

5.0 Construction Methodology and Phasing

Introduction

- 5.1 This chapter describes the anticipated demolition, construction methodology and phasing of the Development. Consideration of likely significant effects on the environment that may arise during the demolition and construction phase, and any necessary mitigation measures, are provided within the respective technical chapters of this ES (Chapters 6 – 8).
- 5.2 Planning for construction is necessarily broad at this stage and may be subject to modification. This chapter is based on reasonable assumptions and experience and allows assessment of the realistic 'worst case' construction phase effects.

Anticipated Programme and Phasing

- 5.3 Subject to gaining planning permission, demolition, and construction of the Development will be phased. Demolition, and the construction of the Yield Hall Place 1 Development and the Yield Hall Place 2 Development is anticipated to commence in September 2025 and April 2027, respectively. The construction of the Yield Hall Place 1 Development and the Yield Hall Place 2 Development is anticipated to be complete 24 months from the start of construction.
- 5.4 The implementation of the Development will be as follows:
- Phase 1a - Demolition of part of Debenhams unit and reconfiguration of retained floorspace to provide new retail unit and leisure facility.
 - Phase 1b - Construction of Yield Hall Place 1 residential development and ground floor commercial and co-working uses and associated public realm works.
 - Phase 2 – Demolition of Vue cinema and implementation of Yield Hall Place 2 development and associated public realm works.

Demolition and Construction Methodology

Demolition/Construction Machinery

- 5.5 Consideration has been given to the types of plant and equipment likely to be used during demolition, and construction of the Development. The plant and equipment likely to be associated with the demolition and construction process are expected to comprise:
- Tracked / wheeled 360-degree excavators;
 - Dumpers;
 - Mobile cranes;
 - Handheld tools including breakers (pneumatic and hydraulic);
 - Specialist rigs associated with the installation of foundations;
 - Power tools including percussion drills, cutting disks and pipe threaders;
 - Piling equipment;
 - Mobile access platforms;
 - Wheel washing plant;

- Scaffold;
- Mobile access platforms;
- Delivery trucks;
- Skips / Skip trucks;
- Forklift trucks;
- Ready mix concrete wagons;
- Concrete placing booms and pumps; and
- Road sweepers.

Site Preparation and Enabling Works

5.6 Site preparation will involve the establishment of any construction worker facilities (including Site compound area with offices and welfare facilities for management and construction workers).

5.7 Enabling works will comprise:

- Preparation of Health and Safety Plans;
- Arboricultural works – including the protection of trees/vegetation to be retained and removal of trees/vegetation where applicable;
- Ecological works (where required);
- Installation of any site hoarding and security fencing;
- General clearance; and
- Installation of temporary surface water management measures.

Excavation and Sub-Structure Works

5.8 Excavation work and the preparation of ground works would take place prior to the installation of foundations on the Site.

5.9 Excavated material from the site is likely to comprise made ground/topsoil, gravel and clay material. Any clean excavated material that cannot be re-used on the Site would be removed by licensed waste hauliers.

Infrastructure and Drainage Works

5.10 All temporary drainage of the construction works will be designed and managed to comply with BS6031:2009 “*The British Standard Code of Practice for Earthworks*”ⁱ, which details methods that should be considered for the general control of drainage on construction sites. Further advice is contained within the Geotechnical Design, General Rules (BS EN 1997)ⁱⁱ which should be read in conjunction with Basis of Structural Design (BE EN 1990)ⁱⁱⁱ.

5.11 The permanent Sustainable Drainage System (SuDS) on the Site will be constructed during the infrastructure works when installing the temporary surface water management measures. SuDS will be implemented in accordance with the site wide drainage strategies and the principles established in the Construction Industry Research and Information Association (CIRIA) C753 ‘The SuDS Manual’^{iv}.

5.12 All works on the Site will be undertaken in accordance with CIRIA (2001) Control of Water Pollution from Construction Sites^v which promotes environmental good practice for control of water pollution arising from construction activities.

