



Q U I N T A I N

BRINGING PROPERTY AND
PLACES TO LIFE

Quintain Ltd
Sustainability Report 2020



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INTRODUCTION

FOREWORD

Our 2020 Sustainability Report provides a snapshot of performance across the range of environmental, social and governance issues that we have identified as being material to us in our updated Sustainability Policy & Objectives

Our 2020 Sustainability Policy and Objectives define the overarching principles in addressing environmental, social and governance (ESG) issues at Quintain.

Supporting our corporate vision of 'bringing property and places to life', activity is directed around three focus areas: People, Place and Property. We have split this report into sections reflecting our work in each of these areas, concluding with a section on the methodologies we have adopted and how we have applied them.

It has been five years since we last produced a sustainability report – our 2015 Responsibility Data Report was produced just before we fundamentally changed as a business, moving from a publicly listed company (PLC) to a business owned by private equity. Our corporate structure may have changed, but our emphasis on ESG issues has not, and whilst in the intervening period we have continued to deliver against broad ESG objectives, we are now re-invigorating our strategy.

We have spent the past 18 months reviewing our approach, convening a Sustainability Steering Group with representation from across the business, and engaging with industry experts to identify the issues that are most likely to affect our business and that are of particular interest to our stakeholders.

We have reviewed in detail the aims of the United Nations Sustainable Development Goals (SDGs) and have worked to identify ways in which we can adjust our practices slightly to align with the global sustainability priorities. As a global set of goals, the aims are understandably high-level, but we feel that it is important to recognise their influence and promote their use at every scale of activity.

Within each of our three focus areas, we have identified several priority areas, against which we have identified the SDGs which are key to that topic, as well as those that have a lesser influence; this is illustrated throughout our reporting through the use of the SDG icons that relate to each section.

Over the course of 2021, we will be looking to identify specific Key Performance Indicators (KPIs) across issues where we do not yet have them in place, and we will be developing a clear set of short-, medium- and long-term targets to help us to measure performance against our objectives.

In support of our new Sustainability Policy & Objectives, we are committing to reporting annually on our progress, both in the form of a standalone report and more regularly via our website; whilst the focus of this report is on the progress we have made in 2020, where relevant, for context, we have also included details of what we have been working on since our last report in 2015.

We welcome your feedback, so please get in touch if you have any questions or suggestions for improvement. Our contact details are provided at the end of this document.

“As I reflect on my first year as Chief Executive, I am proud of what the company has achieved over these tumultuous 12 months. The global pandemic has taught us new ways of collaborative working, how teams can work remotely but still can come together, to work and to support each other in ways that I was not convinced were possible before.

So much research has been done globally into how attitudes have evolved towards climate change and lifestyle; sourcing and shopping locally, living in a 15-minute neighbourhood and how mental and physical health are increasingly and equally important.

At Quintain we took the opportunity to re-evaluate who we are and what we stand for this year, speaking to our staff and together establishing an updated set of company values. We are a diverse group of people who, together, strive to provide a high-quality home, an outstanding neighbourhood and an enjoyable lifestyle for our residents and visitors.

Quintain continues its growth and at the same time we are ensuring that the foundations for Sustainability and responsible practices are documented. For nearly 30 years Quintain has gone above and beyond what was expected of us and the resulting sustainability work streams reflect this.

Our strategy addresses environmental, social and governance (ESG) issues and is just the start of a new chapter for Quintain as we continue to invest in 'people', 'place' and 'property'. We not only seek to play our part in addressing the causes of the climate emergency, but make our places better to live in, work and visit. We are proud of the work we have done so far, but we must push each other even further to achieve and exceed these goals.”

JAMES SAUNDERS
CHIEF EXECUTIVE

“Quintain's Sustainability Steering Group (SSG) has been in place for 18 months and has a broad base of members from across the business - operations, development, design, leasing, procurement, finance, technology, construction, HR and corporate communications. Together, this group has reviewed the many ESG issues that affect or are affected by Quintain, reviewed the large number of projects that are already in place, and identified those which it would like the company to commence or augment, many of which are now underway.

This report summarises how the SSG view Quintain by dividing it into People, Place and Property, alongside Good Governance, and serves to showcase our achievements in our priority areas to date. We have strong aspirations to continue to develop our approach to ESG issues and ensure that our projects and approach are effectively communicated to all stakeholders. This report is a great start in that journey.”

CATH WEBSTER
EXECUTIVE DIRECTOR & CHAIR OF SUSTAINABILITY STEERING GROUP



INTRODUCTION

SUSTAINABILITY POLICY

Quintain is one of the UK and Ireland's leading vertically integrated developers and an early pioneer of Build to Rent (BtR) residential properties in the UK market. Established nearly 30 years ago, Quintain is today one of the UK's largest developers, owners and operators of BtR, with a pipeline in London of 8,500 homes at Wembley Park, the largest single site of BtR in the UK.

Only by measuring and understanding our impact on the environment, society and the wider economy, can we effectively evaluate our contribution, manage our business risks and identify opportunities to create lasting value for all.

We have a culture of continuous improvement supporting our business processes and initiatives that aim to reduce the environmental impact of our operations and those of our suppliers.

These improvements also focus on socio-economic impacts and aim to support the communities in which we work, leaving lasting positive legacies.

These new Sustainability Policy & Objectives replace our 2015 Responsibility Policy and outline our approach, sitting within the wider suite of corporate policies that are already in place to ensure we deliver on the things that are important to us and to our stakeholders.

OUR AREAS OF FOCUS

Our environmental, social, economic and governance impacts are considered across our three pillars:

PEOPLE: We aim to put people first in everything we do. We recognise that we have a responsibility to leave a positive and lasting legacy with the people we work with, whether our own employees, our supply chain, or our local communities.

PLACE: We aspire to create inspiring, vibrant and thriving communities and neighbourhoods that are socially, culturally, environmentally and commercially sustainable.

PROPERTY: We endeavor to create sustainable buildings that are built to last and futureproofed to ensure they provide a high-quality, comfortable environment, now and in the future.

We have developed priority areas under each pillar and have defined specific objectives against which we can track progress against our policy and report on performance.

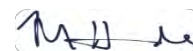
Our Sustainability Steering Group meets regularly in order to ensure we focus on and address the sustainability issues that are central to our business activities, providing feedback on performance and recommendations on a quarterly basis to the Operational Board.

Underpinning our policy is our approach to Good Governance. This ensures that the decisions we make are the right ones for the business and our stakeholders.

OUR COMMITMENTS

To demonstrate compliance with our policy and demonstrate to deliver our objectives, we commit to:

- Go beyond compliance and minimum requirements
- Provide leadership and seek to continuously improve
- Be forward-thinking, innovating where required
- Ensure our employees and other stakeholders are all aware of and can contribute towards our goals
- Work to influence impacts beyond our direct activity and engage in pro-active discussion with our business partners and suppliers
- Identify Key Performance Indicators and set targets for performance in key areas
- Measure and disclose our performance in a transparent way.



JAMES SAUNDERS
CHIEF EXECUTIVE
1 DECEMBER 2020



QUINTAIN SUSTAINABILITY PRIORITY AREAS

PEOPLE

DIVERSITY & INCLUSION



EDUCATION, SKILLS & EMPLOYMENT



SAFETY, HEALTH & WELLBEING



SUSTAINABLE COMMUNITIES



PLACE

BIODIVERSITY & NATURAL CAPITAL



PUBLIC REALM & PLACEMAKING



TRANSPORT & CONNECTIVITY



GOOD GOVERNANCE



PROPERTY

CLIMATE CHANGE



RESOURCE EFFICIENCY



SUSTAINABLE PROCUREMENT



TECHNOLOGY AND INNOVATION



SUSTAINABILITY POLICY

GOOD GOVERNANCE



CORPORATE GOVERNANCE

Our objective is to operate our business in an honest, transparent and ethical manner, protecting company assets and working in the best interests of all our stakeholders.

Good governance ensures that the decisions we make are the right ones for the business and our stakeholders.

We adopt best-practice approaches to governance issues, irrespective of requirements and regulation, because we believe it makes us stronger as a business, more attractive to our employees, and facilitates better relationships with our supply chain and local communities.

GOVERNANCE PROCEDURES

We are a relatively small, privately-owned organisation, and as such, have few formal reporting obligations in relation to governance matters.

Irrespective of this, we have maintained the majority of policies and procedures we had in place when we were a PLC and seek to go beyond minimum legal compliance requirements in matters that address social and environmental issues.

In 2021, we will be carrying out a gap analysis in conjunction with each department and we are proposing the introduction of a more robust compliance review framework to audit and report on the effectiveness of compliance-related controls. These will focus on laws and regulations specific to each operational area.

Whilst we currently report on compliance matters to the Board via our Governance Report and to our Parent Company on a quarterly basis, we would ultimately like to create a separate, more comprehensive Compliance Report dashboard to be shared with both in order to promote better visibility and collective understanding of important governance issues at board level.

SUPPLY OF GOODS & SERVICES

Our approach to procurement and the supply of goods is strongly influenced by our approach to governance, with many checks and balances to ensure we are procuring in an ethical manner.

Ongoing monitoring of supplier performance is focused on our high-risk suppliers and those with whom the majority of our spend is concentrated. Compliance reviews are carried out by our procurement team on a regular basis, and where appropriate, third party specialists are appointed to carry out more in-depth checks. Our Principal Contractors are also monitored on an annual basis by our third-party auditor, Achilles.

Achilles have significant industry experience and are trained in accordance with the International Register of Certified Auditors (IRCA) to measure and track supplier compliance; the scope of their audit programme covers an assessment of each supplier's organisational management systems, documents and processes relating to key supply chain risk areas across a wide range of ESG issues including: ethical business practices; health and safety; environmental performance and corporate responsibility; and carbon management. The Achilles supply chain mapping exercise collects information on sub-suppliers in order to link relationships and improve the visibility of the wider supply-chain network, helping us to better understand the inter-connected relationships and potential supply chain issues that could arise as a result.

Performance against each organisation's own policies and procedures is also reviewed and "pass/fail" events are reported back to us, with corrective actions as necessary. To date, there have been no significant issues reported, and we continue to work only with compliant and 'approved suppliers'.

MODERN SLAVERY

The construction supply-chain is a high-risk area for incidents of modern slavery, so we take measures such as independent labour audits and confidential interviews with site operatives to mitigate the risk of this at our sites. This monitoring is also carried out by our main contractors, each who are equally committed to eliminating modern slavery in supply chains.

ANTI-BRIBERY & CORRUPTION

The construction industry also consistently ranks high in corruption indexes; due to the nature of work, no two projects are the same, making it difficult to compare costs across projects and identify bribes. As a developer, we take bribery and corruption seriously, and have policies and procedures in place to ensure that any potential issues are identified and dealt with. This includes regular training and recording of gifts and hospitality, guidelines on appropriate acceptance of hospitality, particularly during periods of contract award, and the use of a confidential phoneline which our employees can call to report any concerns they might have. Contract staff working with us in place of an employee for a period of more than three months are offered a compliance induction and our Safecall hotline is also made available to them.

To further strengthen compliance, we are currently considering the possibility of sharing our hotline facility with our suppliers when they contract with us as part of our SupplierPortal process.

STREAMLINED ENERGY & CARBON REPORTING (SECR)

Reporting on energy, emissions and our use of other resources helps us to understand how our assets are impacting the environment and helps us to identify areas for improvement.

Quintain is not currently required to report on its emissions via the SECR regime, but we have chosen to incorporate the SECR guidance into our own energy and emissions reporting procedures and incorporate energy reporting in accordance with SECR in our Annual Report & Accounts.

The climate crisis is one of the defining issues of our lifetime, which is why climate change and resource efficiency have been identified as priorities for our business. We go significantly beyond the SECR reporting guidelines and you will find a summary of our emissions in our Annual Report & Accounts, with further detail on our direct and relevant indirect emissions sources contained within the 'Climate Change' and 'Resource Efficiency' sections of this report. In 2021, we will be developing further our approach to climate change and intend to publish specific targets for reducing GHG emissions in line with global targets.



SUSTAINABILITY POLICY

GOOD GOVERNANCE



SUSTAINABILITY STEERING GROUP

Our objective is to guide our approach to environmental, social and governance issues, identifying and reviewing the short-, medium- and long-term issues that affect or are affected by our business, ensuring we have the appropriate measures in place to carry out our activities responsibly and with integrity.

Our Sustainability Steering Group (SSG) was formed in 2019 and takes advantage of experience and expertise from across the business to develop our sustainability priorities and report on progress against our objectives. Co-chaired by Cath Webster, our Executive Director for Strategy & Investment, and Harriet Pask, Head of Corporate Communications, the SSG currently meets fortnightly and reports into the Operational Board on a quarterly basis.

TERMS OF REFERENCE

The SSG is responsible for ensuring that our sustainability strategy remains current, that progress against our objectives is tracked, and that our approach to sustainability is communicated both internally and externally.

STRATEGY & OBJECTIVES

It is the role of the SSG to identify the sustainability issues that are material to the business, set objectives against those issues and recommend appropriate courses of action to deliver against those objectives to the Operational Board.

In 2020, the SSG revitalised the company's sustainability strategy and set clear objectives across key issues identified in relation to our three sustainability pillars: People, Place and Property,

These issues were selected based on an updated materiality assessment and reflect the concerns of our stakeholders, as well as our ability to affect or be affected by them.

The SSG has input into the job descriptions for several new roles across the business, ensuring they are aligned with the resourcing needs to deliver against our sustainability objectives; and has recently gained approval for a new dedicated sustainability resource for which we will be recruiting in the coming months.

PROJECTS & IMPLEMENTATION

Another area of focus for the SSG is the development of implementation plans for each of our objectives, and the identification of opportunities and projects to enhance the sustainability of the business. This includes working alongside other areas of the business, such as our Smart Cities Working Group, to identify incubator investment opportunities that will help to improve and promote sustainability performance.

This also involves the communication of our strategy, objectives and performance both within the business and externally.

MEASUREMENT

As our objectives have been developed, we have identified a number of Key Performance Indicators (KPIs) against which we can measure our performance over time.

As a result of this exercise, we have implemented further measurement of our impacts across different topics, and in 2021, we will once again be responding to the Global Real Estate Sustainability Benchmark (GRESB) to allow us to benchmark our performance against our peers.

We will also be identifying additional KPIs for those issues where we are not currently monitoring, and we will be developing targets against which we can track our performance. It is important that our targets are robust and evidence-based, so we have not rushed into setting these in 2020, but this is something we will be working on in the coming year.

In 2020, we commissioned several studies into the carbon performance of our construction and operational activities, and we are currently working out how we can deliver zero carbon buildings and in what timeframe. We have already set design standards to reflect this, and we have identified a trajectory for ongoing improvements in embodied carbon and operational energy.

SSG MEMBERS

The SSG draws on expertise from across the business, bringing together a range of perspectives and experiences relevant to our objectives.

Individuals are invited to join the committee based on a combination of their expertise in one or more of our strategic sustainability focus areas; their ability to influence and effect change; or their proficiency to practically implement policies and assist with data gathering. We also draw on expertise in governance, communications and reporting to enable us to effectively deliver against our objectives.

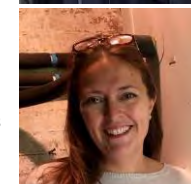
CATH WEBSTER, Co-Chair

Executive Director of Strategy & Investment
Focus: Supporting each area of the business to identify and progress change, and ensuring processes and resources are in place to implement sustainability objectives.



HARRIET PASK, Co-Chair

Head of Corporate Communications
Focus: Communicating internally and externally on sustainability performance, and ensuring responsibility for meeting sustainability objectives is felt across the business.



JACQUI WILLIS, Secretariat

Assistant Company Secretary
Focus: Ensuring meetings are effectively organised and minuted; advising on governance-related issues and requirements.



“Our values and associated behaviours acknowledge our responsibility to the entire life cycle of a project, from designing and building it, to operating it and ensuring it becomes a fantastic place to live. It is vital for us to understand that operational efficiency can only be achieved with dedicated focus at the design stage, and that building for a diverse, long-lasting community is best done by a diverse team from the outset.”

HARRIET PASK



SUSTAINABILITY POLICY

GOOD GOVERNANCE



ALEX HARE

Group Financial Controller

Focus: Accuracy, transparency and assurance of GHG emissions and other reporting frameworks; and the understanding carbon offsetting costs, procurement options and implications.



JENNIE FOJTIK

Head of Mobilisation, Quintain Living

Focus: Identification of circular economy opportunities within the Quintain Living supply chain; and resident engagement.



JAMES HUARTSON

Head of Estate Services, Wembley Park

Focus: Ensuring the responsible use and identification of resource use improvement opportunities; improving the performance of Envac; and procurement of utilities.



WARREN MCMEEKING

IT Manager, Wembley Park

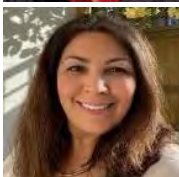
Focus: Identification of opportunities where technology can support the achievement of our sustainability objectives.



FAREEN LALANI

Development Director

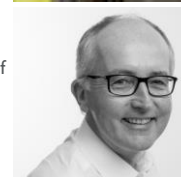
Focus: The development of viable and implementable strategies to support the decarbonisation of energy supplies.



JULIAN TOLLAST

Head of Masterplanning & Design

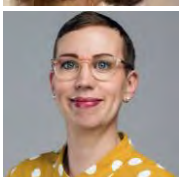
Focus: Enhancing biodiversity; collaborative design of the public realm; and the development of optimum approaches for reducing embodied and operational carbon.



LAURA ASHBY

Skills Manager, Construction

Focus: Enabling local people to access opportunities within the construction and property sector; and development of community education and skills programmes.



MARY KELLY-MANNION

Group Head of Cost Management & Procurement

Focus: Development of criteria and management of processes to ensure selection of supply chain partners in accordance with our ESG requirements.



SUZANNE HENDERSON-FRENCH

HR Business Partner

Focus: Support and development of employee health and wellbeing initiatives; employee data and trend analysis; and involvement in the development of our emerging EDI strategy



NICK ADAMS

Head of Facilities Management, Quintain Living

Focus: Investigating ways to use energy, water and waste data to drive performance improvements across residential assets; and identifying further opportunities for a circular economy and improved biodiversity.



WIDER IMPLEMENTATION

In addition to our formal committee members, there is a wealth of knowledge, interest and enthusiasm across the Group which we tap into on a regular basis to inform, evolve and implement our sustainability objectives.

We have a number of specialist business functions, who although aren't directly involved in the SSG, have responsibility for key ESG issues and sustainability priority areas within their day-to-day roles. This includes health and safety, community engagement, arts and culture, and technology specialists and leaders, who have their own strategies, policies and procedures that help to ensure that, as a company, we are able to deliver against our wider sustainability goals. Each of our Steering Group members is responsible for liaising with their teams and disseminating the work of the SSG more widely. Specialists across the business have been consulted on their areas of expertise relevant to the sustainability strategy to ensure alignment, and as part of our Projects & Implementation strand of work, and over the coming year, we will be strengthening these links to ensure that departmental and individual performance objectives link to our sustainability policy and objectives.

With a view to obtaining wider support and buy-in for meeting our objectives, we will be increasing our internal communication and engagement on sustainability issues, through both formal and informal channels.

Ultimately, behaving in a responsible and sustainable manner is part of all our roles, and the majority of our employees are already mindful of this. This is evidenced by the results of our most recent employee survey, where 86% of responders saw this as a positive area for the business.

Managers have all agreed to support our strategy, and alongside Operational Directors have agreed to help us to further drive our culture of sustainability within their teams.

One of the ways in which we will achieve this is through our mid-year development review process, which will require each member of staff to identify a personal sustainability objective, aligning with our corporate and departmental objectives, to further reinforce and embed our strategy.

We hope that by this time next year, we will be able to demonstrate clear progress towards achieving our objectives.

“Embracing Sustainability helps drive value to every part of our business – operationally, financially, to our residents and wider stakeholders. It's rapidly becoming a fundamental part of all that we do.”

ALEX HARE

“The bid for climate change has never been stronger. We all have a responsibility to think more carefully about all that we do in our day-to-day work and actively seek positive change from within our departments, within the wider company and within our extensive supply chains”

JENNIE FOJTIK





PEOPLE

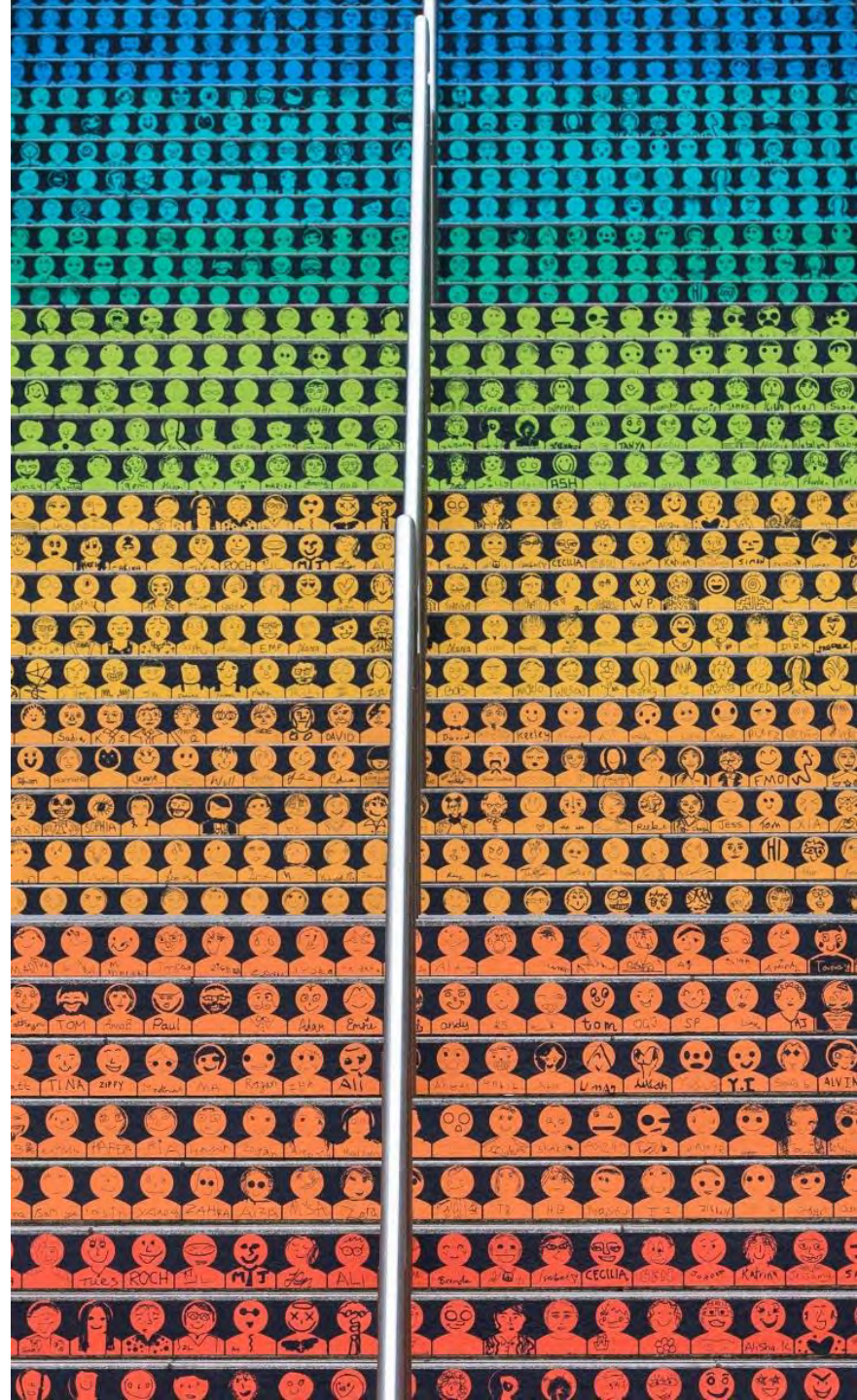
We aim to put people first in everything we do.

We recognise that we have a responsibility to leave a positive and lasting legacy with the people we work with, whether our own employees, our supply chain, or our local communities.

OUR OBJECTIVES

We believe that by employing and engaging with people from different backgrounds - and by learning from their lived experiences - we are better placed to create more inclusive places.

Objectives: To improve diversity in all its forms across our business and operations, addressing potential biases and barriers to entrance and progression in the professions and sectors in which we operate; and ensuring that the contributions, presence and perspectives of all our employees are valued and used to inform our business decisions, allowing us to create places where everybody feels like they belong.



PEOPLE

DIVERSITY & INCLUSION



DIVERSITY & INCLUSION

Our objective is to improve diversity in all its forms across our business and operations, addressing potential biases and barriers to entrance and progression in the professions and sectors in which we operate, and ensuring that the contributions, presence and perspectives of all our employees are valued and used to inform our business decisions, allowing us to create places where everybody feels like they belong.

We want to foster environments where people feel free to share their ideas and opinions, knowing that their input is acknowledged and valued.

ONE QUINTAIN

Our culture is welcoming to all. We function as one company, whether you work in our central London Office, Dublin or Wembley Park, creating a sense of belonging for every employee. Our 'One Quintain' ambition is the driving force behind our brand, values and culture.

Quintain aims to be a people-first company, that values its staff and respects their diversity.

We do this because we believe that people who feel included and listened to are happier, more productive, and stay longer; and ultimately our inclusive culture will drive our business performance. Our values are Creative, People-first, Pioneering, Sustainable and Proud and the associated behaviours foster a sense of respect, awareness and belonging.

DIVERSITY & INCLUSION AT QUINTAIN

As a privately-owned company, our Board of Directors now mainly comprises representatives from our Parent Company, Lone Star and their specialist asset management company, Hudson Advisors. Our focus and ability to influence change is centred on Quintain Ltd, and not only has our corporate structure changed, but we have also

more than doubled in size since we last reported in 2015.

As our number of employees has increased, the ratio of male to female employees at the junior level of the business has improved and amongst our junior members of staff, we now employ more women than men. This should begin to translate into more women appointed at senior levels of the business in the future.

In 2015, we did not provide a breakdown of Senior Professionals, but at that time, there were no female Executive or Operational Directors (who form the Operational Board and are the most-senior decision-makers in the company below the Board of Directors, responsible for delivery of our medium- to long-term objectives). The increased scale of our business has resulted in an increased number of people at this level, many of whom are female.

Although we are becoming more diverse in relation to gender across the business as a whole, we recognise that there is more that we need to do to improve gender balance at all levels, and we are currently looking at ways to address this.

We also recognise that gender is the most basic of diversity measures, and there are multiple additional measures where we need to improve our measurement, understanding and ultimately, performance.

OUR PLAN FOR 2021

We are embarking on a new journey together that will build a stronger company underpinned by our values and behaviours.

We have appointed an external advisor on diversity and inclusion to facilitate the company's next steps on this journey and at end of 2020,

we started by asking, through a company-wide communication, for employee volunteers to participate in a consultation exercise to share their lived experiences and opinions on what we do well and where they believe we can improve. 42 members of staff joined these focus groups: we have listened, acknowledged staff opinion and defined our aims and proposed approach based on these conversations.

Now complete, this information has been shared with us thematically so that we can understand our areas for focus and begin to plan our strategy. We feel that this employee insight is critical to ensuring that we can set our own diversity and inclusion strategy which addresses what is important to our staff and our business.

Led by our Chief Executive, James Saunders, our diversity and inclusion aims are four-fold:

- To build a One Quintain culture, built on our shared values to unify all teams across all levels in the business.
- To create an inclusive workplace culture where everyone is treated fairly, with equal access to opportunities, training and resources, and the opportunity to be heard and to share their experiences.
- To celebrate and build a greater understanding of Quintain's diversity and the benefits to be gained from increased diversity and inclusion.
- To acknowledge that improved business performance is achieved by greater inclusivity and belonging, where employees feel more connected, valued, integrated, less siloed and with the opportunity to grow and realise their potential.

