

## GOSH CCC Construction / Demolition Management Plan Pro forma

08.02.2024

GOSHCCC PP-10539661 - S2 P07







# Deconstruction and Construction Management Plan

Great Ormond Street Hospital GOSH Children's Cancer Centre (CCC)



## **Contents**

Revisions	4
Introduction	5
Timeframe	8
<u>Contact</u>	9
Site	12
Community liaison	19
Transport	30
Environment	81
<u>Agreement</u>	100

101



**Appendices** 

## **Revisions & additional material**

#### Please list all iterations here:

Date	Version	Produced by
03/05/2021	P01	Nick Fitzgerald
07/08/2023	P02	Nick Fitzgerald
23/10/2023	P03	Nick Fitzgerald
04/12/2023	P04	Nick Fitzgerald
05/02/2024	P05	Conor Ryan
06/02/2024	P06	Conor Ryan
08/02/2024	P07	Conor Ryan

#### **Additional sheets**

Please note – the review process will be quicker if these are submitted as Word documents or searchable PDFs.

Date	Version	Produced by
04/12/2023	P04	Section 11 - Public Consultation – Letter to the
		neighbours added to Appendices
04/12/2023	P04	Section 09 – Update to site opening hours
04/12/2023	P04	Section 10 – Update to project receptors
04/12/2023	P04	Section 20a – Update to project logistic plan
04/12/2023	P04	Section 20b – Update to traffic marshal regime
04/12/2023	P04	Section 22 – Site setup
04/12/2023	P04	Section 25 – Road Closures
05/02/2024	P05	Section 19 – HGV delivery hours amended
05/02/2024	P05	Section 20b – Update to traffic marshal regime
05/02/2024	P05	Section 25 – Diversion plan included
05/02/2024	P05	Section 18a – Updated traffic layout
05/02/2024	P05	Section 12 – More dates added for CWG
05/02/2024	P05	Section 4 – Community Liaison Manager updated
06/02/2024	P06	Section 7 – Reference to future Guilford St. works
06/02/2024	P06	Section 14 – Inclusion of Holborn Gyratory upgrades
06/02/2024	P06	Section 18b – Inclusion of Boswell St. awareness



06/02/2024	P06	Section 19 – Removal of swept path analysis
06/02/2024	P06	Section 19e – Amendment to restriction of HGVs
06/02/2024	P06	Section 20 – Removal of logistics plans
06/02/2024	P06	Section 21 – Removal of unloading information
06/02/2024	P06	Section 24 – Inclusion of reference to RSA
06/02/2024	P06	Section 25 – Removal of detail on no cycle diversion
06/02/2024	P06	Section 26 – Inclusion of signage and scaffold info.
08/02/2024	P07	Section 18a – Routing map revised & images added
08/02/2024	P07	Section 14 – Wording revised for clarity of scope
08/02/2024	P07	Section 7 – Inclusion of review status of new entrance



## Introduction

The purpose of the **Construction Management Plan (CMP)** is to help developers to minimise construction impacts, and relates to all construction activity both on and off site that impacts on the wider environment.

It is intended to be a live document whereby different stages will be completed and submitted for application as the development progresses.

The completed and signed CMP must address the way in which any impacts associated with the proposed works, and any cumulative impacts of other nearby construction sites, will be mitigated and managed. The level of detail required in a CMP will depend on the scale and nature of development. Further policy guidance is set out in Camden Planning Guidance (CPG) 6: Amenity and (CPG) 8: Planning Obligations.

This CMP follows the best practice guidelines as described in the <u>Construction Logistics and Community Safety</u> (**CLOCS**) Standard and the <u>Guide for Contractors Working in Camden.</u>

Camden charges a <u>fee</u> for the review and ongoing monitoring of CMPs. This is calculated on an individual basis according to the predicted officer time required to manage this process for a given site.

#### Camden's Minimum Requirements

The approved contents of this CMP must be complied with unless otherwise agreed with the Council in writing. The project manager shall work with the Council to review this CMP if problems arise during construction. Any future revised plan must also be approved by the Council and complied with thereafter.

It should be noted that any agreed CMP does not prejudice or override the need to obtain any separate consents or approvals such as road closures or hoarding licences.

If your scheme involves any demolition, you need to make an application to the Council's Building Control Service. Please complete the "<u>Demolition Notice.</u>"

Please complete the questions below with additional sheets, drawings and plans as required. The boxes will expand to accommodate the information provided, so please provide as much information as is necessary. It is preferable if this document, and all additional documents, are completed electronically and submitted as Word files to allow comments to be easily documented. These should be clearly referenced/linked to from the CMP. Please only provide the information requested that is relevant to a particular section.

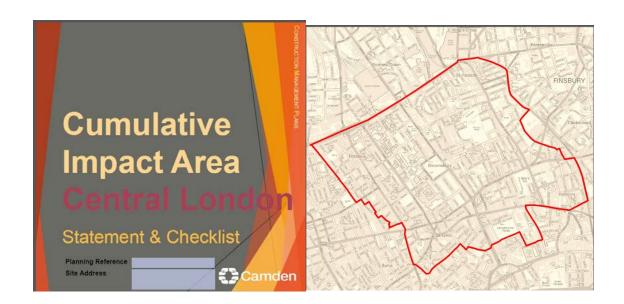


(Note the term 'vehicles' used in this document refers to all vehicles associated with the implementation of the development, e.g. demolition, site clearance, delivery of plant & materials, construction etc.)

Revisions to this document may take place periodically.

**IMPORTANT NOTICE:** If your site falls within a Cumulative Impact Area (as of 03/02/2020 to 03/08/2020 there is only one established CIA for the Central London area) you are required to complete the CIA Checklist and circulate as an appendix to the CMP and included as part of any public consultation – a CMP submission will not be accepted until evidence of this has been supplied.

The CIA Checklist can be found at <a href="https://www.camden.gov.uk/about-construction-management-plans">https://www.camden.gov.uk/about-construction-management-plans</a>





#### Introduction

This document is a revised Deconstruction / Construction Management Plan (DCMP) prepared to support the Great Ormond Street Hospital (GOSH) Children's Cancer Centre (CCC) project (LB Camden – Ref. 2022/2255/P).

This DCMP is a live document and a full detailed revision of the DCMP will be maintained. The DCMP will be continuously monitored throughout the deconstruction and construction programme to ensure industry best standards for safety and optimum logistical management.

The DCMP has been prepared to support the following submitted LBC documents. These include:

- Construction Management Plan Pro-Forma; and-
- Cumulative Impact Areas in Central London Guidance and Checklist.

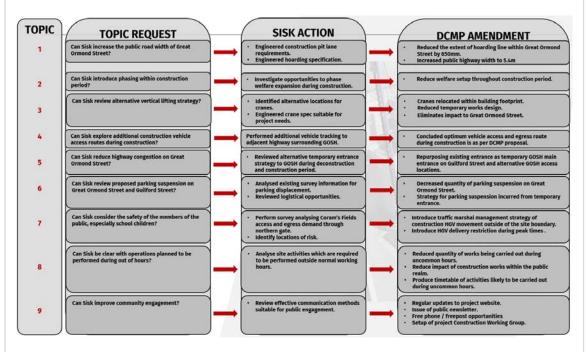
The DCMP has been prepared using the following LBC guidance documents. These include:

- Camden Planning Guidance: Amenity (January 2021);-
- Community Liaison Guidance;-
- Construction Working Group for developers and Contractors guidance;-
- Camden Minimum Requirements; and-
- Guide for Contractors Working in Camden.

Copies of these guidance documents will be made available to appointed Principal Contractor (PC) and Sub-Contractors (SB).

John Sisk and Son Ltd (Sisk) has been appointed as the Principal Contractor for a pre-construction services agreement (PCSA) by The Great Ormond Street Hospital for Children NHS Foundation Trust (GOSH). Sisk is working with BDP Architects to deliver design for the de-construction of the existing Great Ormond Street Hospital Frontage Building and redevelopment of a new Children's Cancer Centre (CCC).

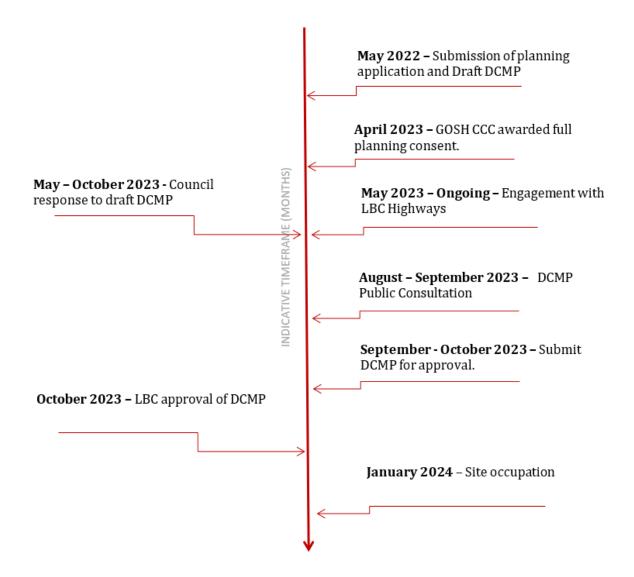
The table below illustrates a summary of amendments to the GOSHCCC DCMP following public consultation.



GOSHCCC DCMP Development Summary



## **Timeframe**





## Contact

1. Please provide the full postal address of the site and the planning reference relating to the construction works.

#### Address:

Frontage Building, Great Ormond Street Hospital, Great Ormond Street, London, WC1N 3JH.

Planning reference number to which the DCMP applies: 2022/2255/P

2. Please provide contact details for the person responsible for submitting the CMP.

Name: Rory McManus of Turley Planning

#### Address:

Turley 8<sup>th</sup> Floor, Lacon House, 84 Theobald's Road, London, WC1X 8NL

Email: rory.mcmanus@turley.co.uk

**Phone:** 020 7851 4010 **Phone:** 079 2054 6081



3. Please provide full contact details of the site project manager responsible for day-to-day management of the works and dealing with any complaints from local residents and businesses.

Name: Nick Fitzgerald of John Sisk & Son Ltd

#### Address:

John Sisk & Son Ltd 1 Curo Park, St Albans AL2 2DD

Email: nickfitzgerald@sisk.co.uk

**Phone:** 01727 875551 **Phone:** 0777 181 4895



4. Please provide full contact details of the person responsible for community liaison and dealing with any complaints from local residents and businesses if different from question 3. In the case of Community Investment Programme (CIP), please provide contact details of the Camden officer responsible.

Name: Patsy Evans of John Sisk & Son Ltd

Address:

John Sisk & Son Ltd
1 Curo Park,
St Albans
AL2 2DD

Email: patsyevans@sisk.co.uk

Phone: 01727 875551

5. Please provide full contact details including the address where the main contractor accepts receipt of legal documents for the person responsible for the implementation of the CMP.

 $\textbf{Name:} \ \mathsf{Imran} \ \mathsf{Patel} \ \mathsf{of} \ \mathsf{John} \ \mathsf{Sisk} \ \mathsf{and} \ \mathsf{Sons} \ \mathsf{Ltd}$ 

#### Address:

John Sisk & Son Ltd 1 Curo Park, St Albans AL2 2DD

Phone: 0776 057 1107

Email: Imran Patel@sisk.co.uk

Phone: 01727 875551
Phone: 07568129615



## Site

6. Please provide a site location plan and a brief description of the site, surrounding area and development proposals for which the CMP applies.

The site is located within the Bloomsbury Conservation area to the South of the main GOSH Campus on Great Ormond Street.









Site Location



7. Please provide a very brief description of the construction works including the size and nature of the development and details of the main issues and challenges.

#### **Project Description**

An annotated plan view of the site location and, surrounding area is set out above. As shown in the images the proposed southern hoarding line is located along Great Ormond Street. The hoarding line layout as shown is proposed to remain throughout the duration of the deconstruction and construction operations. The hoarding extends into the Great Ormond Street footpath and highway. The western boundary extends through to Powis Place. Existing buildings to the north, east and west of the boundary are existing GOSH clinical buildings. Buildings to the south of the boundary comprise a mixture of residential buildings, local businesses and GOSH clinical buildings.

#### **Description of Development**

John Sisk and Son Ltd (Sisk) has been appointed as the Principal Contractor for a pre-construction services agreement (PCSA) by The Great Ormond Street Hospital for Children NHS Foundation Trust (GOSH). Sisk is working with BDP Architects to deliver design for the de-construction of the existing Great Ormond Street Hospital Frontage Building and redevelopment of a new Children's Cancer Centre (CCC).

Redevelopment works include deconstruction, secant piling, basement construction for plant distribution and the construction of an eight storey Children's Cancer Centre which comprises rooftop garden and facilities including complex imaging and theatre suites, critical care unit, hospital school, cytotoxic pharmacy and outpatient dispensary, cancer daycare unit and three inpatient levels including a bone marrow transplant unit.

#### The Site

The majority of the site is currently occupied by the existing GOSH Frontage Building, a five storey building (inclusive of basement) dating from the 1950s that was constructed in two separate phases. The building is currently occupied by a number of GOSH departments including Audiology Department, Clinical Research Facility (CRF), Department of Child and Adolescent Mental Health and Paediatric Psychology Department.

The western most part of the site is occupied by the existing Paul O'Gorman building and GOSH main entrance. Both areas will be decommissioned from current operations to facilitate the GOSHCCC development.

The site is bounded by the Paul O'Gorman Building to the west, Octav Botnar Wing to the east, the Variety Club Building and Premier Inn Clinical Building to the north and Great Ormond Street to the south.

#### **Proposed Works**

The following deconstruction and construction works are proposed:

- deconstruction of existing Frontage Building;
- partial deconstruction of existing Paul O'Gorman Building
- asbestos and hazardous material removal;
- secant, CFA and rotary piling;
- basement excavation;
- reinforced concrete frame construction;
- structural steel truss and link bridge;
- pre-cast and unitised cladding façade;
- clinical MEP installation; and
- clinical internal architectural fitout.



To permit a safe working environment for the proposed works the following logistical arrangements and temporary works are proposed:

- existing utility and clinical service diversion;
- installation of temporary surface water attenuation and foul drainage services;
- hoarding erection;
- temporary public and GOSH walkway displacement;
- temporary highway displacement;
- temporary parking suspension and displacement;
- highway closures and diversions;
- temporary welfare/staff facilities setup;
- basement propping;
- site dewatering strategy;
- two goods and personnel hoist installation;
- erection of 2no luffing tower cranes;
- scaffold working platforms and encasement; and
- external cradle and abseiling operations;

The temporary arrangements needed to facilitate the new entrance on Guilford Street will remain under review and will be revisited, if deemed necessary by Camden. Sisk will work with GOSH & Camden to try to resolve any such issues.

Further proposals are being considered to better accommodate the temporary GOSH main entrance on Guilford Street. Any further highways changes needed as part of this will be consulted upon as necessary and detailed in an addendum to the DCMP.

#### **Project Challenges**

Sisk has compiled a list consisting of known site challenges identified thus far during the pre-construction period. Detailed methodologies and risk assessments will be established throughout the Preconstruction Services Agreement PCSA period to eliminate and reduce impact of site activities on GOSH clinical activities, local residents and businesses. These include:

- ground conditions;
- asbestos and other hazardous material removal;
- adjacent structures belonging residents businesses, healthcare and Great Ormond Street Hospital;
- management of logistical operations;
- adjacent vehicular and pedestrian traffic;
- GOSH / neighbours clinical activities;
- existing services;
- restrictions on normal working hours by the Employer;
- restricted construction traffic routes to site;
- noise, dust and vibration restrictions.



8. Please provide the proposed start and end dates for each phase of construction as well as an overall programme timescale. (A Gantt chart with key tasks, durations and milestones would be ideal).

#### **GOSH CCC Stage 4 Design Construction Programme**

Site occupation and utility diversion works could take place in the winter/spring of 2024, with site mobilisation and enabling works commencing. The deconstruction works would follow in the autumn of 2024. The remaining site works, which consist of substructure & superstructure, facades and fit out follow. Handover of the CCC from Sisk to GOSH could take place in the winter of 2027. Once the CCC is handed over to GOSH, there would be a period of clinical commissioning to get the building ready to treat patients.

Sisk has produced an indicative preliminary list of key construction programme dates. Should the start date change, these would move accordingly. These include:

- site occupation and utility diversion works February 2024;
- site mobilisation and facilitating works February 2024 August 2024;
- deconstruction, piling, substructure and superstructure August 2024 October 2026;
- façade envelope treatments August 2026 June 2027;
- internal fitout May 2026 November 2027;
- commissioning August 2027 December 2027; and
- target project completion December 2027.

As noted from the total programme, including enabling works, deconstruction, construction and technical commissioning is currently envisaged to be in the region of 202 weeks (around 4 years).



- 9. Please confirm the standard working hours for the site, noting that the standard working hours for construction sites in Camden are as follows:
  - 8.00am to 6pm on Monday to Friday
  - 8.00am to 1.00pm on Saturdays
  - No working on Sundays or Public Holidays

#### **Permitted Site Working Hours**

Permitted site working hours: Mon – Fri: 0800 - 1800

Sat: 0800 - 1300

Not on Sundays, Bank or Public Holidays

When required to work outside the above hours Sisk will obtain necessary statutory approvals from the LBC. In accordance with the Control of Pollution Act 1974, when planned works which are likely to emit levels of noise and vibration, Sisk will apply for prior consent to work outside the permitted hours under a Section 61. A Section 61 requires formal submission to LBC for their approval. Residents will be informed where necessary prior to the works commencing. The list below includes phases where out of hours works could potentially be required:

- Non-intrusive works for GOSH Trust existing services disconnection and terminations (within GOSH Hospital);
- Sisk utility relocation and permanent connections;
- works to Great Ormond Street one way, alterations of existing parking;
- piling rig delivery and removal;
- tower crane erection and dismantle;
- completion of concrete pours that commenced earlier in the working day;
- steel truss installation;
- steel link bridge installation; and
- site decant post project completion.

The activities listed above have been proposed because of the need to ensure specific safety requirements for both the public and GOSH operation.

The table below provides an indication of the possible extent of out of hours works. As it shows, out of hours deconstruction and construction operations will be limited as far as possible and will not be carried out 24hours a day 7days a week. Sisk will continuously uphold the working policies of construction sites within the London Borough of Camden and will only carry out certain tasks beyond the normal working hours as a last resort.

Construction activity on-site will be reviewed and when necessary controlled/restricted on major public community event days and event that are led by GOSH. No construction vehicle deliveries will be permitted within two hours of the scheduled start time of an event. The scope of works that may be undertaken on major event days will be discussed and agreed during monthly Client Progress Meetings between the Sisk Project Manager and the Trust Management Team.



WEEKDAY	- 1	HOURS															
	00:00	01:00	02:00	03:00	04:00	05:00	06:00	07:00	08:00	12:00	13:00	17:00	18:00	20:00	21:00	22:00	23:00
Monday														6			
Tuesday																	
Wednesday										1							
Thursday																	
Friday							l l						,	V.			
Saturday																	
Sunday		1						1					-	-			

KEY	
No Intrusive Works During	
These Hours	
Potential Working Hours	
for late pours due to	
unexpected events or early	
deliveries of large plant due	
to Traffic Orders. Works to	
be performed under a	
section 61.	
Standard Working Hours	
for Specific Named Events.	
Works to be carried out	
under local authority	
approval.	
Standard Working Hours	

Site Opening Hours



### **Community Liaison**

A neighbourhood consultation process must have been undertaken <u>prior to submission of</u> the CMP first draft.

This consultation must relate to construction impacts, and should take place following the granting of planning permission in the lead up to the submission of the CMP. A consultation process <u>specifically relating to construction impacts</u> must take place regardless of any prior consultations relating to planning matters. This consultation must include all of those individuals that stand to be affected by the proposed construction works. These individuals should be provided with a copy of the draft CMP, or a link to an online document. They should be given adequate time with which to respond to the draft CMP, and any subsequent amended drafts. Contact details which include a phone number and email address of the site manager should also be provided.

Significant time savings can be made by running an effective neighbourhood consultation process. This must be undertaken in the spirit of cooperation rather than one that is dictatorial and unsympathetic to the wellbeing of local residents and businesses.

These are most effective when initiated as early as possible and conducted in a manner that involves the local community. Involving locals in the discussion and decision making process helps with their understanding of what is being proposed in terms of the development process. The consultation and discussion process should have already started, with the results incorporated into the CMP first draft submitted to the Council for discussion and sign off. This communication should then be ongoing during the works, with neighbours and any community liaison groups being regularly updated with programmed works and any changes that may occur due to unforeseen circumstances through newsletters, emails and meetings.

Please note that for larger sites, details of a construction working group may be required as a separate S106 obligation. If this is necessary, it will be set out in the S106 Agreement as a separate requirement on the developer.

#### **Cumulative impact**

Sites located within high concentrations of construction activity that will attract large numbers of vehicle movements and/or generate significant sustained noise levels should consider establishing contact with other sites in the vicinity in order to manage these impacts.

The Council can advise on this if necessary.



#### 10. Sensitive/affected receptors

Please identify the nearest potential receptors (dwellings, business, etc.) likely to be affected by the activities on site (i.e. noise, vibration, dust, fumes, lighting etc.).

#### **Construction Effects**

To accurately identify who could be potentially affected by the activities on site (i.e. noise, vibration, dust, fumes, lighting etc) and any potential mitigation that is required, Sisk has appointed RSK to carry out the following assessments:

- acoustic assessment;
- road safety audit;
- vibration assessment; and
- baseline air quality assessment.

Sisk has appointed A-Squared Site Engineering to carry out the following assessments:

- basement impact assessment (BIA);
- building ground movement assessment (GMA);
- Thames Water ground movement assessment (TWGMA);
- type 2 geotechnical assessment; and
- Structural investigation to localised receptors of adjacent clinical building.

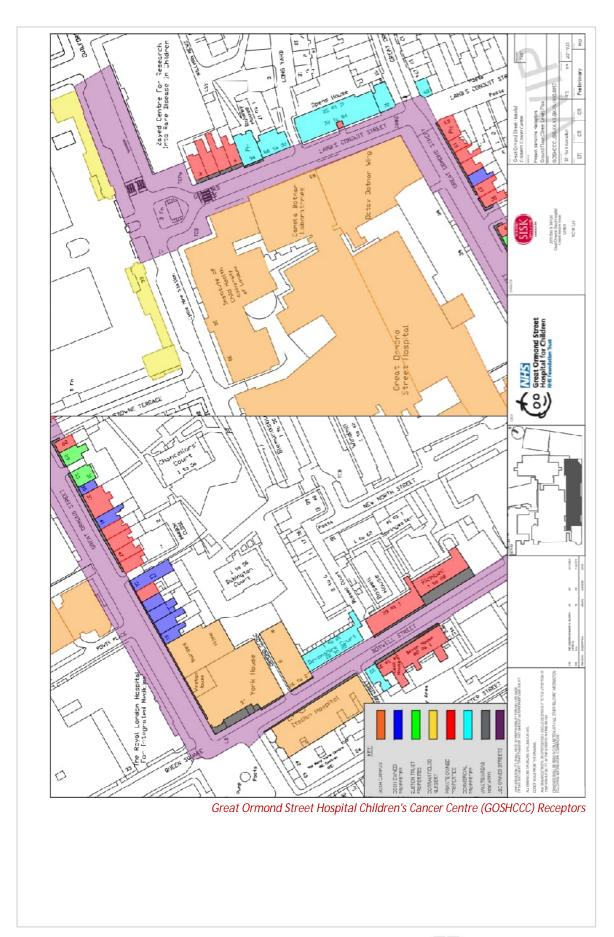
Sisk has appointed Avison Young to carry out the following assessments:

- daylight and sunlight assessment; and
- light pollution study.

The Current identified project receptors are as followed:

- Adjacent clinical buildings;
  - GOSH Variety Club Building VCB;
  - GOSH Premiere Inn Club Building PICB;
  - GOSH Octav Botnar Wing OBW;
- Residential properties on Lambs Conduit Street, Great Ormond Street and Boswell Street;
- Local businesses on Lambs Conduit Street, Great Ormond Street and Boswell Street;
- Public highway Great Ormond Street, Lambs Condiut Street and Boswell Street;
- Existing below ground structures and vaults on Lambs Conduit Street, Great Ormond Street and Boswell Street; and -
- Coram's Fields northern entrance.







#### 11. Consultation

The Council expects meaningful consultation. For large sites, this may mean two or more meetings with local residents **prior to submission of the first draft CMP**.

Evidence of who was consulted, how the consultation was conducted and a summary of the comments received in response to the consultation should be included. Details of meetings including minutes, lists of attendees etc. should be appended.

In response to the comments received, the CMP should then be amended where appropriate and, where not appropriate, a reason given. The revised CMP should also include a list of all the comments received. Developers are advised to check proposed approaches to consultation with the Council before carrying them out. If your site is on the boundary between boroughs then we would recommend contacting the relevant neighbouring planning authority.

Please provide details of consultation of draft CMP with local residents, businesses, local groups (e.g. residents/tenants and business associations) and Ward Councillors.



#### **Community Liaison**

It is recognised that it is important to build strong relationships with the local community. This is best achieved through open and collaborative engagement, clarity in messaging and justification as well as bringing forward a building of the highest design quality.

Throughout the ongoing preconstruction phase of GOSHCCC Sisk and GOSH Trust have engaged with London Borough of Camden Planning department to ensure that community liaison management and construction working groups are carried out to be compliant with guidance and this is set out within the Statement of Community Engagement submitted with the planning application. We have documented the comments received from neighbours and stakeholders and how changes have been implemented to address each comment. Within the appendix contains a DCMP Public Consultation Report, this report provides a summary of;

- who was consulted;
- evidence of community engagement i.e letters;
- a summary of the comments received; and
- how the DCMP has been amended / mitigated measures put in place in response to comments received, an explanation of the reasons for not making changes.

Prior to the planning application being submitted, the applicant has set up a number of Planning Consultation Group (PCG) meetings and held engagement events. During the planning application process and prior to the May and October 2022 submissions of draft DCMPs to LBC, Sisk and GOSH carried out individual meetings and consultation events, these included face to face presentations, drop in events and virtual and face to face meetings.

The impact from deconstruction and construction activities needs to be assessed to ensure there is minimal impact and nuisance to the ongoing activities at GOSH and to the surrounding businesses and residential community. Due to the high potential risk in interfering with ongoing clinical activities, Sisk has proposed implementing the role of a Project Liaison Manager to plan, manage and monitor all interfacing activities that may have an impact on GOSH, local residents and businesses.

#### **Community Communications Approach**

During the deconstruction and construction phase Sisk will implement, monitor and manage the Community Communications Approach to ensure that communication lines are easily accessible to anybody with queries or concerns relating to the deconstruction and construction activities.

Any issues will be dealt with swiftly and where appropriate remedial action will be taken. This will be the responsibility of the Project Liaison Manager, who will devise a set of customer care standards.

A 24-hour hotline will be set up and maintained for the duration of the deconstruction and construction works by Sisk. The hotline will be advertised on noticeboards and will act as the first point of contact for the reporting of any issues associated with the construction activities.

Project details of upcoming events and construction phases will be circulated on our project website <a href="https://www.goshccc.info">www.goshccc.info</a> and email updates/newsletters sent to those residents who have requested updates. The project website will contain contact information and functions that will enable members of the public to communicate with Sisk Management.

A complaint and incident register will be maintained in accordance with LBC guidance throughout the deconstruction and construction activities. Details of recording complaints shall include the following:

- date and time complaint is raised;
- causes of complaint;
- action taken to resolve or mitigate the complaint;
- date and time of action taken to resolve the complaint;
- reasons for any unresolved complaint;
- a summary of the comments received; and-
- the complaint and incident register will be filed within Sisk site offices and available for review upon Trust or regulatory body request.



The Trust's Project Manager will communicate any complaints GOSH receive to the Sisk Project Liaison Manager for action as necessary. Complaints will be fully investigated and recorded in the register together with details of any remedial action taken. The register will be maintained for the duration of the deconstruction and construction works and will be made available to the local community and client during monthly consultations.

Should complaints be received Sisk will proceed with immediate complaints resolution procedure and follow up.

Sisk is committed in making a positive contribution to the local community. Throughout the stage 4 design period Sisk will investigate opportunities to support community scheme, and best present our business image of being a "good neighbour". Potential initiatives include:

- Locally resource labour / materials;-
- Charity campaigns;-
- community stakeholder meetings; and-
- Engagement with local schools and colleges.



#### 12. Construction Working Group

For particularly sensitive/contentious sites, or sites located in areas where there are high levels of construction activity, it may be necessary to set up a construction working group.

If so, please provide details of the group that will be set up, the contact details of the person responsible for community liaison and how this will be advertised to the local community, and how the community will be updated on the upcoming works i.e. in the form of a newsletter/letter drop, or weekly drop in sessions for residents.

#### **Construction Working Group**

As set out in the Section 106, a Construction Working Group (CWG) will be set up. This group will build on the consultations that took place prior to and during the planning application process, as well as the consultation on the draft DCMP.

Reflecting comments from the local community, we have invited all those who have expressed an interest in the GOSHCCC to the first CWG which we are holding on 8 November 2023. To enable us to manage this well, we will ask people to register their attendance in advance. We will hold CWGs monthly, unless particular site activities mean additional meetings are required.

To ensure these meetings are functional and depending on the number of attendees at the meetings, we may request that representatives of groups attend, and/or one person is nominated as a group's spokesperson. We will send notifications of the CWG meetings and the minutes to everyone who has registered for updates on the CCC, or who has responded to the DCMP consultation. We will also publish this information on the CCC website and promote the meeting via local business and posters.

We will also send invitations to the following groups and organisations.

- Great Ormond Street residents;
- Perseverance Pub;
- Tybald's Close Residents Association;
- Falcon Residents Association;
- Ward Councillors;
- St George The Martyr's school;
- Camden Council Planning Obligations and Highways teams;
- Queen Square Gardens Trustees;
- Institute of Child Health;
- UCLH;
- Coram's Field;
- London Ambulance Service;
- Children's Acute Transport Service; and
- Tenants Association for Rugby School.

#### Meeting schedule includes

- November 2023;
- December 2023;
- Jan 2024;
- Feb 2024;
- March 2024
- Once monthly in 2024 until October
- Further dates TBC



Alongside the CWG we will continue to provide updates via our website. We will also develop a newsletter and have drop-in sessions for the community.
In addition, it is proposed that information sessions will be carried out every 4 months and prior to the commencement of specific construction work phases for the wider community.
At these events, presentations will be delivered to all attending parties and resident associations on logistical arrangements and proposed environmental controls.



#### **Schemes**

Please provide details of your Considerate Constructors Scheme (CCS) registration. Please note that Camden requires <u>enhanced CCS registration</u> that includes CLOCS monitoring. Please provide a CCS registration number that is specific to the above site.

Contractors will also be required to follow the <u>Guide for Contractors Working in Camden</u>. Please confirm that you have read and understood this, and that you agree to abide by it.

#### **Considerate Constructors Scheme CCS**

Sisk will be required to register and adopt the construction best practices associated with the Considerate Constructors Scheme. The project is scheduled to be registered shortly prior to the commencement of the construction contract operations.

In line with Sisk company policy site effective initiatives will be implemented throughout site during the construction phase to ensure a high score >41 is awarded during CCS auditing and internal reviews. To facilitate this a dedicated member of staff will be assigned to carry out the requirements for inspections. This procedure will be executed from project start to finish.

In accordance with the LBC approved document "Guide for Contractors Working in Camden" Sisk will follow the code of conduct for considerate constructor standards, which focuses on environment, cleanliness, good neighbour, respectfulness, safety, responsibility, and accountability.

All appointed sub-contractors will be a member of the accredited Fleets Operators Recognition Scheme (FORS).

CLOCS monitoring and inspections are to be undertaken as part of the CCS inspection regime. A formal site review visit by the CLOCS monitoring team will assess, capture and record the good practice and recommendations of site operations. The Sisk operations team will complete a self-assessment form and submit to the CLOCS monitoring team prior to any site visit. Formal site review reports and scores are to be used as evidence of compliance and published to necessary external stakeholders.



#### 14. Neighbouring sites

Please provide a plan of existing or anticipated construction sites in the local area and please state how your CMP takes into consideration and mitigates the cumulative impacts of construction in the vicinity of the site. The council can advise on this if necessary.

#### **Neighbouring Sites**

Sisk will continue to liaise with the relevant parties of the neighbouring sites to ensure that construction activities are coordinated where appropriate. Any works that might impact either project will be identified by means of scheduled meetings and addressed by the site management team.

#### **Tybalds Estate**

Sisk are aware of the ongoing operations associated with the Tybalds regeneration scheme. During the DCMP consultation period Sisk and GOSH Trust engaged with the Project Managers from both Principal Contractors carrying out the redevelopment works. Our engagement concluded that although construction works are planned to be carried out at the same time, our logistic strategies will not conflict with one another. Nevertheless, Sisk will continue to communicate planned works with each contractor and monitor the LBC planning portal to identify planned and upcoming construction works that may have an impact on the CCC works.

Information relating to the new homes on the Tybalds Estate can be found within the link below:

Tybalds regeneration programme - Information page - We Are Camden - Citizen Space

#### **Holborn Gyratory Upgrades**

London Borough of Camden are undertaking major highway changes at the "Holborn Gyratory" – on the junctions of Theobald's Road, Southampton Street, Proctor Street, Red Lion Square, High Holbron & Kingsway. Whilst these works are likely to happen concurrently with the GOSH works, our logistics strategies will not conflict with one another. Sisk will continue to communicate planned works with LBC planning portal to identify planned and upcoming construction works that may have an impact on the CCC works.

#### **GOSH Enabling Works**

In conjunction with ongoing internal refurbishment works to the Great Ormond Street Hospital Southwood Building the Trust has applied and been given the approval for suspension of two parking bays on Guilford Street for a period of 266 days. This commenced during September 2022 and is due to be complete by October 2023. These planned operations are not anticipated to conflict with the planned CCC construction works.

To enable the commencement of deconstruction operations to existing buildings, a number of existing services must first be diverted and decommissioned. Due to the intricate sensitivity of identified interfaces both Sisk and GOSH Trust have planned for site facilitating and decant operations to be carried out in a concurrent manor.

#### Coram's Fields

Coram's Fields is a children's only park and playground space located north of Guilford Street. The charity funded facility provides valuable services for all young people, both from the local community as well as for those visiting the area. Since the award of full planning consent Sisk, Trust and representatives from the Coram's Fields organisation met on several occasions to discuss the social value opportunity and the impact of proposed construction logistics.



During the deconstruction and construction phases there will be an increased level of HGV activity traveling eastbound on Guilford Street and turning south onto Guilford Place. Ensuring the safety of pedestrians crossing at Guilford Street and entering/exiting Coram's Fields is a constant safety priority for site traffic management. During the summer 2023 Sisk assessed the frequency and quantity of public access and egress through Coram's Fields southern gate on Guilford Street. Results identified that peak use occurred between 8:00-9:30 and 15:00-15:30 which consisted of school travel and events within Coram's Fields.

Sisk proposes the following protocols and methods of control to ensure a safe segregation between construction HGV traffic and pedestrians:

- highway alterations to maintain safe zebra crossing;
- traffic marshal supervision during articulated HGV site attendances and high frequency delivery events such as concrete pours;
- realignment of existing kerb line to prevent HGV mounting footpath;
- Continuous planning monitoring and engagement with Coram's Fields representatives to prevent conflict of operations; and-
- Reduce where applicable delivery times during peak hours.

#### **GOSH Arts Projects**

GOSH Arts has commissioned artists to work with children from GOSH and the wider community to create artworks during the construction works. The team is working with the Holborn Community Association and Coram's Field on this project. The children will work with the artists to develop artworks that can be displayed in the vicinity of the site. We are also exploring whether traffic marshal PPE can include some of this artwork. Any artworks intended for display on the street will be subject to agreement with Camden and will be subject to separate planning consents and Transport/Highways approvals where necessary.



## **Transport**

This section must be completed in conjunction with your principal contractor. If one is not yet assigned, please leave the relevant sections blank until such time when one has been appointed.

Camden is a CLOCS Champion, and is committed to maximising road safety for Vulnerable Road Users (VRUs) as well as minimising negative environmental impacts created by motorised road traffic. As such, all vehicles and their drivers servicing construction sites within the borough are bound by the conditions laid out in the CLOCS Standard.

This section requires details of the way in which you intend to manage traffic servicing your site, including your road safety obligations with regard to VRU safety. It is your responsibility to ensure that your principal contractor is fully compliant with the terms laid out in the CLOCS Standard. It is your principal contractor's responsibility to ensure that all contractors and sub-contractors attending site are compliant with the terms laid out in the CLOCS Standard.

Checks of the proposed measures will be carried out by CCS monitors as part of your enhanced CCS site registration, and possibly council officers, to ensure compliance. Please refer to the CLOCS Standard when completing this section.

Please contact <a href="CLOCS@camden.gov.uk">CLOCS@camden.gov.uk</a> for further advice or guidance on any aspect of this section.

#### **CLOCS Contractual Considerations**

#### 15. Name of Principal contractor:

Name: John Sisk & Son
Address:

John Sisk & Son Ltd

1 Curo Park, St Albans AL2 2DD

Phone: 0121 329 0600



16. Please submit the proposed method for checking operational, vehicle and driver compliance with the CLOCS Standard throughout the duration of the contract.

#### **Transport**

A construction stage Transport Management Plan (TMP) based on the CLOCS Standard will be implemented for the duration of deconstruction and construction phase for the GOSH CCC development. Scheduled consultation meetings between Sisk, the Trust Management Team, the Highway Authority and relevant sub-contractors with be carried out to ensure an effective management system for deconstruction and construction traffic.

Sisk will be responsible for the design implementation and monitoring of the construction TMP. Controls will be implemented to ensure conformity and compliance throughout the deconstruction and construction phase. Initiatives implemented will include but not limited to:

- traffic marshals;
- Msite delivery management software;
- just in time deliveries;
- All operators of construction delivery vehicles over 3.5t will have successfully undertaken Safe Urban Driver Training;
- All delivery vehicles over 3.5t will be equipped with blind spot minimisation equipment, including but not limited to, Fresnel lens / CCTV and audible left turn alerts.
- no empty vehicles leaving site where viable;
- consolidation centre;
- hydrotreated vegetable oil HVO fuels for site plant and vehicles;
- electrical plant and vehicles where viable;
- waste refuse collection; and
- no idling construction traffic.



17. Please confirm that you as the client/developer and your principal contractor have read and understood the CLOCS Standard and included it in your contracts.

I confirm that I have included the requirement to abide by the CLOCS Standard in my contracts to my contractors and suppliers:

#### **CLOCS Declaration**

Sisk can confirm that the requirement to abide by the CLOCS standard is included in all contracts to their contractors and suppliers on the GOSH CCC project.

Please contact <a href="CLOCS@camden.gov.uk">CLOCS@camden.gov.uk</a> for further advice or guidance on any aspect of this section.



#### **Site Traffic**

Sections below shown in blue directly reference the CLOCS Standard requirements. The CLOCS Standard should be read in conjunction with this section.

**18. Traffic routing**: "Clients shall ensure that a suitable, risk assessed vehicle route to the site is specified and that the route is communicated to all contractors and drivers. Clients shall make contractors and any other service suppliers aware that they are to use these routes at all times unless unavoidable diversions occur." (P19, 3.4.5)

Routes should be carefully considered and risk assessed, taking into account the need to avoid where possible any major cycle routes and trip generators such as schools, offices, stations, public buildings, museums etc.

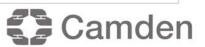
Consideration should also be given to weight restrictions, low bridges and cumulative impacts of construction (including neighbouring construction sites) on the public highway network. The route(s) to and from the site should be suitable for the size of vehicles that are to be used.

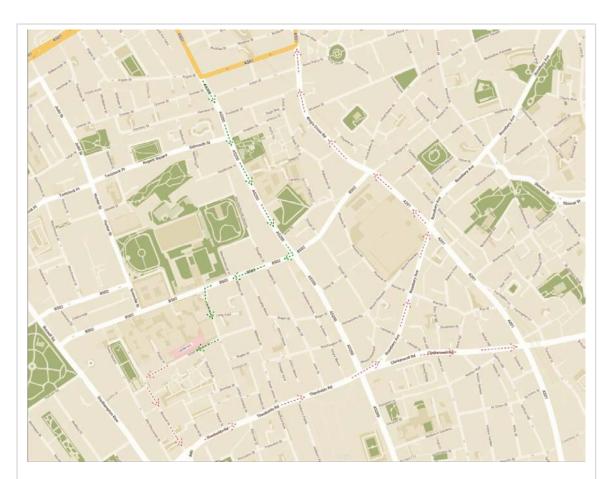
a. Please show vehicle approach and departure routes between the site and the Transport for London Road Network (TLRN). Please note that routes may differ for articulated and rigid HGVs.

Routes should be shown clearly on a map, with approach and departure routes clearly marked. If this is attached, use the following space to reference its location in the appendices.



Traffic Management Layout	
The images below represent the current site traffic management layout for the construction phase of the project.	
To enable safe logistical activities being carried out we have proposed a one-way system to be implemented along	
Great Ormond Street allowing users to travel from east to west.	
<u> </u>	
The delivery / plant entrance gate into site is currently positioned on the eastern hoarding line providing segregated access and egress between public traffic and GOSH clinical traffic throughout the site. For plant and delivery purposes two additional site plant gates have been positioned along the southern and western hoarding line. This arrangement will alleviate site traffic congestion and enable multiple deliveries to occur at once. Large construction vehicles will exit the site through the western exit gate. When leaving site all construction traffic will merge with public one-way traffic on Great Ormond Street.	





