

CODE FOR SUSTAINABLE HOMES - NOV 2010

THE ENVIRONMENTAL RATING FOR HOMES

PRELIMINARY ASSESSMENT

INCLUDING ANY ASSUMPTIONS AND BASIS FOR DATA

28 KINGS MEWS, WC1N 2JB FOR Mr & Mrs MacDonagh

Issue Date:

17/08/2012

Code Registration Number:

BRE-00018854-DS-001-00

Abba Energy Ltd

FF10 BASE STATION, SAGA CENTRE, 326 KENSAL ROAD, LONDON W10 5BZ

INTRODUCTION

This document was commissioned by Louise Turley of FT Architects and written by Julian Williams of Abba Energy Ltd. There are two units being assessed on this site.

This report reviews the current standing of this scheme, employing verbal and available design information. Sufficient evidence is not yet available to enable an Interim Stage assessment to be undertaken.

Following this report (and where issued by Abba Energy), it will be the project team's responsibility to ensure that the drawings and specifications follow and clearly state the requirements for the relevant Code for Sustainable Homes issues. Information should then be submitted to the Assessor for the Final report to be made. Please note that without the evidence the assessor cannot award the credits. Reference should be made to Code November 2010 Technical Guide.

Project name	28 KINGS MEWS, WC1N 2JB Code Vendon	Nov-10
Client	Mr & Mrs MacDonagh Target Rating	Level 3
Assessment Type	PRELIMINARY Preliminary Rating Achieved	Level 3

PLANNING REQUIREMENTS

There is a Planning requirement to achieve a rating of Level 3. In detail this requirement, under Camden's Policy CPG3 Sustainability, states that at least 50% of the available marks under each Category must be achieved for EACH of the following Categories: Energy, Water, Materials.

CODE CATEGORY	AVAILABLE MAXIMUM CREDITS	PROPOSED CREDITS	50% COMPLIANCE ?
ENERGY	31	16	YES
WATER	6	4	YES
MATERIALS	24	12	YES

PRELIMINARY ASSESSMENT

The following table includes the basis of data input, sources and assumptions. Each issue is 'weighted' differently, to reflect considered importance, according to the following equivalent percentage scores per credit point; Energy & CO2 Emissions (Ene) = 1.17%; Water (Wat) = 1.50%; Materials (Mat) = 0.30%; Surface Water Runoff (Sur) = 0.55%; Waste (Was) = 0.80%; Pollution (Pol) = 0.70%; Health & Wellbeing (Hea) = 1.17%; Management (Man) = 1.11%; Ecology (Eco) = 1.33%. Where credits have been awarded, it is assumed that the criteria (detailed within the relevant version of the Code Technical Guide) will be met.

Please note - Architect = FT Architects, Code Consultant = Abba Energy.

References to 'dwelling' mean a unit of accommodation, house or flat.

ESTIMATED TOTAL CREDITS BEFORE 'WEIGHTING' FOR 'CATEGORY ISSUES'	67
TARGET PERCENTAGE REQUIRED	57.00%
ESTIMATED TOTAL PERCENTAGE	63.71%
ESTIMATED CODE RATING	Level 3

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Results

Development Name: 28 KINGS NEWS, WC1N 238

Dwelling Description: Two new-build flats within an existing cosmopolitan terrace

Name of Company: Abba Energy Ltd.
Code Assessor's Name: Julian Williams

Company Address:

326 Kensal Road, London, W10 582

Notes/Comments:

For Planning 17/03/2012

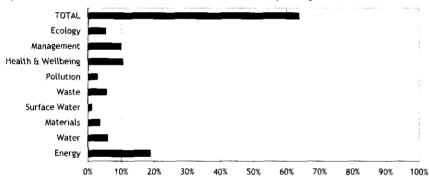
PREDICTED RATING - CODE LEVEL: 3

Mandatory Requirements: All Levels

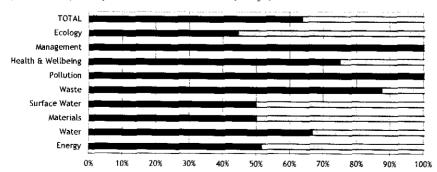
% Points: 63.71% - Code Level: 3
8reakdown: Energy - Code Level: 3

Energy - Code Level: 3
Water - Code Level: 4

Graph 1: Predicted contribution of individual sections to the total score and percentage of total achievable score



Graph 2: Predicted percentage of credits achievable. Total and by Category



NOTE: The rating obtained by using this Pre Assessment Estimator is for guidance only. Predicted ratings may differ from those obtained through a formal assessment, which must be carried out by a licensed Code assessor.

