

# A NEW VELINDRE CANCER CENTRE FOR FUTURE GENERATIONS

SHORT VERSION

OUR WELLBEING, ENVIRONMENTAL AND ARCHITECTURAL VISION, FOR THE NEW VELINDRE CANCER HOSPITAL AND ITS ENVIRONS

PREPARED BY PHIL ROBERTS  
CONSULTANT DESIGN ADVISOR  
16<sup>th</sup> June 2020



## NOTE & ACKNOWLEDGEMENT.

PLEASE NOTE THAT DUE TO THE COVID 19 SITUATION AND TRAVEL RESTRICTIONS, WE HAVE HAD TO USE SOME 'STOCK' PHOTOS FOR THE PURPOSE OF ILLUSTRATING THE BIO-DIVERSITY AND LANDSCAPE.

THESE WILL BE REPLACED WITH MORE APPROPRIATE PHOTOGRAPHS AS THEY BECOME AVAILABLE.



## INTRODUCTION

## NATURE AND HEALING.


RESEARCH SHOWS THAT NATURE HAS A HEALING AND CALMING EFFECT ON HUMANS.

IN A CANCER HOSPITAL, THIS IS OF EVEN GREATER IMPORTANCE.

OUR PROPOSALS THEREFORE PLACE THE LANDSCAPE AND ITS BIODIVERSITY IN A CENTRAL ROLE - NOT ONLY AROUND, BUT ALSO INTEGRATED INTO THE BUILDINGS THEMSELVES.

THE NEW VELINDRE HOSPITAL INTENDS TO BE A LUXURIANT, VIBRANT AND GREEN HOSPITAL, WHERE PATIENTS WILL NOT ONLY FEEL BETTER THAN THEY NORMALLY DO AT A HOSPITAL, - BUT ALSO ARE HELPED WITH THEIR RECOVERY.

BIODIVERSITY AND THE PROTECTION AND ENHANCEMENT OF THE NATURAL ENVIRONMENT, WILL THEREFORE BE AT THE HEART OF EVERYTHING WE DO.



THIS PRESENTATION HAS BEEN PREPARED BY  
PHIL ROBERTS, CONSULTANT DESIGN ADVISOR  
FOR THE NEW VELINDRE CANCER CENTRE, WITH THE  
SUPPORT OF A NUMBER OF SPECIAL ADVISORS TO THE  
TRUST.

PHIL IS A DESIGN AND DEVELOPMENT PROFESSIONAL WITH A LIFE-LONG  
INTEREST IN SUSTAINABLE DEVELOPMENT AND ARCHITECTURE. HE  
STUDIED FOR HIS MSc IN ENVIRONMENTAL ARCHITECTURE, IN CARDIFF  
UNIVERSITY AND HAS BEEN A DESIGN REVIEW PANEL MEMBER AT THE  
DESIGN COMMISSION FOR WALES FOR OVER 12 YEARS.

HE SPENT OVER 16 YEARS AS SENIOR PARTNER IN ARCHITECTURAL  
AND SURVEYING PRACTICE AND HAS WORKED AS A CEO AND  
DIRECTOR IN THE SOCIAL HOUSING SECTOR.

HE ALSO SPENT 5 YEAR AS CEO OF WARM WALES-CYMRU GYNNES,  
(A 'NOT FOR PROFIT' COMMUNITY INTEREST COMPANY) DELIVERING  
MAJOR PROPERTY RENOVATION PROJECTS TARGETING THE REDUCTION  
OF FUEL POVERTY AND CARBON EMISSIONS AND THE INSTALLATION OF  
RENEWABLE ENERGY TECHNOLOGIES.

HE IS A FORMER CHAIR AND BOARD MEMBER OF WOOD KNOWLEDGE  
WALES AND A COMMITTED ENVIRONMENTALIST AND FORAGER. PHIL  
WAS FORMERLY AN INDEPENDENT MEMBER OF THE VELINDRE BOARD.

## SPECIAL ADVISORS

VELINDRE IS ALSO WORKING WITH NUMBER OF OTHER 'SPECIAL ADVISORS', WITH EXPERTISE AND PROVEN SUCCESS IN CRITICAL AREAS TO ASSIST US IN DELIVERING A SUCCESSFUL SCHEME.

- THEIR WORK WILL BE AIMED AT ENCOURAGING US TO DO 'THE BEST WE CAN' AND TO DELIVER ON ALL OUR CHALLENGES.
- THEY HAVE ALL BEEN ASKED TO INDEPENDENTLY REVIEW OUR PROPOSALS, HIGHLIGHT ANY SHORTCOMINGS, AND SUGGEST IMPROVEMENTS.
- THEY HAVE BEEN TASKED WITH PUSHING US 'THAT EXTRA MILE' TO DELIVER ON OUR VISION AND PROMISES.

THESE ADVISORS INCLUDE:

- DOWN TO EARTH ~ (COMMUNITY ENGAGEMENT, LOW CARBON BUILDING AND 'THE WELL BEING OF FUTURE GENERATIONS ACT' IMPLEMENTATION.)
- PROFESSOR PHIL JONES ~ THE WELSH SCHOOL OF ARCHITECTURE (LOW AND ZERO CARBON DESIGN AND ENERGY POSITIVE SOLCER BUILDERS)
- HUW DENMAN, OF SYLFAEN CYF. ~ (TREE PLANTING AND MANAGEMENT, AND ECOLOGICAL ENHANCEMENT)
- PADDY JENKS OF ADERYN ECOLOGY ~ (ECOLOGY AND SPECIES RETENTION)
- SIMON WRIGHT ~ (SUSTAINABLE FOOD PRODUCTION)

## THE KEY POINTS.

- WE ARE FULLY COMMITTED TO DELIVERING A BUILDING OF THE HIGHEST POSSIBLE ENVIRONMENTAL DESIGN AND QUALITY AND WANT OUR PATIENTS AND THE PEOPLE OF WALES TO HAVE THE BEST THAT IS POSSIBLE.
- MUCH OF THE SITE WILL REMAIN AS MEADOW LAND WITH OPEN PUBLIC ACCESS FOR WALKING, CYCLING, AND RECREATION, IN THE RETAINED AND ENHANCED, 'NATURAL' LANDSCAPE.
- WE WILL PROTECT, RETAIN, AND ENHANCE, LOCAL BIODIVERSITY, WITH SUPPORT FROM EXPERT ECOLOGISTS AND COMMUNITY GROUPS.
- THIS PRESENTATION SETS OUT SOME OF OUR GUIDING PRINCIPLES AND IS INTENDED AS AN ILLUSTRATION OF OUR COMMITMENT TO DELIVER NOT JUST THE GREENEST HOSPITAL IN THE UK, BUT TO 'MAKE A CALM AND REFLECTIVE GREEN PLACE' THAT IMPROVES THE CARE OF OUR PATIENTS, THEIR FAMILIES, AND OUR STAFF, BUT ALSO ENGAGES FULLY WITH THE WIDER COMMUNITY.  
WE BELIEVE IT IS NO LESS THAN EVERYONE DESERVES.

