

# National and Major Infrastructure Projects: Capturing the Benefits Through Planning

Claire Pearce  
Director of Planning and Economic Development, Gravity

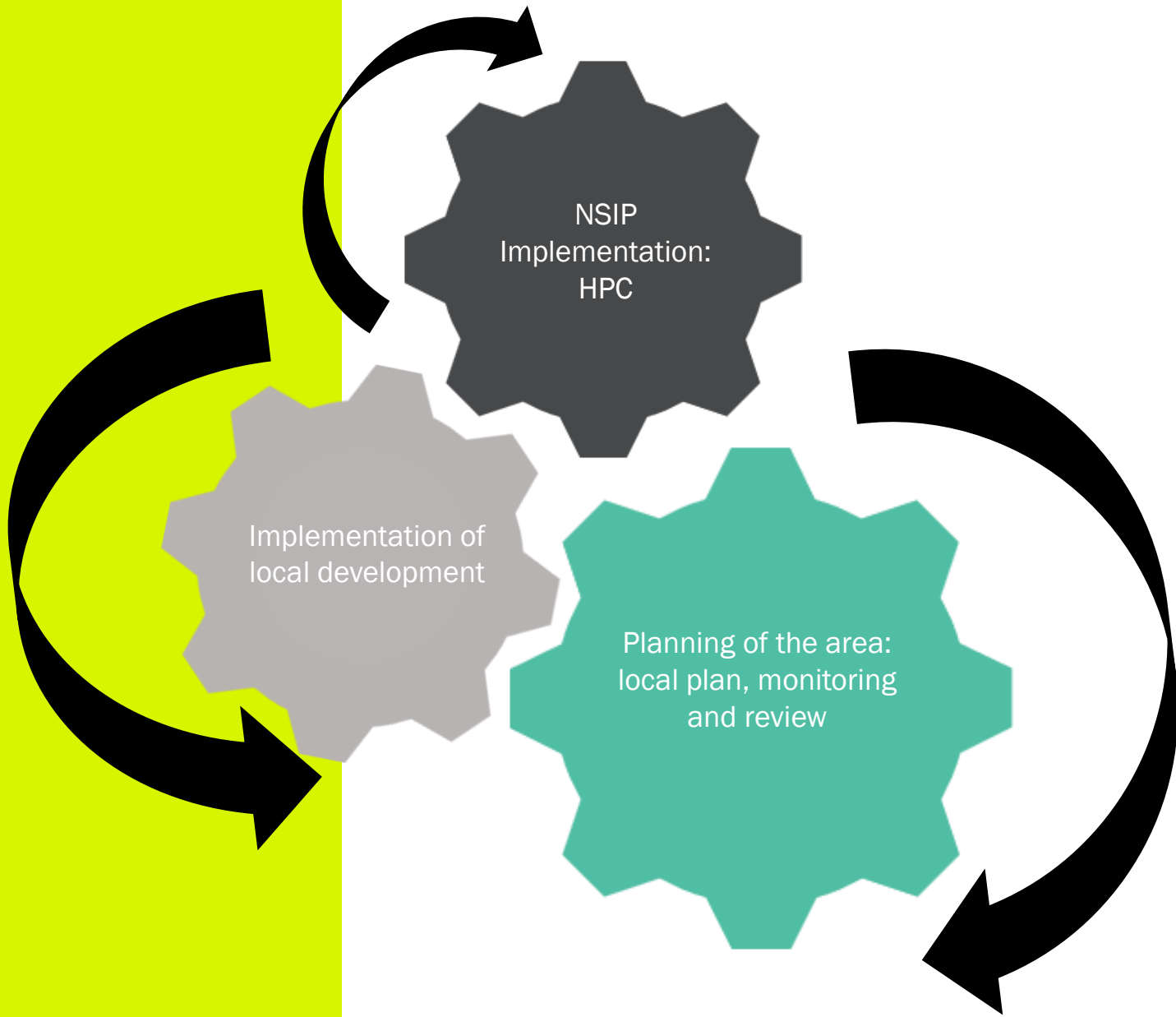
- + Introduction
- + National policy alignment? Priorities?
- + Personal perspective: positive planning, place, performance
- + The role of planning to make sense of it all
- + Today – focus on the HotSW: HPC and Gravity
- + The MANY roles of the planner – macro to micro
- + Baseline; proportionate, priorities, outcomes; solutions
- + Project legacy, 'our' legacy
- + Improvements to places for communities to thrive



# Hinkley Point C – just a construction project ?

- + £19b 7% of UK energy needs, 6m homes - first unit 2025
- + Global inward investment project, multi-generational effects
- + 25,000 jobs, 5600 pd at peak, 700 permanent jobs
- + 190ha main site, multiple associated and ancillary sites
- + 4 park and ride sites, 2 temporary campuses for 1500 workers, jetty and wharf
- + Transport improvements across 15 miles
- + Timeline: Site selection 2008, 2009 PPA, 2010 Site prep works (£25m mitigation, 2014 DCO commenced (£75m), 2016 FID
- + 2017 Earthworks, 2020 Civils, 2021 peak



