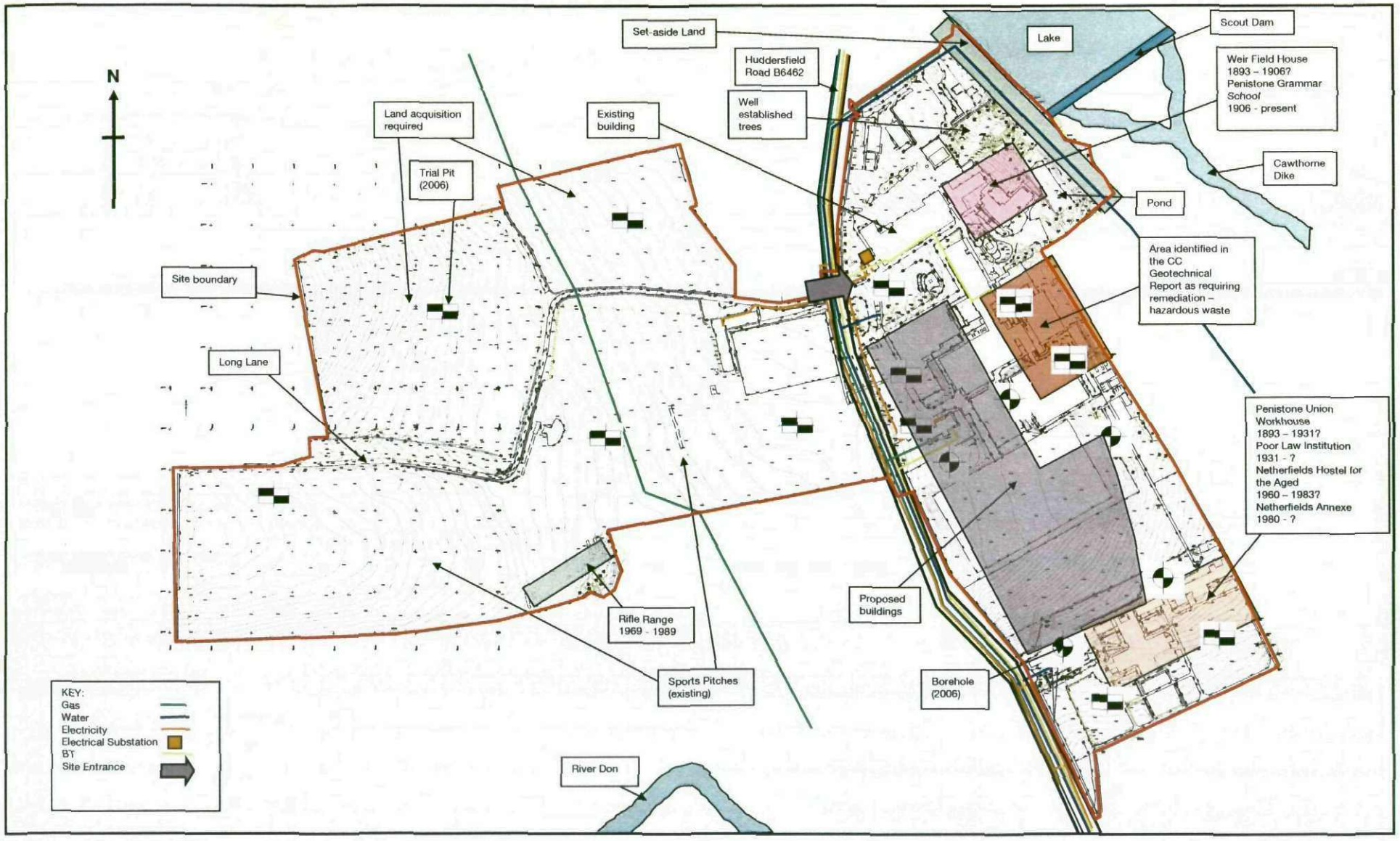
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Penistone Grammar - Barnsley BSF – Data Summary						
Site Address: Huddersfield Road, Penistone. S36 7BX				**Grid Reference:** SE (4)24100 (4)04050		
Item Title	**Comments (Data Summary - please also refer to formal reports)**					
SITE DETAILS						
Current Site	Sports field (west of Huddersfield Road) and School buildings with associated hard standing (east of Huddersfield Road).					
History (Envirocheck Report)	• Open Fields (east and west of Huddersfield Road). • Penistone Union Workhouse (extreme south - east of Huddersfield Road) and School buildings (north – east of Huddersfield Road). • Sports fields as current layout (west of Huddersfield Road). • Penistone Grammar School (east of Huddersfield Road).					
Utilities	Statutory service plans have been provided and presented on the associated Penistone Grammar site constraints drawing.					
Ground Investigations undertaken	Description	BH	TP	WS	DPT	
	CC Geotechnical (2006)	5	12	-	-	
	GEL (2007)	3	-	8	-	
GROUND CONDITIONS						
Geology (BGS Map)	The published geology indicates: • The site is directly underlain by undifferentiated river terrace deposits (in SW corner) over Carboniferous Lower Westphalian Coal Measures strata, a sequence of mudstone, sandstone, siltstones coals and seatearths. The unpublished geology indicates: • Made Ground up to 1.10 m thick. • Weathered Coal Measures to 6.80 m BGL. • Coal Measures to depths >20.50 m BGL.					
