TABLE B4 DESIGN ASSESMENT CHECK LIST

HIGH GRANGE DEVELOPMENTS – LAND OFF WHITEHAVEN ROAD, CLEATOR MOOR

SUDS Location – Off Keekle Mount, Cleator Moor CA25 5FD (OS 300831-516281)

	SUDS MANUAL	Y	N	SUMMERY OF DETAILS	COMMENTS
ls surface water used as a resource, where appropriate?	3.2.2		N		
Does the design meet the following discharge hierarchy (with acceptable justification for moving between levels): 1 infiltration to the maximum extent that is practical - where it is safe and acceptable to do so. 2 discharge to surface waters 3 discharge to surface waler sewer 4 discharge to combined server (last resort)	3.2.3			Discharge to upsized surface water sewer which discharges directly to river	
If infiltration is used; confirm that an acceptable infiltration assessment has been undertaken and submitted			N		
lf discharge to a sewerage asset is proposed, has evidence been provided that the design criteria have been agreed with the sewerage undertaker and that an appropriate connection detail has been agreed?		Y		Details submitted to LLFA to remove condition	
Has runoff and flooding from all sources (both on and off site) been considered and taken into account in the design?	3.3.3		N	The site is stand-a-lone	
Does the scheme design demonstrate on-site retention of approximately the first 5mm of runoff from impermeable surfaces for most events? How is interception to be delivered eg infiltration, green roofs, permeable pavements, vegetated surfaces, bespoke design - provide details)?	3.3.1 4.3.1		N	All Sw connections are trapped, water buts provided to all properties	
Does the design demonstrate adequate control of the "l year' critical duration site event?	3.2.3 3.3.2	Y			

Does the design demonstrate adequate control of the 100 year, critical duration site event (including urban creep and climate change allowances)?	3.2.7 3.3.2 3.2.3	Y			
Does the design demonstrate adequate control of the 100 year, 6 hour runoff volume from the site?	3.2.3 3.3.1	Y			
Are any natural hydrological features on the site adequately protected by the design?	3.2.4		N	No natural hydrological features	
Are all SuDS components outside any areas of significant flood risk? If not. provide justification and evidence that the risks lo system performance are acceptable	3.2.5	Y		The nearest river is almost 10m below the level of the basin. Ground water is more Than 1m below the basin	
ls pumping a requirement {or the operation of the system? lf yes, have all other possible alternatives been considered appropriately?	3.2.5		N		
Have infiltration rates, hydraulic gradients and any downstream constraints been evaluated to ensure that the components will drain down within a suitable timescale?	3.2.5	Y		The receiving SW sewer has 100yr capacity. The critical storm duration is 360min	
Are flows up to the agreed standard of service event (including allowances for urban creep and climate change) fully conveyed within the drainage system?	3.2.6 3.2.7 3.3.3	Y		Minor site flooding for the 15min 100yr event in one length of sewer	
Are flows up to the agreed exceedance standard of service event (including allowances for urban creep and climate change) contained OR stored on SITE within safe exceedance storage areas and flow paths? Are these areas and flow paths protected from future development?	3.2.6 3.2.7 3.3.3	Y			
Does the design include an appropriate treatment strategy to ensure that: . sediment is happed and retained on site in accessible and maintainable. areas? . suitable SuDS components have been provided in series before Discharge that provide acceptable treatment, taking account of proposed site land use and the status of all receiving water bodies?	4.2.2 4.3.2			Yes, basin has a silt forebay All surface water connections have traps. Water butts to all properties All climate change allowed for. Minor spare capacity in basin up to 1m deep	

. Has consideration been given to the potential implications of climate change on the capability of the SuDs components to provide the required treatment?					
Where the drainage system serves more than one property, is public space used and integrated with the drainage system in an appropriate and beneficial way?	5.2.2	Y		The basin and surround are designated POS by The planning dept.	
Does the proposed scheme enhance the visual character of the development?	5.2.3	Y			
Are the proposed component safe for any proposed amenity use? Has a health and safety risk assessment been undertaken?	5.2.4 Chap 36 Check B3		N	The max 100yr water depth is 1m within the basin, wetted banks are 1:5	
Have opportunities been taken to use the drainage system to enhance development resilience lo future climate change scenarios?	5.2.5	Y		The basin does have further capacity	
ls the structure and function of the drainage system clear and obvious to the local community?	5.2.6	Y		Signs will be erected	
Do the design proposals include sufficient provision for community engagement and awareness raising?	5.2.7	Y		The basin will offer visual engagement	
Will the drainage system support and protect natural local habitats and species?	6.2.1	Y		Meadow grass and local plant species	
Will the drainage system contribute to the delivery of local biodiversity objectives?	6.2.2	Y			
Does the design support local (and wider where possible) habitat connectivity?	6.2.3	Y		The basin is adjacent fields to the southwest	
Does the design promote the creation of diverse, self-sustaining and resilient ecosystems?	6.2.4	Y			
Has an acceptable construction method statement been submitted and approved?	Chap 31		N		
Are the design features sufficiently durable to ensure structural integrityover the system design life, with reasonable maintenance requirements?	Chap 32	Y			
Are the operating and maintenance requirements of the drainage system adequately defined?	Chap 32	Y			

ls operation and maintenance achievable at an acceptable cost to the adopting body (including any pumping requirements)?	Chap 35	Y			
Has an acceptable Maintenance Plan been submitted and approved?	Chap 32	Y			
Are the proposed components safe to construct, maintain and operate? Has a health and safety risk assessment been undertaken?	Chap 36 Check B3		N		