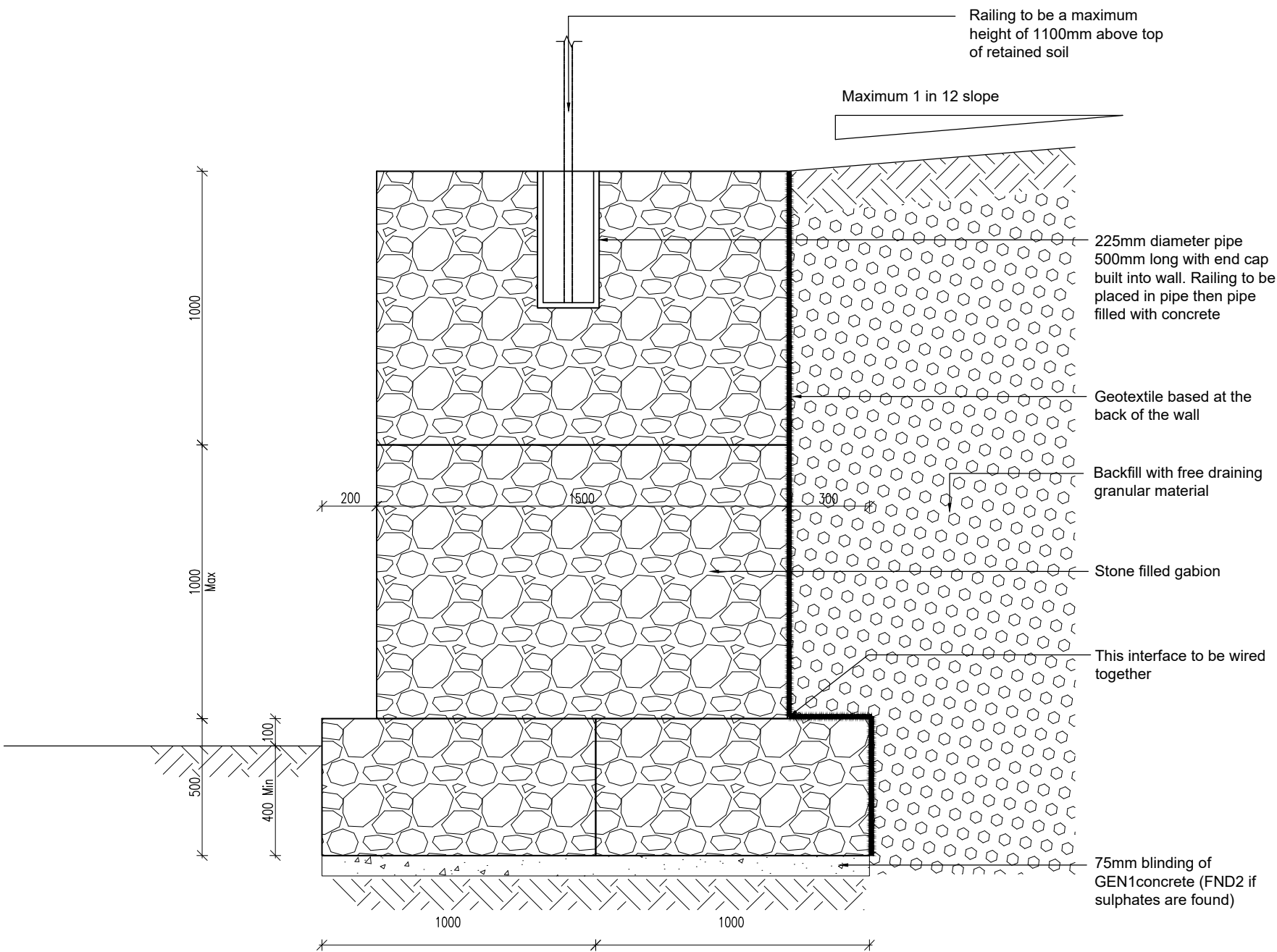




1800-2100mm Retained with Railing

(1:20)

Notes:

1. The gabion shall be manufactured from 3mm diameter steel wire to BS 1052. The wires shall be formed into a bi-axial mesh, with square openings of nominal dimension of 76.2mm on the grid, by electronically welding the cross wires at every intersection. Wires shall be galvanised to BSEN 10244-2:2001 and additionally coated with fusion bonded green PVC, nominally 0.25mm radial thickness after welding. BBA Certification is required for the product for up to 120 year life expectancy.
2. Assembled gabions should be placed in position prior to filling and secured to adjoining gabions by lacing with wire specified below. Internal lacing of each basket from front face through to rear face is required at 350mm centres vertically and horizontally. Lacing of lids should be carried out immediately after filling.
3. All joints and connections of gabion units are to be formed using continuous lacing wires and/or high tensile stainless steel "C" rings from 3.0mm wire, attached with a pneumatic assembly tool. PVC coated lacing wire shall be 2.2mm core diameter and zinc coated to BS 443.
4. Filling stone should hard, durable quarried material, clean and free from contamination. It should confirm to BS 5390 for hardness, crushing strength & resistance to weathering. Stone fill to be selected uniformly graded, not less than 100mm, or larger than 150mm, 90% of fill to be retained on a 100mm ring. The fill should be placed in layers not exceeding 300mm and hand rammed to achieve a dense mass. Gabions should be overfilled by 25mm-50mm to allow for settlement. Front face to be hand placed to achieve a fair face.
5. All mesh edges shall be reinforced with a galvanised PVC coated selvedge wire of 3.4mm core diameter, overall 4.4mm diameter.
6. This retaining wall is designed to be founded on natural ground with a safe bearing capacity of at least 100 kN/m². Bearing pressure on site to be checked on site prior to placing of concrete. The Contractor/Site Agent shall bring to the immediate attention of the Project Engineer any unnatural or unsuitable ground conditions.
7. This retaining wall is suitable for railing up to 2000mm in height cast into 225mm diameter pipe sections incorporated into the top of the wall.
8. A non-woven permeable geotextile, Terram 1500 or equivalent, should be placed directly into the rear face of the gabion wall with a minimum overlap of 300mm.
9. Vertical joints perpendicular to the line of the wall to be staggered where possible.
10. This retaining wall has been designed for a maximum surcharge of 5 kN/m².
11. This design will not be applicable in the vicinity of trees, steeply sloping sites, on sites affected by mining subsidence, or where the ground strength reduces with depth.
12. If the design criteria set out on this drawing do not comply with the site conditions the project Structural Engineer should be consulted.
13. Design suitable for private gardens, private drives and shared drives only. Not suitable for retaining public highway.
14. The design is based on the existing ground conditions consisting of medium dense sand or gravel (SPT N value not less than 10) or firm to stiff clay with a shear strength of at least 50 kN/m². Depth of soil behind wall is not to exceed 200mm.
15. Railings have been designed for a design wind load of 1kN/m² which relates to inland and sheltered locations below 150m altitude and away from escarpments. For sites or locations more onerous such as open country, coastal locations or higher altitudes consult the engineers.

Rev	Details	Date	By	Chk
DATE	13.02.2020	DRAWN	BH	
SCALE	1:20 @ A3	CHK	H51	
STANDARD DETAILS 5000 SERIES				
Retaining Gabion with Railing Loading 1.8m to 2.1m Retained				
Dwg No	SD/5208	Rev	--	
Keepmoat, The Waterfront, Lakeside Boulevard, Doncaster, DN4 5PL. Tel: 01302 347605 www.keepmoat.com				
				