

Towards a sustainable urban campus at Grangeegorman

Brian Norton



Dublin Institute of Technology



- Over 120 years of excellence in education
- Was 39 locations around Dublin
- 10% of third level in Ireland
- National provider
- Applied, career-focused education
- Degree-awarding; apprenticeship to PhD
- 80% of graduates employed in professions
- Always ranked in top 5 for CAO applications
- Ranked in Times Higher “Top 100 under 50” rankings





DIT Sustainability

Home Study Academics & Research Community Operations Grangegorman Contacts

DIT is committed to sustainability in all aspects of its teaching, research, operations and community engagement.



Studying

Find out what courses you can pursue in an emerging field with DIT. Postgraduate and undergraduate course.

Find out more



Research

DIT is at the forefront of sustainable research, find out what is going on along with what you can do too.

Find out more

LATEST NEWS

Jan 2014 Towards a Model for Integrating Management & Communications Theory in Sustainability/CSR Research, Lisa Koep, Prof. Aidan O'Driscoll

(Use arrow to discover other DIT sustainability publications)

Jan 2014 H2020 Environment Call : Mark Sweeney Presentation - Enterprise Ireland

FULL TIME POSTGRAD PROG.S : SEPT 2015

MSc Sustainable Development

MSc Sustainability, Technology, & Innovation

MSc Sustainable Electrical Energy Systems





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Upcoming Events

Please note Dublin Energy Lab will hold their next Quarterly PhD Colloquium in Grangegorman (Rathdown House) on the 20th May 2015 at 9:00am

Welcome

The Dublin Energy Lab (DEL) is a leader in science and engineering energy research in Ireland with an associated staff of fourteen academics, four full time researchers, fifteen full and part time PhD researchers and three MPhil researchers. DEL conducts research across a range of disciplines with key efforts organised into themes of

- [electrical power](#)
- [energy policy](#)
- [solar energy](#)
- [zero emissions buildings](#)
- [energy demand analysis and forecasting](#)
- [life cycle assessment](#)
- [more research areas](#)

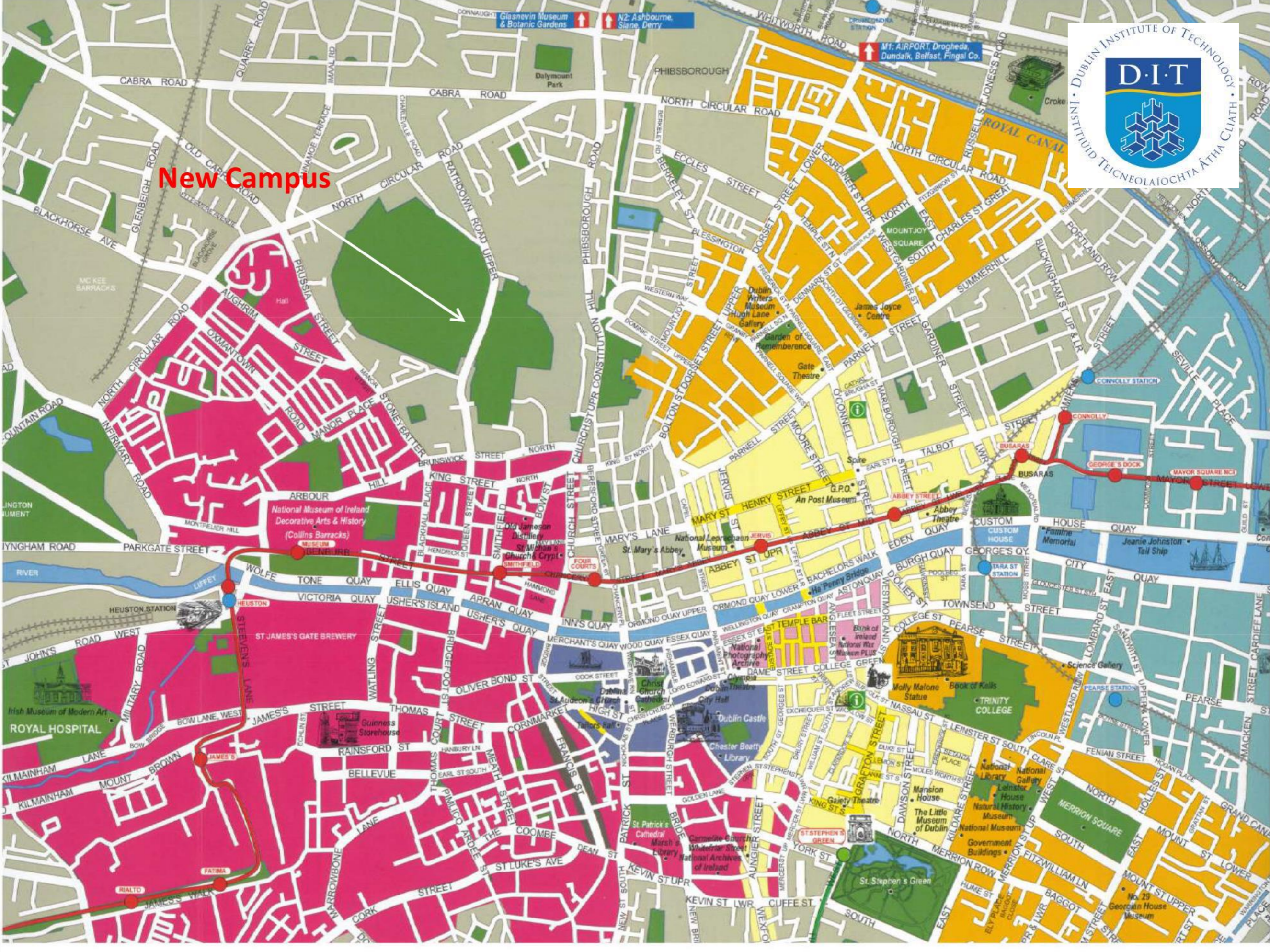
Our mission is to maintain our position as a foremost resource for energy related research and development in Ireland, serving the islands institutional, industrial and academic needs. This is achieved through basic and applied research collaborations closely linked with national and international targets for carbon reduction and growth of a knowledge economy.

DIT's participation in the PRTL funded [GREP-Eng](#) is through DEL.





New Campus



Glasnevin Museum & Botanic Gardens

N2: Ashbourne, Slane, Derry

M1: AIRPORT, Drogheda, Dundalk, Belfast, Fingal Co.