A. Breakdown of Employees by Role, Gender & Age

	2020						2014/15					
	Total	Average Age	Male No	% Male	Female No	% Female	Total	Average Age	Male No	% Male	Female No	Female %
TOTAL	190	39	98	52%	92	48%	92	43	58	63%	34	37%
Board of Directors ¹	9	54	9	100%	0	0%	9	59	8	89%	1	11%
Non-Executive Directors	7	55	7	100%	0	0%	6	58	5	83%	1	17%
Executive Directors	2	50	2	100%	0	0%	3	61	3	100%	0	0%
Senior Professionals ¹	29	47	19	66%	10	37%	19	44	12	59%	7	41%
Operational Board	13	48	8	62%	5	38%	N/A	N/A	N/A	N/A	N/A	N/A
Senior Managers	16	47	11	69%	5	31%	N/A	N/A	N/A	N/A	N/A	N/A
All Other Employees	152	36	70	46%	82	54%	64	41	38	59%	26	41%

EXPLANATORY NOTES:

¹ Due to changes in our corporate structure, there is a minor change in how these categories are defined; 2014/15 data has been restated to align with our new reporting structure. For full details of the calculation methodology, exclusions, and data sources relating to the data in this table, refer to the Methodology section at the end of this report.



PEOPLE

DIVERSITY & INCLUSION

CELEBRATING DIVERSITY & PROMOTING INCLUSION AT WEMBLEY PARK

We support the need to create a more joined-up approach and a shared understanding of the importance of different achievements and stories in public spaces, and we are watching closely the progress of the Commission for Diversity in the Public Realm, set up by London Mayor Sadiq Khan in 2020.

The London Borough of Brent is one of the UK's most culturally diverse areas, with two-thirds of the population from black, Asian and minority ethnic groups and one of the largest Irish populations in the country. It is thought that 149 different languages are spoken and in one in five households, English is not the first language.

We are mindful of the role we play in ensuring that Wembley Park serves all local residents; when reflecting on Wembley Park as a successful neighbourhood, Mohammed Butt, Leader of Brent Council said that you “get a sense of the positive melting pot of communities all working and living together”, and this is what we strive to deliver - a neighbourhood that is inclusive, accessible, and fosters a genuine sense of community, connecting to the diverse wider locality.

Our Cultural Placemaking Strategy ensures that we commission and procure art that reflects the diversity of the area and provides a platform for local artists. Our busking programme ensures musicians are paid fairly for their work, and Second Floor Studios offers low-cost workspaces for artists. Wembley Park Market hosts diverse independent retailers, and the food offering at Boxpark provides a wide range of tastes reflecting the different backgrounds and cultures of our vendors.

Our year-round event programme has profiled local heroes, raised awareness of mental health matters, celebrated Pride with a rainbow pedestrian crossing and giant rainbow heart, and has included installations co-created with members of the community. We celebrate Black History Month with a programme of relevant talks, films and activities; and a wide range of holy days and festivals are acknowledged and celebrated across the public realm.

In 2020, we sponsored Brent as the London Borough of Culture 2020,

won in large part as a result of the cultural diversity represented by the borough.

Local people are invited to shape their own programming at our community centre, The Yellow, where we provide space and support to allow the community to determine and meet local needs, resulting in the provision of support groups for men and women, English classes for speakers of other languages, clubs for pensioners and creative outlets such as our regular Open Mic and the Brent Fashion Show. Coffee meetups, resident meetings and cooking clubs are organised so that new and existing residents get the opportunity to meet one another, make new connections and learn from one another.

At the end of 2020, we commissioned a short film to thank our local heroes who have kept the community running throughout the pandemic. Championing unity and hope and celebrating our diverse community of residents, workers, visitors, businesses and artists, the film features everyone from the barber to the local police force, to the Mayor of Brent and is a continuation of our ‘People of Wembley Park’ programme, profiling the contribution that local people make to the community.

ACCESS FOR ALL

Great care is taken to make the pedestrianised thoroughfares of Wembley Park accessible to those with mobility issues, ensuring that everybody can access and enjoy the public realm on offer.

At the end of 2020, our Olympic Steps project came into fruition after a decade of planning, improving accessibility to Wembley Stadium by replacing the pedway with the new Olympic Steps.

The steep gradient of the pedway was a challenge for encumbered spectators, causing difficulty for those with mobility and visual impairments, the ambulant disabled, as well as those with pushchairs. The Olympic Steps were designed after consultation with Level Playing Field, an organisation that promotes a positive, inclusive experience for disabled sports fans, and along with the introduction of four new lifts from ground level to the Wembley Stadium concourse, provides better access for those with accessibility difficulties.

For further details of our community programmes, refer to the Local Communities section of this report.

For further details on our Cultural Placemaking Strategy and involvement in Brent London Borough of Culture, refer to the Public Realm & Placemaking section of this report.

CASE STUDY

The People of Wembley Park

Our People of Wembley Park campaign has been running since 2016 and celebrates some of the individuals who make Wembley Park the cohesive and close-knit community that it is.

We are currently interviewing a new cohort of locals for our next round of profiles who will feature on our hoardings and website.



PEOPLE

EDUCATION, SKILLS & EMPLOYMENT

OUR OBJECTIVES

We have a responsibility to ensure that local people benefit directly from the pathways into training, apprenticeships and employment programmes that exist across our activities and within our supply chain.

We are committed to investing in education and training at all levels to ensure that as many people as possible can access the opportunities that are available to them.

EDUCATION

Objective: To inspire local people to pursue careers in our sector by supporting educational partners and engaging with students to enhance their understanding of the required skillsets and the types of opportunities available to them.

SKILLS & EMPLOYMENT

Objective: To share our knowledge and skills with local communities, equipping people with relevant training to support their future ambitions and providing access to apprenticeships and employment opportunities across our developments.



PEOPLE

EDUCATION, SKILLS & EMPLOYMENT



EDUCATION

Our objective is to inspire local people to pursue careers in our sector by supporting educational partners and engaging with students to enhance their understanding of the required skillsets and the types of opportunities available to them. Our Education Programme is designed to highlight pathways and promote careers in construction and property, at the same time developing soft skills that aren't necessarily part of the national curriculum and raising awareness of mental health and wellbeing.

ENGAGEMENT WITH SCHOOLS

Our School Engagement Programme is led by our Skills Team and is multi-faceted, combining engagement activities with local schools and our business, our supply chain and our community centre, The Yellow.

In 2016, we identified a number of local schools, based on proximity, with which we could build lasting and strong relationships with. We were keen to ensure, with several large contractors on site - some of which were already building their own relationships with schools - that there was not overlap in what we were offering, or that some schools were given more attention than others.

We began by approaching local schools, education providers and other organisations directly, with a 'menu' showcasing what we and our contractors could offer, but with limited uptake, it became apparent that the most effective way we could provide support was to partner with organisations who had existing relationships; this included our local Brent Library Service and The Learning Zone at Wembley Stadium, as well building on our existing relationship with Young Enterprise. Through these channels have been able to more effectively communicate what we can offer and ultimately expand our reach. We have identified additional partners, such as Place2Be, with whom we have partnered on several arts-based projects across multiple schools in the area.

This has led to our involvement in mentoring, career talks and site

tours; skills-based learning, working in partnership with Young Enterprise and Skills Builder; arts projects with our long-term delivery partner Place2Be; and physical support through building and refurbishment of playgrounds and forest schools.

We manage requests for support and allocate resources accordingly by liaising internally and with our contractors. Our Skills Team also lead our Employee Volunteering programme, linking opportunities in schools with professionals across the business and where possible, we identify teams that involve employees from Quintain, as well as from across the pool of framework contractors, their sub-contractors and our consultants to provide a varied mix of skills, expertise, materials, supplies and volunteers.

“I spent an enjoyable three sessions with the students at our local Ark school, discussing the depth and range of opportunities in the workplace and talking about relevant skills that will help when seeking employment that they can work on now.”

CATH WEBSTER
EXECUTIVE DIRECTOR

SKILLS BUILDER

Since 2018, we have funded the growth of the Skills Builder Partnership in Brent, providing four local schools with support in developing school-wide skills provisions strategies.

The Skills Builder Universal Framework covers eight key areas determined to be the essential skills for succeeding in life: Listening; Problem Solving; Creativity; Staying Positive; Aiming High; Leadership; and Teamwork. Each skill is broken down into sixteen tangible, teachable and measurable steps which can be used to clarify what success looks like in each skill and map out a trajectory for proficiency.

The Skills Builder team provide core capacity building activities to all four schools, supporting the development of school-wide skills provision strategies; training teachers to build confidence in teaching the essential skills; and providing access to a wide range of resources and guidance through the Skills Builder Hub.

Additionally, each school can choose additional support elements to enhance to programme, in alignment with their school's priorities. This includes Challenge Days, where the whole school carries out day long skills development projects, led by teachers with support from Skills Builder and volunteers from the employer and their supply chain; and Employer Visits, where students spend a day with an

employer organisation.

Since partnering with Skills Builder, we have hosted six Employer Visits, where after a Q&A session and site tour, the students are set a task to design a new tower that the local community would be proud of. Our employee, consultant and contractor volunteers cover a cross-section of disciplines, exposing the children to potential careers not only in construction, but in the many professions linked to the built environment.

**Participating
students (2019/20)**

1,864



**Participating
Schools (2019/20)**

4



PEOPLE

EDUCATION, SKILLS & EMPLOYMENT

LIFELONG LEARNING

Through collaboration with key local actors, lifelong learning is supported through a range of initiatives in the local community.

Through early research carried out with Brent Community Voluntary Service and the Young Brent Foundation, we identified skills gaps that were needed within the voluntary sector locally.

As similar skills gaps were identified across different organisations, we developed a programme to deliver relevant training courses to groups of people from across the sector using our in-house expertise. This included, for example, a session on media training delivered by Deepika Sharma, Content Manager for Quintain Living.

THE CORNER

In 2017, we rented out space on the ground floor of the library in Brent Civic Centre in a three-year deal to use as an information hub to inform local people of our plans for Wembley Park. Known as 'The Corner', we initially used this space to engage with the public and to host one-off events, allowing the library to use this as extra break-out space when not occupied.

In 2018, we began thinking about how we could make better use of the space, and in partnership with the Culture Team at the London Borough of Brent, The Corner was transformed in 2019 to provide a new creative learning space for Wembley Park.

In line with the principles set out by the Wembley Park Cultural Placemaking Strategy, The Corner provided a platform to expand the horizons of the diverse communities within Brent through creative learning and participation.

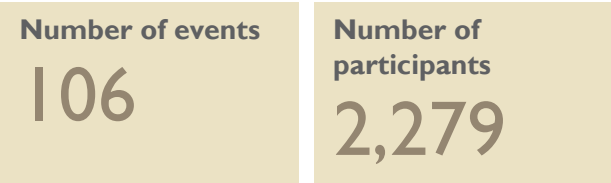
A collaborative, bottom-up approach to programming was achieved through regular consultations with the public, enabling the local community to inform the events programme.

A programme was developed in line with the framework set out by Brent Libraries' *Universal Offers Model*, focusing on six key areas: Culture; Digital; Health; Information; Learning; and Reading. Events have included an art exhibition with Hindu Council UK, film-making and creative writing workshops, emotional intelligence talks and independent film screenings by ethnic, London-based film-makers. We have also used the space, along with our community facility The Yellow, to accommodate recipients of funding from the Wembley Park Community Fund in the delivery of their programmes. This has

included *Abundance Arts*, who run art sessions for young people focusing on celebrating Brent as a place to live; *Learning through the Arts*, who run arts projects for families during school holidays; and *Every Person in Capable*, who won funding for a men's peer support group at The Yellow, but have used The Corner to deliver other events, 'The Power of Positive Thinking – A Date with Your Mind', and a screening and panel discussion of the documentary 'Bboy Mercenaries'. The Corner was also available free of charge to individuals and groups in the local community who wanted to hold community events or develop community initiatives. The space is more visible than our dedicated community facility at The Yellow, so we also used it to raise awareness locally of everything on offer across Wembley Park, directing people to the other activities and spaces that are available.

COVID-19 limited our ability to use the space and run a full event programme in 2020, and at the end of 2020, the space was returned to the library.

We continue to work closely with Brent Library Development team, meeting on a monthly basis to align strategy, identify synergies for collaboration, and avoid duplicating events. We look forward to supporting future programming, however as more people are now aware of its existence, the majority of this type of activity will move to The Yellow, which can better accommodate activities with less disturbance from other library users.



PEOPLE

EDUCATION, SKILLS & EMPLOYMENT



SKILLS & EMPLOYMENT

Our objective is to share our knowledge and skills with local communities, equipping people with relevant training to support their future ambitions and providing access to apprenticeships and employment opportunities across our developments.

Increasing the level, range and depth of local skills and creating a tangible legacy from our investment in an area, our skills programmes are targeted at every level, from residents, to trades, businesses, schools and tertiary education.

We aim to equip local economies with well-trained workforces, which in turn will support local businesses, as well as encouraging start-ups and more well-established enterprises to relocate.

OUR SKILLS TEAM

Our Skills Team, managed by Laura Ashby, is responsible for the development and delivery of our Education & Skills Programmes at Wembley Park.

Laura is a local resident with over 15 years' experience of working within communities and has been part of the Wembley Park team since 2015, first establishing the Retail Skills Academy for Realm at London Designer Outlet, and in 2017, joining Quintain to set up and lead the Skills Team.

The team is responsible for the development, coordination and delivery of education, skills and employment activities across the London Borough of Brent, linked to our activities at Wembley Park. This includes the identification of opportunities for the business to engage with education providers and other third sector organisations to enhance community provision in the area, much of which is delivered via our Contractor Community Framework, Corporate Volunteering Programme and the Wembley Park Community Fund. Our corporate volunteering enables us to speak to people in an

organic and informal way about opportunities, as well as providing us with a better understanding of the other ways we might be able to support local initiatives.

The team apply their skills to monitor the performance and social value of our activities, allowing us to identify opportunities to continually improve and ensure the best possible outcomes for those who take part.

In 2014, we began working with community food charity Sufra, setting up an IT suite for them in our old office building, York House. Sufra's services have extended beyond food bank provision, and we have supported them along the way through the provision of space, volunteers and access to opportunities.

In recent years, this has included funding via the Wembley Park Community Fund to extend their Food Academy aimed at providing healthy eating and cooking skills to children to an employability programme providing catering qualifications.

As a result of the programme, several graduates have found employment in the catering industry, including a team who set up and ran their pancake business *Oh Crepe!* from Wembley Park Food Market.

CONTRACTOR COMMUNITY FRAMEWORK

In 2016, we set up our Contractor Community Framework to leverage the support and coordinate engagement with our framework contractors at Wembley Park for the benefit of residents in the London Borough of Brent.

To demonstrate our long-term commitment to the local area, we have developed a strategic and targeted approach with our contractors for supporting local community needs. This includes the identification and coordination of volunteering, as well as more targeted programmes that allow us to share our knowledge and skills with the local community, whilst raising awareness and providing access to career opportunities within the sector. Representatives from our principal contractors, employment services from the London Borough of Brent, the College of Northwest London, and employment agencies we are working with meet on a quarterly basis to plan activities and events to deliver against our objectives.

COMMUNITY CONSTRUCTION SKILLS

Construction skills programmes often only focus on delivering training and skills to those of school age or in higher education. Whilst this is clearly a key area of focus for the Contractor Community Framework, we also think it is important that our local communities' benefit from the knowledge and skills that we and our supply chain can share.

Over the past few years, our contractors have shared their skills with local people - ranging from basic plumbing, to decorating advice, tiling, carpentry and dry-lining.

These sessions not only provide local people with useful skills, they're also a valuable way for our site teams to connect with and build relationships in the community.



PEOPLE

EDUCATION, SKILLS & EMPLOYMENT



LOCAL EMPLOYMENT

Prior to the commencement of any construction work, our contractors complete and submit Employment & Training Plans to identify local employment opportunities. We then work closely with our contractors – and they with their sub-contractors - to forecast vacancies across the entire construction phase.

During the construction process, needs and timings change, so we have implemented appropriate governance structures to ensure that all relevant parties are up to date and aware of any changes to the construction programme and that upcoming opportunities are updated to reflect this.

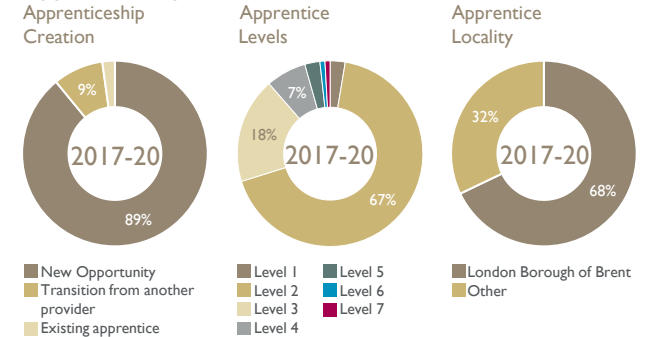
In 2013, Brent Works opened on the ground floor of one of our early residential buildings, Quadrant Court, and with financial support from Quintain, provides work-related training to potential candidates in the local area and an employment brokerage service for employers. All training and job opportunities across Wembley Park, whether construction or operational are advertised with Brent Works and given the large number of construction opportunities, specific training is provided to staff on how to talk to job seekers about potential opportunities. Brent Works identifies potential candidates for the roles we identify in our pipeline, coordinates and supports candidates in attending interviews, and where necessary, identifies and provides pre-employment training to candidates. Other local organisations, such as the College of Northwest London, housing associations and other statutory and voluntary organisations may also put forward candidates to fill these positions and we also distribute potential opportunities across the organisations we work with in the voluntary sector. We also work with United Borders, who work with people at risk of offending, and with Pliars Resettlement, who support the resettlement and reintegration of offenders into the community, providing career advice in prisons by talking to inmates about construction opportunities at Wembley Park on release. In collaboration with the London Borough of Brent and our contractors, we set a target in 2016 that at least 20% of the construction workforce will be resident in Brent. Our partnership approach has proven to be a successful way of delivering against this target; each contractor is held accountable for delivery and any challenges are overcome by the wider team. As a result, between 2018 and 2020, 34% of our construction workforce was resident in the borough, resulting in over 2,882 weeks of employment and at

peak, over 975 workers from Brent per day. Due to the nature of construction, and the need for different trades on site at different times, not all of those employed will become full time employees on completion of their contract, however we know that 17% of local people employed on our projects have gone on to be full time employees with the contractor that originally employed them.

APPRENTICESHIPS

Our Employment & Training Plans also identify opportunities for apprenticeships, so additional steps to our local employment processes are in place with local colleges and training providers, who provide further support in identifying potential candidates and provide the regular accredited training required for our apprentices. Our larger contractors manage the on-boarding and human resource support in-house, but for many of our smaller sub-contractors, Apprenticeship Training Agencies (ATAs) are appointed to support these processes and fulfil the role of coordinating the apprentice's training with training providers on behalf of the contractor. Whilst the current minimum wage for apprentices under the age of 19, or age 19 or over in their first year as an apprentice, is £4.15 per hour, all apprentices at Wembley Park are paid the National Minimum Wage for their age; further, many of our contractors and their sub-contractors have made Local Living Wage commitments and pay the higher London Living Wage instead. This provides an indicator to the apprentice of their value to the companies they work for and of the investment that their employer is making in them, whilst also enabling our apprentices to come to work with fewer financial concerns, allowing them to invest and commit properly to their futures. Apprenticeship opportunities are available at different entry levels, with Level 1 apprenticeships aimed at those leaving school and looking for some knowledge of the sector and hands-on experience, and Level 7 apprenticeships equivalent to a master's degree. Apprentices have been appointed at every level at Wembley Park, although the majority have been at Levels 2, 3 and 4: equivalent to GCSE, A Level and Foundation degree level. The majority of apprentice roles were created specifically as a result of construction at Wembley Park and of the 155 apprentices employed since 2017, we have data for 137 which shows that 122 were new apprentices, 12 transitioned from other employers, and three were existing apprentices, who although would have been sent elsewhere if Wembley Park did not exist, still gained valuable experience by working on the project.

Apprenticeship Statistics



Using social value proxies from the National TOMs Framework, we have calculated the social value of apprenticeships at Wembley Park to be in the region of £1.1m between 2017 and 2020; this is the combined current economic benefit to the individual and the annualised future lifetime value to society of achieving the qualification.

CASE STUDY

National Apprenticeship Week: Apprentice's Breakfast

In February 2020, we celebrated National Apprenticeship Week by hosting a networking event at our community centre, The Yellow, for apprentices of Wembley Park to celebrate their success and contribution to the transformation of the area.

Matt Joyce, our Executive Director of Construction, shared our long-term vision for Wembley Park in order to provide our apprentices with some context for the roles they are playing in realising our masterplan vision, whilst senior members of our team were on hand to provide advice and encouragement on how to make the most of the opportunities available to them in the sector.



PEOPLE

EDUCATION, SKILLS & EMPLOYMENT



Total Apprentices
2017 - 20

155

Social Value of Apprenticeships
2017 - 20

£1.1m



PEOPLE

SAFETY, HEALTH & WELLBEING

OUR OBJECTIVES

We have a significant influence on the safety, health and wellbeing of a wide variety of stakeholders, and can influence better outcomes through engagement, creative design and good management.

Beyond compliance with minimum requirements, we seek to find innovative solutions and to identify partners across our network to improve the health and wellbeing of our employees, residents, tenants and the wider community.

SAFETY

Objective: To achieve zero harm, zero accidents and zero incidents across our construction sites, assets and operations.

HEALTH & WELLBEING

Objective: To engage, understand and seek to improve through various means the physical and mental health and wellbeing our employees, residents, tenants and local communities.



PEOPLE

SAFETY, HEALTH & WELLBEING



SAFETY

Our objective is to achieve zero harm, zero accidents and zero incidents across our construction sites, assets and operations. Whilst our objective is zero harm, the reality of never having any kind of accident or incident given the scale and variety of our activities is improbable. Therefore, we focus on zero RIDDOR reportable accidents or incidents.

OUR APPROACH

We take a proactive approach to health and safety, supported by the business and led by senior management.

We have a well-resourced and structured team consisting of our Head of Health and Safety who oversees the function across the business. We have an Estate Health and Safety Manager who looks after the public realm and is a fire safety specialist, providing the resource required by Quintain Living to support the development and implementation of fire safety plans.

Our Health and Safety Compliance Manager looks after all areas of compliance for the business, including managing the Construction Design Management (CDM) process for all construction operations, and ensuring that our statutory obligations for each of our offices is in place, including fire safety measures and water risk assessments. Finally, we have an Assistant Health and Safety Manager for Construction who, whilst assisting the team in other areas as required, is responsible for the audit of our construction sites to ensure they are working to and maintaining the highest standards of health and safety. The goal of the team is to be proactive, providing advice, support and guidance across the business, as required, in order to prevent accidents and incidents from occurring, rather being reactive to tragedy or disasters should they materialise.

The landscape in 2021 and beyond will be heavily focused around COVID-19, fire safety and wellbeing, with a particular focus on mental health. We are currently developing strategies to ensure that we are proactive in developing our approach, policies and procedures in these areas.

Our ambition is that our team is suitably trained and qualified to readily support the business and enable as much to happen safely, in accordance with all required law, regulation and guidance, and in alignment with industry best practice.

ACCREDITATION & AWARDS

In 2019, Quintain achieved accreditation under ISO 45001 which is the new, internationally recognised management standard for Health and Safety. It shows that the systems, processes and management of health and safety at Quintain are of the highest standard, which is verified by an external audit carried out by the British Safety Council.

Also in 2019, we were awarded International Safety Awards for both Quintain and Quintain Living, by the British Safety Council, further demonstrating our dedication and commitment to high standards of health, safety and wellbeing.

We are a Scheme Client Partner of the Considerate Constructors Scheme (CCS), and each of our sites are individually registered and audited by CCS. Amongst other issues, the Code of Considerate Practice requires that as a minimum, constructors should attain the highest level of occupational health and safety performance. The Sisk team responsible for our Canada Gardens development won a Gold Award in 2019 and 2020, with a specific mention as to how safety was at the heart of the project.

CONSTRUCTION SAFETY

As a client for so many different construction projects, we aim to provide a coherent approach to health and safety across our multiple sites.

We select those who we work with in accordance with strict health and safety criteria through the application of procurement policies and the use of our Supplier Portal (see our Sustainable Procurement section for further information).

MANAGING OUR CONTRACTORS

At Wembley Park, we are operating an ambitious construction programme, with up to six Principal Contractors and 2,500 to 3,000 construction employees on site at any given time, working an average of 300,000 to 400,000 hours per month at peak. Whilst each Principal Contractor is responsible for safety on their individual sites, we implement a range of measures to ensure our standards are maintained across the board.

Weekly safety reports are submitted to our Head of Health & Safety for each project setting out statistics relating to hours worked and details of any accidents, incidents, near misses, dangerous occurrences or hazards observed – and in 2020 – confirmed COVID-19 cases. Details of any accidents or incidents that require follow-up action are provided, along with any warnings issued, and details of any other relevant health and safety issues. Any anticipated works for the following two weeks that may have an impact on the wider Wembley Park Estate are also reported, allowing us to ensure that our Estate Team are prepared for any such events, which might include road closures, crane lifts or physical works in the public realm. We also carry out monthly Site Safety Audits with representatives of the site teams and share these results with each contractor, allowing actions to be agreed and then closed out. Each audit is also scored, contributing to our Safety Leaders Table, with the best performing team rewarded at the end of the year. In 2020 Volker Fitzpatrick were the winners, receiving an engraved plaque and a cheque from the company for £2,500 to celebrate, as a team, what a fantastic effort they put in over the year. Our Head of Health & Safety also chairs a monthly meeting with senior representation from all contractors working at Wembley Park. The Wembley Park Construction Safety Steering group covers safety performance on each site, sharing accidents, incidents, lessons learned and best practice.

FIRE SAFETY

The Grenfell tragedy in 2017 put into sharp focus the potential dangers from fire, particularly in relation to high rise buildings and the use of cladding and other construction materials and processes that do not or did not meet a suitable standard.

On 28 July 2017, following the Grenfell Tower fire, Communities Secretary Sajid Javid announced an independent review of the building regulations and fire safety. The review, led by Dame Judith Hackitt, focused specifically on issues related to high-rise residential buildings, including the regulatory system around design, construction and ongoing management of buildings.

Matt Joyce, our Executive Director for Construction, sits on the British Property Federation Working Group for Fire Safety, helping to shape the sector's response post-Grenfell, particularly in relation to Building Regulations; and on the New London Architecture Expert Panel for Tall Buildings, which looks at the construction of towers post-Grenfell.



PEOPLE

SAFETY, HEALTH & WELLBEING



Each building is designed in accordance with all current building regulations and other required pieces of legislation, approved codes of practice and guidance to ensure they are inherently as safe as can be. They all have built-in active and passive fire safety management systems, guided by a Fire Safety Strategy and implemented and managed by a specific building Fire Risk Assessment. Our involvement in industry discussions commencing in 2017 led to the implementation of measures ahead of the publication of formal updates to regulations; part-way through the construction of the façade on our Landsby building, we took the precautionary measure of replacing the proposed phenolic insulation with mineral wool. We have also increased supervision during construction, particularly of façades, and we now appoint a third-party to carry out additional reviews throughout design, installation and completion. Façades of all residential buildings we have constructed have been assessed in accordance with the Royal Institute of Chartered Surveyors (RICS) process for External Wall Systems (EWS), and all but one achieve at least a B1 rating, indicating that there is either no combustible material present, or where there is, this does not result in an increased risk of fire. The combustible material in the façade of Forum House (completed in 2008) resulted in a B2 rating, indicating an increased risk of fire; however, the integrity of existing measures such as fire doors is good and the on-site concierge and regular patrols of the building mean that there is no need for a 'waking watch'. The building has been accepted into the Government's Building Safety Fund and remedial work will be carried out to remove the cladding and replace the combustible insulation with mineral wool.