# PUBLIC ENGAGEMENT

- PRIOR TO OBTAINING PLANNING CONSENT FOR THE NEW CANCER CENTRE A DETAILED PROGRAMME OF PUBLIC ENGAGEMENT WAS UNDERTAKEN WITH MEMBERS OF THE LOCAL COMMUNITY AND OTHER INTERESTED GROUPS. WE EXPLAINED THE BACKGROUND TO THE PROJECT, RECEIVED FEEDBACK AND OUR DESIGN TEAM ADDRESSED MANY OF THE IMPORTANT ISSUES DURING IN THE DESIGN PROCESS.
- REGULAR WORKSHOPS WERE HELD DURING THE DESIGN PHASE, ALONG WITH A PUBLIC EXHIBITION OF THE 'REFERENCE DESIGN' AND ACCESS ROAD PROPOSALS. A DETAILED DESCRIPTION OF THE EVENTS AND RELEVANT FEEDBACK WAS FULLY DOCUMENTED IN THE CONSULTATION REPORT THAT WAS INCLUDED IN OUR SUCCESSFUL PLANNING APPLICATION.
- THE DESIGN PROPOSALS WERE ALSO INFORMED BY PRE-APPLICATION MEETINGS WITH THE LOCAL PLANNING AUTHORITY (FORMAL AND INFORMAL) AND STATUTORY CONSULTEES INCLUDING WELSH GOVERNMENT AND NATURAL RESOURCES WALES.





# PUBLIC ENGAGEMENT

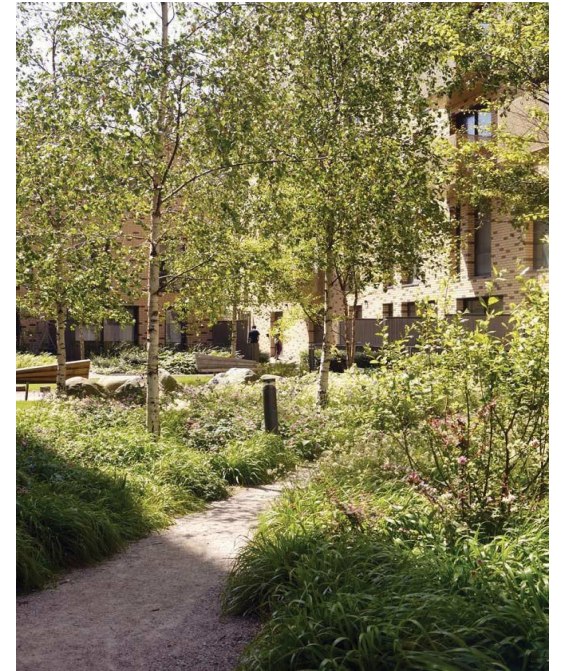
- OUR ENVIRONMENTAL IMPACT ASSESSMENT WAS SUBJECT TO STATUTORY, PRE-APPLICATION CONSULTATION AS REQUIRED BY PART 1A OF THE PLANNING (WALES) ACT 2015. THE OUTCOMES OF THE STATUTORY PRE-APPLICATION CONSULTATION WERE ALSO SET OUT IN THE PRE-APPLICATION CONSULTATION REPORT.
- HAVING UNTAKEN THE ABOVE ENGAGEMENT ACTIVITIES WE NOW REALISE THAT FURTHER WORK NEEDS TO BE DONE TO RESPOND TO THE CURRENT CONCERNS. WE ARE THEREFORE COMMITTED TO FURTHER ENGAGEMENT AND EQUALLY IMPORTANTLY TO, WHEREVER POSSIBLE, ADDRESS CURRENT CONCERNS BY LISTENING AND ACTING UPON THEM.





# INTEGRATION INTO THE LANDSCAPE

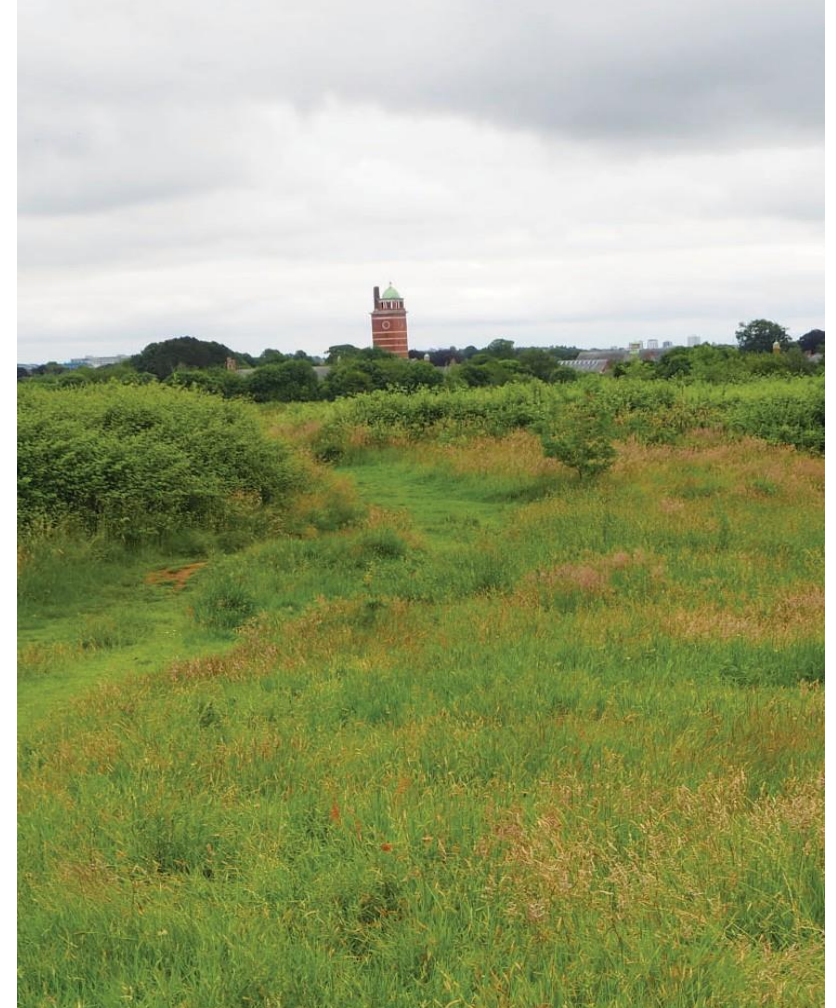
OUR CONCEPT IS BASED ON THE IDEA OF A PATIENT HUB, SURROUNDED BY CORE CLINICAL FUNCTIONS WHICH ARE THEN CLOSELY INTEGRATED WITH THE SURROUNDING LANDSCAPE. OUR VISION RELIES HEAVILY UPON THE INTEGRATION OF THE CANCER CENTRE INTO THE LANDSCAPE, AS WE BELIEVE THIS IS THE ESSENTIAL ELEMENT FOR THE WELL-BEING OF OUR PATIENTS, OUR STAFF AND THE COMMUNITY. WE NEED TO RESPECT AND SUPPORT THE NATURE AROUND US FOR THE BENEFIT OF ALL.





