



Notes

1. Do not scale this drawing. All dimensions must be checked/ verified on site. If in doubt ask.
2. This drawing is to be read in conjunction with all relevant architects, engineers and specialists drawings and specifications.
3. All dimensions in millimetres unless noted otherwise. All levels in metres unless noted otherwise.
4. Any discrepancies noted on site are to be reported to the engineer immediately.
5. This drawing should be read in conjunction with BWB Proposed Levels, drawing number DKN-BWB-DGT-XX-DR-G-0600
6. Site Layout taken from Maber Architecture drawing DKN-MA-00-GF-DR-A-00154, dated 31.03.2020
7. This drawing is based on Maptic Topographical Survey, Ref 3054-0001 dated 20.03.2019

Key

- Application Boundary - Taken from Maber Site Plan, ref 3009-00201
- Proposed Retaining Wall
- Isopachyte contour indicating depth of cut in 100mm intervals
- Isopachyte contour indicating zero cut/fill
- Isopachyte contour indicating depth of fill in 100mm intervals
- Environment Agency 8m Easement from the River Leen

Earthworks Strategy

**1. Site Strip**  
The existing site consists of distinct areas of existing hard standing and topsoil / vegetation. For the purposes of the site strip we have assumed the following depths:

- Topsoil / vegetation (200mm thick)
- External concrete / building slab (200mm thick)
- Asphalt Concrete (140mm thick)
- Other Compacted Stone / Works Materials (150mm thick)

Based on the above values and the areas identified on the Topographical Survey, the site strip works could generate the following volumes (unbulked):

- Topsoil (2030m<sup>3</sup>) = 400m<sup>3</sup>
- Concrete (4320m<sup>3</sup>) = 860m<sup>3</sup>
- Asphalt Concrete (545m<sup>3</sup>) = 75m<sup>3</sup>
- Other Material (640m<sup>3</sup>) = 100m<sup>3</sup>

No assessment of demolition arisings from the existing buildings or foundations has been made.

**2. Construction Depths**  
A CRB of 5% has been assumed to determine the proposed construction depths to calculate the formation levels of the proposed works:

- Building Slab = 300mm Slab over 600mm Piling Mat
- Resin Bound Footpath = 220mm
- Block Paved Footpath = 210mm
- Car Parking Bay = 335mm
- Soft Landscaping = 400mm (assumed clean capping layer)
- Environment Agency Access Track = 375mm (Resin Bound)
- Environment Agency Access Track = 445mm (Block Paved)
- Car Parking Bay

**3. Bulk Cut/Fill Earthworks**  
Following the site strip, the bulk earthworks required to reach the formation levels (FFL minus assumed construction thickness) is anticipated to generate:

	CUT	FILL
Total Gross	2,195	3,600
NETT		1,405

I.E. Nett Fill (deficit) of approx 1,405m<sup>3</sup>

**4. Piling Mat Materials**  
For these volumetric calculations, a piling mat thickness of 600mm has been assumed under the footprint of the building to be confirmed by the main Contractor.

Assumed Piling Mat Required:  
Material required (0.6m x 3,000m<sup>2</sup>) = 1,800m<sup>3</sup>

**5. Construction Arisings**  
An allowance has been made for the excavated materials generated from the construction arisings of drainage and foundations, the volumes are as follows:

Foundations	= 1500m <sup>3</sup>
Drainage	= 750m <sup>3</sup>
Attenuation	= 300m <sup>3</sup>
	2,550m <sup>3</sup>

Depending on the sequencing, it might be possible for the arisings to be reused in the bulk earthworks. However, this strategy assumes that the arisings are to be removed from site.

**6. Earthworks Totals**  
1,405m<sup>3</sup> of material is required to reach proposed formation level.  
1,800m<sup>3</sup> of material is required for the piling mat (T.B.C by Contractor).  
2,550m<sup>3</sup> of material is anticipated from the construction arisings, to be disposed off site.  
860m<sup>3</sup> of concrete material from site strip.  
400m<sup>3</sup> of existing topsoil to be removed from site.  
100m<sup>3</sup> of mixed material from site strip to be removed from site.  
75m<sup>3</sup> Asphalt Concrete from site strip to be removed from site.

An unknown volume of material is likely to be generated from the demolition of the existing buildings. The use of this material is to be agreed with the Project Manager.

C01	24.11.20	Issued for Construction	JJ	DG
P03	22.10.20	Earthworks volumes updated, Title Block amended	DG	DG
P02	16.10.20	Title Block Amended and B&K Logo Added	JN	DG
P01	14.05.20	Preliminary Issue	DG	MC
Rev	Date	Details of issue / revision	Drw	Rev

**Issues & Revisions**

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Client

**BOWMER + KIRKLAND**

Project Title

**Deakins Place Nottingham**

Drawing Title

**Proposed Earthworks Cut and Fill**

Drawn:	D. Gray	Reviewed:	M. Collins
BWB Ref:	NTS2777	Date:	14.05.20
Scale:	@1:1,200		

CONSTRUCTION				Status	Rev
Project - Originator - Zone - Level - Type - Role - Number	65775-BWB-ZZ-ZZ-DR-C-0630				C01