	1 ENERGY		Overall Level: 3	Overall Score			Evidence Required
	on Credits Pred			Credits	Level	Assumptions Made	(The below cells can be formatted by assessors if
		Score: 18,78 points		16.0 of 31 Credits	Level 3		required.)
	1	rarded based on the percention Rate (DER) over the Targ				Code 3 compliance will be exceeded.	
L		ig SAP 2009. Minimum stand					
		ode energy calculator can			ļ		
	predicted score	2,					
	~	ar a d					
	Enter the pre	aicted score ———————————		,	ļ		
	Wh:	at is the predicted number of	credits? 2.0	2.0 of 10 Credits	Level 3		
	OR Are	zero net CO ₂ emissions achie	eved?				
]	J]		
	Credits are	awarded based on the F	abric Energy Efficiency			A good energy efficiency strategy will ensure	
Fabric Energy		f the dwelling. Minimum stan				compliance above average for the FEE.	
Efficiency	I .	Code energy calculator car	n be used to calculate a]	•]	
	predicted score						
	Enter the pre	dicted score					
]	Apa	rtments, Mid-terrace	•]	•		
	OR End	terrace, Semi and Detached	0	4.0 of 9 Credits	-		
	OR Sta	gered Mid terrace	0]			
j]] wh	at is the predicted number of	credits? 4.0	ļ	}		
		_					
Ene 3	Credits are a	warded where a correctly	specified Energy Display			Will fully comply.	
Energy	,	led monitoring electricity ar	nd/or primary heating fuel		,		1
Display Devices	consumption.						
	Select wheth	er the EDD monitors electricity and/or	r fuet ———				
]	Nor	e Specified	0]	}		
	Prie	nary Heating only	0				
	OR Ele	tricity only	0	2 of 2 Credits			
	OR Ele	tricity and primary heating f	fuel 💿	J]		

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Issue		Credits	Level	Assumptions Made	Evidence Required
	One credit is awarded for the provision of either internal or external secure drying space with posts and footings or fixings capable of holding 4m+ of drying line for 1-2 bed dwellings and 6m+ for dwellings with 3 bedrooms or greater. Will drying space meeting the criteria be provided? Yes OR No	1 of 1 Credits	-	Will comply.	
Energy Labelled White Goods	Credits are awarded where each dwelling is provided with either information about the EU Energy Labelling Scheme, White Goods with ratings ranging from A+ to B or a combination of the previous according to the technical guide. Select the appropriate option below EU Energy labelling information only A+ rated appliances A+, A and B rated appliances Combination of compliant rated white goods with EU Energy Labelling Scheme		-	Will fully comply.	
External	Credits are awarded based on the provision of space lighting* with dedicated energy efficient fittings and security lighting fittings with appropriate control gear Space Lighting None provided OR Non Code compliant lighting OR Code compliant lighting None provided OR Non Code compliant lighting OR Code compliant lighting and controls Dual lamp luminaires Compliant with both above criteria	2 of 2 Credits	-	Will fully comply.	

Issue		Credits	Level	Assumptions Made	Evidence Required
Ene 7 Low or Zero Carbon Technologies	Credits are awarded where there is a 10% or 15% reduction in CO ₂ emissions resulting from the use of low or zero carbon technologies. Select % contribution made by low or zero carbon technologies Less than 10% of demand			This aspect is under examination but at present is estimated not to comply.	
	OR 10% of demand or greater OOR 15% of demand or greater	0 of 2 Credits	-		
Ene 8 Cycle Storage	Credits are awarded where adequate, safe, secure and weather proof cycle storage is provided according to the Code requirements. Fill in the development details below Number of bedrooms; Number of cycles stored per dwelling* If you have storage for 1 cycle per two dwellings insert 0.5 in number of cycles stored per dwelling	2 of 2 Credits		Will fully comply.	
Ene 9 Home Office	A credit is awarded for the provision of a home office. The location, space and services provided must meet the Code requirements. Will there be provision for a Home Office? Yes OR No	1 of 1 Credits	-	Will comply by design of daylighting and specification of space & services.	