Proposed Traffic Route to CCC Site



On approach to site, articulated HGVs are to wait along the the southern kerb of Guildford Street, outside the Zayed Research Centre, whilst traffic marshals stop traffic in both directions to facilitate the turn onto Guilford Place





On the exit route away from site, particular attention and caution will be paid to left turning cycles from Rosebury Avenue onto Farringdon Road





b. Please confirm how contractors and delivery companies will be made aware of the route (to and from the site) and of any on-site restrictions, prior to undertaking journeys.



#### **GOSH Travel Plan**

A draft Travel Plan (2022) has been issued to Sisk by the Trust. Sisk will work with the Trust to integrate its new Travel Plan within our Construction Method Statement. The Trust has been developing a brief and vision for a safer, healthier more child-friendly environment on Great Ormond Street and is preparing to develop it further over the coming year. The Trust has also been working closely with Camden on short-term traffic calming solutions to improve the air quality and safety on the street. Working with appointed consultants the revised Travel Plan will be implemented by the Trust which will provide safe alternative travel options for GOSH staff, patients, and visitors to the hospital. To ensure compliance the approved Travel Plan will be available on site and distributed to all relevant stakeholders. A copy of the GOSH Travel Plan can be located within the supporting documentation of the planning application submission.

Sisk has commissioned a Transport Statement for the GOSH CCC development which has been submitted in support of the planning application.

#### **Pre-Site Attendance**

All sub-contractor and their suppliers undertaking deliveries to and from site will be given in advance the project logistical plan with designated routes to access site.

Throughout the deconstruction and construction phases we will encourage all site operatives to travel to site via the use of public transport. This is intended on reducing the demand of local highways, parking congestion and carbon footprint. All sub-contractors will have a contractual obligation for their deliveries to follow approved DCMP. Ensuring the DCMP and TMP is circulated as part of tender and contractual documents.

#### **Traffic Management Signage**

Sisk will be responsible for the design and installation of signage for the site to cover the following:

- construction traffic arriving at the site;
- pedestrians arriving at the site;
- construction traffic through the site; and
- pedestrian access through the site.

Signage will be provided by Sisk at the perimeter of the site which will convey the following information:

- contact details for key personnel;
- contact address, email, website and telephone numbers for complaints;
- out of hours emergency numbers; and
- signage to meet health and safety requirements.

All signage will be positioned in locations to be most informative to construction vehicle drivers and avoid distraction or confusion to traffic on adjoining highways. Prior to site mobilisation all signage strategies will be presented and agreed with the GOSH Trust Management Team.

The proposed logistical layout will evolve and adapt to suit different construction phases of the GOSH CCC. Logistical alterations will be planned and discussed with the Trust Management Team during monthly progress meetings. Once agreed all logistical alterations will be displayed on site noticeboards and presented during site weekly logistic and whiteboard meetings.



#### **Delivery Management System (DMS)**

Sisk will implement "Msite" delivery management software procedure throughout the construction phase. All contractors will be required to pre-book approved delivery slots to site and prevent both site and surrounding highway congestion.

Material deliveries will be managed so that they do not affect the day to day running of GOSH clinical activities. The restricted nature of the site and the limited loading and unloading facilities available will necessitate close liaison with the Trust Management Team.

As part of the Great Ormond Street Hospital enabling works the existing mortuary access from Great Ormond Street will be suspended through the construction phase. The displaced location of the mortuary access will be relocated to the PICB service yard accessed from Guilford Street. The Trust Built Environment Directorate will still require access to the existing ramp from Great Ormond Street. All access is to be scheduled and coordinated and agreed prior to maintenance works being carried out.

All suppliers and deliveries will be booked in using our site delivery management system. Construction HGV traffic will wait for instructions from traffic marshals before proceeding to and exiting from site.

All suppliers will be made aware of the local environment through inductions/pre-start packs to ensure that construction traffic is sensitive to the local community & historic environment. These briefings will include:

- On leaving site, construction traffic will be managed to ensure that there is sufficient time between
  each vehicle exit, as to ensure that only one vehicle is passing Bevan House on Boswell St at any given
  time.
- Drivers are to maintain a low speed when passing Bevan House on Boswell Street.
- Drivers are to keep to the eastern carriageway when passing Bevan House on Boswell Street as directed by the keep left sign on Boswell St.

# **Parking Provision**

GOSH does not provide on-site car parking for GOSH staff or families of patients. Cycle storage areas within the hoarding boundary are to be relocated to facilitate construction logistics and operations. Data provided within the GOSH Travel Plan 2022 has been utilised to facilitate the production of options for new cycle parking facilities. The planning application proposes to replace lost cycle parking within the Morgan Stanley Building. Due to logistical constraints, there will be no allowance for operative parking onsite. All attending site resources are encouraged to travel to site via public transport.

The proposed logistical layout will evolve and adapt to suit different construction phases of the GOSH CCC. Logistical alterations will be planned and discussed with the Trust Management Team during monthly progress meetings. Once agreed all logistical alterations will be displayed on site noticeboards and presented during site weekly logistic and whiteboard meetings.



# **19.** Control of site traffic, particularly at peak hours: "Clients shall consider other options to plan and control vehicles and reduce peak hour deliveries" (P20, 3.4.6)

Construction vehicle movements should be restricted to between the hours of 9.30am to 4.30pm on weekdays and between 8.00am and 1.00pm on Saturdays. If there is a school in the vicinity of the site or on the proposed access and/or egress routes, then deliveries must be restricted to between the hours of 9.30am and 3pm on weekdays during term time.

Vehicles may be permitted to arrive at site at 8.00am if they can be accommodated on site. Where this is the case they must then wait with their engines switched off.

A delivery plan should ensure that deliveries arrive at the correct part of site at the correct time. Instructions explaining such a plan should be sent to all suppliers and contractors.

Please provide details of the types of vehicles required to service the site and the approximate number of deliveries per day for each vehicle type during the various phases of the project.

For Example:

32t Tipper: 10 deliveries/day during first 4 weeks Skip loader: 2 deliveries/week during first 10 weeks

Artic: plant and tower crane delivery at start of project, 1 delivery/day during main

construction phase project

18t flatbed: 2 deliveries/week for duration of project 3.5t van: 2 deliveries/day for duration of project



# **Expected Construction Traffic**

It is expected that the existing surrounding highways will experience an increase of heavy goods vehicles HGV during the deconstruction and construction period. Based on the current proposed design Sisk has carried out calculations to identify anticipated vehicular needs. These consist of:

ACTIVITY	QUANTITY	PROGRAMME OUTPUT	ADDITIONAL COMMENTS	
Deconstruction	3250m3 Frontage Building = 125m3 pw	3-4weeks per floor	Traditional deconstruction method / no crushing onsite	
Bulk Excavation	15,260m3 (incl. 20% bulk factor)	7 weeks // 30 wagons pd	Plant & Vehicle Gantry	
Piling	351No. Secant // 93No. Bearing Piles	4No.pd // 5No. pd	- Environmental Conditions to be confirmed - Existing Piles Design Flexibility for the Load Bearing	
Basement Raft Slab	1800m2	8 weeks // 250m2/wk	Plant & Vehicle Gantry	
RC Frame	15,700m2 (excl Pant deck)	39 weeks //202m2/wk/hook	2No. Tower Cranes  Logistics constraints	
Pre-cast Panels	3270m2 // 20No. avg Per floor	33 Weeks // 125m2 pw 3 Weeks per floor (20No. Avg per floor – 2pd)	90% Crane availability 20% Delay Allowance included	
Internal Fitout & Comms	18,627m2 (GIFA)	57 weeks // 30-35 week per floor	72 Bedrooms with En-suite & Multiple specialist fitout areas	

To enable the commencement of specific construction activities several exceptional deliveries are required. The deliveries will be carried out under separate Traffic Orders and will enter and exit site via Lamb's Conduit Street/Guilford Street. No outsize loads will use Boswell Street. These include:

- delivery and removal of heavy deconstruction plant and machinery i.e. mobile cranes and excavators;
- delivery and removal of site welfare and accommodation;
- delivery and removal of piling rigs and associated plant attendances;
- 2no tower crane reception and dismantling; and
- possible additional cranage for any heavy plant delivery, clinical equipment etc.



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GOSH CCC – Estimated Construction Traffic



b. Cumulative affects of construction traffic servicing multiple sites should be minimised where possible. Please provide details of other developments in the local area or on the route that might require deliveries coordination between two or more sites. This is particularly relevant for sites in very constrained locations.

Refer to section 14 for formal response.	

c. Please provide swept path analyses for constrained manoeuvres along the proposed route.

Please refer to Appendices for GOSHCCC - Vehicle Tracking

d. Consideration should be given to the location of any necessary holding areas/waiting points for sites that can only accommodate one vehicle at a time/sites that are expected to receive large numbers of deliveries. Vehicles must not queue or circulate on the public highway. Whilst deliveries should be given set times to arrive, dwell and depart, no undue time pressures should be placed upon the driver at any time.

Please identify the locations of any off-site holding areas or waiting points. This can be a section of single yellow line that will allow the vehicle to wait to phone the site to check that the delivery can be accommodated.

Please refer to question 24 if any parking bay suspensions will be required to provide a holding area.

NA			

e. Delivery numbers should be minimised where possible. Please investigate the use of construction material consolidation centres, and/or delivery by water/rail if appropriate.



#### **Mitigation Method of Expected Construction Traffic**

Sisk has designed for two vehicle exit gates to be incorporated within hoarding line. This will allow for small deliveries to attend site and exit whilst larger deliveries are still being unloaded and ensure continuity of logistic operations.

Deliveries will be palletised or strapped to certified stillages to enable quick and safe unloaded without the need for manual handling.

A delivery management system (DMS) will be imbedded within the logistical planning and management to ensure "just in-in-time deliveries is successful. The proposed site logistics has enabled for all construction vehicles to attend site without the need of a holing area off-site or within the public realm. Through the DMS Sisk will coordinate manageable site deliveries and collections of construction vehicles.

Sisk appointed logistics sub-contractor will provide sufficient management resources to deal with multiple trades delivery and traffic requirements.

Following consultation with the local community and Camden Highways department, Sisk recognise the importance in maintaining safe segregation between project HGV traffic and public highway demand and footpath pedestrians. As a means of mitigation and control, Sisk have proposed to implementing delivery restrictions at peak times throughout the deconstruction and construction works. These include;

- no delivery or collection of large plant or use of articulated HGV deliveries are to be carried out between 08:00-09:30, 15:00 15:30 and 16:30 18:00, unless under the approval of Section 61 agreement; and
- HGV deliveries will be restricted, as far as possible, during 08:00-09:30, 15:00-15:30 and 16:30 18:00 as the
  proposed logistical plan for GOSHCCC can immediately accommodate the attendance within the proposed pit
  lane
- HGVs will arrive for 08:00, where they will be admitted to site, and held on site until 09:30, as far as possible

Vehicle certification will be inspected prior to attending site, traffic marshals will be onsite to carry out final conformity inspections.

f. Emissions from engine idling should be minimised where possible. Please provide details of measures that will be taken to reduce delivery vehicle engine idling, both on and off site (this does not apply to concrete mixers).



Management of Vehicular Emissions
Sisk sustainability policy 2022 enforces an obligation that all subcontractor delivery and plant vehicles are fuel by HVO biohazardous fuels. Enforcement of vehicle engine idling will be carried out through appointed logistical subcontractor and traffic marshals.
All delivery drivers will undergo delivery site inductions of which engine isolation will be included within the site rules.
All deliveries are required to be pre-booked and just in time deliveries. Within the online booking system it will clearly state the rules for engine isolation and require drivers to sign agreeance. Sisk just in time deliveries will ensure that vehicle enter site when site can logistically accommodate their presence.

**20. Site access and egress:** "Clients shall ensure that access to and egress from the site is appropriately managed, clearly marked, understood and clear of obstacles." (P18, 3.4.3)

This section is only relevant where vehicles will be entering the site. Where vehicles are to load from the highway, please skip this section and refer to Q23.



Vehicles entering and leaving the site should be carefully managed, using gates that are clearly marked and free from obstacles. Traffic marshals must ensure the safe passage of all traffic on the public highway, in particular pedestrians and cyclists, when vehicles are entering and leaving site, particularly if reversing.

Traffic marshals, or site staff acting as traffic marshals, should hold the relevant qualifications required for directing large vehicles when reversing. Marshals should be equipped with 'STOP – WORKS' signs (not STOP/GO signs) if control of traffic on the public highway is required. Marshals should have radio contact with one another where necessary.

a. Please detail the proposed site access and egress points on a map or diagram. If this is attached, use the following space to reference its location in the appendices.

Please refer to Appendices for GOSHCCC - Hoarding & Gate Drawing

b. Please describe how the access and egress arrangements for construction vehicles in and out of the site will be managed, including the number and location of traffic marshals where applicable. If this is shown in an attached drawing, use the following space to reference its location in the appendices.





c. Please provide swept path drawings for vehicles accessing/egressing the site if necessary. If these are attached, use the following space to reference their location in the appendices.

Refer to appendices for copy of HGV vehicle tracking and highway alterations proposals.



d. Provision of wheel washing facilities should be considered if necessary. If so, please provide details of how this will be managed and any run-off controlled. Please note that wheel washing should only be used where strictly necessary, and that a clean, stable surface for loading should be used where possible.

#### **Construction Vehicle Cleaning**

Wheel wash facilities will be provided on the western exit gate throughout the project.

Concrete hard standings will be installed as part of the enabling works to aid dust suppression. During the hotter months an appointed traffic marshal will be employed to spray the hard standings with water for the proposes of dust suppression.

**21. Vehicle loading and unloading:** "Clients shall ensure that vehicles are loaded and unloaded on-site as far as is practicable." (P19, 3.4.4)

This section is only relevant if loading/unloading is due to take place off-site on the public highway. If loading is taking place on site, please skip this section.

a. please provide details of the parking and loading arrangements for construction vehicles with regard to servicing and deliveries associated with the site (e.g. delivery of materials and plant, removal of excavated material). This is required as a scaled site plan, showing all points of access and where materials, skips and plant will be stored, and how vehicles will access and egress the site. If this is attached, use the following space to reference its location in the appendices. Please outline in question 24 if any parking bay suspensions will be required.

# **Unloading and Loading of Construction Vehicles**

All offloading will be carried out within the erected site hoarding line.

b. Where necessary, Traffic Marshalls must ensure the safe passage of pedestrians, cyclists and motor traffic in the street when vehicles are being loaded or unloaded. Please provide detail of the way in which marshals will assist with this process, if this differs from detail provided in Q20 b.

# **Segregation of External Stakeholders**

Sisk's site logistical plan has been established to ensure safe segregation between construction activities and the public realm. Gatemen will be positioned at every access and egress gate within the site hoarding line. Subject to construction events where large plant or deliveries occur traffic marshals will assist with managing public traffic to ensure a safe environment. During these events public traffic including vehicular movements, cyclists and pedestrians will be given right of way.



# **Street Works**

Full justification must be provided for proposed use of the public highway to facilitate works. Camden expects all options to minimise the impact on the public highway to have been fully considered prior to the submission of any proposal to occupy the highway for vehicle pit lanes, materials unloading/crane pick points, site welfare etc.

Please note that Temporary Traffic Orders (TTOs) and hoarding/scaffolding licenses may be applied for prior to CMP submission but <u>won't</u> be granted until the CMP is signed-off.

Please note that there is a two week period required for the statutory consultation process to take place as part of a TTO.

If the site is on or adjacent to the TLRN, please provide details of preliminary discussions with Transport for London in the relevant sections below.

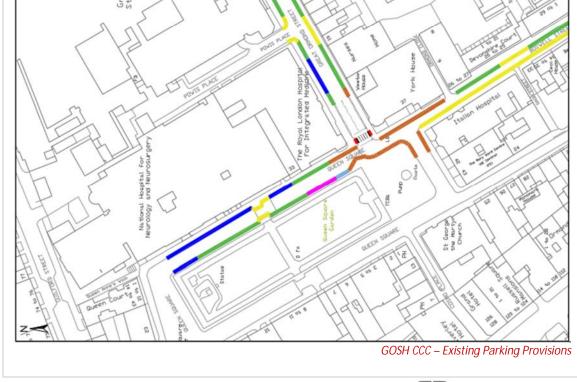
If the site conflicts with a bus lane or bus stop, please provide details of preliminary discussions with Transport for London in the relevant sections below.

22. Site set-up

Please provide a scaled plan detailing the local highway network layout in the vicinity of the site. This should include details of on-street parking bay locations, cycle lanes, footway extents, relevant street furniture, and proposed site access locations. If these are attached, use the following space to reference their location in the appendices.



# **Existing Parking Provisions** Sisk has analysed parking provisions within the existing public realm. The majority of provisions consist of; double and single yellow lines, private resident parking, pay and display parking and ambulance parking. When planning the construction logistics Sisk will impose a logical and practical solution to ensure safe segregation between construction operations and public traffic. Great Ormond Street Hospital Great Ormond Street Hospita Current parking restrictions





# **GOSH Entrance During Deconstruction and Construction Phase**

The main entrance to GOSH is located on Great Ormond Street, between the Frontage Building and POG. This entrance is used by the vast majority of patients and visitors to the wider hospital island site along with a high proportion of staff. Other existing entrances are available around the wider island site, most of which are for staff access or specific departments.

The deconstruction and construction activities will require the closure of the footway and main hospital entrance on the north side of Great Ormond Street between the POG and Lamb's Conduit Street.

The temporary main entrance will become the existing entrance to the Morgan Stanley Clinical Building (Location 2 in Figure 27) on Guilford Street.

Secondary entrances for all GOSH users will be the Octav Botnar Building (Location 4) on Lamb's Conduit Street, and the (location 1) Nurse's home as required.

GOSH staff will have access to entrances at (location 8) Powis Place, (location 1) the Nurse's home and (location 3) Camelia Botnar Laboratories. Powis Place will continue to be available for blue light and bed patient transfer only.



Existing GOSH Entrance Locations

Details of the proposed highway alterations including amendments to parking, removal of existing public amenities and alterations of existing trees have been summaries within sections 23, 24 and 25 of this documents.

To best inform GOSH staff and patients, Sisk will display appropriate wayfinding signage on the construction hoarding. In light of this we have structured our welfare setup and site entrance to be positioned on the east corner of Great Ormond Street and Lamb's Conduit Street.

The existing road network north of GOSH offers a smoother flow of traffic than Great Ormond Street as there is a one-way system from Russell Square along Bernard Street, Grenville Street and Guilford Street, returning to Russell Square. This will reduce the risk of congestion by preventing U-turning vehicles and removing two-way traffic along these sections where it would not be possible to pass oncoming traffic. It also relocates the activity associated with the main entrance away from the construction area and GOSH/UCLH blue light routes. The Revised Transport Statement produced in October 2022 provides detailed commentary and modelling noting that the temporary removal of hospital activities from Great Ormond Street would reduce the level of traffic on Great Ormond Street during the construction of the development.



In preparation of relocating the existing GOSH main entrance, partial simulations of the relocated main entrance were carried out 26 April 2023, 7 June 2023. The partial simulations consisted of volunteers following the alternative access routes. A full simulation including associated highway alterations is scheduled to be carried out on 30 November 2023 and 1 December 2023.

#### **Highway Alterations**

Though detailed preconstruction investigation and engagement with London Borough of Camden Highways department we have identified the following highway alterations to facilitate the safe manoeuvres of construction vehicles travelling to site. A copy of the proposed highway alteration drawings is have been appended within the DCMP.

To facilitate safe continuous public travel throughout the deconstruction and construction phase temporary road orders (TRO) are required. The following proposed <u>highway alterations</u> has agreed with LBC Highways.

#### **Guilford Street:**

- existing zebra crossing to the east of Guilford Place junction is to be relocated east with additional build out to suit kerb line adjustment entering Guilford Place;
- construction of drop kerb to facilitate loading and unloading of patients to relocated temporary main entrance to Great Ormond Street Hospital; and
- appropriate highway line markings and signage to suit proposal.

#### **Guilford Place and Lamb's Conduit Street:**

- Guilford Place and Lamb's Conduit Street current highway layout of two-way traffic northbound and southbound will remain throughout the deconstruction and construction phase;
- realignment of kerb and construction of build out to facilitate use of HGV and articulated wagons during construction; and
- appropriate highway line markings and signage to suit proposal.

#### **Great Ormond Street:**

- realignment of kerb at junction between Orde Hall Street and Great Ormond Street and double yellow lines at junction;
- implementation of westbound one-way traffic route for public highway;
- implementation of emergency vehicle access only eastbound on Great Ormond Street to access Powis Place;
- relocation of three existing street posts from the southern footpath to the north;
- removal of existing parklet seating area and relocated to Guilford Street;
- temporary removal of existing streateries associated with The Perseverance public house on southwest highway throughout project duration;
- construction of new pedestrian crossing including footpath drop-kerb and build out west of Powis Place junction;
- relocation of existing zebra crossing at west end of Great Ormond Street to facilitate kerb line adjustments; and
- appropriate highway line markings and signage to suit proposal.

## Queen Square:

- Queen Square to junction of Powis Place two-way traffic to be amended to ambulance access only travelling eastbound (to accommodate GOSH and UCLH blue light (emergency) ambulances).
- realignment of south kerb at junction between Great Ormond Street and Queen Square.
- appropriate highway line markings and signage to suit proposal.

#### **Boswell Street:**

appropriate highway line markings and signage to suit proposal.

#### Orde Hall Street:

appropriate highway line markings and signage to suit proposal.

# Lansdowne Terrace:

- appropriate highway line markings and signage to suit proposal; and
- establish designated ambulance parking throughout the entirety of the construction phase.

# **Grenville Street:**

no highway alterations will take place on Grenville St.

#### **Brunswick Square:**

- appropriate highway line markings and signage to suit proposal; and
- establish designated ambulance parking throughout the entirety of the construction phase.



# 23. Parking bay suspensions and temporary traffic orders

Parking bay suspensions should only be requested where absolutely necessary and these are permitted for a maximum of 6 months only. For exclusive access longer than 6 months, you will be required to obtain a <a href="Temporary Traffic Order">Temporary Traffic Order</a> (TTO) for which there is a separate cost.

Please provide details of any proposed parking bay suspensions and/or TTO's which would be required to facilitate the construction - include details of the expected duration in months/weeks. Building materials and equipment must not cause obstructions on the highway as per your CCS obligations unless the requisite permissions are secured.

Information regarding parking suspensions can be found <a href="here.">here.</a>



#### **Parking Bay Suspension and Temporary Traffic Orders TTO**

To facilitate safe continuous public travel throughout the deconstruction and construction phase, temporary road orders (TRO) are required. The following proposed <u>amendments to existing parking</u> has been agreed with LBC Highways.

#### **Guilford Street**;

- relocation of 1no existing disabled parking bay on north east side of Guilford Street to permit relocation of existing zebra crossing;
- installation of 1no ambulance parking/loading/unloading bay;
- conversion of 4nr resident parking spaces to facilitate loading and unloading of patients to relocated temporary entrance to Great Ormond Street Hospital; and-

#### **Guilford Place and Lamb's Conduit Street:**

 partial temporary suspension of loading bay at the southern end and introduction of timed waiting and loading restrictions, Mon-Fri 08:00 – 18:00 and Sat 08:30-13:30.

#### **Great Ormond Street:-**

- relocation of 1no disabled parking space;
- installation of 1no bay timed waiting and loading restrictions to the eastern end of Great Ormond Street, Mon-Fri 08:00 – 18:00 and Sat 08:30-13:30;
- installation of full-time waiting loading restrictions (double yellow lines) & removal of 3no permit holder parking bays at the east of Orde Hall junction;
- installation of full-time waiting loading restrictions (double yellow lines) & removal of 7no Ambulance only parking bays at the north side kerb line on Great Ormond Street;
- installation of 1no pay & display bay full time waiting loading restrictions (double yellow lines) at the west of Orde Hall junction;
- installation of 1no new permit holder parking bay;
- installation of 2no permit holder bay timed waiting and loading restrictions at the western end of Great Ormond Street, Mon-Fri 08:00 – 18:00 and Sat 08:30-13:30;
- installation of 1no permit holder bay timed waiting and loading restrictions at the western end of Great
   Ormond Street, Mon-Fri 08:00 18:00 and Sat 08:30-13:30at the west of Barbon Close;
- installation of 2no new permit holder parking bays;
- convert 4nr existing pay & display parking bays into permit holder parking bays;
- installation of 2no pay & display parking bays full time waiting loading restrictions (double yellow lines) at north east of Great Ormond Street, to facilitate two-way emergency vehicle access;
- installation of 2no existing ambulance only parking bays full time waiting loading restrictions (double yellow lines) at north east of Great Ormond Street, to facilitate two-way emergency vehicle access; and
- installation of 1no pay & display parking full time waiting loading restrictions (double yellow lines) at north east of Great Ormond Street, suspension of bays to facilitate two-way emergency vehicle access.

#### Queen Square:-

 installation of timed waiting and loading restrictions to south east corner (double yellow lines), Mon-Fri 08:00 – 18:00 and Sat 08:30-13:30.

#### Boswell street:-

- installation of timed waiting and loading restrictions to east kerb line, suspension of 11no permit holder parking bays (double yellow lines), Mon-Fri 08:00 – 18:00 and Sat 08:30-13:30;
- installation of timed waiting and loading restrictions to east kerb line, suspension of 6no pay & display parking bays (double yellow lines), Mon-Fri 08:00 – 18:00 and Sat 08:30-13:30; and
- Installation of full time waiting and loading restriction to west kerb line throughout Boswell Street.

#### Orde Hall Street:-

convert 4no pay & display parking bays to permit holder bays.

#### Lansdowne Terrace:-

conversion of 5no permit holder bays to 5no ambulance only parking bays.

# **Grenville Street:-**

no parking amendments will occur on Grenville St.

#### **Brunswick Square:-**

conversion of 5no permit holder parking bays to 5no ambulance only parking bays.

#### **Grenville Street:-**

conversion of 3no existing permit holder parking bays into disabled parking bays.



An automatic traffic counter (ATC) was installed to monitor volumes of traffic and speed travelling through Great Ormond Street (monitoring period for 7 days between 4<sup>th</sup> and 11<sup>th</sup> February 2020). Data recorded indicates that weekday traffic volumes are around 1,600 vehicles in an eastbound direction and 1,300 in a westbound direction per day. HGVs represented 15% of that volume of traffic. Hourly volumes are less than 100 movements in either direction. This indicates a preferrable route for one way travel during construction would be in a westbound direction, which has been reflected within the proposed construction logistics plan.

A summary of south zone parking impacts has identified the following:

Table below provides a summary of recommended changes, highlighting net changes in provision of each type affected.

ROAD	AMBULANCE	PERMIT	DISABLED	PAY & DISPLAY	TOTAL
Great Ormond Street Full Time	-9	4	-	-9	+4
Loading Restriction					
Great Ormond Street Timed	-	-4	-	-	-4
Loading Restriction					
Boswell Street Full Time Loading	-	-	-	-	0
Restriction					
Boswell Street Timed Loading	-	-11	-	-6	-15
Restriction					
Orde Hall Street Full Time	-	+4	-	-4	0
Loading Restriction					
Orde Hall Street Timed Loading	-	-	-	-	0
Restriction					
<b>Total South Full Time Restriction</b>	-9	-7	-	-15	-31
Total South Times Loading	-	0	-	-4	-4
Restriction					

GOSH CCC Summary Of Net Changes In Parking Provision (South Zone)

Table below presents a summary of recommended changes, highlighting net changes in provision of each type affected.

ROAD	AMBULANCE	RESIDENT	DISABLED	PAY-BY PHONE	TOTAL
Guilford Street	+1	-4	-	-	-3
Grenville Street	-	-	-	-	0
Brunswick Square	+5	-5	-	-	0
Lansdowne Terrace	+5	-5	-	-	0
Total (South)	+11	-17	+3	0	-3

GOSH CCC Summary Of Net Changes In Parking Provision (North Zone)



# 24. Occupation of the public highway

Please note that use of the public highway for storage, site accommodation or welfare facilities is at the discretion of the Council and is generally not permitted. If you propose such use you must supply full justification, setting out why it is impossible to allocate space on-site. We prefer not to close footways but if this is unavoidable, you should submit a scaled plan of the proposed diversion route showing key dimensions.

a. Please provide justification of proposed occupation of the public highway.

Throughout the design phase of GOSHCCC the Sisk pre-construction team has investigated logistical arrangements of which will best suit the needs of both the public and Great Ormond Street Hospital whilst maintaining high standards of health and safety management.

Due to the geographical location of the site whereby the only accessible place is via Great Ormond Street on the southern boundary it is by then through process of elimination that construction workforce, plant and vehicles must use the only accessible route permitted.

b. Please provide accurate scaled drawings of any highway works necessary to enable construction to take place (e.g. construction of temporary vehicular accesses, removal of street furniture etc). If these are attached, use the following space to reference their location in the appendices.



### **Occupation of Public Highway**

During the construction phase our hoarding line will encompass the entire northern pedestrian footpath and a section of Great Ormond Street. A series of tree works will be required.

Sisk has commissioned an Arboriculture Assessment, risk assessment and method statement of the existing trees within and in proximity of the site boundary to understand the potential impacts on trees.

The Arboricultural Method statement has identified 25 tree features, composed of 24 individual trees and once group of trees which have the potential to be impacted by the proposed development including the access route for high-sided vehicles. A summary of proposed works to existing trees include:

- temporary removal of 10 trees and once group of trees directly to the front of the existing building on the north side of Great Ormond Street. The removal of these trees has been approved under planning application 2022/2233/P.
- Tree pruning of 8 trees is required to allow for the access and egress of deliveries from high-sided vehicles.
- Stem protection to 1 tree opposite existing Paul O'Gorman Building.

A copy of the Arboricultural Method Statement has been included within the appendix of the DCMP. Sisk proposes to replace all removed trees with replacements of identical value upon completion of construction works, as agreed with London Borough of Camden.

In addition to the above tree works the following alterations to the existing public realm are required, as agreed with London Borough of Camden:

- removal of 19 existing bicycle hoops (11 belonging to GOSH and 8 belonging to LBC);
- removal of 3 street corner vehicle bollards;
- removal of 2 public general waste bins;
- removal of 3 street light lamp posts;
- removal of 3 street signposts; and
- removal of 3 public benches.

Existing LBC cycle parking provision will be relocated to the surrounding area where possible. Sisk will work with Camden to ensure that this provided as part of the wider highways works.

As part of the preconstruction process Sisk has produced relevant traffic management order drawings and general arrangements drawings to demonstrate the proposed highway alterations during the deconstruction and construction phase. A copy of these drawings has been included within the appendix of the DCMP.

A Stage 2 Road Safety Audit has been commissioned for the proposals. This has been included within the appendices of this document.

A Stage 3 Road Safety Audit has been commissioned take place once the new road layout works have been completed. Sisk will work with London Borough of Camden to implement any recommendations, as necessary.





# 25. Motor vehicle and/or cyclist diversions

Where applicable, please supply details of any diversion, disruption or other anticipated use of the public highway during the construction period. Please show locations of diversion signs on drawings or diagrams. If these are attached, use the following space to reference their location in the appendices.

#### **Motor Route**

Throughout the construction phase of the project, Great Ormond Steet will become 1-way westbound for motor vehicle traffic.

The motor vehicle diversion route is shown below. Permanent diversion signage will be delivered as soon as possible, and no later than 1<sup>st</sup> September, once the new highways layout is in place.

A "keep left" A board will be used in the carriageway on Boswell Street to the immediate south of the junction with Gage St to alert HGV drivers to the need to use the eastern side of the carriageway. This will be in addition to the briefing which all drivers will receive on leaving site as outlined above.

The sign will be displayed and removed daily before and after the first and last deliveries.

The approach to this will be kept under review and revisited if necessary.



Details of the proposed cycle and motor signage are included within with the appendices - *Traffic Management Order drawings, Proposed Highway Alterations Drawings and HGV Tracking.* 





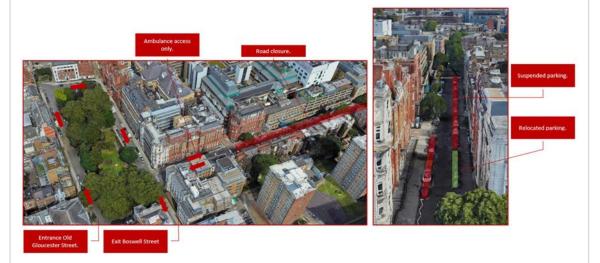


#### **Road Closures**

Scheduled temporary road closures of Great Ormond Street will be required to facilitate specific works during the construction phase. Work activities currently identified that will require temporary road closures include:

- site mobilisation and hoarding erection and dismantle. Anticipated duration 5 days;
- removal of existing Frontage Building emergency generator 2 days;
- specialist plant delivery and removal, including but not limited to piling rigs, specialist access equipment and crawler cranes. Anticipated duration 1 day each operation;
- site welfare accommodation setup and dismantle. Anticipated duration 2 days;
- existing service diversion and termination. Anticipated duration 2 days;
- erection and dismantle of 2no tower cranes. Anticipated duration 5 days;
- installation of specialist medical equipment, including but not limited to PET and MRI scanners. Anticipated duration 2 days:
- Installation of precast façade panels for tower crane infills. Anticipated duration 5 days;
- operative and goods hoist erection and dismantle. Anticipated duration 2 days;
- enabling works i.e existing Great Ormond Street footpath protection. Anticipated duration 3 days;
- level 6-10 steel truss installation. Anticipated duration 2 days; and
- bridge link installation. Anticipated duration 2 days.

To mitigate the temporary loss of access during these periods on Great Ormond Street Sisk has developed a plan to continue to provide blue light vehicular access and bed patient transfer within Powis Place for GOSH and UCLH. Table below demonstrates clinical vehicles are to follow the existing one-way travel around Queen Square whereby all vehicles will turn left heading eastbound onto Great Ormond Street and into Powis Place. As shown in swept path analysis Powis Place can permit turning of vehicles up to a maximum of 10t rigid artic. All clinical vehicles can leave GOSH via Boswell Street.



#### GOSH CCC – Proposed Road Closure Diversion Route

It is the responsibility of Sisk to ensure that all necessary TRO, consents and licences are obtained within a sufficient programme. Throughout the planning application process Sisk has engaged with the Camden Highways Agency and LBC planning and transport team to negotiate a safe and efficient logistical arrangement for the deconstruction and construction phase. Ongoing dialogue will continue throughout the preconstruction, deconstruction and construction phase. Anticipated road closures during the deconstruction and construction phases will impact the eastern half of Great Ormond Street. Contingency plans will be coordinated and communicated to permit public access to Barbon Close during road closure events.

As part of our Considerate Constructor obligation, construction activities will remain within our hoarding line to avoid interference and nuisance to traffic movements. Any exemption to this will be planned and agreed with all relevant parties.



It is the responsibility of Sisk to ensure that all necessary TRO, consents and licences are obtained within a sufficient programme. Throughout the planning application process Sisk has engaged with the Camden Highways Agency and LBC planning and transport team to negotiate a safe and efficient logistical arrangement for the deconstruction and construction phase. Ongoing dialogue will continue throughout the preconstruction, deconstruction and construction phase.

All road closure events will be planned and approved in accordance with London Borough of Camden Highways department legislation and guidelines. Road closures will be coordinated to ensure safe pedestrian access to the

Road closures will be implemented as a last resort to ensure safe segregation between public and site operations. Details of upcoming road closure events will be published and notified through, newsletters, Construction Working Groups and website updates.

southern footpath of Great Ormond Street is maintained. Contingency arrangements will be implemented for each specific road closure event to maintain opportunity of emergency vehicular access to residential and

business properties which reside opposite the site boundary.

As part of our Considerate Constructor obligation, construction activities will remain within our hoarding line to avoid interference and nuisance to traffic movements. Any exemption to this will be planned and agreed with all relevant parties.



# 26. Scaffolding, hoarding, and associated pedestrian diversions

Pedestrians safety must be maintained if diversions are put in place. Vulnerable footway users should also be considered. These include wheelchair users, the elderly, those with walking difficulties, young children, those with prams, the blind and partially sighted. Appropriate ramps must be used if cables, hoses, etc. are run across the footway.

Any work above ground floor level may require a covered walkway adjacent to the site. A licence must be obtained for scaffolding and gantries. The adjoining public highway must be kept clean and free from obstructions, and hoarding should not restrict access to adjoining properties, including fire escape routes. Lighting and signage should be used on temporary structures/skips/hoardings etc.

A secure hoarding will generally be required at the site boundary with a lockable access.

a. Where applicable, please provide details of any hoarding and/or scaffolding that intrudes onto the public highway, describing how pedestrian safety will be maintained through the diversion, including any proposed alternative routes. Please provide detailed, scale drawings that show hoarding lines, gantries, crane locations, scaffolding, pedestrian routes, parking bay suspensions, remaining road width for vehicle movements, temporary vehicular accesses, ramps, barriers, signage, lighting etc. If these are attached, use the following space to reference their location in the appendices.



#### Scaffold

As stated in Section 6 of this document, as part of the enabling works, a scaffold walkway will have to be erected at the current main entrance to Great Ormond Street Hospital. This will require founding on the public footway. The scaffold will be wrapped and secure to ensure the public safety is always maintained. The scaffold standards will be kept a minimum of 450mm from the kerb edge. A minimum clearance of 1.2m will be kept in the east-west direction on the footway.

During construction, a pedestrian diversion will be implemented to ensure public safety is always maintained. A temporary ambulance bay suspension may be implemented to facilitate this diversion. The works will be undertaken only once the main entrance to GOSH has been relocated and during the weekends (under a section 61) to minimise public use of the footway. Proposed traffic management has been included within the appendices.

#### **Statutory Licenses**

It is the responsibility of Sisk to obtain all required licences and consent for the welfare accommodation location. Currently the proposed site welfare facility is to be located on the eastern end of the site boundary.

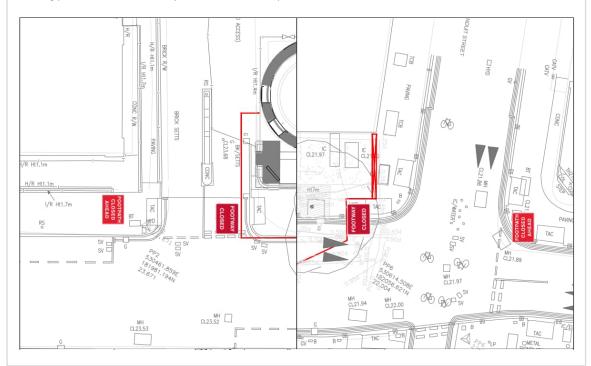
Due to the sensitivity of GOSH operations Sisk have carried out thorough investigations and carried out meetings with the Trust Management Team regarding site-setup. Heavily congested traffic routes and adjacent public walkways will need to be managed effectively and it will be necessary to establish clear segregation to maintain health and safety during construction.

#### **Hoarding and Associated Pedestrian Diversions**

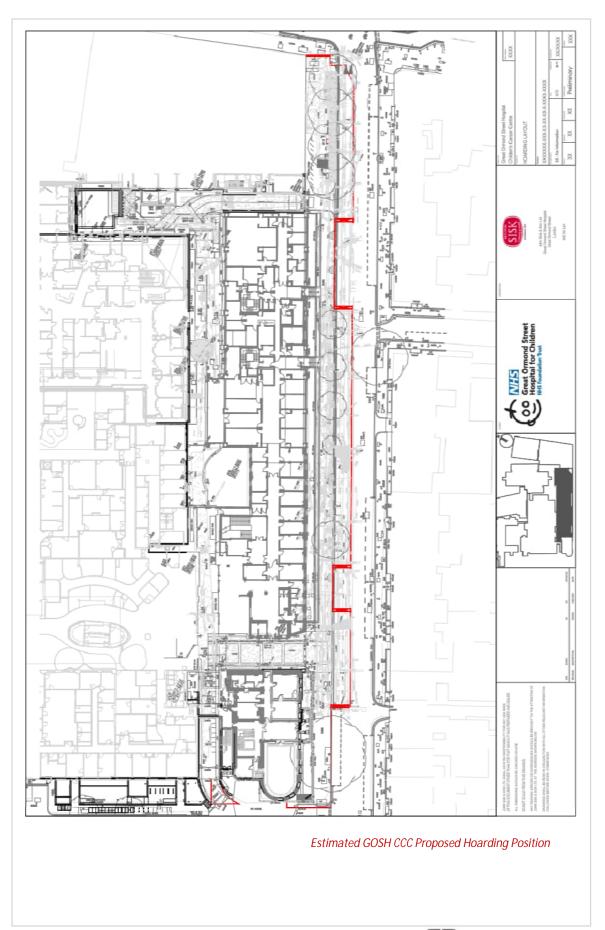
Hoardings are primarily a safety requirement, but they do have secondary environmental functions, as described within environmental chapters of this document.

Hoardings are to be compliant with the Considerate Constructors Scheme CCS and to be erected in accordance with agreed GOSH specifications. The site will be enclosed with a 2.44m high *Temporary Vertical Concrete Barrier* TVCB system. Hoarding panels are interlocked to a steel support which is connected via M16 bolts into a recessed pre-case channel.

