

**BdR Civil & Structural Engineering Limited
Environmental Impact Review**



SECTION 1 – Company Operations

Review Date: July 2007			Next Review Date: July 2008	
Environmental Impacts	Standards Required	Standard In Place	Plan of Action	Target Date
Purchasing Office Equipment	To check energy consumption levels for IT / Office electrical equipment before purchasing.	YES	Whenever possible staff shall take into consideration the consumption energy levels of all equipment when selecting new equipment for purchase.	Ongoing
Office Equipment	When not in use and overnight, all computer equipment and printers must be switched off and not left in standby mode.	NO	Put up notice next to door to remind the last to leave to make sure that all computers and printers have been switched off.	August 2007
	Consideration must be given to try and repair any faulty computer / equipment before a decision is made to purchase new.	YES	The Office Manager is to check the status of redundant equipment before authorizing the purchase of new equipment	Ongoing
Waste Minimisation	Printing of emails and company documents should be kept to a minimum.	YES	Add appeal to BdR e-mail template to consider the environment before printing the e-mail. Issue documents electronically where practicable.	Ongoing
	Any papers/documents printed but not required should be placed in the appropriate trays by the printers/photocopiers for future scrap/note pad use.	YES IN HADLOW	Crowborough and St Leonards to implement waste tray for unused paper.	August 2007
	Minimise unwanted faxes	YES	Subscribe to fax preference mail service	Ongoing
	Minimise unwanted post	YES	Contact senders of junk mail to remove the company from the mailing list	Ongoing
	Minimise waste batteries	YES	All staff to use rechargeable batteries. Admin to maintain stock of charged batteries.	Ongoing

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Environmental Impacts	Standards Required	Standard In Place	Plan of Action	Target Date
Waste Disposal	Disposal of computers and other electrical equipment must be disposed of correctly and in an environmentally sound way.	YES	The Office Manager is to maintain a list of companies who will dispose of equipment in this way.	Ongoing
	Paper waste to be recycled	NO	Arrangements to be put in hand to have waste paper collected	Nov 2007
Lighting	Low energy light bulbs should be used in all office areas wherever possible.	YES	When light bulbs need replacing they must be replaced with low energy light bulbs	Ongoing
Office Stationery	Whenever possible to order stationery from local companies to reduce the use of vehicle/fuel/etc.	YES	Use Mediatek	Ongoing
	Try to ensure that paper used within the company is from recycled sources.	NO	Mediatek to source recycled paper for office use	November 2007
	Used printer ink cartridges are to be recycled	YES	Follow the instructions inside the packaging or return cartridges to the stationery supplier	Ongoing
Travelling	Where practicable, journeys to site / meetings should be made by public transport.	YES	For journeys over 20 miles staff should consider the practicability of using public transport as opposed to driving.	Ongoing
	Staff should be encouraged to consider the environmental impacts of their journey to work.	YES	Staff using the car parking facilities provided by the company should take care and consideration of others with regard to car fumes, noise and vehicle alarms	Ongoing

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Environmental Impacts	Standards Required	Standard In Place	Plan of Action	Target Date
Building, Insulation and Heating	Minimise energy consumption on heating	YES	Heating must be turned off in all unused offices and central heating must be timed to turn off after office hours	Ongoing
		YES	Windows and doors should be kept closed in winter to avoid having to use heaters unnecessarily.	Ongoing

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SECTION 2 – Design

Every scheme has different opportunities to reduce environmental impact through good design. It is the responsibility of every designer to consider the environmental impacts inherent in their design during the construction, operation, maintenance and demolition of the building, road, sewer or other structure. The following list is not exhaustive and should be expanded by the designer as appropriate.

Environmental Impacts	Design Considerations	Example Actions	Comments
Waste Minimisation	Excavated material	Balance cut and fill to minimise waste and minimise imported material	The hierarchy which should be observed when considering use of materials is as follows: Reused materials Recycled materials Renewable resources Non-renewable resources Environmentally damaging materials (e.g. fossil fuel derivatives, production requiring high energy, production releasing greenhouse gases etc) Where the higher categories should be first choice and lower categories should be avoided where possible
	Unsuitable sub-grade	Consider lime stabilisation to keep unsuitable material on site and remove the need for importing capping layer material	
	Re-use material already on site wherever possible	Crush concrete on site.	
Material selection	Use renewable sources	Specify timber where possible, but only from sustainable sources. Do not specify tropical hardwoods.	
	Reduce use of non-renewable resources	Where possible specify building products that use recycled materials	
	Transport	Specify local sources for materials wherever possible to minimise the effect of transporting them	

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Environmental Impacts	Design Considerations	Example Actions	Comments
Surface Water Drainage	<p>Flooding</p> <p>Pollution Control</p>	<p>Attenuate surface water run off to minimise the risk of flooding, incorporate SUDS wherever possible.</p> <p>Ensure design takes into account the presence of oil, fuel, grease and antifreeze in runoff from trafficked areas</p>	
Flood Risk Assessments	Sustainable development	A flood risk assessment provides an opportunity to influence design decisions towards a more sustainable development with regard to flood risk to and from the development	
Natural Habitat	Trees	<p>Ensure existing trees are preserved wherever possible</p> <p>Avoid nesting season, in accordance with legislation</p> <p>Use no dig methods to minimise damage to roots if construction in close proximity to trees is unavoidable</p>	
Natural Habitat	Water courses, ponds and wetlands	<p>Wherever possible natural habitats should be preserved and the natural ecosystem maintained.</p> <p>Avoid un-natural fluctuations in water level</p> <p>Ensure that the level of natural run-off to existing water courses, ponds and wetlands is maintained.</p>	

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Environmental Impacts	Design Considerations	Example Actions	Comments
Transport Assessments and Green Travel Plans	Sustainable Transport	Transport assessments provide an opportunity to influence design decisions in favour of sustainable transport	
Car Parking	Provision Materials	Car parking provision should be minimised to encourage more sustainable forms of transport Specify recycled aggregate where practicable Consider grass reinforcement Consider porous paving	
Contaminated Land	Dealing with Contamination Construction in contaminated land	Wherever possible contamination should be neutralised at source to limit the waste to be removed from site. Use raft or piled foundations to minimise the excavation in contaminated ground.	
Hazardous Substances	Existing New	Ensure contractor has an environmentally sensitive strategy for disposal of any hazardous material which may arise from demolition works Avoid specifying any material, the use of which may be hazardous to health or the environment during construction or demolition	

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Environmental Impacts	Design Considerations	Example Actions	Comments
Heating, lighting, insulation	Energy efficiency	Although internal specification is predominantly the role of the architect, the engineering design should take into account the need for energy efficiency wherever possible.	