OPERATIONAL SAFETY

Our operational responsibilities cover a wide variety of people and situations, from our own employees in our offices, to the residents and tenants of our assets.

Across the board, we have in place policies and procedures that ensure that safety risks are regularly reviewed, and that policies and procedures are in place to ensure they are managed effectively. We typically achieve our objective of zero accidents and incidents across our offices and our own operations, but the Wembley Park Estate receives in excess of 16 million visitors in a typical year, with a number of assets that attract large crowds, so slips, trips, falls and minor first aid incidents inevitably occur.

CASE STUDY

COVID-19 and our Contractors

All of our contractors operate safe, COVID-compliant construction sites in line with the most up-to-date guidance as put forward by the Construction Leadership Council.

Specific examples of measures implemented include:

- Temperature checks upon arrival
- Non-essential visitors stopped from attending site
- Increased hand hygiene points in all areas of sites
- Larger, socially distanced welfare spaces including canteens and changing facilities
- Reduced numbers of staff where possible
- Reprogramming of activities to reduce the need for separate teams to be working in close proximity of each other during lockdown periods.

In addition, we also made car parking free for our contractors so that they could avoid the use of public transport during the pandemic.

PERFORMANCE DATA

Over a 12-month period we capture statistics from our contractors related to both RIDDOR reportable and non-RIDDOR reportable accident and incidents. This data is shared periodically in reports to the Operational and Main Boards, as well as in our Annual Health and Safety Report.

We look at trends across various operations, areas where we have performed well and, if applicable, areas for improvement or focus. In 2020, we additionally measured the confirmed cases of COVID-19 across our construction sites and own-operations to help us to monitor our performance in managing the spread of infection. Across our construction sites, a particular focus is our construction RIDDOR Accident Frequency Rate, which for 2019 was 0.30 and 2020 was 0.42. This is against a national average for construction of 2.01, so this is an area where we are performing well in comparison to the rest of the sector. Although construction activity slowed down significantly in 2020 during periods of lockdown, with appropriate measures in place, it did continue. Construction was one of the occupations with typically higher rates of COVID-19 infection across the UK, but with appropriate measures in place, the incident rate across our sites was very low.

A. Health & Safety Performance

	2019	2020
TOTAL INCIDENTS, ACCIDENTS & CONFIRMED COVID-19	211	35
QUINTAIN OPERATIONS	0	10
Non-RIDDOR Accidents/ Incidents	0	0
RIDDOR Accident/ Incidents	0	0
Confirmed Cases of COVID-19	N/A	10
WEMBLEY PARK ESTATE	0	0
Non-RIDDOR Accidents/ Incidents	0	0
RIDDOR Accident/ Incidents	0	0
Confirmed Cases of COVID-19	N/A	N/A
WEMBLEY PARK EVENTS	0	0
Non-RIDDOR Accidents/ Incidents	0	0
RIDDOR Accident/ Incidents	0	0
Confirmed Cases of COVID-19	N/A	N/A
WEMBLEY ARENA	52	0
Non-RIDDOR Accidents/ Incidents	51	0
RIDDOR Accident/ Incidents	1	0
Confirmed Cases of COVID-19	N/A	N/A
LONDON DESIGNER OUTLET	56	3
Non-RIDDOR Accidents/ Incidents	55	3
RIDDOR Accident/ Incidents	1	0
Confirmed Cases of COVID-19	N/A	N/A
BOXPARK	18	0
Non-RIDDOR Accidents/ Incidents	18	0
RIDDOR Accident/ Incidents	0	0
Confirmed Cases of COVID-19	N/A	N/A
CONSTRUCTION	85	22
Non-RIDDOR Accidents/ Incidents	83	17
RIDDOR Accident/ Incidents	2	1
Confirmed Cases of COVID-19	N/A	4

In 2019, our overall RIDDOR accident and incident rate was approximately 0.0001% across the Wembley Park Estate (including operations), which is extremely low.

For the majority of 2020, mass gatherings were prohibited, and as such, both visitor numbers and crowds have been significantly suppressed, resulting in one positive outcome of the pandemic – the achievement of zero RIDDOR accidents or incidents across the entire estate in the reporting year, and only three minor incidents. We are likely to see this trend continue into 2021 as enforced lockdowns and social distancing continue but given the event-based nature of the activities across the estate, we are likely to see a small increase in incidents as crowds return to normal levels in the future.



CASE STUDY

COVID-19 Measures across our Offices, Assets & Wembley Park Estate

2020 provided some unique challenges relating to COVID-19, and like many other organisations, we had to quickly adapt our workplace health and safety procedures to ensure they were COVID-secure, that social distancing could take place and that hygiene measures were sufficient to reduce the risk of spreading the disease. In March 2020, as our awareness of the new coronavirus was increasing, supported by our workplace COVID risk assessments we took precautionary measures across all of our offices, including providing sanitiser stations and encouraging teams to either work from home or stagger their presence in the office to enable allow a safe distance between individuals at desks to remain. During the first lockdown, only essential personnel were permitted in our buildings and special measures were put in place to help them travel safely to work. To reduce the risk of contracting the disease on public transport and to ensure continuity of support in our residential buildings for example, this included providing free accommodation on site for building management personnel.

We act in accordance with the most current government guidance, and most of our staff have worked from home throughout the pandemic. For those that do need to be in the office, for example where they perform a function that cannot be carried out remotely, or where there are unsuitable home facilities, we have implemented multiple measures to ensure their safety. Employees are advised to either travel to work alone, or with only members of their own household, where possible avoiding the use of public transport. Many of our staff walk or cycle to work, but for those for whom this is not an option and whose only alternative to public transport is to drive, we have introduced free staff parking for the duration of the pandemic. Further measures that were introduced in response to the pandemic and continue to be implemented within our buildings include:

- All staff are required to sanitise their hands before entering the office.
- Masks are provided for use during each office 'session'.
- Disposable gloves are provided in areas with high common touch points, such as kitchens.
- Access to high-traffic areas such as kitchens and toilets is controlled and restricted, with only one person at a time permitted to use facilities.
- Printer access is limited to one person at a time, with wipes available for cleaning down the area before and after use.
- Desk-side conversations have been suspended, with communication encouraged via telephone email or Microsoft Teams instead
- Maximum numbers have been calculated for each of our meeting rooms based on maintaining a safe distance of 2m between each person – where this cannot be achieved, meetings must instead be conducted virtually.
- External personnel are not permitted to attend the office for any reason other than post and deliveries, which have specific controls.
- Enhanced cleaning regimes have been put in place, with all touch points – such as handrails, door handles, sockets, lift controls, kitchens and toilets – are cleaned three times per day.
- Antibacterial wipes are provided at every workstation and a clear desk policy is enforced to enable effective cleaning.

As not all of our employees have a suitable place at home in which to work, we have developed a Home Office Self Assessment which allows staff who feel that their workspace is inadequate to identify potential solutions. Up to £300 per employee is available to make improvements to their environment. Our employees made improvements totaling £12,120 to their working environments, with the most common purchases being office chairs, Bluetooth keyboards, second screens for laptops, headsets and USB cameras.

Across the public realm at Wembley Park, we have adopted the 'Stay Home Now' logo developed by St Luke's – the simple reversal of the instantly recognizable NHS logo serves to reinforce the message that staying at home saves lives. Other practical measures include:

- The introduction of two-way pedestrian routes indicated with repeat signage.
- Social distancing messaging reinforced by repeat signage.
- Areas used for gatherings have been closed, gated and locked until deemed safe to reopen.
- Hand sanitiser stations have been installed across the estate for public use.
- Signage on seating restricting usage to allow for social distancing.
- The Estate Operations Team, Estate Protection Officers and cleaning teams pro-actively monitor the estate for affected surfaces that could cause harm.

Across the board, the measures that we have implemented have been effective at reducing the transmission of the disease, and as a business, we have experienced very few confirmed COVID cases across our assets.

We will continue to follow Government guidance and whilst we will welcome people back into the office, this will initially be on a rota basis, with those who can carry out their work from home encouraged to do so.



PEOPLE

SAFETY, HEALTH & WELLBEING



HEALTH & WELLBEING

Our objective is to engage, understand and seek to improve through various means, the physical and mental health and wellbeing of our employees, residents, tenants and local communities.

The impacts of leading more sedentary lifestyles are increasingly well understood, as are the effects that our buildings and surroundings have on both our physical and mental wellbeing. As a developer, we are in a position to incorporate passive features that can help to improve the health and wellbeing of our occupiers, ranging from the quality of air that they breathe, ensuring that they feel connected with nature, and providing 'nudges' to increase movement.

In managing our assets and our own offices, we are more active in our approach, and adopt specific measures to proactively improve the health and wellbeing of our workforce, occupiers and local communities.

EMPLOYEES

Employee wellbeing is a key area of focus for us, supported by a broad range of health and wellbeing benefits and other initiatives to help our employees stay healthy and well at work.

We offer a comprehensive range of medical assistance, including private medical insurance, health assessments and an Employee Assistance Programme, WeCare, that is available via a simple app, completely free of charge to all staff and their immediate family. This provides access to 24/7 GP consultations, mental health advice, counselling, get fit programmes and more. Additionally, our Group Income Protection and Discretionary Sickness Policies provide financial reassurance when our employees are facing more serious illnesses.

The importance of taking a break from work is reinforced via our generous annual leave allowance and employees are able to purchase additional leave if they desire. We have always recognised the value of flexible working, and our Family-Friendly and Flexible Working policies were put in place to ensure that every employee can achieve a work-life balance that suits them. During the pandemic, more of our colleagues are taking advantage of these policies and we have continued to be flexible in allowing people to work at a time that suits them. Our Social Committee has been running since 2018, arranging events and activities to bring our people together and ensure that all of our employees feel like they are part of our employee community. With most of us now working from home, we have had to be more creative about staying in touch with each other, so we have set up a series of virtual coffee meetings, where anybody from across the business can join in by video and catch up. This might not force people away from their screens, but it helps to schedule in well-deserved breaks and ensures that we all get a bit more human contact than what can be found within our own four walls.

Our weekly newsletter is one of the channels where we share updates and news from across the business and throughout lockdown, we have used this to provide additional advice and to direct people to the support available to them. This has included providing advice from MIND on maintaining good mental health whilst working from home. Over lockdown, this proved to be an effective way of communicating, with readership increasing by over 20% in March 2020 as lockdown began.

We are an active group of people, and unable to attend our usual free spin classes close to our West End office or participate in one of our active fundraising events, we have set up Step Challenges to keep everybody moving. Facilitated by HiMotiv, our first 6-week Quintain Move Challenge ran as the first lockdown started, attracting 30 participants from across the business, who walked or ran a total of 8.26 million steps. Our month-long Quintain Team Challenges in May and June saw four teams of 24 participants walking or running a total of 5.87 million steps, and the Quintain Summer Step Challenge attracted an additional 14 participants who completed a further 4.15 million steps.

Steps in our 2020 Step Challenges

18.28m

In 2021, we will continue with our current activities, but will also be raising health and wellbeing issues in our annual staff survey; understanding how we can best support our staff as we transition back to normal patterns of working will be particularly relevant in informing our next steps in relation to employee health and wellbeing.

RESIDENTS & TENANTS

Increased awareness of health and wellbeing amongst our occupiers is something we are responding to with thoughtful design and consideration in our building management strategies.

We are currently trialing a number of approaches and focussing on several key issues that are most relevant to our location. Air quality is an issue that has come into sharp focus - particularly in London - over the past few years. Short-term exposure to air pollution can exacerbate conditions such as asthma, impact on lung function and cause increases in respiratory and cardiovascular hospital admissions and mortality. Over the long-term, it can reduce life expectancy and in the UK is linked to between 28,000 and 36,000 deaths per year. This is why we adopt strategies during the planning, design and construction of our developments to reduce both external and indoor air pollution.

Buildings have for many years now been designed for convenience - getting the greatest number of people up to their floors in the shortest space of time. As a result, staircases are often hidden away as an emergency means of escape, and the lift is the primary means of moving up through a building. Making the stairs more prominent and an attractive feature can help to nudge people into making them their primary route, particularly where they are located on lower floors. Small design interventions such as this can make a big difference in increasing our daily step count and introducing some cardiovascular exercise easily into our routines; combined with management measures to encourage healthier behaviours, we can make a small contribution to improving the physical health of our occupiers.

DESIGN FOR HEALTH & WELLBEING

In the first instance, one of the perspectives from which we design our public realm relates to health and wellbeing issues.

More details on our approach can be found in the Biodiversity & Natural Capital, Public Realm & Placemaking, and Transport & Connectivity sections of this report.



PEOPLE

SAFETY, HEALTH & WELLBEING



both within our control and in the local area; improve access to green space and biophilia; make the most of the natural capital services provided via our landscaping strategy; and encourage movement and active travel.

We are currently trialling a number of approaches and seeking third party certifications to demonstrate our commitment to health and wellbeing in the built environment.

During construction, we ensure that our contractors adopt best practice approaches to controlling pollution from their sites, with measures ranging from reducing the number of deliveries and idling vehicles on site, to limiting the use of fuels for energy generation and mitigating dust pollution with suppression methods.

In 2020, we became the first residential developer in the world to be certified using the AirRated AirScore, achieving the Gold standard at our residential development Landsby; we are currently obtaining WELL standard certification for one of our latest residential buildings; and we are working towards the achievement of WELL Communities for the entire estate. It is now a minimum requirement for all residential buildings in our development pipeline to be designed in accordance with WELL principles.

We carefully select the materials that we use to ensure that harmful Volatile Organic Compounds (VOCs) - which can cause adverse effects such as eye and respiratory tract irritations, headaches, dizziness, visual disorders and memory impairment - are limited. We also ensure good ventilation throughout our buildings, which reduces the build up of CO₂, helping to control humidity and improving thermal comfort. This in turn helps to improve productivity and reduces the potential for symptoms related to Sick Building Syndrome.

MANAGEMENT FOR HEALTH & WELLBEING

The final element of our approach relates to our management policies and practices. These set out how we encourage and incentivise behaviours to improve health and wellbeing amongst our occupants. Throughout the pandemic, our focus has shifted somewhat, with very few commercial occupiers now on site, but many more residents working from home. In our Sustainable Communities section, we discuss some of the measures we have taken specific to the COVID-19 pandemic: we have worked hard to maintain and improve the physical wellbeing of our residents during lockdown, providing free access to online exercise classes as our gyms have closed, and encouraging more physical activity by communicating possible walking

and cycling routes in the local area; at the same time, we are very conscious that maintaining mental wellbeing whilst working from home can be difficult, so we have partnered with Luminare, specialists in mental health in the workplace, to provide a series of workshops and advice.

We build strong relationships with our residents, so it has been central to the approach of our building management teams to check in with them on a regular basis, particularly during periods of lockdown, offering additional support when required.

LOCAL COMMUNITIES

Whilst we have a more limited impact on the health and wellbeing of the local community, health and wellbeing is one of the key areas of focus in the programming of our engagement activities.

Our interaction with local communities is for the most part via our community engagement activities, which at Wembley Park are centred around The Yellow, our community centre. Our programming is focussed around improving local outcomes, one of which is health and wellbeing.

Physical health and wellbeing are addressed through the offer of physical activities to all levels of fitness, and via activities that address other aspects of health, such as healthy eating. This has, in the past, linked to events on site, such as providing free entry and Couch to 5k training for events such as the Color Run.

We also have a number of programmes for supporting mental health and wellbeing, targeting different groups of people with specific vulnerabilities. This includes tackling loneliness in older people; loneliness and social isolation can have health effects that rival those of smoking, obesity and physical inactivity, as well as increasing the risk of dementia, heart disease and stroke.

Men are 3.5 times more likely to commit suicide than women, so our conversation support groups provide a safe space where people can talk about their everyday lives have been successful in helping men in particular to open up and talk about more serious issues which might be affecting them.

Further details on how we engage with our employees, tenants, residents and local communities can be found in the Sustainable Communities section of this report.

CASE STUDY

The World's first AirRated Residential Building

Our Landsby development was the first to be certified under the residential version of the AirRated scheme, launched in April 2020. The certification, which is underpinned by leading medical and scientific research, alongside industry best practice and guidance, generates an AirScore comprising five fundamental parameters: PM_{2.5}; CO₂; TVOCs; Temperature; and Humidity, all of which have potential health and wellbeing consequences and must meet therefore a minimum threshold requirement for 95% of survey hours in order to pass. The AirScore is calculated following a three-week monitoring period, during which time information about indoor air quality (IAQ) is gathered using high specification sensors. Outdoor data from local, in-situ monitoring stations is also gathered, analysed and taken into account, as this heavily influences IAQ. These datasets are then tested against the AirRated Scoring System. The AirRated report outlined a number of ways that our building management and individual building occupants could maintain good IAQ, and the display of the certification plaque in reception sparked interest amongst residents, acting as a unique engagement tool on the topic.





PEOPLE

SUSTAINABLE COMMUNITIES

OUR OBJECTIVES

We are running a business and developing assets, but more importantly, we are building communities.

To be sustainable in the long-term, we need to meet the needs of the people who live, work and visit our places, and we do this by engaging with our stakeholders on a regular basis, responding to and anticipating their needs.

LOCAL COMMUNITIES

Objective: To foster vibrant and happy communities by bringing people together via robust, balanced and accessible programmes of engagement and activity, appealing to different groups and ensuring everybody feels part of their local community.

RESIDENTS & TENANTS

Objective: To listen to our tenants and residents, understand their needs and create environments that welcome a diverse range of residents, businesses and retailers through the delivery of buildings and spaces which instill a strong sense of belonging.

EMPLOYEES

Objective: To ensure every member of our team feels supported in their career development and is encouraged to reach their full potential as part of a team of inspiring and like-minded people who want to get the most out of their career.



PEOPLE

SUSTAINABLE COMMUNITIES



LOCAL COMMUNITIES

Our objective is to foster vibrant and happy communities by bringing people together via robust, balanced and accessible programmes of engagement and activity, appealing to different groups and ensuring everybody feels part of their local community.

Our community strategy is designed to maximise the benefit that we and our supply chain can deliver to local communities surrounding our developments. This is supported by our approach to Education, Skills & Employment, as well as our Community Investment and Charitable Giving, ensuring that instead of reacting to individual requests for support, we provide funds in a structured way against a set of objectives identified by us and our partners, including local representatives from the communities in which we are based.

THE YELLOW

At Wembley Park, we provide space for many of the activities we fund in our community centre The Yellow, now located on the ground floor of our Alto residential building. The Yellow is our version of your traditional village hall. The purpose-designed space provides a base for our Community Team and allows us to offer a wide range of activities, including those funded by our community fund, as well as education and skills-related activities organised by our Skills Team.

After testing the concept in two temporary buildings on site, The Yellow is the first of a number of permanent community facilities that will eventually be located across the development. The importance of meeting local needs - rather than imposing or transporting an existing programme from elsewhere - was central to our plans right from the outset. Our first temporary community centre - The Yellow Pavilion - opened in 2015 as a meanwhile use on

the site that now accommodates our Landsby Building. Weekly drop-in sessions were held to begin a dialogue to try and understand the demand for such a space, and by reaching out to our growing local network, we were able to identify partners and providers who could meet local needs. In 2016, the Yellow Pavilion moved to a disused retail unit on Wembley Retail Park, where it was fitted out to better accommodate the activity programme. This learning was invaluable in determining the needs and demands of the eventual fit-out of The Yellow at Alto. The design team worked closely with our Community Engagement Team and regular users of the building to make sure it met their needs, providing secure and flexible activity spaces of different sizes and a substantial kitchen area that allows for the catering of events, as well as cookery lessons. Also offering classes, workshops, support groups and advice, the space is a popular community hub for the people of Wembley Park and surrounding areas.

RUN BY LOCAL PEOPLE, FOR LOCAL PEOPLE

The Yellow is managed by Ash Patel, a Wembley Park local who grew up and still lives just a few streets away. Ash was one of our original volunteers, pioneering the Open Mic nights back in 2015, which were such a huge success that they are still a firm favourite in the event calendar. His previous skillset as an IT Project Manager, coupled with enthusiasm and an interest in community engagement made him a prime candidate when we recruited for the Community Engagement Manager role and led him to join us on an alternative career path in 2016. There are also around 25 local volunteers interested in supporting their community, who between them share their time and skills with other local people, and steer the programming of The Yellow, supporting the various activities and developing ideas for new workstreams.

A REGULAR TIMETABLE

Until March 2020, and in a normal year, a regular timetable of weekly and monthly activities takes place, including fitness classes, art groups, theatre workshops, mental health awareness and wellbeing groups, poetry and debating. Classes are mostly run by local people, with a hire fee structure dependent on the fee charged for the class and the type of organisation running the activity. For commercially run activities, a rent-free grace period is offered to allow the provider to establish a following and achieve sustainable attendee numbers, with rents then charged at a rate comparable to other local venues.

With the closure of many community centres over the past decade, a key consideration in setting rental levels was to avoid activities being displaced from other centres in the surrounding areas that are dependent on rental income for their survival.

The Yellow unfortunately closed its doors to the public in March 2020, reopening in January 2021 with an updated programme of activity and COVID-secure measures in place. However, whilst closed to the public, the space was made available to some of our partners to allow them to continue to run certain programmes. This included the continuation of The Agency Project, a collaboration with the London Borough of Culture and Kiln Theatre, in early 2020.

Where possible, many of our activities also continued online, and support was provided to activity leaders to allow this to happen.

ONE-OFF EVENTS & PARTNERSHIPS

The Yellow is also used as a base for engaging with our community partners, delivering one-off events to celebrate local culture and for providing information to local people on the current and future programmes of works at Wembley Park.

The space can be hired out to host birthday parties and other personal events at a preferential community rate - something that has proved to be very popular with local residents!



Typical monthly visits

719

Annual attendance in 2019

9,100

Hours of free space for local organisations

364

Regular weekly classes

28





CASE STUDY

Building an Outdoor Musical Play Area from Junk

Working with Wembley Park Community Fund beneficiary *Intercultural Musicology*, students from Mora Primary, Mitchell Brook Primary and Brentfield Primary were tasked with the challenge of building an outdoor musical play area from recycled materials, creating large-scale instruments from junk.

As part of the Big Build, this joint project with John Sisk & Sons, Alandale Logistics, McAleer & Rushe, Wates Construction and McLaren, required the children to use recyclable materials collected from all of our offices across Wembley Park to construct their pieces.

58 children took part, alongside 13 volunteers from Quintain, Sisk, Wates and McAleer & Rushe and we were able to yield over 16 different instruments.



CASE STUDY

Survive and Thrive

In partnership with Brent Youth theatre, Survive and Thrive was aimed at supporting children through the arts during lockdown. 85 young people aged between seven and 16 participated in a number of online projects between March and July, ranging from filmmaking to scriptwriting and writing letters to care homes. Their work was then exhibited in December at The Yellow, bringing families, friends and the local community together for a socially distanced exhibition celebrating their achievements.



CASE STUDY

The Agency Project

Using a methodology developed for working with young people living below the poverty line in Brazil, The Agency Project engages and empowers young people to plan, structure and launch social enterprises and ambitious projects that positively impact their local communities.

After successful runs in Battersea, Wandsworth and Manchester, we identified The Agency as a potential partner in 2019 and in early 2020, they began working with young people from the St Raphael and Chalk Hill estates and surrounding neighbourhoods in Brent, run by The Kiln Theatre, with support from The Yellow and London Borough of Culture.

The project received over 70 applications and interviewed 60 young people, 25 of whom were offered places on the program, which required their commitment for seven hours per week for three months; 23 of the participants went on to complete the program and four successful business ideas were chosen by an expert panel, with grants of between £500 and £2,000 were awarded to help develop proposals, which are described opposite.

LIVING HISTORY

Michael

The archive and installation of pre-regeneration local histories.

@livinghistories_

SANCIA'S PODCAST

Sancia

A podcast that tells the stories of young care leavers in Brent and the people who support them.

@sanciaspodcast_

FILM4THOUGHT

Berlyn, Nathan, Yusra, Lina

Opportunities for young people to produce short films which speak to current affairs and pertinent topics.

@film4thought_

CONSENT FIRST

Fizza

A creative project for young people in Wembley providing education around consent and healthy relationships whilst improving design and making skills.

@consentfirst_



PEOPLE SUSTAINABLE COMMUNITIES



WEMBLEY PARK COMMUNITY FUND

The Wembley Park Community Fund was founded in 2016, initially as a three-year programme led by Quintain in partnership with our Wembley Park Framework contractors: Wates; McLaren; John Sisk & Son; and McAleer & Rushe.

The fund aims to make a real difference to residents of Brent by encouraging community engagement, participation and place-making through the funding of a wide variety of community-led activities. An independent application process is administered by the London Community Foundation, itself a charity, with funds available for projects within the London Borough of Brent that help to locally address eight of the Sustainable Development Goals that we have identified as funding priority issues:



FUNDING ROUND 1: 2017/18

The first funding round commenced in July 2017, where funds of £66,038 were awarded to seven of the 39 applicants, benefitting 863 individuals directly and a further 965 individuals indirectly. Four groups received funding for the first time via London Community Foundation; two of the groups were supported again in the second round; and four groups received full or partial funding to continue their funded work in some way. A mixture of organisation sizes were supported, with three of the groups having annual incomes of less than £50,000. Projects ranged from the provision of advisory services, to training sessions covering sport, music, cookery and English for speakers of other languages. and outcomes as a result of the funded projects included:

- 224 people attended training
- 67 people came off work-related benefits
- 187 people were able to remain in housing
- 92 gained sustainable employment
- 239 people achieved independent living
- 326 people accessed advice/ guidance/ services for the first time
- 187 people participated in community activities
- 40 people showed an increase in confidence

FUNDING ROUND 2: 2018/19

In July 2018, 13 organisations were awarded a total of £116,501 for projects offering a range of support for the people of Brent, from employability for vulnerable adults, to holiday sessions for young people and arts projects for care leavers. The average income of successful organisations was £39,248, with only one organisation with an income over £100,000 awarded funding, reflecting our preference for the fund to reach small, grassroots community groups. The majority of the projects took place at Wembley Park, with six taking place at The Yellow.

Outcomes as a result of the funded projects included:

- 667 people have increased leadership skills
- 56 people gained sustainable employment
- 919 people attended training
- 357 people showed an increase in confidence
- 206 people feel they have increased voice or ability to influence
- 618 people participated in community activities for the first time
- 248 people gained new skills for the first time
- 120 people engaged with social and support networks

FUNDING ROUND 3: 2019/20

In August 2019, 14 organisations were awarded a total of £122,528 for projects ranging from football sessions for young people, to the development of a dementia café and a peer support group addressing men's mental health.

In support of Brent London Borough of Culture 2020, 40% of funding was allocated to arts and cultural projects, which included a series of arts workshops for children, and a program of Latin American cultural activities and music workshops.

The COVID-19 pandemic had a major impact on projects, and whilst a number were able to pivot to remote delivery, others have had to postpone their work and some projects are therefore yet to complete. To date, outcomes as a result of funded projects include:

- 481 people reported improved physical/ mental health
- 318 people gained sustainable employment
- 371 people attended training
- 4,018 people took part in arts activities, 267 for the first time
- 1,182 people participated in community activities
- 385 new people took part in sport, exercise, and leisure activities
- 215 people engaged with social and support networks.

FUNDING ROUND 4: 2020/21

The three-year programme was extended for 2020/21, where a further nine projects were awarded £83,446 including additional funding for several previous recipients.

Again, due to COVID-19 restrictions, many of the projects have been delayed and we do not expect to be in a position to report on outcomes of these activities until 2022.

FUTURE FUNDING & SOCIAL VALUE

The Wembley Park Community Fund has been a huge success, reaching a large audience and resulting in a wide range of social outcomes for local people across Wembley Park and the wider Brent area.