Appropriate signage will be erected at either end of Great Ormond Street, fixed to the hoarding and on A-boards alerting pedestrians and footway users of the footway closure. Locations can be seen below:









#### **Construction Lighting**

Construction lighting will be provided by portable tungsten halogen floodlights. Light sources including those on cranes, will be directed away from hospital rooms and neighbouring homes. All non-essential lighting will be switched off when not in use. Generators used to power lighting will be noise attenuated. Lighting to hoarding will be illuminated for 30 minutes after sunrise and before sunset. The hoarding lighting will comprise impact resistant luminaires spaced at 3mm distances. To reduce site carbon footprint Sisk will implement LED lighting where applicable.

# **Construction Security Arrangements**

There will be regular security patrols within and around the perimeter of the Sisk site during and after site working days. Site security will be maintained through hoardings, controlled gate access systems to record visitors' details, and out-of-hours movement sensitive lighting and CCTV.

b. Please provide details of any other temporary structures which would overhang/oversail the public highway (e.g. scaffolding, gantries, cranes etc.) If these are attached, use the following space to reference their location in the appendices.

#### **Lifting Operations**

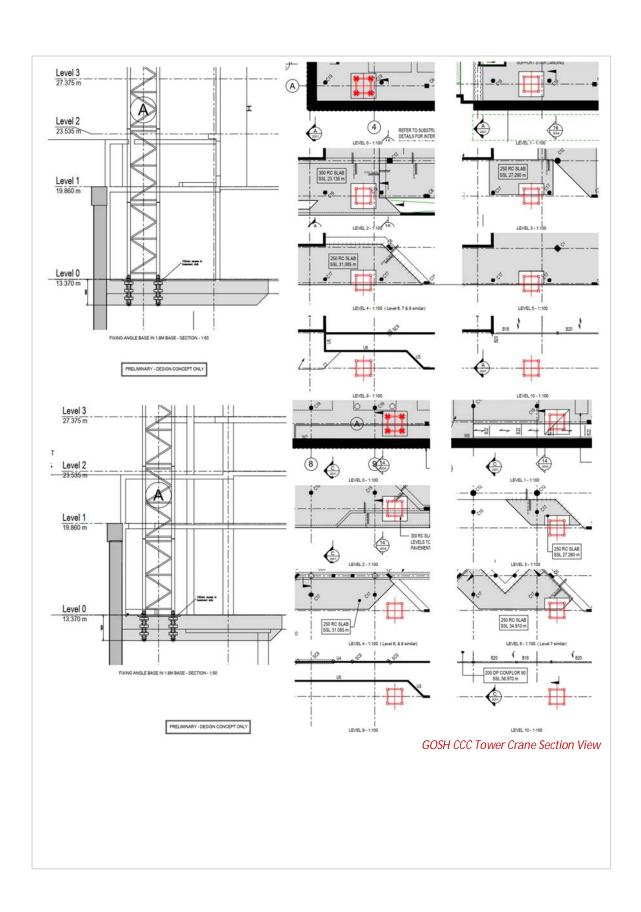
2 luffing jib tower cranes and 2 operative hoists will be installed on site to facilitate the majority of vertical transportation of site operative workforce, plant and materials. The two proposed tower cranes will enable full coverage of the site boundary. The first operative and personnel hoist will provide safe direct access to Level 1 and Level 0 basement areas. The second operative and goods hoist will provide safe site access to the building's upper levels.

All lifting operations will be designed, planned, and monitored by the Sisk Appointed Person and Lift Supervisor with CPCS A61 Appointed Person and CPCS A62 Crane Supervisor/Lift Supervisor. In addition, lifting operations management will cover any works with tower cranes, hoists, telehandlers, Hi-Ab lorries, mobile cranes and lifting accessories.

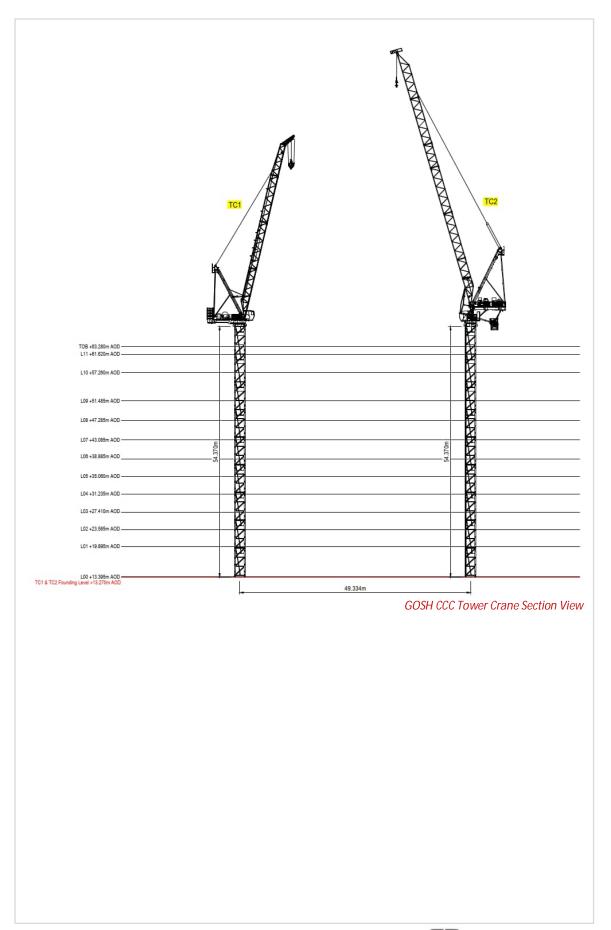
The lifting team will be briefed on the schedule of common lifts that is produced by Sisk during the preconstruction phase as guidance on how each lift on site should be correctly installed. Sub-contractors will provide sufficient banksman resources towards works packages and Sisk will provide a single banksman to ensure all lifting operations are carried out in accordance with the Sisk company standards. The Lift Supervisor will carry out weekly briefings with all lifting team operatives and management and ensure all required weekly checks under LOLER Regulations are carried out and up to date.

In response to comments received following submission of the planning application Sisk has reviewed opportunity to relocate both tower cranes and reduce the impact on Great Ormond Street. As a result, the current option locates both cranes within the proposed building footprint and eliminates risk of oversailing adjacent properties.

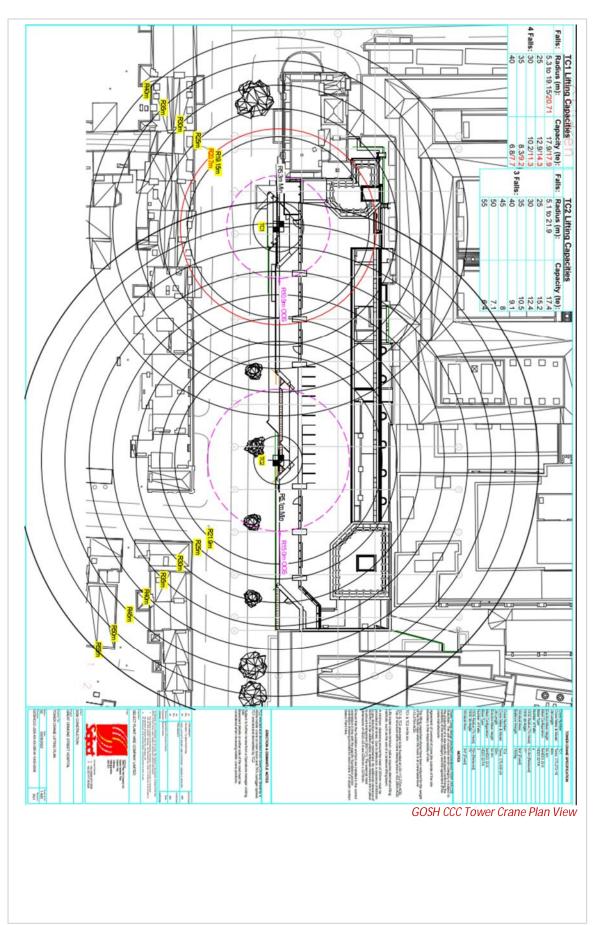




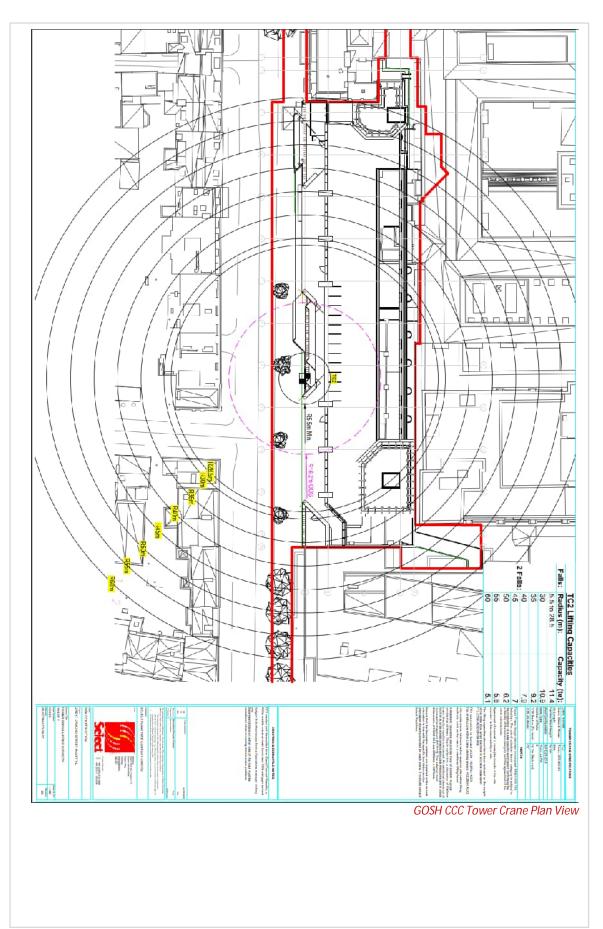














# Preliminary tower crane 1 (TC1) project info summary (UNDER REVIEW):

- crane make and model: CTL272-18 TEREX 67KW
- mast height: 54.40m;
- jib length: 40m;
- mains power requirement: 190KVA;
- safe working load min radius: 17900kg;
- max safe working load max radius:7700kg;
- out of service radius: 10.90m;
- erection date: TBC (1w install);
- hire duration: 70wk;
- dismantle Date: TBC (1w dismantle); and
- temporary work considerations: TBC pending ongoing temporary works investigation.

# Preliminary tower crane 2 (TC2) project info summary (UNDER REVIEW):

- crane make and model: CTL430-24 TEREX;
- mast height: 54.40m;
- jib length: 55m;
- mains power requirement: 246KVA;
- safe working load min radius: 17400kg;
- max safe working load max radius: 64000kg;
- out of service radius: 15m;
- erection date: TBC (1w install);
- hire duration: 70wk;
- dismantle Date: TBC (1w dismantle); and
- temporary work considerations: TBC pending ongoing temporary works investigation.

# Preliminary operative and goods hoist 1 (GH1) project info summary (UNDER REVIEW):

- hoist make and model: Alimak Scando 650 FC 50;
- max safe working load: 2500KG;
- entry width x height: 2000mm x 2300mm;
- operating speed: 54m/min;
- erection date: TBC;
- hire duration: 50w;
- dismantle date: TBC;
- temporary works: TBC pending ongoing temporary works investigation; and
- new build breakthrough locations: Hoist shaft to breakthrough level 1 & 2 concrete slab.

#### Preliminary operative and goods hoist 2 (GH2) project info summary (UNDER REVIEW):

- hoist make and model: Alimak Scando 650 FC 50;
- max safe working load: 2500KG;
- entry width x height: 2000mm x 2300mm;
- operating speed: 54m/min;
- erection date: TBC;
- hire duration: 50w;
- dismantle date: TBC; and

temporary works: TBC pending ongoing temporary works investigation.





GOSH CCC Proposed Goods and Personnel Hoist Logistics



#### 27. Services

Please indicate if any changes to services are proposed to be carried out that would be linked to the site during the works (i.e. connections to public utilities and/or statutory undertakers' plant). Larger developments may require new utility services. If so, a strategy and programme for coordinating the connection of services will be required. If new utility services are required, please confirm which utility companies have been contacted (e.g. Thames Water, National Grid, EDF Energy, BT etc.) You must explore options for the utility companies to share the same excavations and traffic management proposals. Please supply details of your discussions.

#### Services

Prior to the commencement of deconstruction works, the Trust Management Team will be responsible for isolating, terminating, and making safe all live services within the Frontage Building and Paul O'Gorman PO'G building. Upon completion of these works the Trust Management Team will issue Sisk a "green" deconstruction certificate.

To assist with design and planning Sisk has carried out surveys to determine the location and type of existing services within the site hoarding line. These include identification of services residing within the northern pedestrian footpath on Great Ormond Street, Powis Place and the northern courtyard space.

As part of the construction works Sisk will form an extended basement plant space from existing ground level. Sisk recognises that these works will encroach into locations of existing below ground services. As part of our obligation to ensure continuous functionality of adjacent clinical buildings Sisk will develop a temporary service strategy to divert existing services of adjacent buildings that clash with the GOSH CCC development and re-route into the mains connections. Further development of this strategy will follow as the project design develops and ongoing surveys are complete.

Utility connection locations for a temporary builders' supply TBS are to be provided by statutory organisations i.e Thames Water and UKPN. Sisk will be responsible for the installation, operation, and maintenance of TBS throughout the construction phase.

Illustrated below are images of services identified following site surveys, listed below are known services:

- surface drainage:
- heating apparatus / pipes;
- BT cables;
- water services;
- electrical cables;
- streetlight cables;
- pipe (unspecified);
- empty ducts; and-
- potential utility route identified by GPR.







## **Environment**

To answer these sections please refer to the relevant sections of **Camden's Minimum Requirements for Building Construction (CMRBC)**.

28. Please list all <u>noisy operations</u> and the construction method used, and provide details of the times that each of these are due to be carried out.

#### Environment

It is the responsibility of Sisk to identify potential environmental risks during the construction of the GOSH CCC project. The proposed GOSH CCC development is located within proximity of functioning GOSH clinical buildings on the north, east and west boundary lines. Residents and local businesses reside outside the southern boundary on the other side of Great Ormond Street. Careful consideration has been given when planning construction methods to ensure minimal interference to hospital patients and staff, neighbours and businesses.

To ensure compliance during the deconstruction and construction phase the following list of environmental objectives will be achieved:

- ensure compliance with all relevant Environmental Legislation;
- compliance with local authority environmental policies;
- compliance with the Sisk Environmental Policy and standards;
- minimise risk of environmental damage through effective and appropriately resourced control measures, implemented through responsible management;
- promote better workforce knowledge by ongoing education in methods of preventing environmental damage and pollution;
- to minimise waste sent to landfill during deconstruction and construction by commitment to reuse waste materials on site, and by maintaining effective recorded monitoring of waste, in accordance with the requirements of the Site Waste Management Plan SWMP;
- establish travel plan for employees by encouraging use of public transport;
- achieve minimum or better within the Considerate Constructors Scheme; and
- achieve BREEAM 2018 "Excellent" compliance.

With the intention of mitigating the level of nuisance and disturbance to the public realm and GOSH Hospital Sisk have proposed the implementation of quiet periods during the normal working day. The timing and duration of these is currently as below:

Quiet times: Monday to Friday: 07:00-08:00, 12:00-13:00, 16:30-17:30. Saturday 08:00-09:00

During the quiet periods max dB = 65dB Laeq,1hour at source of monitoring location.

#### Site Acoustics

Construction activities are likely to give rise to airborne, ground borne and structure borne noise. The main activities that are associated with the CCC project will be:

- deconstruction works concrete breaking and grinding;
- piling works CFA, secant piling wall operations and sheet piling;
- ground works reduced level dig to form Level 0 basement;
- removal of below ground obstructions;
- reinforced concrete frame formwork installation;
- reinforced concrete slab scabbling; and
- plant and construction vehicle movement.



29. Please confirm when the most recent noise survey was carried out (before any works were carried out) and provide a copy. If a noise survey has not taken place please indicate the date (before any works are being carried out) that the noise survey will be taking place, and agree to provide a copy.

#### **Baseline Noise Impact Assessment**

Sisk has completed a full impact noise assessment during August 2021 in accordance National Policy Framework (NPPF), BS 4142:2014+A1:2019, BS6472-1:2008, BS6472-1:2008, BS7445-1:2003, Pollution Act 1974, Environmental Protection Act 1990 and any specific LBC requirements.

Baseline noise monitoring was carried out to establish daytime and night time noise levels through the use of attended and unattended monitoring.

Image below illustrates locations of long term unattended measurements was taken in two locations:

- roof level of existing Frontage Building; and
- roof level of Premier Inn Clinical Building PICB.

Unattended monitor stations recorded noise levels for a minimum of 4 days and included at least one full weekend and two full weekdays / nights.

Image below illustrates locations of short term attended measurements was taken in six locations:

- street level on Powis Place;
- street level of Great Ormond Street west;
- street level of Great Ormond Street east;
- roof level of Octav Botnar Building (OBW);
- roof level of Premier Inn Clinical Building (PICB); and
- roof level of Variety Club Building (VCB).

Attended monitor stations recorded noise levels for a minimum 20 minutes.



GOSH Surveyed Attended and Unattended Locations



#### **Guidance on Acoustic Standards During Deconstruction and Construction**

Management and operational controls will be implemented in order to minimise adverse effects from noise arising from deconstruction and construction activities, if they occur. The timing and duration of mitigation measures, as described below, have all been designed to minimise impact on the hospital, neighbours and businesses.

There will be monitoring of noise, both on-site to protect employees, and off-site, to measure potential disturbance to neighbours and businesses and comply with noise control limits. This will occur prior to and throughout the main deconstruction and construction works. This document addresses off-site impacts.

Noise and its emission will be controlled in accordance with the recommendations established in BS 5228-1:2009 Code of practice for noise and vibration control on construction and open sites.

#### **Noise Monitoring Equipment**

Noise data will be collected on a continuous basis by Sisk and disseminated as follows:

- the LAeq.1hr A-weighted continuous equivalent sound level measured over a 1-hour period;
- the maximum sound pressure level, LAmax, slow;
- the LA90.1h noise level which is the level of noise exceeded for 90% of the hour;
- the noise monitors around site will be capable of triggering an e-mail or SMS alarm if the set noise level is
  exceeded. Continuous noise monitoring data will be uploaded via a modem and will be available to view
  online;
- baseline noise monitoring will be carried out eight weeks prior to deconstruction works commencing on site;
- the noise monitoring data will provide via weekly and monthly reports. These will detail any exceedance of the maximum noise level to prevent a re-occurrence.

The noise monitoring data will be summarised in monthly reports to be completed two working days after the end of the month. The report will include data interpretation and a discussion of the results and their significance. The reports will be shared with the Trust and EH officers from the LBC. The measurement instrument will conform to the requirement for integrating sound level meter Type 1 as specified in BS EN 60804.

Continuous monitoring data will be transmitted, via a modem link, to a central computer located within the main project office.

#### **Maintenance Of Monitoring Equipment**

The microphone for the measurement system will be suitably weather protected without compromising the Type 1 performance and requirements of the measurement system.

Sisk will provide a Type 1 integrating sound level meter for use on-site for the duration of the works. This will be used for short term monitoring of noise sources and at potential noise sensitive locations off-site. This equipment will be stored in the main project office when it is not in use.

All sound measurement systems will be calibrated on-site using a sound level calibrator, which itself has within the last 12 months been tested for compliance with BS 7189 or tested against a reference set. The tests for compliance with BS 7189 will be carried out by a calibration laboratory, which holds UKAS accreditation.



30. Please provide predictions for <u>noise</u> and vibration levels throughout the proposed works.

#### **Documentation**

The equipment will be periodically calibrated as part of the equipment maintenance contract. Calibration results will be recorded and held by the appointed Sisk Environmental Manager.

#### **Construction Phase Acoustic Control and Mitigation Methods**

The Environmental Manager will be trained in noise measurement techniques - to the standards required to pass the examination requirements of the 'Institute of Acoustics Certificate of Competence in Environmental Noise Monitoring', in accordance with BS 5228:2009 or equivalent.

Records will be kept by the Environmental Manager of plant and equipment maintenance, and these will be made available when required. Copies of the monitoring results will be made available to the Trust Management Team, LBC and the Health and Safety Executive (HSE) upon request.

Noise impacts may occur during specific stages of the construction programme. Potential increases in ambient noise may be significant and therefore mitigation options to ensure that good working practices are adhered to and to ensure that the potential disturbance to sensitive receptors is kept to a minimum, are set out below.

The Sisk Project Manager in conjunction with the Sisk Environmental Manager will ensure that all permissions and consents are applied for and obtained in advance of any works commencing.

Permissions and consents may arise from other legislative requirements, and the Trust Management Team. All permissions and consents shall be strictly adhered to, and it is the responsibility of the Sisk Environmental Manager to ensure that operatives fully understand the conditions and requirements contained within them, through appropriate briefing and training.



31. Please provide details describing mitigation measures to be incorporated during the construction/demolition works to prevent noise and vibration disturbances from the activities on the site, including the actions to be taken in cases where these exceed the predicted levels.

#### **Construction Phase Acoustic Control and Mitigation Methods**

Throughout the duration of the pre-construction phase Sisk will be in continuous engagement with our supply chain to develop construction methods, innovative site-setup solutions, and management structures to help maintain and improve the acoustic environment of the site. Any additional best practice initiatives to be incorporated within the project will be added to the list below.

Industry best practice will be employed to reduce the impacts on the above receptors. This includes:

- all Sisk site management will be trained on BS 5228:2009;
- selection of low noise methods of work, where possible;
- designated quiet periods, as stipulated above;
- selection of quiet/ low noise equipment, where possible;
- location of noisy equipment away from sensitive receptors;
- provision of acoustic enclosures and ensure closed during equipment operation;
- planning site haul routes to avoid vehicles reversing;
- planning delivery times and routes to suit local conditions;
- maintaining haul routes in good order to prevent vehicle noise caused by potholes or uneven surfaces;
- minimising drop heights of materials into lorries and dumpers;
- shutting down plant when not required;
- using only plant conforming with relevant standards and directives on emissions;
- maintaining plant in good order, including compressor air lines;
- placing material handling areas away from sensitive receptors;
- providing tool box talks TBTs to all operatives on noise nuisance;
- operation of site gates will be in such a manner as to control and minimise vehicle movements onto and off site, and in so doing minimise stray noise emissions. Site security will prevent unauthorised access to the site;
- the site will be fully enclosed by hoarding and steel mesh gates. Any damage to the site boundary will be repaired promptly;
- fixed items of construction plant will be electrically driven where practicable. In all instances noise generating
  operations will be sited as far as possible from noise sensitive areas of the site and will employ suitable noise
  control measures;
- all vehicles, compressors and plant will be equipped with effective silencers and noise reducing insulation to BS 5228-1:2009;
- work practices will be adopted such that noise emissions are kept to a minimum, i.e. plant not in constant
  operational use will be switched off, excessive revving of vehicles will not be permitted and noise
  suppression covers will be closed at all times;
- loading and unloading of vehicles, dismantling of site equipment such as scaffolding or moving equipment or materials around site will be conducted in such a manner as to minimise noise generation and will be conducted away from site boundaries and sensitive receptors where practicable. Reversing alarms will be set to the minimum required setting allowed by HSE:
- deviation from the approved method statements will only be with prior approval from LBC and the Trust Management Team, In the case of emergencies these will be advised immediately by telephone relevant bodies;
- noise complaints, breaches of any Section 61 notices, or exceedances of agreed action levels will be investigated immediately; and
- A letter drop will be carried out to local residents and businesses to notify them of pending works, which will
  have site contact details in the event concerns need to be raised by the stakeholders.



More detailed options to be considered for the mitigation and control of construction impacts, where noise impact has been raised as a concern, include:

- engineering control;
- acoustic screening;
- · restricted hours of working;-
- the provision of sound insulation; and with further supply chain engagement, we can identify specific plant to be used onsite and examine specific specification sheets to identify operational noise levels.

#### Site Vibration (Structure-borne Noise)

The current design requires construction works are to be carried out within close proximity of adjacent clinical buildings. Further consideration through supply chain engagement will be carried out to consider construction methods that limit vibration levels and not undermine adjacent building structural integrity and operational clinical plant.

In accordance with LBC requirements, wherever possible to prevent unnecessary vibration reinforced concrete superstructures should be demolished using equipment fitted with pulveriser/munching attachments. In the case of vibration, measured vibration levels shall be compared with the criteria in BS 5228: 2009 part 2 (i.e. 1mms<sup>-1</sup> PPV for potential disturbance in residential and using a suggested trigger criteria of 2mms<sup>-1</sup> for commercial). Lower limits are to be agreed with the LBC if there is a risk that vibration levels may interfere with vibration sensitive equipment or other vibration sensitive objects.

Construction activities are likely to give rise to increased vibration levels. The main activities that are associated with this particular project will be:

- deconstruction works concrete breaking and grinding;
- piling works CFA & secant piling wall operations;
- ground works reduced level dig to form Level 0 basement;
- continuous flight auger CFA pile cropping;
- reinforced concrete frame formwork installation;
- reinforced concrete slab scabbling; and
- plant and construction vehicle movement.

In the event that any complaint is received regarding vibration during deconstruction and construction activities, the matter will be discussed with the Trust Management Team and LBC and if appropriate a measuring exercise will be undertaken. If vibration is encountered then remedial measures will be proposed, agreed, and implemented.

#### Vibration Survey

Ground born vibration levels will be measured at suitable locations on site by installing a vibration meter on the ground for a period of 24hours. Levels will be measured using accelerometers, adhering to the requirements of BS 6472-1:2008 "Guide to Evaluation of human exposure to vibration in buildings – Part 1: Vibration for sources other than blasting". The vibration meter would be capable of applying appropriate frequency weightings to the measured acceleration levels in the horizontal axis (X- and Y-axis) and vertical axis (Z-axis) in order to calculate the Vibration Dose Values (VDV) m/s1.75.

The results from of the vibration monitoring will be compared to the criteria set out in the aforementioned BS6472-1:2008 which provides the calculation methodology and criteria for the assessment of ground vibration on humans within buildings using VDVs. The assessment determines the likelihood of adverse comment from future inhabitants.



#### **Evaluation of Vibration Impacts**

Any measurement of vibration will be conducted in accordance with the principles of BS 5228: "Noise Control on Construction sites, Part 4", BS 7385: "Evaluation and measurement for vibration in Buildings" or BS 6472: 'Guide to evaluation of Human Exposure to Vibration in Buildings'. Vibration dose values (VDVs) from BS 6472:1992 may be used for the assessment of subjective reaction to ground born vibration.

Where PPV values exceed the recommended values in BS 5228: Part 4 or BS 7385, activities causing vibration hazard will be suspended pending further investigation.

#### **Details of Monitoring Equipment**

The mobile monitoring equipment will be positioned at locations of identified receptors which include adjacent buildings ( VCB, PICB and OBW). This measurement location will be at the foundation of the building, but when this is not practicable, a low point on the main load bearing external wall at ground level will be used.

this is not practicable, a low point on the main load bearing external wall at ground level will be used.						
The Sisk Environmental Manager will be trained in vibration measurement techniques.						
Documentation If any mobile equipment is used, records of plant and equipment maintenance will be maintained along with copies of monitoring results made available to the Trust Management Team and LBC as required and requested.						



### 32. Please provide evidence that staff have been trained on BS 5228:2009

BS5228:2009 Training  The Environmental Manager will be trained in noise measurement techniques - to the standards required to pass the examination requirements of the 'Institute of Acoustics Certificate of Competence in Environmental Noise Monitoring', in accordance with BS 5228:2009 or equivalent.
All Sisk site management staff and SMSTS trained, included within the certification of SMSTS is compliance to B25228:2009.
Regular tool-box talks and internal briefings will be carried out to site management and workforce to continuously bring awareness to BS5228:2009.



33. Please provide specific details on how air pollution and dust nuisance arising from dusty activities on site will be prevented. This should be relevant and proportionate to activities due to take place, with focus on both preventative and reactive mitigation measures.



#### **Air Quality Management**

Air quality management will be carried out in such a way as to limit the emissions of air pollution by employing best practical means. Throughout the deconstruction and construction phase Sisk will be responsible for air quality monitoring management within the site boundary.

#### **Air Quality Assessment**

Sisk has carried out an Air Quality Assessment of existing/baseline conditions and potential air quality impacts during the construction and operational phases of the GOSH CCC Project. Included within the assessment the published report contains an air quality neutral assessment and recommends mitigation measures as appropriate.

Sisk has completed a 3month baseline assessment of existing air qualities. Sisk monitored existing PM2.5, PM10 and NO2 particles. A copy of the Baseline Air Quality Monitoring assessment has been appended to the DCMP.

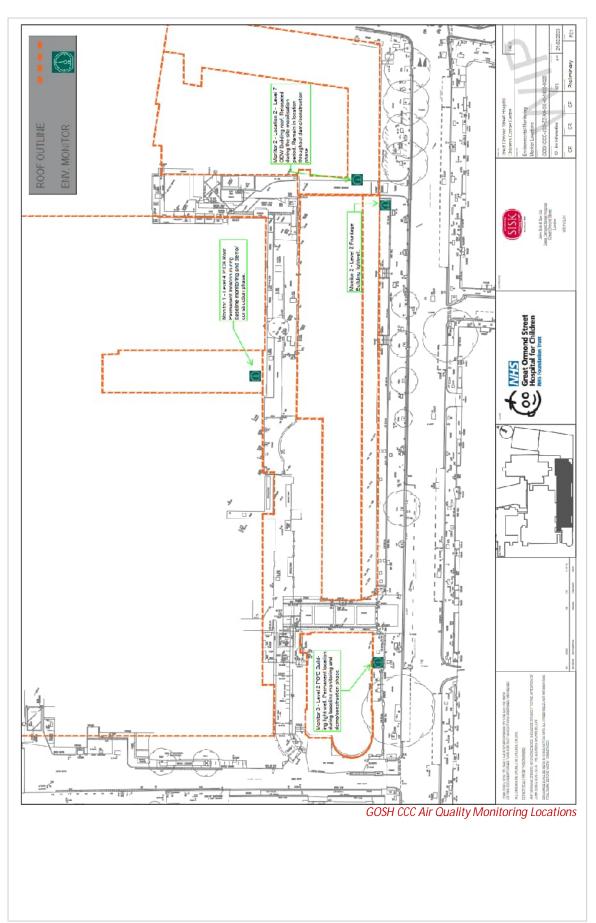
#### **Air Quality Monitoring Locations**

In collaboration with Great Ormond Street Hospital Sisk will continuously monitor air quality levels at recognised receptors within adjacent clinical buildings.

Sisk will monitor air quality levels in three external locations of the site boundary throughout the deconstruction and construction phase.

Sisk has agreed with LBC's Air Quality Officer the location of air quality monitors throughout the deconstruction and baseline assessment. Image below demonstrates that air quality will be continuously monitored on the north, east and west site boundary lines. Sisk will continue monitor PM2.5, PM10 and NO2 throughout the duration of deconstruction and construction phases.







#### **Construction Phase Air Quality Control and Mitigation Methods**

The Air Quality Assessment concluded that emissions of dust (and particulate matter) will increase locally during the construction period, but the residual effect will be minor, with appropriate mitigation in the form of dust control at source, as set out below:

- design, implement and monitor philosophy of prevention of dust formation in the first place by utilising dust hierarchy; prevention, suppression and containment;
- hoarding of the site prior to any deconstruction and construction activities being carried out;
- deconstruction works of the Frontage Building will be undertaken using primarily non-percussive techniques such as hydraulic crushing with the use of water sprays as necessary to control dust generation. Percussive deconstruction techniques will be utilised where unavoidable and authorised by GOSH Trust and steps taken to minimise dust generation including the use of water sprays or mists to suppress airborne dust;
- where feasible working areas are to be enclosed with temporary scaffolding wraps to mitigate the spread of air borne dust particles and pollutants.
- the inclusion of suitable measures for the containment of dust, such as the use of debris screens and sheets; suitable and sufficient water sprays; and enclosed chutes for dropping waste materials to ground level;
- any debris dropped by site traffic will be cleaned away by the relevant sub-contractors before the end every working day or by close of business;
- concrete arisings will be removed from site for crushing at a local plan;
- all waste to be removed from site, materials not to be stockpiled unless it is to be reused in the site
  development. Any material that is stockpiled on site is to be contained within the hoardings and controlled
  using water sprays and sheeting to reduce dust generation;
- storage sites, equipment, temporary buildings and fixed plant and machinery etc. will be located to limit
  adverse environmental effects to sensitive receptors. All reasonable precautions will be taken for the
  operation of plant and equipment, to avoid nuisance. In common with storage of all waste, controls will be
  used to prevent release of airborne dust from spoil heaps and roads such as the use of covers or by damping
  down;
- burning of materials on site will be prohibited. All work areas will be kept clean and tidy and rubbish will be removed at frequent intervals;
- materials handling and storage areas will be sited as far away as reasonably practicable from
  public/residential areas. These areas will be actively managed where practicable. Prolonged storage of debris
  on site will be avoided;
- where necessary, other dusty materials will be dampened down using water sprays in dry weather;
- site plant and equipment will be kept in good repair and maintained in accordance with the manufacturer's specifications;
- where practicable, low emission fuels will be employed for deconstruction plant;
- no plant will be left running when not in use/operation;
- plant with dust arrestment equipment (such as particle traps) will be used where practicable;
- use of vehicle and plant with raised exhausts to minimise dust generation;
- the speed limit on site will be restricted to 10 mph for all site traffic;
- effective wheel cleaning will be undertaken for traffic leaving the site onto haul/public highways by the use of
  pressure washers. Cleaning of the underside of the vehicle will also be required. Where practical, delivery
  vehicles will only stand on hard surfaces rather than soil;
- vehicles transporting material capable of generating dust are to be suitably sheeted on each journey, to
  prevent release of materials and particulate matter. The sheeting material will be maintained in good order
  and free from excessive rips and tears. Vehicles will be checked before they leave the site to ensure they are
  properly sheeted and/or washed;



- a mechanical road sweeper is to be used on-site as necessary to supplement manual cleaning and washing of carriageway footpaths, exit haulage routes and hard standing;
- all site vehicles will be kept in a good state of repair and maintenance;
- pile arisings will be cleared on a daily basis to reduce the propagation of dust;
- during prolonged dry periods or as directed by the Sisk Site Manager, haul roads will be dampened down
  where practicable. If necessary, during excavation works the site will be damped down to suppress dust
  propagation, using a water spray. The need for and frequency of such damping down operations will be
  reviewed in line with the prevailing weather conditions;
- exposed dust generating surfaces will be sealed off as quickly as practicable. This applies in particular to the
  excavation phase when the contractors will work from the existing hard standing in the clearing from east to
  west and will continue in general throughout the project;
- pre-mixed versions of cementations materials will be used where possible;
- any stockpiles to be screened and covered to minimise dust arising. deconstruction sub-contractors will be required to provide detailed screening and covering measures;
- the orientation, shape and location of any stockpiles to be controlled to minimise risk of dust arising through wind action;
- the handling operations to minimise risk of dust rising, and the materials put onto stockpiles will be dropped from minimal practical height to minimise dust rising;
- spraying of water at work faces or during loading operations to be undertaken to mitigate dust; and
- where practical, electrically operated machinery will be used in preference to petrol or diesel powered
  equipment. Operators will be instructed to switch off their plant instead of leaving it idling.

The measures proposed for dust control set out in this section are consistent with those that will apply across the site as a whole and are based upon good practice developed during the deconstruction and construction phase. The monitoring proposals build upon the baseline established during pre-construction stage and construction works on other similar Sisk projects.

#### **Sensitive Receptors**

Potential		Sensitivity of the surrounding area			
Impact		Deconstruction	Earthworks	Construction	Trackout
Dust Soiling	Receptor sensitivity	High	High	High	High
	Number of receptors	>100	>100	>100	>100
	Distance from source	<20m	<20m	<20m	<20m
	Sensitivity of the area	High	High	High	High
Human Health	Receptor sensitivity	High	High	High	High
	Annual mean PM10 concentration	24-28ug/m³ (as per LAEI 2016)	24-28ug/m³ (as per LAEI 2016)	24-28ug/m³ (as per LAEI 2016)	24-28ug/m³ (as per LAEI 2016)
	Number of receptors	<10	<10	<10	<10
	Distance from source	<20m	<20m	<20m	<20m

#### **Evaluation of Air Quality Impacts**

Criteria is to be established with the Trust Management Team, for the construction works carried out on the other Land Parcels.



34. Please provide details describing how any significant amounts of dirt or dust that may be spread onto the public highway will be prevented and/or cleaned.

#### **Dust Control Measures**

Throughout the duration of recognised construction phases where excessive dirt and mud is to be emitted, a wheel wash station is to be established at the site exit gate. No construction vehicles are to be permitted to leave site until cleaned.

During dry weather conditions pit lane surfaces will be dampened down to prevent the risk of dust clouds rising and affecting the public realm.

Our proposed hoarding specification will provide a substantial barrier between construction site and public realm.

#### **Reporting and Mitigation**

If dust or particulate levels exceed standards agreed with the Trust Management Team and LBC, the findings will be reported, and the source of dust emission investigated with corrective action implemented as required.

The air quality management and monitoring plan will be co-ordinated by the Sisk Environmental Manager for the project and will be subject to periodic review, on an annual basis. This review will cover the scope, requirement and type of monitoring undertaken on an ongoing basis and any necessary changes will be submitted.

36. Please confirm that an Air Quality Assessment and/or Dust Risk Assessment has been undertaken at planning application stage in line with the GLA policy The Control of Dust and Emissions During Demolition and Construction 2014 (SPG) (document access at bottom of webpage), and that the summary dust impact risk level (without mitigation) has been identified. The risk assessment must take account of proximity to all human receptors and sensitive receptors (e.g. schools, care homes etc.), as detailed in the SPG. Please attach the risk assessment and mitigation checklist as an appendix.

Sisk can confirm that an Air Quality Assessment has been carried out and is included within the supporting planning documentation of planning application submission.

37. Please confirm that all of the GLA's 'highly recommended' measures from the SPG document relative to the level of dust impact risk identified in question 36 have been addressed by completing the GLA mitigation measures checklist. (See Appendix 7 of the SPG document.)

Sisk can confirm that an Air Quality Assessment has been carried out and is included within the supporting planning documentation of planning application submission.

Further information will be found within the project Environmental Management Plan EMP.

38. Please confirm the number of real-time dust monitors to be used on-site.



Note: real-time dust (PM<sub>10</sub>) monitoring with MCERTS 'Indicative' monitoring equipment will be required for all sites with a high OR medium dust impact risk level. If the site is a 'high impact' site, 4 real time dust monitors will be required. If the site is a 'medium impact' site', 2 real time dust monitors will be required.

The dust monitoring must be in accordance with the SPG and IAQM guidance, and <u>the</u> <u>proposed dust monitoring regime (including number of monitors, locations, equipment specification, and trigger levels) must be submitted to the Council for approval. Dust monitoring is required for the entire duration of the development and must be in place and operational <u>at least three months prior to the commencement of works on-site</u>. Monthly dust monitoring reports must be provided to the Council detailing activities during each monthly period, dust mitigation measures in place, monitoring data coverage, graphs of measured dust (PM<sub>10</sub>) concentrations, any exceedances of the trigger levels, and explanation on the causes of any and all exceedances in addition to additional mitigation measures implemented to rectify these.</u>

In accordance with Camden's Clean Air Action Plan, the monthly dust monitoring reports must also be made readily available and accessible online to members of the public soon after publication. Information on how to access the monthly dust monitoring reports should be advertised to the local community (e.g. presented on the site boundaries in full public view).

<u>Inadequate dust monitoring or reporting, or failure to limit trigger level exceedances, will be indicative of poor air quality and dust management and will lead to enforcement action.</u>

Real time monitoring of air quality and dust monitors will be in place prior to the commencement of the demolition phase. All data will be accessible via and online database and the ability to generate reports on a monthly basis or as required throughout the construction phase. Currently we have identified the need for three dust monitors to be installed in strategic locations of the site. The confirmation of quantity and precise locations is to be confirm throughout the stage 4 pre-construction and design phase. This will be included within the final version of the DCMP.

39. Please provide details about how rodents, including rats, will be prevented from spreading out from the site. You are required to provide information about site inspections carried out and present copies of receipts (if work undertaken).



#### **Rodent and Vermin Control**

Sisk is legally bound to take necessary steps to ensure that any risk of rodent infestation is eradicated and to take all reasonably and practicable steps necessary to prevent infestation. The following measures have been identified for implementation to prevent infestation.

Prior to the commencement of deconstruction to the Frontage Building Sisk will appoint a specialist contractor to inspect the site to assess existing and potential infestation levels and confirm whether any disinfestation measures are required prior to site mobilisation.

It is essential that a good standard of hygiene be maintained on site during deconstruction and construction phases so rodents are not to be attracted to site. Site hygiene standards will be imposed onsite to reduce risk of infestation, these include:

- implement an approved method statement which demonstrates how if the presence of rodents has been caused and how they will be destroyed if found on site;
- at all times the site shall be kept free, so far as is reasonable practicable, from rodents (Prevention of Damage by Pests Act 1949, part 'H' of the Building Regulations (Drainage & Waste Disposal);
- document pest control job receipts;
- waste food, empty food tins, and other waste which might attract rodents is to be stored in bins with tight fitting lids;
- accumulations of old timber, bricks and debris, provide harbourage for rodents and should be cleared away as quickly as possible; and
- storage of building material should be kept neatly stored.