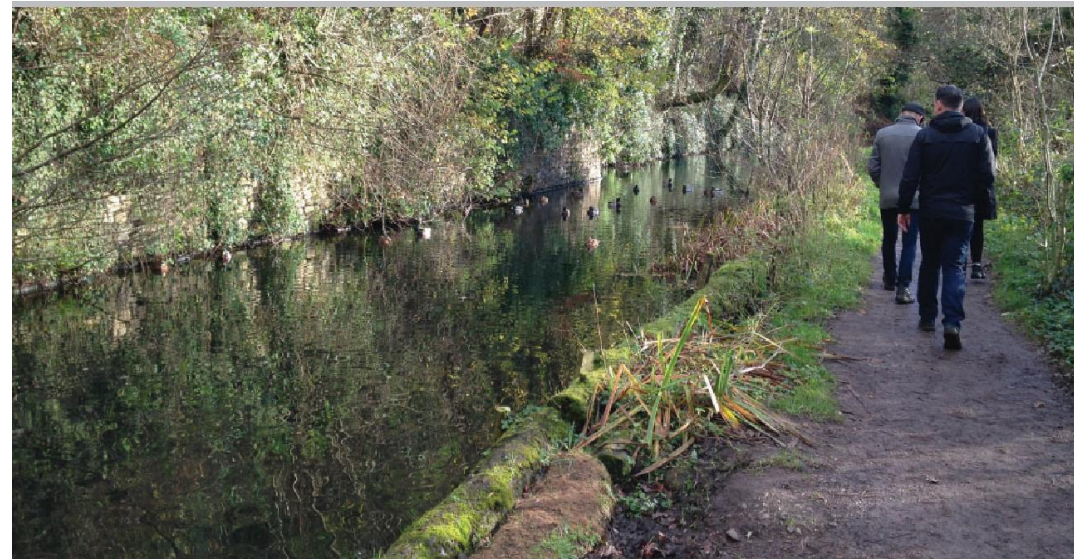
# ENVIRONMENTAL ENHANCEMENTS

- WE WILL ENHANCE THE WOODLAND EDGE (15M PROTECTED SSSI EDGE). THE TREES LOCATED WITHIN THE SSSI AND LNR SITES ARE CLASSIFIED AS CATEGORY A TREES AND ARE EXPECTED TO CONTRIBUTE A HIGH LEVEL OF ECOLOGICAL AND SCENIC VALUE FOR A FURTHER 40 YEARS.
- THE WOODLAND LOCATED SOUTH OF THE MEADOW AREA IS DOMINATED BY OAK AND BEECH WITH FEWER ASH TREES. THE UNDER-STOREY OF THE SSSI IS MADE UP OF HAZEL AND HOLLY. THE WOODLAND IN THE LNR BEYOND THE NORTH BOUNDARY CONTAINS A LARGE NUMBER OF ASH AND SMALLER NATIVE SPECIES.
- NEW TREE PLANTING WITHIN THE 15M PROTECTED ZONE WILL BE NATURAL IN CHARACTER AND WILL BE PLANTED WITH A SELECTION OF STANDARD, SELECT STANDARD AND HEAVY STANDARD BEECH AND HAZEL TREES. THE SOIL ON THE SITE HAS BEEN CLASSIFIED AS BOULDER CLAY AND WILL REQUIRE PLENTY OF FARMYARD MANURE TO BREAK UP THE HEAVY SOIL.
- NECTAR RICH SINGLE-FLOWERING VARIETIES SUCH AS HAWTHORN, ROSES AND DAISIES WILL INCREASE BIODIVERSITY AND ARE EASY FOR BEES AND BUTTERFLIES TO POLLINATE.

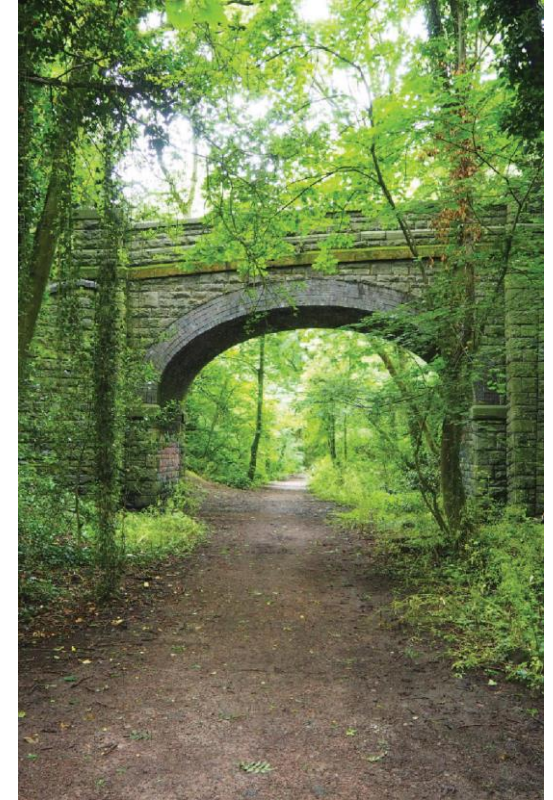




# THE SURROUNDING LANDSCAPE



HIKING TRAILS ON THE STEEP ESCARPMENT THROUGH THE LOCAL NATURE RESERVE BETWEEN THE MEADOW AND CANAL TO THE SOUTH WILL REMAIN AND BE PROTECTED, RETAINING FULL ACCESS TO 150 ACRES OF NATURE RESERVE.



# THE WELL-BEING OF FUTURE GENERATIONS (WALES) ACT ~ THE SEVEN WELL-BEING GOALS

WE ARE, AND ALWAYS HAVE BEEN, FULLY COMMITTED THE PRINCIPLES OF THE WELLBEING AND FUTURE GENERATIONS ACT AND OUR WIDER SUSTAINABLE DEVELOPMENT GOALS IN THE DESIGN AND DEVELOPMENT OF THE NEW CANCER CENTRE.

THE ACT REQUIRES THAT WE CONTRIBUTE TOWARDS MEETING THE SEVEN WELLBEING GOALS FOR OUR NEW HOSPITAL.

WE ARE COMMITTED TO MEETING THESE GOALS WHICH ARE:

- A PROSPEROUS WALES,
- A RESILIENT WALES,
- A MORE EQUAL WALES,
- A HEALTHIER WALES,
- A WALES OF COHESIVE COMMUNITIES,
- A WALES OF VIBRANT CULTURE AND THRIVING WELSH LANGUAGE
- A GLOBALLY RESPONSIBLE WALES,

THIS DOCUMENT SETS OUT TO ILLUSTRATE BRIEFLY, SOME OF THE WAYS IN WHICH WE WILL ADDRESS THESE GOALS.



# OUR GREEN INFRASTRUCTURE PLAN

WE BELIEVE THAT THE NETWORK OF NATURAL AND SEMI-NATURAL FEATURES, GREEN SPACES, RIVERS AND LAKES WITHIN AND BETWEEN OUR VILLAGES, TOWNS AND CITIES ARE VITAL TO OUR AND THE WORLD'S WELLBEING.