- 5.13 In accordance with measures set out in the Demolition/Construction Environmental Management Plan (D/CEMP), construction vehicles will be properly maintained to reduce the risk of hydrocarbon contamination and will only be active when required. Construction materials will be stored, handled and managed with due regard to the local water environment and thus the risk of accidental spillage or release will be minimised.
- 5.14 In accordance with the Control of Pollution (Oil Storage) (England) Regulations 2001^{vi}, any tanks storing more than 200 litres of oil will have secondary bunding. Bunding will be specified having a minimum capacity of *“not less than 110% of the container's storage capacity or, if there is more than one container within the system, of not less than 110% of the largest container's storage capacity or 25% of their aggregate storage capacity, whichever is the greater.”* Any above ground storage tanks will be located on a designated area of hardstanding. No underground storage tanks will be used during the construction period. Storage of liquids such as degreasers, solvents, lubricants and paints will be in segregated, bunded enclosures.
- 5.15 The following control measures will also be incorporated into the D/CEMP, which will be secured via planning condition:
- Temporary surface water management system (e.g., oil interceptors, holding tanks to remove suspended sediment prior to discharge);
 - Equipment maintenance;
 - Wheel washing;
 - Covering stockpiles; and
 - Storage of substances in accordance with all applicable legislation.
- 5.16 Further information on the D/CEMP is provided below.

Construction of Superstructure

- 5.17 This stage will involve the respective construction of the Yield Hall Place 1 Development and the Yield Hall 2 Development envelopes on the Site. It will include the pouring of concrete, the installation of steel/timber frames, external hard surfacing and the external building fabric.

Fit out

- 5.18 Fit out of the residential units within the Development will involve the installation of dry lining to internal walls, mechanical and electrical installations and finishes and fitted kitchens and bathrooms.
- 5.19 The fit out of the cinema and commercial aspects of the Development will involve mechanical, electrical and sprinkler installations.

Landscaping and Amenity Space

- 5.20 Landscaping works within the amenity space of the Development will involve the establishment of green spaces within the Site including soil preparation, tree and vegetation planting and seedings.

Material and Resource Use

- 5.21 The demolition of the existing structures on the Site will take place to facilitate the construction of the Development. Any suitable material from the demolition waste would be crushed and re-used on the Site during the construction of the Development.

- 5.22 The primary construction materials to be used will include internal and external concrete, steel frame and cladding, timber, brick and tarmac. Where possible, materials and resources used during the construction of the Development will be sourced from the local area. All timber and wood-based products would be sustainably sourced and procured from known and legal sources.
- 5.23 The off-site re-use, recycling or recovery of demolition, construction and excavation waste would be maximised, where possible. Opportunities to reduce waste through careful management and procurement will be set out in the Site Waste Management Plan (SWMP) as part of the D/CEMP and secured through planning conditions. Waste would only be sent to landfill as a last resort if there is no alternative disposal route.

Construction Phase Vehicle Movements

- 5.24 Construction phase vehicle movements will be managed via a Construction Traffic Management Plan (CTMP), to be secured through a suitably worded planning condition, in order to minimise the impact on the local road network. Construction traffic would access the Site via Yield Hall Place.
- 5.25 The Heavy Goods Vehicle (HGV) movements, including deliveries to the Site, would be dispersed across the working day with few expected during the AM and PM Peak periods. The arrival and departure of light vehicles would have some impact during the morning and evening periods; however, it is likely that a significant majority of construction workers would travel outside the network peak periods due to an early daily start on the Site.

Construction Traffic and Access Management

- 5.26 Construction traffic is likely to access the Site via the main distributor roads surrounding the Site, including the A329. All traffic will be encouraged to avoid local settlement centres. The construction routing detail will be secured through the CTMP, which will form part of the D/CEMP.
- 5.27 If abnormal or oversized loads are required to deliver materials to the Site, notice will be given to RBC, depending on the routing, and also the Police, the Fire Brigade, and other emergency services, sufficiently in advance of the required closure or diversion dates. Should any hazardous materials arise during the course of the works, these materials would be transported to a licensed disposal facility using permitted routes as identified in the CTMP.
- 5.28 All vehicle loading will take place within the Site and will not affect public highways or adjacent occupiers. Deliveries and vehicle movements will be planned so as to avoid the queuing of construction vehicles on the public highway. If waiting or queuing is unavoidable, engines will be switched off and not left to idle.