Infestation preventatives to be included onsite during construction include:

- all existing drains and other disused pipes are to either be filled with concrete or alternately dug out and the junctions sealed;
- existing foundations and cavities should be backfilled with suitable hardcore, well consolidated and covered with a layer of concrete; and
- all openings lower than 1.5m from ground level to be sealed.

If infestation occurs Sisk will advise GOSH Management and LBC Environmental Health Department and undertake any actions as required in dealing with the infestation.

40. Please confirm when an asbestos survey was carried out at the site and include the key findings.



#### **Asbestos Management**

Based upon the investigations carried out by appointed consultants there is a high risk of exposing hazardous asbestos materials and the subsequent need for removing asbestos within the Frontage Building and Paul O'Gorman Building during the deconstruction phase. All necessary risk assessments will be carried out to ensure safe removal of hazardous substances are carried out.

From reviewing the current GOSH asbestos register and carrying out visual inspections of plant space and riser cupboard there is a high risk of asbestos exposure.

At this point in time, the deconstruction works will require a notifiable works license. It is therefore proposed that all deconstruction operatives and supervisors, including Sisk, undertake asbestos awareness training. To be able to identify asbestos and respond accordingly. RAMS will also be required to put measures in place to mitigate the risk to operatives. For example, if required but not limited to the following, respiratory protective equipment, air monitoring and watching briefs. Measures to also be in place to prevent the spread of the asbestos.

Our appointed deconstruction contractor will be a licensed asbestos removal contractor and will be required to remove all asbestos containing materials from the structure as part of this project. Our appointed contractor will be required to carry out a full HSG264 compliant deconstruction asbestos survey prior to carrying out soft strip or any deconstruction works. All identified asbestos containing materials will be removed in accordance with "The Control of Asbestos Regulations 2012".

They will carry out all works carefully whilst checking for further asbestos that may not have been identified within the asbestos survey. Should any suspect material asbestos be discovered during the physical works, the works will cease, and a sample will be taken under controlled conditions for testing.

41. Complaints often arise from the conduct of builders in an area. Please confirm steps being taken to minimise this e.g. provision of a suitable smoking area, tackling bad language and unnecessary shouting.

#### **Behavioural Code**

Due to the construction site residing within the ground of Great Ormond Street Hospital Sisk are obliged to adhere to the rules are a smoke free site. This will be enforced through site rules and behavioural code of conduct. Smoking will not be permitted from any member for Sisk staff and workforce within the close proximity of site. Any breaches of this site rule will be enforceable under Sisk behavioural code.

Sisk is acutely aware of the issues relating to smoking on the south side of Great Ormond Street and we will endeavour to prevent this occurring in respect of construction related operatives (and staff).

Site staff and workforce will not be able to leave site whilst wearing associated construction PPE and hi-visibility clothing.

As such should any members of the workforce be encountered with abusive behaviour from members of the public they are encouraged to return to the safe confined space of site welfare from where the matter can be dealt with in a diplomatic manner.

Site workforce will additionally be reminded during site induction that they are representing GOSH and the high level of professionalism is expected at all times.

42. If you will be using non-road mobile machinery (NRMM) on site with net power between 37kW and 560kW it will be required to meet the standards set out below. The standards are applicable to both variable and constant speed engines and apply for both PM and NOx emissions. See the Mayor of London webpage 'Non-Road Mobile Machinery (NRMM)' for more information, a map of the Central Activity Zone, and for links to the NRMM Register



and the NRMM Practical guide (V4): <a href="https://www.london.gov.uk/what-we-do/environment/pollution-and-air-quality/nrmm">https://www.london.gov.uk/what-we-do/environment/pollution-and-air-quality/nrmm</a>

Direct link to NRMM Practical Guide (V4):

https://www.london.gov.uk/sites/default/files/nrmm practical guide v4 sept20.pdf

From 1<sub>st</sub> September 2015

- (i) Major Development Sites NRMM used on the site of any major development will be required to meet Stage IIIA of EU Directive 97/68/EC
- (ii) Any development site within the Central Activity Zone NRMM used on any site within the Central Activity Zone will be required to meet Stage IIIB of EU Directive 97/68/EC

From 1st September 2020

- (iii) Any development site NRMM used on any site within Greater London will be required to meet Stage IIIB of EU Directive 97/68/EC
- (iv) Any development site within the Central Activity Zone NRMM used on any site within the Central Activity Zone will be required to meet Stage IV of EU Directive 97/68/EC

Please provide evidence demonstrating the above requirements will be met by answering the following questions:

- a) Construction time period (mm/yy mm/yy): 2024 2027
- b) Is the development within the CAZ? (Y/N): YES
- c) Will the NRMM with net power between 37kW and 560kW meet the standards outlined above? (Y/N): YES
- d) Please confirm that all relevant machinery will be registered on the NRMM Register, including the site name under which it has been registered: **YES**
- e) Please confirm that an inventory of all NRMM will be kept on site and that all machinery will be regularly serviced and service logs kept on site for inspection: YES
- f) Please confirm that records will be kept on site which details proof of emission limits, including legible photographs of individual engine plates for all equipment, and that this documentation will be made available to local authority officers as required: YES



43. Vehicle engine idling (leaving engines running whilst parked or not in traffic) produces avoidable air pollution and can damage the health of drivers and local communities. Camden Council and City of London Corporation lead the London Idling Action Project to educate drivers about the health impacts of air pollution and the importance of switching off engines as a simple action to help protect the health of all Londoners.

Idling Action calls for businesses and fleet operators to take the **Engines Off pledge** to reduce emissions and improve air quality by asking fleet drivers, employees and subcontractors to avoid idling their engines wherever possible. Free driver training materials are available from the website: https://idlingaction.london/business/

Please provide details about how you will reduce avoidable air pollution from engine idling, including whether your organisation has committed to the Engines Off pledge and the number of staff or subcontractors who have been provided with free training materials.

#### **Engine Idling**

Engine idling will not be tolerated onsite for all construction vehicles and plant. Failure to comply with this site rule will be subject to Sisk behavioural discipline procedures. This rule will be enforced by all Sisk management staff. Additional measures for mitigating this risk have been included within our transport management strategy and air quality management mitigations listed within this document.

SYMBOL IS FOR INTERNAL USE



## **Agreement**

The agreed contents of this Construction Management Plan must be complied with unless otherwise agreed in writing by the Council. This may require the CMP to be revised by the Developer and reapproved by the Council. The project manager shall work with the Council to review this Construction Management Plan if problems arise in relation to the construction of the development. Any future revised plan must be approved by the Council in writing and complied with thereafter.

It should be noted that any agreed Construction Management Plan does not prejudice further agreements that may be required such as road closures or hoarding licences.

Signed:

Date: 06/02/2024

**Print Name:** Nick Fitzgerald

Position: Project Manager

Please submit to: planningobligations@camden.gov.uk

End of form.

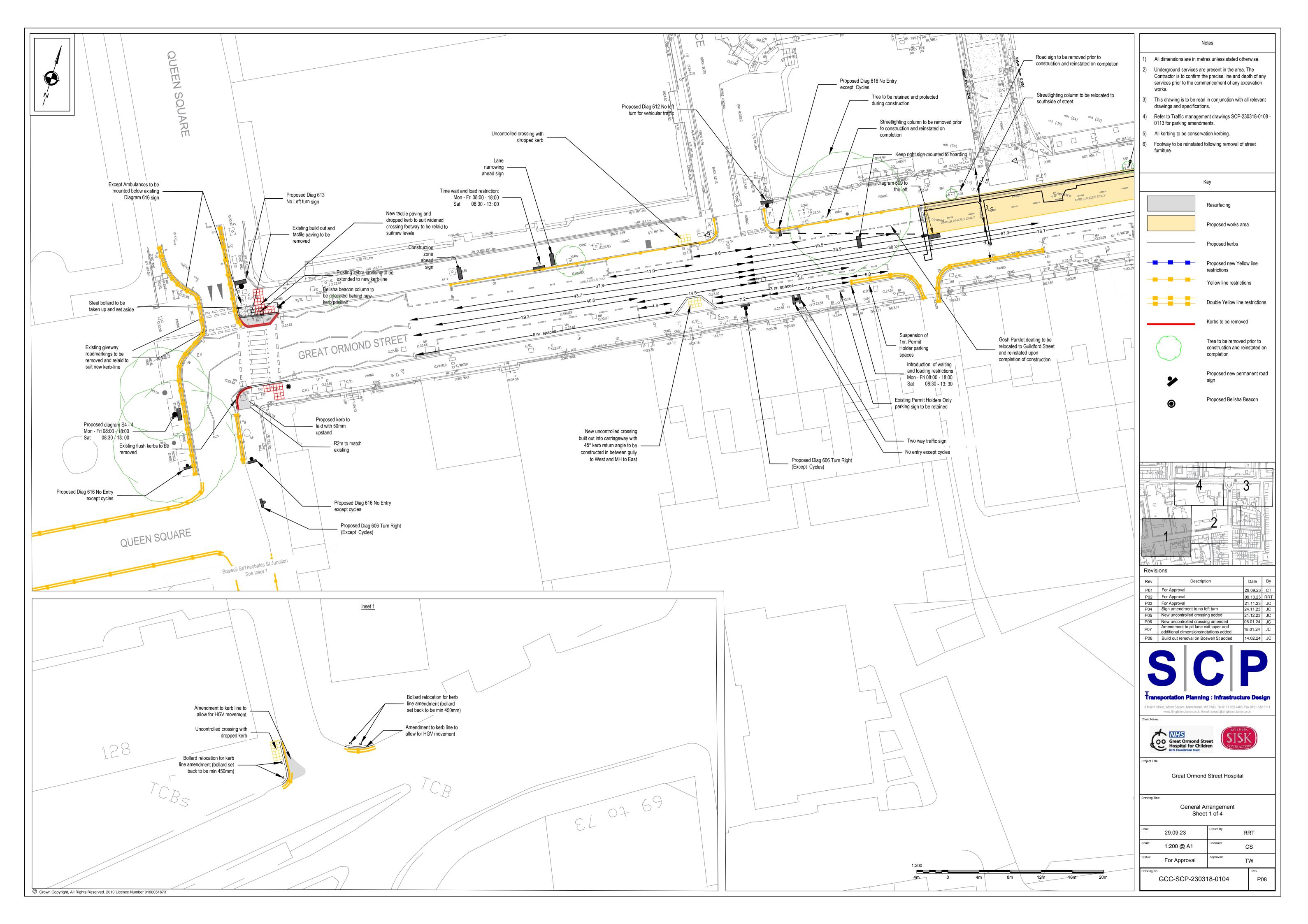
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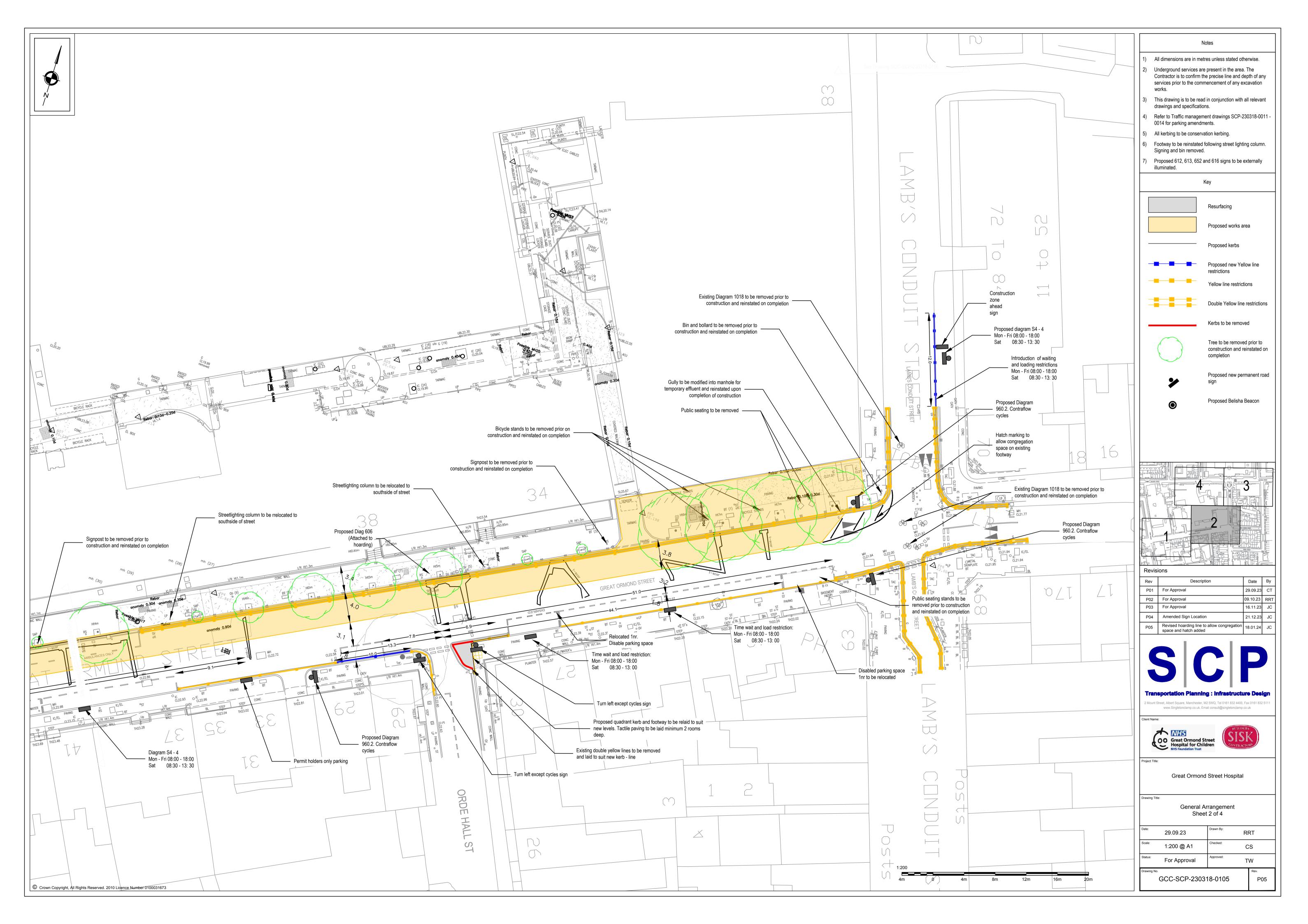


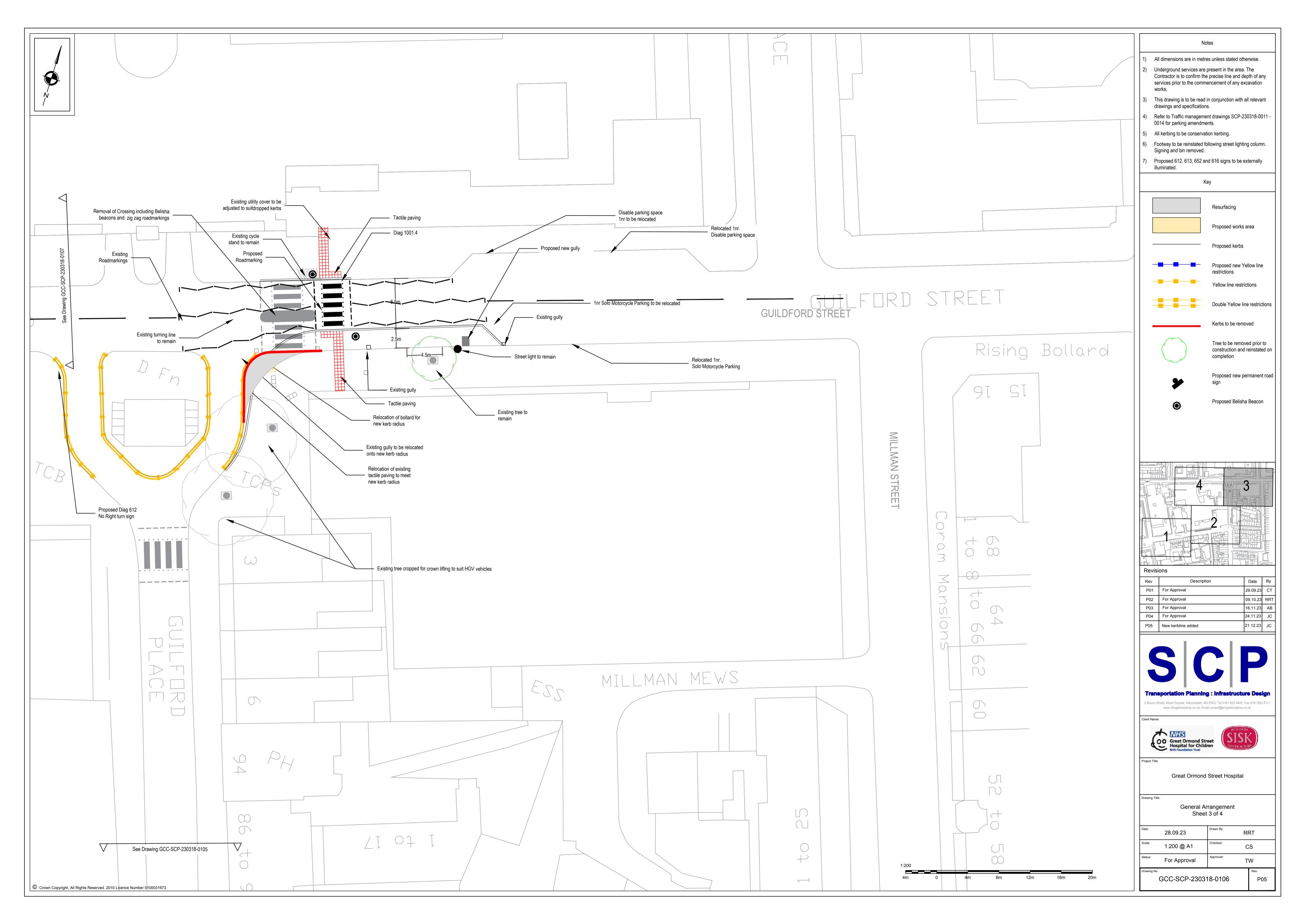
# **Appendices**

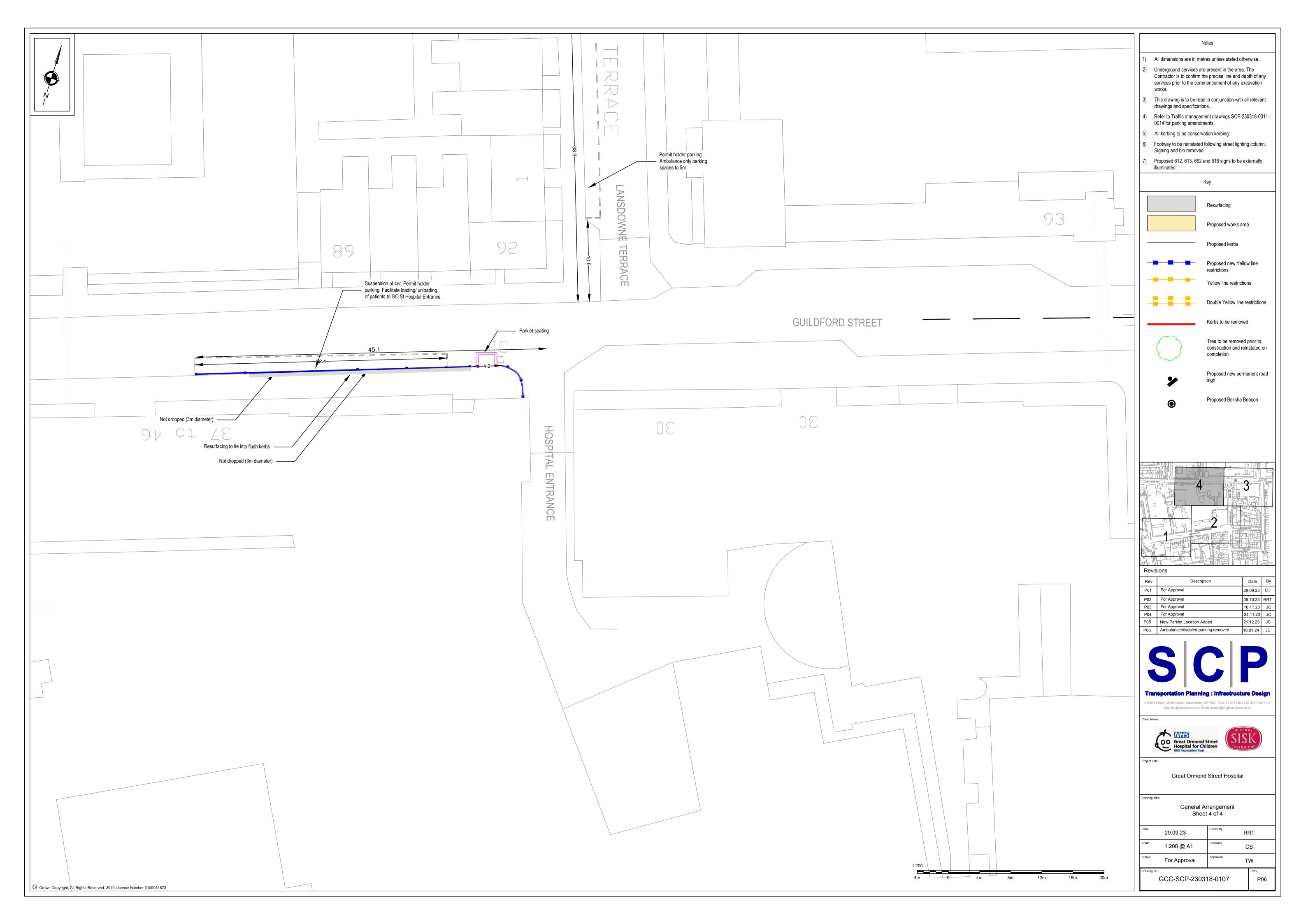
**Proposed Highway Alteration Drawings and HGV Tracking** 