WE ALSO BELIEVE, THAT WHEN APPROPRIATELY PLANNED, DESIGNED AND MANAGED, THESE GREEN ASSETS HAVE THE POTENTIAL TO DELIVER MANY BENEFITS - FROM PROVIDING SUSTAINABLE TRANSPORT LINKS, PROTECTING AND ENHANCING ECOLOGY, TO MITIGATING THE EFFECTS OF CLIMATE CHANGE.

VELINDRE WILL THEREFORE ENSURE THAT OUR PLANS FOR THE NORTHERN MEADOWS SITE FULLY RECOGNISES THE NEED TO RESPOND TO THE RANGE OF ENVIRONMENTAL CHALLENGES, BOTH CURRENT AND FUTURE, THAT NEED ADDRESSING.

WE BELIEVE THAT OUR GREEN INFRASTRUCTURE SHOULD BE MULTIFUNCTIONAL BY DESIGN; IN THAT IT CAN HELP MITIGATE AND ADAPT TO CLIMATE CHANGE, WHILST IMPROVING THE HEALTH AND WELLBEING OF OUR PATIENTS, STAFF AND THE COMMUNITY AROUND.

OUR PLANS AIM TO PROTECT THE SOIL, MANAGING WATER RESOURCES AND FLOODING BY USING SUSTAINABLE DRAINAGE SYSTEMS (SUDS), AND ENHANCING THE NATURAL BIODIVERSITY OF THE SITE AND SURROUNDING AREA BY CAREFUL PLANNING, IMPLEMENTATION AND MAINTENANCE.

OUR GREEN INFRASTRUCTURE PLAN IS CRITICAL TO HOW WE DELIVER IMPROVED NATURAL HABITAT FOR THE BENEFIT OF PATIENTS, OUR STAFF, LOCAL-RESIDENTS AND THE BIODIVERSITY OF THE SITE.





# ADDRESSING BIODIVERSITY

TO GAIN PLANNING CONSENT FOR THE NORTHERN MEADOWS, WE COMMISSIONED EXPERT ECOLOGICAL REPORTS FROM CONSULTANTS, MOTT MACDONALD.

THE REPORTS OUTLINED IN CONSIDERABLE DETAIL BOTH THE CURRENT ECOLOGY OF THE SITE AND ITS ENVIRONS, BUT ALSO MADE RECOMMENDATIONS AS TO THE MITIGATION MEASURES NECESSARY TO PROTECT THE SITE AND MAKE IMPROVEMENTS TO ITS BIODIVERSITY.

AS A RESULT OF RECENT PUBLIC CONCERNS, WE HAVE ASKED OTHER INDEPENDENT EXPERTS TO REVIEW THESE REPORTS AND RECOMMENDATIONS.

WE WILL COMPLY FULLY WITH THEIR ADVICE TO ENSURE WE PROTECT, PRESERVE AND ENHANCE THE BIODIVERSITY OF THE MEADOWS.

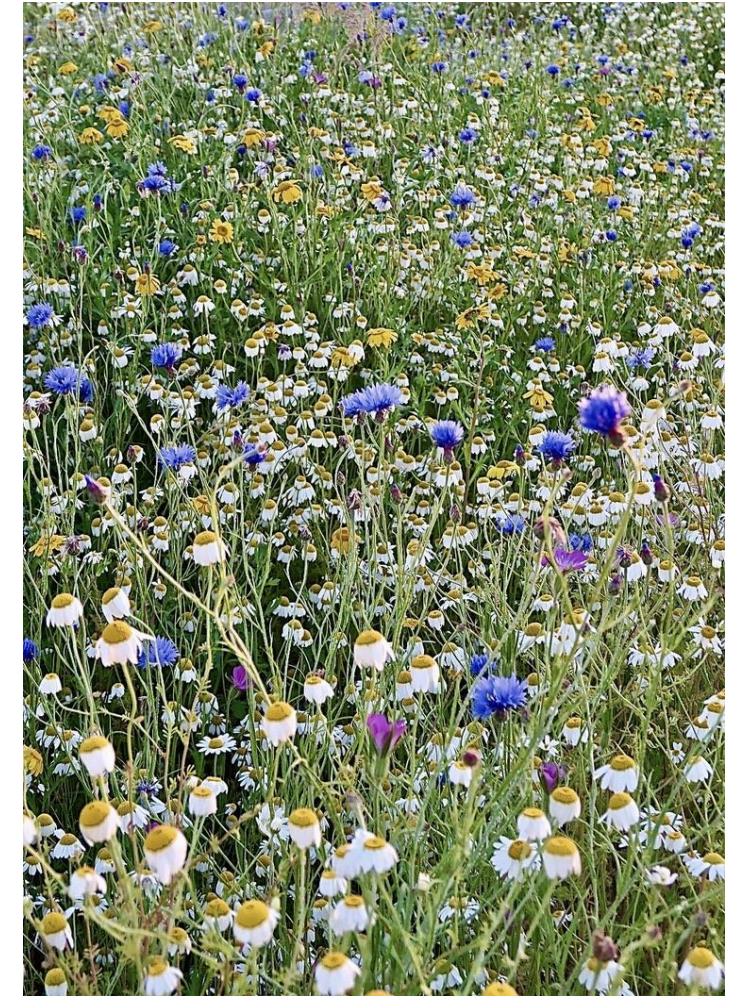




# PROPOSALS FOR SUSTAINABLE LANDSCAPE MANAGEMENT

## ESSENTIAL ASPECTS:

- SURVEY AND MONITORING PROVIDING EVIDENCE OF CONSERVATION BENEFITS.
- SURVEY AND MONITORING CARRIED OUT BY QUALIFIED AND EXPERIENCED ECOLOGISTS.
- MONITORING IS PRIMARILY BIRD AND MOTH SPECIES.
- PROPOSALS TO SURVEY AND MONITOR BIRD SPECIES AND PROVIDE AND RECORD A NEST-BOX SCHEME AND MIST NETTING.
- MONITOR ALL ASSOCIATE BREEDING BIRD SPECIES PRESENT, INCLUDING PIED AND SPOTTED FLYCATCHERS, WOOD WARBLERS AND REDSTARTS.
- RECORD AND MONITOR ALL CHARISMATIC SPECIES SUCH AS DORMICE.
- OTHER RARE, THREATENED AND ENDANGERED SPECIES PRESENT INCLUDING WILLOW TIT.
- EARLY MOTH MONITORING INDICATES A WIDE RANGE OF SPECIES IN LARGE NUMBERS.
- PROPOSALS TO SURVEY AND MONITOR BAT SPECIES, BRYOPHYTES, AND LICHENS.
- MONITORING RESULTS FOR FUTURE MANAGEMENT.