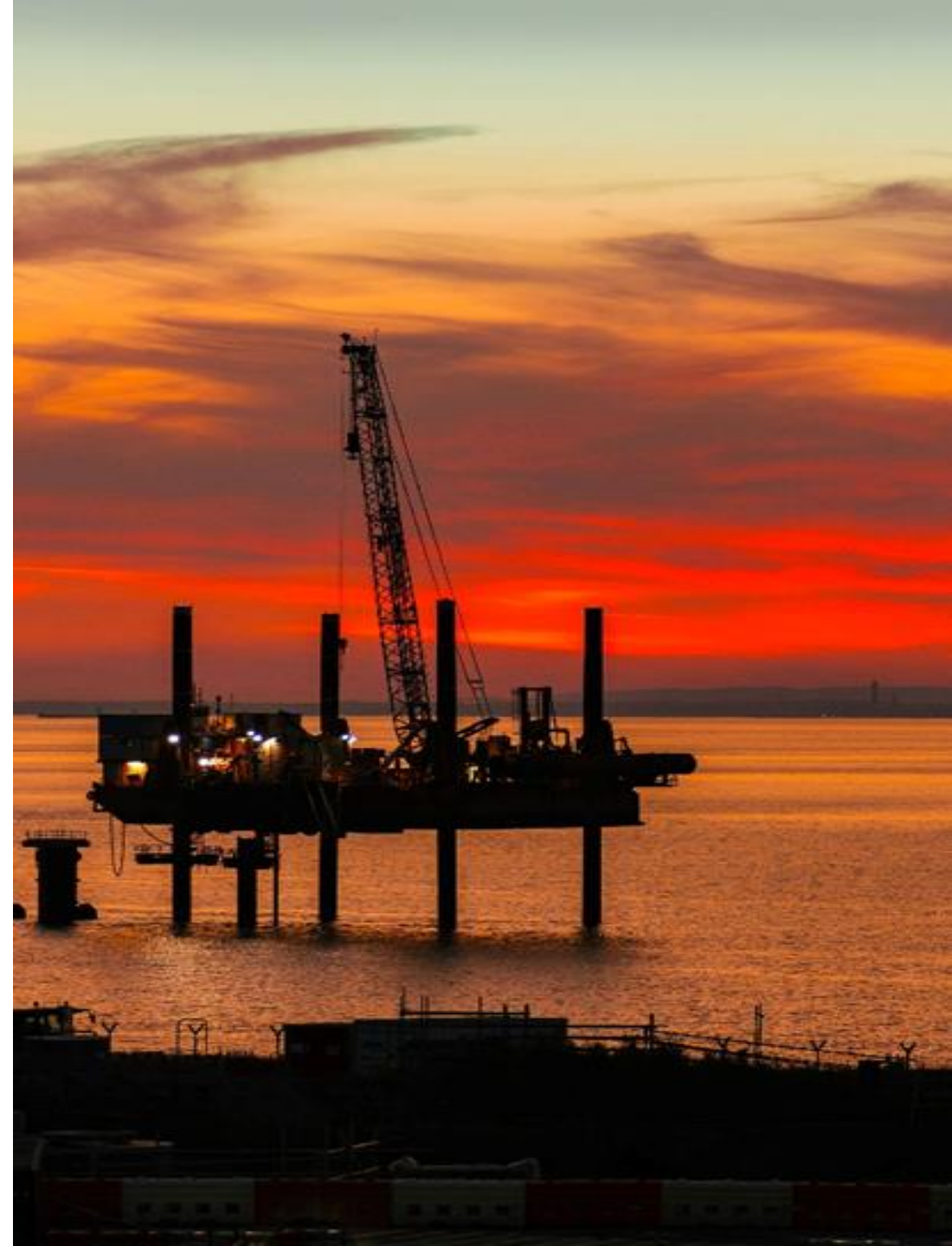


Use spatial planning as a planning as positive tool to lead and shape transformation.

Being innovative, creative and enabling progressive decisions and outcomes.

# Hinkley Point C

- + No governmental support/ assistance
- + Opportunity for the 3 primary authorities
- + Key decisions about degree, depth, resourcing, challenge
- + Sedgemoor took initiative: max benefits, min impacts
- + Leadership role - shared vision, objectives, outcomes
- + Strategic planning: Clear vision: long term thinking
- + HPC PPA recognised nationally as best practice
- + Local Impact Report, S106, 3 primary controls



# Designing in Benefits

PPA : “A significant contribution towards:

- + Socio -economic benefits during construction and operation
- + Local employment opportunities
- + Training and workforce development
- + Leisure services
- + Expenditure on local facilities
- + Businesses in the supply chain
- + Place transformation- infrastructure investment

Dillington visions 2010:

- + Housing
- + Economic development
- + Low carbon future
- + Education, employment and skills
- + Community well being