National Museum of Ireland
Decorative Arts & History
(Collins Barracks)

ST JAMES'S GATE BREWERY

Irish Museum of Modern Art

ROYAL HOSPITAL

Guinness Storehouse

Dublin Castle

Molly Malone Statue

TRINITY COLLEGE

National Library

National Gallery

Natural History Museum

Government Buildings

St. Patrick's Cathedral

Carmelite Church

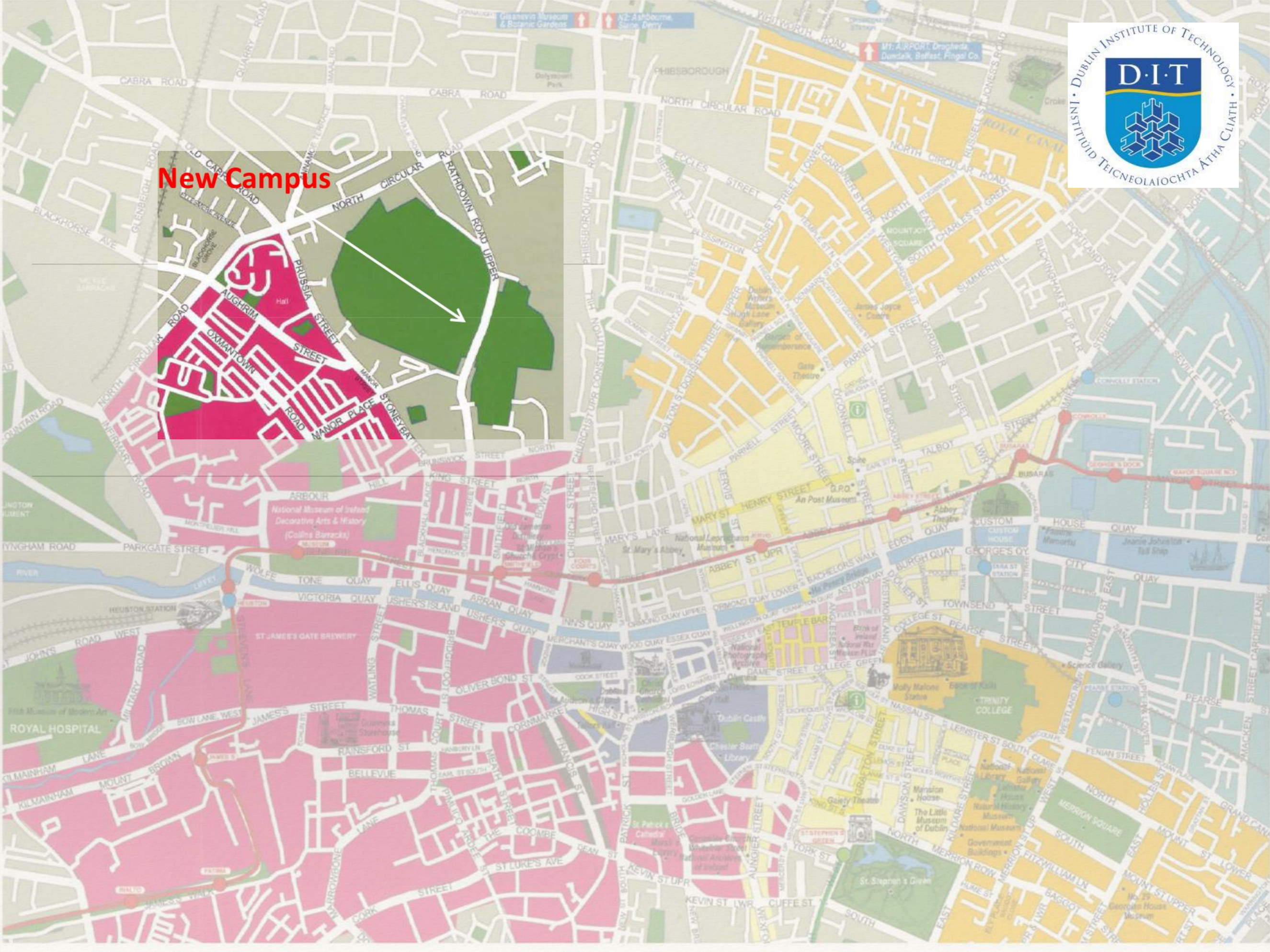
National Archives of Ireland

St. Stephen's Green

No. 29 Georgian House Museum



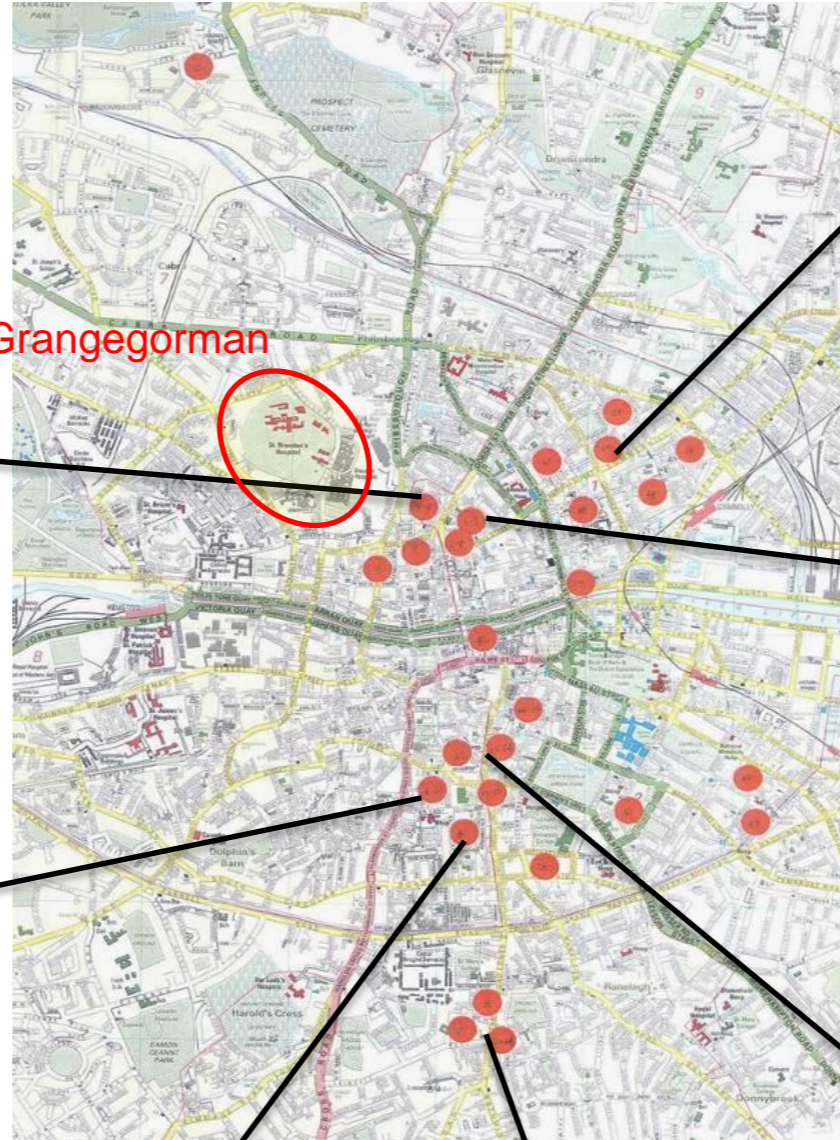
New Campus



DIT Across the city



Bolton St



Grange Gorman



Mountjoy Sq.