# PROTECT AND ENCOURAGE BIODIVERSITY





# ECOLOGICAL MANAGEMENT STRATEGY

## OUR HABITAT AND SPECIES PROPOSALS

OUR INDEPENDENT SPECIAL ADVISORS HAVE REVIEWED AND ENDORSED THE GREEN INFRASTRUCTURE MANAGEMENT STRATEGY, COVERING :

- CONSULTATION WITH LOCAL BIOLOGICAL RECORD CENTRES, WILDLIFE GROUPS AND LOCAL NATURALISTS AND INTERESTED LOCAL PEOPLE TO COLLATE EXISTING AVAILABLE BIODIVERSITY INFORMATION.
- DESKTOP ASSESSMENT OF HISTORICAL RECORDS, MAPS AND DATABASES TO IDENTIFY PRE-EXISTING AND EXISTING FEATURES, HABITATS AND SPECIES, INCLUDING ANCIENT WOODLAND INVENTORY.
- BASELINE FIELD SURVEY TO IDENTIFY CONSERVATION FEATURES, HABITATS AND SPECIES.
- SURVEYED HABITATS WILL BE CLASSIFIED ACCORDING TO NATIONAL VEGETATION CLASSIFICATION.
- COMPREHENSIVE TREE SURVEY OF SIGNIFICANT TREES AND GROUPS OF TREES, SHRUBS AND REGENERATION.
- BAT SURVEY TO IDENTIFY NATAL SITES, ROOSTING AND HIBERNATION SITES AND FEEDING AREAS.
- SURVEY OF TREE CAVITIES.
- BREEDING BIRD SURVEY.





# FAUNA FLORA AND TREE PLANTING

THE FUNDAMENTAL TARGET OF OUR SCHEME IS THE GREENING OF THE NEW HOSPITAL AND ITS ENVIRONS.

BY SELECTING AND PLANTING SPECIES OF TREES, SHRUBS AND FLOWERS WITH KNOWN ECOLOGICAL BENEFITS, THE ROOFTOPS, WALLS, AND THE LANDSCAPE AROUND THE NEW HOSPITAL WILL BOTH MAINTAIN EXISTING WILDLIFE AND ENCOURAGE A RANGE OF OTHER WILDLIFE SPECIES INTO THE NORTHERN MEADOWS.

OUR GREEN INFRASTRUCTURE PLAN WILL TARGET THE PLANTING OF WELSH NATIVE SPECIES TO OFFER AS GREAT A BENEFIT AS POSSIBLE TO LOCAL BIODIVERSITY. NON-NATIVE SPECIES SHALL BE SELECTED ONLY WHERE THEY PROVIDE A KNOWN ECOLOGICAL BENEFIT, SUCH AS NECTAR FOR INVERTEBRATES, OR SEEDS AND BERRIES FOR BIRDS.





# THERAPEUTIC LANDSCAPES ~ QUALITIES

WE FULLY UNDERSTAND AND RECOGNISE THE CONCERNS THAT WE WILL NOT TREAT THE LANDSCAPE AND ITS WILDLIFE WITH THE RESPECT IT DESERVES AS TYPICAL HOSPITAL ENVIRONS HAVE TARGETED CLINICAL CARE AND EFFICIENCY, RATHER THAN AN HOLISTIC APPROACH TO HEALTH.

ONE OF THE REASONS WE HAVE CHOSEN THIS SITE, IS SPECIFICALLY FOR THE BENEFITS THAT NATURE AND WILDLIFE CAN BRING TO THOSE BEING TREATED FOR CANCER, IN AIDING THEIR RECOVERY.

WE THEREFORE OUTLINE IN THE FOLLOWING SLIDES, SOME OF THE QUALITIES WE ARE SEEKING FROM THE SITE AND ITS VERY SPECIAL CHARACTER.

WE INTEND TO ENHANCE THOSE QUALITIES WE SO ADMIRE, NOT DIMINISH THEM.





# PROPOSED LANDSCAPING TECHNIQUES ~ ON THE SITE

ECOLOGICAL ENHANCEMENTS WHICH ARE LIKELY TO INCLUDE, BUT ARE NOT BE LIMITED TO:

- LEAVING STANDING DEADWOOD TO PROVIDE SHELTER AND NESTING/ROOSTING PLACES FOR BIRDS, BATS AND INVERTEBRATES (WHERE IT IS SAFE TO DO SO).
- REMOVAL AND MANAGEMENT OF INVASIVE SPECIES, INCLUDING MANAGEMENT OF BRACKEN.
- PROVISION OF BAT BOXES AND BIRD/OWL BOXES, AND
- PROVISION OF REPTILE HIBERNACULA AND GRASS SNAKE EGG LAYING HEAPS.
- IMPLEMENTATION OF IMPROVEMENTS TO THE LOCAL NATURE RESERVE WILL BE DEVELOPED IN AGREEMENT WITH THE LOCAL AUTHORITY, THE FRIENDS OF FOREST FARM AND ANY OTHER RELEVANT STAKEHOLDERS, VIA A CONSULTATION PROCESS WHICH WILL BE UNDERTAKEN PRIOR TO ON-SITE COMMENCEMENT OF CONSTRUCTION.





# DOWN TO EARTH'S SITE AT BRYNGWYN BACH, GOWER.

DOWN TO EARTH'S SITE AT BRYNGWYN BACH (LITTLE BRYNGWYN) SITS IN THE UK'S FIRST AREA OF OUTSTANDING NATIONAL BEAUTY, (AONB) ON THE GOWER PENINSULAR. (PENRHYN GYWR)

THE NEW BUILDINGS WERE CONSTRUCTED USING A VARIETY OF SUPER-GREEN 'NATURAL' MATERIALS SUCH AS STRAW BALE, LOCAL SUSTAINABLY MANAGED TIMBER, CLAY PLASTERS, HEMP ETC. THE GREEN ROOF COVERINGS WERE LIFTED FROM THE AREAS NOW OCCUPIED BY THE NEW BUILDINGS TO RETAIN EXISTING VEGETATION AND ALLOW BUILDING TO BLEND IN TO THE LANDSCAPE WITH THEIR GREEN ROOFS.

THE RESULT IS THE RETENTION OF MUCH OF THE NATURAL FLORA AND FAUNA OF THE SITE IN A WAY THAT BLENDS INTO THE LANDSCAPE.

WITH THE HELP AND SUPPORT OF 'DOWN TO EARTH' AS ONE OF OUR SPECIAL ADVISORS WE AIM TO ACHIEVE SIMILAR RESULTS ON OUR SITE.





# ARCHITECTURAL INSPIRATION ~ BUILDING IN THE LANDSCAPE

ARCHITECTURE ~ ARCHITYPE



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OUR NEW CANCER CENTRE WILL FOLLOW THE DESIGN PHILOSOPHY OF PROJECTS SUCH AS THESE ILLUSTRATED, WHICH WERE DESIGNED BY ARCHITECTS ARCHITYPE, TO HAVE A 'LIGHT TOUCH'. THEY HAVE BEEN DEVELOPED WITH A TRULY INTEGRATED ARCHITECTURAL, ENVIRONMENTAL, AND LANDSCAPING STRATEGY.



## QUALITIES WE ARE SEEKING



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GOOD NATURAL LIGHTING AND VISTAS TO THE LANDSCAPE. ARCHITECTS ~ ARCHITYPE

## QUALITIES WE ARE SEEKING



GOOD NATURAL LIGHTING AND VISTAS TO THE LANDSCAPE ~ KKE ARCHITRECTS



# MAGGIE'S CENTRE OLDHAM

ARCHITECTS ~ ALEX DE RIJKE OF DRMM



A QUOTATION FROM MAGGIE'S ARCHITECTURAL DESIGN BRIEF.

