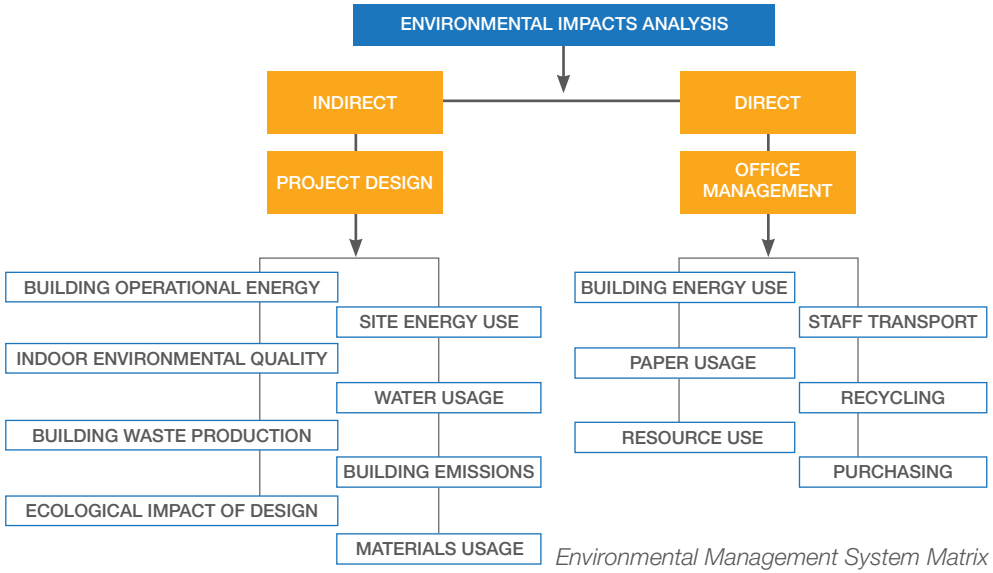
The Green Professional Services Award

Scott Tallon Walker Architects

Commitment and Achievements



Environmental Management System Matrix

Since 1928 Scott Tallon Walker Architects has been a unique landmark in the Irish architectural landscape. Entrusted with important projects commissioned by both public institutions and large private companies, our objective is to produce well designed buildings with superior environmental performance.

In 2010 Scott Tallon Walker Architects completed the implementation of the International Environmental Management System ISO 14001:2004 across all of its offices. This system allowed environmental impacts, both direct and indirect, to be audited and assessed and processes put in place to prevent, reduce or mitigate these impacts where possible. This benefited our own workplace as well as ensuring that we are providing our clients with buildings designed to reduce the buildings' environmental impact while increasing building efficiency and minimizing energy consumption and carbon dioxide emissions. Scott Tallon Walker are the first architectural practice in Ireland to be accredited with ISO 14001:2004.

Communication

Everyone connected with the construction industry has a role to play to ensure that energy consumption and carbon emissions are reduced. We believe, as architects, that we have a key role in leading this discussion and working with clients to deliver exemplary projects. Scott Tallon Walker's approach to sustainable design solutions requires the full commitment from our clients, and at the beginning of all projects we present our Environmental Policy to our client and review the benefits of adopting an environmental approach from inception to completion.

Sustainability Design Group

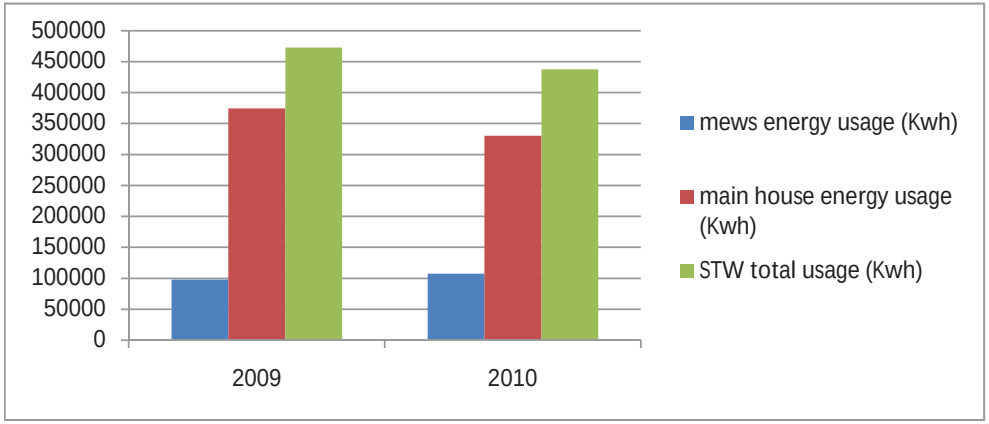
Within the practice a 'Sustainability Design Group' has been established to research new sustainable technologies and materials, as well acting as a forum for discussion within the practice, and ensures that the practice knowledge base over the past 50 years is communicated and consolidated.