Aungier St



Cathal Brugha St.



Kevin St.



Rathmines



Chatham Row



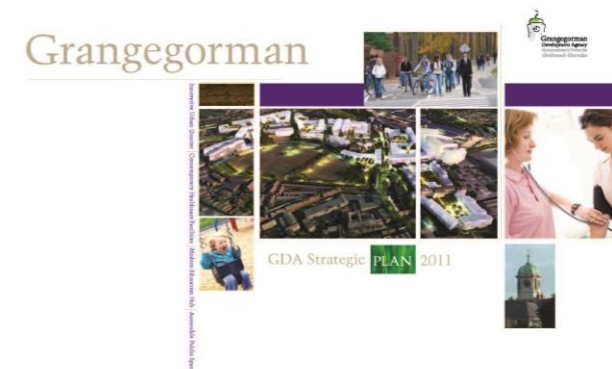
- A **flagship development** within higher education in Ireland incorporating leading edge design, educational innovation and technology.
- One of the **largest urban design developments** to be undertaken in the city core for many decades
- **Award-winning Masterplan** including community healthcare, primary school, modern mental health facility & Dublin Institute of Technology
- **Sympathetic restoration** of existing structures on site



Grangegorman Development Key Strategy Documents



- Grangegorman Masterplan 2008
The Vision
- Grangegorman Strategic Plan 2011
The 'How To'
- Grangegorman Planning Scheme
2012
Key Statutory Document



Vision For Sustainability



The Grangegorman Urban Quarter will be zero carbon by 2050

The Grangegorman Urban Quarter will use zero net mains water by 2050

Grangegorman will achieve Good Practice in Biodiversity

The Grangegorman Urban Quarter will achieve best practice in Waste

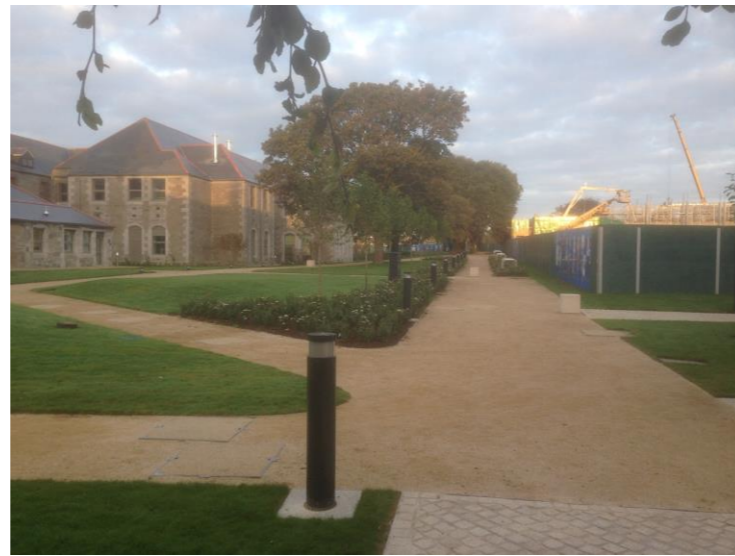
The Grangegorman Urban Quarter will exceed best practice in Sustainability Education.

The Grangegorman Urban Quarter will achieve best practice in Health & Wellbeing

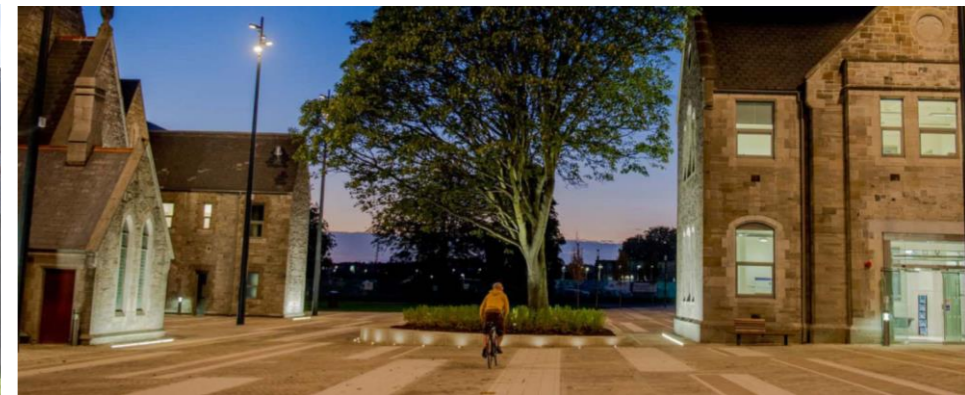
The Grangegorman Urban Quarter will exceed best practice in Community Relations