Hydrology	Scout Dike is situated 50 m to the northeast of the site and the River Don is located approximately 300 m to the southsouthwest of the site. Not in Zone of Extreme Flooding from Environment Agency.					
Hydrogeology (EA Groundwater vulnerability map)	Aquifer Classification. (EA Groundwater Vulnerability Map)	Minor aquifer (variably permeable).				
	Soil Classification (EA Groundwater Vulnerability Map)	Low leaching potential.				
	Groundwater Protection Zone (GPZ) (EA Database)	The site does not fall within a GPZ.				
	Examination of the general topography and hydrology of the area based on OS maps indicates that groundwater flow is likely to be towards the east and southeast (estimated).					
Mining (CA Report)	Is site within an area where past underground mining has taken place?	No				
	Is site within an area for which a licence for present or future extraction exists?	No				
	Are shafts/adits recorded on site?	No				
	Is site within geographical boundary of former opencast workings?	No				
	Is site within 200m of current opencast workings?	No				
	Is site within 800m of future opencast workings?	No				
Geo-hazards (Envirocheck)	Compressible Ground	No	Ground Dissolution	No	Landslip	Low-Mod
	Gulls and Cambering	Low	Swelling Clay	No	Combustible Soils	No
ENVIRONMENTAL SETTING						
Previous Usage	Potentially contaminating previous usages: • Made Ground – significant contamination not anticipated.					