Involvement of staff and the wider community

In 2010 our people have been active participation in the wider community including lecturing Sustainable Design at University College Dublin, and sitting on the RIAI Sustainability Taskforce Advisory Committee. Scott Tallon Walker Architects are members of the Carbon Trust and are also founding members of the Irish Green Building Council.

Environmental Impacts of Direct Internal Policies

	2009	2010	difference	% difference	status
Mews	98001	107368	+9367	+10 %	Increase
Offices	374546	330051	-44495	-12 %	Decrease
TOTAL STW	472547	437419	-35128	7%	Decrease



Direct - Office Management

STW Recycling and Waste Policy: Significant reductions in the use of paper has been recorded following initiatives such as double-sided printing and the introduction of electronic issue of drawings.

STW Sustainable Purchasing Policy ensures that environmental issues are considered in relation to the procurement of suppliers and materials.

STW Energy Policy targeted a 5% reduction in energy use from 2009. An overall reduction of 7% was achieved representing an overall saving of 20 tonnes of CO_2/ Annum.

STW Transport Policy: The provision of two office bicycles for staff to use when visiting site has been highly successful with both bicycles recording over 1000km per annum. Financial incentives schemes to promote the use of public transport by members of staff have also been successful.

Department of the Environment Offices, Wexford:

Assessed as "Excellent" utilising the BREEAM Assessment Tool.

"I have responsibility for promoting environmental sustainability, regulating building standards and promoting architectural quality. This building gives physical expression to these policies… High quality architecture and urban design have a real place in the pursuit of sustainability. I believe this building shows how we get it right when we invest in good quality design and high building standards."
- Minister for the Environment, John Gormley at the official opening.

St. Patrick's Place, Cork:

Winner of Best Sustainable Project in the RIAI Awards 2010

"Through its siting, mixed use and considered use of appropriate technologies, this inner city building invigorates a difficult site and seamlessly integrates all aspects of sustainability on a wider socio-economic scale. From re-use of an existing building, to the sourcing of local materials and the impact on the local community it serves as a model of well mannered urban redevelopment with solid environmental concerns integrated into the design."
- RIAI Award Jury Citation

Implementation of our Environmental Management System – STW Project Guidance Document

Indirect - Project Design

The Project Quality Plan (PQP) system is a core component of the Environmental Management Systems ISO 14001, and ensures that every project within the office is reviewed at key stages to ensure sustainable strategies are established and implemented where possible.

The PQP continues to be expanded and improved upon and is audited by NSAI as part of the ISO 14001 accreditation.

CHECKLIST A - SITE — FORM **E-01**

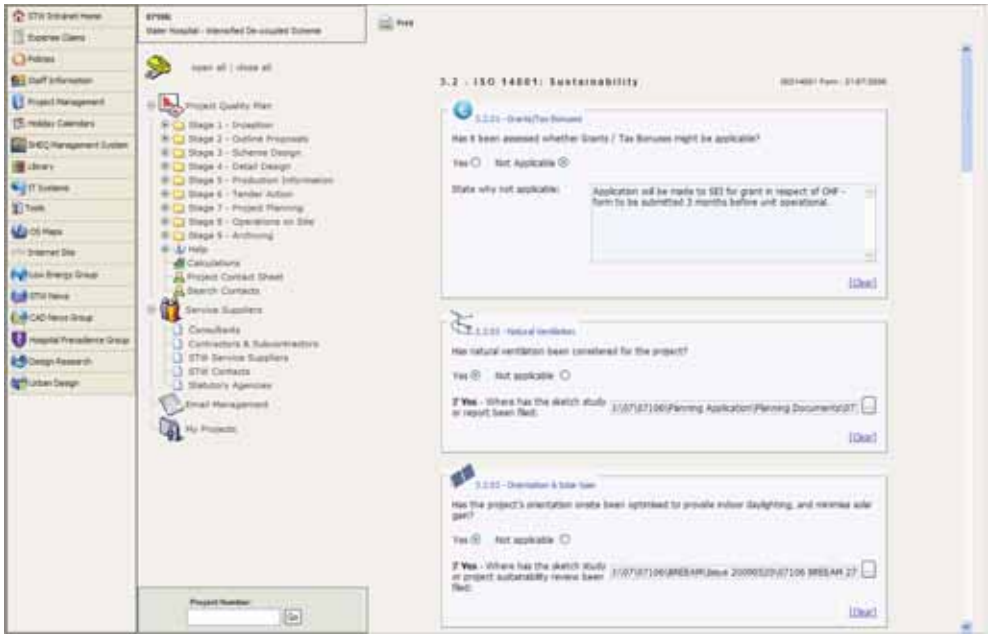
Project Name : | Project No :