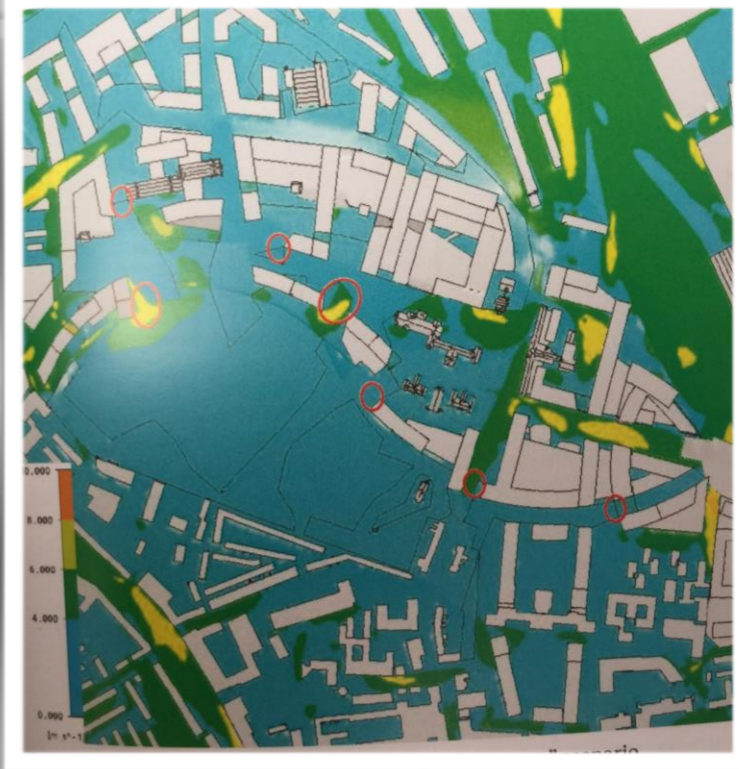
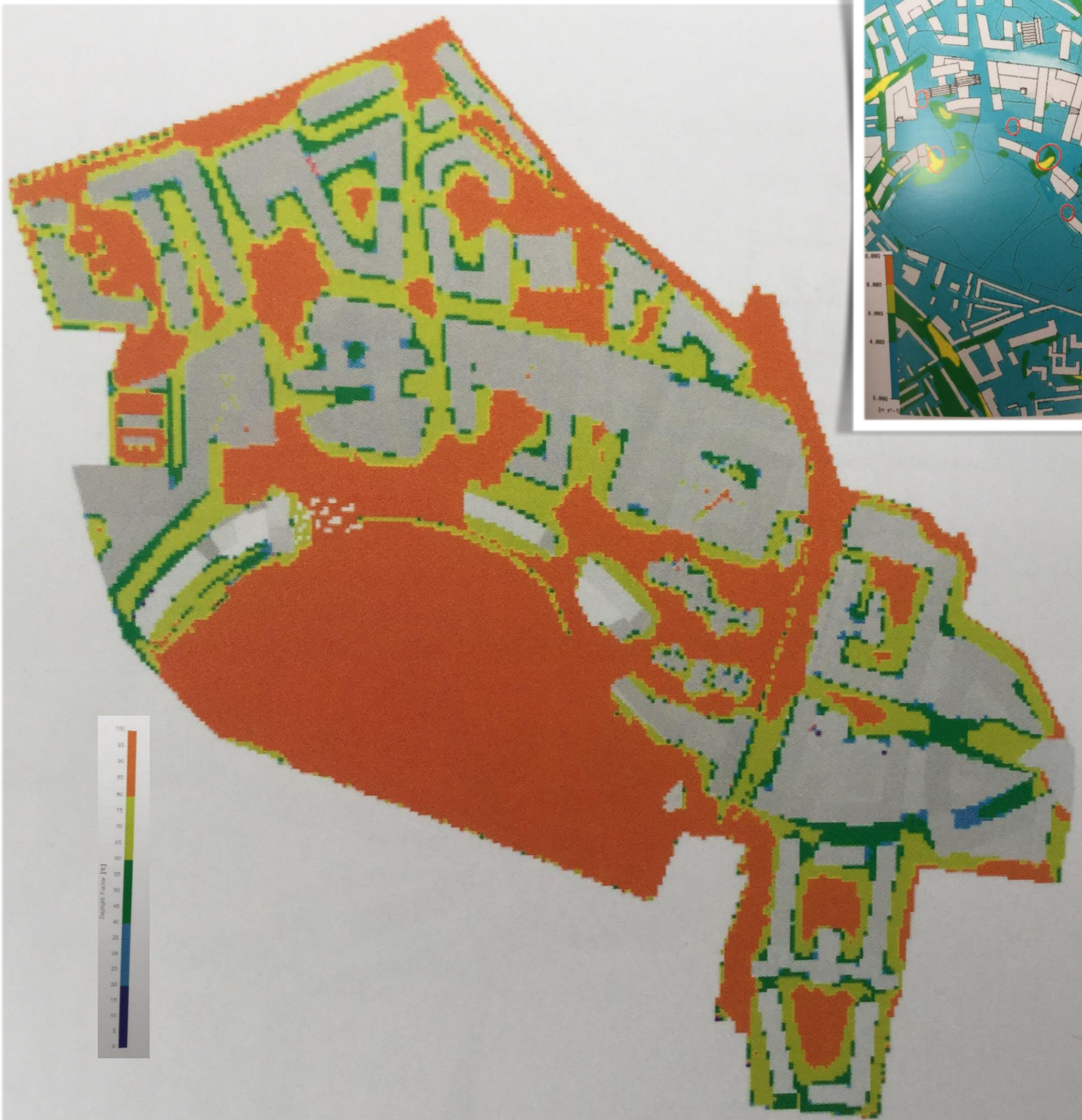
The Grangegorman Urban Quarter will achieve best practice in Transport

The Grangegorman Urban Quarter will exceed best practice in Sustainable Governance



- Minimisation of energy-demand and carbon emissions generated in particular by vehicular traffic
- Improved connectivity and integration of the site with the surrounding area
- Community access to cultural, educational and recreational facilities
- The inclusion of research, incubation, science and technology, and commercial uses within the site
- Mixed uses on the site thus creating a vibrant urban area and also reducing travel journeys



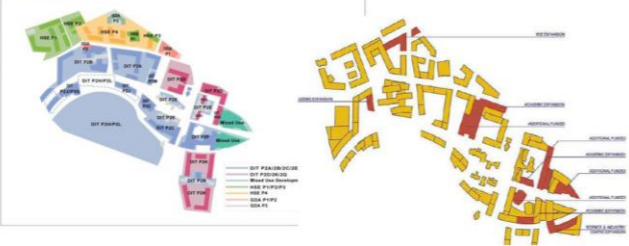




- Reuse of a brownfield inner-city site
- Significant open space for recreational use, with inherent environmental benefits
- Facilitation of the repair, reuse, intervention and adaptation of protected structures
- Encouragement of a positive modal shift in transport patterns, through public transport linkages within city centre and improved pedestrian and cycling access and facilities