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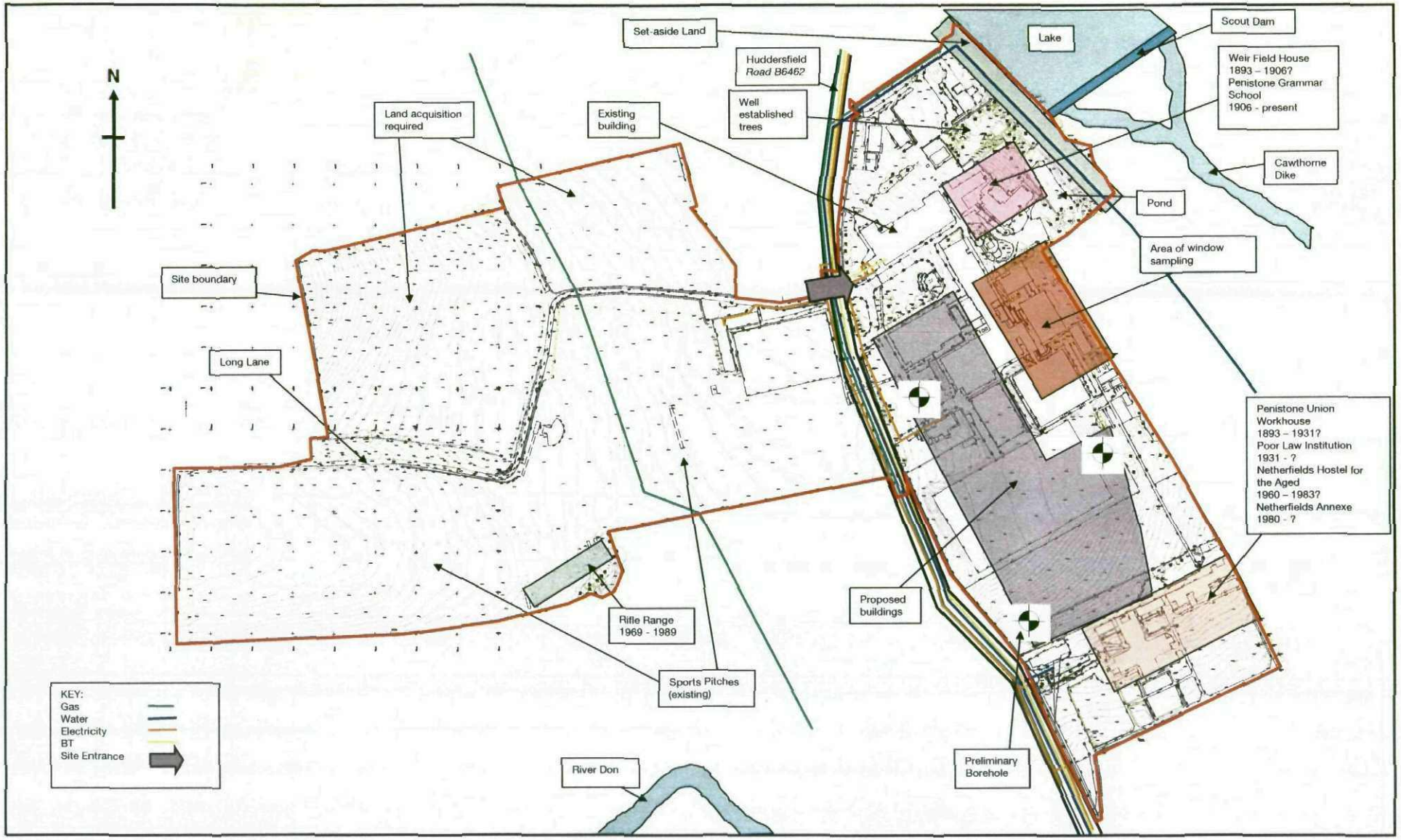
Contamination: End Use	Elevated concentrations of petrochemicals and asbestos identified along the central eastern boundary. GEL WS 01, 03, 06 (asbestos) and GEL WS 03, 04, 07. CC Geotechnical TP7 and 10 (petrochemicals).			
Contamination: Waste Disposal	CC Geotechnical report identifies elevated concentrations of petrochemicals along the central eastern boundary. GEL also identified asbestos in this area – this area is likely to be **hazardous waste**. GEL – 8 samples tested (excluding identified asbestos): 2 results identify inert waste. 6 results identify non- hazardous waste.			
Remediation Strategy	Assumed that existing situation is environmentally acceptable but that a layer of clean cover will be applied for human health (end users). Some soil removal may be required in the central eastern area dependent upon final end use and finished levels.			
Hot Spots	Localized hot spots should be anticipated across the site (in particular along the central eastern boundary) and associated cost for removal or capping should be anticipated (dependent on finished levels and end use).			
Clean Cover	Assume 0.50 m build up of clean material is included in surface coverage. Additional clean cover may be required to areas of soft landscaping.			
Japanese Knotweed	None identified.			
Ground Gas	Further monitoring necessary – in areas of proposed buildings CS1 but allow for gas membrane.			
Radon	Site in an area where less than 1% of homes above action level.	No	Radon Protection Requirement	Basic (Sealed DPM)
Pollution Incidents	Pollution incidents within 500 m radius.	7 No.	Considered risk	Low
Landfill activity	*Landfill activity within 500 m radius.*	*8 No.*	*Considered risk*	Low
Trade Directories	Trade Entries recorded in area (250 m).	5 No.	Considered risk	Low
GEOTECHNICAL CONSIDERATIONS				
