



British Library
Phasing Plans [37]

Luffing tower cranes will not oversail the northern or western boundary of the site

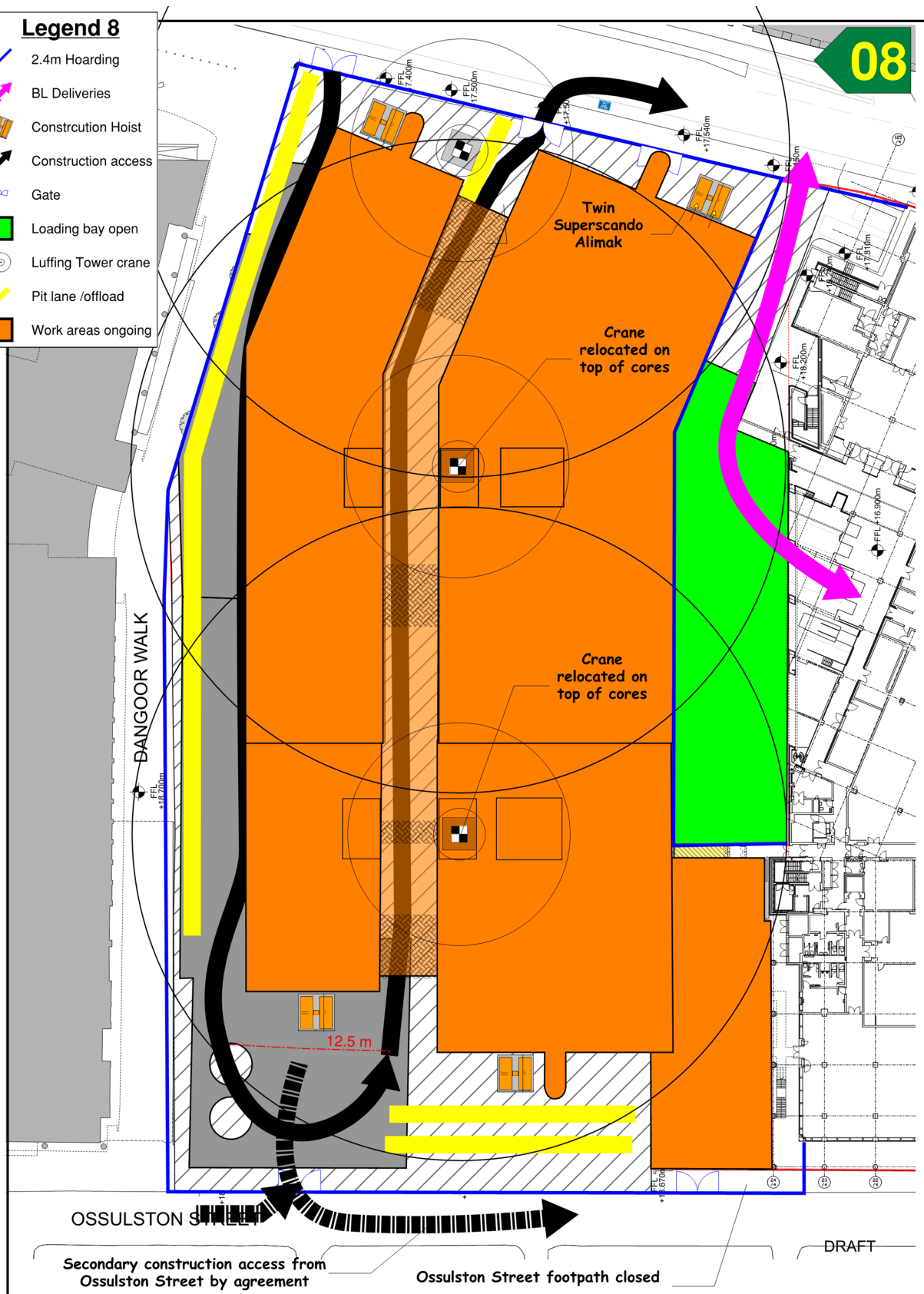
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Date	10 Mar 21
Rev	[37]

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Legend 8

- 2.4m Hoarding
- BL Deliveries
- Construction Hoist
- Construction access
- B Gate
- Loading bay open
- Luffing Tower crane
- Pit lane /offload
- Work areas ongoing