# Approach to benefits realisation

- + Two planning systems – one place
- + A Proactive, Dynamic, Future Proof Strategy
- + Economic led transformation strategy over 20 years
- + Shaping and Delivering Planning Mitigation
- + Anticipating and shaping a 'Place Based Vision'
- + Leveraging other funding to secure and add value to legacy
- + Reverse engineering legacy
- + Attitude: commitment, resilience, focused on transformation



# Driving out benefits

- + Managing risk: Avoid boom and bust
- + Using tools: £130m section 106 agreements
- + Marshalling investment and delivery- National College for Nuclear (NCFN)
- + Somerset Energy Innovation Centre & Somerset Low Carbon Energy Hub (SEIC)
- + EDF Energy Low Carbon Leadership Training Campus (Cannington Court)
- + Bridgwater Gateway Employment Site
- + Skills and Training - BTC's Advanced Engineering Centre & Construction Skills Centre
- + Under Construction





# Capturing benefits to place:

National College for Nuclear



# Capturing benefits to place:

Somerset Energy Innovation Centre & Somerset Low Carbon Energy Hub



# Advanced Engineering & Construction Skills Centres



# Cannington Court Regeneration: Listed building restoration



# Enabling expenditure and creating opportunities

- + >£1.5 billion spend to date, £840million in South West
- + £20m Community funds
- + Inspiring young people
- + Tackling deprivation and long term unemployment and under-employment

## Creating Opportunity for training and skills enhancement:

E.g. NCFN construction LLA delivered:

- + 98 jobs (87 to employees in TA postcode)
- + 5 work placements to BTC students
- + 433 weeks of training completed by 22 employees
- + 8 workers secured new qualifications at NVQ Level 2 or above
- + 114 new industry certifications gained by workforce
- + Educational facilities for training across all levels including apprenticeships, vocational and degree / masters.
- + Significant range of benefits across social, economic and environmental aspects of sustainability: inclusivity



# Substantiality benefits

- + Enabling low carbon energy generation
- + Targeting the infrastructure deficit
- + Travel demand management
- + SEIC – Creating a sustainable economic legacy through the growth of a South West low-carbon energy cluster. BREEAM Excellent.
- + NCfN – Social sustainability through high value training. BREEAM Excellent.
- + Gateway – 3000 jobs, 25,000 trees & shrubs.
- + Cannington Court – first large scale example of a ground-source heat pump combined with solar thermal technology. Grade I Listed.
- + Using HPC capacity and capability as a driver
- + Next phase of economic transformation underway: Gravity



# Making a difference – Capturing benefit

- + PPA- creating capacity, evidence, leverage
- + Long-term planning policy framework with clear vision
- + Transformational effect on communities, educational opportunity, quality of life and economic prosperity
- + Creating Value: Planning can provide flexibility through TCPA regimes. Experts in their localities and how they function
- + Critical role in requirement / obligation discharge, change management and implementation – driving out legacy
- + Unlocking private investment
- + Realising tangible outcomes in communities



Shaping the next  
generation of investment:

# Gravity

Smart Campus





# Supporting the Industrial Strategy Grand Challenges

A business which is:

- + Responding to opportunities in the UK and SW
- + Enormous opportunity to realise added value and achieve sustainable legacy beyond HPC
- + Delivering a bold vision as a response to the **cultural shift** in the digital economy, consumption changes and automation development, affecting the commercial landscape
- + A catalyst for **regional change** and **innovation**
- + Developing a **live-work-play** environment to meet the needs of tomorrow's workforce
- + Underpinned by a **Clean Growth** strategy which is focused on the future economic growth of the UK

**Gravity**



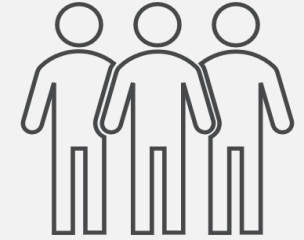
# Leading The UK's Sustainable Economic Growth

- + **Smart Campus:** Exemplary use of AI & IoT, data, environmental performance
- + **Clean Growth:** The South West has an opportunity to 'lead' the Clean Growth space in the UK
- + **Future of Mobility: Research and innovation centre in partnership with UWE:** EV, AV, rail, passenger transport active travel choices
- + **Ageing Society:** Live-work-play, inclusive and holistic approach to wellbeing, cycling and walking trails, investment in natural environment as an asset

**Gravity**



Smart Tech



Community / Local Services



Clean Growth



Future of mobility

# An Opportunity with Significant Global Interest

**A catalyst for change:** Supporting regional and national economic development by attracting modern and innovative businesses and inward investment.