As we take a pause before entering into new agreements with our contractors for future phases of construction at Wembley Park, we will be taking the opportunity to review our community programmes in the round, with a view to delivering the best social return on our investments and delivering long-term benefits to our local communities.

As part of this exercise, we will be seeking to improve our understanding of the social value achieved as a result of the activities we have funded, specifically looking at the long-term value to beneficiaries and wider society as a result of the outcomes described opposite.

Understanding the different outcomes from a social value perspective will ultimately enable us to make better funding decisions.

Wembley Park Community Fund

£595k

Grants awarded to date

43

Fund beneficiaries to date: individuals

11,040

Funds distributed 2020/ 2021

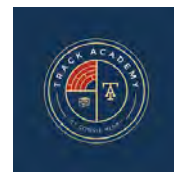
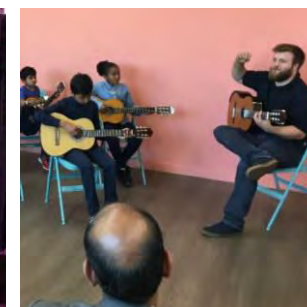
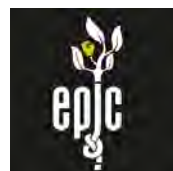
£83k



PEOPLE SUSTAINABLE COMMUNITIES



SUPPORTED ORGANISATIONS



OUR PARTNERS



“The Wembley Park Community Fund has a real effect across the Borough, supporting a wide variety of individual projects and those most in need. I encourage organisations in Brent to apply and look forward to seeing the fantastic work they produce.”

CLLR MUHAMMED BUTT
LEADER OF THE COUNCIL, LONDON BOROUGH BRENT

“We are delighted to be recipients of this grant funding and keen to see our Sowing Seeds intergenerational allotment project develop in 2021! Thank you so much for all of your support!”

DANIEL'S DEN
FUND RECIPIENT



PEOPLE

SUSTAINABLE COMMUNITIES



COMMUNITY INVESTMENT & CHARITABLE CONTRIBUTIONS

Monitoring how we contribute, what we support and why we contribute helps us to better understand and focus our efforts.

We adopt the Corporate Citizenship London Benchmarking Group guidance on measuring corporate community contributions and categorise our inputs in terms of how, what and why we contribute. We also make an assessment of the support we leverage via our own staff and via our supply chain.

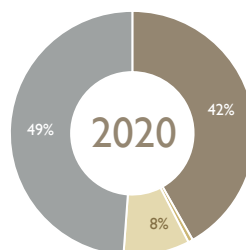
The majority of our funding is in the form of community investment, supporting, with 'Education, Skills & Employment', 'Arts & Culture' and 'Other Support' (which includes any funding that covers multiple categories, such as our investment in The Yellow community facility) forming 89% of our contributions.

Full details of our calculation approach can be found in the Methodology section of this report.

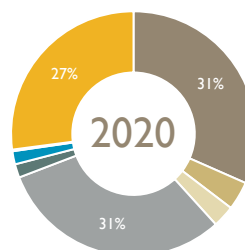
A. How, What & Why we Support

	TOTAL (£)
HOW WE CONTRIBUTE	781,085
■ Cash	326,114
■ Staff time	5,733
■ In-kind donations	68,158
■ Management costs	381,081
WHAT WE SUPPORT	781,085
■ Education, Skills & Employment	246,799
■ Health & Wellbeing	29,457
■ Economic Development	22,727
■ Arts & Culture	241,440
■ Emergency Relief	13,983
■ Social Welfare	13,494
■ Environment	1,700
■ Other Support	211,485
WHY WE CONTRIBUTE	781,085
■ Charitable donations	44,100
■ Community investment	736,985
SOURCES OF ADDITIONAL FUNDING (LEVERAGE)	58,196
■ Contributions from Quintain employees	7,344
■ Contributions from Quintain supply chain	50,852

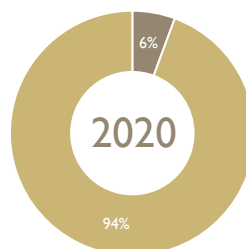
HOW WE CONTRIBUTE



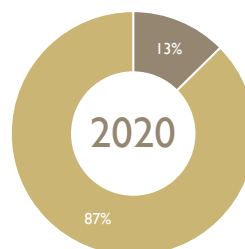
WHAT WE SUPPORT



WHY WE CONTRIBUTE



LEVERAGE



Total Quintain contributions

£781k

Individuals supported

4,558

Total leveraged contributions

£58k

Organisations supported

54

CASE STUDY

Brent Foodbank @ Yellow Pavilion

In late 2020, after experiencing unprecedented demand for their services due to the COVID-19 pandemic, the Trussell Trust approached us looking for space to sort and store food donations for the Brent Foodbank, one of the largest foodbanks operating in the London Borough of Brent.

Given our proximity to their existing foodbank centres in Neasden and Kingsbury, Wembley Park was an optimum location and after carrying out additional health and safety fit-out works to make sure the space was fit for purpose, we were able to put the former Yellow Pavilion back into full-time community use.

The trust moved into their new premises in early December 2020 and both Quintain and our retail managing agent Realm continue to provide practical and in-kind support, allowing the trust to deliver their crucial work in these trying times.



PEOPLE

SUSTAINABLE COMMUNITIES



RESIDENTS & TENANTS

Our objective is to listen to our tenants and residents, understand their needs and create environments that welcome a diverse range of residents, businesses and retailers through the delivery of buildings and spaces which instill a strong sense of belonging. Quintain Living makes up over 77% of our operational business by Gross Asset Value, followed by Wembley Park Retail at just over 12%; these areas of our business are therefore our primary focus.

QUINTAIN LIVING

Our company values: People First, Pioneering, Creative, Sustainable and Proud befit the effort and emphasis that Quintain Living put on making sure the resident comes first. Engaging with our residents is of paramount importance to us and to the success of the business. If they are happy, they are more likely to stay with us, so as well as being what matters to us most, it also makes good commercial sense. Our Residents Team is the first port of call for our residents, and feedback from their interactions with our residents helps us to improve the services we offer.

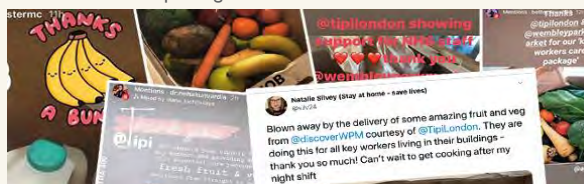
RESIDENT SATISFACTION SURVEYS

Due to the vast number of residents and differing tenancy lengths, we also seek external support and have adopted a process for ongoing resident satisfaction using the HomeViews website platform. Our aim is to understand what we're doing well and where we can improve, so residents are sent simple questionnaires at different points in their tenancy to obtain their views on their experience of the different aspects of what we offer. In 2020, residents told us they were unhappy that they weren't familiar with the leasing associates who handled contract renewals, so we realigned the process, handing it over from the Leasing Team to the Residents Team as soon as their contract starts; this ensures that there is continuity of care between the resident and the team that they interact with and get to know on a day-to-day basis.

CASE STUDY

Supporting our Key Workers

We are proud to have over 70 key workers living with us at Quintain Living and in recognition the difficulties they have faced during the COVID-19 crisis, we have looked to support them in various ways. Taking their feedback and suggestions on board, we identified two key ways in which we could do this. First of all, our key workers found it really tough to get to the shops to stock up on basic supplies, so during the first lockdown, we partnered with Bread Ahead to provide them with food packages, on us. They included staple items such as fresh fruit and vegetables, butter, milk, bread and eggs and were delivered weekly. And to help make leaving and returning home after long shifts easier, we gave our key-workers hassle-free access to parking spots across our buildings. Parking spaces were secured for key workers within all of our car parks, so those who needed to could park conveniently, close to home. For those key workers who already had a parking space, their accounts were credited with their parking fees.



“The concierge is first class and any issues with the property are addressed quickly.

The residents team run great events and deliver a personal touch.”

RESIDENT (ALAMEDA)

“The concierge team and everyone at Quintain Living are so helpful and friendly, which adds to the experience. You get luxury flats with a nice sense of community.”

RESIDENT (ALAMEDA)

Net Promoter Score

88%

HomeViews Star Rating

4.27/5

CASE STUDY

COVID-19 and our Residents

During COVID-19 lockdowns – periods of great stress and anxiety for many - the Quintain Living team put great emphasis on providing additional support to residents.

For those who were shielding or who were deemed particularly vulnerable, regular check-in calls are made, and for those self-isolating, we put in place measures to ensure that everyday necessities, such as disposing of refuse - are taken care of without our residents having to leave their apartments.

At the height of the first lockdown, when internet shopping was at its peak, additional staff were employed, dedicated to receiving packages and delivering them directly to residents, avoiding the gathering of people in communal areas.

Whilst not possible for high-risk communal spaces such as gyms to remain open, we quickly implemented a booking system to allow some of our indoor and outdoor spaces to continue to be available to our residents. With additional cleaning taking place between each time slot, spaces such as our home working pods remained in use.

Community is a big part of the Quintain Living offer, and where previously our events focused on people meeting and getting to know each other, a new schedule was quickly put in place to improve wellbeing and help ensure our residents felt less isolated.

It is also important to us to support local businesses and entrepreneurs whose incomes have suffered due to COVID-19 restrictions, so where possible, we have identified partners to work with who are part of the Wembley Park community, and who are local, independent or in other ways provide services that generate a higher social value.

When our gyms were closed, a variety of exercise classes were instead provided virtually, delivered by an instructor resident in one of our buildings. Local businesses such as Bread Ahead provided virtual cookery classes; and other events included wine tasting, candle making, art classes and cinema evenings, with ingredients and materials provided, collected from the concierge prior to the event.

“During the Covid-19 outbreak, we had to complete our university degrees in our apartment, and we felt comfortable, safe and content to be at home 24/7. Management really looked after all residents during this time, and were supportive and understanding, with constant communication to reassure residents and look after everyone's wellbeing.”

RESIDENT (LANDSBY)

“The staff are fantastic and so are the free events they put on for residents. They have made lockdown easy! You would never get this treatment elsewhere, renting or as a buyer.”

RESIDENT (FERRUM)



PEOPLE SUSTAINABLE COMMUNITIES



CASE STUDY

Screening Nights

In addition to our cinema nights, where residents receive a voucher to watch selected classics online (as well as popcorn and sweets of course), we try to keep things interesting by providing unique viewing experiences – this has been especially appreciated as cinemas have closed.



In May we collaborated with Secret Sofa for the screening of two retro classics. To hint at what they'd be watching, residents were sent angel wings and flower garlands (Romeo & Juliet) and paper boiler suits (Ghostbusters), setting the mood.

And in October, director and screenwriter of Oscar-nominated *Black Sheep*, Tomsin Adepeju, was on hand to answer our residents' questions after they enjoyed a special screening of the film.



CASE STUDY

Stress Awareness Week

Never has there been a year where the need to be aware of and manage the signs of stress been more important.

During Stress Awareness Week in November, coinciding with the second national lockdown, we teamed up with *We Are Luminare* to help our residents recognise and manage the signs of stress via a series of Webinars which included: 'Managing Anxiety', 'Boosting Happiness' and 'Stress Management'.



CASE STUDY

Cookery Classes

We are privileged to have such amazing food creators on site here at Wembley Park, and both before and throughout periods of lockdown, our residents have been treated to free cookery classes from the experts.

Bread Ahead have taught us how to make their legendary brownies, amaretti and pumpkin pies; Pasta Remoli founder Simone taught us how to make delicious Homemade pasta and shared what makes an authentic Italian dish; and Efthymios Vasilakis – founder of Boxpark favourite *The Athenian* – injected some Greek sunshine into our cooking.

Following on from the success of the Koolcha supper club we hosted with Michelin-starred Rohit Ghai (of Koolcha and Kutir) in 2019, in April, we were especially lucky to have Rohit share with our residents how to make Indian street food dishes using some of his family's secret recipes, all from the comfort of their own kitchens.



CASE STUDY

Our Pet-friendly Approach

Our pet friendly approach began as a trial in one of our earlier residential buildings, Landsby as a reaction to the 'no pets allowed' policies we were coming across within many private residential leases. With 49% of adults in the UK owning a pet, and with the proven health, wellbeing and community benefits associated with animal ownership, we wanted to go beyond just allowing them and find ways to actively encourage them!

This has proved extremely popular with prospective residents' and seeing animals around the building appears to have prompted others to get their own pets - at our last count, we had 65 dogs and 18 cats residing with us across Quintain Living.

All of our buildings are now pet friendly, and we have incorporated a number of dog runs - equipped with safe poop bins and poop bags - across the public realm and within the shared gardens of some of our buildings. In response to demand, one of our more recent buildings has a dog wash station, and we are currently identifying a partner to carry out dog walking and provide boarding, day care, grooming and other pet-related services. Our Pet Event Strategy will follow, providing additional fun for our furry friends and their owners.

CASE STUDY

Home Working Pods

Nestled amongst the podium gardens of Quintain Living's Canada Gardens development, our home-working sheds have been popular with our many homeworkers even before lockdown.

Equipped with high quality office furniture from John Lewis & Partners, potted plants, plug points, a place to hang coats and heating, the sheds provide a comfortable change of scenery for a working day and much-needed connection with the outdoors for busy professionals. Residents can choose from four sheds, each similar in style and size but with different views of the acre of the developments landscaped gardens.



CASE STUDY

Wembley Park Zipcar

As part of our Strategic Travel Plan, all of our residents receive two-years free Zipcar Membership and £25 of driving credit when they activate their membership via our dedicated portal.

To encourage uptake of this offer, availability is highlighted to new residents when they move in, in newsletters, via the resident app, and across digital screens within buildings.



PEOPLE

SUSTAINABLE COMMUNITIES



WEMBLEY PARK RETAIL

We adopt a flexible and supportive approach as a landlord, resulting in a symbiotic landlord/ tenant relationship where in good times, both parties benefit; and in less favourable conditions, we are both incentivised to generate improvements.

Our collaborative approach as a landlord with our retail tenants was firmly in place before COVID-19, with marketing initiatives to encourage customer footfall across the estate as well as turnover-based lease agreements, which have been a particular support to retailers during periods of lockdown when they have been unable to trade.

This approach is attractive to occupiers since they can avoid very large fixed costs, only paying increasing rents as sales increase. This also means we have a vested interest in ensuring people and trade are attracted to Wembley Park.

Our retail mix is multi-faceted and talks to several potentially different customers. London Designer Outlet (LDO) on the one hand accommodates the big brands, morphing into Food & Beverage (F&B) and leisure on The Boulevard, whereas convenience and independent retail is scattered throughout the development, catering to local needs and those looking to seek out something special.

We work closely with our occupiers to maximise opportunities for turnover, and support them in promotions, projecting their brand, and even in designing their stores.

We have carefully curated our retail mix and take every opportunity to promote our retailers within all parts of our business. Where we can identify opportunities to collaborate, we actively do so - this is particularly relevant across Quintain Living, where as outlined in the previous section, we have worked together to deliver exclusive experiences for our residents.

Following the end of the first lockdown, Quintain and our retail managing agent, Realm, worked with each individual tenant at Wembley Park to agree plans and procedures for a safe and successful reopening. Every precaution was taken to ensure customers and staff felt safe, including the implementation of social distancing measures, hand sanitiser stations, quarantined clothing after they had been tried on by customers and three hours of free parking to offer an alternative to public transport.

CASE STUDY

Supporting Independent Retail at Wembley Park

Independent retail is an important part of our leasing strategy, giving visitors and residents a chance to experience both unfamiliar concepts and familiar concepts delivered in new and exciting ways.

We are always looking for operators who can provide something not readily available or that meets a specific local need.

Wembley Park Market offers a modern twist on the Wembley market heritage, bringing the community together with small businesses to celebrate makers, artisans and designers; Second Floor Studios provides space for a community of makers and artists, which has become a new focus for creatives in North West London; and other retailers offer unique experiences, such as Bread Ahead who provide visitors with the opportunity to create their own versions of their delicious baked goods at their on-site cookery school.



INSIGHTS

COVID-19 and the Implications for Retail

“One aspect that has come much more to the fore is the relationship between landlords and retailers across the sector. No longer can the two be viewed as parallel tracks of the same railway line, looking after their own interests and broadly heading in the same direction.

Now, there is a greater need to focus on working as partners. The goal remains to encourage guests to visit more often, but with concern for coronavirus, there is a growing trend towards localism with people choosing to shop nearby without a need to travel far. This puts greater emphasis on attracting visitors from across a retail destination's catchment.

Prior to reopening after the first lockdown, we at London Designer Outlet worked closely with all our retailers, agreed individual plans and procedures for their stores and ensured we kept within all the Government guidelines, while adding plenty of our own local extras.

We know that guests, currently, don't wish to stay in public places longer than needed and will avoid public transport, if possible. With strict social distancing rules, not least those that limit numbers within each store, the onus is on having procedures in place and knowledgeable Guest Relations teams on hand to ensure guests make the purchases they want, and still have enjoyable and memorable experiences.

Further helping our guests to shop hands-free, we were the first UK shopping centre to offer Dropit, the app-based, store-to-door delivery service. Added to that, we launched The LDO Edit to allow guests to browse our website and click-and-reserve from a curated selection of popular items from our top brands. Additionally, we have enhanced our Customer Relationship Management (CRM) capabilities by applying new technologies that enable us to communicate with our guests and personalise our approach, sharing with them unique and bespoke offers through personalised QR codes.

As we face the challenges created by the pandemic, we see landlords and retailers working more closely together in partnership to enhance footfall, improve the guest experience and strengthen key trading metrics for stores.”

SUE SHEPHERD

GENERAL MANAGER LONDON DESIGNER OUTLET, REALM



DISCOVER

MARKET
WEMBLEY PARK





EMPLOYEES

Our objective is to ensure every member of our team feels supported in their career development and is encouraged to reach their full potential as part of a team of inspiring and like-minded people who want to get the most out of their career. At Quintain, one of our five core values is “People First”; recognising that our people are at the centre of everything we do. Integral to our approach is understanding what is important to them and how they feel about working for Quintain.

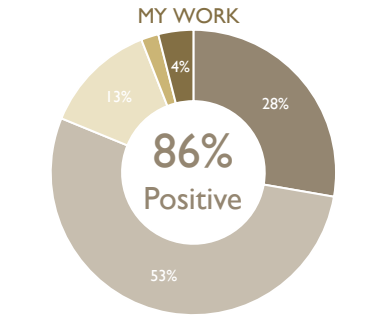
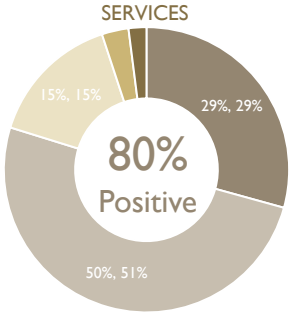
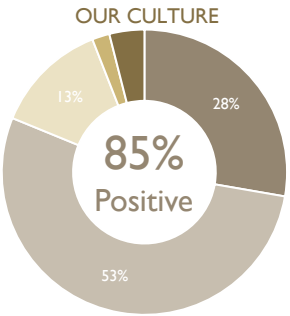
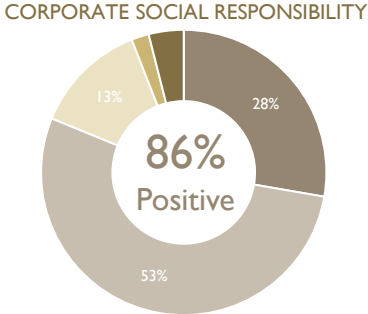
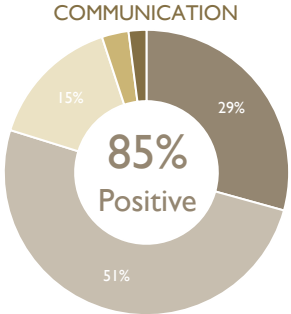
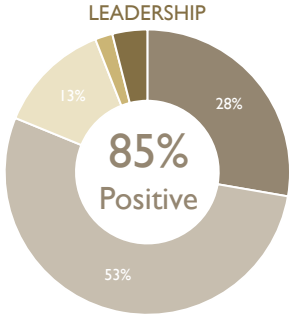
ANNUAL EMPLOYEE SURVEY

We are committed to ensuring that we have an engaged workforce and that employees are given the opportunity to give their feedback and views on how we are performing as an employer and where we can take steps to improve.

All employees are invited and encouraged to participate in an independent employee satisfaction survey; this is generally well-received and we typically achieve a response rate in excess of 90%.

Generally, we run the survey annually, although due to COVID-19, the 2020 survey was delayed and we expect to run this in the second half of 2021 instead. Following the survey, results are analysed and reviewed by senior management and insights are shared with employees. Feedback sessions are held with groups of employees to delve deeper into the findings, following which action plans are put into place to address any issues highlighted in the survey.

As a result of previous surveys, our social committee was launched to support the development of cross-department relationships and to reduce any perceptions of people working in silos; we have implemented an open diary policy across the business to encourage transparency and remove ‘busy’ entries; and we continue to improve our communications on departmental and business developments.



KEY

- Strongly Agree
- Agree
- Disagree
- Strongly Disagree
- Cannot Comment

“ I work with people from different parts of the business and I love the way we help each other when necessary. The work environment makes me feel very comfortable and helps me to do my job easily. ”

“ I enjoy my role and feel it is varied and interesting. I feel like Quintain and my manager want me to succeed which is a nice feeling. ”

Survey response rate	Net Promoter Score	Overall Positive responses	Enjoy their job	Proud to work for Quintain
92.6%	91.4%	82.2%	92.1%	97.1%

EXPLANATORY NOTES:
The categories in the key relate to aggregated responses, where all questions ask the respondent how much they agree with a positive statement.

For more information about the Employee Survey process, refer to Page 94 in our Methodology section.



PEOPLE SUSTAINABLE COMMUNITIES



TRAINING & DEVELOPMENT

Key to the success of our growing business is ensuring that our employees have the skills and experience needed to perform their roles, but also that they have opportunities to learn, supporting both the needs of the business and their own career development.

We are currently developing a Learning and Development Strategy aimed at providing a more focussed approach to training and development for our employees. As part of the strategy, we hope to be able offer more e-learning opportunities, thereby providing flexible and efficient access to training courses and materials, whether for mandatory and/or compliance training, job-related learning or the development of other skills.

Our robust Performance and Development Review process is implemented annually and through this, all employees are encouraged to agree a Development Action Plan with their manager highlighting development objectives for the year ahead. In addition to training provision offered to our employees at an individual, team and company-wide level, we also offer financial and study support to employees who wish to study for professional qualifications and accreditations which may support their role and career development.

EMPLOYEE VOLUNTEERING

Volunteering is a valuable way of connecting with the communities in which we live and work and has been demonstrated through various studies to improve health and wellbeing.

For these reasons, all employees are given two days per year to spend volunteering, supporting the communities local to our development activities. Currently, this is focused on supporting the local community at Wembley Park and within the London Borough of Brent, although due to COVID-19, our volunteering activities have unfortunately been unable to continue at the same level as previous years, but in 2020 we still managed to contribute over 100 hours, with staff from across the business participating in a wide range of activities, supporting a variety of local causes and in many cases, learning valuable things about themselves, as well as gaining a better understanding of the impact and value of our activities on our communities.

CASE STUDY

Employee Volunteering with Sufra

Since 2018, we have supported St. Raphael's Edible Garden managed by Sufra through employee volunteering, which has included creating a new composter, extending planting beds and creating a community mosaic designed by local school children using lost and found items.

The space emerged as a result of a local campaign by residents and provides a therapeutic area where Sufra can invest in the skills, health and wellbeing of local people, whilst improving the appearance of the estate and giving residents the opportunity to come together, have fun and grow their own food.



“ I have found volunteering to be a good opportunity to learn new skills whilst helping others in the process (who knew making peanut sauce and spring rolls (not fried) could be so easy)! Volunteering is always great fun and you end the day feeling a sense of satisfaction. ”

SONIA KHAN
FINANCIAL ACCOUNTANT

“ I really enjoyed the volunteering experience at the Ark Academy, despite us all having hectic schedules I felt that finding the time to give something back to our community was really satisfying, especially opening the kids minds to the amazing opportunities that are available to them on their doorstep. ”

RUSSEL MARKOU
HEAD OF OPERATIONS, QUINTAIN LIVING

CASE STUDY

COVID-19 and our Employees

2020 has been an extremely difficult year for everyone, and in recognition of the challenges faced by our employees, we have developed several mechanisms to support our people.

Throughout the pandemic, we have communicated regularly to ensure everybody has up to date access to information about the latest Government rules and guidance, as well as medical information relating to COVID-19 symptoms and care. These communications are in addition to our weekly e-newsletter and quarterly Company Update Meetings which have continued throughout.

Recognising the importance of maintaining strong working relationships, we have also encouraged regular team contact throughout the working week so that our teams stay connected. Team meetings include introductions from visiting speakers from across the business and we have recently introduced 'virtual coffee breaks' for groups of no more than eight. For the most part, the weekly, half hour coffee break hosted by a member of senior management is a chance to talk about anything that is not work. Often laugh out loud entertaining, they can also identify feelings of loneliness, so follow-up plans are also put in place with any individual who would like one. This programme is ongoing and was implemented so that we can maintain some of the social aspects of the workplace.

Furthermore, we have provided guidance and tips from working from home; access to online webinars on mental health; and company financial support to purchase equipment to ensure a suitable working from home set-up, such as furniture or additional IT equipment.

To support those managing the demands of caring responsibilities or home schooling, we have adopted a flexible approach to working times, and we actively encourage our employees to take regular breaks, promote the benefits of exercise and ensure that employees continue to use their holiday entitlement, even if only staying at home.

Whilst it has been necessary to furlough some members of our team as a direct consequence of the pandemic, we have endeavored to limit this; we welcomed the introduction of 'flexible furlough', which has allowed more of our employees to return to work on a part-time basis, and we brought all employees back to work as swiftly as possible, albeit dependent on their role and specific circumstances. We recognise that our employees have financial commitments and to ease any anxiety related to reduced take-home pay, throughout the pandemic, we have provided our employees on furlough with top-up pay to their normal salary rate.





PLACE

We aspire to create inspiring, vibrant and thriving communities and neighbourhoods that are socially, culturally, environmentally and commercially sustainable.

PLACE

BIODIVERSITY & NATURAL CAPITAL

OUR OBJECTIVES

The natural world provides many services that we rely on, from purifying the air we breathe, to pollinating our plants.

We are increasingly aware of the need to preserve, protect and improve biodiversity across our developments, and are committed to ensuring that the benefits of the natural environment are available to all, now and in future generations.

BIODIVERSITY

Objective: To adopt a holistic approach in order to maintain and enhance biodiversity across all our developments, through the selection of appropriate species, the provision of linkages to existing areas of biodiversity value and the adoption of best practice approaches to ongoing management.

NATURAL CAPITAL

Objective: To understand, measure, improve and communicate the value of nature across our developments.

POLLUTION PREVENTION

Objective: To prevent damage to the natural environment through measures at design, construction and operational phases to reduce pollution to air, water and soil.



PLACE

BIODIVERSITY & NATURAL CAPITAL



BIODIVERSITY

Our objective is to adopt a holistic approach in order to maintain and enhance biodiversity across all our developments, through the selection of appropriate species, the provision of linkages to existing areas of biodiversity value, and the adoption of best practice approaches to ongoing management.

Through the sensitive regeneration of brownfield and former industrial land, we are able to deliver ecological improvement that incorporates a variety of different habitat sites, resulting in significant improvements in species value and improved ecological connectivity.

WEMBLEY PARK

Our landscaping strategy pays homage to Repton's English Landscape Movement, reconnecting with the surrounding network of natural ecosystems and wildlife corridors and providing open space within the heart of Wembley.