Completed by : PRINT NAME/S

Note: This checklist forms part of the ISO 14001 Environmental Management system, which commences at appointment & continues until final completion. It is printed filed under Standard Forms, of the Intranet ISO 9000/ ISO 14001 guidance.

No.	Description	✓	
1	**SITE SURVEY**		
1.1	Has a full ecological survey of the site been undertaken		
1.2	Have ground conditions been assessed in accordance with BS5930		
1.3	Has the position and quality of any aquifer and/or ground water been assessed in accordance with BS6068		
1.4	Does the site include contaminated land requiring remedial work prior to construction		
1.5	Is the site in an area of high flood risk		
1.6	Have all existing structures onsite been assessed for retention in project design		
1.7	Have all materials from existing structures onsite been assessed for reuse in project design		
1.8	Have significant ecological features of the site been identified (species on site etc)		
2	**SITE GENERAL LAYOUT**		
2.1	Can the design optimise the use of site contours (Shelter / Heat Loss)		
2.2	Will the site layout be supportive of pedestrians and cyclists		
2.3	Can surface parking be eliminated from design or incorporated in basement		
2.4	Does the orientation and allocation of uses onsite optimise access to daylight		
2.5	Does the orientation and allocation of uses onsite minimise solar gain to main facades		
2.6	Does the orientation and allocation of uses onsite optimise areas for solar energy systems		
2.7	Has the impact to other buildings on and off site been considered in relation to solar access, noise pollution and wind conditions		
2.8	If existing structure onsite is to be removed has the option of limiting the new design to the existing structure's footprint to minimise site impact been assessed		
2.9	Consider access paths from site entrance for pedestrians and cyclists		
2.10	Consider adequate cycle parking spaces and facilities for incorporation into the project's design (BREEAM guidelines)		
2.11	Consider improvements to the existing ecology of the site such as reed beds etc		
3	**ONSITE PRELIMINARY ENERGY CONSIDERATIONS**		
3.1	Is Group or District Heating available / considered in this scheme		
3.2	Can volume be optimised onsite for thermal mass		
3.3	Have wind conditions that may require additional insulation been identified		
3.4	Is there an adjacent to site energy source (river, sea, etc)		
4	**ECOLOGY:**		
4.1	Will there be provision for natural drainage of surface water?		
4.2	If the building footprint and surrounds take up area that was previously green space will there be compensation to the site ecology (green roof etc)		
4.3	Has the new design scope to introduce new species of flora and fauna to the onsite ecology		
4.4	Has the provision of onsite water features to aid water systems and drainage been assessed		
4.5	Will it be possible to significantly protect existing ecological site features during the construction phase		

STW Sustainability checklist to be completed for all projects.



Screenshot of STW Project Quality Plan, assessing sustainable objectives at key design stages for all projects.