"OUR BUILDINGS AND OUR GARDEN LANDSCAPES HAVE TO INVITE YOU IN. THE PATH TO THE CENTRE MUST BECKON AND GUIDE YOU TO WHAT IS CLEARLY THE FRONT DOOR. THE WAY THE PATH IS PLANTED CAN HELP YOU SHED A LITTLE OF THE STRESS OF THE HOSPITAL ATMOSPHERE BEFORE YOU EVEN REACH THE FRONT DOOR. THE LANDSCAPE GIVES A BIT OF BREATHING SPACE BETWEEN THE TWO WORLDS OF HOSPITAL AND NORMAL LIFE (WHICH ISN'T QUITE SO NORMAL ANYMORE)."



# HERLEV HOSPITAL ~ BUILDING 'IN THE LANDSCAPE'

HENNING LARSEN, ARCHITECT, DENMARK.





# HEALING LANDSCAPES

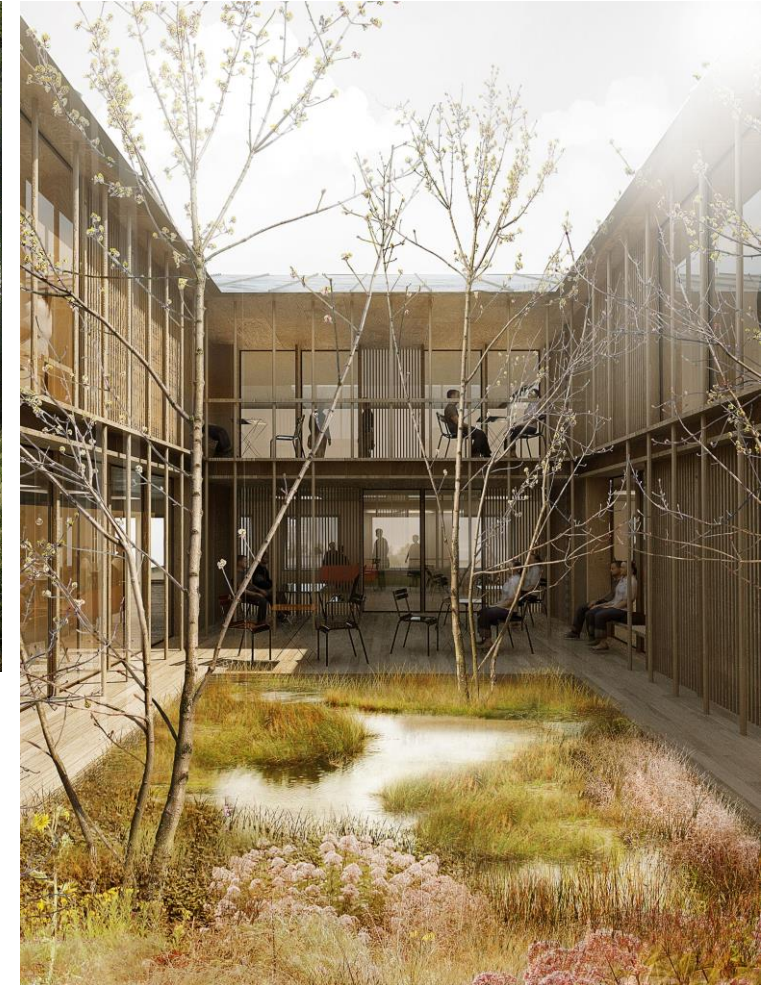
NORTH ZEALAND, AND BISPEBJERG-PSYKIATRI HOSPITAL DENMARK.



WE ADMIRE THE WAY IN WHICH THESE DANISH ARCHITECTS HAVE USED THE LANDSCAPE AS AN INTEGRAL PART OF THEIR BUILDING'S ARCHITECTURE.

WE ARE LOOKING ACROSS THE WORLD, FOR EXAMPLES OF THE BEST, SO WE CAN DELIVER A PROJECT OF WHICH WE CAN ALL BE PROUD.

IMAGE CREDITS ~ HERZOG AND DE MEURON ARCHITECTS



HENNING-LARSEN-ARCHITECTS



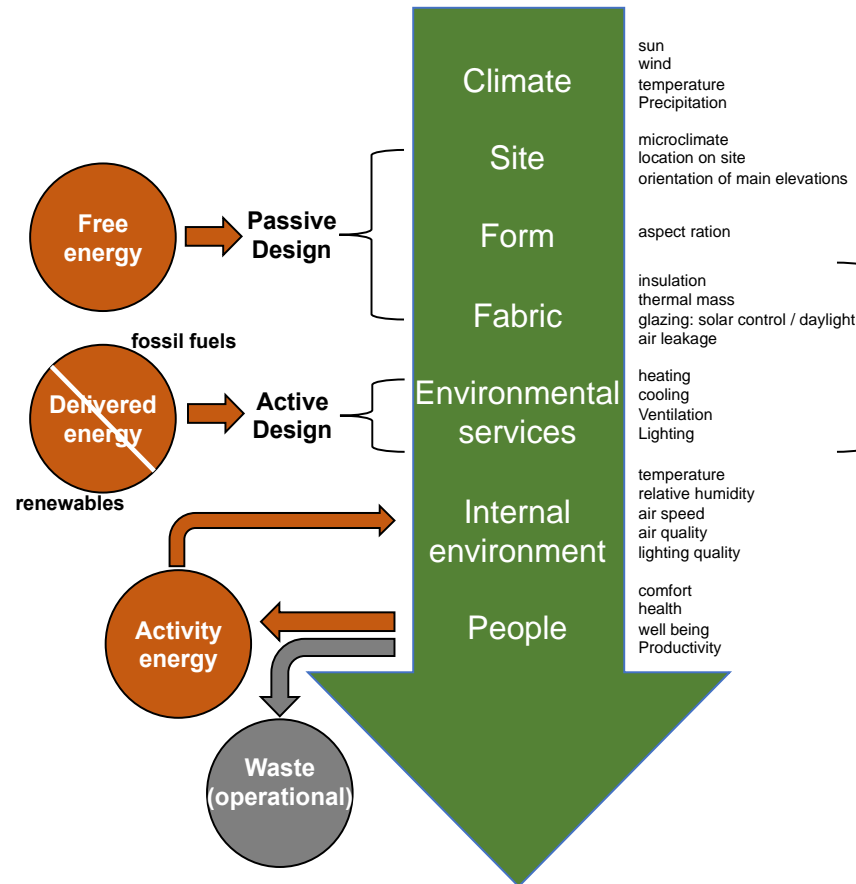
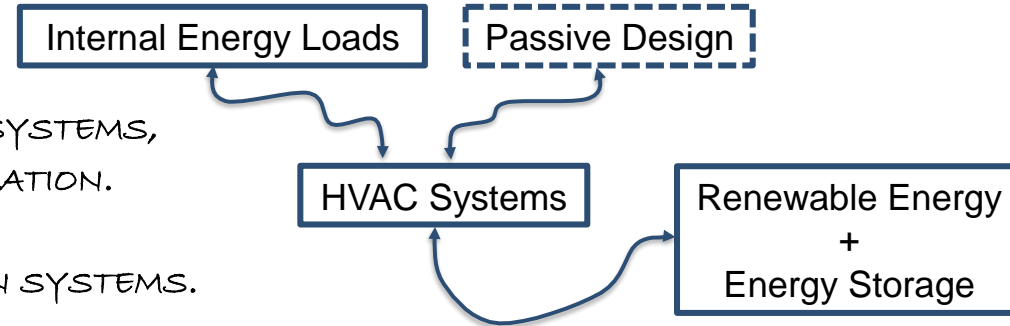
# INTEGRATIVE DESIGN APPROACH