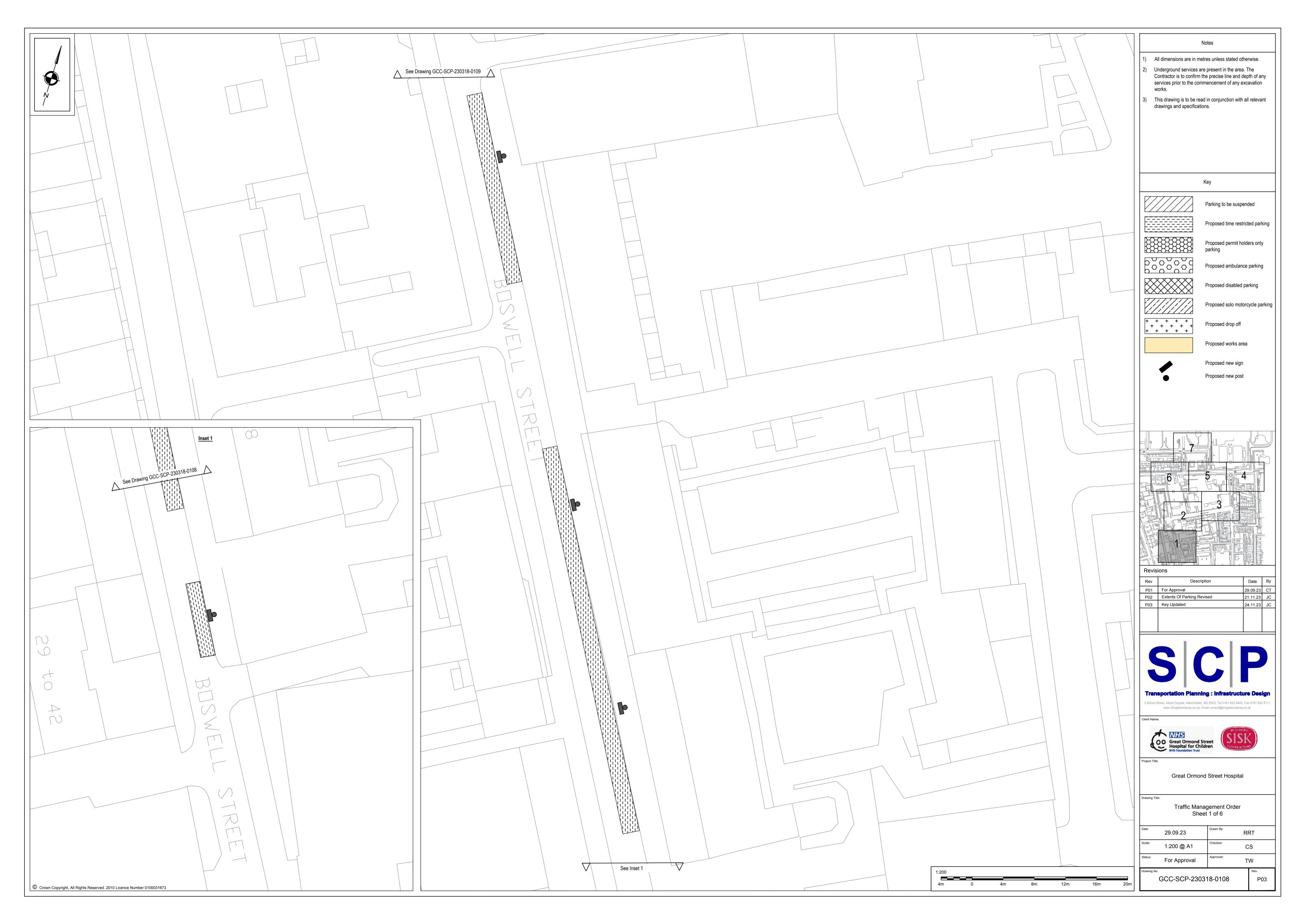


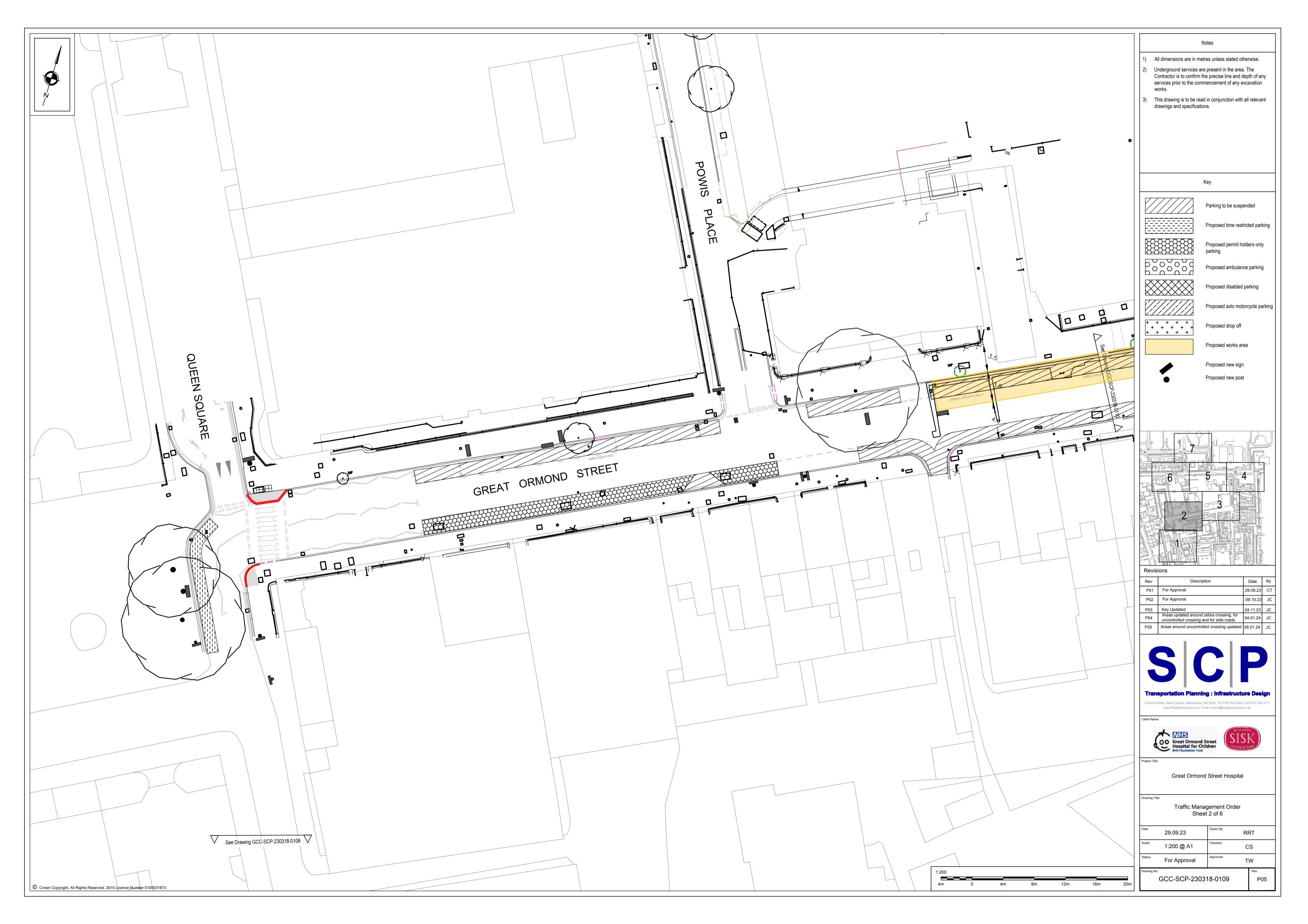


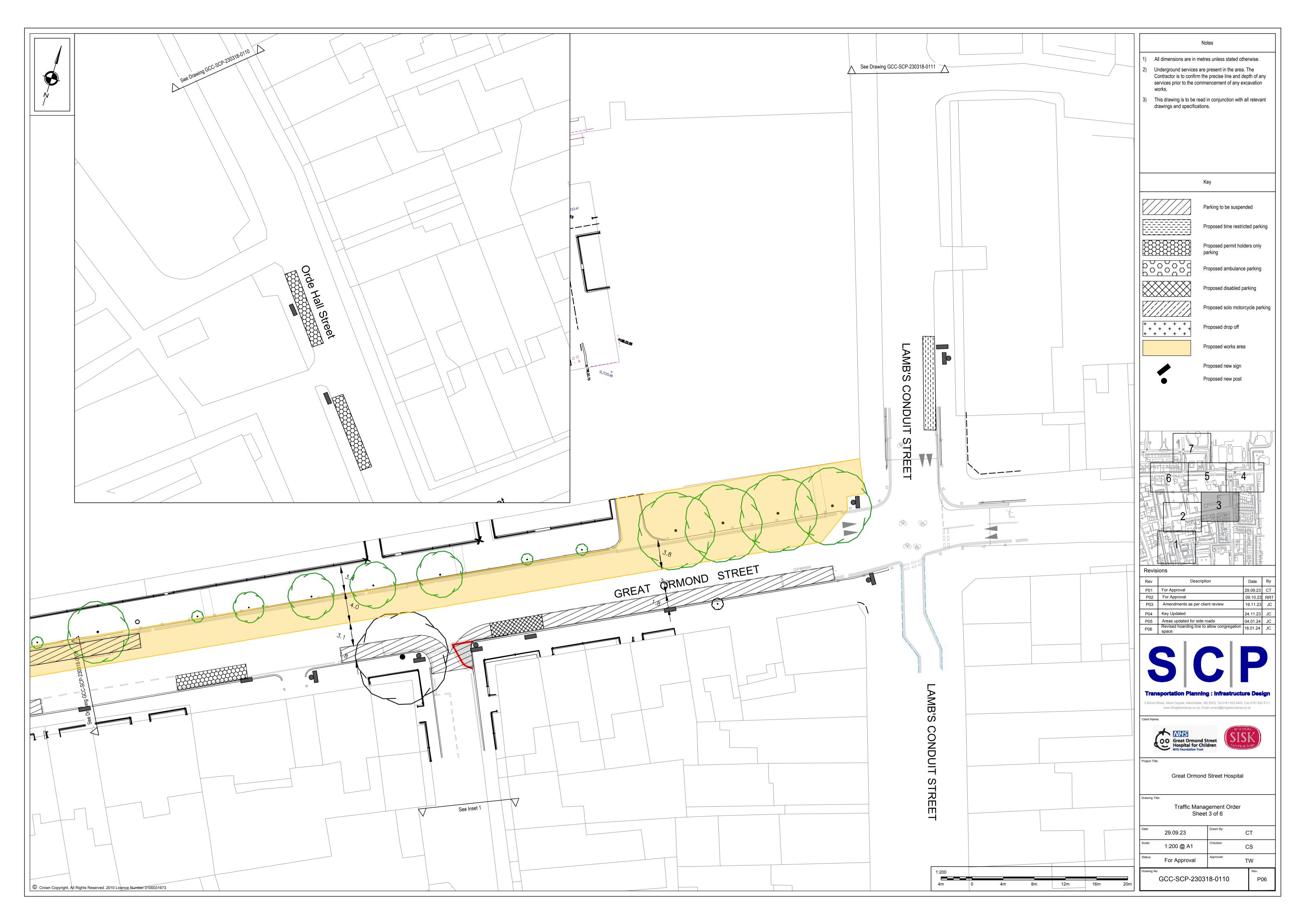


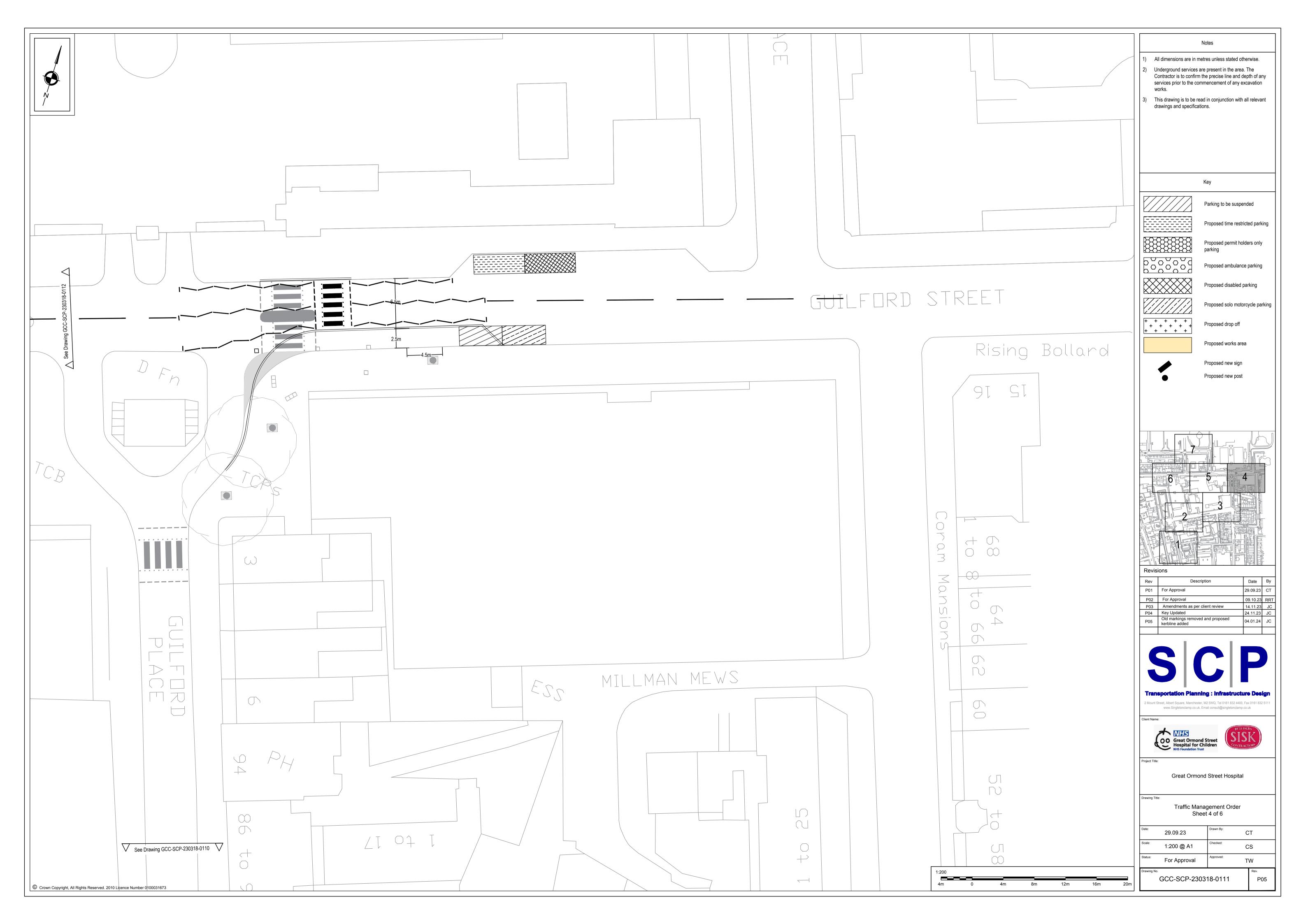


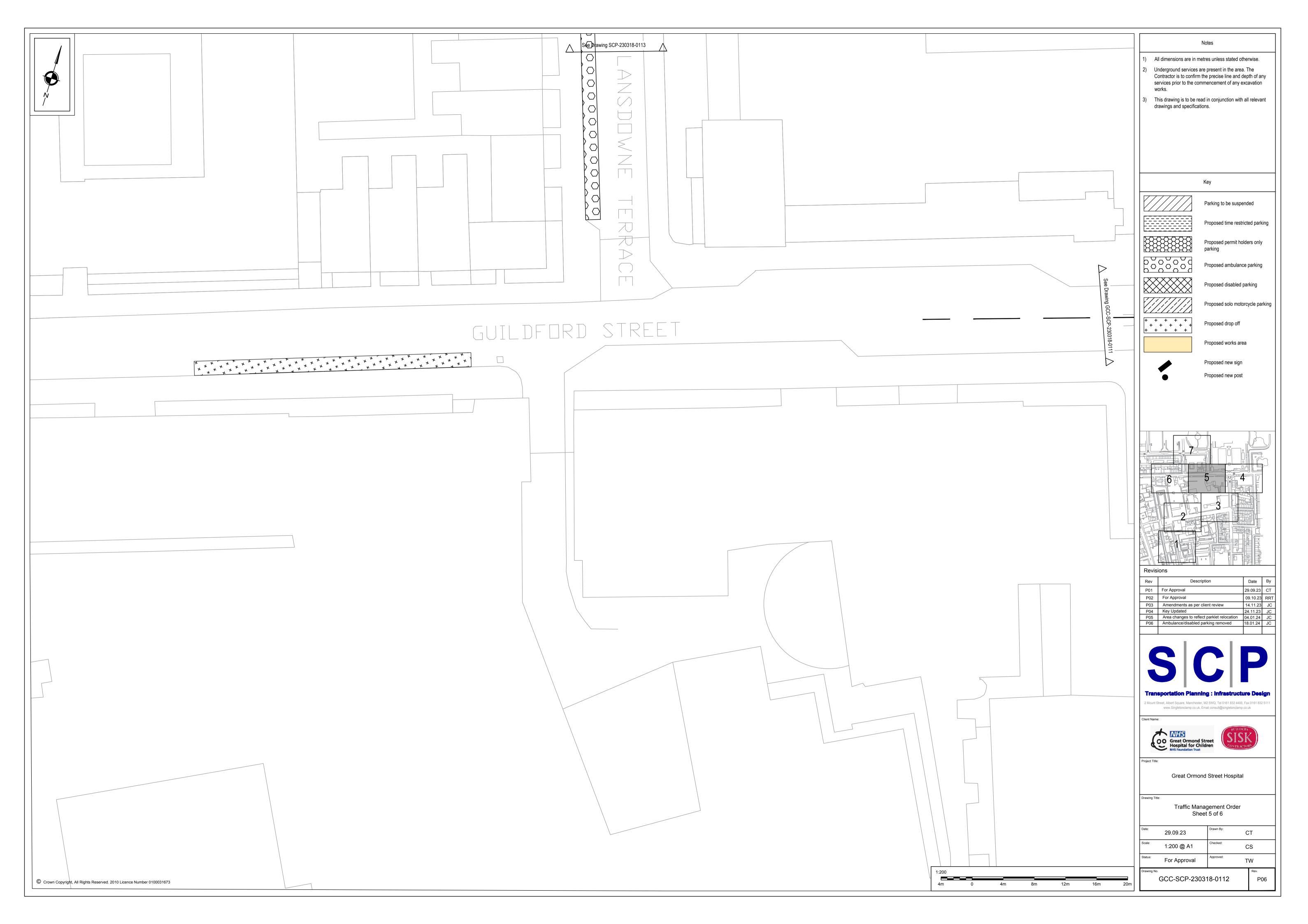


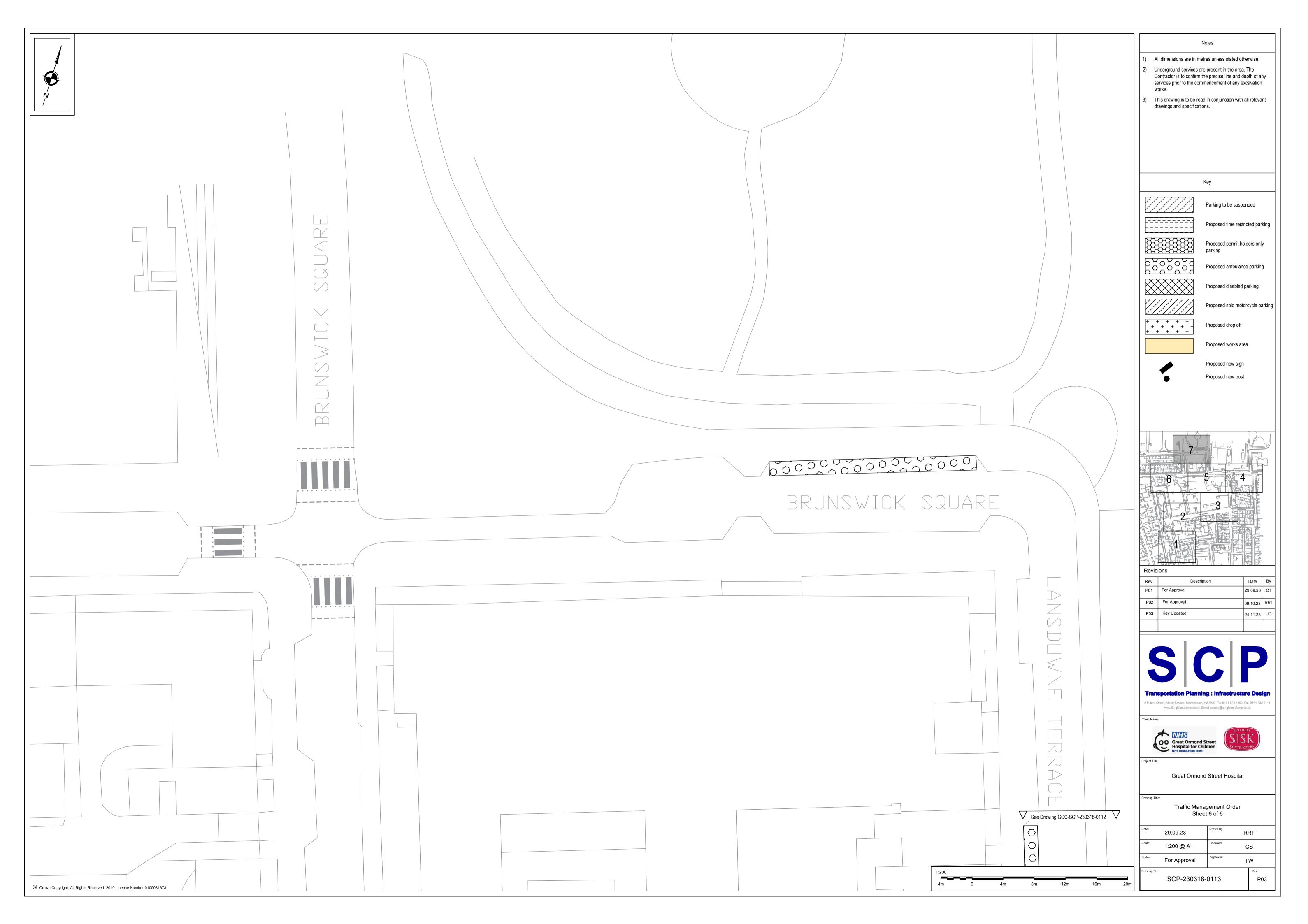


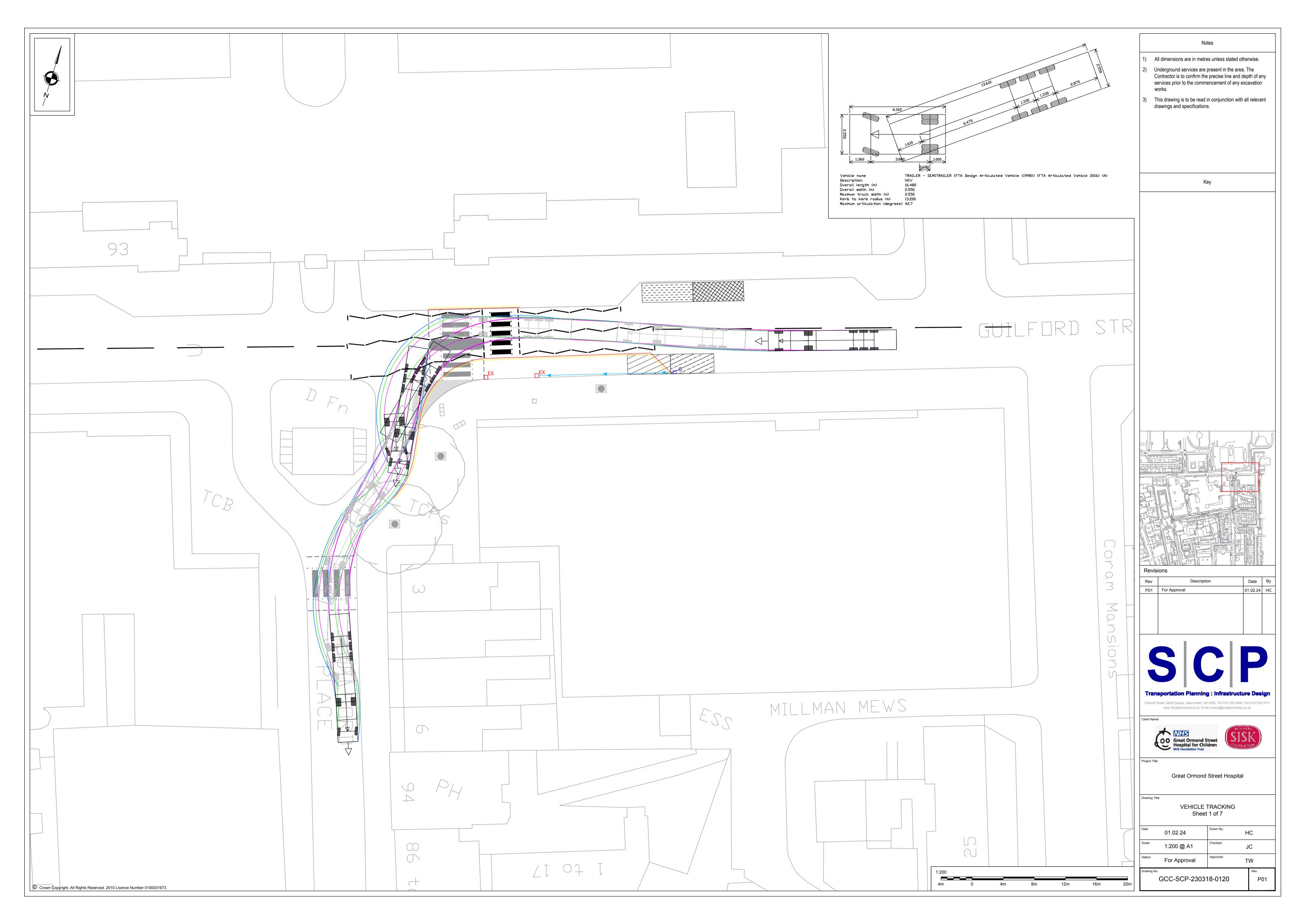


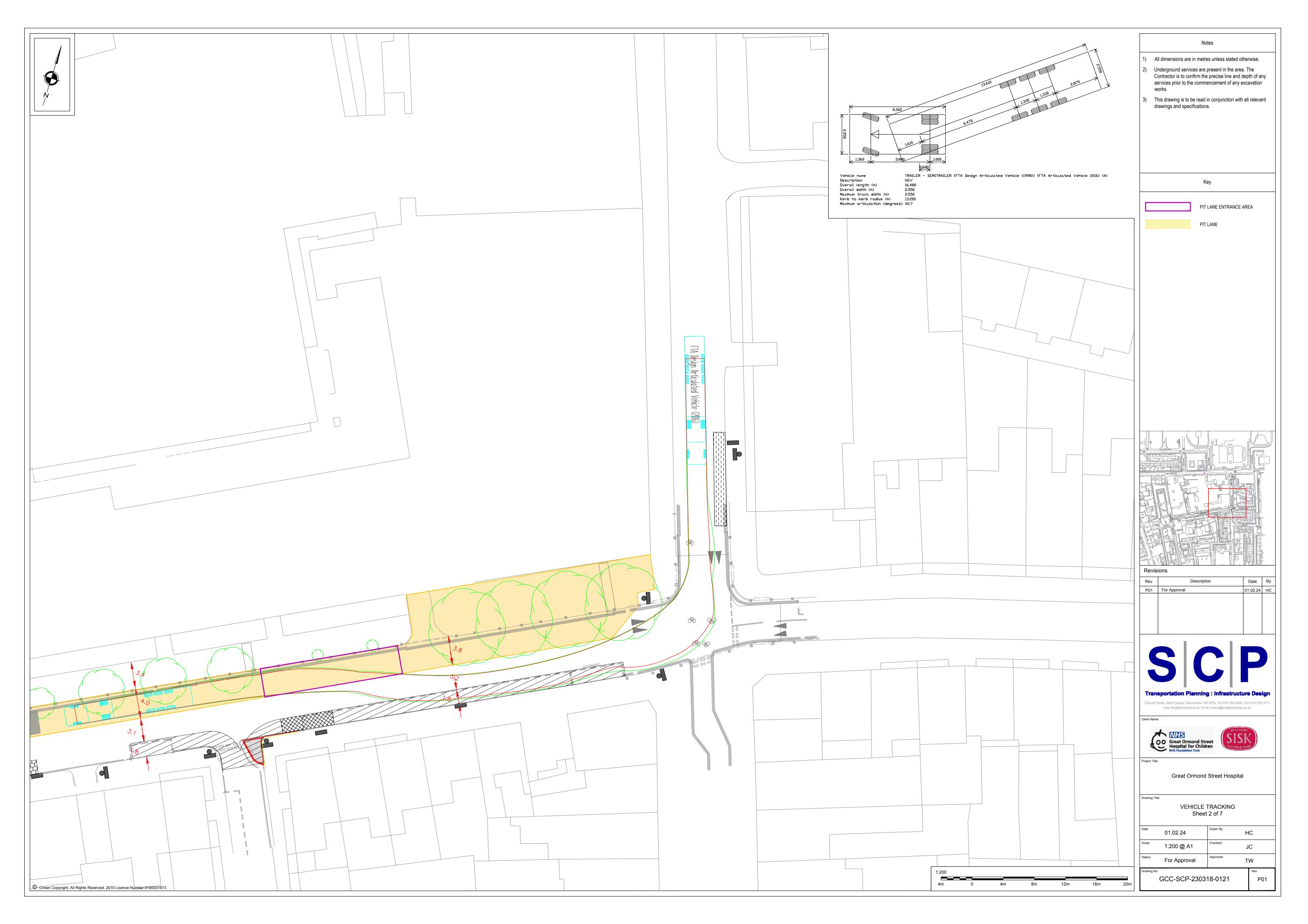


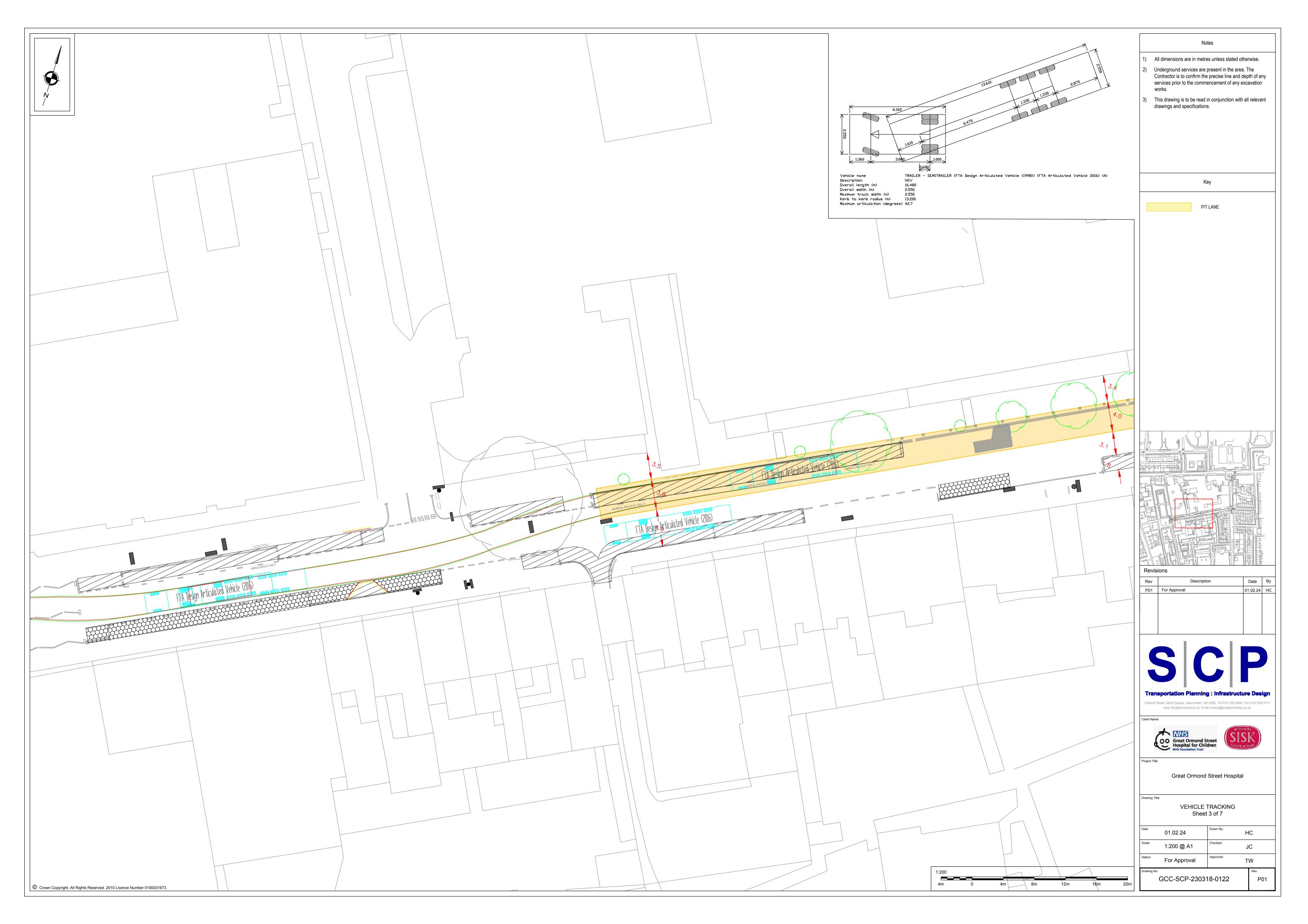


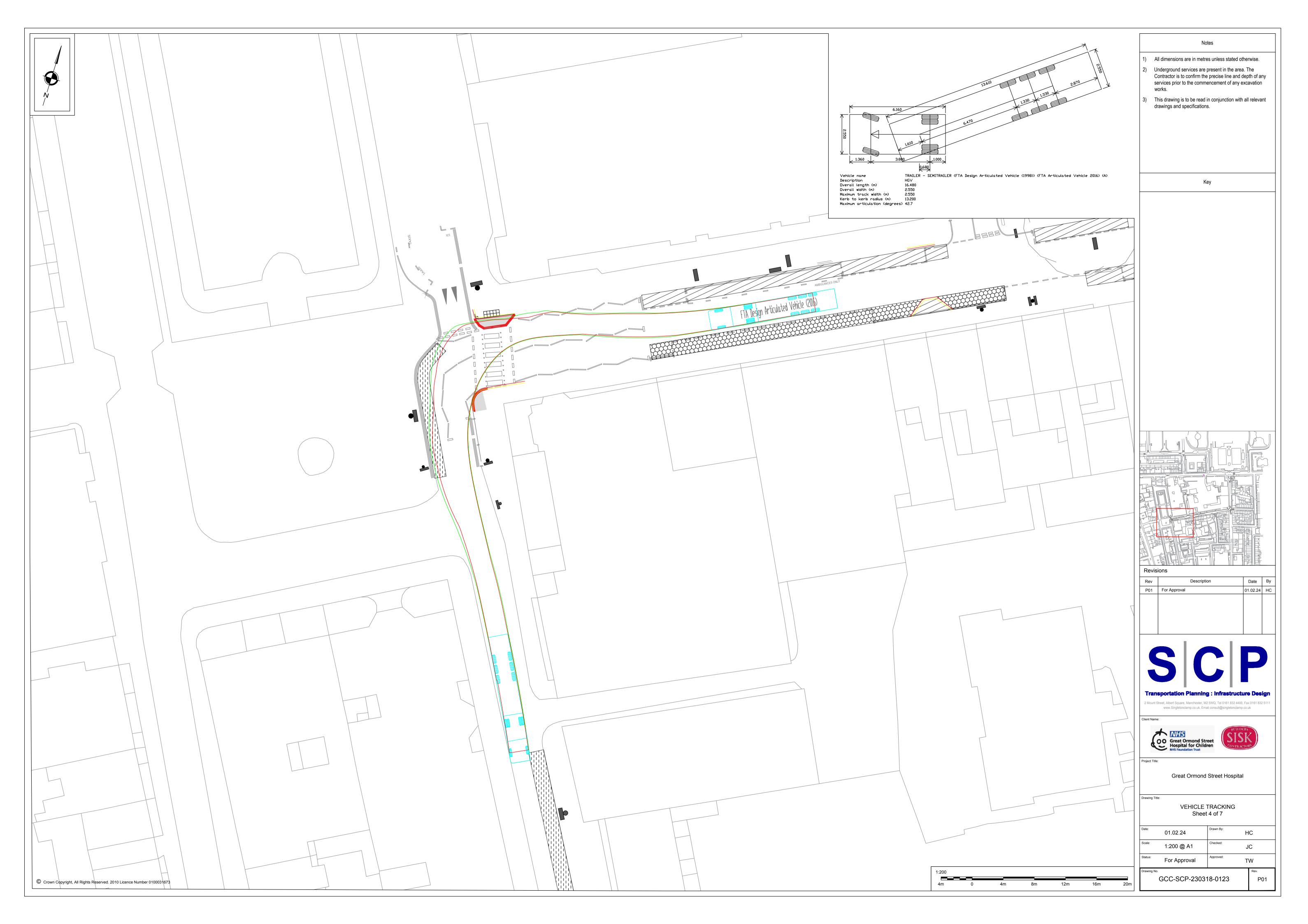


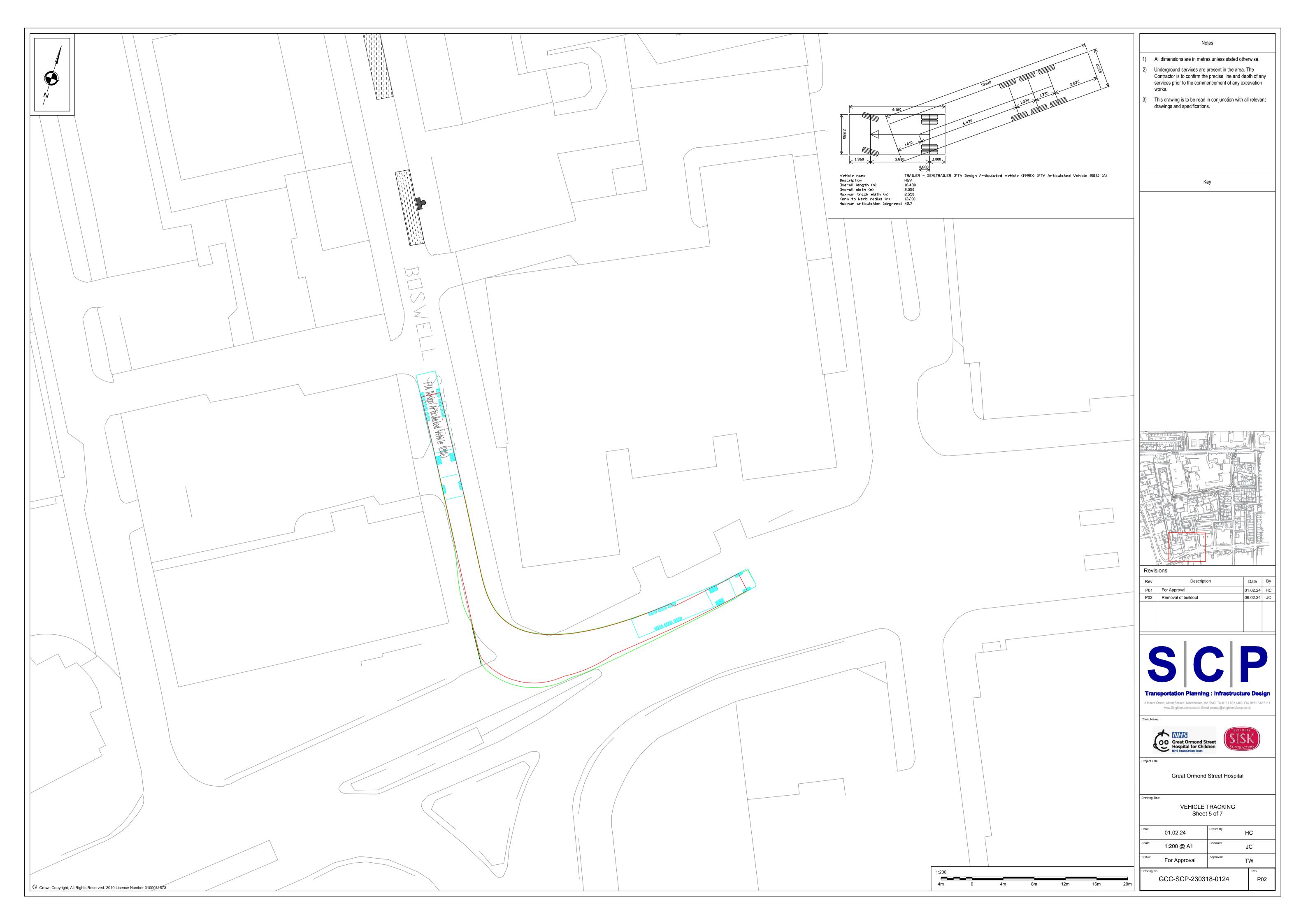


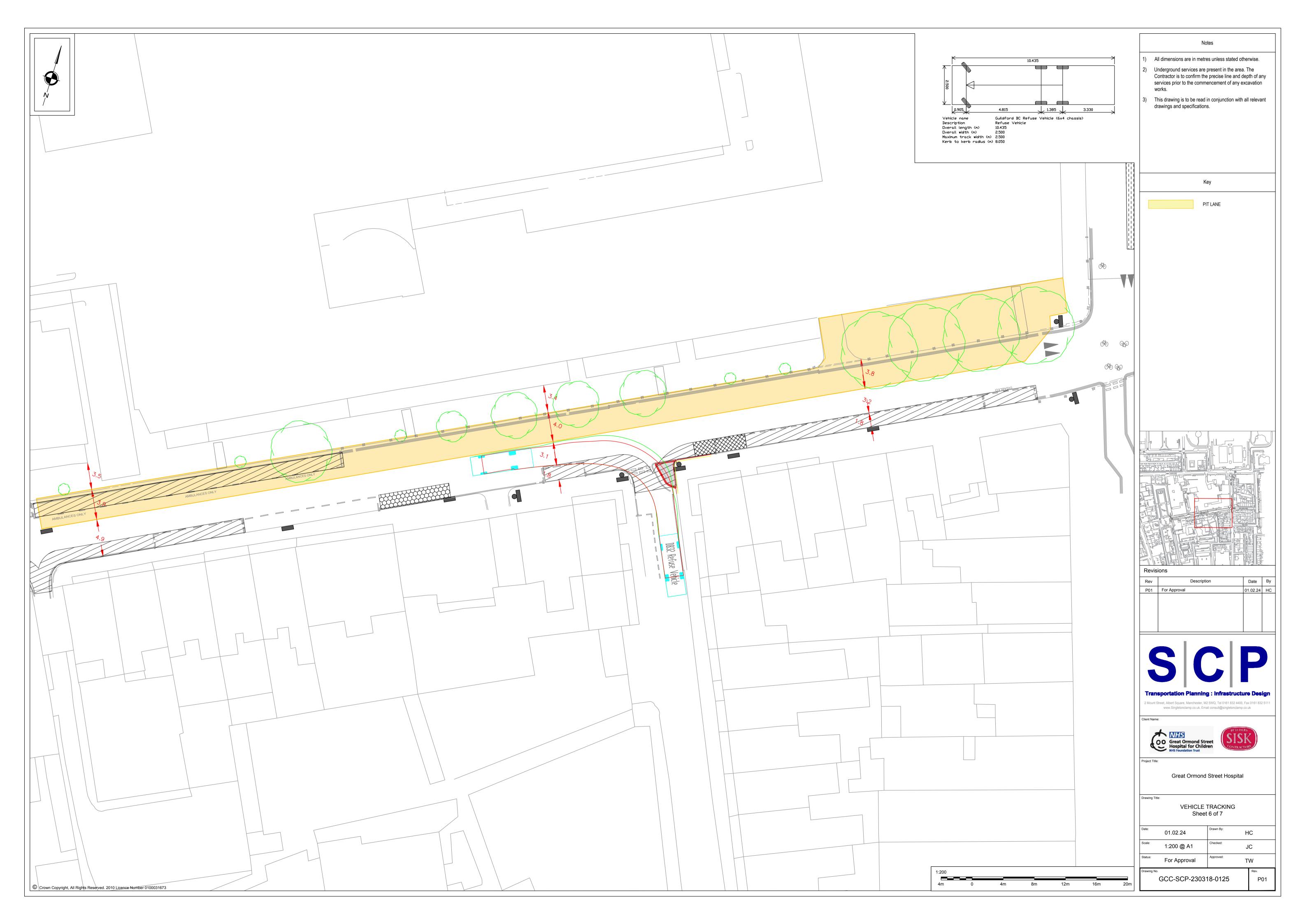


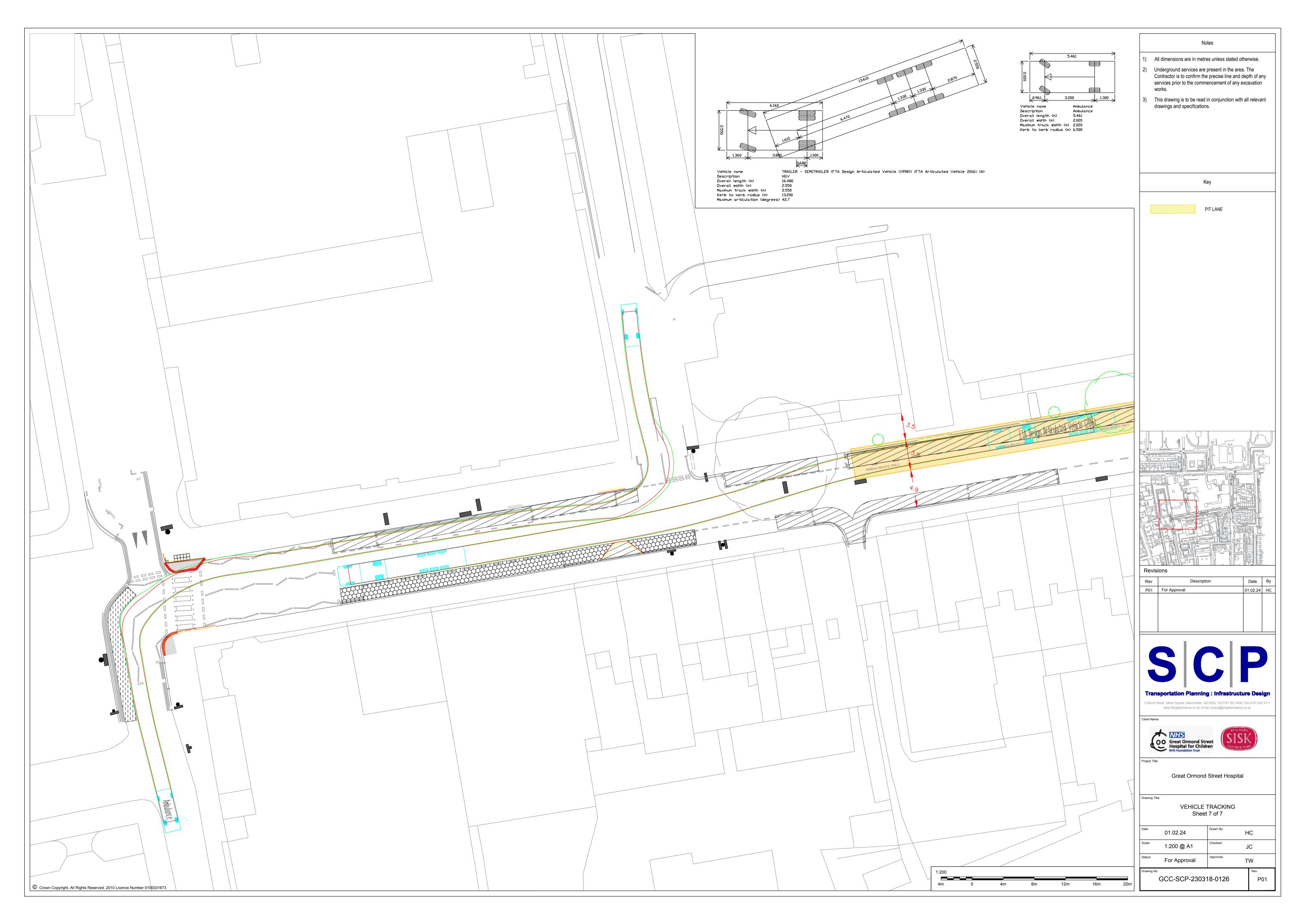


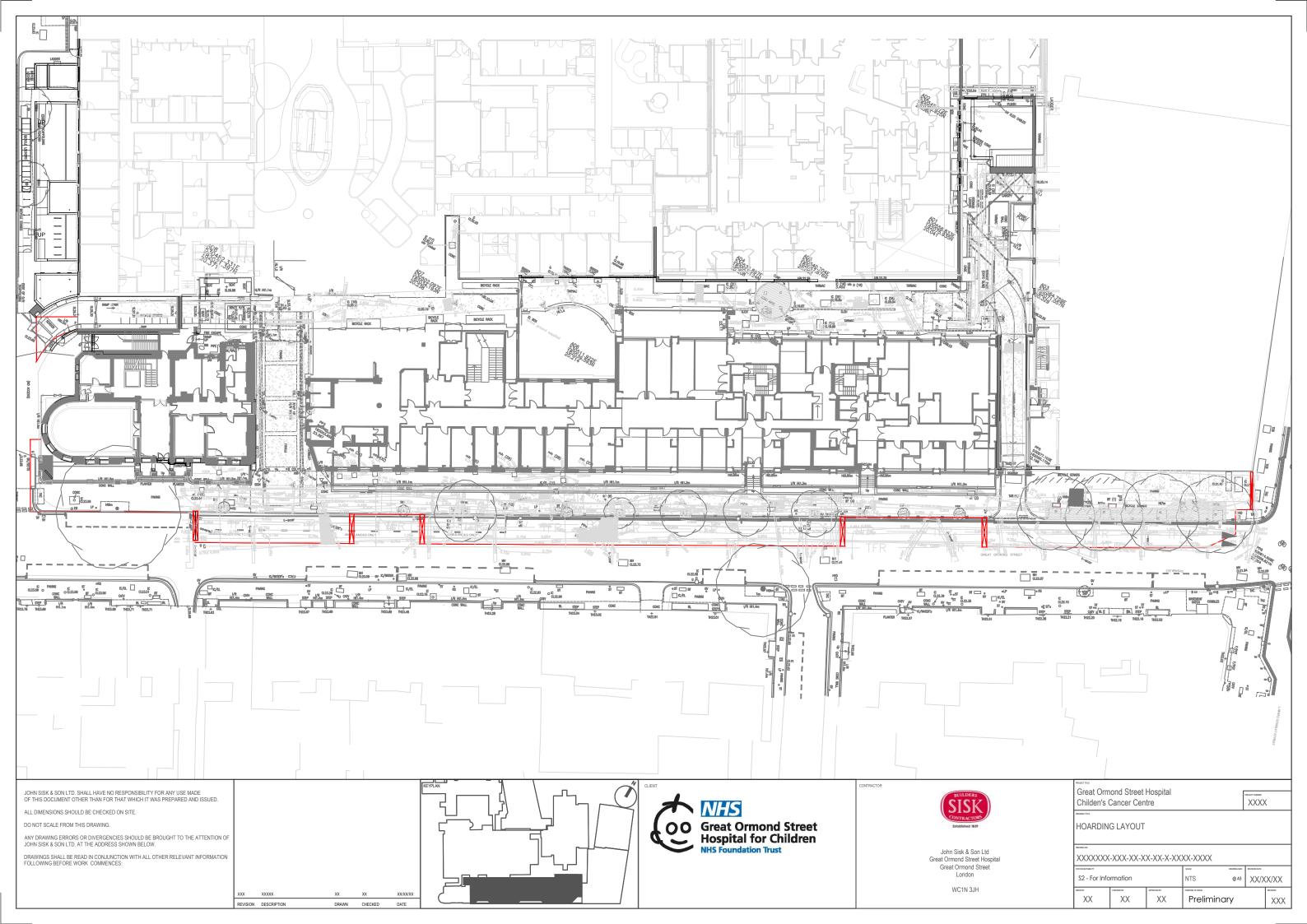


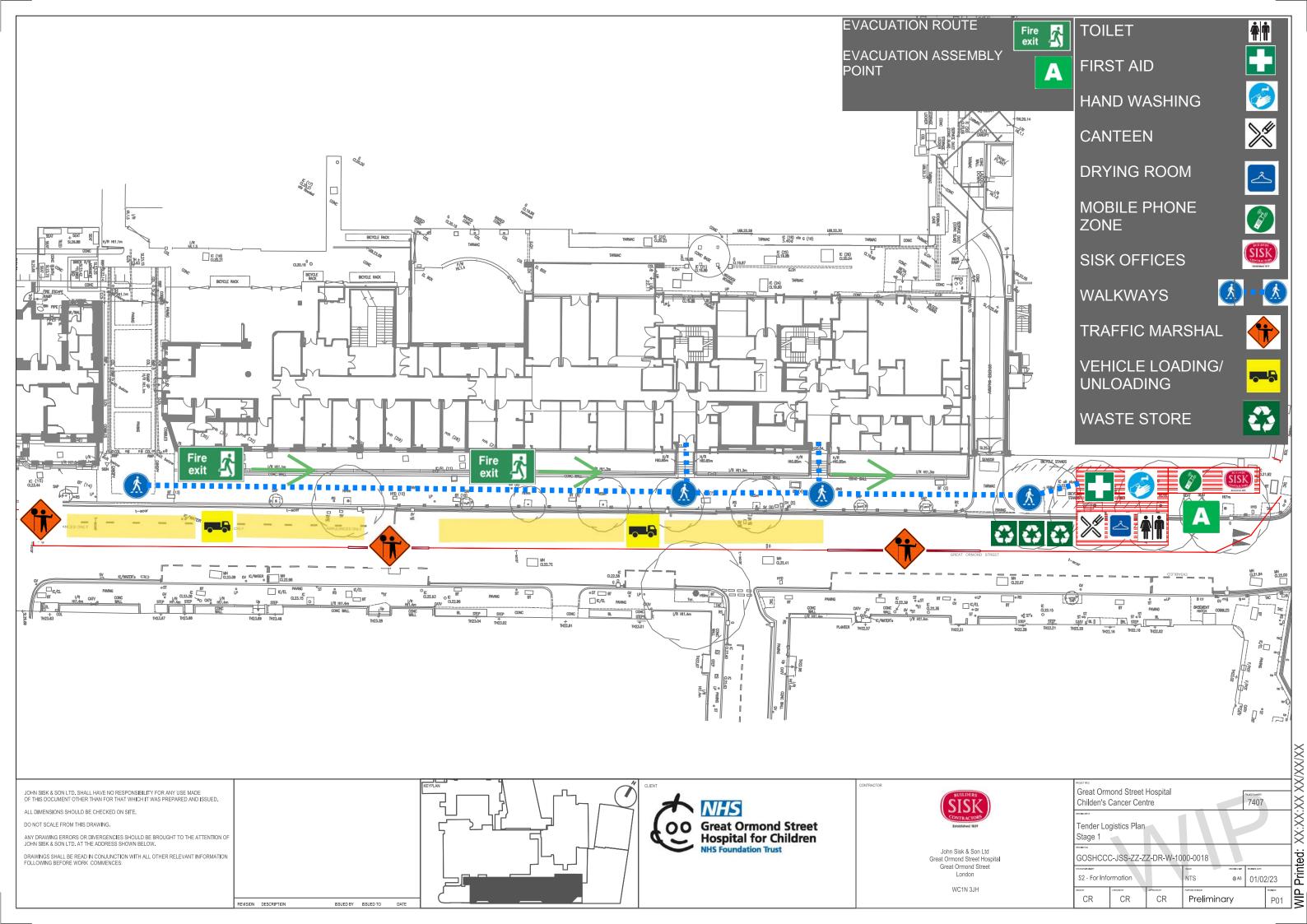


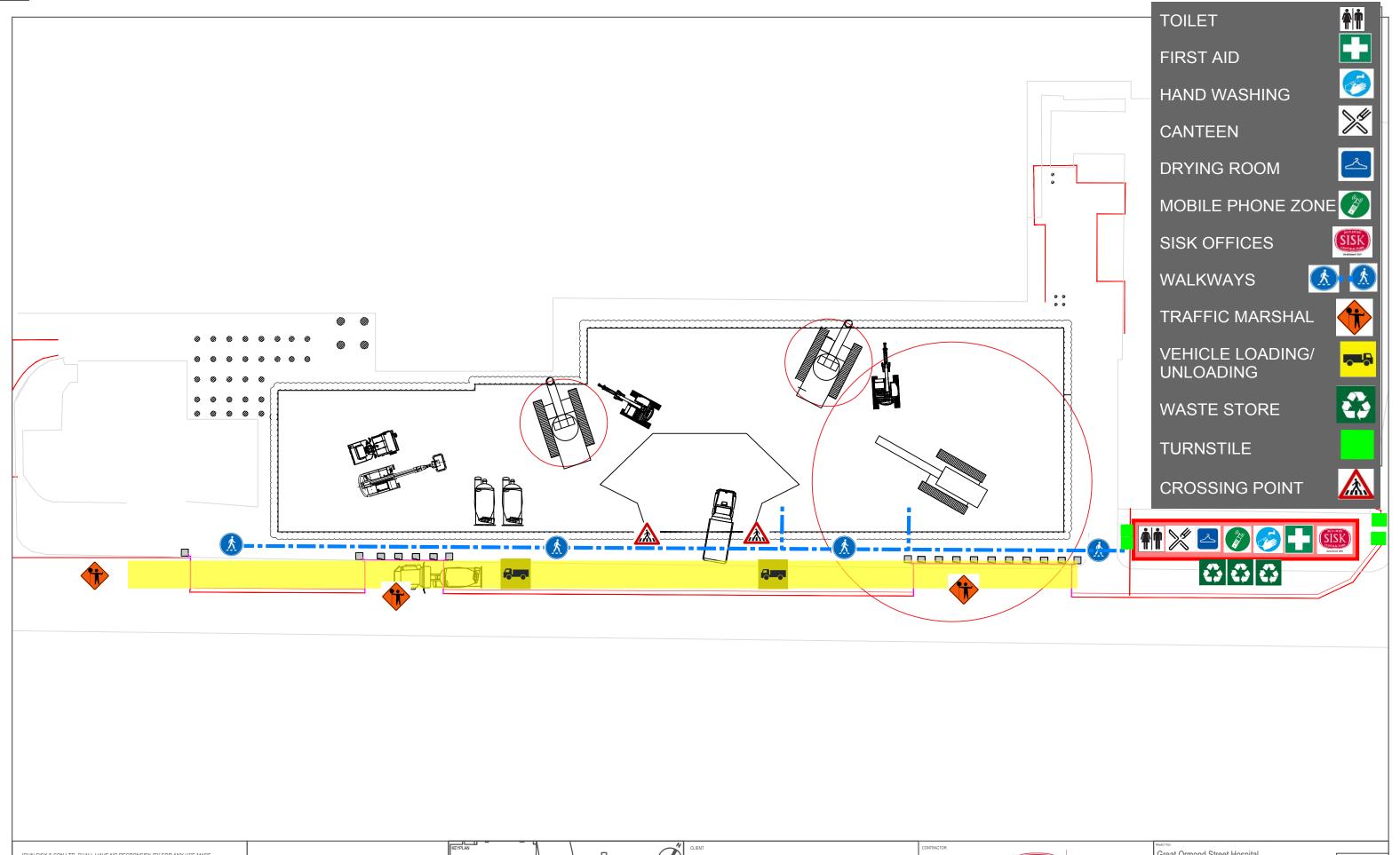












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Great Ormond Street Hospital for Children



John Sisk & Son Ltd Great Ormond Street

WC1N 3JH

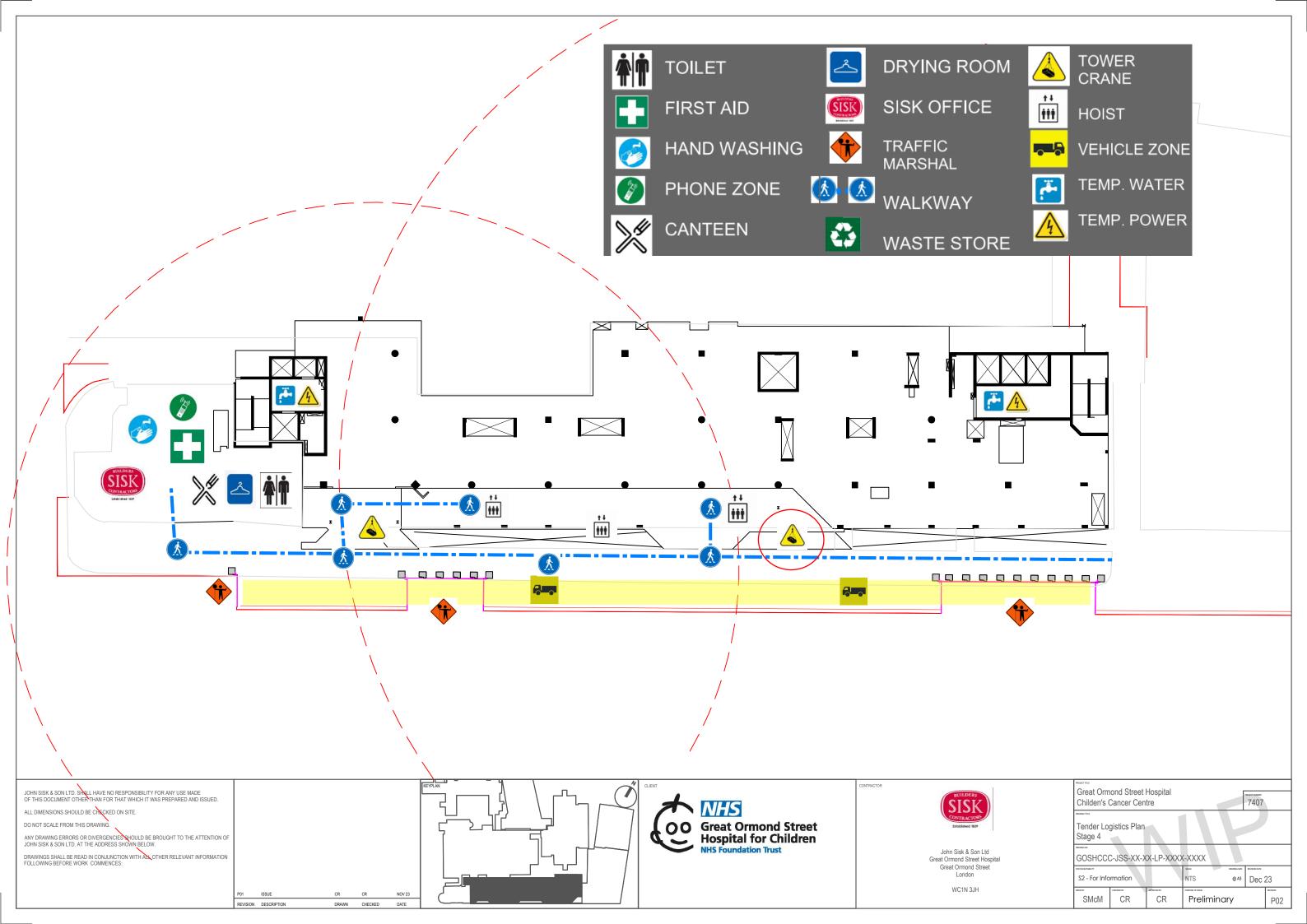
Great Ormond Street Hospital Childen's Cancer Centre Tender Logistics Plan Stage 3

GOSHCCC-JSS-XX-XX-LP-XXXX-XXXX

S2 - For Information @ A3 Dec 23 SMcM

CR Preliminary

7407





Saxon House 27 Duke Street Chelmsford Essex CM1 1HT

T: 020 3376 6660 E: info@scptransport.co.uk www.scptransport.co.uk

> TW/230318 15 November 2023

Camden Highways

Dear Sir/Madam

## Great Ormond Street CCC Phase 4 Stage 2 Road Safety Audit Designers Response

Please find below our response to the issue identified in the Stage 2 Road Safety Audits for the Great Ormond Street CCC Phase 4 site. As required by GG119 a Designer's Response is prepared below for agreement.