% of Sect	ly 2 WATER for Credits Predicted; 66.66 tion to Overall Score; 6.00 points	Overall Level: 3	Overall Score Credits 4 of 6 Credits	63.74 Level Level 4	Assumptions Made	Evidence Required (The below cells can be formatted by assessors if required.)
Wat 1 Indoor Wate Use	Credits are awarded based on the p	the Code Water Calculator le level apply. y Requirement erson/ day on/ day		Level 3 AND Level 4	Will comply to Code Level 3 standards.	
Wat 2 External Water Use	A credit is awarded where a complicollecting rainwater for external irrioutdoor space is provided the credit of Select the scenario that applies No internal or communal of OR Outdoor space with collections of the collection of	igation purposes. Where no an be achieved by default. outdoor space Otion system		-	Will comply.	

	' 3 MATERIALS	Overall Level: 3	Overall Score			Evidence Required
	on Credits Predicted: 50.00 on to Overall Score: 3.60 points		Credits 12 of 24 Credits	Level Ali Levels	Assumptions Made	(The below cells can be formatted by assessors if required.)
Environm- ental Impact of Materials	Mandatory Requirement: At least the elements must achieve a Green Guing Tradable Credits: Points are awarde Green Guide Rating of the specific Calculator can be used to predict a p	ide 2008 Rating of A+ to 0, ed on a scale based on the cations. The Code Materials			12 credits awarded, based upon 12.78 points as scored against the Green Guide for Specifications. As estimated at this early stage against proposed construction materials.	
	Mandatory Requirement Will the mandatory requir Enter the predicted score What is the predicted num		12 of 15 Credits	All Levels		
Sourcing of Materials -	Credits are awarded where material elements are responsibly sourced. The can be used to predict a potential so	is used in the basic building	41		Estimated as not compliant at this stage.	
Basic Building Elements	Enter the predicted Score What is the predicted num	nber of credits?	0 of 6 Credits			
Mat 3 Responsible Sourcing of Materials - Finishing	Credits are awarded where mater elements are responsibly sourced. The can be used to predict a potential source. Fenter the predicted Score	ne Code Materials Calculator	'I		Estimated as not compliant at this stage.	
Elements	What is the predicted num	nber of credits?	0 of 3 Credits			

% of Section	4 SURFACE WATER RUN-OFF Overall Level: 3 in Gredits Predicted: 50.00% in to Overall Score: 1, 10 points	Overall Score Gredits 2 of 4 Credits	63.7/i Level All Levels	Assumptions Made	Evidence Required (The below cells can be formatted by assessors if required.)
Sur 1 Management of Surface Water Run-off from developments	Mandatory Requirement: Peak rate of run-off into watercourses is no greater for the developed site than it was for the predevelopment site and that the additional predicted volume of rainwater discharge caused by the new development is entirely reduced as far as possible in accordance with the assessment criteria. Desiging the drainage system to be able to cope with local drainage system failure. Tradable Credits: Where SUDS are used to improve water quality of the rainwater discharged or for protecting the quality of the receiving waters.			The mandatory aspect will be complied with. The extra criteria are under consideration by the Project Team.	
	Mandatory Requirement Will the mandatory requirement be met? Select the appropriate option No SUDS No runoff into watercourses for the first 5 mm of rainfall Runoff from hard surfaces will receive an appropriate level of treatment	0 of 2 Credits	All Levels		
Sur 2 Flood Risk	Credits are awarded where developments are located in areas of low flood risk or where in areas of medium or high flood risk appropriate measures are taken to prevent damage to the property and its contents in accordance with the Code criteria in the technical guide. Select the annual probability of flooding (from PPS25*) Zone 1 - Low OR Zone 2 - Medium OR Zone 3 - High			The Environment Agency's Flood Risk website shows a Low Risk for this area. A full FRA, following PPS25 will be required to prove this, taking into account all of the normal potential sources of flooding. At present full compliance is anticipated.	The EA website shows flooding from rivers and the sea, but excludes flood sources such as groundwater, direct runoff from fields, or overflowing sewers.
	Select the apropriate option(s) Low risk of flooding from FRA** All measures of protection are demonstrated in FRA Ground floor level and access routes are 600 mm above design flood level	2 of 2 Credits			
	* Planning Policy Statement 25 - Planning and Flood Risk ** FRA - Flood Risk Assessment	<u></u>			

