



Existing Topsoil Site Strip:
238,750m³
 For details refer to drawing 018844-420.

Note:
 For assumed minimum construction depths and areas refer to drawing 018844-423.

Earthwork quantities to underside of imported sub-base:
 Cut and fill volumes required to achieve formation level are: (bulking factor of 1.025 applied to CUT)

Access roads:	=	
Cut volume	=	396,150m ³
Fill volume	=	26,200m ³
NET (cut/surplus)	=	369,950m³
Warehouse units (smaller units):	=	
Cut volume	=	0m ³
Fill volume	=	222,850m ³
NET (fill/required)	=	222,850m³
Warehouse units (large units):	=	
Cut volume	=	391,950m ³
Fill volume	=	164,100m ³
NET (cut/surplus)	=	227,850m³
Heavy duty service yards:	=	
Cut volume	=	433,350m ³
Fill volume	=	36,300m ³
NET (cut/surplus)	=	397,050m³
Service yards and car parks:	=	
Cut volume	=	323,000m ³
Fill volume	=	290,900m ³
NET (cut/surplus)	=	32,100m³
Train tracks:	=	
Cut volume	=	129,600m ³
Fill volume	=	49,850m ³
NET (cut/surplus)	=	79,750m³
Landscaping:	=	
Cut volume	=	874,500m ³
Fill volume	=	1,790,200m ³
NET (fill/required)	=	915,700m³
TOTAL:	=	
Cut volume	=	2,548,550m ³
Fill volume	=	2,580,400m ³
Total (fill/required)	=	31,850m³

Summary:
 Allowing for the following:
 9,900m³ underground attenuation tank below DC1 car park
 18,000m³ for carrier pipes running across site
 1,000m³ for swale running along Eastern internal road
Total cut from above = 28,900m³
Remaining fill to come from surplus airings from drainage and services, therefore cut and fill balance achieved.

SURFACE ELEVATION DATA			
NUMBER	MINIMUM ELEVATION	MAXIMUM ELEVATION	COLOR
1	-18.00	-16.00	Red
2	-16.00	-14.00	Dark Red
3	-14.00	-12.00	Purple
4	-12.00	-10.00	Magenta
5	-10.00	-8.00	Pink
6	-8.00	-6.00	Red
7	-6.00	-4.00	Orange
8	-4.00	-2.00	Light Orange
9	-2.00	0.00	Yellow
10	0.00	2.00	Light Green
11	2.00	4.00	Green
12	4.00	6.00	Light Blue
13	6.00	8.00	Blue
14	8.00	10.00	Dark Blue
15	10.00	12.00	Very Dark Blue
16	12.00	14.00	Black

Note:
 Surface elevation isopachytes (colours) shown on plan and key are calculated from existing survey information to proposed formation levels.

Drawings:
 Topographical survey - SEP drawing ref. S10885-T rev -
 Architects layout plan - SGP drawing ref. 15-857 K017-Option 10 Planning.

WORK IN PROGRESS
For information Only

The findings on the drawing are subject to a full detail Geotechnical site investigation report and assessment.

THIS DRAWING IS FOR INFORMATION PURPOSES ONLY AND THE MAIN CONTRACTOR MUST CARRY OUT HIS OWN CUT AND FILL ANALYSIS TO SATISFY HIMSELF AS TO THE ACCURACY OF THE CUT AND FILL VOLUMES.

THE LEVELS AND VOLUMES ON THIS DRAWING ARE PRELIMINARY ONLY AND NOT TO BE USED FOR CONSTRUCTION PURPOSES.

This drawing is copyright and owned by Capita, and is for use on this site only unless contractually stated otherwise.
 DO NOT SCALE this drawing (printed or electronic versions). Contractors must check all dimensions from site.
 All other design team elements, where indicated, have been imported from the consultant's drawings and reference should be made to the individual consultant's drawings for exact setting out, size and type of component.
 Discrepancies and / or ambiguities within this drawing, between it and information given elsewhere, must be reported immediately to the architect for clarification before proceeding.
 All works are to be carried out in accordance with the latest British Standards and Codes of Practice unless specifically directed otherwise in the specification.
 All setting out to be in accordance with the Architect's details, (the Architect's drawings to take precedence over any setting out shown on this drawing).
 SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION
 Refer to the relevant Construction (Design and Management) documentation where applicable.
 It is assumed that all works on this drawing will be carried out by a competent contractor, working where appropriate to an approved method statement.

- NOTES:**
- Earthwork volumes are calculated from existing survey to proposed formation levels and exclude arisings from excavations for drainage and foundations.
 - Cut and fill isopachytes shown on this drawing are calculated from existing survey information to proposed formation levels. As such, they include existing construction thicknesses unless noted otherwise. They do not include the proposed new construction thicknesses and do not include a bulking factor.
 - Cut and fill exercise allows for a bulking factor of 1.025 to cut volume only.
 - The cut and fill isopachytes and volumes assume that all cut material are suitable to be re-used as fill material.
 - The topsoil thicknesses and volumes shown on this drawing are assumed and to be confirmed on site.
 - Additional testing of head deposits is required to certain areas of the site and a volume of material may need to be stabilised prior to reuse as fill material.
 - All earthworks are to be undertaken in conjunction with Capita NBS Specification. Full method statement to be provided for approval by the Engineer prior to any work commencing on site.
 - All cut and fill quantities are preliminary and are to be verified by quantity surveyor for cost estimating purposes.

P01	01.07.16	NDH	SOAKAWAY NO. 4 AND CARRIER DRAINS ADDED TO CALCULATIONS AND EASTERN MOUND AMENDED TO SUIT BALANCE.	NRB
Rev	Date	By	Description	Rev' check

Drawing status
PRELIMINARY
 Client



Project
RADLETT SRFI
HERTFORDSHIRE

Drawing
EARTHWORKS ANALYSIS
CUT AND FILL VOLUMES

Scale @ A1
1:5000
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