#### **STAGE 2 ROAD SAFETY AUDIT**

#### **Problem Ref 2-1**

It is proposed to introduce new signs as part of the works. In two locations the signs are shown within existing tactile areas associated with uncontrolled dropped crossings. The first location is the junction with Powis Place and the second is at the junction with Lambs Conduit Street.

These signs will result in an increased risk of collisions between the visually impaired and the proposed street furniture increasing the risk of injuries.

#### Recommendation

Ensure that all signing is away from the existing uncontrolled dropped crossings.

#### Designer's Response

Agree with finding. Signs that need to be located within the footway areas will not be located within tactile paving areas and observe a minimum clearance of 450mm from the kerb face.

#### **Problem Ref 2-2**

It is proposed to ban right turns from Guildford Place to Guildford Street. The Audit Team noted that there are existing left/right road markings on Guildford Place just prior to the give way markings. These markings contradict the signs proposed, this will result in confusing information for drivers and will result in inappropriate turning movements at the junction increasing the risk of collisions.

#### Recommendation

Remove the double headed road marking and replace with a single left turn arrow and also consider worded markings "Left Turn" only.



#### **Designer's Response**

Agree with finding. The proposal for a right-turn ban from Guildford Place on to Guildford Street is no longer required and therefore the roadmarkings do not need to be amended.

We trust the above is acceptable, should you have any queries please do not hesitate to contact me.

Yours sincerely

TW

Tim Wright
Regional Director
On behalf of SCP
tim.wright@scpdesign.co.uk



# Great Ormand Street CCC Phase 4 Road Safety Audit: Stage 2

London Borough of Camden 5, Pancras Square Camden WC1H 9JE Jonathan Birkett
Meraki Alliance Ltd
Unit 1 Waterside
Old Boston Road
Wetherby
LS22 5NB
Tel:+44 (0) 7966296302



# Great Ormand Street CCC Phase 4 Road Safety Audit: Stage 2

Report Produced for: London Borough of Camden

Report Produced by: Jonathan Birkett

Report Dated: 14 November 2023

Report Reference: MAL/CCCP4RSA2Rev0

Road Safety Audit Team Leader: Jonathan Birkett



## **Great Ormand Street CCC Phase 4**

Road Safety Audit: Stage 2

#### Contents Amendment Record

This report has been issued & amended as follows:

Issue	Revision	Description	Date	Signed
1	0	Draft Report	13 Nov 2023	JB
1	0	FINAL REPORT	14 Nov 2023	JB/GK

### Report Circulation Record

This report has been circulated, as follows:

Person	Organisation	No. of	Date
		Copies	
	London Borough of		
	Camden		
Tim Wright	SCP	Electronic	14 Nov 2023
G Kidd	Meraki Alliance Ltd	Electronic	14 Nov 2023

## **Contents**

1		Introduction	3
	1.1	General	3
	1.2	Documents Forming the Brief	3
	1.3	Collision Traffic and Speed Data	3
	1.4	Details of Site Visit	4
	1.5	RSA Team and Format	4
	1.6	Departures or Relaxations from Standards	5
	1.7	Issues Raised at Previous RSA.	5
	1.8	Information Not Provided at this RSA Stage 2	6
	1.9	Items Considered but not Included Within the RSA	6
2		Items Raised at Previous Stage 1 Road Safety Audit	7
	2.1	RSA Problems Previous Stage 1	7
3		Items Raised at Stage 2 Road Safety Audit	9
	3.1	RSA Problems Stage 2.	9
4		Audit Team Statement	10
Аp	pendix	1 – Audited Documents and Drawings	11
Αp	pendix	2 – Problem Location Plan	12

#### 1 Introduction

#### 1.1 General

This report has been prepared in response to a request to undertake a Stage 2 Road Safety Audit (i.e., carried out prior to construction), by Tim Wright of SCP on behalf of the Overseeing Organisation, London Borough of Camden.

The proposals are to accommodate a temporary compound and works to accommodate HGVs accessing/aggressing the compound. These works include minor kerb works, relocation of existing pedestrian facilities, suspension, and relocation of existing parking bays in the general area surrounding Great Ormond Street Hospital (GOSH) and are associated with the deconstruction and construction operations for GOSH Children's Cancer Centre (Phase 4).

#### **Overseeing Organisation**

London Borough of Camden.

#### Client

Great Ormand Street Hospital for Children.

#### **Designers**

SCP.

The audit comprised an examination of documents forming the Audit Brief and an examination of the site.

#### 1.2 Documents Forming the Brief

The documents were made available to the Road Safety Audit Team by Tim Wright of SCP on behalf of the Overseeing Organisation, London Borough of Camden. The total documents forming the Audit Brief are listed in Appendix 1:

Generally, the Brief comprised:

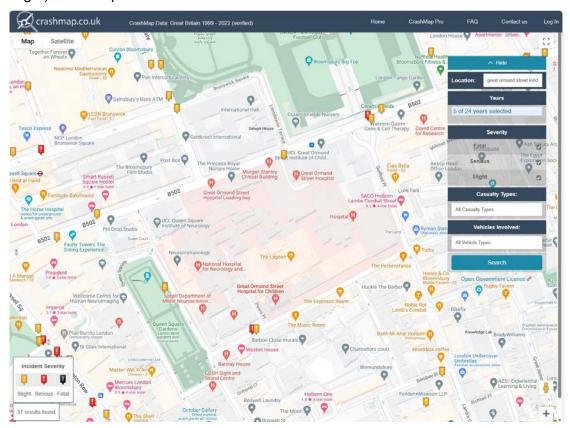
- o Brief.
- Drawings.
- RSA 1 Taylor Bowie Ltd Oct 2023.

#### 1.3 Collision Traffic and Speed Data

Collision data was not available as part of the Brief. Therefore, the Audit Team examined the most recent 5 years (2018-2022) data held on the "Crashmap" website.

Examination of the data shows that there have been thirty-seven personal injury collisions on the wider surrounding highway network. Of these thirty-seven collisions

six are located within the works being examined as part of this RSA 2. These collisions resulted in two serious and four slight collisions. Four of the collisions (one serious and three slight) involved cyclists. Two of the collisions (one serious and one slight) involved pedestrians.



Traffic count data was not available.

Speed data was not available.

#### 1.4 Details of Site Visit

A site inspection was undertaken on Sunday 12 November 2023 between 07:45 and 08:45. The Audit Team spent 60 minutes on site understanding the proposed works and their interaction with the local road network.

During the site visit the weather was fine, the road surfaces were damp. No incidents were noted whilst on site. There roads were not heavily trafficked, there were a number of pedestrian and cyclists observed on the surrounding roads/footways during the course of the RSA.

#### 1.5 RSA Team and Format

It was considered that the information provided was sufficient for the purpose of carrying out the Road Safety Audit Stage 2 requested.

The Road Safety Audit Team membership approved was:

JONATHAN BIRKETT IENG MICE FIHE Holder of Certificate of Competency Road Safety Audit Team Leader

G KIDD BSc (HONS) MIHE Road Safety Audit Team Member

The Road Safety Audit comprised an examination of the documents and drawings supplied to the Road Safety Audit Team (referenced in Appendix 1 of this report). No member of the Road Safety Audit Team has had any previous input to the design of the scheme.

The Terms of Reference are as described in the National Highways Design Manual for Roads and Bridges document GG119 'Road Safety Audit'. The scheme has been examined and this report compiled only with regard to safety implications to road users of the scheme as presented. It has not been verified for compliance with any other Standards or criteria. However, in order to clearly explain a safety problem or the recommendation to resolve a problem, the Audit Team may on occasion have referred to a design standard for information only. However, any audit comments should not be construed as implying that a technical audit has been undertaken in any respect.

Furthermore, any recommendations included within this report should not be regarded as being prescriptive design solution to the problem raised. They are intended only to indicate a proportionate and viable means of eliminating or mitigating the identified problem, as stipulated in GG119, and in no way imply that a formal design process has been undertaken. There may be alternative methods of addressing a problem which should be equally acceptable in achieving the desired elimination or mitigation and these should be considered when responding to this report.

It is the Project Sponsor's responsibility to ensure that all problems raised by the Road Safety Audit Team are given due consideration.

In the event of a collision and any resulting legal action, Meraki Alliance Ltd would have to defend its actions on the basis that it took such care, as in all circumstances was reasonably required, to ensure that the highway was not dangerous to road users. It is important therefore that recommendations contained in the report are acted upon wherever possible.

#### 1.6 Departures or Relaxations from Standards

No departures from standard have been provided to the RSA Team.

#### 1.7 Issues Raised at Previous RSA.

An RSA 1 was undertaken in October 2023 by Taylor Bowie Ltd, and the findings of that RSA have been included in Section 1 of this report.

#### 1.8 Information Not Provided at this RSA Stage 2

All information provided.

#### 1.9 Items Considered but not Included Within the RSA

No items identified outside the scope of the RSA.

## 2 Items Raised at Previous Stage 1 Road Safety Audit

This section details the findings of previous Stage 1 Road Safety Audit.

#### 2.1 RSA Problems Previous Stage 1

PROBLEM	1
Location	General, throughout the scheme extents
Summary	Insufficient drainage may result in single vehicle loss of control type collisions or a slip/fall hazard for pedestrians and cyclists.

A number of changes to existing kerblines are proposed throughout the scheme extents. Whilst there is existing drainage provision, this may not be sufficient for the proposed changes.

Lack of surface water drainage may result in surface water ponding with the potential slide risk for vehicles during wet and subsequent cold/freezing weather conditions. This may increase the risk of single vehicle loss of control type collisions. In the vicinity of crossing areas this may result in an increased risk of slip/fall hazards for pedestrians and cyclists.

#### **RECOMMENDATION**

The Audit Team recommend that at the next stage of design, new drainage appropriate for the proposed highway works is incorporated into the scheme proposals.

#### **DESIGNERS RESPONSE**

Changes to drainage have been proposed as part of the detailed design.

PROBLEM	2
Location	General, throughout the scheme extents
Summary	Locations of inadequate utility inspection chambers and other street furniture may increase the risk of single vehicle loss of control type collisions or vehicular strikes.

The site visit has established that there are a number of existing utility inspection covers, presently in footway areas, that may end up being located whole or partly within the mainline carriageway or within areas that may be overrun my HGVs.

The siting of utility covers in wheel tracks, particularly of motorcyclists/cyclists could adversely affect their stability and increase the risk of single vehicle loss of control type collisions. Additionally, unsuitable grade covers may result in broken or damaged covers which could form a hazard for all users.

Furthermore, kerb changes may result in other street furniture sited inappropriately whereby it may be vulnerable to potential vehicular strikes due to insufficient lateral clearance and possible single vehicles loss of control type collisions.

#### **RECOMMENDATION**

The Audit Team recommend that utility inspection covers are of a suitable grade and located appropriately and that other street furniture is sited with sufficient clearance.

#### **DESIGNERS RESPONSE**

Where service covers are within the carriageway suitable new covers will be provided to give suitable resistance to skidding.

END OF PROBLEMS IDENTIFIED AND RECOMMENDATIONS PRESENTED IN PREVIOUS STAGE 1 ROAD SAFETY AUDIT

## 3 Items Raised at Stage 2 Road Safety Audit

This section details the findings of this Stage 2 Road Safety Audit. The problems identified are summarised in Appendix 2.

#### 3.1 RSA Problems Stage 2.

PROBLEM		2-1
Location:	Great Ormand Street.	
Summary:	Signs within tactile areas will increase the risk of pedestrian collis street furniture.	sions with

It is proposed to introduce new signs as part of the works. In two locations the signs are shown within existing tactile areas associated with uncontrolled dropped crossings. The first location is the junction with Powis Place and the second is at the junction with Lambs Conduit Street.

These signs will result in an increased risk of collisions between the visually impaired and the proposed street furniture increasing the risk of injuries.

#### RECOMMENDATION

Ensure that all signing is away from the existing uncontrolled dropped crossings.

PROBLEM		2-2
Location:	Guildford Place junction with Guildford Street.	
Summary:	Contradictory road markings will increase the risk of driver or resulting in inappropriate turning movements.	confusion

It is proposed to ban right turns from Guildford Place to Guildford Street. The Audit Team noted that there are existing left/right road markings on Guildford Place just prior to the give way markings. These markings contradict the signs proposed, this will result in confusing information for drivers and will result in inappropriate turning movements at the junction increasing the risk of collisions.

#### **RECOMMENDATION**

Remove the double headed road marking and replace with a single left turn arrow and also consider worded markings "Left Turn" only.

## END OF PROBLEMS IDENTIFIED AND RECOMMENDATIONS PRESENTED IN THIS STAGE 2 ROAD SAFETY AUDIT

## 4 Audit Team Statement

We certify that this Road Safety Audit has been carried out in accordance with GG119		
ROAD SAFETY AUDIT TEAM LEADER		
NAME:	JONATHAN BIRKETT	
SIGNED:	<b>J3</b>	
POSITION:	DIRECTOR	
ORGANISATION	MERAKI ALLIANCE LTD	
DATE:	14 NOVEMBER 2023	
ROAD SAFETY AUDIT TEAM MEMBER		
Name:	GILLIAN KIDD	
SIGNED:	Allen Elect	
Position:	AUDIT TEAM MEMBER	
ORGANISATION	MERAKI ALLIANCE LTD	
DATE:	14 NOVEMBER 2023	

# **Appendix 1 – Audited Documents and Drawings**

DRAFTIWickettXXXX23

DRAFTRSAStage1

GOSH CCC - Proposed Highway and Traffic Alterations Combined\_04.07.23

SCP-230318-0001 P03

SCP-230318-0002 P03

SCP-230318-0003 P03

SCP-230318-0004 P03

SCP-230318-0011 P02

SCP-230318-0012 P02

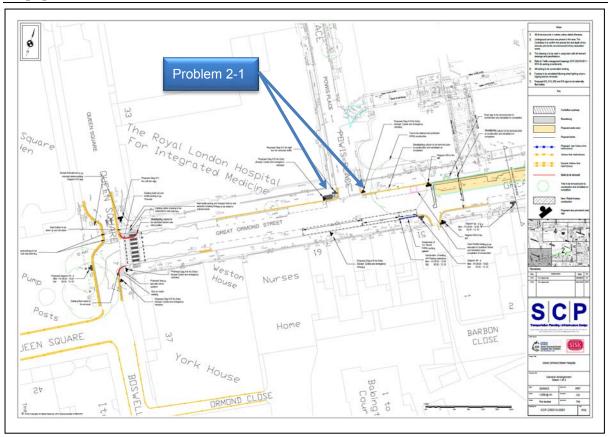
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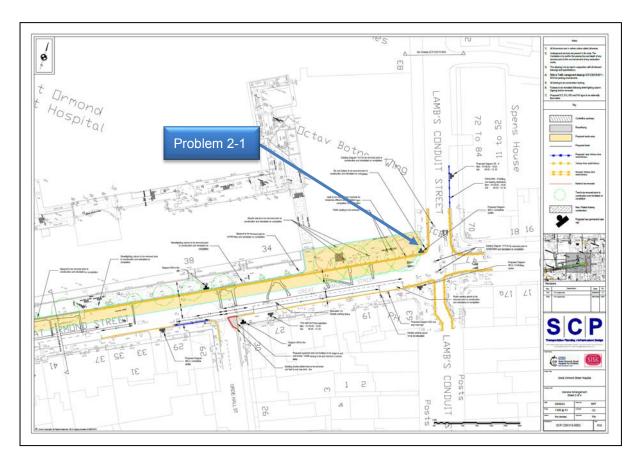
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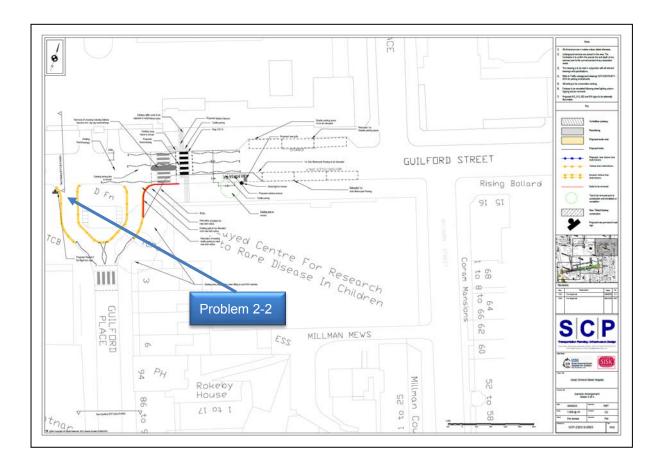
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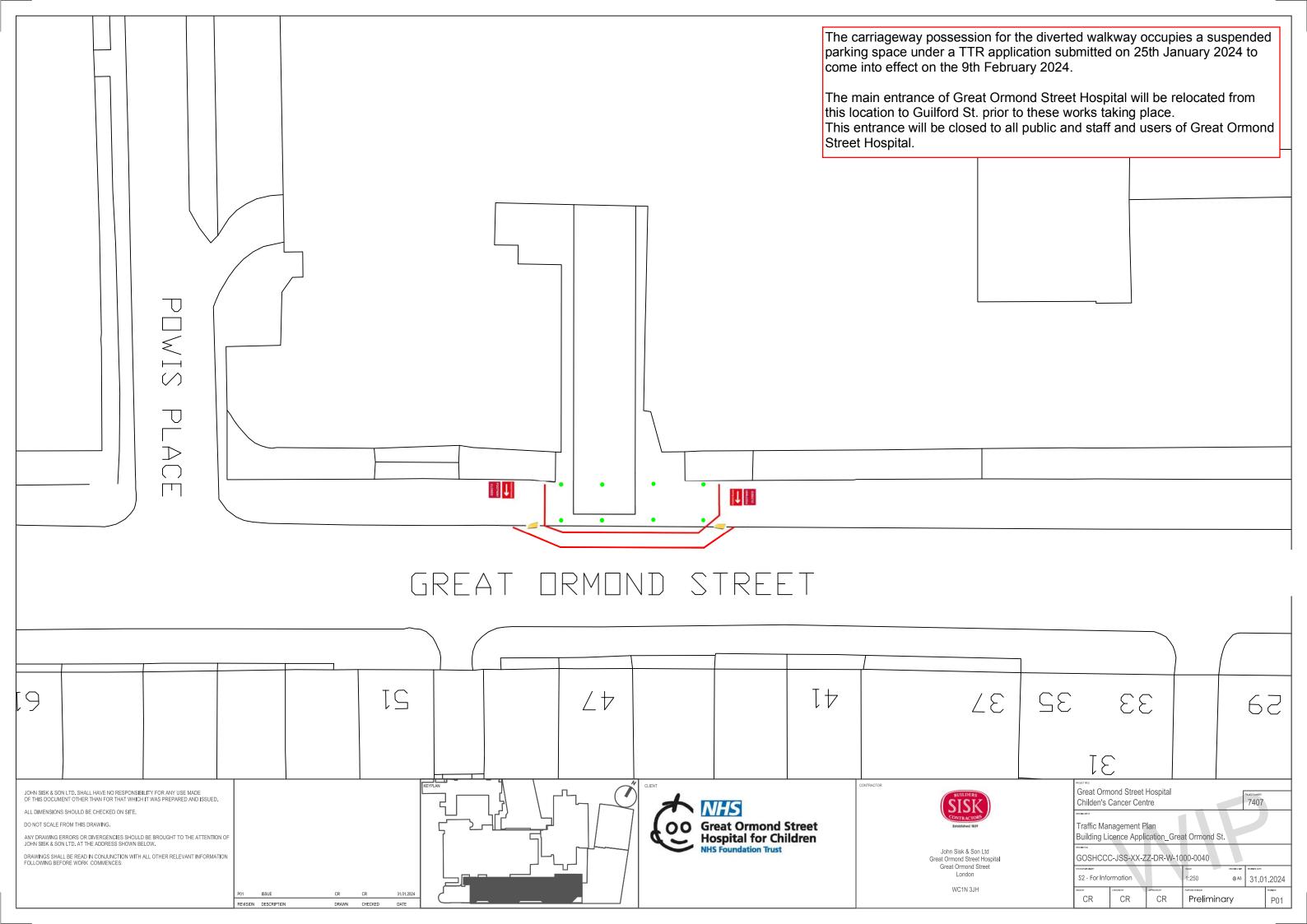
SCP-230318-0016 P02

## **Appendix 2 – Problem Location Plan**











## Arboricultural Method Statement Great Ormand Street Hospital Children's Cancer Centre (GOSHCCC)

Date: June 2023

#### Submitted to:

John Sisk & Son (Holdings) Ltd, 2410 Regents Court, The Crescent, B37 7YE. **ADAS Reference: 1050736-04** 

#### Prepared by:

RSK ADAS Ltd,

Abbey Park,

Humber Road,

Coventry,

CV3 4AQ.





## Contents

1	Exe	xecutive Summary1		
2	Intr	oduction	2	
	2.1	Client Instruction	2	
	2.2	Project Background	2	
	2.3	Purpose of Report	2	
	2.4	The Author	3	
	2.5	Site Description	3	
	2.6	Assumptions and Limitations	3	
	2.7	Tree Survey Methodology	4	
	2.8	Legislation	6	
	2.8.	1 Tree Preservation Orders and Conservation Areas	6	
3	Tre	e Survey Results and Impact Assessment	7	
	3.1	Tree Survey Results	7	
	3.2	Assessment	7	
	3.3	Impact	9	
	3.3.	1 Above ground	9	
	3.3.	2 Below Ground	9	
4	Wo	rks Under Consideration	. 10	
5	Arb	oricultural Method Statement: Construction Stages - General	. 11	
	5.1	Site Briefings	. 11	
	5.2	Site Monitoring	. 11	
	5.3	Appointment of Site Arboriculturist	. 11	
	5.4	Toolbox Talk	. 11	
	5.5	Movement of Vehicles, People and Plant	. 11	



6	Arboricultural Method Statement – Specific Operations		. 13
	6.1	Tree removal	13
	6.2	Tree pruning	13
	6.3	Impacts of works on trees	14
	6.4	Installation of stem protection	14
	6.5	Removal of decorative stone edging and installation of highways kerb	14
	6.6	Movement of high sided vehicles	15
	6.7	Site monitoring	15

#### Appendices

**Appendix 1: Tree Protection Plan** 

**Appendix 2: Cascade Chart for Tree Quality Assessment** 

Appendix 3: Tree Survey Schedule

**Appendix 4: Schedule of Tree Pruning** 

**Appendix 5: Site Monitoring Form** 

Appendix 6: Installation of Stem Protection



#### Quality Assurance

Author	Checked	Approved
Ellen Boardman Msc, BSc (Hons), M.Arbor.A  Senior Arboricultural Consultant	Iain Waddell L6 Dip Arb (ABC), M.Arbor.A  Associate Director	Ian Braddock BSc(Hons) Arb, MICFor Associate Director

#### Disclaimer

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Where any data supplied by the client or from other sources have been used, it has been assumed that the information is correct. No responsibility can be accepted by ADAS for inaccuracies in the data supplied by any other party. The conclusions and recommendations in this report are based on the assumption that all relevant information has been supplied by those bodies from whom it was requested.

No part of this report may be copied or duplicated without the express permission of ADAS and the party for whom it was prepared.

Where field investigations have been carried out, these have been restricted to a level of detail required to achieve the stated objectives of the work.

This work has been undertaken in accordance with the quality management system of RSK ADAS Ltd.

### **Revision History**

Version	Date	Amendment
-	June 2023	First Issue



#### 1 Executive Summary

ADAS has been commissioned by John Sisk & Son Ltd to provide an Arboricultural Method Statement (AMS) in respect of proposed demolition and construction works affecting the Root Protection Areas (RPAs) of retained trees adjacent to the Great Ormand Street Hospital (GOSH) development proposals.

The proposal for the redevelopment of the Great Ormand Street Hospital (GOSH) Frontage Building (Ref: 2022/2255/P) was granted planning permission on the 17<sup>th</sup> of April 2023 subject to conditions. Condition 7 of the Decision Notice relates to trees as follows;

'Prior to the commencement of any works on site, details demonstrating how trees to be retained on Great Ormond Street shall be protected during construction work shall be submitted to and approved by the local planning authority in writing. Such details shall follow guidelines and standards set out in BS5837:2012 "Trees in Relation to Construction". All trees on the site, or parts of trees growing from adjoining sites, unless shown on the permitted drawings as being removed, shall be retained and protected from damage in accordance with the approved protection details.'

ADAS prepared an Arboricultural Planning Statement Report (Ref: ADAS\_Great Ormond Street Hospital\_APS\_June 2022\_RevF) in respect of the development, this document shall be used in addition to this approved report and addresses the protection and construction activities adjacent to retained trees within the site and on the approved document GOSH-CCC-Proposed Traffic and Highway Alterations drawing numbers; GOSHCCC-JSS-ZZ-XX-SK-OW-1000-0029, GOSHCCC-JSS-ZZ-XX-SK-OW-1000-0031 and GOSHCCC-JSS-ZZ-XX-SK-OW-1000-0032.

The works under consideration at this site are; The operations under consideration within this AMS relate to pruning works to trees, installation of stem protection for retained one tree, kerb line remediation within the RPAs of retained trees, movement of high-sided vehicles and site monitoring.



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#### 2 Introduction

#### 2.1 Client Instruction

This report was commissioned by the appointed design and build contractor John Sisk & Son (Holdings) Ltd in June 2023 and is pertinent to the site known as Great Ormond Street Hospital Children's Cancer Centre (GOSHCCC).

#### 2.2 Project Background

The proposal for the redevelopment of the Great Ormand Street Hospital (GOSH) Frontage Building (Ref: 2022/2255/P) was granted planning permission on the 17<sup>th</sup> of April 2023 subject to conditions. Condition 7 of the Decision Notice relates to trees as follows:

'Prior to the commencement of any works on site, details demonstrating how trees to be retained on Great Ormond Street shall be protected during construction work shall be submitted to and approved by the local planning authority in writing. Such details shall follow guidelines and standards set out in BS5837:2012 "Trees in Relation to Construction". All trees on the site, or parts of trees growing from adjoining sites, unless shown on the permitted drawings as being removed, shall be retained and protected from damage in accordance with the approved protection details.'

ADAS prepared an Arboricultural Planning Statement Report (Ref: ADAS\_Great Ormond Street Hospital\_APS\_June 2022\_RevF) in respect of the development, this document shall be used in addition to this approved report and addresses the protection and construction activities adjacent to retained trees within the site and on the approved document GOSH-CCC-Proposed Traffic and Highway Alterations drawing numbers; GOSHCCC-JSS-ZZ-XX-SK-OW-1000-0029, GOSHCCC-JSS-ZZ-XX-SK-OW-1000-0031 and GOSHCCC-JSS-ZZ-XX-SK-OW-1000-0032.

#### 2.3 Purpose of Report

The purpose of this report is to provide supplementary information detailing the specific protection measures and precautionary working practices to be adopted to ensure the protection of retained trees as an extension to the information presented within the approved APS referenced above.

This document is intended as a reference point for all site operatives and a copy will remain with the site manager for the duration of the development.

This document may be used as a point of reference if there were to be a dispute over compliance with related planning conditions.



#### 2.4 The Author

This document has been prepared by Ellen Boardman, an ADAS Senior Arboricultural Consultant. Ellen is a Professional Member of the Arboricultural Association and holds the MSc in Arboriculture and Urban Forestry. Ellen has 18 years of experience within the arboricultural industry, both in the Public Sector as a Tree Officer and in the Private Sector as an Arborist and Arboricultural Consultant.

#### 2.5 Site Description

The majority of the site is currently occupied by the existing GOSH Frontage Building, a five-storey building (inclusive of basement) dating from the 1950s that was constructed in two separate phases. The building is currently occupied by a number of GOSH departments including Audiology Department, Clinical Research Facility (CRF), Department of Child and Adolescent Mental Health and Paediatric Psychology Department.

For the purposes of this report, reference to 'the site' relates to land shown in the Tree Protection Plan as the Construction Exclusion Zone and the associated access and egress route for high sided vehicles as shown in GOSHCCC-JSS-ZZ-XX-SK-W-1000-0029, GOSHCCC-JSS-ZZ-XX-SK-W-1000-0031, GOSHCCC-JSS-ZZ-XX-SK-W-1000-0032, proposed traffic and highway alterations.

The western most part of the site is occupied by the main GOSH Entrance providing connections to the wider GOSH hospital island site and by a small rear element (external staircase) of the Paul O'Gorman Building that will be demolished to facilitate the proposed development.

The site is bounded by the Paul O'Gorman Building to the west, Octav Botnar Wing to the east, the Variety Club Building and Premier Inn Clinical Building to the north and Great Ormond Street to the south.

#### 2.6 Assumptions and Limitations

This assessment is based upon the information provided by the client in addition to information collected by ADAS during a survey of the site undertaken on 7<sup>th</sup> January 2020 with additional site visits to include areas covered by the construction management plan on 19<sup>th</sup> June 2023. The documents and drawings considered are detailed within **Table 1**.

**Table 1: Documentation Considered** 

Author	Document Title	Drawing / Document Number	Date
ADAS	Arboricultural Planning Statement	ADAS_Great Ormond Street Hospital_APS-RevF	May 2022



Author	Document Title	Drawing / Document Number	Date
John Sisk & Son/DPD	GOSH- CCC – Proposed Traffic and Highway Alterations	GOSHCCC-JSS-ZZ-XX-SK-W-1000-0029, GOSHCCC-JSS-ZZ-XX-SK-W-1000-0031, GOSHCCC-JSS-ZZ-XX-SK-W-1000-0032	June 2023
John Sisk & Son/DPD	S73 BDP Presentation	GOSHCCC-BDP-ZZ-ZZ-RP-A-2000-0054 (P01)_S2	April 2023

The Tree Protection Plan (TPP) contained in **Appendix 1** has been developed from the tree survey information.

This report assumes that the proposed design layout demonstrated on the Tree Protection Plan (TPP) contained in **Appendix 1** is the final layout.

This report is only intended for use by the person(s), or company named on the front cover.

This report is not a full hazard or risk assessment of trees and should not be used as such.

Trees are living organisms and are constantly adapting to their ever-changing environment. No tree is completely safe and there is no guarantee that problems or deficiencies may not arise in the future, which have not been identified in this report. Therefore, this report is only valid for a period of 1 year from the date of the initial site inspection.

#### 2.7 Tree Survey Methodology

The tree survey of the site was undertaken by Ed Lusk on 7<sup>th</sup> January 2020 with additional trees surveyed for the access and egress route for high-sided vehicles surveyed by Iain Waddell on 19<sup>th</sup> June 2023. The 2020 survey number is highlighted in yellow on the Tree Survey Schedule (**Appendix 3**), and the 2023 survey is highlighted in green. The tree survey was carried out in accordance with the recommendations contained within 'BS5837:2012 Trees in Relation to Design, Demolition and Construction: Recommendations'.

All trees have been visually inspected from ground level unless otherwise stated, with no climbing or boring tests being undertaken. The comments made on their condition are based on observable factors present at the time of inspection.

The information, shown in **Table 1** below, was recorded as part of the tree survey.



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Table 1: Tree Survey Schedule heading descriptions

Column Heading	Description	
Tree Ref No.	All individual trees and groups of trees have been given a unique reference number.  Each number is prefixed by a letter.  T = Individual tree	
	■ G = Group of trees	
Species	The English common name has been used.	
Single or Multiple stem (S or M)	'S' represents a tree which has a single clear stem to at least 1.5m above ground level.	
	<ul> <li>'M(a)' represents a tree where the main stem divides into two to five stems below 1.5m above ground level, and</li> </ul>	
	'M(b)' represents a tree where the main stem divides into 6 or more stems below a height of 1.5m.	
Height (m)	Where possible tree heights are measured using a laser. In some instances, such as in close groups of trees, one height may be measured, and other nearby trees estimated from this height. Measurements are provided in metres.	
Stem Diameter (mm)	$S_{\text{n}}$ represents the stem number. Measurements are provided in millimetres at 1.5m above ground level for single stemmed trees.	
Branch Spread (m)	Measured in metres to the four cardinal compass points (N, E, S, W).	
Crown Clearance	<ul><li>(1) Height in metres of the first significant branch, and the direction of growth.</li><li>(2) Height in metres of lowest part of crown.</li></ul>	
Life Stage	The stage at which the tree is within its lifecycle (Y = young, SM = semi-mature, EM = early-mature, M = mature, OM = over mature, V = veteran)	
General Observations	Any relevant observations are recorded, with reference to structural and/or physiological condition.	
Preliminary Management Recommendations	Recommendations are made where management work is required for reasons of health and safety or sound arboricultural management.	
Estimated Remaining Contribution (years)	An estimation of how long the feature will contribute to its surroundings. This is recorded in bands of either <10 years, 10+ years, 20+ years and 40+ years.	
Tree Quality Grading	The trees are graded to the categories prescribed within BS5837:2012 (U, A, B & C). Details of this grading system can be found in <b>Appendix 2</b> .	
Root Protection Area	Calculated as prescribed in section 4.6 of BS5837:2012, provided as an area $(m^2)$ and a radius from the tree's stem $(m)$ .	
Niete Theorem	the standard for the st	

Note: Those measurements shown in *italics* have been estimated, usually where access has restricted it being taken.



# 2.8 Legislation

## 2.8.1 Tree Preservation Orders and Conservation Areas

Local Planning Authorities (LPAs) have the power to preserve selected trees and woodlands through the making of Tree Preservation Orders (TPOs). Similarly, special provision is provided to trees located within Conservation Area's (CA) which are not the subject of a TPO. The LPAs powers to do this are provided by the following Act of Parliament and its associated regulations:

- Town and Country Planning Act 1990
- Town and Country Planning (Determination of Appeals by Appointed Persons) (Prescribed Classes) (Amendment) (England) Regulations 2008
- Town and Country Planning (Tree Preservation) (England) Regulations 2012

The principal effect of a TPO is to prohibit the cutting down, uprooting, topping, lopping, wilful damage or wilful destruction of trees without first obtaining the consent of the relevant Local Authority.

Where works to trees within a CA are proposed, six weeks notification must first be given to the relevant Local Authority.

Unauthorized works to trees either protected by a TPO or those that are located within a CA, could result in an unlimited fine for each tree.

An enquiry to Camden Council on 23<sup>rd</sup> June 2023 confirmed that there are no TPOs within the site nor on the trees that are part of the access and egress route for high sided vehicles. The area falls within the Bloomsbury Conservation Area and therefore six weeks notice shall be given to Camden Council.



# 3 Tree Survey Results and Impact Assessment

# 3.1 Tree Survey Results

The tree survey identified 25 tree features, composed of 24 individual trees and one group of trees which have the potential to be impacted by the proposed development including the access route for high-sided vehicles.

The trees were surveyed on the 7<sup>th</sup> of January 2020, tree number highlighted in yellow on schedule, and 19<sup>th</sup> of June 2023, tree number highlighted in green on schedule.

Of these tree features, six were awarded a high-quality A grade, two awarded a moderate-quality B grade and 17 were awarded a low-quality C grade. No trees were considered unsuitable for retention, U grade.

Just under half of the trees surveyed (11) were categorised as young, with the remaining trees being equally split between semi-mature (6), early-mature (2) and mature (6).

A full tree survey schedule is included in **Appendix 3**.

### 3.2 Assessment

The impact the proposals are likely to have on the existing trees has been assessed under the following categories, and the findings are summarised in **Table 2** below.

- Trees proposed for removal. This includes trees:
  - o that are under the footprint of the proposed works
  - o whose Root Protection Areas (RPAs) are heavily affected by the works
  - o which are to be removed for reasons of sound arboricultural management.
- Retained trees that require works to their crown or require extra protection due to their proximity to the proposed works area and site traffic.
- Retained trees which are unaffected by the development proposals.



Table 2: Arboricultural Impact Assessment

		Tree Qual	ity Assessmen	t Category Gra	ding*	
Impact	Reason	А	В	С	U	Totals
Trees to be removed *	Trees are directly within the development area	None	G1	T5, T6, T7, T8, T9, T10, T11, T12, T13, T14	None	11
Retained trees that are at risk of damage due to proximity to the proposed development	Tree is within the site hoarding for the development area	None	T4	None	None	1
Trees that require pruning to facilitate the development	Crow low over site area	None	T4	None	None	1
Retained trees that require pruning to facilitate safe access for high- sided vehicles	Crown require works to prevent damage by high sided vehicles	T15, T16, T17, T23, T24	T4	T19, T20, T21	None	9
Retained trees where current decorative stone edging will be replaced with highways kerb	Trees will not be adversely affected providing methodology in section 6.5	T16	None	None	None	1
Retained trees that require bankmen whilst being passed by high sided vehicles	Banksmen are required to prevent impact between trees adjacent to the access and egress route for high sided vehicles.	T15, T16**, T17, T22, T23, T24	T4	T18, T19, T20, T21	None	11
	Totals	12	5	17	None	34

<sup>\*</sup>Trees to be removed granted under planning permission 2022/2255/P

<sup>\*\*</sup>T16 requires two banksmen as per section 6.6



### 3.3 Impact

### 3.3.1 Above ground

Based on the proposed site plan ten low-quality category C trees will need to be removed and one group of moderate-quality category B trees will need to be removed.

As a significant majority of the trees are of low-quality, with only one moderate-quality group, it is deemed acceptable to remove them to facilitate the development. These removals have subsequently been approved under planning permission 2022/2255/P.

Five high-quality category A trees, one moderate-quality category B tree, and three low-quality category C trees need to be pruned to allow for access and egress of high-sided vehicles to facilitate the development. The pruning detailed in the specification in **Table 3** below are considered to be low impact to the retained trees. The specification is detailed so that the minimum number of branches are removed to create adequate clearance for high-sided vehicles without compromising the visual amenity of the trees. A competent and qualified contract shall be used to undertake the works. Correct target pruning of branches based on BS3998 (2010) 'Tree work – Recommendations and industry best practice' will further limit any detrimental effect to the trees due to pruning works. Trees T15, T16, T17, T23 and T24 are high value category A trees and so preserving their visual amenity is extremely important.