CATEGORY 5 WASTE Overall Level: 3 % of Section Credits Predicted: 87,00% Contribution to Overall Score: 5,60 points	Overall Score Credits 7 of 8 Credits	63.71 Level All Levels	Assumptions Made	Evidence Required (The below cells can be formatted by assessors if required.)
Was 1 Mandatory Requirement: The space provided for waste storage Storage of non-should be sized to hold the larger of either all external recyclable containers provided by the Local Authority or the min capacity calculated from BS 5906. Tradable Credits are awarded for adequate internal and/ or external recycling facilities.			Will fully comply. Current refuse collection regime includes collection of bags left on the street.	
Mandatory Requirement Will the minimum space be provided and be accessible to disabled people?				
Internal Recyclable household waste storage Where there is no external recyclable waste				
storage and no Local Authority collection scheme				
internal storage (capacity 60 litres)	0 of 2 Credits			
Local Authority collection Scheme				
Post Collection sorting Internal storage (capacity 30 litres) Pre-collection sorting Internal storage (3 separate bins, capacity 30 litres)	4 of 4 Credits	All Levels		
External Storage, no Local Authority collection scheme		[
3 separate internal storage bins (capacity 30 litres) AND				
Houses External Storage(capacity 180 litres)	0 of 4 Credits			
Private recycling operator 3 or greater types of waste collected				

Issue		Credits	Level	Assumptions Made	Evidence Required
Was Z Construction Site Waste Management	A credit is awarded where a compliant SWMP is provided with targets and procedures to minimise construction waste. Credits are available where the SWMP include procedures and commitments for diverting either 50% or 85% of waste generated from landfill.			Will partially comply,	
	SWMP details Does the SWMP include: + No SWMP • SWMP with targets and procedures to minimise waste? O				
	+ SWMP with procedures to divert 85% of waste + SWMP with procedures to divert 85% of waste	2 of 3 Credits			
Was 3 Composting	I W CLEGIC IS AMOUNTED MINELE HIGHWOOD HOUSE COMPOSEINE FACILICIES!			Compliance will use the Local Authority's collection regime of a 'kitchen caddy' in the kitchen and a large bin outside.	
 	No composting facilities ○ Individual composting facilities ○ OR Communal/ community composting*? ● Local Authority ☑ OR Private with management plan □	1 of 1 Credit			
	* including if an automated waste collection system is in place				

	6 POLLUTION		Overall Level: 3	Overall Score	63.71		Evidence Required
		cted; 100.00% core: 2.80 points		Credits 4 of 4 Credits	Løvel All Levels	Assumptions Made	(The below cells can be formatted by assessors if required.)
Pol 1 Global Warming Potential (GWP) of Insulants	substances (in less than 5. Select the ma All OR Son		VP of less than 5	1 of 1 Credits	-	Will comply.	
Pol 2 Nox Emissions	the operation of dwelling. Select the more of the mor		water energy	3 of 3 Credits		Will fully comply.	

% of Secti	Y 7 HEALTH & WELLBEING Overall Level: 3 on Credits Predicted: 75.00% ion to Overall Score: 10.50 points	Overall Score Credits 9 of 12 Credits	63.71 Level No level	Assumptions Made	Evidence Required (The below cells can be formatted by assessors if required.)
Hea 1 Daylighting	Credits are awarded for ensuring key rooms in the dwelling have high daylight factors (DF) and a view of the sky. Select the compliant areas Room Kitchen: Avg DF of at least 2% Living Room*: Avg DF of at least 1.5% Dinning Room*: Avg DF of at least 1.5% Study*: Avg DF of at least 1.5% Study*: Avg DF of at least 1.5% W 80% of working plane in all above rooms receive direct light from the sky? Any room used for Ene 9 Home Office must also achieve a min DF of 1.5%.	1 of 3 Credits	_	Will partially comply with the criteria under BS8206:Pt2.	
Hea 2 Sound Insulation	Credits are awarded where performance standards exceed those required in Building Regulations Part E. This can be demonstrated by carrying out pre-completion testing or through the use of Robust Details Limited. Select a type of property Detached Property Attached Properties: - Separating walls and floors only exist between non habitable spaces Select a performance standard Performance standard not sought Airborne: 3db higher; Impact: 3dB lower OR Airborne: 5db higher; Impact: 5dB lower OR Airborne: 8db higher; Impact: 8dB lower	3 of 4 Credits	-	Will partially comply.	