Wembley Park is a unique location, requiring a robust landscape that can withstand the vast crowds of event days whilst also providing tranquil spaces for people to enjoy and wildlife to thrive. Our dedicated Landscape Management Team, led by our Landscape Manager David Hughes, oversees the planning and management of our green infrastructure and ensures that the health of all species on site is maintained.

TREES

Urban trees play an important role in increasing urban biodiversity, providing plants and animals with a favourable habitat, food and protection. Our award-winning, site-wide tree planting strategy has been in place since 2005 and has been developed in recognition of the heritage and the value trees provide for biodiversity, nature, health and memory; the provision of shade, pollution and dust reduction, erosion control

and flood attenuation; and for creating identity, sense of place and legibility within the placemaking context. Wembley is synonymous as a place that welcomes the world and our Avenue of Champions along Olympic Way celebrates this using matched pairs of trees arranged according to their order of longitude; starting at Wembley Park Station we are transported to the West Coast of America, ending on the East Coast of Japan at Wembley Stadium. Olympic Way previously accommodated a mixture of Lime and Plane trees, which have been moved to our 'tree orphanage' located on Engineers Way, fronting North Park. This space accommodates trees from other parts of the site whilst they await a new home. In order to better care for our trees, we use an online tree inventory system, Curio, which allows us to map and record information about individual trees, upload photographs of tree condition, and send links to our maintenance teams regarding specific trees on which works need to be carried out. Our use of Curio also allows us to make our tree data publicly available; either directly via their website, or indirectly through linking to many freely available public apps. Curio details individual trees, providing a range of information and interactive features to help people to explore their local area and learn more about local biodiversity. Local people can also record their own photos, observations and stories about our trees and other features, highlighting the cultural importance of greenspace and maintaining the sense of community ownership of these important amenities.

GREEN ROOFS

Green roofs can accommodate a wide range of insects associated with dry grasslands and provide important foraging habitats for birds. All 15 acres of our roof and podium areas are put to use, either accommodating plant and required plant access, providing amenity areas for residents, or providing green and brown roofs to improve biodiversity.

New trees planted to date	Green and brown roof area to date
913	3 acres

CONNECTION TO WILDLIFE CORRIDORS

Wildlife corridors allow species to move between areas that would otherwise be fragmented, which in turn supports the viability of animal and plant species through enlarging habitat. Much of Wembley is defined as an area of wildlife deficiency, with the most substantial area of habitat located along the embankments of the Chiltern railway line; a continuous strip of woodland is designated for its conservation value. The landscaping of our Ferrum residential building was designed to extend this Site of Importance for Nature Conservation (SINC) along the railway frontage of the buildings, improving the wildlife corridor in this area. The Wealdstone Brook which runs to the north and east of Wembley Park and River Brent flow through the area and are part of the London Blue Ribbon Network, London's strategic network of water spaces. Whilst we do not directly connect into this network, we have made visual connections through the design of our surface water systems.





PLACE

BIODIVERSITY & NATURAL CAPITAL

THE PARK

Currently under construction, with the Southern section almost complete, The Park will provide 7-acres of new parkland for the local area, comprising of a mixture of landscape types that respond to the local context.

The Park is the principal organizing space for the lands east of Wembley Stadium, and an essential part of both the urban design of the area, and to the creation of a rich, biodiverse and sustainable landscape.

BLUE SPACE

A key feature of the park is the pond and reed beds, combining to visually link the water features in the South Park through to the North Park. The pond has an important amenity value, as well as increasing the opportunity for biodiversity through the introduction of aquatic and marginal water plants. The reed beds clean and filter the water before it enters the pond, reducing reliance on mechanical filters.

Marginal and water-edge plantings fill the damp soil that is not covered by water, or is only periodically inundated. This includes a matrix of grasses and rushes, some evergreens and coppiced shrubs. Reed bed planting is both ornamental, designed for visual delight and to allow a greater diversity of flowering plants to co-exist with them, but also to provide water-cleansing services.

There is also a swale which caters for daily rainwater runoff from the adjacent hard landscaped areas. The selection of swale planting is carefully considered for the challenging location – in shade for much of the time, most likely exposed to wind, and for most of the time dry, but able to withstand periodic inundation following rainstorms; therefore, a range of robust, drought-tolerant and/ or shade tolerant species have been included to withstand different climatic conditions throughout the year.

PLANTING

The specification and management of urban green spaces can directly influence their micro-environment, creating conditions that are favourable to a range of plants, which in turn create habitats for other species.

The park will include planting that responds to the change in conditions from north-west to south, creating a 'String of Gardens'. Herbaceous planting, including swathes of robust, naturalistic



perennials, will provide year-round interest along the edges of the rain gardens and meadows, with a variety of species selected to attract beneficial insects and pollinators. This will be further enhanced by very low-maintenance wildflower planting that will be cut back in autumn, maintained as short grass until the end of winter, and then allowed to develop as meadow for the rest of the year.

Planting will be enhanced by the addition of trees, with species tolerant as far as possible to climate change, and in the area in proximity to the swale, with species tolerant to water. Existing trees that have been relocated from areas of the site where development has already taken place are currently residing in the tree nursery, and for the most part will be relocated into the park.

CASE STUDY

London National Park City

London National Park City is a community-grassroots movement inspired by the family of National Parks but applied at city scale. According to mapping company Esri, Greater London's public green space covers 16.8% of the city, and the aim of the movement is to highlight the importance of green space in the capital in order to increase and protect it. In 2015, Quintain became involved with the campaign to make London the world's first National Park City by corporately supporting the London National Park City Campaign, which with support from the Mayor of London, Sadiq Khan, was successful in 2019. New policies are being implemented with the objective of increasing green space in the capital to cover 50% of the city by 2050; Wembley Park is already on its way to achieving this target, when on completion, circa 50% on plan will be green or blue space. We are members of the National Park City Development Forum and Julian Tollast, our Head of Masterplanning & Design is a Trustee of the National Park City Foundation, which provides leadership in coordinating and developing the vision for the movement.



“The principles of London National Park City: ‘Connect, Create, Champion’ to make the outdoors ‘Greener, Healthier, Wilder’ are very much aligned with the principles that have underpinned Quintain’s work at Wembley Park.”

JULIAN TOLLAST
Head of Masterplanning & Design



PLACE

BIODIVERSITY & NATURAL CAPITAL



NATURAL CAPITAL

Our objective is to understand, measure, improve and communicate the value of nature across our developments.

We are reliant on nature to provide many services that we take for granted: our food-chain is reliant on the activity of pollinators; the soil, plants and trees store carbon and convert pollutants, helping to absorb greenhouse gas emissions, and clean our air and water; and a human connection to nature has significant positive impacts on our physical and mental health by creating opportunities to exercise and socialise.

VALUING NATURE'S SERVICES

Whilst some people are offended by the concept of 'putting a price on nature', we feel that it can be helpful to improve decision-making and provide the justification that may be needed to invest in green infrastructure based on the benefits it can provide.

It can also help to steer landscaping strategies, incentivising the provision of natural features or certain species in preference to alternatives to deliver the greatest societal gain.

This approach is adopted by the National Park City Foundation and in London, is supported by the Greater London Authority, who in 2017 published their own study which calculated aspects of the economic value as a result of the city's parks and green spaces.

Natural capital also underpins the UK Government's 25 Year Environment Plan, stating that the "UK intends to use 'natural capital' as a tool to help us make key choices and long-term decisions". The Natural Capital Committee (NCC), an independent advisory committee that helped develop the plan, published guidance in 2020 on embedding natural capital into the HM Treasury Green Book, which sets out the Government's guidance for appraisal and evaluation of public spending policies; incorporation in the Green Book will lead to a much more widespread use of this approach in the future.

CARBON DIOXIDE & AIR QUALITY

Trees can take up substantial amounts of CO₂ and vegetation can act as a natural filter, removing particulate matter from the air via the surface of leaves.

Modelling led by the UK Centre for Ecology & Hydrology (UKCEA) estimates that vegetation (including trees as well as other natural habitats and cropland) removed over 1,325,000 tonnes of pollutants from the air in the UK in 2015, but the national benefit is not distributed uniformly across the country, varying according to the amount and type of pollution in the air; vegetation cover and mix of species within; and population size and composition and climate. For example, trees remove more particulate matter than other types of vegetation, and the benefits are greater in urban areas where there is more pollution and more people who benefit.

The *Pollution Removal by Vegetation* tool produced by UKCEA estimates that 6.2kg of PM_{2.5} are removed each year per hectare of woodland planting in the London Borough of Brent, with a value of £1,053,338 per hectare over the next 100 years at present value in avoided health costs.

The type of species is an important factor in the quantity of emissions and particulates that can be removed from the atmosphere, so we are closely following research in this area in order to guide our species selection. In particular, certain species of tree may have a negative impact on the environment – the London Plane for example is a high emitter of biogenic volatile organic compounds (BVOCs), which play a role in ozone formation, and therefore have a negative impact on air quality.

FLOODING & WATER FILTRATION

With increasingly intense periods of rainfall, flooding as a result of surface water is a risk we have to manage across our public realm. Our approach to this has shifted over time, and whereas historically we adopted a more physical and mechanical approach to stormwater attenuation and storage, for example through the use of storage crates, we now utilise our landscaping areas to carry out a significant proportion of this work. The new park has been designed to incorporate a swale to manage daily rainwater runoff, alongside a series of rain gardens, profiled to accommodate storm water from the park and adjacent buildings for a 1 in 100-year event. The pond also features a 300mm freeboard to accommodate and attenuate storm water runoff.

Additionally, the water filtration benefits of reed beds will be utilised to naturally clean water before it enters the pond, resulting in energy, GHG emission and financial savings through reduced mechanical filtration.

HEALTH

There are an increasing number of scientific studies being undertaken across the globe relating to the physical and mental health benefits of proximity to parks, trees and nature in general.

A Canadian study comparing neighbourhoods with different densities of trees in Toronto with high-quality data sets on public health and demographics found that higher tree density correlated with higher perceptions of health and lower incidence of heart and metabolic disease; the authors estimated that planting just 10 additional trees per city block has a benefit equivalent to more than \$10,000 Canadian dollars per household in health-related costs.

A study analysing the effects of the loss of city trees comparing health data before and after the loss of 100 million ash trees across the USA due to the infestation by the emerald ash borer between 1990 and 2007 found statistically significant increases in mortality related to cardiovascular and lower-level respiratory tract illness, the magnitude of which increased as the infestation progressed.

The 2017 *Natural Capital Accounts for Public Green Space in London* study for the GLA estimates that for populations with access to a park, the probability of being physically inactive is 20 per cent lower. This study goes on to estimate the physical per person benefit of proximity to a park in London is estimated to be £67 per year. Similarly, the relationship between mental health outcomes has been studied and is estimated to result in a per person benefit of £42 per year. On completion, Wembley Park itself will accommodate circa 20,000 residents, equating to a total annual health benefit of £1.6 million. In addition, there are several thousands more existing residents in close proximity who will benefit from our green space.

**Physical & mental health benefit of
Wembley Park green space on completion**

£1,635,000/year





POLLUTION PREVENTION

Our objective is to prevent damage to the natural environment through measures at design, construction and operational phases to reduce pollution to air, water and soil.

CONSTRUCTION MEASURES

We require our contractors to adopt best practice measures in the prevention of pollution from our sites in order to reduce noise, protect the soil and ensure better air quality.

With a large amount of construction activity in a relatively small space, we are mindful of our potential impacts and put in place procedures to manage pollution risks.

AIR QUALITY

There are three main potential sources of air pollution at Wembley Park: dust arising during demolition and construction works; particulate emissions arising from construction vehicles and vehicles across the estate road network; and emissions arising from the burning of fuels to generate heat and electricity in our energy centres. During construction, an Air Quality Management & Monitoring Plan is produced for each individual site and continuous monitoring of air quality is undertaken to ensure that agreed levels of particulates are not exceeded. Deposited dust is also measured at the end of each month; a sample is collected and its mass is measured to ensure levels have not exceeded an agreed level of 200mg/m²/day.

Typical dust management measures include:

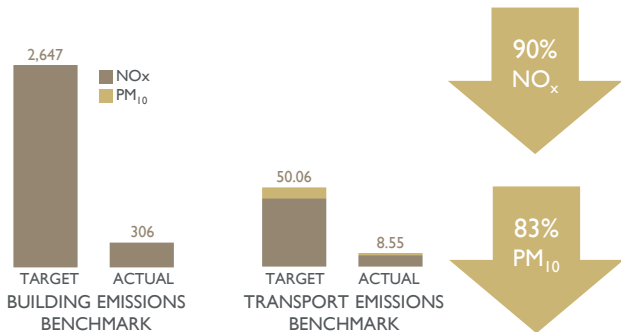
- Storage of powdery materials in enclosed containers, and where possible, the use of pre-mixed versions of cementitious materials
- Vehicle wheel cleaning at site exits
- Sheeting of loads being removed from site
- Damping down of the general site, sweeping of adjacent roads and sealing of exposed dust-generating surfaces as quickly as practicable
- Limited use of stockpiled materials (unless being reused on site).

Construction vehicle emissions arise as a result of vehicles of the road network and Non-Road Mobile Machinery (NRMM) within the vicinity of each site. All NRMM complies with the Stage IIIA emission standard

set out in EU Directive 97/68/EC and the use of petrol and diesel fuelled plant is limited. Construction vehicles are routed first to our off-site consolidation centre to reduce vehicle movements and idling, and therefore reducing emissions. All vehicles and plant are required to be turned off when not in use and this is enforced by Environmental Coordinators on site. The use of district heating and CHP electricity generation in energy centres such as those at Wembley Park localises NO_x emissions that would otherwise have been produced elsewhere; emissions from our energy centres are managed through the use of ultra low-NO_x boilers which emit less than 40mgNO_x/kWh and through the adoption of selective catalytic reductions to reduce CHP emissions to a rate of 50mgNO_x/Nm³. An 'Air Quality Neutral' assessment is carried out for new buildings, which measures building performance against a Building Emissions Benchmark (BEB) and a Transport Emissions Benchmark (TEB); these are calculated for each building based on building energy use and associated road transport. For E03 Canada Gardens where completions commenced through 2020, a BEB of 2,647kgNO_x/annum and TEBs of 42.7kgNO_x/annum and 7.36kgPM₁₀/annum were calculated, against which the building achieved a Total Building NO_x emission rate of 306kgNO_x/annum and Total Transport NO_x emission rates of 7.3kgNO_x/annum and 1.25kgPM₁₀/annum, offering a significant improvement over the benchmark requirement.

E03 Canada Gardens Air Quality

[kg/annum]



NOISE & VIBRATION

Given the nature of our work, noise is something that cannot always be avoided. In order to mitigate the potential for nuisance, particularly amongst our residential occupants, we implement measures during construction to reduce the impact of noisy operations. This includes the use of a noise monitoring system to regulate the effective disturbance being caused, requirements for contractors and sub-contractors to ensure that their activities do not cause undue disturbance, and special measures where particularly noisy operations are to take place.

Recently, we carried out the demolition of the pedway leading from Olympic Way to Wembley Stadium, replacing it with the new Olympic Steps. Our project management team and construction partners went to great lengths to minimise disturbance to local residents: a proportion of the main structure of the steps was constructed off site; timber was laid to absorb vibration; specialist machines were selected to ensure the noisiest part of the project was completed as quickly as possible; and water spray was used to manage dust levels.

Noise and vibration monitoring stations were in place in several locations around the site, which were closely monitored by our contractors, as well as an independent team from Brent Council. At the closest residential development to the site, a noise level of 82 decibels was set as a recommended limit of extended exposure. This was only briefly exceeded on three days during the ten-day demolition phase. Vibration levels briefly exceeded recommended levels of 2 millimetres per second.

Local residents were kept informed throughout the process and as the work involved some night working, additional measures in certain apartments in our Alameda, Beton and Landsby buildings that were most adversely affected were out in place. In the first instance, residents were provided with complimentary earplugs. Where this proved insufficient, sleep headbands and noise cancelling headphones were provided on loan, and options to sleep in alternative apartments, or for longer periods of disruption, the granting of licences to occupy an alternative apartment, were granted.

The management of noise and vibration resulted in positive feedback and genuine excitement for this new chapter of Wembley Park's public realm.

Further details of air quality measures can be found in the Sustainable Infrastructure and Logistics sections of this report.



PLACE

PUBLIC REALM & PLACEMAKING

OUR OBJECTIVES

The success of any place is largely dependent on the places and spaces that shape the built environment and how they function to welcome all. This is why we adopt a Space Positive design approach across all our projects, delivering public realm that not only creates an instant impact but also matures and has longevity.

From the infrastructure required for everyday activities and our day-to-day management approach, to the animation provided by regular events and one-off occasions, we consider the details so that we create places that are accessible, inviting and inspirational to all.

PUBLIC REALM

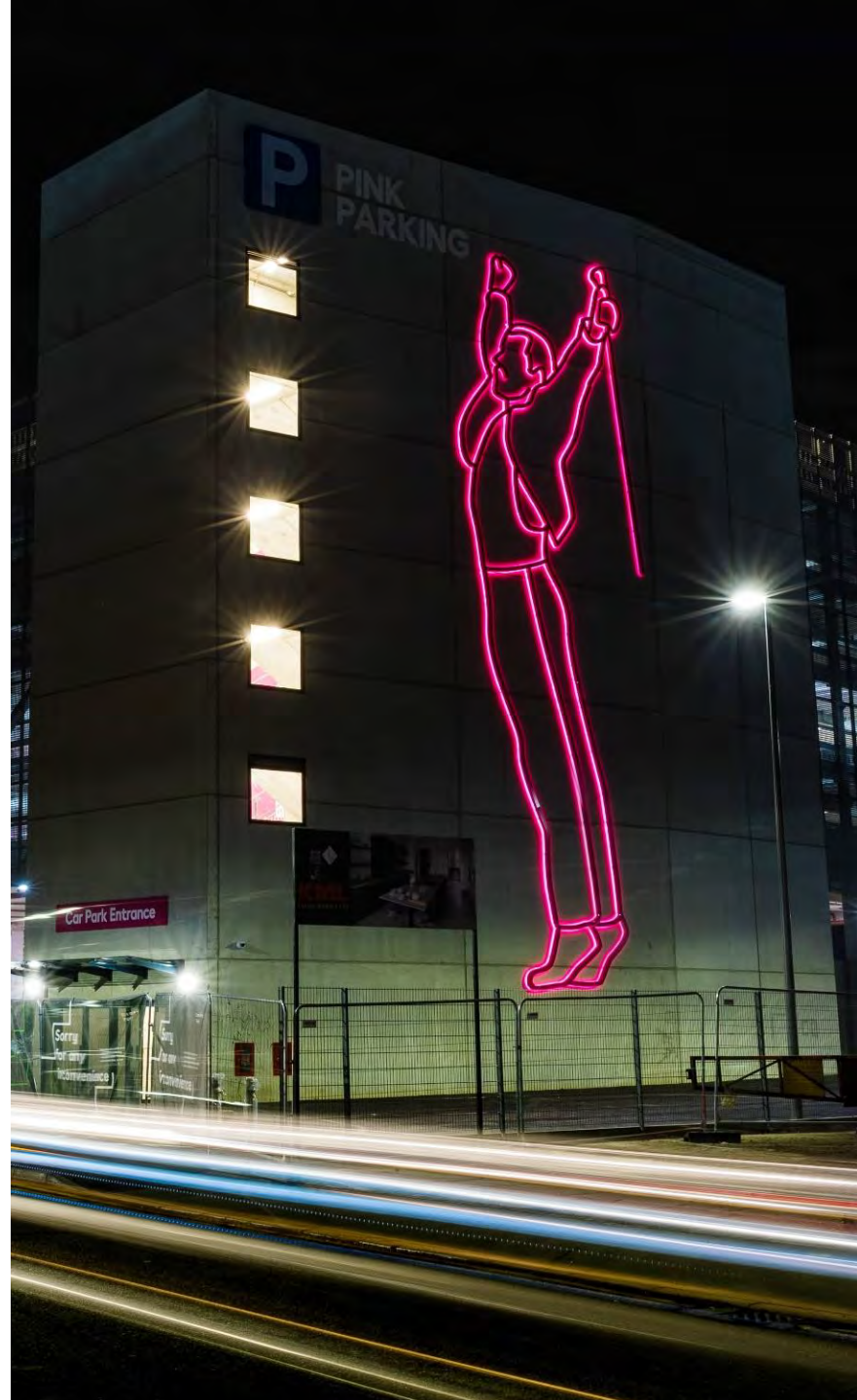
Objective: To provide a warm welcome to all through the adoption of a 'Share with Care' approach and the provision of hard and soft public realm at a variety of scales and settings.

SUSTAINABLE INFRASTRUCTURE

Objective: To invest in infrastructure in a way that not only limits environmental impact, but also seeks to provide additional benefits to people, property and place.

CULTURAL PLACEMAKING

Objective: Elevate cultural ambition through the establishment of strong cultural partnerships and our approach to cultural programming, public art and associated infrastructure.



PLACE

PUBLIC REALM & PLACEMAKING

PUBLIC REALM

Our objective is to provide a warm welcome to all through the adoption of a 'Share with Care' approach and the provision of hard and soft public realm at a variety of scales and settings.

Public realm is increasingly delivered and managed by private entities, subject to private rules and regulations determined by the landowner. The term Publicly Owned Private Spaces (POPS) is seen by many as undesirable, but we believe that when designed and managed in the right way, POPS can be a force for good.

WEMBLEY PARK: TOP OF THE POPS

Quintain is committed to ensuring that the 21 acres of public realm at Wembley Park embody the concept of open and democratic access.

Our investment in the public realm at Wembley Park has been extensive, and 100% of the circa annual £2.7 million bill for the day-to-day management of the space is paid for privately, with the cost levied via our residential, retail and commercial building service charges. Irrespective of ownership, we believe that public spaces are there for everybody, and whilst we do have certain rules in place, these are proportionate to the potential risks to the general public in a high-profile location and are in line with what would be expected in any publicly owned public space of a similar nature.

The experience of the public in the public realm should be seamless and enjoyable with freedom to express many ways of enjoying it, but with sufficient guidance and enforcement to discourage or prevent anti-social behaviour.

We are supportive of freedom of speech and have accommodated protesters when they have been banned from other public spaces; we actively encourage people of all ages to gather and involve local communities in the design of public spaces so that the sense of ownership is shared by all. We are also looking at potential ways to involve local people in the ongoing management of spaces, using a 'friends of' model.

DAY-TO- DAY ESTATE MANAGEMENT

We employ a team of Estate Protection Officers (EPOs), whose role is to ensure that everybody can enjoy the public realm in a safe and secure manner. Our fundamental principal is that everybody is welcome, however we do ask that people respect other site users and there are some rules in place that are enforced by our EPOs, who always explain their reasoning in a respectful manner.

- Skateboards, skates, scooters and bikes: The principle of 'Share with Care' is applied, and when areas are relatively low in other users, all are welcome providing they are not undertaking 'tricks' which could endanger other users or damage street furniture/ surfaces. Those carrying out activities that could pose a danger to others or cause damage are asked to stop and the situation explained as to why they are being asked to do so. Some activities which pose no danger in less populated areas become riskier when spaces are crowded, so discretion is applied, and where possible, alternative locations within Wembley Park are suggested.
- Sunbathing and use of the fountains: Users are asked to consider others and act appropriately, including being aware that other users may be offended by their actions.
- Ponds: All are asked not to enter the ponds due to the risk of drowning, so no swimming / wading
- Filming / taking pictures: Are permitted, as long as there is no bulky equipment which could cause a trip hazard (so handheld only unless specifically authorised).
- Picnics: Are encouraged, but all are asked to use the bins provided
- Body cameras: Our EPOs use body cameras when undertaking any such interactions and individuals are informed they are being recorded both on film and audio for their own protection.

Wembley Park is also an area subject to a Public Spaces Protection Order (PSPO) as determined by the London Borough of Brent; this makes certain activities, such as drinking outside of licensed areas, an offence.

EVENT DAYS

Due to events that attract large crowds to Wembley Park, we have separate rules in place on event days to ensure the safety of all our residents and visitors. On these occasions, some areas are protected from 'mass fan usage' to prevent street drinking, littering and damage to the public realm; only residents are permitted to use these areas.

via specific entry points. This is to prevent circumvention of restrictions through secure areas that could cause problems at transport hubs with otherwise conflicting crowd access.

COMMUNITY POLICING

Under a new Special Police Services Agreement with the Mayor's Office for Policing and Crime (MOPAC), we have invested in additional police resource to be deployed across the neighbourhood as of January 2021, for an initial period of three years.

The new scheme aims to enhance police visibility in the area, deter criminal activity, disorder and anti-social behaviour, and provide an additional level of reassurance to all residents, businesses, workers and visitors.

A dedicated police support team of six constables and one sergeant will provide a visible patrol presence, seven days a week to complement the already effective service provided by our EPOs. By linking up resources, information and intelligence, the new and existing teams will work seamlessly together to further reduce crime, whilst providing and important ambassadorial presence across the neighbourhood and ensuring a safe, secure environment for those who live, work and visit Wembley Park.

The team plan to hold a regular drop-in surgery at Wembley Park as soon as lockdown restrictions are fully lifted, giving people an opportunity to meet and get to know them and raise any concerns.



PLACE

PUBLIC REALM & PLACEMAKING

COLLABORATIVE DESIGN

We work with a wide range of stakeholders to obtain their views and input into the design of our public realm, creating spaces that cater to a wide range of needs.

In recent years, we have gone beyond statutory consultation requirements and have identified innovative ways in which to engage with our stakeholders, specifically targeting groups who have traditionally felt left out of the process or feel that public spaces aren't designed for them.

Our Head of Planning, Brett Harbutt, sits on the New London Architecture Expert Panel for Planning, which focuses on best practice in the planning system to support London's development, including new approaches to community consultation and trust in the development process; accessibility and transparency of data; the role of local and regional plans; and how the planning system can better support London's economic recovery following the COVID-19 pandemic.

When the Mayor's London Borough of Culture 2020 title was awarded to Brent in 2018, the bid stood out because it unashamedly placed young people at its heart, promising an exploration of what culture means to them in the 21st century. The first phase of the public campaign for Brent 2020 called for radical change in the way that public spaces are planned and designed to reflect the needs of young people.

As a Principal Partner of Brent 2020, we strongly supported this objective, and in addition to our support of Brent 2020's Blueprint Collective – a group of over 100 young people aged between 15 and 24 who have helped to drive Brent's year of culture – we have developed a specialist programme with experts in urban design at the London School of Economics (LSE).

Inspired by extensive research and workshops in collaboration with urban design researchers at LSE and the design and development team at Quintain, the Blueprint Collective have developed the 'Seen & Heard Charter' – a manifesto calling for the needs of young people to be at the heart of the design of public spaces in London.

APPRENTICESHIP IN CITY DESIGN

The Apprenticeship in City Design was created as a continuation of the themes explored with the Blueprint Collective and was designed to engage young voices in the planning and design of the built

environment by testing new forms of participation aimed at future city makers. In order to involve a diverse range of participants, Quintain financed six paid opportunities to learn through practice, delivered by the LSE

For the participants, learning components involved practical aspects such as mapping; demystifying the planning system; and the anthropological aspects of city design. More philosophical issues such as why design matters when thinking about the city; the city as site for resistance and contestation; and whether meanwhile uses can be considered as radical, or just reinforce the status quo, were also explored. The Wembley Park site and context were introduced, and design proposals from the students were sought focusing on four public spaces.

Throughout the process, several principles emerged. These included that:

- Designs should achieve a sense of "Brent in Brent": the task is to bring elements that are recognisable and important to local people into a space; a space like Wembley can feel bereft of these. The celebration and valuing of diverse local histories is key to this.
- Highly valued places for young adults are places to do nothing and places to "be without an excuse"... An aspect of this is a resistance to things that are over-designed, over-programmed.
- Strong association of green space with escapism, downtime and 'breaks' for young adults.
- A full spectrum of social interaction, realised through design, is highly valued by the participants.
- Safety is an important aspect for young adults, yet it means different things to different people. It can mean the difference between a well used, inviting space and a space that is best avoided. Acknowledging and incorporating the differences in what safety means to different people is essential.
- Respect and inclusivity of different demographics are key aspects for creating public spaces.