A detailed schedule of tree pruning is contained in **Appendix 4** which will describe the location and extent of pruning required for each of the trees.

Additional precautions will also be put in place to minimise any impact to these trees on completion of the facilitation pruning work. **Section 6** below details tree protection measures needed to be installed to prevent any damage to the stem and canopy of these trees.

#### 3.3.2 Below Ground

Work within RPA's of retained trees is limited to the replacement of the decorative stone edging with Highways Kerbing within the current footprint of the decorative stone edging. The work is confined to the position of the existing kerb. Providing the methodology is followed in **Section 6.4** below there will be no negative effect on T16, the high-quality A grade retained tree.



# 4 Works Under Consideration

The operations under consideration within this AMS relate to pruning works to trees; T15, T16, T17, T23, T24 (high-quality A grade trees), T4 (moderate-quality B grade tree), T19, T20, T21 (low-quality C grade trees); installation of stem protection for retained tree T4; and kerb line remediation within the RPAs of retained tree T16; movement of high-sided vehicles and site monitoring of trees T15, T16, T17, T18, T19, T20, T21, T22, T23, T24.



# 5 Arboricultural Method Statement: Construction Stages - General

## 5.1 Site Briefings

The Site Manager is responsible for ensuring that all personnel are made fully aware of the constraints posed by retained trees on site and the measures in place to ensure they are protected, including having full on-site access to the Arboricultural Method Statement and Tree Protection Plan. It is good practice for the site arboriculturist to be involved in site briefings to ensure all constraints and tree protection measures are clearly understood.

## 5.2 Site Monitoring

An auditable system of site monitoring shall be established at the pre-commencement site meeting to; guide contractors on site, ensure that tree protection measures are implemented and adhered to and to demonstrate to the Local Planning Authority that Planning Condition 7 has been met satisfactorily. An example Site Monitoring Form is included as **Appendix 5**.

This includes site visits by the site arboriculturist to confirm the correct installation of protective fencing and to sign off the construction stages when works are complete and associated tree protection fencing can be dismantled.

# 5.3 Appointment of Site Arboriculturist

A suitably qualified and competent arboriculturist must be employed to monitor all stages of the construction process and to ensure retained trees are protected in accordance with the Arboricultural Method Statement and accompanying Tree Protection Plan.

Site based activity must be recorded in accordance with the accompanying Site Monitoring Form included as **Appendix 5**.

#### 5.4 Toolbox Talk

A Toolbox Talk should be provided to site workers prior to completing any of the specific operations that have the potential to impact retained trees set out within this report. A copy of the AMS and TPP should be used in the process of explaining to all personal the methodologies to be adopted to ensure retained trees are not damaged; copies of both the TPP and this Method Statement must be available in the Site Office at all times.

# 5.5 Movement of Vehicles, People and Plant

Construction works (in particular the use of machinery) must be carefully co-ordinated to avoid damage to retained trees and should adhere to operating outside of the tree protection barrier's locations on the accompanying Tree Protection Plan. A banksman must be in place for any operations which occur within

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5m of any part of a retained tree canopy at all times. This relates to trees T4, T15, T16, T17, T19, T20, T21, T23, and T24.



# 6 Arboricultural Method Statement - Specific Operations

### 6.1 Tree removal

The removal of 10 trees and one group of trees directly to the front of the existing building on the north side of Great Ormond Street to facilitate the proposed development: T5, T6, T7, T8, T9, T10, T11, T12, T13, T14 and G1. The removal of these trees has been approved under planning application 2022/2255/P. These trees shall be removed by an approved contractor prior to any other works beginning on the site.

## 6.2 Tree pruning

Pruning of eight trees is the required to allow for the access and egress of deliveries from high-sided vehicles and exceptional loads, maximum vehicle heights will be 5m. The specification for tree pruning is detailed in the **Table 3** and also shown in the schedule of tree pruning in **Appendix 4**.

Table 3: Pruning specification

Tree number	Species	Pruning specification
Т4	Tree of Heaven	Crown lift over Road to give 5m clearance, small diameter branch ends only
T15	London plane	3x small diameter branch end to be reduced <25mm in size
T16	London plane	2x small diameter branch end to be reduced <25mm in size
T17	London Plane	4x small diameter branch end to be reduced <25mm in size
T19	Ash	2x 30mm diameter branch end to be reduced back to branch union. 2x 40mm diameter branch to be reduced back to branch union to give 5m clearance
T20	Ash	2x 30mm diameter branch end to be reduced back to branch union to give 5m clearance
T21	Ash	3x 30mm diameter branch end to be reduced back to branch union to give 5m clearance
T23	London plane	Crown lift the lowest branch ends to 5.5m over the road. Approximately 10 small diameter <25mm branch ends will need pruning





Tree number	Species	Pruning specification
T24	London plane	Crown lift the lowest branch ends to 5.5m over the road. Only 5x small diameter <25mm branch ends will need pruning

## 6.3 Impacts of works on trees

The works specified in **Table 3** above will have a low negative effect on the health of the trees. Removal of small branches in low quantities such as this specification are generally not considered harmful to healthy trees. Providing the tree work is undertaken by a qualified and competent contractor the loss of crown is low and unlikely to cause any negative effect on either the aesthetic value nor the health of these trees.

## 6.4 Installation of stem protection

Stem protection positioned around T4 shall be installed as per the Tree Protection Plan in **Appendix 2** following the example in **Appendix 6**. Stem protection shall be a robust wooden construction consisting of hardwood plywood sheet of 18mm thickness attached to upright posts secured to the ground using ground pins, or similar to prevent direct damage to the stem of T4. This stem protection shall be constructed following the removal and pruning of trees and prior to any works being undertaken within the site. This stem protection shall remain in situ for the duration of the redevelopment works and shall only be removed in agreement with the Project Arboriculturist.

# 6.5 Removal of decorative stone edging and installation of highways kerb

The GOSH – CCC – Proposed Traffic and Highway Alterations requires the kerb line to remediated in Guildford Place for the duration of the construction period and reinstated on completion. This involves the removal of the current decorative stone edging and replacement with highways kerbing. In order to prevent any negative impact on the retained tree, T16, this work shall be carried out as follows;

- 1. The stone removal and replacement shall be supervised by the Project Arboriculturist due to the proximity to the base and potential for presence of structural roots under the stone.
- 2. The current edging shall be lifted manually with no excavation outside of the edging line.
- 3. Highways kerbing shall be directly replaced in the opening created by the removal of the decorative edging.
- 4. No cement shall be used to secure the kerbing.



- 5. The kerbing shall be paced at the same time as removal to ensure that no roots are left exposed.
- 6. If necessary, sharp sand (not builders' sand) can be used to infill the area underneath the kerb where there are roots are present.
- 7. No tools shall be rested on the stem of the tree during the works.

If any excavation if required either within the surfaced highway or the footway, supervision will be required by the Project Arboriculturist.

The decorative edging shall be replaced following the same procedure on completion of all redevelopment works within the site.

### 6.6 Movement of high sided vehicles

Movement of high sided vehicles in close proximity to trees will need to be monitored for the duration of construction. In order to maintain access and prevent direct damage to trees a banksman will be required for movements in close proximity to trees whilst on the approved route for large articulated vehicles as detailed in GOSH – CCC – Proposed Traffic and Highway Alterations. This relates to T4, T17, T18, T19, T20, T21, T22, T23, T24.

Two banksmen will be required for movements around T16. Tree T16 has a natural lean to the north-west, towards the highway, at the entrance to Guildford Place. One banksman shall guide the vehicle alongside the tree with the second banksman adjacent to the tree to communicate proximity to the first banksman. At no point shall direct contact with the tree be made.

### 6.7 Site monitoring

Provision of site monitoring will provide an auditable trail of evidence of compliance with the arboricultural method statement. A schedule for site monitoring shall be agreed between the Site Manager and Project Arboriculturist at the pre-commencement site meeting. An example of a site monitoring form is in **Appendix 5** 

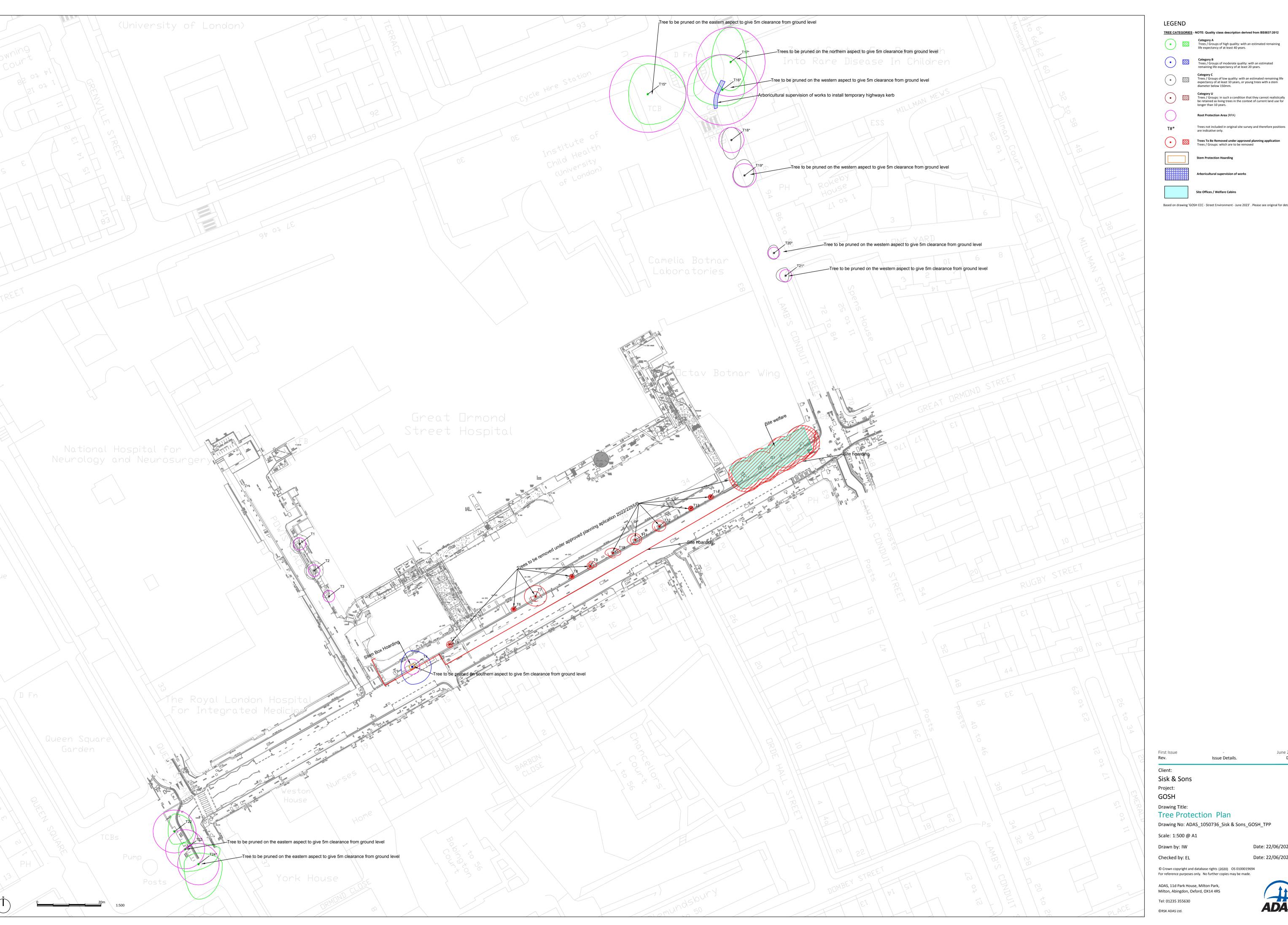


# Appendix 1: Tree Protection Plan

See following page.



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TREE CATEGORIES - NOTE: Quality class description derived from BS5837:2012

Category B

Trees / Groups of moderate quality: with an estimated remaining life expectancy of at least 20 years.

Category C
Trees / Groups of low quality: with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm.

Trees To Be Removed under approved planning application
Trees / Groups: which are to be removed

Based on drawing 'GOSH CCC - Street Environment - June 2023' . Please see original for details.

Date: 22/06/2023 Date: 22/06/2023



# Appendix 2: Cascade Chart for Tree Quality Assessment

See following pages.



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Category and definition	Criteria (including subcategories where a	ppropriate)		Identification on plan						
Trees unsuitable for retention	(see Note)									
Category U  Those in such a condition that they cannot realistically		ole, structural defect, such that their early loss viable after removal of other category U trees r cannot be mitigated by pruning)		See Table 2						
be retained as living trees in	<ul> <li>Trees that are dead or are showing s</li> </ul>	igns of significant, immediate, and irreversibl	e overall decline							
the context of the current land use for longer than 10 years	<ul> <li>Trees infected with pathogens of sig quality trees suppressing adjacent trees</li> </ul>	nificance to the health and/or safety of other ees of better quality	trees nearby, or very low							
	NOTE Category U trees can have existing or potential conservation value which it might be desirable to preserve; see <b>4.5.7</b> .									
	1 Mainly arboricultural qualities	2 Mainly landscape qualities	3 Mainly cultural values, including conservation							
Trees to be considered for ret	ention									
Category A	Trees that are particularly good	Trees, groups or woodlands of particular	Trees, groups or woodlands	See Table 2						
Trees of high quality with an estimated remaining life expectancy of at least 40 years	examples of their species, especially if rare or unusual; or those that are essential components of groups or formal or semi-formal arboricultural features (e.g. the dominant and/or principal trees within an avenue)	visual importance as arboricultural and/or landscape features	of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood-pasture)							
Category B	Trees that might be included in	Trees present in numbers, usually growing	Trees with material	See Table 2						
Trees of moderate quality with an estimated remaining life expectancy of at least 20 years	category A, but are downgraded because of impaired condition (e.g. presence of significant though remediable defects, including unsympathetic past management and storm damage), such that they are unlikely to be suitable for retention for beyond 40 years; or trees lacking the special quality necessary to merit the category A designation	as groups or woodlands, such that they attract a higher collective rating than they might as individuals; or trees occurring as collectives but situated so as to make little visual contribution to the wider locality	conservation or other cultural value							
Category C	Unremarkable trees of very limited	Trees present in groups or woodlands, but	Trees with no material	See Table 2						
Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150 mm	merit or such impaired condition that they do not qualify in higher categories	without this conferring on them significantly greater collective landscape value; and/or trees offering low or only temporary/transient landscape benefits	conservation or other cultural value							

# Appendix 3: Tree Survey Schedule

See following page.



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Column Heading	Description
Tree Ref No.	All individual trees and groups of trees have been given a unique reference number. Each number is prefixed by a letter.  • T = Individual tree  • G = Group of trees
Species	The English common name has been used.
Single or Multiple stem	* 'S' represents a tree which has a single clear stem to at least 1.5m above ground level.  * 'M(a)' represents a tree where the main stem divides into two to five stems below 1.5m above ground level, and  * 'M(b)' represents a tree where the main stem divides into 6 or more stems below a height of 1.5m.
Height (m)	Where possible tree heights are measured using a laser. In some instances such as in close groups of trees, one height may be measured and other nearby trees estimated from this height. Measurements are provided in metres.
Stem Diameter (mm)	S <sub>n</sub> represents the stem number. Measurements are provided in millimetres at 1.5m above ground level for single stemmed trees.
Very Large Girth (y/n)	Girth is very large for species inaccordance with Fig 1.3 of publication 'Ancient and other veteran trees: further guidance on management' Acient Tree Forum 2013. RAVEN - Step 1
Ancient (A), Veteran (V) or Notable (N)	Result of the RAVEN assessment © Julian Forbes-Laird 2018 www.flac.uk.com; provided on separate ADAS Sheet 2. (RAVEN = Recognition of Ancient, Veteran & Notable Trees)
Branch Spread (m)	Measured in metres to the four cardinal compass points (N, E, S, W).
Crown Clearance	<ol> <li>Height in metres of the first significant branch, and the direction of growth.</li> <li>Height in metres of lowest part of crown.</li> </ol>
Life Stage	The stage at which the tree is within its lifecycle (Y = young, SM = semi-mature, EM = early-mature, M = mature, OM = over mature, V = veteran)
General Observations	Any relevant observations are recorded, with particular reference to structural and/or physiological condition.
Preliminary Management Recommendations	Recommendations are made where management work is required for reasons of health and safety or sound arboricultural management.
Estimated Remaining Contribution (years)	An estimation of how long the feature will contribute to its surroundings. This is recorded in bands of either <10 years, 10+ years, 20+ years and 40+ years.
Tree Quality Grading	The trees are graded to the categories prescribed within BS5837:2012 (U, A, B & C).
Root Protection Area	Calculated as prescribed in section 4.6 of BS5837:2012, provided as an area (m²) and a radius from the tree's stem (m).
Note: Those measurements shown in	n <i>italics</i> have been estimated, usually where access has restricted it being taken.



Tree Re No.	f Species	Single or Multiple Stem	Height	Stem Diameter	Very Large Girth	Ancient, Veteran or Notable		Branch	Spread		Crea	own rance	Life Stage	General Observations (structural / physiological condition)	Preliminary Management Recommendations	Estimated Remaining Contribution	Tree Quality Grading		rotection Area
		(S or M)	(m)	S1	(Y / N)	(A, V or N)	N	E	s	w	(1)	(2)				(years)		(m²)	(radius in m)
T1	Lime ( <i>Tilia x europaea</i> )	S	9	160	N		2	0	2.5	2	4.0-W	3	Υ	Asymmetrical canopy due to pruning works undertaken for scaffolding installation.	None required.	20+	C1	11.6	1.9
T2	Lime ( <i>Tilia x europaea</i> )	S	9	150	N		2.5	0.5	2.5	2.5	3.5-W	2.5	Y	Asymmetrical canopy due to pruning works undertaken for scaffolding installation.	None required.	20+	C1	10.2	1.8
ТЗ	Lime ( <i>Tilia x europaea</i> )	8	9	150	Z		2	0	0.5	2	4.0-S	3	Y	Asymmetrical canopy due to pruning works undertaken for scaffolding installation.	None required.	10+	C1	10.2	1.8
T	Tree of Heaven (Ailanthus altissima)	S	11	200	N		5	6	5.5	3.5	2.5-E	2	SM	Spreading crown. Crown obscures street lamp and is touching building. Exposed and damaged surface roots. Updated June 2023 - Crown is in good condition with good leaf development. Crown over the road is 4m branch tips the main limbs are 6m over the road.	Crown lift over the road to give 5m clearance, this will be small diameter branch ends only	20+	B1	18.1	2.4
Т5	Pride of India (Koelreuteria paniculata)	S	4	50	N		1	1	1	1	2.0-S	2	Υ	Recently planted young tree.	Fell - Approved under planning application number 2022/2255/P	20+	C1	1.1	0.6
Т6	Snowy Mespilus ( <i>Amelanchier laevis</i> )	S	4	40	N		0.75	0.75	0.75	0.75	2.0-W	2	Y	Recently planted young tree.	Fell - Approved under planning application number 2022/2255/P	20+	C1	0.7	0.5
Т7	Tree Cotoneaster (Cotoneaster frigidus)	S	6.5	130	N		3.5	3.5	3	3.5	2.0-N	1.5	ЕМ	Epicormic growth at base. Low spreading crown.	Fell - Approved under planning application number 2022/2255/P	10+	C1	7.6	1.6



Tree Ro	f Species	Single or Multiple Stem	Height	Stem Diameter	Very Large Girth	Ancient, Veteran or Notable		Branch	Spread		Cro		Life Stage	General Observations (structural / physiological condition)	Preliminary Management Recommendations	Estimated Remaining Contribution	Tree Quality Grading		rotection
		(S or M)	(m)	S1	(Y / N)	(A, V or N)	N	E	s	w	(1)	(2)				(years)		(m²)	(radius in m)
Т8	Pride of India (Koelreuteria paniculata)	S	4	40	N		0.75	0.75	0.75	0.75	2.0-E	2	Υ	Recently planted young tree.	Fell - Approved under planning application number 2022/2255/P	20+	C1	0.7	0.5
Т9	Snowy Mespilus (Amelanchier laevis)	8	6.5	90	N		1.5	2	0.5	0.5	2.0-E	2.5	Y	Broken branch in crown. Old decayed fungal fruting body at stem base. Stem bark wounds.	Fell - Approved under planning application number 2022/2255/P	10+	C1	3.7	1.1
T10	Snowy Mespilus (Amelanchier laevis)	S	6.5	130	N		1.5	2.5	1	2.5	2.0-W	2.5	SM	Stem leaning east. Broken branches in crown to south.	Fell - Approved under planning application number 2022/2255/P	20+	C1	7.6	1.6
T11	Snowy Mespilus (Amelanchier laevis)	S	6.5	120	N		2	2	1.5	2.5	2.0-E	2	SM	Large stem wound from ground level to 0.3m. Epicormic growth at base.	Fell - Approved under planning application number 2022/2255/P	20+	C1	6.5	1.4
T12	Snowy Mespilus (Amelanchier laevis)	S	7.5	130	N		2	2	1.5	2.25	2.5-N	2.5	SM	Stem bark wound at base.	Fell - Approved under planning application number 2022/2255/P	20+	C1	7.6	1.6
T13	Pride of India (Koelreuteria paniculata)	S	3	50	N		0.75	0.75	0.75	0.75	2.0-N	2	Υ	Recently planted young tree.	Fell - Approved under planning application number 2022/2255/P	20+	C1	1.1	0.6
T14	Pride of India (Koelreuteria paniculata)	S	4	50	N		0.75	1	0.75	0.75	2.0-N	1.5	Y	Recently planted young tree.	Fell - Approved under planning application number 2022/2255/P	20+	C1	1.1	0.6



Tree Re No.	f Species	Single or Multiple Stem	Height	Stem Diameter	Very Large Girth	Ancient, Veteran or Notable		Branch	Spread	read		own rance	Life Stage	General Observations (structural / physiological condition)	Preliminary Management Recommendations	Estimated Remaining Contribution	Tree Quality Grading		rotection
		(S or M)	(m)	S1	(Y / N)	(A, V or N)	N	E	s	w	(1)	(2)				(years)		(m²)	(radius in m)
G1	False Locust (Robinia pseudoacacia )	S	10	230	z		4.5	4.5	4.5	4.5	2.5-S	2	ЕМ	Group of four off-site trees. Minor deadwood in crowns.	Fell - Approved under planning application number 2022/2255/P	20+	B2	23.9	2.8
T15	London Plane	Ø	20	1000	N		9.5	12	9.5	6	2.0-N	4	М	Street tree in good condition with good leaf development thoughout the crown. The tree has been reduced in the past and has its western crown regularly reduced to give clearance from the building west. Crown over the road has 4m clearance, this is branch tips main limbs are approximately 7m over road.	3x small diameter branch end to be reduced <25mm in size	40+	A12	452.4	12.0
T16	London Plane	S	20	920	N		11	7	5	9	7.0-W	5	М	Street tree in good condition with good leaf development thoughout the crown. The tree has been reduced in the past and has its southern crown regularly reduced to give clearance from the building south. Crown over the road has 5m clearance, this is branch tips main limbs are 7m over road, the tree has a natural lean to the north west and the stem height over the kerb is 5m. Ganoderma bracket at the base of the stem on the northern aspect of the tree.	2x small diameter branch end to be reduced <25mm in size	40+	A12	383.0	11.0
T17	London Plane	Ø	20	900	N		11	5	9	6	5.5-N	4	М	Street tree in good condition with good leaf development thoughout the crown. The tree has been reduced in the past and has its eastern crown regularly reduced to give clearance from the building east. Crown over the street corner to the north has 4m clearance, this is branch tips main limbs are 8m over road.	4x small diameter branch end to be reduced <25mm in size	40+	A12	366.5	10.8
T18	Ash	S	9	330	N		4	3	6	3	1.5-S	4	SM	Street tree in fair condition with good leaf development in the lower crown and reduced leaf size in the very upper crown. Crown clearance over the road is 5m. The tree has been reduced in the past.	None	10+	C2	49.3	4.0
T19	Ash	S	10	310	N		5	3	3.5	3.5	2.5-S	4	SM	Street tree in fair condition with good leaf development in the lower crown and reduced leaf size in the very upper crown. Crown clearance over the road is 4m. The tree has been reduced in the past.	2x 30mm diameter branch end to be reduced back to branch union. 2x 40mm diameter branch to be reduced back to branch	10+	C2	43.5	3.7
T20	Ash	8	7	150	N		2.5	1.5	2	2	2.0-W	4		Street tree in good condition with good leaf development in the crown. Crown clearance over the road is 4m. The tree has been reduced in the past on the eastern aspect.	2x 30mm diameter branch end to be reduced back to branch union to give 5m clearance	10+	C2	10.2	1.8

Date: Jan 2020 - Yellow June 2023 - Green



Tree Re	Species	Single or Multiple Stem	Height	Stem Diameter	Very Large Girth	Ancient, Veteran or Notable		Branch	Spread			own	Life Stage	fe Stage General Observations (structural / physiological condition)		Estimated Remaining Contribution	Tree Quality Grading		Protection Area
		(S or M)	(m)	S1	(Y / N)	(A, V or N)	N	E	s	w	(1)	(2)				(years)		(m <sup>2</sup> )	(radius in m)
T21	Ash	8	8.5	160	N		2.5	1	2	3	2.0-E	4	Y	Street tree in good condition with good leaf development in the crown. Crown clearance over the road is 4m. The tree has been reduced in the past on the eastern aspect.	3x 30mm diameter branch end to be reduced back to branch union to give 5m clearance	10+	C2	11.6	1.9
T22	London Plane	Ø	12	560	N		5.5	6	4	2	4.0-E	4.5	М	One of three Plane trees on Queens Square. The crown of this tree is in good condition with good leaf development thoughout, the crown has been regularly pollarded. On the north western aspect of the stem there is historic bark loss from ground level to 2.2m which hasn't.	No works required if the tree is maintained as a pollard	40+	A12	141.9	6.7
T23	London Plane	S	12	510	N		2	11	7	2	4.0-E	4	М	One of three Plane trees on Queens Square. The crown of this tree is in good condition with good leaf development thoughout. This teee has grown with a lean to the south and the crown is predominately weighted to the east and south. The crown over the road has a 3x low limbs where the main limbs over the road are 7.4m over the road. The low branch ends hang down to 4m over the road.	Crown lift the lowest branch ends to 5.5m over the road. Approximately 10 small diameter <25mm branch ends will need pruning	40+	A12	117.7	6.1
T24	London Plane	S	13	540	N		3.5	7.5	11	4.5	5.5-E	4.5	М	One of three Plane trees on Queens Square. The crown of this tree is in good condition with good leaf development thoughout. This teee has grown with a lean to the south and the crown is predominately weighted to the south. The crown over the road has a 3x low limbs where the main limbs over the road are 5.6m over the road. The low branch ends hang down to 4.5m over the road.	Crown lift the lowest branch ends to 5.5m over the road. Only 5x small diameter <25mm branch ends will need pruning	40+	A12	131.9	6.5

Date: Jan 2020 - Yellow June 2023 - Green

# Appendix 4: Schedule of Tree Pruning

Tree number	Species	Pruning specification
Т4	Tree of Heaven	Crown lift over Road to give 5m clearance, small diameter branch ends only
T15	London plane	3x small diameter branch end to be reduced <25mm in size
T16	London plane	2x small diameter branch end to be reduced <25mm in size
T17	London Plane	4x small diameter branch end to be reduced <25mm in size
T19	Ash	2x 30mm diameter branch end to be reduced back to branch union. 2x 40mm diameter branch to be reduced back to branch union to give 5m clearance
T20	Ash	2x 30mm diameter branch end to be reduced back to branch union to give 5m clearance
T21	Ash	3x 30mm diameter branch end to be reduced back to branch union to give 5m clearance
T23	London plane	Crown lift the lowest branch ends to 5.5m over the road. Approximately 10 small diameter <25mm branch ends will need pruning
T24	London plane	Crown lift the lowest branch ends to 5.5m over the road. Only 5x small diameter <25mm branch ends will need pruning





T4

Looking west along Great Ormond Street showing approximate pruning points to give 5m clearance over the road. Crown lift over the road to give 5m clearance, this will be small diameter branch ends only

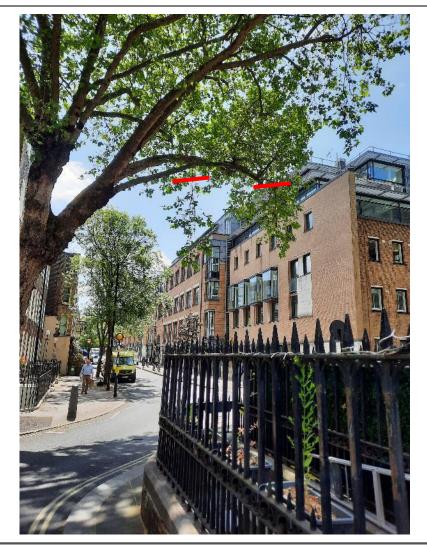


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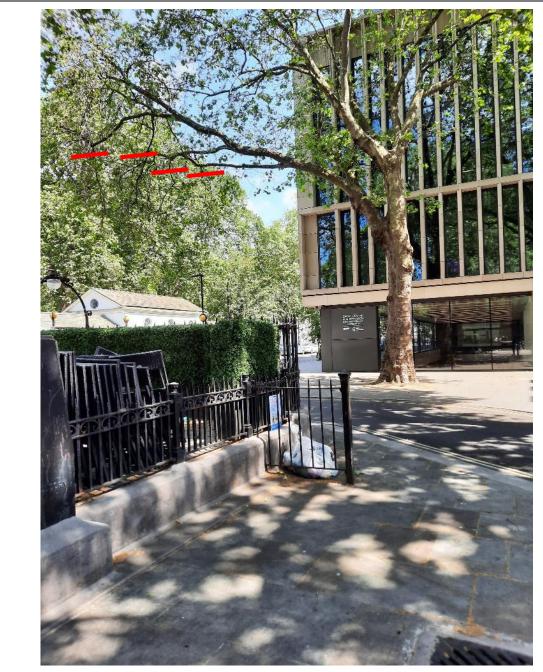
Looking south along Guildford Place showing the three small diameter branch ends to be reduced over the road (<25mm.in diameter)

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**T16**Looking south along Guildford Place showing the two small diameter branch ends to be reduced (<25mm in diameter)





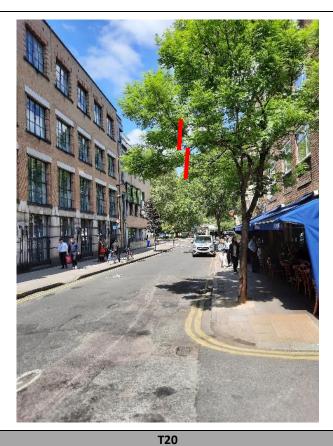
T17

Looking east towards T17 and Guildford Street showing four small diameter branch ends to be reduced (<25mm in diameter)

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Looking south at T19 and along Guildford Place showing two small diameter limbs to be reduced (<25mm in diameter)



Looking north towards T20 and along Guildford place showing two small diameter limbs to be reduced (<25mm in diameter)





**T21**Looking south towards T20 and along Guildford Place showing three small diameter limbs to be reduced (<25mm in diameter)



T23

Looking south towards T23 and along Russell Square showing Approximately 10 small diameter <25mm branch ends will need pruning



T24
Looking south towards T24 and along Russell Square showing Approximately five small diameter <25mm branch ends will need pruning

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# Appendix 5: Site Monitoring Form

Appointed Site Arboricultural Consultant:							
Company:							
Consultant's name:							
Tel:							
Mob:							
Development site address:		Local Planning Authority (LPA):					
Developer's details:		.1					
Company:							
Developed news							
Developer's name:							
Tel:							
Stage of Development (x)							
Pre-construction works	Construction works		Post-construction works				
Tree works	Demolition		Rectifying tree damage/pruning				
Protective fencing/tape	Grading/muck away		Hard landscaping/walls/drives				
Fencing signage	Placing portacabin		Removal of protective fencing etc				
Ground protection	Excavation/services		Soft landscaping				
Temporary haul road	Construction work		Special surfacing Tree planting				
Findings:							
r manigs.							
Action Taken:							
				_			
Further action							
required/recommendations:							
				$\dashv$			
Comments							
Date of site visit:	Date of site visit:		Date of next visit:				
Date sent to Local Planning Case Officer							



# Appendix 6: Installation of Stem Protection



Example of stem protection for T4. Hardwood plywood sheet attached to wooden frame and fixed to floor using ground pins or similar.



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John Sisk & Sons Ltd

# **Great Ormond Street Hospital**

Baseline Air Quality Monitoring

Project No. 445279-01-Baseline monitoring

October 2023





# **RSK GENERAL NOTES**

**Project No.:** 445279 Report No.: 445279-01-Baseline monitoring Title: Great Ormond Street Hospital Baseline Air Quality Monitoring Client: John Sisk & Sons Ltd Date: 24th October 2023 Status: Draft – Awaiting NO<sub>2</sub> results Robert Clark William Franklin **Technical** Author: Senior Air Quality Consultant reviewer: Associate Director Richer 24th October 2023 24th October 2023 Date: Date:

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Where field investigations have been carried out, these have been restricted to a level of detail required to achieve the stated objectives of the work.

This work has been undertaken in accordance with the quality management system of RSK Group Limited.



# **Contents**

1	Introduction	Δ	
	Monitoring Methods and Assessment Criteria		
	2.1 Monitoring Methods		
	2.2 Assessment Criteria		
3	Air Quality Monitoring Results		
	3.1 Particulate Matter (PM) Monitoring		
	3.2 Meteorological Monitoring		
	3.3 Dust Deposition		
	3.4 NO <sub>2</sub>	16	
1	Conclusions	19	



# 1 INTRODUCTION

RSK Environment Limited was instructed to undertake to undertake a period of three months baseline air quality monitoring before the construction works at Great Ormond Street Hospital.

The monitoring programme comprised:

- Three indicative optical particulate matter monitors, nephelometers, to measure indicative concentrations of the fine particulate matter (PM<sub>10</sub>) fraction of airborne particulate matter;
- Three Stockholm Environment Institute (SEI) 'Frisbee' dust deposition gauges and;
- Three locations of nitrogen Dioxide (NO2) diffusion tubes in triplicate

All equipment was installed on the  $22^{nd}$  of June 2023. With the exception of the  $NO_2$  diffusion tubes and batteries powering the nephelometers at MP2 and MP3, which were installed on the  $26^{th}$  of June. All equipment was demobilised on the  $4^{th}$  of October 2023

The nephelometer at MP1 was replaced on the 19th September as it was due for calibration.

Table 1.1: Monitoring Locations for Dust and PM<sub>10</sub> monitoring

Monitor	Description	Monitoring Equipment	Nephelometer
MP1	Internal GOSH Rooftop	Frisbee, nephelometer and NO <sub>2</sub> tubes	TNO4123 & TNO3850
MP2	GOSH Main Entrance	Frisbee, nephelometer and NO <sub>2</sub> tubes	TNO3694
MP3	GOSH Service Entrance	Frisbee, nephelometer and NO <sub>2</sub> tubes	TNO3603

This report covers the whole of the baseline monitoring period from 22<sup>nd</sup> June until the 4<sup>th</sup> of October 2023.



ROOF OUTLINE ENV. MONITOR Monitor 3 - Level 4 PICB Roof. Permanent location during baseline monitoring and demo/ construction phase. Monitor 2 - Level 2 Frontage Building lightwell. Great Ormond Street Hospital for Children NHS Foundation Trust

**Figure 1.1: Monitoring Locations** 



# 2 MONITORING METHODS AND ASSESSMENT CRITERIA

# 2.1 Monitoring Methods

The proposed monitoring regime comprised:

- Dust monitoring using SEI 'Frisbee' dust deposition gauges,
- Near real-time indicative PM<sub>10</sub> monitoring using nephelometers; and
- Nitrogen Dioxide (NO<sub>2</sub>) monitoring using diffusion tubes.

## 2.1.1 Dust Deposition Monitoring

Disamenity due to the deposition of fugitive dust on surfaces may lead to complaints.

SEI 'Frisbee' dust deposition gauges were used for the dust monitoring at GOSH. The inverted 'Frisbee' dust deposition gauge, developed by the Stockholm Environment Institute (SEI) at the University of York, is established as a simple and robust method for the quantification of dust deposition. Dust is collected on a horizontal surface and in a collecting bottle. The dust is determined gravimetrically on a filter in the laboratory.

As shown in Figure 1.1, three dust deposition gauges were located across the site.

The dust deposition rate from the 'Frisbee' instruments was calculated as follows:

Deposition rate,  $mg/m^2/day = (W \times 24.7)/T$ 

Where: W (mg) is the dry mass of insoluble solids; and T (days) is the sampling period length.

## 2.1.2 PM<sub>10</sub> Monitoring

Nephelometers are not a 'reference equivalent' method for the determination of airborne particulate matter concentrations; however, they provide continuous indicative data with short averaging periods and indicative PM<sub>10</sub> concentrations can be related to events happening on site in near real-time and this technique is recognised as an appropriate and economic technique for construction site emissions monitoring.

Three 'Osiris' nephelometers were to be installed to provide continuous cloud-hosted, near real-time indicative data, with alert emails to nominated recipients if the pre-determined 'site



action threshold' is exceeded, to allow and inform continuous management of site particulate emissions.

No permanent electricity supply was available therefore the instruments were powered using batteries which were charged and exchanged regularly by the John Sisk & Sons Ltd site team.

# 2.1.3 NO<sub>2</sub> Monitoring

The NO<sub>2</sub> diffusion tube monitoring study was carried out, where possible, in accordance with the methodologies in the following guidance:

- Department for Environment, Food and Rural Affairs (Defra) and Devolved Administration (February 2008) – 'Diffusion Tube for Ambient NO<sub>2</sub> Monitoring: Practical Guidance for Laboratories and Users'; and
- Defra (2016) 'Part IV The Environment Act 1995 Local Air Quality Management Review and Assessment Technical Guidance LAQM.TG(22).

Monitoring was undertaken using passive 'Palmes-type' diffusion tubes. The tubes are passive samplers consisting of plastic tubes containing a chemical reagent to absorb the pollutant to be measured directly from the air. The diffusion tubes were provided and analysed by Gradko International Limited, a United Kingdom Accreditation Service (UKAS) accredited laboratory. The tubes were prepared with a known volume of 20% triethanolamine (TEA) in acetone.

Tubes were installed in triplicate at each monitoring location, and exposed for approximately monthly periods, in broad accordance with the 'Diffusion Tube Calendar'. NO<sub>2</sub> concentrations were monitored for three months overall, from the 26<sup>th</sup> June to 4<sup>th</sup> October 2023.

# 2.2 Assessment Criteria

The assessment criteria are set out below:

# 2.2.1 For PM<sub>10</sub>:

- An '1-hour average' 'site action threshold' (SAT) of 190μg/m³ PM<sub>10</sub>, based on research on construction site emissions and recommended in the IAQM Guidance on Monitoring in the Vicinity of Demolition and Construction Sites;
- A 24-hour average PM<sub>10</sub> criterion equivalent to the 24-hour mean air quality standard of 50μg/m<sup>3</sup> (35 exceedances are allowed per annum); and,
- A long-term criterion equivalent to the annual mean air quality standard of 40μg/m³ (to be applied to the monitoring period reported).

# 2.2.2 For Dust Deposition:

The site is located in a busy area of Central London area; however for a conservative approach and in line with the IAQM Monitoring in the Vicinity of Demolition and Construction



Sites 2018 the 'Residential areas & urban outskirts' threshold is applied, according to the *Suggested Guidelines for Deposited Ambient Dust* (H. W. Vallack and D.E. Shillito) reproduced in Table 2.1, below. Dust deposition rates will be compared with the criterion of 200mg/m²/day, as the threshold when complaints are 'likely'.

Table 2.1: Suggested Guidelines for Ambient Deposited Dust

Site environs	Dust deposition rate (mg/m²/day)	
Open Country	100	140
Residential areas & urban outskirts	150	200
Commercial town centre	200	260
Likelihood of complaint	Possible	Likely

Source: Suggested Guidelines for Deposited Ambient Dust, H. W. Vallack and D.E. Shillito, Published in Atmospheric Environment, Vol. 32, pp. 2737-2744.

# 2.2.3 For Nitrogen Dioxide:

The results will be compared with the annual mean Air Quality Objective and Limit Value for nitrogen dioxide of 40  $\mu$ g/m³, though the period monitored was not representative of a full year.



# 3 AIR QUALITY MONITORING RESULTS

# 3.1 Particulate Matter (PM) Monitoring

Table 3.1 summarises the baseline airborne  $PM_{10}$  particulate matter results recorded by the nephelometer instruments at GOSH. The results are presented graphically in Figures 3.1 to 3.6, below.

The long-term monthly criterion equivalent to the annual mean air quality standard of  $40\mu g/m^3$  was not exceeded at any monitoring position, although the results should be treated with caution as the period mean is not equal to one calendar year.

The daily mean standard for ambient air of 50µg/m³ was not exceeded at any monitoring position during the baseline monitoring period.

The SAT 190µg/m³ threshold was not exceeded at any monitoring position during the baseline monitoring period.