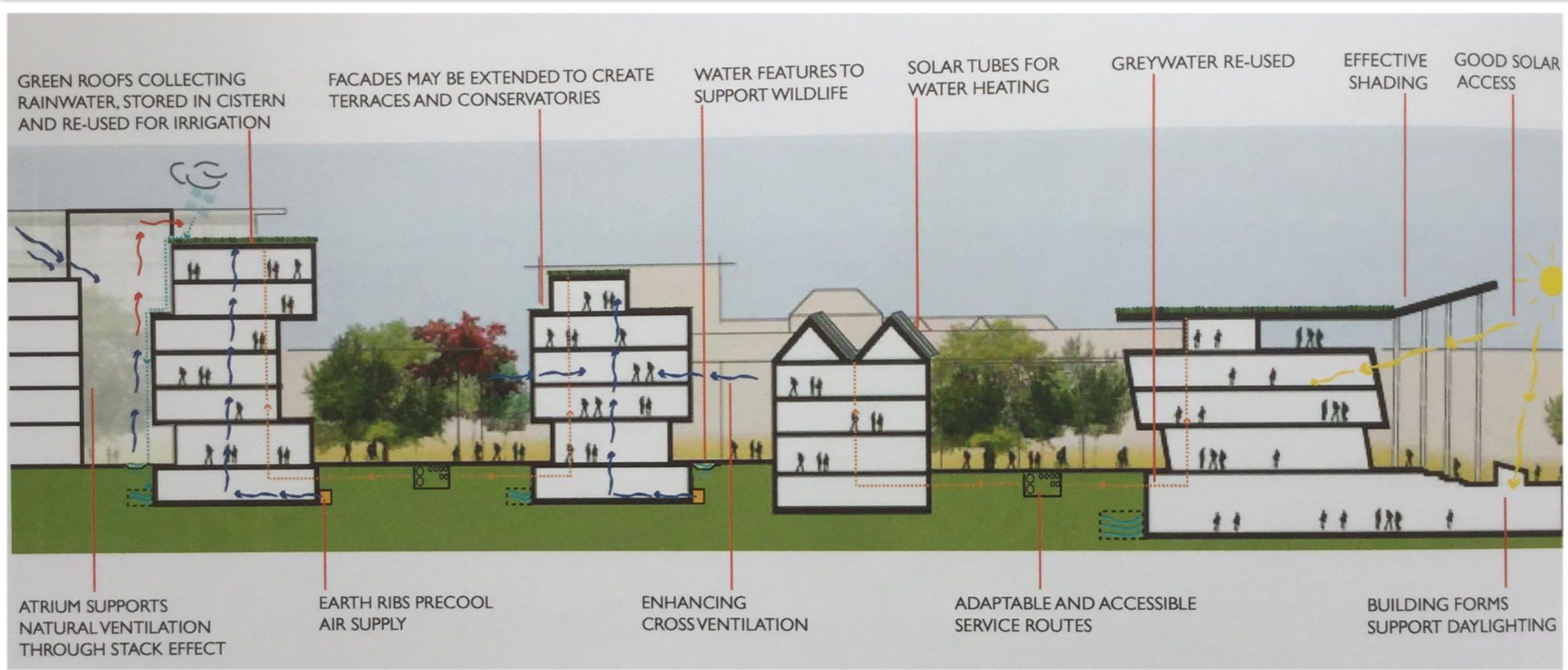
Environmentally sustainable
 Energy efficient
 Integration with surrounding streets
 Urban scale and form
 Incorporating existing protected structures
 Exploiting existing landscape and views



- 2009 World Architecture Festival
- 2010 Chicago Athenaeum/ Europe American Architecture Award
- 2012 American Institute of Architecture honour award
- 2012 Society for University and Campus Planning honour award

- SUMMER SUN PATH
- WINTER SUN PATH
- SOUTH - WEST PREVAILING WINDS - WIND HARVESTING / EVAPORATIVE COOLING
- LANDSCAPE BUFFER - PROTECTION FROM COLD WINTER WINDS
- STORMWATER MANAGEMENT WATER RETENTION POND



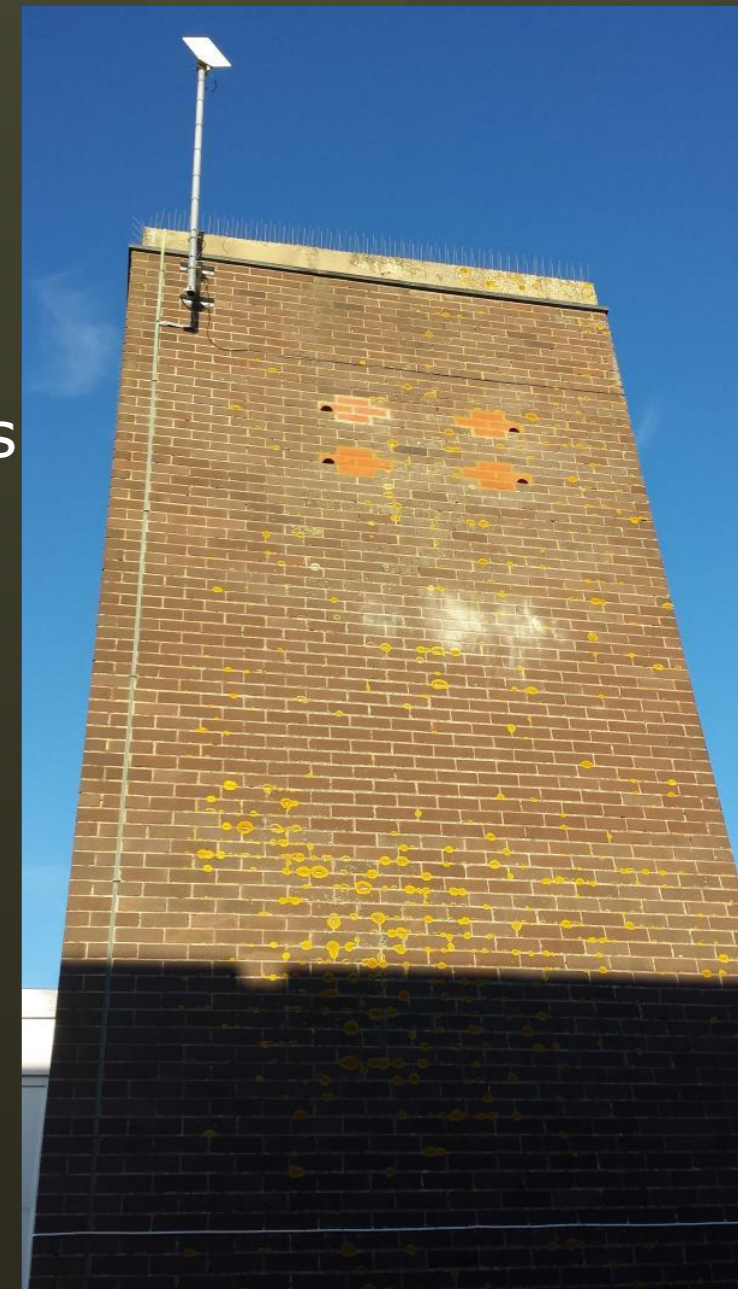


'Swift Conservation in DIT Grangeegorman'

Swifts are a high profile bird in Dublin City their numbers are in decline due to new construction methods. This project is designed to help stop the declining Swift population in Dublin.













This project, led by DIT Green Campus Committee, will create appropriate structures to protect Swifts in the Grangeegorman area at the site of the new DIT Campus.