Site Clearance	Phased construction - Currently a combination of green space and existing schools buildings/hardstanding. Undesirable demolition waste and green waste to be removed from site. *Topsoil strip (based on 300mm across site = 12,611 m^3 – topsoil may not be re-useable for sports pitches (to be reviewed).* Desirable demolition waste may be used as fill material (to be reviewed).			
Cut and fill	Initial earthworks calculations based on levels provided by Landscape Architect. Cut = 45,565 m^3 (bulked cut = 50,122 m^3) and fill = 32,461 m^3 fill. Overall excess of 17,661 m^3. Please refer to relevant drawings. (No allowance for bulking and removal or poor quality material). Further modelling to be undertaken to achieve balance.			
Groundwater	*No groundwater entries noted during drilling.* Monitoring data suggests that groundwater is between 6.50 and 16.70 m BGL.			
Slopes	Slope stability can be categorized as low risk. Site profiles will need to be appropriately designed. Consideration of profile beyond site boundaries required due to hillside setting.			
Likely Foundations	Shallow foundations envisaged - assume bearing capacity in unweathered rock of 250 kN/m^2.			
Retaining Walls	Split level building likely to require retaining walls.			
Floor Slabs	Ground bearing slabs envisaged.			
OTHER CONSIDERATIONS				
Site Access	One access from Huddersfield Road – highway alterations subject to approvals.			
Foul Drainage	Analysis ongoing. To be advised.			
Surface Water	*Analysis ongoing. To be advised.*			
Made Ground	Present on site as previously identified. Area of petrochemical and asbestos contamination.			
Peat/Organic Soil	Not identified.			
Infilled Ponds	None identified.			
Existing Buildings / Obstructions	Existing school buildings and associated hardstanding.			
Buried Culverts	None encountered.			
OH Power Lines	None recorded.			
Ecological Issues	None recorded.			