Table 3.1: Summary of Baseline PM<sub>10</sub> Monitoring at the GOSH

	MP1 Main Entrance	MP2 Service Entrance	MP3 Roof
Period Mean PM <sub>10</sub>	10.4	9.0	8.3
Number of days exceeding 50 μg/m <sup>3</sup>	0	0	0
Number of SAT exceedances	0	0	0



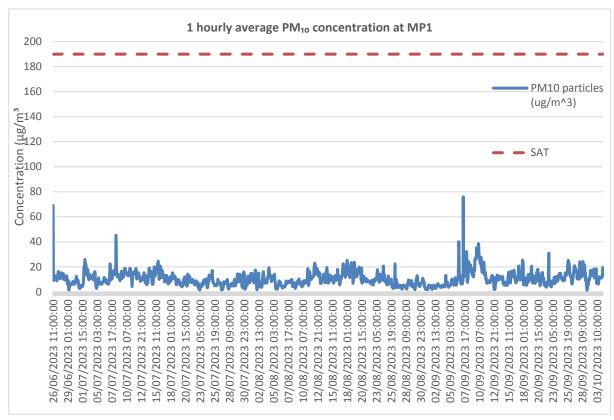
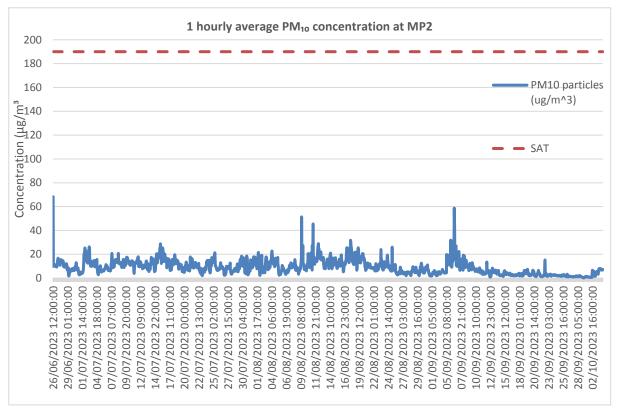


Figure 3.1: 1-Hourly Mean Indicative PM<sub>10</sub> Concentrations, MP1







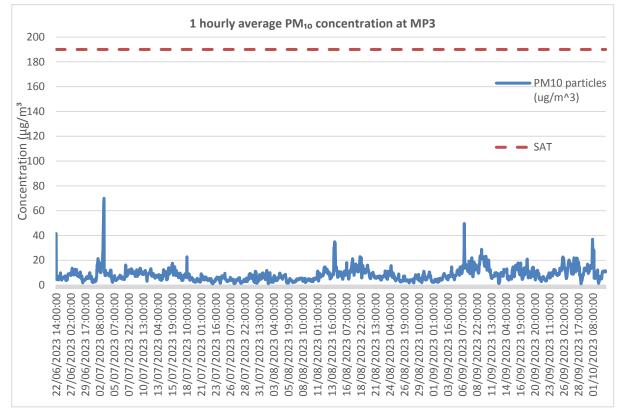
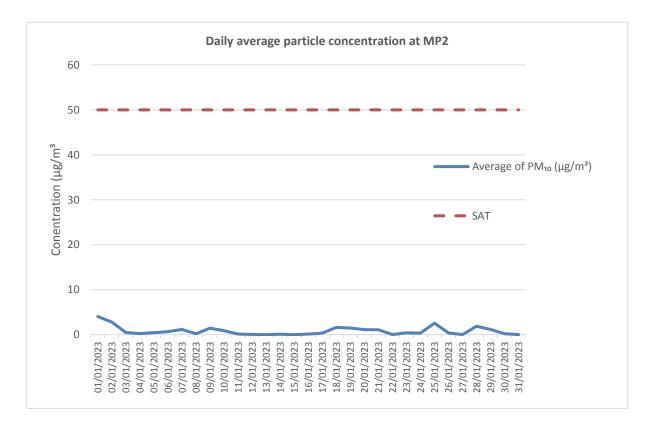


Figure 3.3: 1-Hourly Mean Indicative PM<sub>10</sub> Concentrations, MP3

Figure 3.4: Daily Mean PM<sub>10</sub> Concentrations, MP1







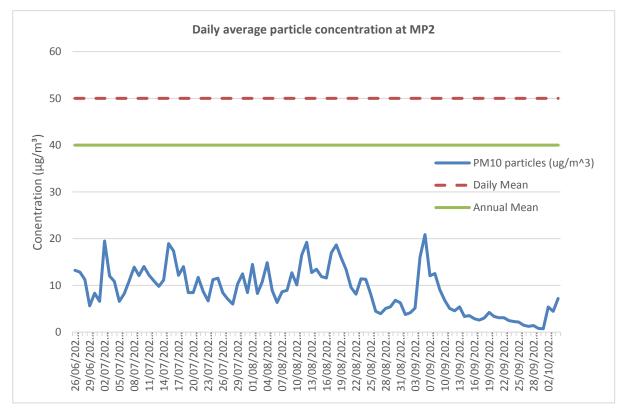
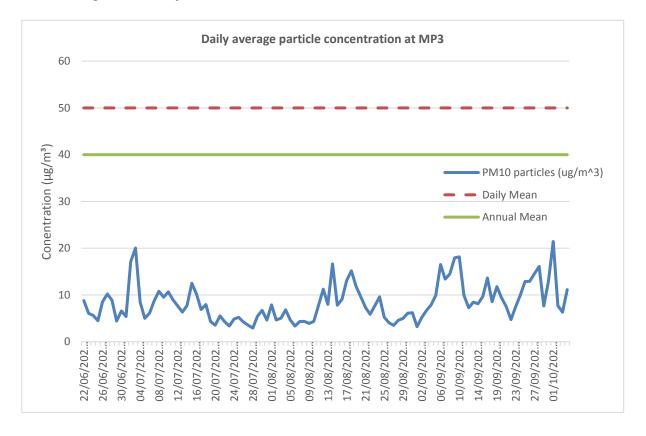


Figure 3.6: Daily Mean PM<sub>10</sub> Concentrations, MP3





# 3.2 Meteorological Monitoring

During the monitoring period presented in this report, the meteorological monitoring recorded that the winds were predominantly from the north east, east and south east. The data is graphically presented in Figures 3.7

50%
40%
20%

Figure 3.7: Windrose at MP3

 $$\rm (m\;s^{-1})$$  Frequency of counts by wind direction (%)

1 to 3

3 to 5

0 to 1

mean = 0.63698



# 3.3 Dust Deposition

The results of dust deposition monitoring conducted for the three monitoring periods are presented in Tables 3.2 to 3.4 and Figure 3.8 below.

The dust deposition rate (mg/m²/day) was below both the 'complaints possible' threshold (200 mg/m²/day) and 'complaints likely' threshold (260 mg/m²/day) for an 'urban centre' location at all monitoring locations for each monitoring period with the exception of MP2 which exceeded the complaints likely threshold during the 1st monitoring period (26th June to 1st August 2023).

Table 3.2: Dust Deposition Monitoring Results for GOSH, 26th June to 1st August 2023

Location	Number of Days	Mass of Dust (mg)	Dust Deposition Rate, mg/m²/day	Likelihood of complaint
MP1	36	85	58	Below 'complaints possible'
MP2	36	639	438	Above 'complaints likely'
MP3	36	168	115	Below 'complaints possible'

Table 3.3: Dust Deposition Monitoring Results for GOSH, 1<sup>st</sup> August to 7<sup>th</sup> September 2023

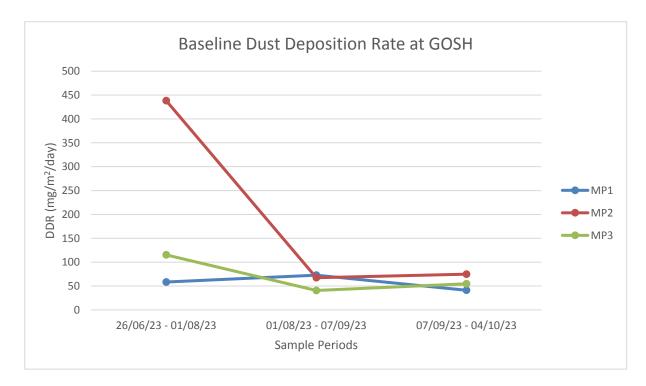
Location	Number of Days	Mass of Dust (mg)	Dust Deposition Rate, mg/m²/day	Likelihood of complaint
MP1	37	109	73	Below 'complaints possible'
MP2	37	101	67	Below 'complaints possible'
MP3	37	61	41	Below 'complaints possible'

Table 3.4: Dust Deposition Monitoring Results for GOSH, 7<sup>th</sup> September to 4<sup>th</sup> October 2023

Location	Number of Days	Mass of Dust (mg)	Dust Deposition Rate, mg/m²/day	Likelihood of complaint
MP1	27	45	41	Below 'complaints possible'
MP2	27	82	75	Below 'complaints possible'
MP3	27	60	55	Below 'complaints possible'



Figure 3.8: Dust Deposition at GOSH





# 3.4 NO<sub>2</sub>

# 3.4.1 Processing of Laboratory Results

# 3.4.2 Bias Adjustment

Diffusion tubes are acknowledged to give a good indication of NO<sub>2</sub> concentrations in locations mainly influenced by road traffic. However, they are an indicative monitoring technique and do not offer the same accuracy as an automatic chemiluminescent analyser as they are affected by several mechanisms which may cause them to exhibit positive bias (over-read), or negative bias (under-read). In order to reduce bias, a bias adjustment factor was applied to the monitoring results.

The monitoring results were adjusted using the 2019 national bias adjustment factor (0.91) for the laboratory that analysed the diffusion tubes, available from Defra's website<sup>1</sup>.

# 3.4.3 Period Adjustment

The annual mean objective for NO<sub>2</sub> applies to a calendar year. Ambient concentrations vary over the course of a year. LAQM.TG(22) Box 7.9 provides a method for estimating the annual mean concentration from a shorter monitoring period by calculating a ratio of the period mean to the annual mean at nearby continuous monitors.

The appropriate 'period mean to annual mean' ratio is then used adjust the bias adjusted period mean for each of the diffusion tubes to give an estimated annual mean.

The annual mean results for triplicate tubes at the same location were then averaged to give a bias-adjusted, estimated annual mean concentration for each monitoring location used in the study.

Table 3.5 below presents the period means and annual means at the continuous analysers used for the study. The data used for the period means have not yet been verified, but are not expected to change significantly.

Table 3.5: Period Mean And Annual Mean Ratios,

		Monitoring Period		2019 Annual Mean		Annualisation Factor
Monitoring Site	Site type	Conc (µg/m³)	Data Capture (%)	Conc (µg/m³)	Data Capture (%)	racioi
Overall Annualisation Factor (Three Months)			0.93			

<sup>&</sup>lt;sup>1</sup> Defra - National Bias Adjustment Factor. Available at: <a href="http://laqm.defra.gov.uk/bias-adjustment-factors/national-bias.html">http://laqm.defra.gov.uk/bias-adjustment-factors/national-bias.html</a>
This is the latest bias adjustment spreadsheet available, 2017 spreadsheet had not been released at the time of writing this report.



# 3.4.4 Results

The results processing for the three month period of diffusion tube monitoring, including both the unadjusted and bias adjusted results are presented in **Appendix A**. All of the results for the triplicate tubes were found to have 'good' precision (as per Defra LAQM TG16 guidance).

Table 3.6 presents the overall results of the three month monitoring study which have been averaged, bias adjusted and annualised as described.

The results are ..... the annual mean NO<sub>2</sub> AQS objective of 40µg/m<sup>3</sup>.

LAQM TG.16 indicates that the annual mean NO<sub>2</sub> concentrations tend to be greater than 60μg/m<sup>3</sup> for an exceedance of the hourly mean NO<sub>2</sub> AQS to be likely. The results are ...... 60μg/m<sup>3</sup> and therefore exceedance of the 1-hour mean NO<sub>2</sub> objective is ...

Table 3.6: Results of NO<sub>2</sub> Monitoring using Diffusion Tubes

Monitoring location	Annual Mean NO₂ Concentrations (μg/m³)
1	
2	
8	



# 4 CONCLUSIONS

RSK was instructed to undertake baseline air quality monitoring at Great Ormond Street Hospital, at three locations using three types of instrumentation/ monitor - nephelometers (which record data in real-time), 'Frisbee' dust deposition gauges and Nitrogen Dioxide (NO<sub>2</sub>) diffusion tubes. This report presents the results for the entire baseline period from the 22<sup>nd</sup> June to 4<sup>th</sup> October 2023.

Data collected at the nephelometer monitoring locations have been compared with the annual, daily and hourly  $PM_{10}$  thresholds of  $40~\mu g/m^3$ ,  $50\mu g/m^3$  and  $190\mu g/m^3$  respectively. The long-term monthly criterion equivalent to the annual mean air quality standard of  $40\mu g/m^3$  was not exceeded at any location. The daily mean standard for ambient air of  $50~\mu g/m^3$  was not exceeded at any location. The 1-hourly 'site action threshold' (SAT) of  $190\mu g/m^3~PM_{10}$  was not exceeded at any location.

The dust deposition rate (mg/m²/day) was below both the 'complaints possible' threshold (200 mg/m²/day) and 'complaints likely' threshold (260 mg/m²/day) at all monitoring locations for each monitoring period except for MP2 which exceeded the complaints likely threshold during the 1st monitoring period (26th June to 1st August 2023).

Nitrogen Dioxide ..





14 August 2023

# Dear Neighbour,

We are getting in touch to provide an update on our plans for the new Children's Cancer Centre (CCC), which was awarded full planning consent on April 17 2023. We would like to invite you to comment on our draft Deconstruction and Construction Management plan and proposals for temporary highways changes, and also to invite you to one of our upcoming consultation events.

# An update on our Section 73 application

Thank you to everyone who joined our previous consultation events and provided feedback on our Section 73 Minor Material Amendment (MMA) Application. The application sets out proposed design refinements to the consented CCC scheme and has now been submitted to LB Camden.

As a reminder, the proposed design updates can be found on the project website, www.goshccc.info, which will continue to be updated as the project progresses. The S73 application has now been validated by LB Camden, who will shortly undertake their own consultation on the proposals. You can view the application on the Camden Council Planning Portal.

# Public consultation on the draft Deconstruction and Construction Management Plan (DCMP) starts on 14 August and closes on 13 September 2023.

With Sisk, our construction contractor, we have been engaging with LB Camden Transport in recent months to update and revise the draft DCMP, which was last submitted as part of our planning application in October 2022.

The draft DCMP outlines how deconstruction and construction activites will be carried out while ensuring safety and minimal disturbance, and it has been updated to take into account feedback from LB Camden and the S73 proposal. The proposals also include the changes needed to facilitate a new temporary entrance to GOSH which will be located via an existing staff entrance in the Morgan Stanley Clinical Building on Guilford Street.

The draft DCMP includes changes to existing parking and loading arrangements on neighbouring roads, and every effort has been made to minimise disruption as far as possible. The adjustments are detailed in Chapter 8 of the DCMP. The affected streets where temporary parking suspension and highway alterations will occur include; **Guilford Street, Grenville Street, Bernard Street, Orde Hall Street, Boswell Street, Great Ormond Street, Queen Square, Guilford Place and Lamb's Conduit Street, Lansdowne Terrace and Brunswick Square.** The proposed highways changes will be implemented later this year prior to the Morgan Stanley Clinical Building entrance coming in to use for patients and prior to commencement of works on site.





The proposed draft highways layouts which are appended to the DCMP have been provisionally agreed with LB Camden subject to detail design and the completion of an independent road safety audit. The proposed changes will be delivered using a temporary traffic restriction (TTR). These changes are due to be introduced in the autumn of this year and to remain in place for approximately three years.

It should be noted that further highways changes to better accommodate the temporary GOSH main entrance on Guilford Street may be introduced during the course of the works. Any such changes will undergo a separate future consultation process.

# Find out more and provide your feedback

We would be grateful for your feedback on the latest version of the DCMP and temporary highways proposals prior to Sisk finalising and submitting it to LB Camden. You can submit your comments by emailing <a href="mailto:cc@gosh.nhs.uk">ccc@gosh.nhs.uk</a>, or by writing to John Sisk & Son 1 Curo Park, St Albans, AL2 2DD. Please note that all comments must be submitted in writing during the consultation period between 14 August and 13 September. Responses to the consultation will be taken into consideration and summarised in an updated version of the DCMP.

Subject to approval from LB Camden, construction works are anticipated to start during March 2024.

A full copy of the draft DCMP will be available on our project website <a href="www.goshccc.info">www.goshccc.info</a> from 14 August at the start of the consultation and printed copies are available to view at Holborn Library (32-38 Theobalds Rd, London, WC1X 8PA).

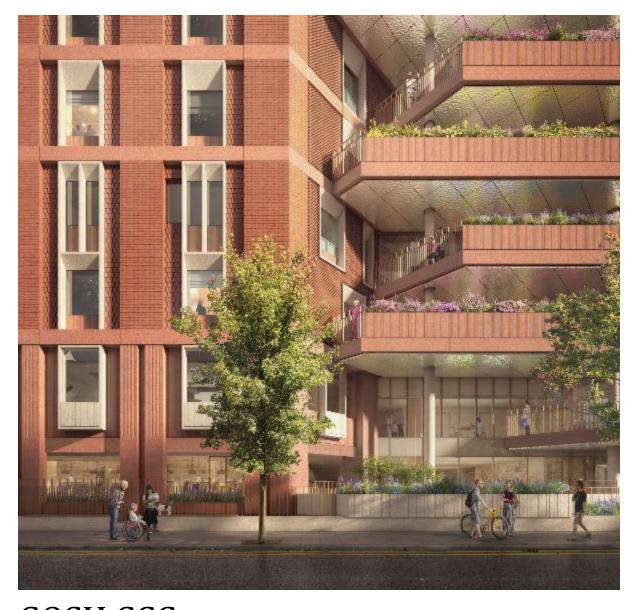
# Invitation to our drop-in events

We will be holding two drop-in sessions with members of the Sisk delivery team to answer any questions you may have. Please join us anytime on the following dates at the Weston House Lecture Theatre, Great Ormond Street, WC1N 3BH:

- Wednesday 6 September between 17:00-20:00
- Thursday 7 September between 13:00-15:30

Kind regards

**CCC Project Team** 



# GOSH CCC Deconstruction and Construction Management Plan Public Consultation Report

17.10.2023





# Deconstruction and Construction Management Plan Public Consultation Report

Great Ormond Street Hospital (GOSH)

Children's Cancer Centre (CCC)



# **Revisions & Additional Material**

# **Document Revision Control Sheet**

Date	Version	Produced by
17/10/2023	P01	Nick Fitzgerald
17/10/2023	P02	Nick Fitzgerald

# **Tracked Revisions**

Date	Version	Alteration
17/10/2023	P01	Frist issue for GOSH Trust review and comment
22/10/2023	P02	<ul> <li>Amend document to suit GOSH Trust comments and recommendation.</li> </ul>

# **Contents**

Revisions & Additional Material	3
Document Revision Control Sheet	3
Tracked Revisions	3
1.0 Introduction	5
2.0 DCMP Public Consultation Timeline	6
3.0 Public Consultation Strategy	7
3.1 Stage 1: Engagement With London Borough of Camden	7
3.2 Notification	7
3.3 Stage 3 Consultation	8
3.4 Stage 4 Review and Response	9
4.0 Public Consultation Analytics	10
5.0 Conclusion and DCMP Amendments	14
6.0 Appendix	15
6.1 DCMP Consultation Drop-In Event Slides	15
6.2 DCMP Consultation Drop-In Event	23

# 1.0 Introduction

John Sisk and Son Ltd (Sisk) has been appointed as the Principal Contractor for a pre-construction services agreement (PCSA) by The Great Ormond Street Hospital for Children NHS Foundation Trust (GOSH).

This document describes the strategy, process and outcome of the Public Consultation period for the proposed Deconstruction and Construction Management Plan DCMP for the Great Ormond Steet Hospital Children's Cancer Centre development.

Redevelopment works include deconstruction, secant piling, basement construction for plant distribution and the construction of an eight storey Children's Cancer Centre which comprises rooftop garden and facilities including complex imaging and theatre suites, critical care unit, hospital school, cytotoxic pharmacy and outpatient dispensary, cancer daycare unit and three inpatient levels including a bone marrow transplant unit.

# 2.0 DCMP Public Consultation Timeline

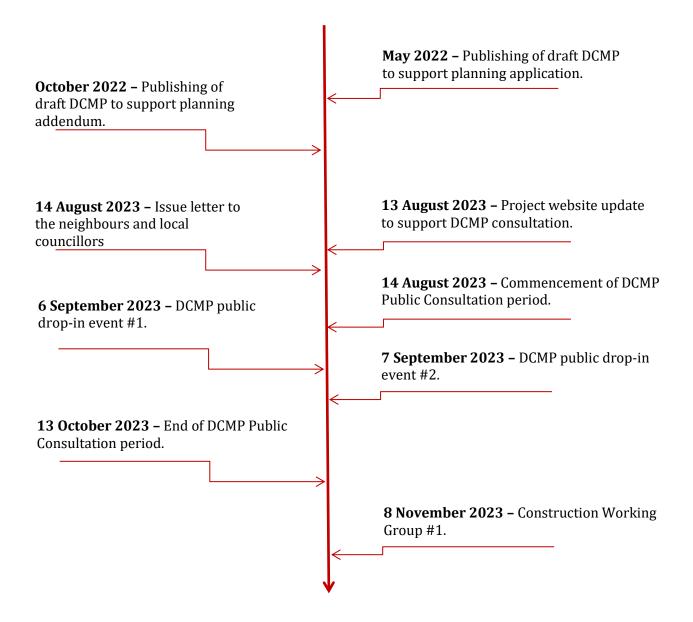


Figure 1 – DCMP Public Consultation Timeline

# 3.0 Public Consultation Strategy

Our objective for the Public Consultation of the DCMP was to ensure residents, businesses and other neighbours had sufficient opportunity to review, understand and comment on the proposed construction management and logistical strategy for the GOSH CCC project. The note below sets out the proposed engagement activities that took place during the consultation period.

# 3.1 Stage 1: Engagement with London Borough of Camden

Several discussions were held between Sisk, Turley, GOSH Trust and London Borough of Camden planning department to agree expectations, obligations and durations of the individual stages appropriate to ensure a successful DCMP Public Consultation period.

### 3.2 Notification

A letter drop was carried out on Monday 14 August 2023 to all properties within the approved site radius. The radius included Great Ormond Street, Lambs Conduit Street, Boswell Street, Orde Hall Street, New North Street, Ormond Close, Queen Square, Old Gloucester Street, Harpur Street, Emerald Street, Great James Street, Rugby Street, Millman Street, Guilford Street, Guilford Place, Mecklenburgh Square, Doughty Street, Grays Inn Road, Lansdowne Terrace, Brunswick Square, Grenville Street, Bernard Street and Herbrand Street. A total of 2095 residential properties and 135 commercial venues where contracted.

Letters were issued to the respected local authority including London Borough of Camden Head of Planning, ward councillors (Holborn and Covent Garden and King's Cross wards) and key community groups.

An update was sent via email to all project website www.goshccc.info subscribers.





# 3.3 Stage 3 Consultation

On 14 August 2023 Sisk and GOSH Trust commenced a four-week public consultation period for the draft DCMP with this period concluding on 13 September 2023. As agreed with the London Borough of Camden Planning department, due to the dates of the consultation period overlapping known holiday season the both Sisk and GOSH Trust agreed to increase the recommended consultation period from two-weeks to four-weeks.

Updates to the project website were published to include an individual page on the DCMP which provided details of:

- summary of the DCMP;
- a downloadable PDF copy of the full DCMP document;
- online feedback form; and
- feedback methods including an email address, phone number and freepost address.

A hard copy of the draft DCMP was kept at Holborn Library and made available for members of the public to review throughout the consultation period.

Two drop-in consultation events were held on 6 & 7 September 2023 at Weston House Lecture Theatre, Great Ormond Street WC1N 3BH.

We chose the drop-in format so members of the public could attend at their convenience and for as long and short as they chose.

The times of the events were varied to enable members of the public to attend during either the evening or afternoon periods. The times were:

- Wednesday 6 September 2023 between 17:00 20:00; and
- Thursday 7 September 2023 between 13:00 15:30.

On arrival, attendees were requested to sign-in and out of the venue.

A series of consultation boards were setup around the lecture theatre covering the following aspects of the DCMP;

- welcome / purpose of the event;
- summary of DCMP development;
- project timeframe;
- site location;
- construction logistics;
- environmental management strategy;
- proposed highway alterations; and -
- construction sequence video.

Senior members of projects teams from both Sisk and GOSH Trust were present at both events to discuss the proposed draft DCMP and answer any questions that were raised during the drop in events.

Comments, questions and discussions were noted by Sisk and GOSH teams with the intent of gather data during the consultation period.

# 3.4 Stage 4 Review and Response

Following the commencement of the public consultation period Sisk and GOSH Trust reviewed and documented all the comments and communications received via email, freepost or telephone conversation. A DCMP Public Consultation Tracker was used to log all the submissions and the responses issued. A thorough analysis was carried out of all comments received and detailed responses were provided to each query.

Following the completion of the consultation period, Sisk reviewed the comments and identified opportunities to amend the DCMP with the intention of improving the logistics and management strategy for the GOSHCCC development. A list of DCMP amendments has been included in the summary section of this report.



# 4.0 Public Consultation Analytics

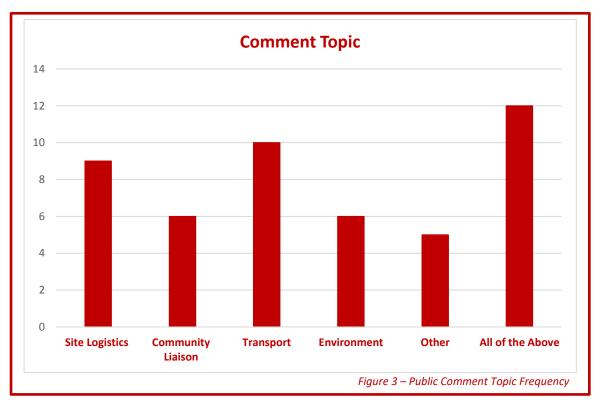
As part of the review process, all comments received were assigned to an appropriate topic, these include;

- site logistics;
- community liaison;
- transport;
- environment;
- other; and –
- all of the above

Several comments received discussed multiple subjects pertaining to the DCMP, these have been recorded within the "all of the above" topic.

In total the GOSHCCC DCMP received 59 comments from the public. The breakdown of this includes;

- 48 via the project email address;
- 0 via the project free-phone directory;
- 0 via the project free-post; and-
- 11 via the consultation drop-in event.



A total of 11 members of the public attended the consultation drop-in events, five attended on 6 September 2023 and six attended on 7 September 2023. All attendees followed the signing in procedure and were made aware of the project presentation boards which contained project specific information. Staff members from both Sisk and GOSH Trust management teams were available to discuss all comments and questions raised during these events.

Based on the data provided in figure 3, the majority of the comments received from the public included statements covering multiple subjects pertaining to the DCMP. Sisk provided detailed responses to all of the statements.

10 of the 48 comments received through the <a href="CCC@gosh.nhs.uk">CCC@gosh.nhs.uk</a> email address raised specific comments to the proposed transport of the GOSH CCC construction logistics and management strategy. The transport comments raised concerns with safety between HGV vehicles and pedestrians, proposed cycle routes, proposed HGV traffic route and quantity of estimated daily deliveries to site.

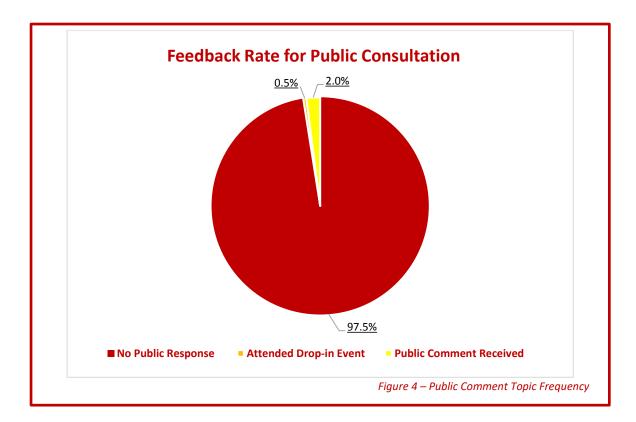
9 of the 48 comments received through the <a href="CCC@gosh.nhs.uk">CCC@gosh.nhs.uk</a> email address raised specific comments to the proposed logistics of the GOSH CCC construction logistics and management strategy. The transport comments raised concerns with safety of the proposed logistics, details of hoarding gate location, temporary lighting, construction water management strategy, road closure events, continuity of access for emergency vehicles attending properties and adjacent hospitals.

6 of the 48 comments received through the <a href="CCC@gosh.nhs.uk">CCC@gosh.nhs.uk</a> email address raised specific comments to the proposed community engagement of the GOSH CCC construction management strategy. The community engagement comments raised concerns of the planned method and frequency of the Construction Working Group CWG, access to London Borough of Camden planning portal, details of project website and request to be added to our website subscription.

6 of the 48 comments received through the <a href="CCC@gosh.nhs.uk">CCC@gosh.nhs.uk</a> email address raised specific comments pertaining to environmental risk of the GOSH CCC construction management strategy. The environmental comments raised concerns of the noise, dust and vibration emissions produced from HGB vehicular and plant operations and construction methods implemented on the project. The proposed working hours of site operations was questioned by members of the public suggesting that the narrative within the DCMP stated works would be carried out 24hours a day 7days a week.

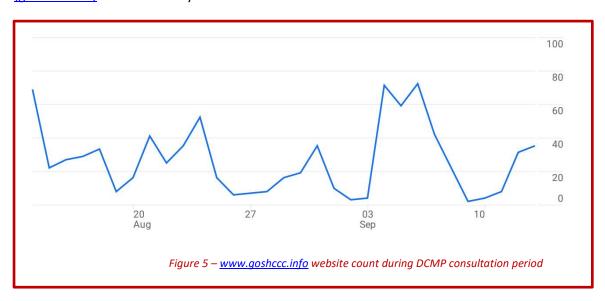
5 of the 48 comments received through the <a href="CCC@gosh.nhs.uk">CCC@gosh.nhs.uk</a> email address raised comments pertaining to other subjects surrounding the project, these included the planning process and, GOSH existing operations design of the GOSHCCC scheme.



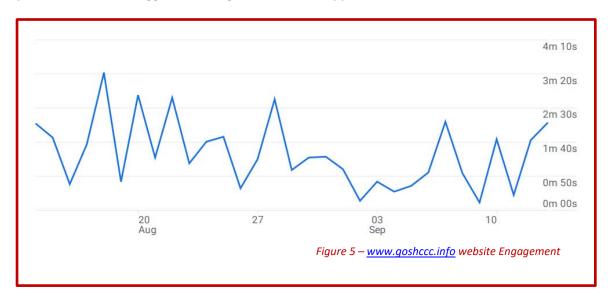


For the DCMP public consultation 2230 letters were issued to local businesses and residential properties and 117 emails were sent to project website subscribers. Of the total 2347 notifications of the DCMP public consultation 2% issued comments and 0.5% attended either of the consultation drop-in events. These figures would suggest that 97.5% of the local community who were engaged are not concerned with the proposed logistical and management strategy for the GOSHCCC development.

During the public consultation period between 14 August and 13 September, Sisk and GOSH Trust have monitored the <u>Great Ormond Street Hospital's plans for a new Children's Cancer Centre</u> (goshccc.info) website activity.



Up to the completion of the DCMP consultation period the <a href="www.goshccc.info">www.goshccc.info</a> website has had 2500 views. During the period of DCMP consultation the <a href="www.goshccc.info">www.goshccc.info</a> website received 827 views. This data can confirm that 33% of the overall website views was a result of the DCMP consultation process and would suggest that stage 2 notification approach was successful.



Of the 827 website views during the DCMP consultation period the average engagement duration was 1m 33s.

Views by Page title and scree	<b>⊘</b> ▼	
PAGE TITLE AND S	VIEWS	
Great Ormond Street	323	
Construction, access	193	
The proposals   Great	126	
Design changes   Gre	75	
Consultation   Great	61	
Children's Cancer Ce	32	
Frequently asked que	15	
 	Figure 6 – <u>www.goshco</u>	<u>c.info</u> website Page

Throughout the DCMP consultation period the <a href="www.goshccc.info">www.goshccc.info</a> Construction Access and Logistics page was the second most popular page visited with a total of 193 views. Of the 827 website visits 290 were viewed for the first time, this suggests that our notification strategy was successful in informing unaware members of the public and our website is a strong platform for communicating the GOSHCCC project. During the DCMP public consultation period a downloadable version of the draft DCMP was obtained 70 times.

# 5.0 Conclusion and DCMP Amendments

The Public Consultation of the DCMP has been informative and an effective opportunity to engage with the local community over the proposed construction management of the GOSHCCC development.

A key concern for the local community is ensuring the safety of the site and the surrounding streets. We recognise that having the project will result in more and different types of vehcles using the streets in the area. The DCMP is designed to ensure the safety of all street users and we are committed to the safety of all.

The changes to the DCMP include:.

- Inclusion of project site facilitating and mobilisation works;
  - list of operation activities;
  - dates of when activities affecting the public realm are planned to comment, i.e erection of hoarding, highway alterations, parking suspension;
- update to DCMP section 4.4 Permitted Working Hours, to include greater detail of planned operations which are likely to be performed outside the normal working hours, under Section 61 and times are when these activities are planned to be carried out;
- Update to DCMP section 5.0 Community Liaison to include strategy of project Construction Working Group, project newsletter and website updates, this includes having a larger initial meeting of the CWG reflecting the level of interest in the scheme, beyond that required in the Section 106 agreement;
- Update to DCMP figure 5 Great Ormond Street Hospital Children's Cancer Centre (GOSHCCC) receptors;
- Include additional tracking of proposed HGV route from Boswell Street the Theobalds Road;
- Update DCMP section 8.4 Road Closures to include clarity of planning, monitoring and logistical management during events;
- Update DCMP section 8.5 Occupation of Highway to in clarity of necessary tree pruning ad protection works required to facilitate construction logistics;
- Include project Road Safety Audit within DCMP appendix.



# 6.0 Appendix

# **6.1 DCMP Consultation Drop-In Event Slides**





### The proposed Children's Cancer Centre

The Children's Cancer Centre will include high quality, inspiring and flexible spaces that are both welcoming and a platform for the delivery of the safest, most effective, and efficient care using the latest technology.

- The plans for the CCC include:
- A cancer day centre with 24 beds
- Cancer inpatient wards accommodating up to 64 beds
- Critical care facilities, a theatre suite
- A Special Feeds Unit
- A roof garden for the convenience and comfort of patients and families
- A new hospital school



^ Proposed view of GOSHCC street view



Freephone: 01727 875551 Email: ccc@gosh.nhs.uk





Deconstruction and Construction Management Plan DCMP Consultation to the Children's Cancer Centre

Welcome to our consultation event on the proposed Deconstruction and Construction Management Plan DCMP for the Children's Cancer Centre.

The purpose of today's event is to provide an overview of the draft deconstruction and construction management and logistical strategy and to answer any questions you have



^ Proposed view of GOSHCC Main Entrance









### Construction, access and logistics consultation - August 2023

John Sisk & Son Ltd is the building contractor for the development of the Children's Cancer Centre at GOSH and are leading the deconstruction and construction process.

The draft DCMP, originally submitted with the application in May 2022, has been under development following ongoing discussions with LB Camden. We have also incorporated a series of measures into the DCMP as a direct result of feedback from our neighbours through the planning process over the past year.



### How can I find out more?

More information about the DCMP can be found via:

- •Download a copy of the draft DCMP via our project website.
- •View a printed version of the draft DCMP at Holborn Library (32-38 Theobalds Road, London, WC1X 8PA)



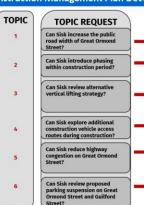
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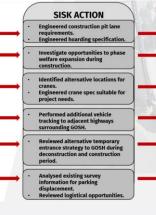
NHS Great Ormond Street Hospital for Children



We have produced a summary of the construction related comments received from the public and **LBC Planning** Department since planning application submission in May 2022.

Action has been made where feasible to address the comments.





DCMP AMENDMENT







### **Project Timeframe**

The total deconstruction and construction related activities are programmed to take 202 weeks to complete.

### Indicative programme (subject to change)

- •Site occupation and utility diversion works March 2024
- •Site mobilisation and enabling works June 2024 November 2024
- •Deconstruction of existing Frontage Building September 2024 July 2025
- •Substructure August 2025 June 2026
- •Superstructure April 2026 July 2027
- •Façade envelope treatments August 2026 July 2027
- •Internal fitout October 2026 December 2027
- •Commissioning June 2027 February 2028
- •Target project completion February 2028



Proposed street view of GOSH CCC

Permitted site working hours will be:

Monday - Friday: 08:00 - 18:00 Saturday: 08:00 - 13:00



Freephone: 01727 875551 Email: ccc@gosh.nhs.uk





## **Site location**

The hoarding line boundary is located along Great Ormond Street and extends into the Great Ormond Street footpath and highway. The western boundary extends throughout Powis Place.

Buildings to the south of the boundary comprise a mixture of residential buildings, local businesses and GOSH clinical buildings.



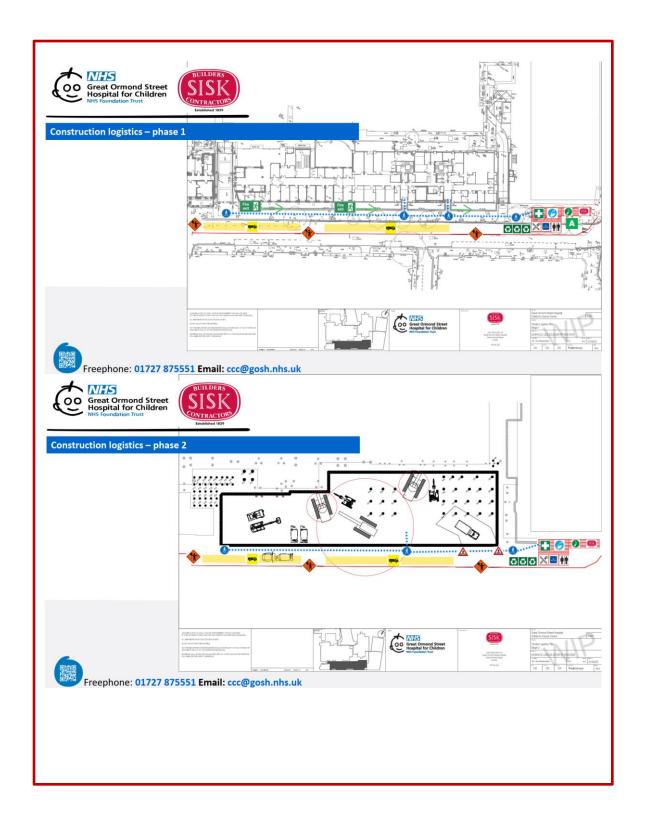


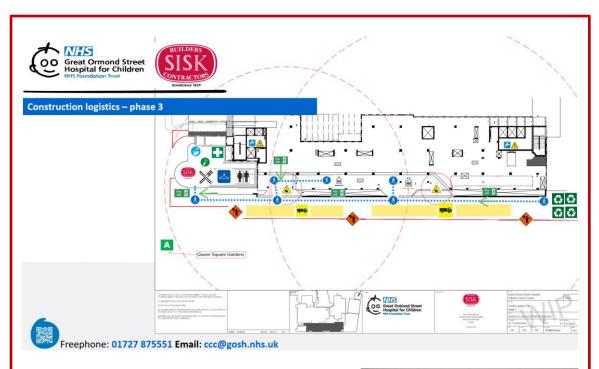
















# **Environmental objectives**

Careful consideration has been given when planning construction methods to ensure minimal interference to hospital patients and staff, neighbours and businesses.

The following list of environmental objectives will be achieved:

- Ensure compliance with all relevant environmental legislation and local authority environmental policies
- Minimise risk of environmental damage through effective and appropriately resourced control measures
- To minimise waste sent to landfill during deconstruction and construction by commitment to reuse waste materials on site, and by maintaining effective recorded monitoring of waste, in accordance with the requirements of the Site Waste Management Plan SWMP
- Achieve <41 or better within the Considerate Constructors Scheme</li>
- Achieve BREEAM 2018 "Excellent" compliance.









### **Environmental control and mitigation**

Management and operational controls will be implemented to minimise adverse effects from noise, dust and vibration arising from deconstruction and construction activities, if they occur. The following proposed initiatives have all been designed to minimise impact on the hospital, neighbours and local businesses.

- Continuous real time monitoring of environmental conditions throughout the deconstruction and construction operations
- Enclosing working environments where practicable
- Planning delivery times and routes to suit local conditions
- Isolation of plant and equipment when not required
- Hydrotreated vegetable oil (HVO) fuels for site plant and vehicles
- Selection of low environmental emission construction methods of work, where possible
- Implementation of event reporting and communication process throughout deconstruction and construction operations



Freephone: 01727 875551 Email: ccc@gosh.nhs.uk





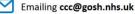


# Thank you for attending our public exhibition

We will be submitting our final copy of the DCMP to London Borough of Camden in October. If you would like to provide feedback or find further information, you can do so by:



Visiting the project website and completing an online feedback form **goshccc.info** 





Calling our Freephone number 01727 875551









# **6.2 DCMP Consultation Drop-In Event**