The project will be to erect new nest boxes for the swifts and to monitor their activity through cameras

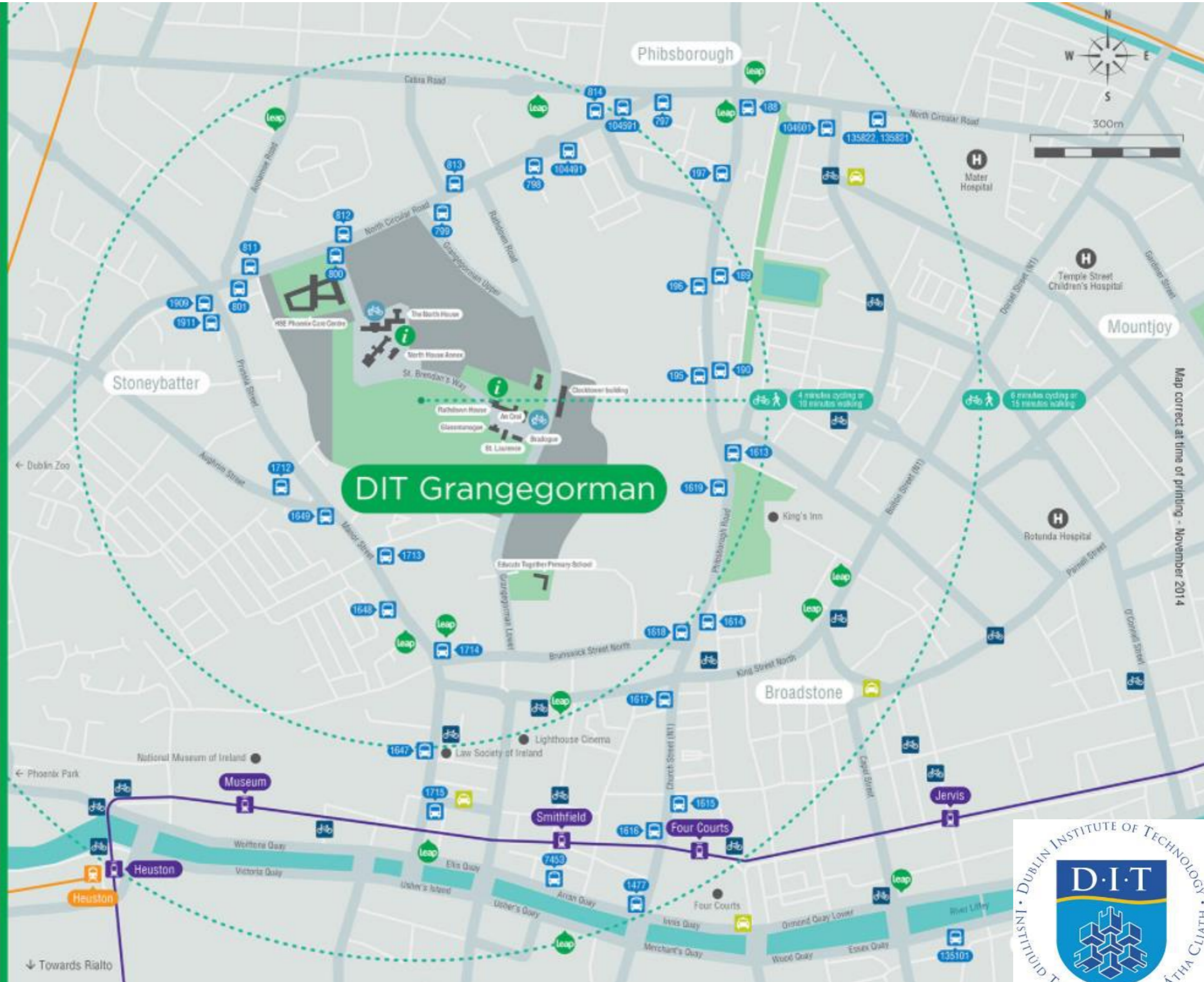


Travel Options and Services:

> DIT Grangegorman

-  Bus
-  878 Bus Stop Number
-  Luas Tram
-  Train
-  Taxi Rank
-  Dublin Bikes
-  Bike Stand
-  Public Transport Information
-  Leap Card Agents
-  Hospital
-  Cycling Time
Average speed and from the centre of campus (St. Brendan's Way)
-  Walking Time
Average speed and from the centre of campus (St. Brendan's Way)

Use the Real Time Ireland App to set an alert for when your bus, tram or train is due, or to view nearby bus stops. Type the bus stop number into the app to find real time information.