In addition to the benefits to the apprentices, the programme helped researchers at LSE in recognising the value of tacit knowledge, compelling them 'to do' research differently; and at Quintain, it has helped to demonstrate constructive ways in which more diverse voices and opinions can and should inform our design processes. The dialogue with the apprentices will not only inform the brief for these spaces, but in some areas will result in the adoption of specific design solutions and their ultimate construction.



"It is right that young people have a say in the plans and decisions about where they live, and I'm delighted that the London Borough of Culture has given a voice to Brent's young people. This is an excellent example of how communities and authorities can work together to shape their local area, and I'm sure the determination and creativity of the Blueprint Collective will lead to improvements that will help Brent now and in the future."

JUSTINE SIMONS OBE

LONDON'S DEPUTY MAYOR FOR CULTURE & THE CREATIVE INDUSTRIES

"As a social science university, LSE is aware of the deep connections between urban space and social inclusion. The planning process in London leaves out the generation of urban residents who most need public space to connect and participate in society. The ideas and recommendations generated by the Blueprint Collective make it clear they want to be 'seen and heard'. They bring fresh thinking that is helping transform real places in Wembley Park in Brent and influence the way planners and policymakers make space for people in the city."

PROFESSOR RICKY BURDETT

DIRECTOR OF LSE CITIES & ADVISOR TO THE QUINTAIN BOARD

CASE STUDY

Student Reflections

"I have had an amazing experience and there is no doubt this is something that should be continued. It exceeded my expectations and that is also thanks to your dedication and support! I really hope we have to opportunity to work together in the future and if there is a possibility after the pandemic it would be so nice for us all to meet. Thank you again for providing this apprenticeship and everything I have learnt from it."

"Everyone is entitled to have a say on public space, whether you're into politics, health or science. It's a shared space and therefore is important for people to take part in the conversation... I see public space as a way to reflect the community and the people who live there. We shape where we live and our circumstances can change what a public space is."

"My perception of public space has changed definitely; I now see the potential public space has as opposed to before. Moreover when outside I can start relating my lecture findings to real life which (is) always fantastic."



PLACE

PUBLIC REALM & PLACEMAKING

SUSTAINABLE INFRASTRUCTURE

Our objective is to invest in infrastructure in a way that not only limits environmental impact, but also seeks to provide additional benefits to people, property and place.

Whilst they may not be visible above ground, the pipes, wires and other systems that function to ensure that things above ground run smoothly are given as much thought as the more visible aspects of our development. From our inception, Quintain has been a strong believer in investing in infrastructure - often ahead of when our competitors would consider it commercially viable to do so - in order to provide long-term benefits and improve the quality of our public realm.

ENVAC

In 2007, Wembley Park was the first UK installation of a vacuum waste collection system for the collection of waste and recycling at scale. Over a decade on, we are reaping the benefits and are expanding the collection facility.

One of the many challenges on a crowded development site is the need to regularly collect waste in large volumes, particularly from our residents; on completion, Wembley Park will accommodate 8,500 new homes and an anticipated 20,000 people making Wembley Park their home.

REDUCED VEHICLE MOVEMENTS

In London, in 2018 (the latest available dataset), each person generated an average of 337 kg of waste per annum. Whilst this figure has been decreasing year-on-year (and will hopefully continue to do so), we could potentially have up to 130 tonnes of waste being generated by our residents each week.

A typical waste grab lorry holds approximately 17 tonnes of waste, so we would be looking at eight bin lorries, almost full to capacity, doing

a weekly run around the development just to collect residential waste. Add to that the waste generated by our retail and commercial tenants, and we have a lot of big, noisy vehicles clogging up the roads across the estate, polluting the air and potentially causing a hazard to pedestrians and cyclists on the internal road network.

Envac, through a network of over 4,000 metres of underground pipes, does away with the need for bulky bins, bin stores and bin lorries within the site. Waste and recycling (and in some cases food) are disposed of in the normal way through one of the portals that looks like an ordinary bin. On a set schedule, each waste stream is separately sucked through the pipes from each location, into the collection station located on the periphery of the site, where it is stored in 25m³ containers ready for collection. A single lorry movement can therefore replace around 23 standard 1,100 litre waste bins and associated bin movements, thus reducing loading and wait times, local congestion and ultimately vehicle emissions and harmful particulate emissions to air.

Once full, our waste partner Veolia discreetly pulls into the collection station and the container is loaded onto the vehicle ready for transport to the Material Recovery Facility less than five miles away in nearby Alperton. From here, the waste is sorted, with materials that can't be recycled going on to Veolia's South East London Combined Heat & Power plant in Lewisham to generate energy from waste.

The system has the capacity to handle up to 6,000 tonnes of waste per year and currently 33% of Wembley Park residential, retail and commercial assets by area are directly connected to Envac with their own dedicated portals. A further 22% of assets by area have their waste collected by the estate cleaning teams, which is then deposited into the portals located in our service yard; these teams also collect waste from the public realm, also for removal via Envac.

Some locations are not currently viable for connection due to their distance from the collection centre and their phasing; where this is the case, provision for future connection to the system has been made.

SPACE SAVINGS

The system has also saved a significant amount of ground level space; Envac can save the space of 1,116 traditional wheelie bins, the equivalent of 237 car park spaces, or 184 shipping containers. This has allowed for significantly more active spaces for amenities in our Quintain Living residential buildings and shared social uses for

residents. From a commercial perspective, reduced bin storage requirements as a result of installing the system in our Landsby building resulted in an increase in retail floor space by approximately 2,000 sqft.

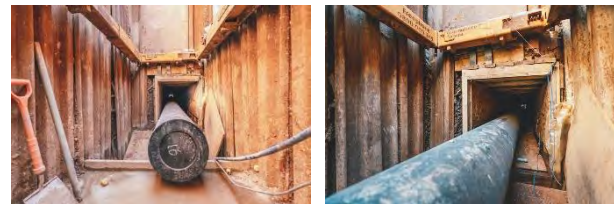
RECYCLING RATES

Whilst the system brings significant benefits, we also face some challenges. When collecting waste in such large volumes, a small quantity of contamination from one source can contaminate an entire load. This is exacerbated by the fact that we are unable to quantify the waste that arrives into the station by source.

As with any large-scale infrastructure, the efficiencies of scale can also cause inefficiencies at scale when there are problems with the system. Since 2019, we have been experiencing issues with groundwater ingress across certain parts of the network.

This has had knock-on impacts and has deteriorated other system components that now also need replacing. The water ingress has saturated the waste going into the system from certain locations, increasing its weight and contaminating all of our dry recycling and organic collections. In turn, this has significantly reduced the recycling rates we are achieving.

Repairs are currently underway, and once complete, we have several plans in place to improve recycling rates. We will be carrying out a detailed camera survey of all internal pipework to ensure that there are no further, or hidden issues and that the system is in top condition. We are also working with Veolia to improve engagement amongst users, and we will be carrying out waste audits to determine individual building waste quantities and recycling rates by diverting waste from the main waste containers in the collection centre on a building by building basis, weighing it over a set period, before returning it to the main container for collection. This will allow us to more accurately target our engagement to the buildings with the poorest performance levels.

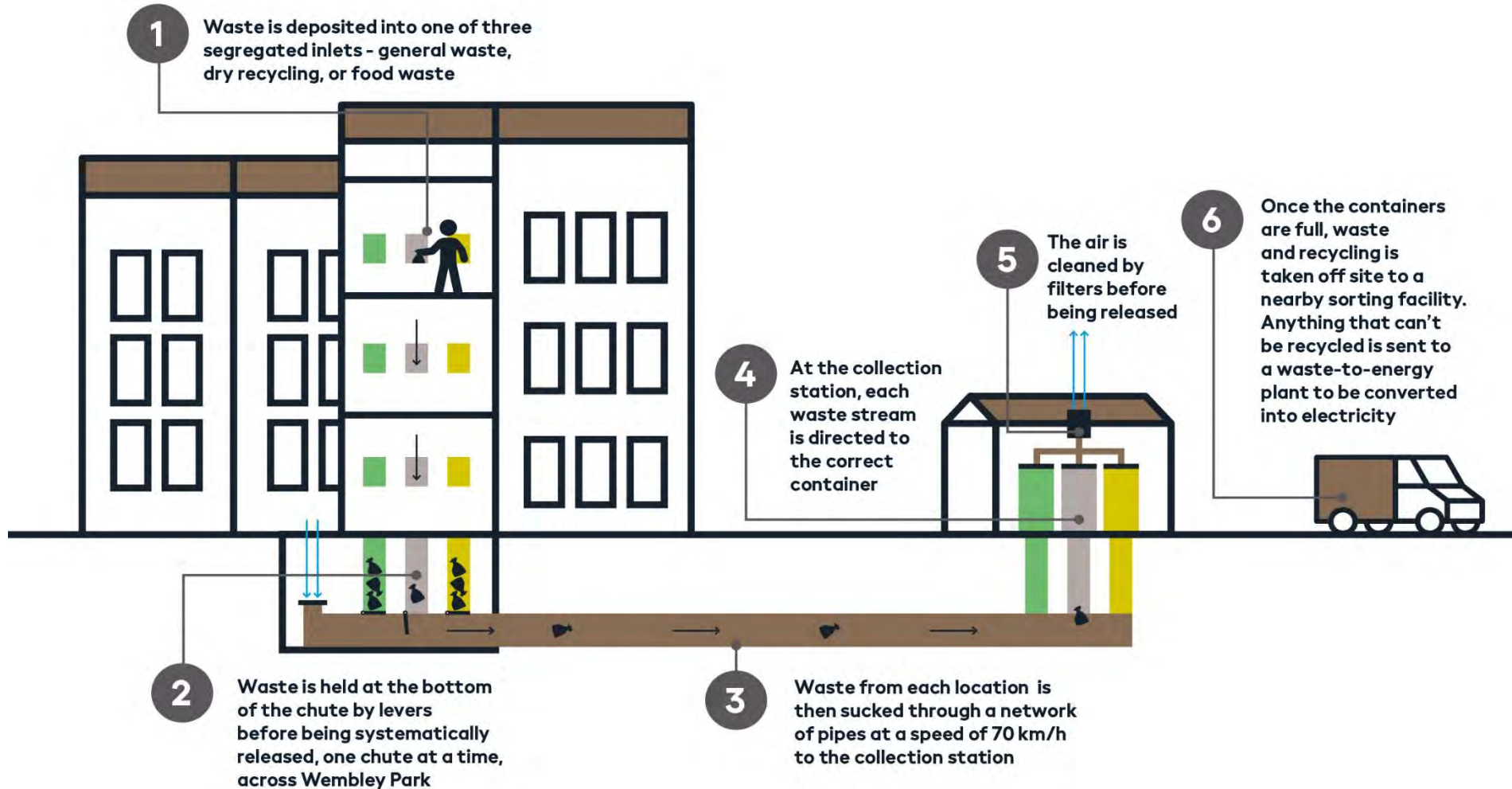


PLACE

PUBLIC REALM & PLACEMAKING



ENVAC AT WEMBLEY PARK



PLACE

PUBLIC REALM & PLACEMAKING

DISTRICT HEAT NETWORKS (DHN)

We have installed a series of heat networks across Wembley Park, with the future ability to connect to wider low-carbon networks as and when they materialise.

Decarbonising electricity and heat are essential to meeting Government and international targets for curbing GHG emissions by 2050. Whilst the decarbonisation of electricity has been enormously successful over the past ten years in the UK, the decarbonisation of heat is much more challenging. This is due in part to the fact that renewable electricity generation is largely decentralised, with off-site generators feeding into the national grid supply to meet demand. Improvements in battery storage technology mean that supply can be better matched to demand, and periods of the day or year where more carbon-intensive generation, such as by coal, would have been needed to supplement renewable supplies have reduced significantly. The decarbonisation of heat is a much bigger challenge, because it can't be stored without incurring significant losses, and therefore cannot be efficiently generated at scale without certainty over demand, or over large distances without significant heat losses. Individual electric heating in homes is now a viable carbon-saving option, but whilst our heat demands are low due to thermally efficient building fabric design, the electricity grid doesn't have the capacity to allow the generation of heat in all our buildings from electricity. Building-level heating solutions, particularly from low-carbon sources, often involve complex systems that can require specialist skills to manage, making them less viable from an operational perspective without increasing the cost of heat to the end user. Heat networks have been actively promoted by national and local government in recent years as a way of delivering low-carbon heat at scale. The main advantage of DHNs is that they meet a strategic need for high density developments such as Wembley Park, as they can reduce peak infrastructure connections and provide long term decarbonisation routes for many homes with fewer technology changes.

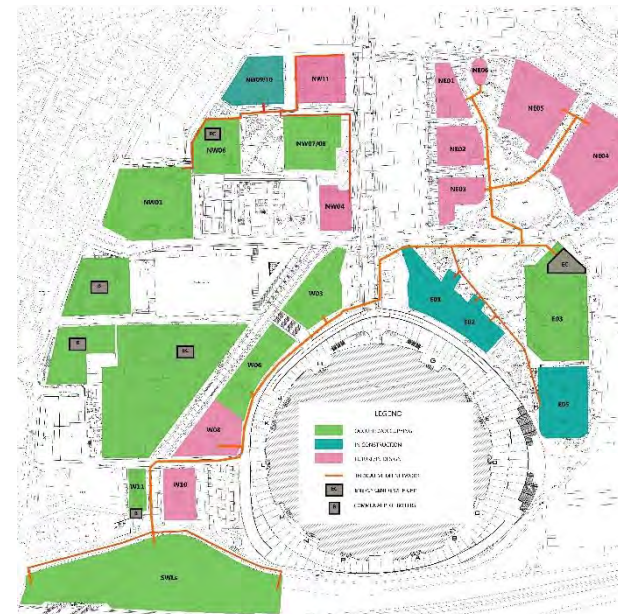
HEAT NETWORKS AT WEMBLEY PARK

In order to meet our planning obligations and deliver an improvement over Building Regulations Part L, we have delivered three heat networks to date on site at Wembley Park: our Western Lands (WLs) Energy Centre that we self-manage; the North-West Lands

(NWLs) Energy Centre managed via an Energy Services Company (ESCo) agreement with EOn; and our Eastern Lands (ELs) Energy Centre, managed via an ESCo agreement with Metropolitan. Our obligations have resulted in the installation of gas Combined Heat and Power (CHP) engines with peak gas boilers, however our WLs energy centre and the NWLs energy centre both currently operate using gas boilers only as due to a number of factors, this is the most carbon efficient mode of operation. CHP generates both heat and electricity, which can either be consumed on site or exported. The efficiency of generation varies, but is typically comparable with a gas boiler when heat and electricity generation are combined. The ability to deliver carbon savings is then dependent on the input fuel and carbon intensity of the electricity being displaced through generation. Historically the electricity generated has displaced electricity produced by coal. However, as the grid decarbonises, CHP provides fewer savings against a low-carbon grid. As the emission factors for gas and electricity converge, as they are currently doing, there is no carbon saving when using gas as the input fuel; as the emissions of grid electricity drop below those of gas, as they are expected to do in the next few years, gas CHP will have higher emissions than a gas boiler and is no longer a low-carbon solution.

DECARBONISING OUR NETWORKS

For the reasons above, and in the context of developing our Pathway to Zero Carbon, we are now working with our energy partners and looking in detail at medium- and long-term decarbonisation strategies for our DHNs. Our priority is the ELs energy centre, as we are still connecting new assets to this. In the long-term, there is a plan to develop an Energy from Waste facility and DHN linked to the SENECA waste recovery centre less than one mile away. Our networks have been designed to allow for future connection should this materialise, but such a facility would take several years to plan and develop, so in the medium-term we are looking at other potential solutions. These include the procurement of biogas to indirectly replace the gas injected in our CHP and boilers, thus reducing their overall emissions; the extension of the current ELs energy centre to accommodate air-source heat pumps (ASHPs), which are highly efficient, delivering more energy than they consume; and the development of a satellite plant room accommodating the required compressors for ASHPs in one of the proposed NELs buildings.



SUSTAINABLE URBAN DRAINAGE

Increasingly we are taking inspiration from nature, so our new Sustainable Urban Drainage Systems (SUDS) are designed to improve water quality and enhance biodiversity whilst improving the quality of the public realm.

We are creating a new generation of SUDS at Wembley Park, moving away from physical concrete tanks for water storage and attenuation, to instead using above-ground multi-purpose green and blue landscaping in conjunction with reduced underground storage. This allows us to use the spaces we are providing for everyday amenity and biodiversity value to also be used to manage rainwater and stormwater.

The flooding and water filtration services provided using these methods are discussed further in the Natural Capital section of this report.



PLACE

PUBLIC REALM & PLACEMAKING

CULTURAL PLACEMAKING

Our objective is to elevate cultural ambition through the establishment of strong cultural partnerships and our approach to cultural programming, public art and cultural infrastructure. Our attention is focused on two key areas: elevating cultural ambition through our approach to public art, messaging and cultural infrastructure design; and creating proactive strategic delivery partnerships that allow us to be the ideal receiver of culture, through our partnerships and the provision of cultural platforms and production spaces for creative industries.

WEMBLEY PARK CULTURAL PLACEMAKING STRATEGY

The Wembley Park Cultural Placemaking Strategy established five Placemaking Principles that define the 'Cultural DNA' of Wembley Park.

The Strategy has already resulted in some significant successes, which include: the opening of London's largest Boxpark; 28 subsidised artist studios; a permanent community hub for local people with free classes and opportunities to get together; the opening of a new market for local independent makers; and a dedicated programme of completely free year-round community events and public art.

Recent initiatives include Wembley Park's £200,000 bid support for Brent Borough of Culture 2020, and the hosting of its opening ceremony; the opening of Troubadour Theatre – the first theatre to open in Brent in 40 years; the opening of the Getty Images Gallery; and at the end of 2019, the announcement of the the Royal Philharmonic Orchestra's intention to move its headquarters to Wembley Park, providing music programmes for local young people. Across five distinct cultural placemaking pillars, the strategy sets out a vision that offers a sense of place and community in a rapidly changing environment, and a cultural identity that fosters social cohesion, breaks down barriers between new and established communities,

counters social isolation and offers employability and training opportunities for local people.

OUR FIVE CULTURAL PLACEMAKING PILLARS

New London Living

We want to shape cultural experiences to match the mobility of modern living, offering variety in terms of timing, location, formality, involvement and scale, allowing people to discover Wembley's identity and heritage through embedded installations and other everyday touch points; and redefining urban living through digital platforms that enable co-creation and social sharing.

Communities

To celebrate the diverse creativity and cultures that exist within and around Wembley Park, we want to open them up to a wider audience through the creation of forums that give an active voice to local communities in defining the Wembley Park narrative, unlocking opportunities to make Wembley and Brent heritage tangible.

Sport & Play

Wembley's rich sporting history can inspire a new generation of Wembley greats, so we want to embed the stories of sporting icons and their achievements within art installations and wayfinding. We adopt an inclusive approach to health and wellbeing beyond formal sports, injecting an element of play into all our programming beyond formal sports.

Education, Training & Employability

Our programming unlocks opportunities to engage local young people in archiving and interpreting the heritage of Wembley Park and we prioritise an integrated and layered approach to lifelong learning through cultural participation, co-creation, formal and informal training through the creation of platforms to develop leadership and support enterprise on site.

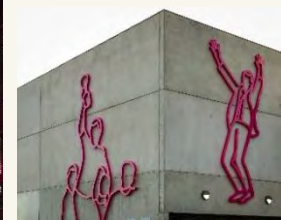
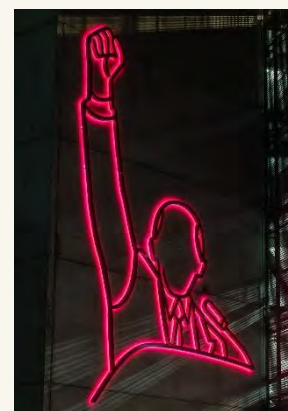
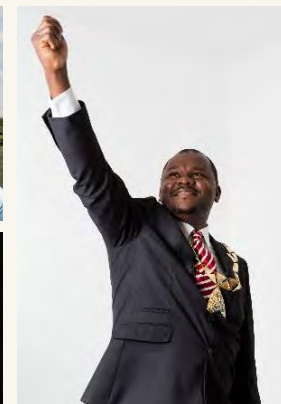
Performance

By creating moments of 'everyday theatre', we are able to elevate emerging local talent and animate our spaces. By using Wembley's iconic performances and Brent's diverse culture to co-curate programming and events, we deliver performance that reflects Wembley's identity and local heritage.

CASE STUDY

Pink Parking

Created by HemmingwayDesign, this highly visual, art and graphic led treatment for Wembley Park's new Pink Parking conveys some of the most iconic historic, sporting and entertainment moments witnessed through the history of Wembley through vibrant pink line art which was posed for by modern-day iconic Wembley residents. The award-winning installation is an example of how we embed the stories of sporting icons, iconic performances and local heritage in our public realm in a way that makes it tangible and involves local people.



Above, former Mayor of Brent, Cllr Ernest Ezeajughi poses as Nelson Mandela during his 45-minute speech at the Nelson Mandela: An International Tribute for a Free South Africa concert held just two months after his release from prison in 1990; and Ash Patel, our Community Engagement Manager poses as Sir Bobby Moore celebrating England's defeat over West Germany in the 1966 World Cup.



PLACE

PUBLIC REALM & PLACEMAKING

WEMBLEY PARK ARTS

2021 will see the formal establishment of Wembley Park Arts, an independent charity to support artists, foster dynamic partnerships and provide access to a globally iconic destination.

In 2019, we appointed Josh McNorton as our Cultural Director to lead the establishment of Wembley Park Arts, a new cultural programme for Wembley Park that will ensure leadership across commissioning, co-production, cultural infrastructure support, and the development of local, national and international partnerships. The programme will be core funded by Quintain, with additional funding raised through partnership, sponsorship and various other platforms.

As well as its own curated program, Wembley Park Arts will work with the area's iconic venues and partners, including The SSE Arena, Wembley Park, as well as newer additions such as the Troubadour Wembley Park Theatre, to present a world-leading offer.

The charity's ambition is to unite contemporary artists with unique locations, cutting-edge event infrastructure, diverse communities and London's most exciting runway to create memorable cultural experiences. Under the umbrella of this new organisation, there are an array of projects being planned.

Wembley Park Arts will build on a foundation of existing investment in the arts, that in 2020 delivered a post-lockdown programme making full use of the neighbourhood's design features, including the wide tree-lined boulevards, public squares and green spaces; and also focused on providing vital support to local artists and creatives whose lives have been impacted by disruptions to live performances and exhibitions. The Wembley Park Art Trail was launched in September to showcase art currently in place across the site, with some specially commissioned pieces adding to our existing collection of installation art within the public realm.

Collaborating with local artists is essential to delivering our vision of creating social value through public art: recent examples include local artist Louisa Smurtwaine, who produced "Legends Calling", a new Brent-inspired artwork for three unique repurposed London phone boxes in Arena Square, and Sian Bliss, who was commissioned to deliver produce "We All Share the Same Sky", a new digital art project for Wembley Park's Christmas Lights display.

WEMBLEY PARK OUTDOOR GALLERY

In 2021, we will be launching our new outdoor gallery, a permanent installation that will feature 16 light boxes on Olympic Way designed by Toy and Robin and will feature a new exhibition every three months.

Our debut exhibition – *United in Light* – will feature 19 photographs from twelve UK-based photographers, ranging from recent graduates to award-winning artists. At a time when artists are under pressure and face-to-face connections are constrained, their photographs will remind visitors of the power of people pulling together, showcasing uplifting and vibrant scenes of togetherness, tenderness and intimacy.

EMPLOYEE SPOTLIGHT

Josh McNorton, Cultural Director

Since joining Quintain in October 2019, Josh has been busy laying the groundwork for Wembley Park Arts, as well as delivering some key projects, procuring new artworks, and engaging with partners on our involvement with London Borough of Culture.

His appointment was timed to support the Principal Partner role of Wembley Park for Brent's year as London Borough of Culture in 2020. Josh moved to the UK from Canada in 2012 to produce a large-scale, outdoor entertainment programme for the London Olympic and Paralympic Games and was appointed for his varied background in producing, curation and programming that includes: Head of Arts & Culture Programmes at multi-disciplinary East London arts centre Rich Mix; Co-founder of the world's first sensory arts and research festival, Open Senses (2017); and Producer at Nesta's flagship festival for the future, FutureFest (2014-2016).

“Wembley Park's growing collection of public art aims to transform bridges, steps, office buildings, public squares and everything in-between into unique canvases. We're delighted to be able to support local artists in this challenging time and look forward to welcoming visitors as they explore our new art commissions around Wembley Park.”

JOSH MCNORTON
CULTURAL DIRECTOR



CASE STUDY

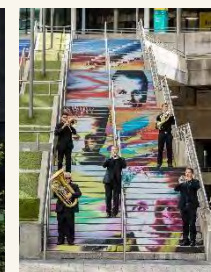
Royal London Philharmonic Orchestra

In December 2019, Wembley Park announced a new cultural anchor tenant: The Royal Philharmonic Orchestra (RPO). The organisation will soon move its headquarters to Wembley Park to continue its decade-long history of providing free and accessible quality musical experiences for the local community, particularly young people. The RPO's mission to be a truly inclusive and contemporary international orchestra for the modern age is brilliantly aligned with Wembley Park's cultural strategy and our shared vision to establish a creative hub bringing together education, community outreach, performance, digital projects and administration in a single location.

As we have transformed the area into a thriving neighbourhood, we already present many hundreds of hours of free entertainment and culture throughout the year. Since the arrival of the pandemic and the closure of venues large and small across the UK, this has continued, including presenting pop-up appearances from members of the RPO. In September 2020, nearly 40 musicians from the RPO surprised Wembley Park's community with their first live appearance since lockdown and the first performance collaboration since we proudly announced that the RPO will move its headquarters to the neighbourhood.

Ensembles of string, brass, wind and percussion players performed from a balcony of one of our latest Build to Rent developments, Beton, in London Designer Outlet, and on the Spanish Steps.

The positive response these performances have had from shoppers, residents and visitors - in the heart of our young, diverse borough - has been immediate and heartfelt. Wembley Park is all about extraordinary experiences, everyday - and that's what the RPO performances have delivered at volume.



PLACE

PUBLIC REALM & PLACEMAKING



WEMBLEY PARK ART TRAIL

In September 2020, we expanded our free art programme for visitors and residents with our first art trail. Working with leading artists and community contributors, Wembley Park is a vast free public gallery of art and culture and our accessible art trail consists of 15 pieces by different artists across different mediums, three of which were specially commissioned for the opening of the trail.



WE ALL SHARE THE SAME SKY

Location: Bobby Moore Bridge
Sian Bliss' new work seeks to remind visitors that we are all united under the same sky, a theme throughout Wembley Park's 2020 Christmas lights.



BOBBY MOORE BRIDGE TILE MURAL

Location: Bobby Moore Bridge
Designed in 1993 by the Architectural Art Service and dedicated to the man himself, the mural welcomes millions of annual visitors to Wembley Park at one of its key gateways.



MR DOODLE

Location: Market Square
A triumph of idiosyncratic characters, inspired by Wembley moments, hand-drawn in the much-loved 'graffiti spaghetti' style of artist Mr Doodle.



FIRE AND WATER

Location: Elvin Gardens
A new street art commission designed by Japanese graffiti artist Suiko inspired by two words that he feels are inspired by the development of the neighbourhood: "水" (aqua) and "光" in Chinese/ Japanese calligraphy.