Issue		Credits	Level	Assumptions Made	Evidence Required
Hea 3 Private Space	A credit is awarded for the provision of an outdoor space that is at least partially private. The space must allow easy access to all occupants. Will a private/semi-private space be provided? Yes, private/semi-private space will be provided OR No private/semi-private space	1 of 1 Credits	-	External private terrace space available for the residents.	
Hea 4 Litetime Homes	Mandatory Requirement: Lifetime Homes is mandatory when a dwelling is to achieve Code Level 6. Tradable credits: Credits are awarded where the developer has implemented all of the principles of the Lifetime Homes scheme. Mandatory Requirement Dwelling to achieve Code Level 6? Lifetime Homes Compliance All Lifetime Homes criteria will be met OR Exemption from LTH criteria 2/3 applied Credit not sought	4 of 4 Credits	No level	Full compliance with all sixteen criteria of LTH, including level thresholds.	

% of Secti	/ 8 MANAGEMENT Overall Level: 3 on Credits Predicted: 100.00% on to Overall Score: 10.00 points	Overall Score Credits 9 of 9 Credits	63.74 Level Ali Levels	Assumptions Maide	Evidence Required (The below cells can be formatted by assessors if required.)
Man 1 Home User Guide	Credits are awarded where a simple guide is provided to eac dwelling covering information relevant to the 'non-technical home occupier, in accordance with the Code requirements. Tick the topics covered by the Home User Guide Operational Issues? Site and Surroundings? Is available in alternative formats?	1	-	Will fully comply.	
Man 2 Considerate Constructors Scheme	Credits are awarded where there is a commitment to comply with best practice site management principles using either the Considerate Constructors Scheme or an alternative locally/nationally recognised scheme.			Will fully comply.	
	No scheme used Considerate Constructors OR Best Practice: Score between 24 and 31.5 OR Best Practice: Score between 32 and 40 Alternative Scheme* OR Mandatory + 50% optional requirements OR Mandatory + 80% optional requirements	2 of 2 Credits	_		
	* In the first instance, contact a Code Service Provider if you are considering to use an alternative scheme.				
Man 3 Construction Site Impacts	Credits are awarded where there is a commitment and strategy to operate site management procedures on site as following: Tick the impacts that will be addressed Monitor, report and set targets, where applicable, for: CO2/ energy use from site activities CO2/ energy use from site related transport water consumption from site activities Adopt best practice policies in respect of: air (dust) pollution from site activities water (ground and surface) pollution on site 80% of site timber is reclaimed, re-used or responsibly sourced	2 of 2 Credits		Will fully comply.	

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Issue			Credits	Level	Assumptions Made	Evidence Required
Man 4					Compliance with SBD Section 2 will be met.	
	Credits are awarded for complying with Section 2					
	Security from Secured by Design - New Homes. An Ar	chitectural		1		
	Liaison Officer (ALO), or alternative, needs to be appo	inted early			[[1
	in the design process and their recommendations inco-	rporated.				
	-					
	Secured by Design Compliance					
	C 4% W-4		2 -6 2 6 49-			
	Credit not sought	Ŏ I	2 of 2 Credits	-	<u> </u>	
	OR Secured by Design Section 2 Compliance	•				
						