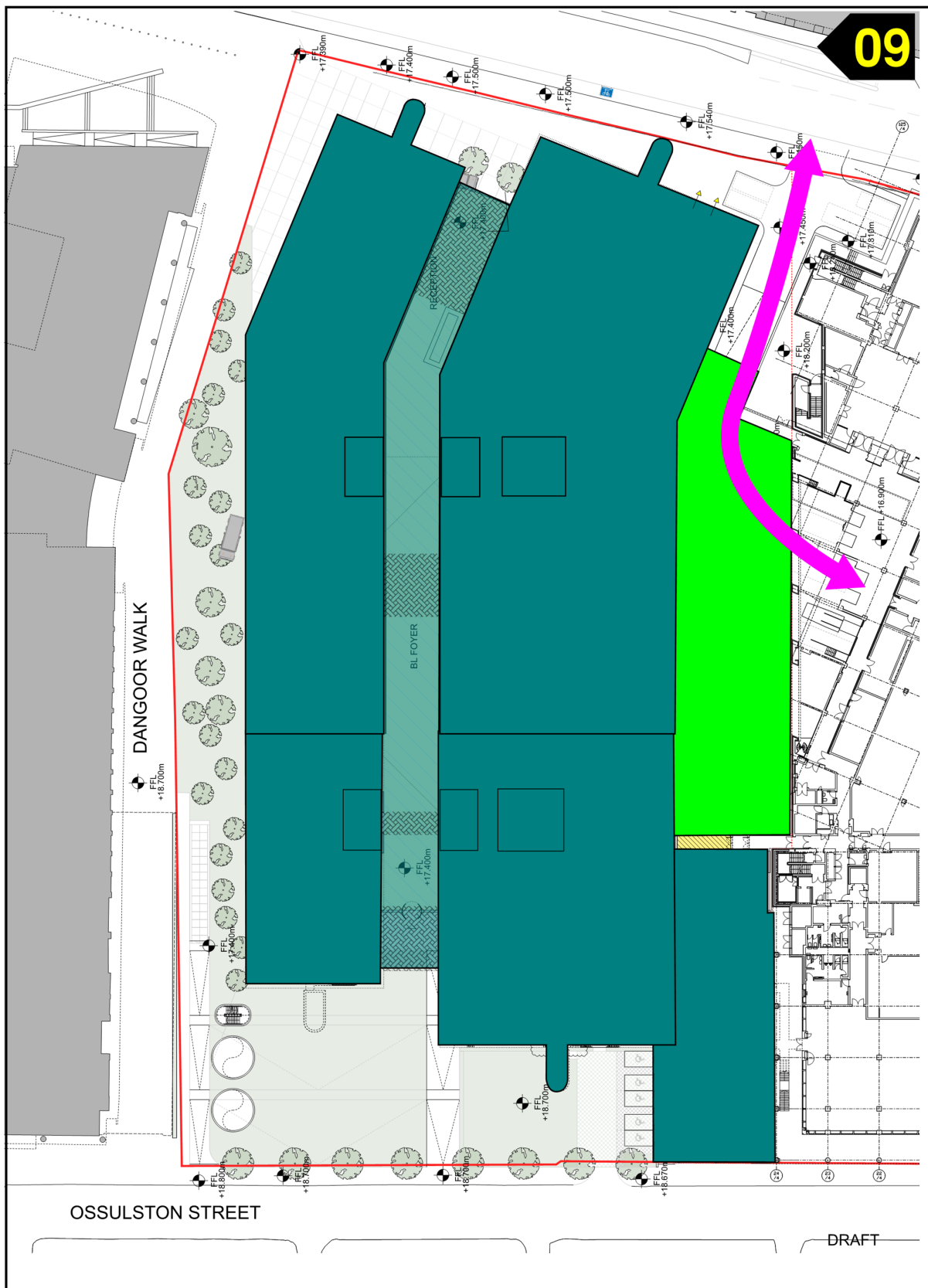
R.P.M.

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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).