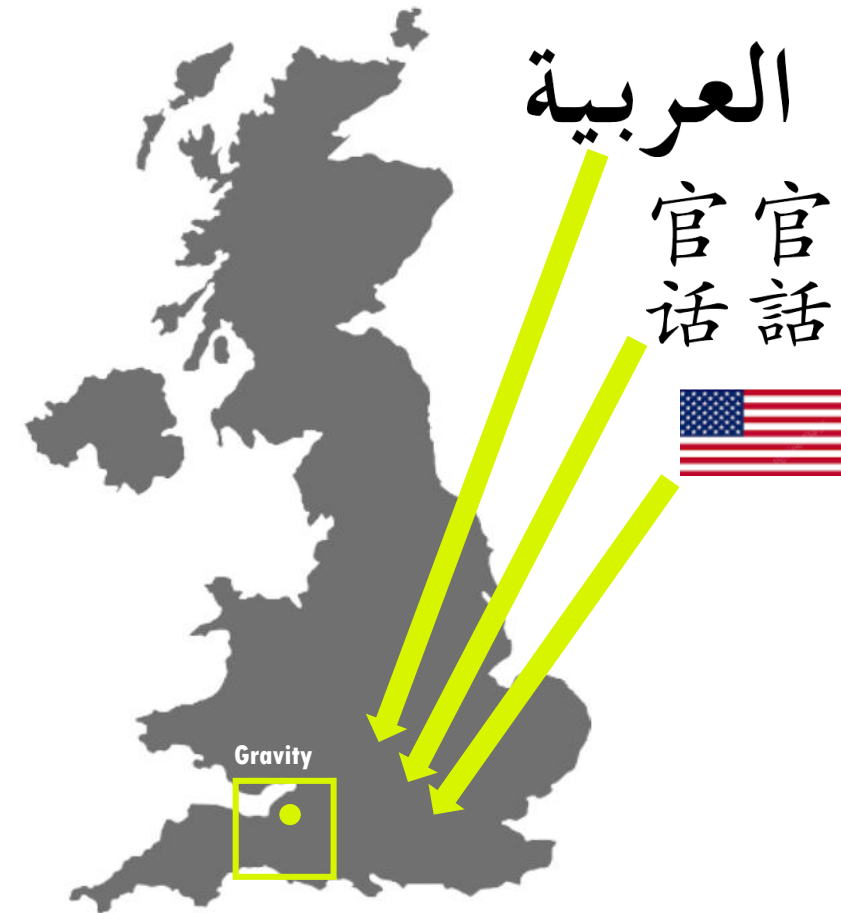
**High economic impact:** Expected to create over 4,000 jobs and contribute ~£500 million to the local economy.

**Supported by UK government:** An Enterprise Zone supported by the Government and aligned to the UK Industrial Strategy's Clean Growth Initiative.

**Leading in the Clean Growth space:** Developing a bold brand that has the opportunity to be internationally recognised and act as a beacon for change to encourage sustainable economic growth.

**Developing Britain's future:** An expression of the creativity, innovation and pioneering spirit that is making Britain great.

**One of a kind:** Placing quality, community and well-being at the core of a high-tech innovation and industrial campus on a scale not seen before in the UK.



# Core Attributes

## **National Government Support**

Enterprise Zone; strategy aligned with key UK initiatives e.g. Clean Growth

## **Local Government Support**

Progressive and engaged Local Enterprise Partnership ("LEP") and District Council with previous experience of a major project (Hinkley Point). Gravity was the first private company to receive a UK transport grant for infrastructure

## **Skilled Workforce**

Strong supply of skilled employees and research facilities within commuting distance

## **Cultural Appeal**

Desirable natural setting in proximity to the coast, bordering a National Nature Reserve and within 15 miles of two Areas of Outstanding Natural Beauty

## **Placemaking**

Placing quality, community and well-being at the core which is fit for a changing world of employment