NBS Work Section	Description	Manufacturer	Product	SUSTAINABILITY										
				BRE Green Guide			WRAP Recycled Content			Manufacturers Information				
				BRE Summary Rating (Generic) Commericial	BRE ECO Points	Typical Replacement Interval (Yrs) Non Domestic	Standard	Good (No add. Cost)	Best (Add. Cost)	Thermal Properties	Typical Replacement Interval (Yrs)	Recycled Content	EMS Attached (Insert Date / Type)	Location of Manufacture / Assembly
P10	**Insulation**	Kingspan	Therma TF70	A+*	0.042	n/a**			20%	0.022-0.023W/mk	n/a**	6%	ISO 14001:2004 (Ref No. 14.0399)	Castleblayney/UK/Holland
F10	**Paint Grade Blockwork**	Forticrete	Newlite	A/B		60 Yrs	25%			0.043W/mk	60 Yrs	80-90%	ISO 14001 : 2004	Dewsbury, West Yorkshire, UK.
F10	**Fair Faced Blockwork**	Forticrete	Arena	A/B		60 Yrs	25%			1.33 W/mk	60 Yrs	40%	ISO 14001 : 2004	Thornley, Co. Durham, UK
F10	**Common Blockwork**	Forticrete	Newlite	A/B		60 Yrs	25%			0.043W/mk	60 Yrs	80-90%	ISO 14001 : 2004	Dewsbury, West Yorkshire, UK.
M50	**Altro Flooring**	Altro	Maxis Suprema	A	1.2	60 Yrs		32%		N/A	60 Yrs		None	Germany
K40	**Ceiling Tiles**	Armstrong	Cirrus	A	0.16	10 Yrs	28%			N/A	10 Yrs	70%	None	Germany
K21	**MDF Sheeting**	Medite Ecologique	All	A	0.2	40 Yrs			80%	N/A	40 Yrs	40%	ISO 14001 : 2004	Ireland

STW Sustainable Specification Matrix: This unique in-house document allows project teams to evaluate and cross reference a diverse range of sustainable criteria to ensure the best product is selected

Environmental Impacts of a selection of completed projects in 2010

Point Village District Centre, Point Village, Dublin

- Decontamination and regeneration of a brown field site.
- Development of Master plan working with the DDDA and RPA to integrate a new LUAS light railway station within the development
- Solar control glazing, brise soleil and external blinds.
- Natural ventilation to shopping centre mall.
- Green sedum roof
- Rainwater harvested for WC flushing and irrigation to landscaped courtyards.
- Air tightness test of 5m3/hr/m2 when tested at a pressure of 50Pa fNatural ventilation to hotel entrance atrium
- Openable windows to all hotel bedrooms
- CHP plant for hot water use
- A 20% improvement on Building Regulations of Part L was achieved to ensure the future proof the development

Aviva Stadium (in association with Populous), Dublin

- Demolished structures of existing stadium re-used for Hardcore and sub bases
- Blast Furnace Waste Slag (eco Cement) used in concrete mix
- Rainwater harvested for use of irrigation of pitches
- Waterless urinals used thought out development
- Heat-exchangers used to pre-heat water in bathrooms/ kitchens
- Highly efficient energy lighting and controls

DKIT School of Informatics and Creative Arts, Dundalk

- Renovation of an existing industrial building providing a second use as education facility
- Solar control glazing
- Windcatchers providing natural ventilation to social & performance space, winter gardens and office atria
- High performance air tightness achieved for an existing building 8 m3/hr/m2
- Existing wind turbine used to provide power to the ice banks

St. Vincent's Private Hospital, Dublin

- Natural ventilation to most areas where clinical use allows
- Natural ventilation to atrium
- Brise soleil and Solar control glazing to limit solar gains.
- Green sedum roof to operating theatre block and atrium
- All AHUs have heat recovery sections
- 20% improvement on Building Regulations of Part L was achieved to ensure the future proof the development.
- Openable windows to all bedrooms except for isolation rooms and HEPA filtered rooms/areas.
- Duel-fuelled boilers for resilience and air cooled chillers.

NUI Maynooth, Humanities & Social Sciences

- Thermal Mass – Exposed concrete soffits, and night time cooling
- Heat Recovery
- Solar heating. Evacuated solar tubes provide domestic hot water & shading to the atrium spaces
- BMS controls allows
- Energy efficient lighting and controls including PIR detection
- High performance Low-e glazing with external solar shading
- Triple skin glazing with integrated blinds

Jesuit Community Care Home, Milltown Park

- All living and community areas orientated south to avail of passive solar gains in the winter
- Fixed and sliding cedar screens used to reduce overheating in the summer
- Geothermal Ground Source heat Pump proving heating
- All bathrooms with PIR controls
- Sedum Grass roof
- Existing trees and landscaping protected and retained.