Refer to Summary time slice Programme in Appendix A and accompanying logistics/phasing plans for further details.			
High level summary of the main programme phases:			
• Construct New Tank Room	Apr 2024	-	Sep 2025
• Fit-out BLCC and NSA	Mar 2024	-	Apr 2026
• Enabling Works and deep shaft works for CR2	Apr 2024	-	Jun 2029
• Eastern Building Construction	Apr 2026	-	Jun 2029
• Western Building Construction	Jan 2027	-	Nov 2029
• New BLCC Building Construction	Jan 2027	-	Jun 2029
The following narrative provides a more detailed breakdown of the proposed works on site.			
<u>National Sound Archive (NSA) & British Library Conservation Centre (BLCC) Fit-Out</u>			
These works are required to facilitate the demolition of the BLCC building. We currently have a period on site that has been provided by the British Library [BL] for these works. This is a period of circa 18 months.			
The start of the period is driven by the planning-design-procurement, then following the 18months on site the staff of the NSA & BLCC relocate into the main building over 1 month.			
This gives Vacant Possession and allows the demolition of the existing facility, to clear the eastern area of the site.			
<u>New Tank Room</u>			
It is necessary to construct this piece of work, to replace the existing BL plantroom, that occupies a basement directly north of the current BLCC building. The existing plantroom does not form part of the new development and must be removed before the main construction works starting in the east of the site. We aim to have the new tank room operational, to allow the old tank room/service tunnel and the existing BLCC to be demolished at the same time.			
With Arup, we have identified a section of the western basement that could be constructed before Vacant Possession [VP] of the BLCC. This needs to be studied in more detail in the next design phase to prove that it can work from an operational point of view.			
Before works starting, a small amount of enabling works will be required, to free up the work site and to ensure that the existing BLCC and the loading bay can operate close to their current format. This will mainly be site clearance, removal of the bike racks, closing of some of the parking bays, and services diversions if required. The area affected can be seen below-left over as the construction area.			
It may be necessary to carry out some service diversion works to allow the services tunnel to be removed during the construction of this phase for working space.			

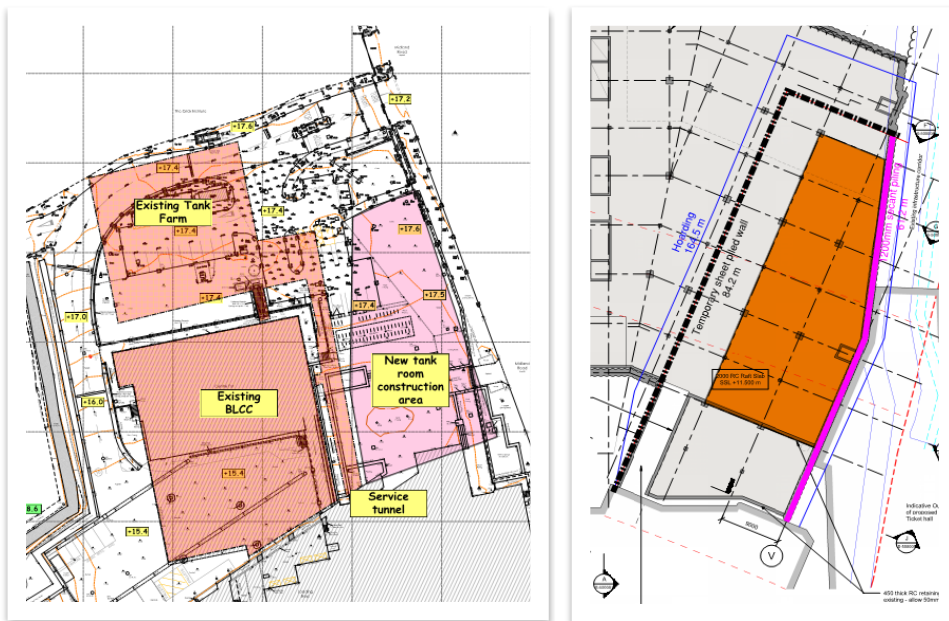


Figure 3 – Tank Room Works

The construction of the substructure will require the mobilisation of a secant piling rig before the main phase of works. The secant pile line to the east, and the existing British Library basement to the south form 2 sides of the basement dig/cofferdam. The west and the north edges will need to be formed from sheet piling, this will act as both shoring and as water cut off. This can be seen above right. We have allowed 9 months to construct the substructure, then 8 months to fit the room out and to bring it online, replacing the services at ground plant room.

Construction of the Eastern Building

The main construction of the eastern section of the building starts following the completion of the demolition of the NSA & BLCC building and the removal of the existing tank farm and service tunnel. The area designated and represented as East on the programme is as below, shown in blue.