# Gravity



# Re-thinking Energy



# ectogrid™

POWERED BY *e-on*

## District heating/District cooling

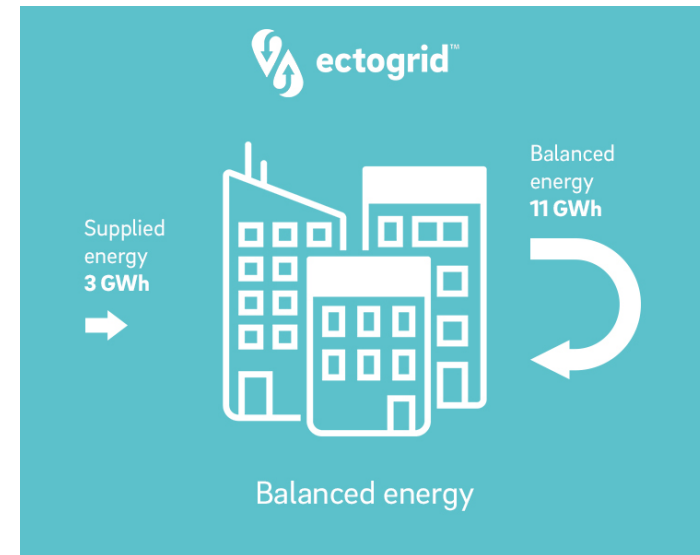
District heating  
10 GWh



District cooling  
4 GWh



Supplied energy



# Access to best-in-class talent pool

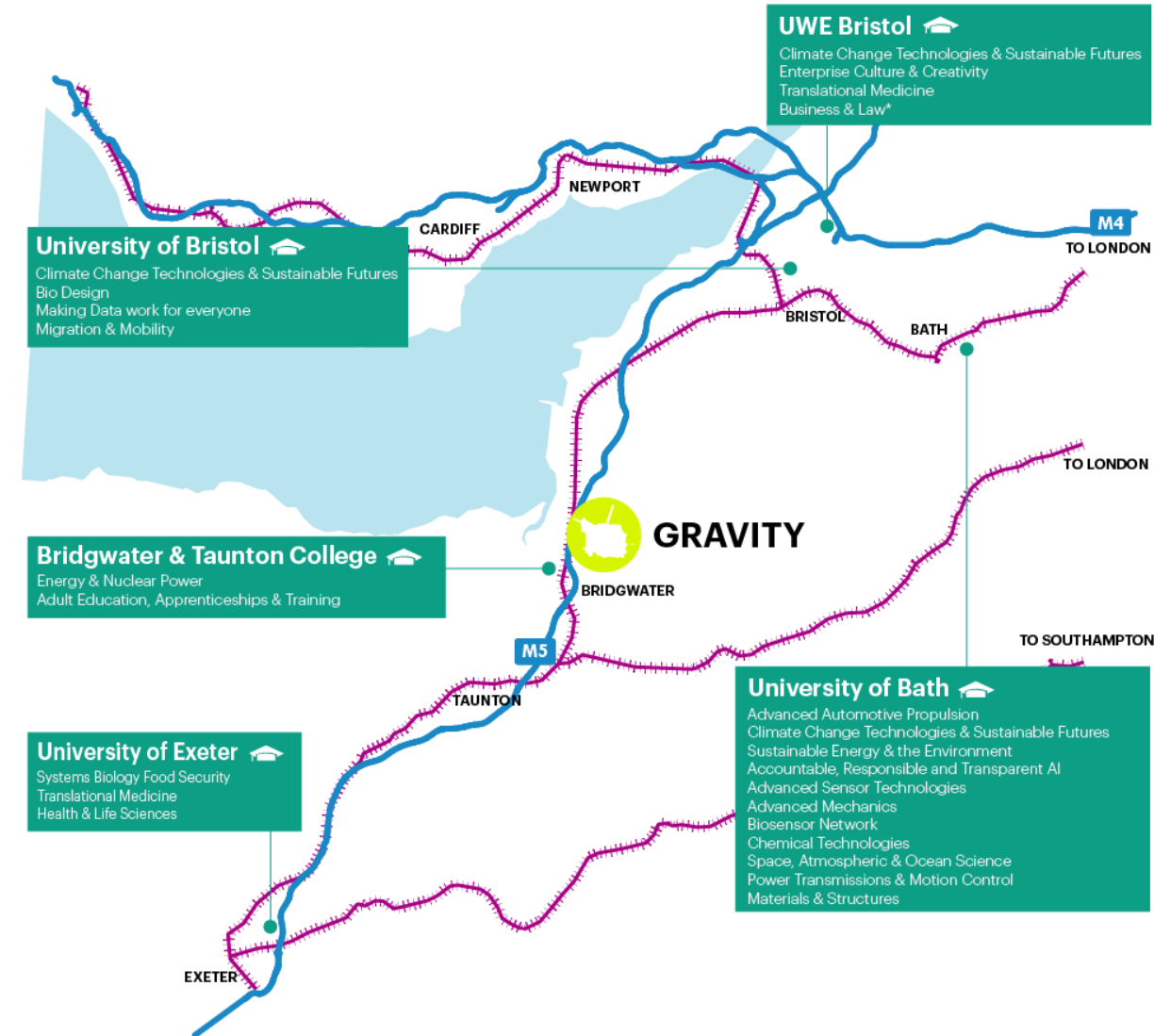
Sedgemoor District sits within a region hosting world class universities with innovation and clean growth-focused research faculties as shown on the map to the right.

By creating an attractive environment for researchers and highly skilled workers, the site will enable occupants to retain top talent in the region and generate a cluster of innovation in the Clean Growth sector.

## Key research areas include:

- + Sustainable Energy
- + Climate Change Technologies
- + Power Transmissions & Motion Control
- + Advanced Mechanics
- + Food Security

In addition, Gravity falls within a 60 minute catchment of Bristol where over 50% of the workforce has qualifications at level 4 or above <sup>(1)</sup>.



# Vision

Gravity will be an intelligent, sustainable, connected and immersive mixed-use campus, home to the world's most innovative companies.

Purpose built, diverse workspaces and resilient technologies will be set against an established natural landscape – supporting a culture of innovation and well-being that blends the boundaries between work and play.

Gravity will be designed to shape connections between people and the places in which they work, for a cleaner, sustainable future.