CATEGORY 9 ECOLOGY Overall Level: 3 % of Section Credits Predicted: 44.00% Contribution to Overall Score: 5,33 points	Overall Score Credits 4 of 9 Credits	63.71 Level All Levels	Assumptions Made	Evidence Required (The below cells can be formatted by assessors if required.)
Eco 1 Ecological Value of Site Select the appropriate option Credit not sought OR Land has ecological value OR Land has low/ insignificant ecological value* * Low ecological value is determined either a) by using Checklist Eco 1 across the whole development site; or b) where an suitably qualified ecologist is appointed and can confirm or c) produces an independent ecological report of the site, that the construction zone is of low/ insignificant value; AND the rest of the development site will remain undisturbed by the works.	1 of 1 Credits		No ecology on existing site, therefore credit awarded by default.	
Eco 2 Ecological Enhancement A credit is awarded where there is a commitment to enhance the ecological value of the development site. Tick the appropriate boxes Will a Suitably Qualified Ecologist be appointed to recommend appropriate ecological features? AND Will all key recommendations be adopted? AND 30% of other recommendations be adopted?	0 of 1 Credits	-	Engagement of an ecologist is not envisaged at present, but will be considered during the early detail design stage.	Site Survey by an SQE would be required prior to any demolition or construction work commencing on site.
Eco 3 Protection of Ecological Features A credit is awarded where there is a commitment to maintain and adequately protect features of ecological value. Type and protection of existing features Site with features of ecological value? OR Site of low ecological value (as Eco 1)? AND All* existing features potentially affected by site works are maintained and adequately protected? "If a suitably qualified ecologist has confirmed that a feature can be removed due to insignificant ecological value or poor health conditions, as long all the rest have been protected, then this box can be ticked.	1 of 1 Credits		No ecology on existing site, therefore credit awarded by default.	

Issue		Credits	Level	Assumptions Made	Evidence Required
ECO 4 Change of Ecological Value of Site	Credits are awarded where the change in ecological value has been calculated in accordance with the Code requirements and is calculated to be: Change in Ecological Value Major negative change: fewer than -9 Minor negative change: between -9 and -3 OR Neutral: between -3 and +3 Minor enhancement: between +3 and +9 Major enhancement: greater than 9	2 of 4 Credits	-	Low Ecological Value of existing site ensures at least a neutral score under this issue.	Site Survey by an SQE would be required prior to any demolition or construction work commencing on site.
Eca 5 Building Footprint	Credits are awarded where the ratio of combined floor area of all dwellings on the site to their footprint is: — Ratio of Net Internal Floor Area: Net Internal Ground Floor Area — Credit Not Sought OR Houses: 2.5:1 OR Flats: 3:1 OR Houses: 3:1 OR Flats: 4:1 OR Houses & Flats Weighted (2.5:1 & 3:1) OR Houses & Flats Weighted (3:1 & 4:1)	0 of 2 Credits		Compliance with criteria not possible with less than three full storeys.	

CONCLUSION

The Code for Sustainable Homes assesses the environmental quality of a development by considering the broad concerns of climate change, use of resources, pollution, and impacts on bio-diversity. These concerns are balanced against their need for a high quality internal environment. The Code Certification pass marks are 36% (Level 1), 48% (Level 2), 57% (Level 3), 68% (Level 4), 84% (Level 5) and 90% (Level 6). However, these can only be applied after all categories have been sub-totalled into their overall 'Issue' categories. At such time scores are 'weighted' and the final marks then calculated.

The Preliminary rating for this scheme is estimated as achieving the Target Rating if the issues awarded with credits are implemented in full. The current estimated score includes a safety margin of at least 5%.

To allow for a margin of safety, it is recommended that a score that is at least 5.0% in excess of the required target percentage is specified. This is because failure on any major issue may force unexpected or unwanted alternative strategies to achieve the desired rating and potentially additional expense.

The Project Team should check and confirm the data and assumptions contained within this report at the earliest opportunity. This will aid the timely and accurate submission of data for the Interim Code Assessment.

The project team should ensure that the drawings and specifications follow AND clearly state ALL the relevant Code issues for each of the applicable credits. Please note that for the Interim Stage Assessment, without the evidence, the assessor cannot award the credits for such certificated assessment. Once the relevant Code issues are integrated with the design, ALL compliant data (auditable proof, as described in the Code Technical Guide) should then be submitted to the Assessor for the Interim Stage report to be written. Once this report is finished it can be submitted to the BRE for QA and Interim Certification, as necessary. This is then followed by the Post Construction Stage report, which is compiled following site visit(s), receipt of "as built" evidence and ultimately, Post Construction Certification.

REFERENCES

This report was based on the following drawings along with written, verbal and web-based evidence:

FT Architects - various drawings	16/8/2012
FT Architects - Design & Access Statement	 June 2012

<END>