Controls to Protect the Environment

- 5.29 The environmental controls (or mitigation measures) to eliminate, reduce or offset likely significant adverse effects on the environment during the construction phase are identified below. It is anticipated that these controls will be secured by appropriately worded planning conditions or obligations:
- Preparation of a D/CEMP, including the CTMP, which clearly sets out the methods of managing environmental issues for all involved with the construction works, including supply chain management;
 - Requirement to comply with the D/CEMP included as part of the contract conditions for each element of the work. All contractors tendering for work will be required to demonstrate that their proposals can comply with the content of the D/CEMP and any conditions or obligations secured through the planning permission;

- In respect of necessary departures from the above, procedures for prior notification to Wiltshire Council, as appropriate, and affected parties will be established;
- Establishing a dedicated point of contact and assigning responsibility to deal with construction related issues if they arise. This will be a named representative from the construction team; and
- Regular dialogue with RBC and the local community.

5.30 The preparation of a D/CEMP is an established method of managing environmental effects resulting from demolition and construction works. The D/CEMP will be submitted to RBC (and where necessary other relevant statutory authorities) prior to the commencement of the works. Compliance with the D/CEMP will be secured by planning condition. The structure of the D/CEMP will include the following:

- A table showing the objectives, activities (mitigation/optimisation measures) and responsibilities for the implementation of those activities;
- A broad plan of the work including working hours and delivery times;
- Details of prohibited or restricted operations (location, hours etc.);
- Institutional arrangements for its implementation and for environmental monitoring: responsibilities, role of the environmental authorities and participation of stakeholders;
- Contact during normal working hours and emergency details outside working hours;
- Provision for reporting, public liaison and prior notification of particular demolition and construction related activities;
- The mechanism for the public to register complaints and the procedures to responding to such complaints; and
- The details of proposed routes for HGVs travelling to and from the Site.

Hours of Work

5.31 Working hours on the Site during the demolition and construction phase will be agreed with RBC through the D/CEMP and it is likely that the standard hours of work will be:

- Monday to Friday 08:00 – 18:00;
- Saturday 09:00 – 13:00; and
- No work will commence on the Site on Sundays or Bank Holidays.

5.32 All noisy works outside these hours will be subject to prior agreement of, and/or reasonable notice to RBC, as appropriate.

5.33 Night-time working will be restricted to infrequent circumstances, and will be undertaken following prior arrangement with RBC. By arrangement, there may be some out of hours construction deliveries made to the Site.

Response to Complaints

5.34 Any complaints will be logged on the Site, and where necessary, reported to the relevant individual at RBC, as appropriate (and vice-versa) as soon as practicable.

Prior Notice

- 5.35 In the event of unusual activities or events, these will be notified to RBC, as appropriate, and relevant property owners or occupiers in advance. The relevant activities will be agreed with RBC, as appropriate, once the detailed programme of construction is defined. This will include:
- Necessary night time, weekend, or evening working (outside core areas) of a type which may affect properties; and
 - Road or footpath closures / diversions and movements of wide loads (unlikely to be required).
- 5.36 The community will be kept informed during the demolition and construction phase, as appropriate.
- 5.37 During the demolition and construction works, measures would be implemented to ensure that the local community and workers are not adversely affected. These measures would include the use of appropriate site hoarding, dust management procedures and construction traffic management.

REFERENCES

- ⁱ British Standards Institution (December 2009) BS6031:2009 Code of Practice for Earthworks
- ⁱⁱ British Standards Institution (December 2004) BS EN 1997-1:2004 Eurocode 7. Geotechnical Design. General Rules.
- ⁱⁱⁱ British Standards Institution (2002) BS EN 1990: 2002 Basis of Structural Design
- ^{iv} Construction Industry Research and Information Association (CIRIA) (2015) The SuDS Manual
- ^v CIRIA C532 (2001) Control of Water Pollution from Construction Sites Guidance for consultants and contractors
- ^{vi} The Control of Pollution (Oil Storage) (England) Regulations 2001, Statutory Instrument 2001 No. 2954