LUAS CROSS CITY ROUTE MAP

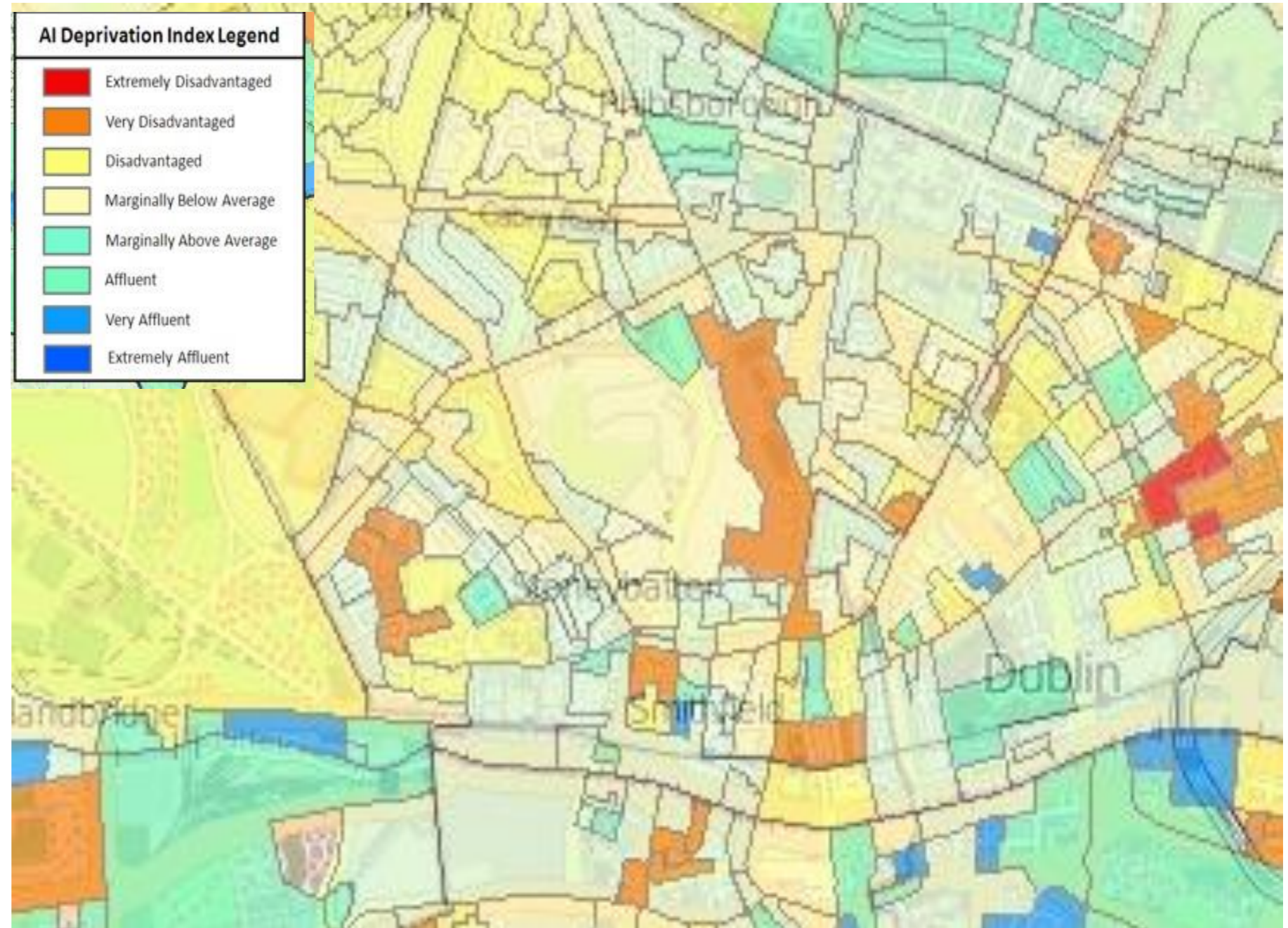
St. Stephen's Green - Broombridge



Urban Regeneration

North Inner City

- Very mixed levels of wealth & deprivation
- Project will provide:
 - Jobs – *construction and long term*
 - Positive impact on local businesses
 - Local amenity space
 - Sporting facilities
 - Joint-use library
 - Primary



Urban Regeneration

DIT and Partners

Regional
Capacity
Building

Regional
Business
Innovation

Public Private
Partnerships

Civic
Engagement
through
Service
Learning

Human Capital
and Skills
Development

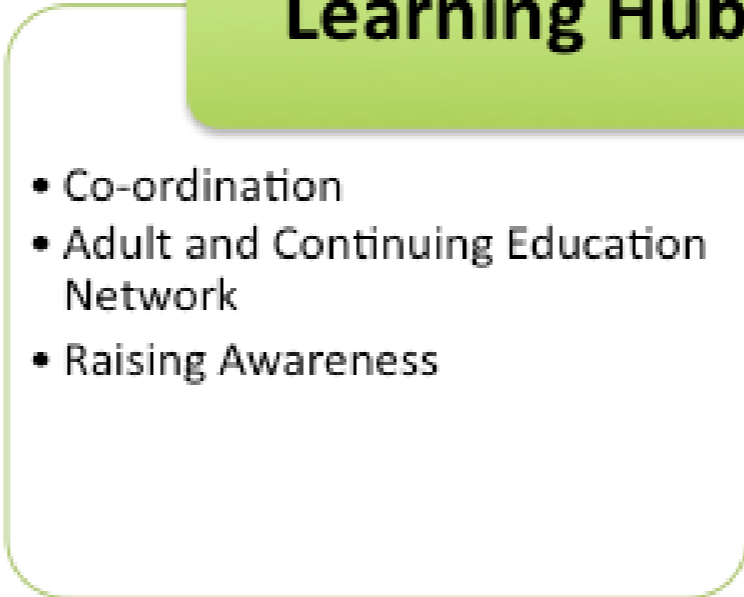
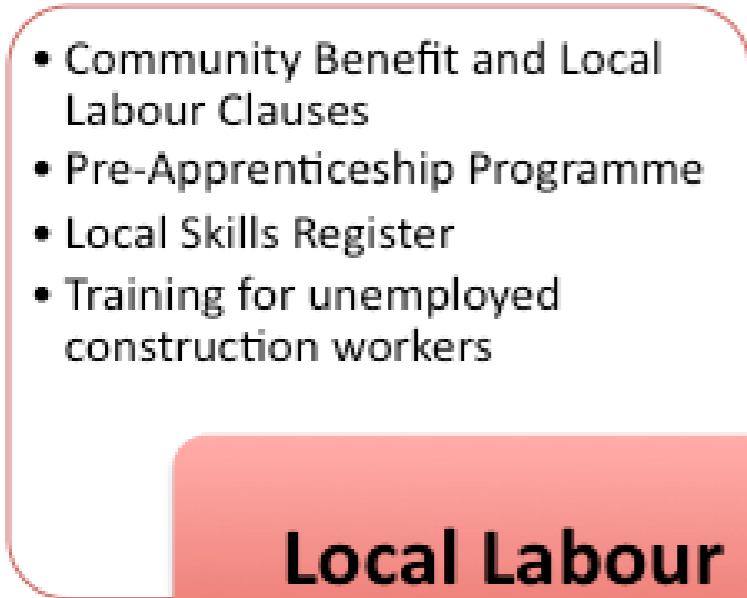
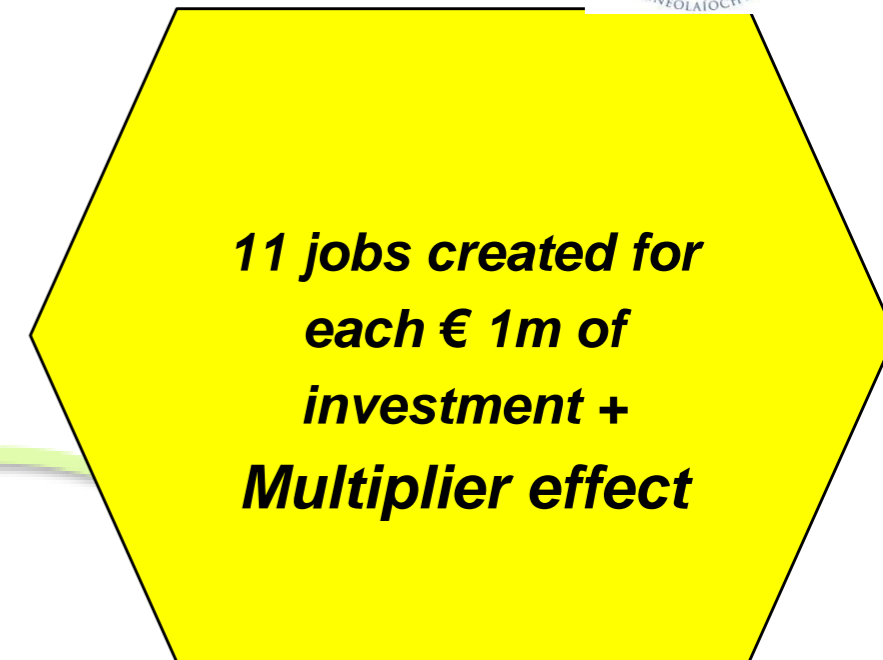
Social and
Cultural
Development