# Gravity

will become the UK's leading Smart Campus

635 Acres

Enterprise  
Zone

Planning  
consent  
granted

On-site  
energy  
generation

M5  
motorway link

Rail link

International  
airport links

Deep sea  
port

Water  
abstraction  
license

Dark  
fibre

Regional skilled  
workforce

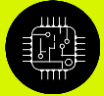


# Infrastructure

## Size & plot flexibility



## Dark fibre



## Connectivity



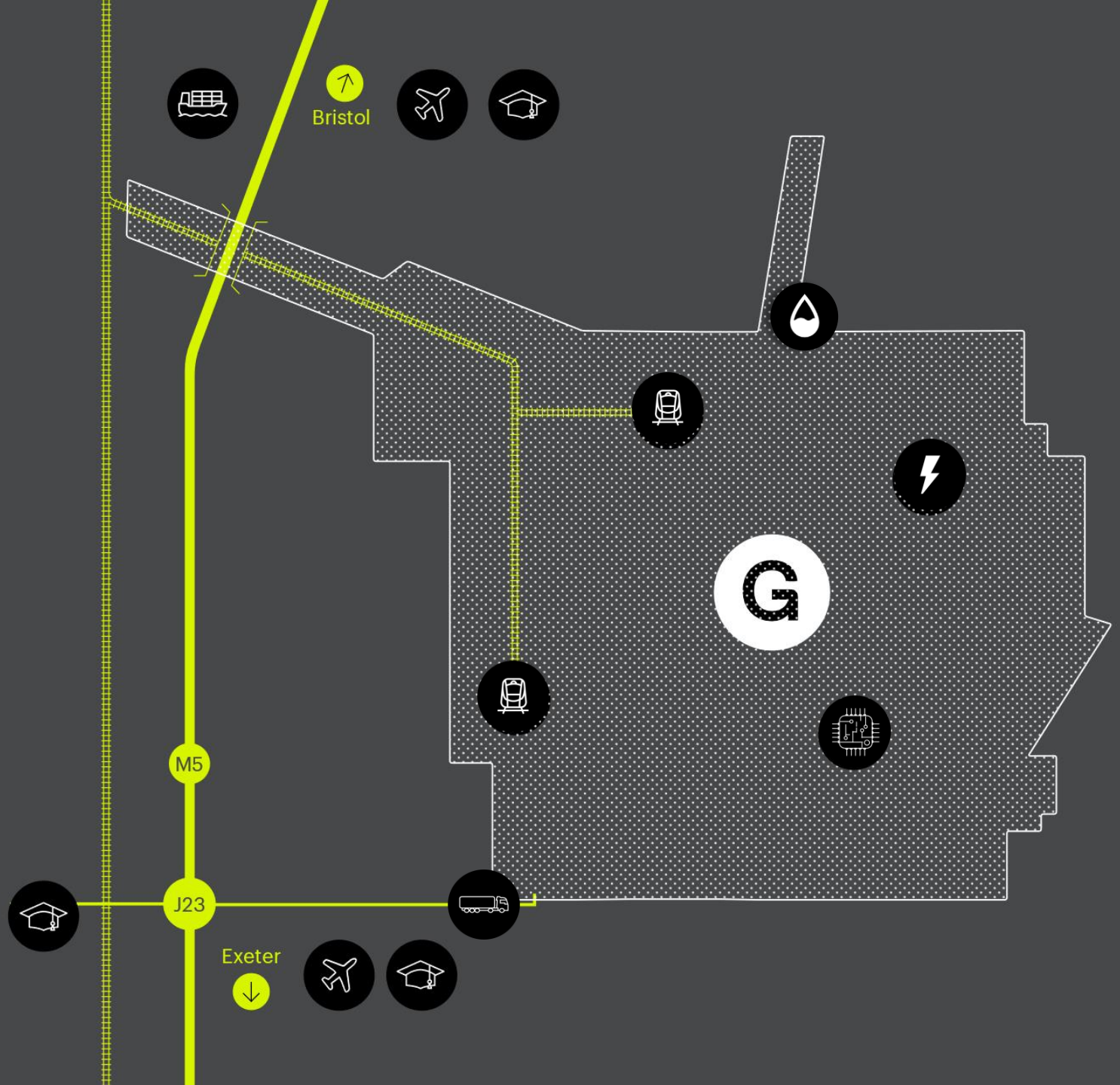
## Water abstraction licenses



## Energy



# Gravity





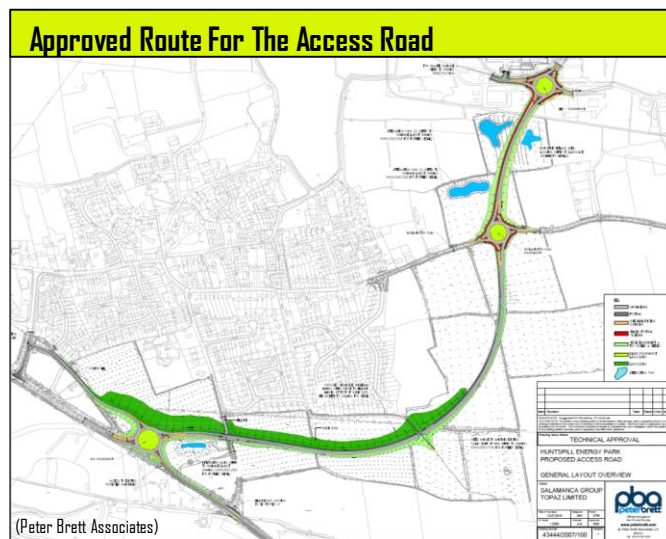
Gravity

# Unlocking the Site - New Access Road

The construction of the access road, which will provide direct access to junction 23 of the M5, and will be the first key step in bringing Gravity forward as a viable commercial destination.