TILIA TREE TOTEMS

Location: Elvin Gardens
The result of a series of participative wood carving workshops held by acclaimed wood carving artist Stephen Stockbridge, and produced using upcycled trunks from trees, removed during the regeneration of Olympic Way.



THESE DAYS

Location: Wembley Park Library
Commissioned by Brent 2020, London Borough of Culture, this piece presents the J.G Ballard quote "THESE DAYS EVEN REALITY HAS TO LOOK ARTIFICIAL" from Kingdom Come using advertising slogans and stock images – a poetic intervention by Dan Mitchell in a space at the heart of civic life, serving as a reminder of our present time.



LEGENDS CALLING

Location: Arena Square
Renowned artist and lighting designer celebrates Brent heroes George Michael, Twigg, Arthur Wint, Amy Johnson and Jayabeam Desai as floating figures of blue light within three traditional phone boxes representing the continuing reverberations of their achievements.



SQUARE OF FAME

Location: Arena Square
London's answer to the Hollywood Walk of Fame, featuring a series of bronze plaques imprinted with the handprints of notable performers at the venue including Kylie Minogue, Sir Cliff Richard, Status Quo, Dolly Parton, Bryan Adams, Lionel Richie, Westlife and most recently, Dame Shirley Bassey.



DRAWN TOGETHER

Location: Wembley Park Boulevard/ Spanish Steps
In a year of people being asked to stay apart, the design features hundreds of unique, self-illustrated faces "drawn together". People from across the UK were invited by artist Tash Randolph to submit self-portraits which are placed side by side and shaded to form a rainbow, reflecting the public working together to tackle the pandemic.



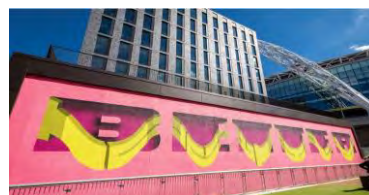
BETON GINNEL MURAL

Location: Beton Building
Geordie for alleyway, the ginnel is an interactive space for residents and passers by. Including the name of the building itself and exposing the 'beton' (concrete in French) the team of artists at Muzeo bring together reality and representation.



CARTOGRAPHER'S FUGUE

Location: The Hive
This canvas by Vivien Zhang references the 1923 Goode map projection, with its organic lines presented in contrast to the crisp geometry of the surrounding space., playing on the double meaning of the word 'fugue'.



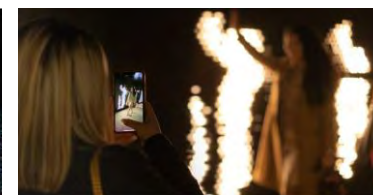
BETTER TOGETHER

Location: Opposite London Designer Outlet
Inspired by recent social and political events, this piece by Brent-born graffiti artist and designer Pref was created for the opening highlight of the inaugural London Mural Festival to highlight the importance of community and unity.



ROYAL WAVE

Location: Royal Route Underpass
A site-specific artwork by Jason Bruges inspired by the journeys in and out of the stadium. As crowds approach the underpass, they are greeted by portraits of local people waving in response to their movement.



SHADOW WALL

Location: Royal Route Underpass
Another interactive piece by Jason Bruges, using the shadows and silhouettes of the passing crowds to generate the resultant work that references the ebb and flow of the crowds and the arrival of the Royal family in procession.



PLACE

PUBLIC REALM & PLACEMAKING



BRENT BOROUGH OF CULTURES

In 2019, Quintain formally became the Principal Partner of Brent 2020, the charity set up to present Brent London Borough of Culture 2020 (LBOC2020).

The London Borough of Culture is a relatively new initiative by the Mayor of London designed to put culture at the heart of communities, celebrating the character and diversity of London and making culture accessible to everyone.

Due to COVID-19 and restrictions on mass gatherings, significant changes to the Brent 2020 program had to be made, but the programme still managed to pack in plenty of one-off special events, exhibitions and performances that could be enjoyed in person, alongside an enhanced online offering presenting oral histories and online archives, digital artworks and podcasts about life in lockdown. Through our funding of Brent's year as London Borough of Culture, we were able to deliver strong social value for the people of Wembley Park and the wider Brent community.

Our support of this landmark cultural initiative, both is sponsorship and via in-kind contribution helped to improved social cohesion by encouraging connections between existing and new communities through art.

RISE: THE OPENING EVENT

Brent's year as London Borough of Culture launched on Saturday 18 January 2020 with RISE, a spectacular outdoor celebration in Wembley Park. Spanning the length of Olympic Way, the event featured a cast of hundreds of local people of all ages, participating in a giant musical dance performance telling the story of Brent. RISE performers were drawn by event curator Southpaw Dance Company from local schools, youth groups and other Brent-based community organisations, alongside performances from Brent based professional dancer and choreographer Andrea Queens.

Wembley Park's popular community hub, The Yellow, was made available free-of-charge for rehearsal, while Quintain's Health & Safety, Facilities and Events teams were instrumental in providing pro-bono advice and assistance to the organisers, thus making the event safe and accessible for everyone.

RISE told the story of how the Borough of Brent travelled from the margins to impact culture in Britain, through its music, activism, and rebellious spirit.

Large-scale projections illuminated Wembley Park's Olympic Way, welcoming over 10,000 local people to celebrate the start of Brent's year as London Borough of Culture.

MAYOR'S RECEPTION

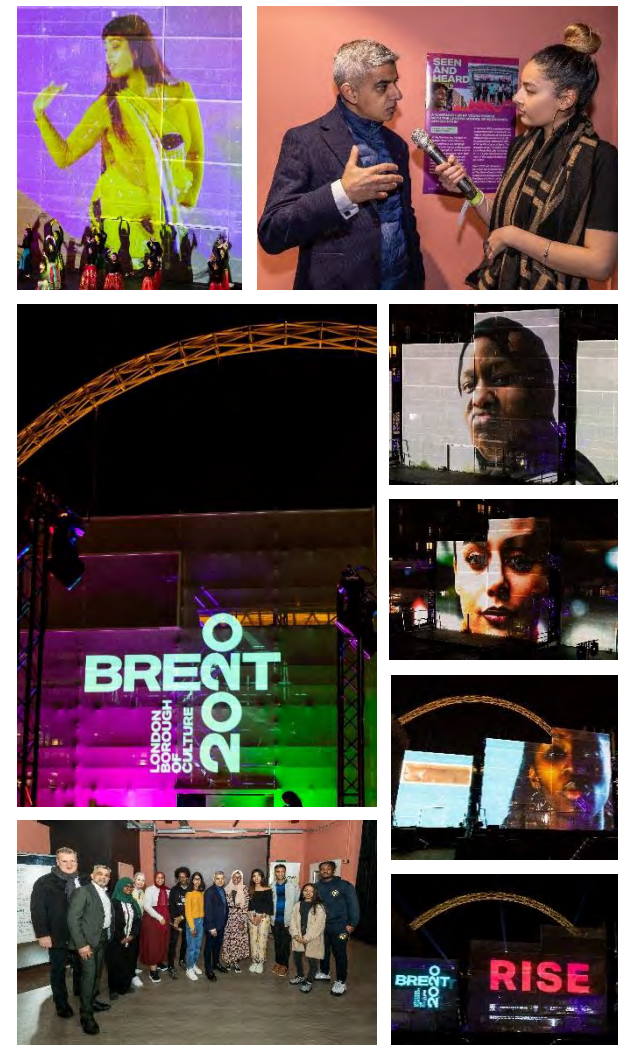
On the evening of RISE, a reception was hosted at Wembley Park's community centre, The Yellow, where Mayor of London, Sadiq Khan and Deputy Mayor for Culture, Justine Simons OBE had the opportunity to meet local children and teenagers involved in LBOC's Seen & Heard and RISE projects. During the reception, the Mayor engaged with local youth in a Q&A session focused on the importance of culture and creative industries in cities and neighbourhoods. Sadiq Khan was then taken on a tour of Wembley Park by Quintain's CEO, James Saunders culminating at Brent Civic Centre, where the mayoral team had an opportunity to meet all the performers taking part in RISE.

BLUEPRINT COLLECTIVE

The voices of young people were at the heart of Brent's year as London Borough of Culture thanks to the Blueprint Collective - an innovative two-year cultural leadership programme which saw a group of over 70 young people aged between 16 and 30 from Brent take a leading role in shaping and directing the cultural programme alongside members of the Brent 2020 team.

Members of the Brent Blueprint Collective received mentoring and career advice, attended skills workshops and visited cultural institutions across London as part of the scheme which aimed to nurture the creativity of young people in the borough and develop a blueprint for how arts programmes can be led by young people in the future.

The Collective also received funding to design and produce their own day festival as part of the Borough of Culture programme, but sadly due to COVID-19 this was unable to go ahead.





PLACE

TRANSPORT & CONNECTIVITY

OUR OBJECTIVES

Transport and connectivity in new development goes beyond proximity to local transport networks and the availability of safe routes; for us, it's about providing an attractive public realm that actively encourages walking and cycling; about ensuring that transport options are linked and that if things go wrong on the daily commute, an alternative option is nearby; and about ensuring that logistics are managed so that our developments are not overwhelmed by people moving in and out, bin lorries picking up waste from dozens of different buildings, and delivery vehicles dropping off construction, commercial and residential deliveries on a daily basis.

ACTIVE TRAVEL

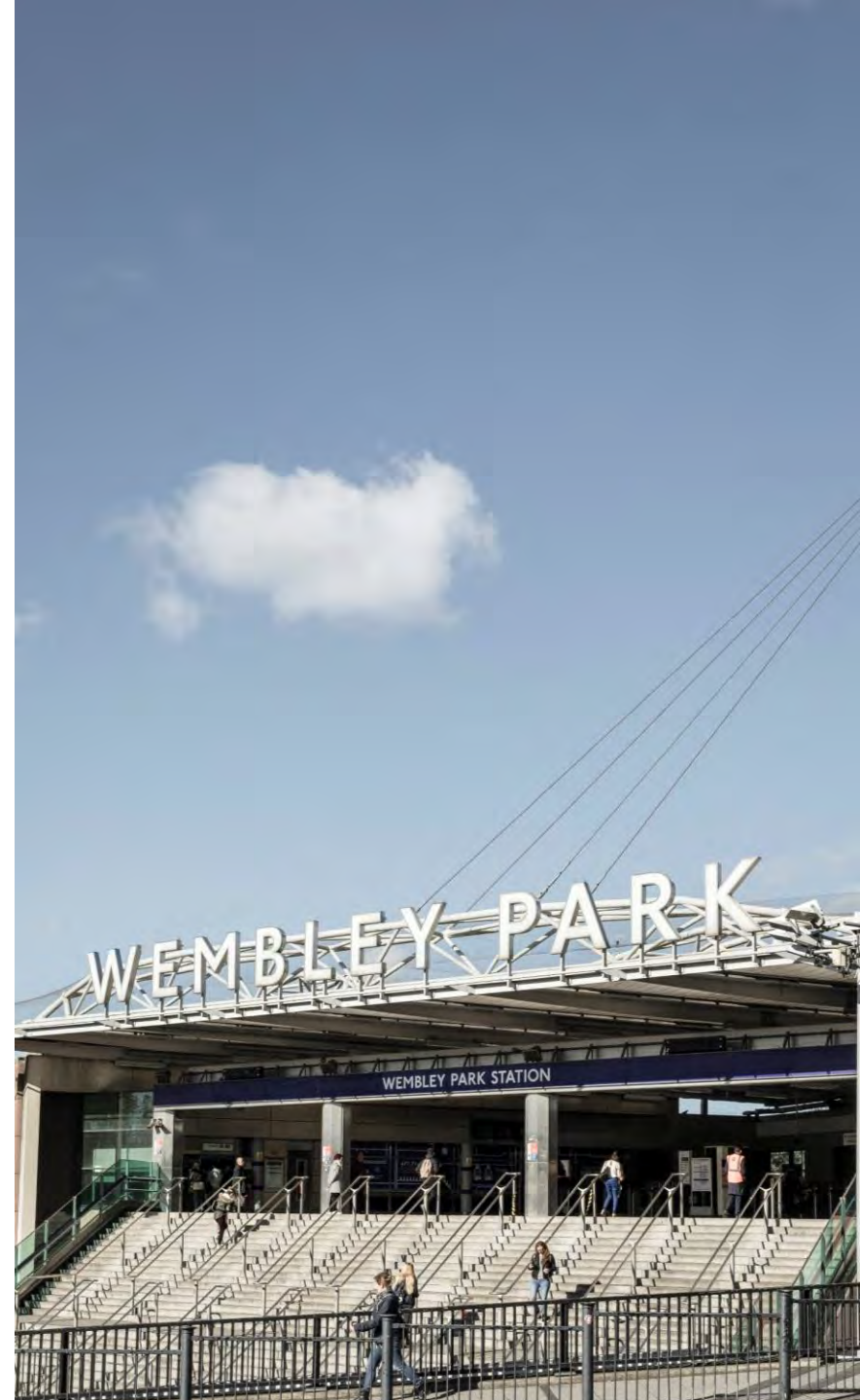
Objective: To encourage active and healthy lifestyles through the provision of infrastructure and the promotion of active travel opportunities available for residents, employees and visitors.

PUBLIC & PRIVATE TRANSPORT

Objectives: To encourage the use of local public transport services and support modal interchange; enhance the quality and availability of travel information and advice for site users; and to support sustainable and shared car-based mobility, minimising the number of single occupancy car driver trips made by residents, employees and visitors.

LOGISTICS

Objective: To minimize the impacts of goods delivery and servicing trips on the local road network, easing congestion, reducing vehicle GHG emissions and improving local air quality.



ACTIVE TRAVEL

Our objective is to encourage active and healthy lifestyles through the provision of infrastructure and the promotion of active travel opportunities available for residents, employees and visitors. At Wembley Park, we have the advantage of an 85-acre site with just three public highways running through it. This presents benefits in terms of the availability of open space and opportunities for active travel, but also some significant logistical challenges. From the outset, we have been aware of the need to be innovative in our approach to managing the movement of goods and people; our Strategic Travel Plan describes in detail our strategy for how this will be implemented, and we have a dedicated Transport Coordinator who is responsible for managing its implementation.



15-MINUTE NEIGHBOURHOODS

From the outset, we have considered and prioritised the needs of pedestrians through the creation of a public realm that is attractive, informative and safe, with a wide selection of everyday amenities that make the ‘15-minute neighbourhood’ a reality.

Aside from the obvious logistical benefits of reduced vehicles on our limited road space, active travel has significant health benefits, and for many people is the easiest and most accessible form of physical activity that can be easily and conveniently built into everyday life. The 15-minute neighbourhood concept is a key part of our vision for developing places that are easy to get around on foot or by bike, and where basic daily needs can be met by local businesses within the vicinity. With convenient access to essential services and amenities on their doorstep, a resident or worker at Wembley Park is increasingly able to meet their daily needs without jumping in their car or heading into another local centre.

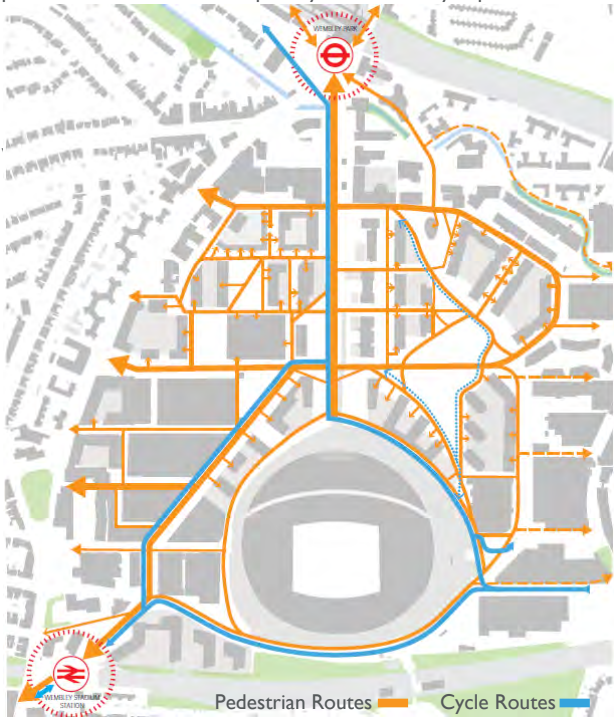
PROMOTING HEALTHY & ACTIVE TRAVEL

We provide a wide range of information on how to access Wembley Park on foot and by bicycle, and this is disseminated through various means to ensure residents, employees and visitors are aware of their travel options. New residents and tenants are provided with travel information packs, and we offer a free personalised travel planning service, taking into account individuals lifestyle and travel needs. The Quintain Living Portal further supports our residents in making active travel choices by integrating real-time travel information, information on walking routes and journey price comparisons by mode.

WALKING

Wembley Park benefits from high quality and well-connected pedestrian routes to, from and through the development area. We have worked closely with Brent Highways to ensure that footpaths and routes on both highways and Quintain-owned land are pedestrian focussed, inclusive and accessible. Our footpath provision is extensive, cohesive, and supported by informative wayfinding signage to further promote walking. Wembley Park achieves a Walk Score of between 85 and 90 out of 100, making it ‘very walkable’ on the whole, with some locations considered a ‘walkers paradise’ where car ownership is not required for daily activities.

Wembley Park has to work for local people as well as for the large events hosted on site, and our approach to security and the vulnerability of crowds is carefully integrated via our Hostile Vehicle Mitigation (HVM) strategy which is designed to reduce the use of bollards through natural level changes and landscape features such as land forming, seating, walls, public areas and street furniture. Still compliant with industry standard security certifications including PAS 68 and PA69, this approach reduces the ‘fortress fear’ impact that can arise from the use of long linear rows of bollards. The provision of seating and rest areas is also important in promoting inclusive access and where possible, seating is integrated into level changes, vents and raised planters to minimise ‘freestanding’ seating that can be problematic to movement, especially for the visually impaired.



PLACE

TRANSPORT & CONNECTIVITY



CYCLING

Cycling is a popular and accessible mode of transport in London and has the potential to substitute short car trips, particularly those less than five miles.

Awareness and encouragement of cycling has been promoted at Wembley Park from the outset and goes beyond the provision of cycle routes and cycle storage facilities. From allowing the use of our land for cycling events and the training of new cyclists via the Brent Cycle Training Scheme; to the provision of cycle storage space and facilities for cycle repairs in our buildings, cyclists are considered at every stage of the design and operation of our public realm.

We also have extensive parking provision for bikes across the public realm and in our buildings, with further provision planned.

Research published by the British Council of Offices in 2017 found that up to 40% of office workers would commute by bike if adequate facilities were provided. The Hive, our recently completed office building on Wembley Park Boulevard, accommodates secure storage and facilities for all, allowing us to support and promote modal shift to the bike not only amongst our tenants, but also their visitors.

Throughout the pandemic, cycling has seen increased usage as people avoid public transport, and post-pandemic we expect this to continue. Designated cycle lanes can give cyclists the impression that they have permission to speed through the site in their own space, which can be dangerous for other road users. Instead of dedicated cycle lanes, we therefore adopt a 'Share with Care' approach along the main routes through the site that link Wembley Park and Wembley Stadium Stations. This is promoted through the use of signage and the installation of permanent HVM along the route.

“All the basic amenity necessities are all within walking distance, i.e. three supermarkets, post offices, corner co-op shops, retail shops, three stations and numerous buses to name a few.”

LOCAL RESIDENT

Resident cycle spaces	Cycle spaces in the public realm
5,158	969

CASE STUDY

Beton Bike Workshop

One of our newest cycle facilities is the bike workshop on the ground floor of our Beton residential building. Equipped with a workstation area, cycle wash, tool wall, repair stands and digital lockers, as well as a few fitness machines, this is more than a basic facility for repairing a puncture.

Open to all residents, this well-equipped space is one of the ways that we have incorporated the promotion of active travel and cycling across our developments.



LOCAL SERVICES & AMENITIES

In addition to the provision of physical road infrastructure, our leasing and development strategies are also aligned to ensure that as more residents move in, the range of local services and amenities is consistent with the 15-minute neighbourhood concept and meets the needs of our residents.

We listen to feedback from our residents and commercial occupiers about the facilities and types of retail they want and seek to find operators who can fulfil those needs. Across Quintain Living, our pet friendly policy has led to a surge in interest for pet grooming and dog walking providers, so we are currently trying to identify somebody who can provide this in one of our retail spaces.

As more people move to the area, demand for groceries has increased, so in addition to the expansion in 2019 of Sainsbury's beneath the Civic Centre, we have also identified several independent operators, now providing a bakery and container-free shopping for dried goods. We have everything from independent hairdressers, gyms and dry cleaners to specialist bike shops, art studios and concept stores, with many of our retailers choosing to live and work in the area.

At Quintain Living, we design our buildings each with their own character, providing a unique mix of facilities and amenities that support working from home, socialising, health and wellbeing and community cohesion – making it entirely possible to live, work and play within our 15-minute neighbourhood.

CASE STUDY

Twenty3C

As an example of our approach to meeting local retail needs whilst supporting our active travel strategy - if the free facilities available in Beton can't fix our resident's bikes, then our neighbourhood bike shop, workshop and education space -Twenty3C - located on the ground floor retail of our Landsby building on Weaver Walk is here to help.



PUBLIC & PRIVATE TRANSPORT

Our objectives are to encourage the use of local public transport services and support modal interchange; enhance the quality and availability of travel information and advice for site users; and to support sustainable and shared car-based mobility, minimising the number of single occupancy car driver trips made by residents, employees and visitors.

Wembley Park benefits from excellent transport links, providing high-quality connections from both the local area and destinations further afield, covering both everyday and event day journeys. Over the last fifteen years, we have sought to improve these connections and promote more sustainable means of transport.

THREE STATIONS STRATEGY

Working closely with the London Borough of Brent, the Three Stations Strategy has seen the transformation of Wembley's three stations and the routes that link them.

Wembley Park, Wembley Stadium and Wembley Central Stations have all received significant investment from Brent Council and Transport for London over the past fifteen years, ensuring that visitors can arrive quickly and comfortably, whilst minimising negative impacts on local residents and businesses.

With Wembley Park and Wembley Stadiums within our site boundary, we have invested significantly over the years in infrastructure to improve accessibility and legibility both within Wembley Park, and with the wider Wembley area. In 2008, a new GLA funded bridge was installed spanning the Chiltern railway line to provide a pedestrian link between Wembley Stadium and Wembley Central Stations. This was accompanied by a new public

square within our public realm masterplan, White Horse Square, which is designed to accommodate large crowds on event days but also provides a focus for local and community activities on non-event days.

The improved connectivity between stations is achieved through a legible public realm and our Wayfinding Strategy ensures that up to date information on services is provided through the use of digital signage. We are currently supporting the London Borough of Brent with wayfinding on Wembley High Road to ensure a consistent approach between the three stations, further improving visual connectivity between the locations.

TRAINS & TUBES

Although Wembley Park is located in Zone 4, the journey time to Zone 1 is just 9 minutes from Wembley Park station and between 9 and 13 minutes to London Marylebone. With access to a wide range of train and tube services via the three stations, even if there is a problem with one of the routes into Central London, there are two additional routes easily accessible within a short distance.

Our 'Best in Class' partnership with the London Borough of Brent, Wembley Stadium, Transport for London and Chiltern Railways was originally centred around fan experience and connectivity for big events but has evolved to cover enhancements to the everyday experience at Wembley Park. Clear, well-signposted pedestrian and cycle connections now link the three station hubs, maximising the flexibility of travel options from Wembley Park to and from the wider area.

We also continue to work with stakeholders to deliver secure cycle parking facilities at the three stations to add to those that are already provided throughout the buildings and public realm of Wembley Park.

BUSES

Services are currently available from a total of twenty bus stop locations within the local vicinity of our development area and are located on key routes.

We have made significant contributions of circa £3m to TfL to enhance bus services in the area between 2019 and 2024. This includes the extension of bus service 440 from Power Road to Stonebridge Park to serve Wembley Park.

We have also worked extensively with TfL to minimise disruption and ensure a better level of service on event days by reducing the number of bus diversions that are confusing to local people.

ELECTRIC SCOOTERS

Electric scooters can be a replacement for multiple modes of transport, as well as providing mobility for new trips, allowing longer distances to be travelled than by foot, but with significantly lower emissions than a short trip by car.

If not properly managed however, they can cause significant problems across the public realm, so we are watching closely the many trials across Europe and in certain UK cities to inform our decision-making as to whether or not to allow their use across the Wembley Park Estate. If we do, we will learn from their roll-out in other locations and implement measures so that the safety of all road users is maintained.

CAR PARKING

Historically, Wembley Park was a location dominated by the car; out of town retail parks with high levels of surface parking only used on event days made it an attractive location for parking for visitors to the local area.

Whilst we still have an obligation to provide 2,900 car parking spaces for major events, we have been replacing the surface parking provision with purpose-built car (and coach parking) that can be repurposed on non-event days for other uses.

We have reduced residential parking provision over time in line with other measures and trends for encouraging reduced private car use by our residents. Our original masterplan had permission for 3,400 residential car parking spaces for 4,200 dwellings. Even though this has increased to 8,500 dwellings, the original parking provision has remained unchanged, going from a parking ratio of 0.8 to around 0.4 spaces per apartment.

We have moved from a traditional approach of selling parking spaces with specific apartments to leasing car parking spaces, using a 'Permit to Park' model. Our Alto, Pienna and Landsby buildings share a car park; and Alameda and Beton have no private parking provision other than for disabled users, but residents are instead able to rent a space in one of our other car parks if required.

“ I have mobility issues and I love that everything is in such close distance and also provides plenty of seating. Couldn't ask for better transport links with both underground and buses literally around the corner. ”

LOCAL RESIDENT



PLACE

TRANSPORT & CONNECTIVITY



CAR CLUBS & ELECTRIC VEHICLE CHARGING

Car clubs offer a convenient, cost-effective and sustainable alternative to owning a car; generally, car club members will drive less, choosing walking, cycling and public transport as their main mode of travel, only using car clubs for essential journeys. We have partnered with ZipCar at Wembley Park, and promote car club membership amongst our residents and tenants through the provision of discounted membership and free driving credit on joining.

ZipCar currently provide access to over 20 vehicles within Wembley Park, an increasing number of which are plug-in hybrids. To support the rollout of electric vehicles, we have to date installed almost 250 active and passive EV charging points across Wembley Park. ZipCar are currently testing a fleet of fully electric vehicles and we are currently working with them to make available EV charging spaces for car club users to make this a viable option.

Whilst we do not under-estimate the value of providing EV charging facilities in the public realm, most vehicle charging takes place at home. This can be particularly difficult for those living in apartments, where it generally is not possible for individuals to install charging infrastructure if they purchase an EV. For this reason, we have taken the decision that 100% of parking spaces provided across the forthcoming development of the North East Lands will be provided with EV charging from day one to support wider EV rollout.

Active EV charging points

124

Passive EV charging points

124

EVENT PARKING

Although a maximum of 35 large events are hosted at Wembley Stadium annually, we are obligated to accommodate 2,900 event-day cars and up to 458 coaches within the Wembley Park boundary.

In the past, surface parking surrounded the stadium and was used for this purpose. This resulted in unattractive and sprawling public realm that was difficult to utilise for other purposes.

Our approach in the redevelopment of Wembley Park has been to move parking to the periphery of the site, accommodating it under new residential buildings and in purpose build multi-storey car park facilities such as the award-winning Pink Parking, which opened early in 2020.

On non-event days, these spaces have been specifically designed to accommodate a wide range of meanwhile uses, which have included storage, five-a-side football, refrigerated dark stores, orchestra performance spaces, photoshoots and location filming for promotional videos, TV shows and even feature films.

We have been working with Amazon to allow their fleet to use the Green Parking outside of event days and are looking to further extend this relationship, allowing the space to become a home for their electrical fleet for delivery within London's Low Emission Zone.