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Project name: Barnsley BSF – Penistone Grammar School			
Project title: ITN GE Data Summary			
Figure title: Penistone Grammar School – Site Constraints and previous GI			
Scale: NTS	Date: December 2008	Job No. 022413	

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Ground Engineering



Project name: Barnsley BSF – Penistone Grammar School			
Project title: ITN GE Data Summary			
Figure title: Penistone Grammar School – GEL 2007 GI Location Plan			
Scale: NTS	Date: December 2008	Job No. 022413	

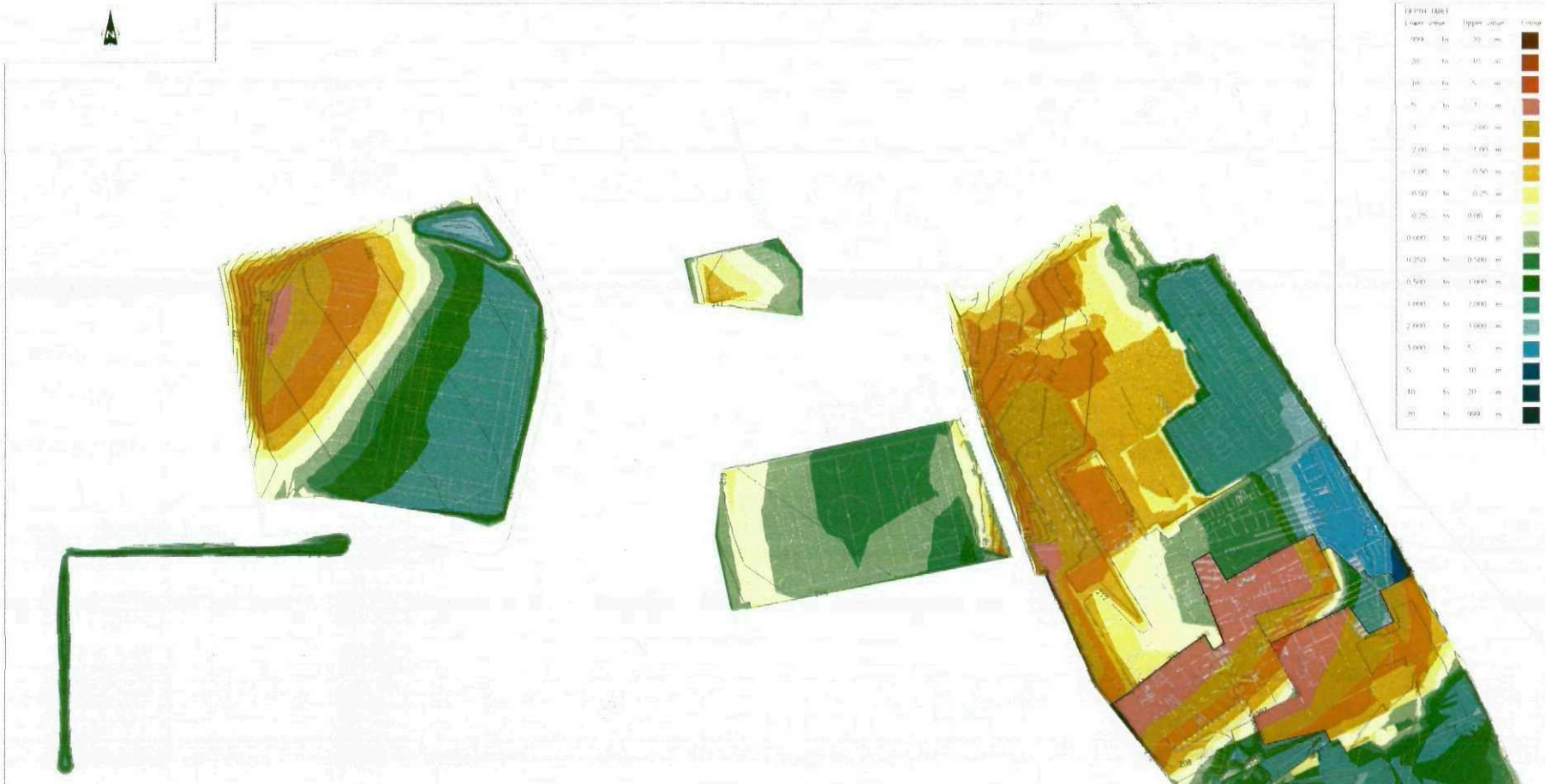
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Bulk Earthworks - Isopachyte Plan With Volume Depths And Proposed Formation Level Contours

Barnsley Partnership For Learning

BP4L_PEN_BUR_DR_98_BW_LL_00001 Scale 1:1000@A1 July 2008

PENISTONE



Site Conditions	
Construction depths used in Model:	
Main Building =	500 mm
Carparks & Vehicle Access =	500 mm
MUGA and Synthetic Turf Pitch =	400 mm
Pedestrian Access =	180 mm
Paved Areas =	180 mm
Pitch =	n/a mm
Landscaping =	n/a mm
Earthworks:	
Bulked Cut to place Fill Factor =	1.1

Bulk Earthworks	
Volume between Stripped surface to Formation level	
Banked Cut =	45565 m³
Bulked Cut =	50122 m³
Banked Fill =	32461 m³
Bulked Cut to place Fill Factor =	1.1
Balance Earthworks Volume = (Excess Earthworks Material)	**17661 m³**
Total Topsoil Required Area =	29117 m²
Total Topsoil Required Volume =	8736 m³
Total stockpiled topsoil (from CEW001) =	12611 m³
Total Excess topsoil =	**3875 m³**

Site Stripping	
Site Plan Area =	137800 m²
Topoil Strip Area =	42035 m²
Topsoil Depth =	0.3 m
Total Topsoil Volume (Stockpiled) =	**12611 m³**