In April 2018 the Heart of the South West LEP approved a £3.94m grant to Gravity towards the cost of the road. This is the first UK transport grant given to a private company for this purpose.

Practical completion of the road will be in H2 2020.



Next Gravity link Road Community drop-in  
session:

**Wednesday 4<sup>th</sup> December**  
**3pm-7pm**

**Design Proposals & Rationale**

Gravity in collaboration with Bridgewater and Taunton College are looking to use the site as an educational resource. In the coming years many thousands of trees will be planted within and around the Gravity site to provide Green infrastructure within the interests of the areas nature conservation value and it's visual amenity.

The proposed nursery would enable seedlings and cuttings from the site and further afield to be propagated such that plants can be planted within and around the Gravity site.

In collaboration with the college, local landowners and Sedgemoor offices it is hoped this propagation will include the rare and locally much valued Black Poplar, a tree once common across the levels but now rare. The nursery would be an asset to the Gravity scheme and the wider area/landscape.

**Land Budget**

Study Site	Gross Area
Total Area. (Excluding road links outside of the security fence boundary)	3329m <sup>2</sup>
Planting Beds	197.55m <sup>2</sup>
Polytunnels	104.64m <sup>2</sup>

**Included items suggested by Bridgewater & Taunton College:**

**2 No. Polytunnel** - Size: 4.26m x 14.63m (14ft x 48ft). Total growing area = 62.32m<sup>2</sup> each.

**Water Supply** - We would suggest each tap location is provided with a gravel & paving slab area, 900 x 900mm sitting on simple gravel & terram sub-base.

**Toilets** - 2 No. Accessible, compostable toilets are located in the south-western corner.

**Irrigation** - Linkages can be made between the taps located around the site into suitable areas. Drip-fed irrigation can be achieved via a network of hoses & irrigation drip-feeds.

**Planting/Sowing Areas** - 9 No. of raised planting mounds, mulched with a thick bark mulch layer to reduce weed growth & water retention. Total growing area = 197.55 m<sup>2</sup>

**Composting Bays** - 2 No. Triple Composting Bays are located within the north-eastern region.

Rootballs will be transplanted from

**Proposed Hedgerow Mix:**

(We suggest that the hedgerow is maintained at 1.5-2.0m in height)

Species	Plant %
Acer campestre	10%
Corylus avellana	20%
Crataegus monogyna	40%
Eurotyum europaeum	10%
Ilex aquifolium	15%
Prunus avium	5%

Note: Hedgerow mix could be added/provided to increase the hedgerow flora & fauna value