PROFESSOR PHIL JONES WELSH SCHOOL OF ARCHITECTURE

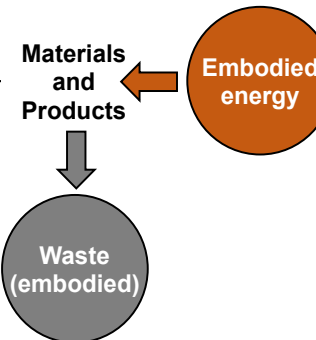
LOW ENERGY - LOW CARBON - LOW WASTE

REDUCING INTERNAL LOADS ON THE ENERGY SYSTEMS,  
INCLUDING LIGHTING, APPLIANCES, AND VENTILATION.

EFFICIENT HEATING, COOLING AND VENTILATION SYSTEMS.



A 'FABRIC FIRST' APPROACH, USING PASSIVE DESIGN  
TO REDUCE ENERGY DEMAND AND CREATE  
COMFORTABLE AND HEALTHY INDOOR (AND  
OUTDOOR) ENVIRONMENTS.



ATTENTION TO THE ORIENTATION, FORM AND  
CONSTRUCTION ELEMENTS OF THE BUILDINGS.

USE OF DAYLIGHT AND THE USE AND CONTROL OF  
THE INGRESS OF SOLAR RADIATION.

# BIO-CLIMATIC TECHNIQUES

## LIVING GREEN ROOFS

LIVING GREEN ROOFS OFFER ECOLOGICAL BENEFITS.

THEY ARE ALSO OFTEN USED TO GROW FOOD PRODUCE FOR CONSUMPTION.

THE INSTALLATION OF GREEN ROOFS ALLOWS FOR SOIL AND VEGETATION TO BE LAID ON THE STRUCTURE OFFERING MANY ENVIRONMENTAL BENEFITS.

THEY CAN BE SELF-SUSTAINING, REDUCING ENERGY CONSUMPTION, LOWERING GREENHOUSE GAS EMISSIONS AND REQUIRING VERY LITTLE ROOF MAINTENANCE.

GREEN ROOFS SAVE ON ROOF MAINTENANCE COSTS, BECAUSE THE VEGETATION SERVES AS A BARRIER AGAINST THE SUN'S RAYS AND THE DAMAGE IT CAUSES TO ROOFING MATERIALS.

LIVING GREEN ROOF ALSO REDUCES HEATING AND COOLING DEMAND AND COSTS, ACTING AS INSULATION DURING THE WINTER AND A COOLING LAYER, DURING THE SUMMER.

WITH OUR ECOLOGISTS, LANDSCAPE ARCHITECTS AND OUR BUILDERS, WE WILL UNDERTAKE A FEASIBILITY STUDY ON USING EXISTING MEADOWS VEGETATION FROM AREAS WHERE THE NEW BUILDINGS SIT, AS A LIVING ROOF COVERING FOR THE NEW CANCER CENTRE.





# THE MODERN USE OF TIMBER IN CONSTRUCTION

## BENEFITS OF TIMBER USE

- CARBON CAPTURE AND STORAGE
- LOW EMBODIED ENERGY
- TRULY RENEWABLE
- DURABLE AND EASILY MAINTAINED
- BEAUTIFUL AESTHETIC
- HIGHLY VERSATILE
- QUICK AND SIMPLE BUILD
- GOOD INSULATION
- CAN BE RE-USED
- NON-TOXIC
- CAN BE A HUMIDITY REGULATOR
- GROWING IT CREATES NATURAL HABITATS



THE GSK CARBON NEUTRAL LABORATORY FOR SUSTAINABLE CHEMISTRY LABORATORY, UNIVERSITY OF NOTTINGHAM, DEMONSTRATES THE MODERN USE AND POTENTIAL FOR TIMBER IN CONSTRUCTION SUSTAINABLE BUILDINGS



# ART AND CULTURE ~ TELLING A STORY

VELINDRE WILL WORK WITH PATIENTS, STAFF, THE COMMUNITY AND LOCAL ARTS ORGANISATIONS, TO EMBED ART AND CULTURE IN THE DESIGN PROCESS OF THE CANCER CENTRE IN A MEANINGFUL WAY.

ART AND CULTURE COULD BE FUNCTIONAL ELEMENTS OF THE CANCER CENTRE, IN WAYS SUCH AS THOSE ILLUSTRATED.

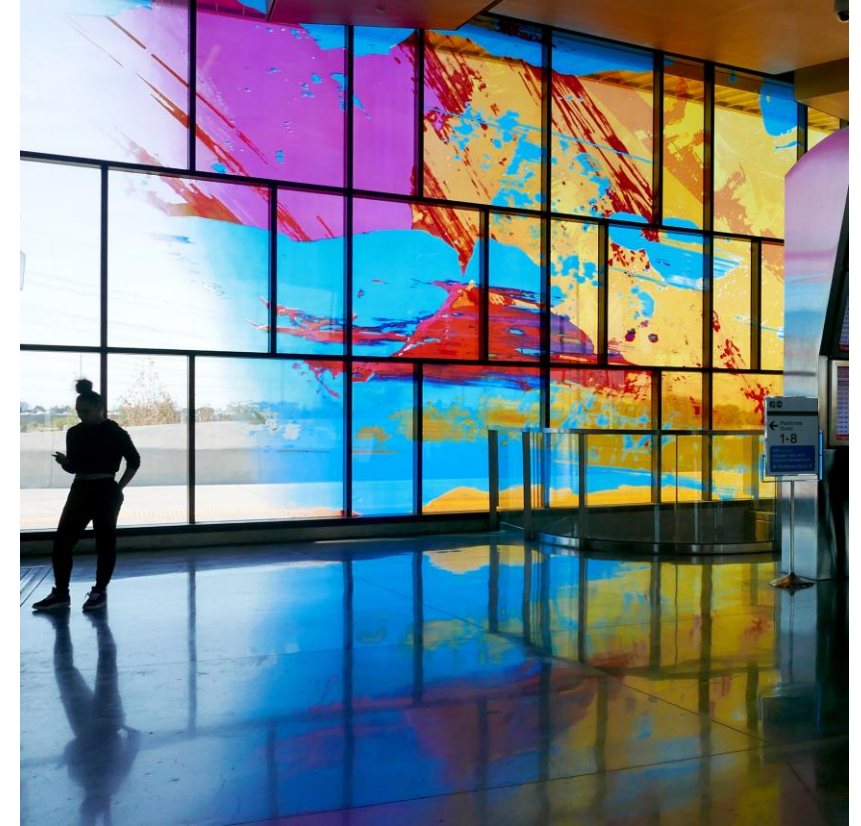
THEY CAN TELL A STORY, BUT ALSO CONTRIBUTE IN PRACTICAL WAYS SUCH AS THE INTEGRATION OF PHOTOVOLTAIC CELLS WITHIN STAINED GLASS WINDOWS GENERATING ELECTRICITY DURING DAYLIGHT HOURS AND PROVIDING LIGHTING FOR THE WINDOWS AT NIGHT.