Labour and Learning Forum



An Integrated Strategy

Programme 1: 300 jobs per year over 3 years



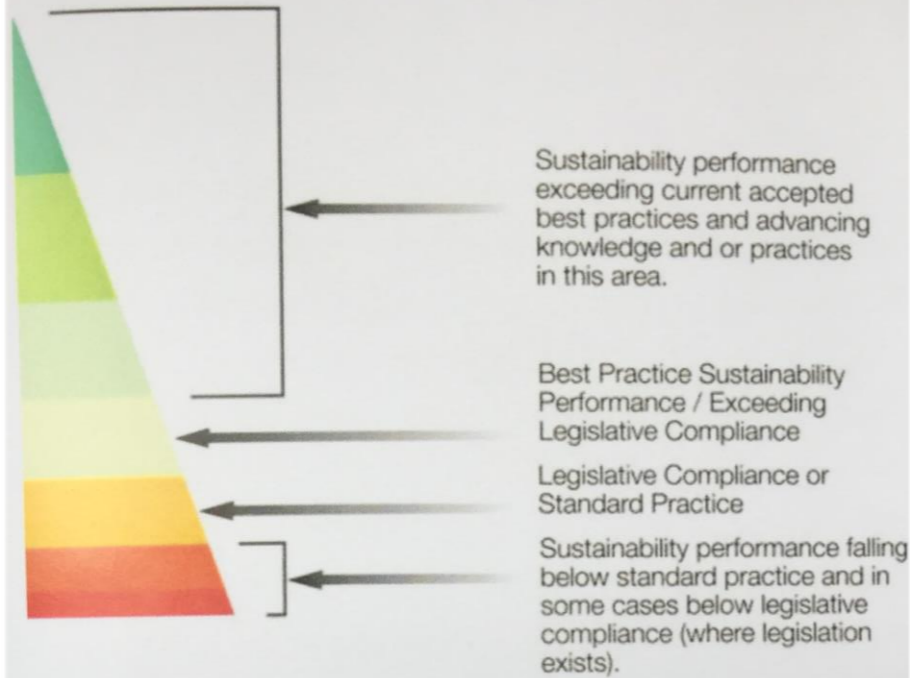
- Community Benefit and Local Labour Clauses
- Pre-Apprenticeship Programme
- Local Skills Register
- Training for unemployed construction workers

- Co-ordination
- Adult and Continuing Education Network
- Raising Awareness

- Business Development Training
- Mentoring
- Technical Assistance
- Financial and Business Planning
- Financial Support
- Incubation Space

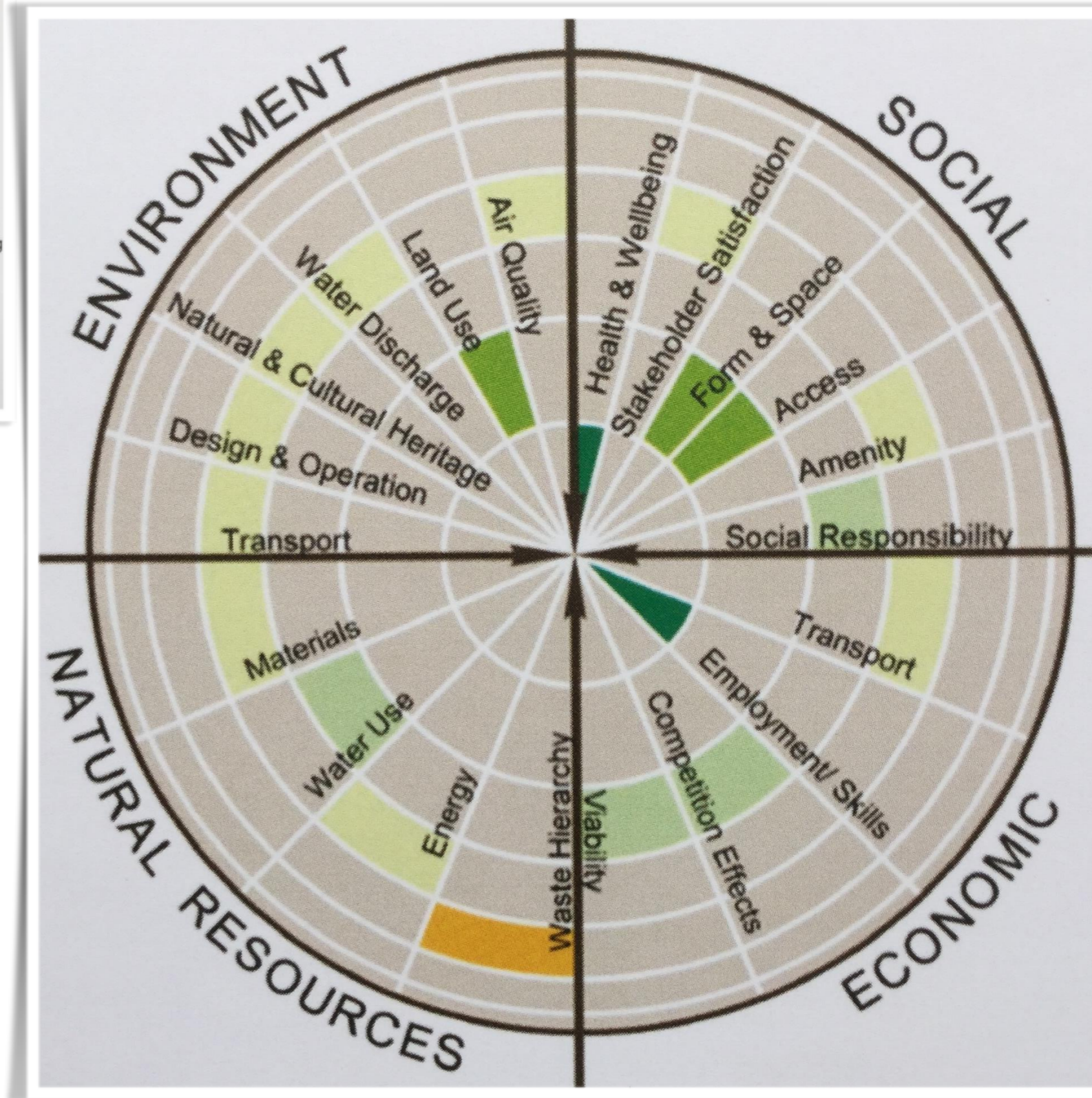
Local Employment Charter in place targeting 20% recruitment from surrounding areas

Optimum Sustainability Performance



Worst Case Sustainability Performance

SPeAR© sustainability performance evaluation approach

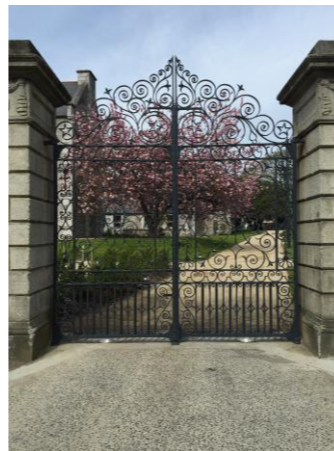




1950s



2013



May 2015



Aug 2014



2020



Longer-term Sustainability Goals in Grangeegorman

“By 2050, Grangeegorman will be recognised by its students, staff and wider stakeholders as one of the leading urban quarters in Ireland for its sustainability performance.”