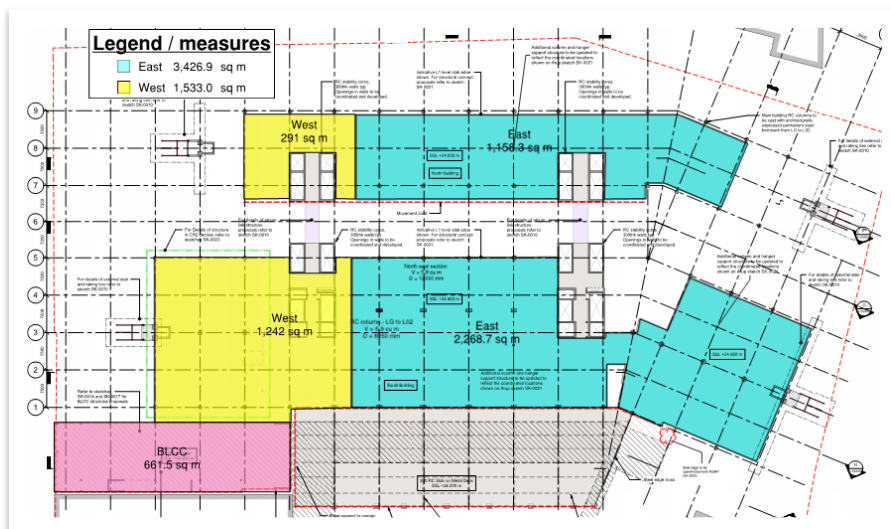


Figure 4 – Eastern Building Extent

1. Secant piling to basement perimeter – installation of 2 rigs.

We have based the secant piling on a piling mat level of +16.000m. Berms will be formed where necessary at a width of 12m from the centre line of the piles.

2. Dewatering cut off.

We have allowed for dewatering cut off to be installed between the east and west sections. This will allow the water level to be drawn down in a controlled manner, this cut off is between Grids G&H. [this split line was chosen as the CR2 contractor could not take their hoarding further east without impeding the delivery access road for the British Library to their service yard.] If the CR2 works start earlier than the east, then this line would be installed under that contract.

3. Propped and unpropped perimeter condition/central thrust block.

The secant piles cannot self-support and will need propping. As the north and south walls are 70m apart, horizontal propping between these points is not practicable. Therefore, we have planned to excavate the central area of the site, leaving perimeter supporting berms against the secant. These berms can be seen below as the blue areas.

It is proposed then to construct sufficient of the central B1 raft to act as a thrust block, then, once cast, it will be used to prop the adjacent secant walls. This allows the berm removal and completion of the construction at the perimeters. This is not necessary where the new basement abuts the Francis Crick Institute or the existing British Library basement, nor in the northeast where traditional horizontal propping is possible.

4. Top-down logistics slab

This will be vital to maintain access across the site from Midland Road and to minimise the use of Ossulston Street for vehicle access. Ossulston Street will be required during stages of the works, but the top-down slab reduces absolute dependency on it. This will result in plunge piles being required that could be installed by the scant piling rigs.

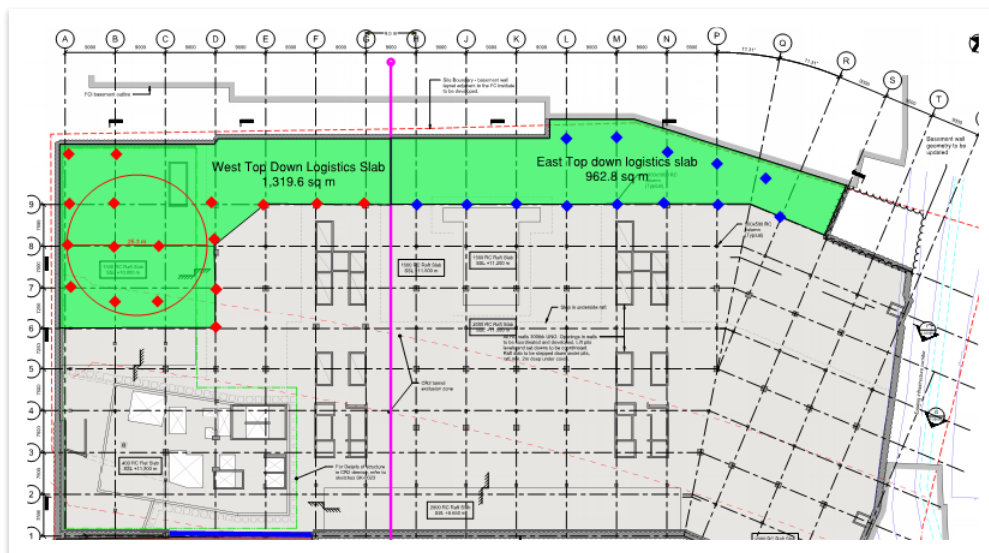


Figure 5 – Top down logistics slab locations