GLASS WITH PV BY CHRIS BIRD  
JONES ~ LLANYBYDDER



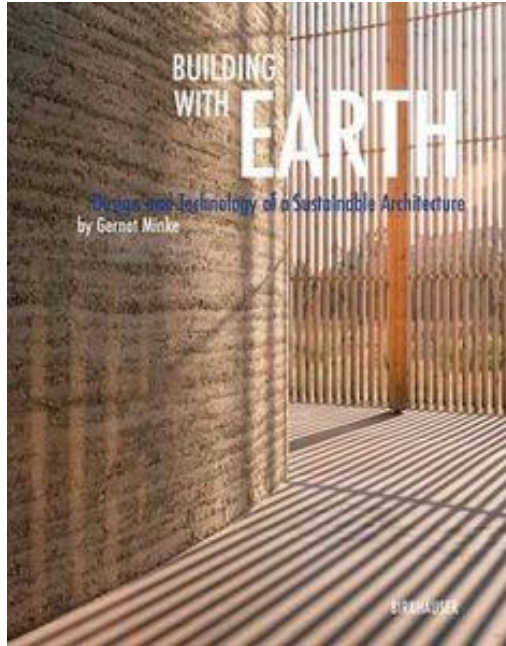
GLASS BY AMBER HISCOTT ~  
GREAT WESTERN HOSPITAL SWINDON



GLASS BY DAVID PEARL  
TTC TRANSIT STATION TORONTO



# LOW CARBON, NON-TOXIC BREATHABLE MATERIALS



**therma  
fleece®**  
COSYWOOL

WE WILL WORK WITH OUR  
FUTURE DEVELOPMENT  
PARTNERS TO UNDERTAKE  
STUDIES OF THE MOST  
APPROPRIATE, LOCALLY  
SOURCED AND  
ENVIRONMENTALLY  
FRIENDLY BUILDING  
MATERIALS



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## FOOD FOR BODY AND MIND AT VELINDRE (CONTRIBUTED BY SIMON WRIGHT)



FARM MACHINERY AS USED AT WHITCHURCH HOSPITAL



ST LUKE'S HOSPITAL FARM EASTON, PENNSYLVANIA

- THE PRODUCTION OF FOOD WITHIN, OR IN CLOSE-PROXIMITY TO HOSPITALS, IS AN IDEA THAT HAS A LONG HISTORY AND WAS PARTICULARLY COMMON IN PSYCHIATRIC HOSPITALS IN THE EARLY 20TH CENTURY
- THERE WERE EXAMPLES IN WALES INCLUDING CEFN COED IN SWANSEA AND AT WHITCHURCH HOSPITAL ITSELF
- THE HOSPITAL FARMS WERE SEEN AS VITAL BOTH IN PROVIDING NUTRITIOUS FOOD FOR PATIENTS AND STAFF
- CONTACT WITH NATURE, GROWING AND FRESH AIR WERE ALSO SEEN AS PART OF A HOLISTIC APPROACH TO THERAPY

THE BENEFITS OF FOOD PRODUCTION LINKED TO HEALTH FACILITIES ARE BEING APPRECIATED AGAIN IN MANY COUNTRIES AROUND THE WORLD WITH EXAMPLES LIKE THE ONE ABOVE IN EASTON PENNSYLVANIA

# THE WAY FORWARD

- WE WILL CONTINUE TO WORK WITH THE WELSH GOVERNMENT, THE DESIGN COMMISSION FOR WALES, CARDIFF CITY COUNCIL, OUR OWN PATIENTS AND STAFF TO ENSURE WE DELIVER A 'GREEN PLACE' THAT MEETS THEIR EXPECTATIONS.
- WE WILL ALSO ENGAGE FULLY WITH THE LOCAL COMMUNITY AND OUR SPECIAL ADVISORS, TO ENSURE WE DELIVER A NEW HOSPITAL AND LANDSCAPE OF THE HIGHEST POSSIBLE DESIGN AND ENVIRONMENTAL QUALITY.
- WE WILL SET CHALLENGING ENVIRONMENTAL TARGETS FOR THE NEW BUILDING AND ITS GREEN INFRASTRUCTURE.
- WE WILL SET A 'DESIGN BRIEF' AND 'DESIGN CODE' AIMED AT DELIVERING, A HOLISTIC GREEN APPROACH TO THE NEW HOSPITAL AND ITS GREEN INFRASTRUCTURE, INCLUDING PROTECTING AND ENHANCING ITS BIODIVERSITY.
- WE WILL AGREE MINIMUM STANDARDS FOR THE ENVIRONMENTAL PERFORMANCE AND DESIGN OF BOTH THE BUILDING AND ITS ENVIRONS~ OUR AMBITION ARE 'BREEAM OUTSTANDING' AND CARBON NEUTRAL FOR THE BUILDINGS AND ENHANCED BIODIVERSITY FOR THE MEADOWS AND THE SURROUNDING LANDSCAPE.
- WE WILL SEEK TO EMPLOY LOCAL LABOUR AND USE LOCALLY PRODUCED, AND PROCURED, HEALTHY MATERIALS WHENEVER AVAILABLE AND SUITABLE.
- WE WILL ENGAGE WITH ALL OUR LOCAL AND NATIONAL STAKEHOLDERS, INCLUDING THE WHITCHURCH COMMUNITY, AND THE FUTURE GENERATIONS COMMISSIONER FOR WALES, TO ENSURE WE CREATE SOMETHING SPECIAL.
- WE WILL AWARD HIGH WEIGHTING POINTS FOR BOTH THE DESIGN AND ENVIRONMENTAL QUALITY OF THE COMPETING SCHEMES, IN CHOOSING OUR FUTURE DEVELOPMENT PARTNER.
- WE WILL DEVELOP OUR DESIGN BRIEF TO REFLECT NEEDS OF OUR PATIENTS, STAFF, THE LOCAL COMMUNITY AND THE PEOPLE OF WALES.
- ABOVE ALL, WE AIM TO GIVE OUR PATIENTS, THEIR FAMILIES AND OUR CLINICIAN STAFF, THE THERAPEUTIC LANDSCAPE THEY DESERVE, IN AIDING THEIR RECOVERY AND DEALING WITH THE STRESSES INVOLVED IN WITH CANCER TREATMENT.