 **the richards partnership**  
 1 Agincourt Square, Monmouth, NP25 3BT  
 T: +44(0)1600 772251

**Project:**  
Gravity - Plant Nursery

**Title:**  
Layout Plan

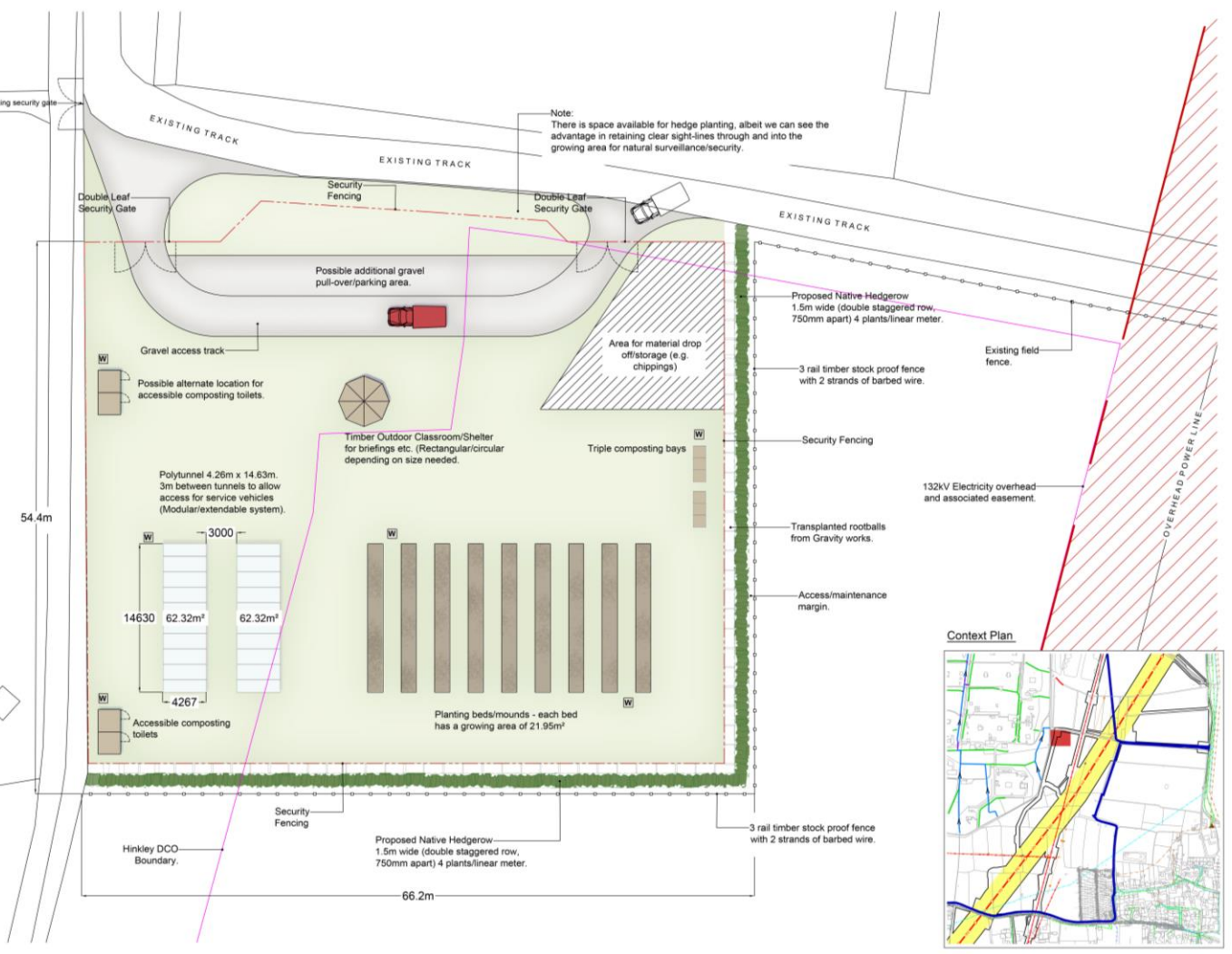
**Revisions:**

Rev 0: 18/09/2020

<b>Drawn by:</b> AP	<b>Checked by:</b> PJR	<b>Status:</b> Planning	<b>Date:</b> 20/06/19	<b>Drawing no:</b> 18-09-PL-220	<b>Rev:</b> 0
------------------------	---------------------------	----------------------------	--------------------------	------------------------------------	------------------

Scale: 1:200 @ A1 / 1:400 @ A3

10m 20m

# The Hub

Building 1/7 Central stores - viewed from the north-west

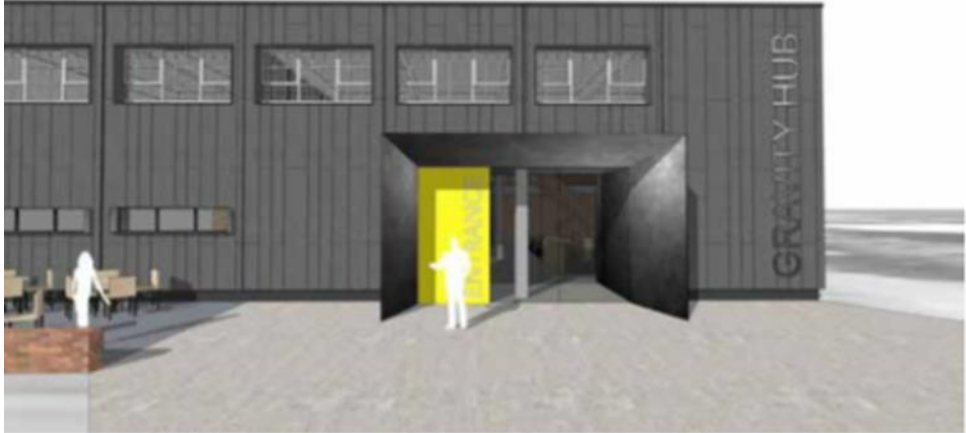


Gravity



# The Hub

Building 1/7 Central stores - viewed from the north-west



Gravity

# Local Opportunity's at Gravity

- + 2020 to 2042
- + Third party supply chain tender process
- + Sedgemoor, Somerset, HotSWLEP and wider Great SW area, UK, international
- + [Thisisgravity.co.uk/localbusinesses](https://thisisgravity.co.uk/localbusinesses)

## Working Together Opportunities



We are very much aware that local businesses are the backbone of our economy. Gravity is committed to supporting small businesses to support a strong and sustainable local economy foundation.

As our smart campus progresses, new opportunities will present themselves to local and regional businesses.

At the moment, no opportunities are available. Please fill in the form to register your interest and we will be in touch when an opportunity arises.

Name

Email

Contact Number

Name of business

# Creating, Enabling and Capturing Benefit

- + Strategic - Horizon scanning, big picture
- + Continuous learning
- + Be externally aware - politics, economy
- + Get under the skin on Place performance – SML
- + Vision, policy, plans, priorities – not just ‘planning’
- + Collaboration between public and private sectors
- + Welcome innovation and change
- + Craft solutions to enable
- + Agility – manage risk, manage the system work
- + Don’t hide behind it
- + Relish the opportunity to achieve and create a personal legacy
- + Delivery: making a real difference to enhance lives



Thank you

**Gravity**