FUTURE MOBILITY TRENDS

In June 2017 Quintain began a joint research project with the London School of Economics (LSE), whose Professor of Urban Studies, Ricky Burdett, is an advisor to the company's board. The research involved students on the LSE's Executive MSc in Cities programme exploring future mobility trends and their potential impacts on real estate value at Wembley Park.

Three students, part of the LSE Future Mobility Taskforce, looked at global transportation trends, including transportation-as-a-service (TaaS), electric vehicles (EVs) and autonomous vehicles (AVs), as well as mobility trends across London, including current travel patterns, car ownership and potential future car ownership trends. Three scenarios were developed to investigate the potential impact on parking provision at Wembley Park, with the mostly likely scenario thought to be one that would involve E-AV technology driving mobility as a service, in turn reduction car ownership. Key recommendations from the study are provided in the Case Study opposite, and we are currently considering a number of measures:

- Our forthcoming development of the North East Lands will have reduced car parking, with a parking ratio of 0.1.
- We are considering offsite parking options on Abbots Land, either with valet-style parking or purely off site (within a five-minute walk).

CASE STUDY

Future Mobility Recommendations

Key recommendations from the LSE study include:

PARKING RATIOS

The ratio of residential parking provision could be lowered to 0.2 spaces per apartment, and future phases should consider car-free development.

FUTURE EFFICIENCY & ADAPTABILITY

Car parking should be built to serve current demands but designed in such a way that it can be easily retrofitted into residential or commercial uses if and when future mobility patterns reduce car ownership and parking requirements.

BELOW GRADE PARKING SPACES

Below-grade parking is significantly more expensive than at-grade or above-grade parking. Whilst this is a worthwhile investment when there is sufficient demand, there are a lack of economically viable alternative uses for below-grade parking where future demand is anticipated to reduce.

REMOTE PARKING

The ability to summon a remotely parked car presents an opportunity to decouple car parking from dwellings, moving parking out to locations with reduced land and construction costs, whilst also enhancing the quality of the immediate public realm.

PLAN FOR PILOTED PARKING

Piloted parking could reduce the space required for parking by reducing the space required for manoeuvring and letting passengers in and out of their vehicles.

AUTOMATED PARKING SYSTEMS

The footprint of conventional car parking facilities could be reduced through the use of automated and mechanised parking technologies.

PASSENGER LOADING

Convert car parking located near residential lobbies into expanded drop off and pick-up areas.

PACKAGE DELIVERIES

Increase the area for packaged delivery and pickup to accommodate the anticipated increased home-goods deliveries. Package Delivery Centres can also be accommodated in parking spaces adjacent to residential lobbies and entrances.



PLACE

TRANSPORT & CONNECTIVITY



LOGISTICS

Our objective is to minimise the impacts of goods delivery and servicing trips on local road networks, easing congestion, reducing vehicle GHG emissions and improving local air quality.

Safe and sustainable logistics are increasingly recognised as a challenge for large developments, especially with increasing numbers of residents, anticipated increases in online shopping and when multiple activities such as construction and operations sit side by side.

At Wembley Park, we have adopted a Construction Logistics Plan that includes a centralised logistics hub and manages all construction vehicle movements across the development; we are currently looking at ways in which we can implement a similar approach with our tenants and residents in the operation of the development.

CONSTRUCTION LOGISTICS PLAN

It was recognised early on that with the quantity of development under construction at any given time, we would require a strategic approach to the management of traffic within the development and deliveries to individual sites.

From a practical point of view, the management of vehicles ensures that the local road network remains operational to everyday traffic, reducing disruption across the local area. This in turn, along with our road safety campaigns and requirements for drivers, helps to prevent road accidents.

We have looked closely at how we can reduce the number of vehicles coming to site in the first place and have put in place strictly enforced requirements that all delivery vehicles must be loaded to at least 65% of their capacity; this ensures that our contractors carefully consider their ordering to avoid unnecessary trips. To facilitate this, we have 1,000 sqm of reserved storage space and a consolidation centre for the storage of bulk materials. This means that a contractor can order all of the material they will need for the project, safely store it at our

facility, and then call it off as required. For each site, our logistics team receive a schedule of all of the materials required for a given day, load this onto a single vehicle and deliver 'just-in-time' to the relevant contractor.

Smaller construction deliveries are also directed to a single location, away from the main Wembley Park site. A single drop-off location means that one vehicle with parcels for multiple destinations can deliver to a single location via a 'milk round', reducing their journey time and the time their vehicle is on the road within our development.

JOURNEY OF A CONSTRUCTION DELIVERY



“Our consolidation facilities at Wembley Park have been vital in supporting our side-wide logistics during these intense years of development and ensuring that we continue to take measures to become a more sustainable developer. We are building 8,400 homes across the 85-acre Wembley Park site (1,890 of which are being handed over this year) and managing such logistics was always going to be a challenge, but one our exceptional team can navigate.

We have two facets to our construction consolidation facilities: a holding area and a construction logistics hub. In addition to this we are developing plans for a separate consolidation facility to manage the many hundreds of daily parcels expected once the population at Wembley Park reaches over 15,000. Large delivery vehicles are required to check in at our holding area with Alandale, our logistics partner, until we are ready to take the deliveries on site; we've had around 180,000 vehicles check in there since January 2017. At peak times we've accepted 9,000 vehicles a month - illustrating the vital need for putting consolidation systems in place.”

MATT VOYCE
EXECUTIVE DIRECTOR – CONSTRUCTION

IMPROVED SAFETY

All framework contractors and hauliers visiting Quintain projects must be members of the Freight Operator Recognition Scheme (FORS) and as a minimum, must achieve a bronze award.

Drivers are also required to demonstrate that they have undertaken safety related training and can provide a Driver Certificate of Professional Competency (CPC); this is reinforced with internal awareness campaigns on cyclists and vulnerable users, driver briefings and toolbox talks.

REDUCED GHG EMISSIONS

Whilst we have not attempted to quantify emissions savings, the Waste Resources Action Programme (WRAP) estimates that construction consolidation centres can reduce vehicle numbers by up to 70% during the busiest phases of a construction project. Emission reductions cannot be easily calculated because they are dependent on the load %, distance travelled and type of vehicle, but the measures in place at the Wembley Park Consolidation Centre contribute to reduced GHG emissions through reduced journeys and vehicle idling.

IMPROVED AIR QUALITY

Equally, NOx emissions and exhaust particulates that contribute towards poor air quality are also reduced with reduced vehicle movements and idling. This is especially important given the close proximity of our construction activities to residential areas and schools.



Nº of logistics vehicles since 2017

180,000

Peak Nº of logistics vehicles per month

9,000



PLACE

TRANSPORT & CONNECTIVITY



OPERATIONAL LOGISTICS

Our principal aim is to implement management measures and initiatives to efficiently and sustainably manage the usage of servicing areas whilst minimising the impact to residents, businesses and the local highway network, and maintaining high levels of security across the estate.

The research findings from our project with LSE highlighted the need for a longer-term facility similar to our construction consolidation centre, and we are now investigating this in order to alleviate congestion from postal and courier deliveries across the estate for our growing number of Wembley Park residents.

When the Strategic Travel Plan was developed in 2019, it was anticipated that for every seven residential homes at Wembley Park, an average of one parcel will arrive on site per day - equating to an expected 1,214 deliveries a day upon the estate's completion.

During the first national lockdown, the increase in residents at home during the day led to an estimated 80% increase in deliveries per day per apartment, which scaled up to estate completion and full occupation could result in 1.1 million parcels per year, or over 3,000 parcels per day. Whilst we cannot yet determine the extent to which home-working behaviours and online shopping patterns will change permanently, this has highlighted the urgency in implementing a site-wide management system for servicing and deliveries and we plan to begin phased trials in early 2022 to test out the feasibility of this approach in a mixed-use residential setting.

We also need to consider the everyday servicing requirements of a large mixed-use site, which on a daily basis can include waste removal, cleaning, maintenance and repairs and landscaping.

Through the widespread use of waste collection via our Envac system across the site, we have already removed a major source of vehicle movement from within the development to the periphery, and due to the size and nature of collection, fewer vehicle trips are required to make collections. This has multiple benefits of reducing vehicle emissions, noise pollution and impacts on air quality, as well as providing a safer public realm for pedestrians and cyclists.

More details of the Envac waste system can be found in the Sustainable Infrastructure section of this report.

INDIVIDUAL PLOT SERVICING STRATEGIES

Currently, an individual servicing strategy is developed for each new plot, identifying the plot-specific management procedures, servicing spaces for Light and Heavy Goods Vehicles (LGVs and HGVs), layby bays and loading areas, as well as concierge services and in-building delivery lockers.

A range of measures are in place that support both the servicing of buildings and wider estate security. These include:

- CCTV
- Traffic Liaison Officers
- Automatic Number Plate Recognition (ANPR) System
- Penalty Charge Notices (PCNs)
- Access control for commercial tenants/ residential concierges

The identification of roads provided with ANPR control is based on locations that cause the greatest impact of traffic flow and/ or inconvenience to residents and other estate road users. ANPR coverage will increase in line with increased occupation and use of the site. Our team of Traffic Liaison Officers patrol the estate and carry out parking enforcement operations across Wembley Park; where a non-sanction intervention is not possible, they are able to issue PCNs in accordance with estate-wide rules.

DELIVERY & SERVICING ESTATE WIDE STRATEGY & ACTION PLAN

As the Wembley Park estate grows, we have identified the need to implement a Delivery and Servicing Estate Wide Strategy to cover deliveries and general servicing requirements for the full extent of the development; this was also a recommendation made in the LSE Future Mobility Report outlined previously. The strategy will ensure a consistent and coordinated approach to better manage deliveries; making sure that servicing and delivery activity associated with the residential and commercial uses works as effectively, efficiently and safely as is practical to do so, in line with current best practice.

An Action Plan has been developed which involves three phases for rolling out the new strategy, with the initial Phase 1 trial implemented in a single zone initially; once the first phase is complete in one zone, the second phase in that zone will commence, and Phase 1 will commence in the next zone.

In addition, our forthcoming North East Lands development will include a parcel logistics hub to serve that phase of the development, as well as consolidation centre that will serve the entire estate.

CASE STUDY

Key Benefits to an Estate-Wide Approach

An estate-wide approach provides an opportunity to identify and engage with delivery operators and service providers, allowing us to work together to demonstrate our joint commitments to sustainability, safety and best-practice working methods.

Other benefits include:

- A reduction in the impact of increasing delivery and servicing movements, facilitating estate-wide rules.
- Sustainable freight travel to and from the development
- Improved management of the increasing number of deliveries and servicing trips, particularly during peak hours.
- A reduction in the impact that heavy vehicle trips have on the surrounding public highways, residential areas and environment.
- A reduction in congestion and associated vehicle emissions.
- Better communication and wider understanding of estate-rules, reducing the need for enforcement measures.

Delivery & Servicing Action Plan: Our Phased Approach

The phased approach we will be adopting is outlined below:

PHASE 1

Introduction of servicing time slots, with access routes and specific servicing bay locations identified as the only servicing spaces available. Enforcement measures will be introduced to focus on compliance, allowing a period of time for site users to adjust to the new system.

PHASE 2

Implementation of exact time slots, set using the online booking system. Estate users will communicate their delivery and supplier companies with the Wembley Park Operations team and ensure suppliers comply with access routes and time slots. Ad-hoc and last-minute servicing will be accommodated in specific locations and based on space availability, with any emergency servicing events communicated to the Wembley Park Estate Management or Security Teams.

Enforcement measures will be in place and will include the use of all available enforcement options.

PHASE 3

The final phase will apply lessons learned from phases 1 and 2 to establish the final, fully operational online booking system and enforcement procedures.





PROPERTY

We create sustainable buildings that are built to last and futureproofed to ensure they provide a high-quality, comfortable environment, now and in the future.

Our joined-up design and construction approach means we are well placed to deliver against our objectives, and our increasing use of technology helps us to be better innovators.

PROPERTY

CLIMATE CHANGE

OUR OBJECTIVES

The pace of global heating is increasing, and there is little dispute that action needs to be taken to quickly prevent runaway climate change and the catastrophic impacts that would have on our buildings, communities and wider society.

Reducing greenhouse gas (GHG) emissions through design, construction and in operation is therefore a priority for us, as is ensuring our assets are resilient and adaptable to a changing climate.

GHG EMISSIONS

Objective: To reduce GHG emissions across our value chain, through the consideration of emissions during construction, our own operations and the activities of our tenants in our assets, and through the reporting of actual emissions on an annual basis.

RESILIENCE & ADAPTATION

Objective: To ensure our assets and infrastructure are resilient and where necessary, adaptable in the face of a changing climate and potential increases in events such as flooding and overheating.



GHG EMISSIONS

Our objective is to reduce GHG emissions across our value chain, through the consideration of emissions during construction, our own operations and the activities of our tenants in our assets, and through the reporting of actual emissions on an annual basis.

Over the past two years, we have worked with Buro Happold to understand the GHG emissions resulting from our developments during construction and we are continuing to identify ways to reduce their impact during operation with the development of our Pathway to Zero Carbon.

Ensuring our energy delivery and carbon strategies remain relevant against a backdrop of a rapidly decarbonising energy system and emerging policy is essential to ensuring that our buildings, systems and infrastructure do not become obsolete or pose climate-related risks during their lifetime.

As a member of the UK Green Building Council (UKGBC), in 2019 we supported the publication of “Net Zero Carbon Buildings: A Framework Definition” and over applied it to investigate how our forthcoming building plots at Wembley Park could achieve Net Zero Carbon status through design, procurement, construction and operation.



We have identified key considerations that will help us to reduce the impact of our construction activities on GHG emissions and will continue our work in this area over the coming years.

The development of our Pathway to Zero Carbon is a priority for us in 2021; this will include a detailed zero-carbon target and trajectory covering construction and operational emissions.

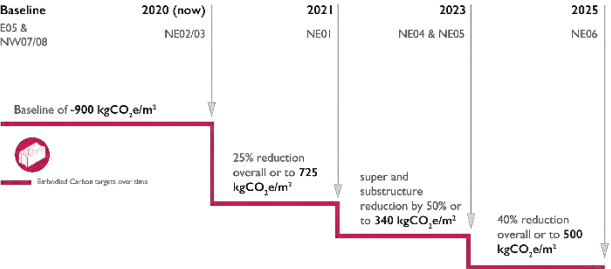
This will then be updated on a regular basis to take into account technological improvements and innovations that we may not have initially considered, in order to progress our path to zero carbon in the most efficient way we can.

EMBODIED EMISSIONS

As we reduce our operational impacts, emissions as a result of our construction activities become proportionally more significant; we have taken steps to understand these impacts and are now working with our design and construction teams to actively reduce them.

In 2019 we carried out a retrospective assessment of embodied carbon of our recently completed residential building, NW07/08 Landsby. This was closely followed by an assessment of E05 The Robinson, which was of a slightly different design and at the construction stage. Our assessments are carried out in accordance with guidance from RICS; having a standard industry approach helps when comparing performance and benchmarking, and since the publication of the *Professional Statement Whole Life Carbon Assessment for the Built Environment* in 2017, this has rapidly become the preferred approach within the sector.

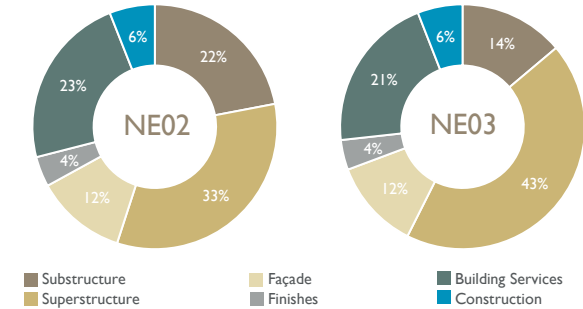
As a result of this piece of work and comparison of other industry benchmarks such as those identified by the London Energy Transformation Initiative (LETI), we have developed reduction targets for our future projects and are currently working towards achieving these goals. We have also identified a trajectory for the reduction of embodied carbon across our five-year pipeline for our next phase of development at Wembley Park, the North East Lands, set out below.



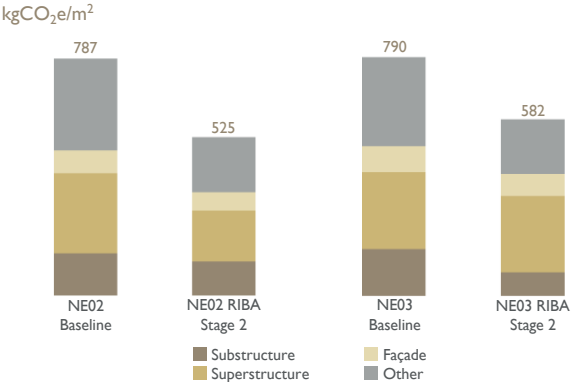
We are currently reviewing and optimising designs for our first plots in this phase, NE02 and NE03 and in doing so are investigating options such as increasing the proportion of Ground Granulated Blast Furnace Slag (GGBS) in our concrete mix and switching to modular construction.

Our GHG Inventory includes an assessment of embodied emissions associated with construction works completed in the reporting year, for each life-cycle stage and for which we have reliable data. However, our current inventory does not yet present the progress we are making in reducing our embodied emissions, as these assets are still to be completed.

RIBA Stage 2 Embodied Carbon by Building Element



RIBA Stage 2 Embodied Carbon Reductions over Baseline



EXPLANATORY NOTES:
All GHG emissions are measured in units of carbon dioxide equivalent (CO₂e); further information can be found on page 104 of our Methodology section.



OPERATIONAL EMISSIONS

Our most significant operational emissions are as a result of energy consumption in our buildings, both within our operational control, and indirectly as a result of the activities of our tenants.

Although the majority of our assets by Gross Asset Value (GAV) are residential, we operate a wide selection of asset types, including retail, office and leisure. These all have different emission profiles and pose unique challenges in reducing emissions.

BUILDING EMISSION TARGETS

Part L of Building Regulations sets a Dwelling Emission Rate (DER) for residential development and a Building Emission Rate (BER) for non-residential development and we have committed to delivering a minimum 35% improvement over this level across all our developments.

One of our greatest challenges is the disconnect between design and as built performance, a complicated relationship that we are beginning to unpick through improved metering and monitoring. The 'Performance Gap' is well-known but poorly understood phenomenon that affects the majority of new buildings, where actual consumption can differ significantly from the anticipated performance at design stage, and from the performance stated on an Energy Performance Certificate (EPC).

There are several explanations for this, some of which relate to energy consumption and others that result in differences in emissions. Clearly, differences in energy consumption will also affect overall emissions, so we have set separate targets for the energy performance of our new development which are outlined in our 'Resource Efficiency' section.

EMISSION FACTORS

Whilst gas emission intensities have remained at a similar level over time, the last decade has seen significant decarbonisation of the electricity grid. According to National Grid, 2020 was 'the greenest year on record for Britain's electricity system', with an average carbon intensity of 181 gCO₂/kWh – a 66% reduction in the last seven years. Records for the greenest month on record and the day with the lowest carbon intensity ever seen on the system were also broken. Although 2020 was a year with distinctly different usage and demand

to other years, these trends are set to continue as the grid decarbonises to meet zero carbon targets by 2050.

For reporting purposes, our GHG Data Management Procedures require us to apply the most representative emission factors that are available to us. In the absence of real-time emissions data, UK grid electricity and gas emission factors published by the Department for Business, Environment and Industrial Strategy (BEIS) on an annual basis for corporate reporting are widely recognised as the most reliable data source for these emission factors. These figures are updated based on the actual, measured emissions relating to the generation of energy, based on the average UK fuel mix for the year two-years prior (for example, 2020 emission factors are based on actual data from 2018), and are the emission factors that we apply to actual, measured energy consumption in our buildings.

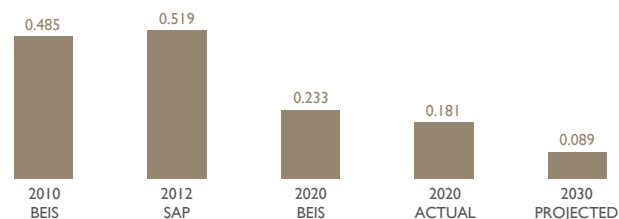
For design purposes, Part L sets out the minimum standards for energy efficiency and GHG emissions for new construction and major refurbishments in the built environment. The calculation procedure adopted applies emission factors that are set in the Standard Assessment Procedure (SAP) methodology, which was last updated in 2012 (based on 2010 data).

Whilst an update to the calculation methodology was expected in 2016, and then in 2020, we are still awaiting an updated assessment procedure, so compliance with Part L and with our planning obligations still uses the 2010 emission factors.

This has unintended consequences where technologies are used that either consume or displace electricity; technologies such as gas CHP, which consume gas and displace electricity, are favored when in practice, those savings are not realised.

Different Grid Electricity Carbon Factors

kgCO₂e/kWh



In our 'Sustainable Infrastructure' section we discuss in detail the benefits of heat networks, but also some of the constraints we have in generating that heat cleanly; this remains one of our biggest unresolved challenges at Wembley Park, and for many other large developments where infrastructure was planned and agreed several years ago.

Our heat networks were designed with gas CHP as the primary heat generation method in order to achieve a minimum 35% improvement over Part L; this method generates both heat and electricity on site, and historically, when grid electricity was generated from less clean sources, this resulted in a significant net CO₂e reduction.

As the grid has become cleaner, this no longer the case, and within a few years, more CO₂e will be emitted than compared, for example, with a conventional gas boiler.

In the short-term, if our energy consumption stays the same, we expect reduced emissions from our electricity supplies, but increased emissions as a result of heat generated via our CHP heat network. This demonstrates the importance of understanding operational emissions over the life of a technology and is something we are now modelling to inform the development of our Pathway to Zero Carbon.

OTHER OPERATIONAL EMISSION SOURCES

In addition to energy use in our buildings, we also consider emissions arising from our Wembley Park estate vehicle fleet, the removal of waste; and the supply and removal of water. These emissions are small compared with energy consumed in our buildings but also represent other environmental impacts.

Furthermore, this year we have increased our reporting to include data on the operations of our tenants. Whilst their emissions are largely dependent on their activities and the efficiency of their operations, there is an element of performance that relates to how our buildings have been designed and constructed, so collecting this data will help us to understand whole-building performance and allow us to improve our ability to benchmark our performance against design data in the future. We have not benchmarked our assets against industry benchmarks in 2020 because it has been an exceptional year, with abnormal usage patterns across all of our asset types, and it is our view that this would not tell us anything useful. As more data is produced and published specific to 2020, we will look to retrospectively benchmark our performance to see if this provides any other useful performance insights.



PROPERTY

CLIMATE CHANGE

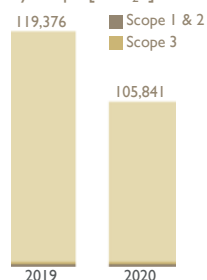


GHG EMISSION REPORTING

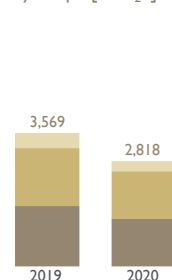
We have been measuring our GHG emissions since 2013, this year extending the scope of sources we consider and increasing our data coverage. This will enable us to better understand our direct and indirect impacts on GHG emissions and climate change, supporting the development of reduction targets.

In 2020, we revisited our GHG management procedures to ensure that they reflect our current material emission sources and follow best-practice in relation to data collection, aggregation and monitoring. Our approach follows the principals set out in ISO 14064 and we have sought external verification to ISAE 3410: Assurance engagements on greenhouse gas statements, to ensure that our data is credible and trustworthy. We adopt an 'operational control' approach, whereby our Scope 1/Category 1 and Scope 2/Category 2 emissions reflect emissions that we have a direct operational responsibility for. This includes energy consumption within assets that we either own or operate, on behalf of ourselves or others, either directly, or via management companies that we appoint and manage. We also include occupier emissions where these cannot be separated out from total building emissions. Our Scope 3 (Category 3 – 6) emissions include those from activities that are up- and down-stream of our main operations, but over which we have operational influence, or occur as a result of our operational activities. The categories of emissions we report are explored in more detail on the following pages.

Absolute Emissions
by Scope [tCO₂e]



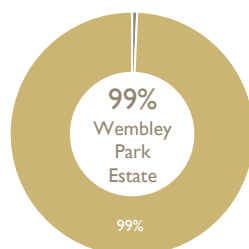
Like-for-Like Emissions
by Scope [tCO₂e]



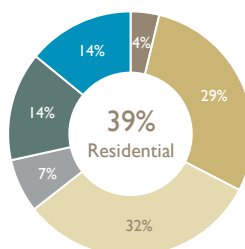
A. Absolute GHG Emissions by Scope and by Entity

	2020				2019 ¹			
	Scope 1 [tCO ₂ e]	Scope 2 [tCO ₂ e]	Scope 3 [tCO ₂ e]	Annualised Area m ²	Scope 1 [tCO ₂ e]	Scope 2 [tCO ₂ e]	Scope 3 [tCO ₂ e]	Annualised Area m ²
TOTAL	1,215	2,351	102,275	381,806	1,484	2,005	115,887	209,188
Corporate Offices	8	89	23	2,645	Not Available	195	47	2,526
Wembley Park Estate	1,207	677	337	132,575	1,484	640	380	98,703
Quintain Living	N/A	749	99,638	164,714	N/A	393	104,296	63,311
Wembley Park Residential	N/A	167	46	13,680	N/A	216	8,103	13,632
Wembley Park Retail	N/A	338	1,678	44,203	N/A	497	3,050	26,467
Wembley Park Commercial	N/A	331	60	15,814	N/A	63	12	4,549
Wembley Park Leisure	N/A	N/A	492	8,175	N/A	N/A	Not Available	8,175

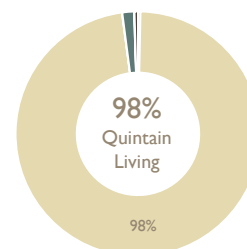
Scope 1 Emissions
% Emissions by Entity [tCO₂e]



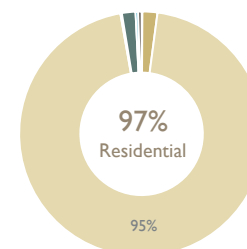
Scope 2 Emissions
% Emissions by Entity [tCO₂e]



Scope 3 Emissions
% Emissions by Entity [tCO₂e]



Total Emissions
% Emissions by Entity [tCO₂e]



B. Like for Like GHG Emissions by Scope and by Entity

	2020			2019 ¹		
	Scope 1 [tCO ₂ e]	Scope 2 [tCO ₂ e]	Scope 3 [tCO ₂ e]	Scope 1 [tCO ₂ e]	Scope 2 [tCO ₂ e]	Scope 3 [tCO ₂ e]
TOTAL	1,195	1,180	443	1,484	1,525	561
Corporate Offices	N/A	67	16	N/A	86	20
Wembley Park Estate	1,195	544	285	N/A	577	335
Quintain Living	N/A	110	29	N/A	180	41
Wembley Park Residential	N/A	132	36	N/A	186	47
Wembley Park Retail	N/A	327	77	N/A	496	117

**LfL reduction
over 2019**

21%

EXPLANATORY NOTES:

¹2019 figures have been restated to reflect adjusted reporting boundaries and include portions of previously missing data. Some previously estimated data has been updated to reflect actual data that has become available since the publication of our 2019 Annual Report & Accounts.

Annualised Area is a metric used to reflect the partial year operation of assets (for example, where they are completed and become standing assets within the reporting year. This differs depending on the specific GHG emission generating activity, but in the above table represents the total asset area covered by Scope 1, Scope 2 and Scope 3 data.

For full details of the calculation methodology, exclusions, and data sources relating to the data in this table, refer to the Methodology section at the end of this report.



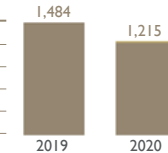
C. Absolute GHG Emissions by GHG Inventory Category and by Entity

	2020				2019			
	Consumption [unit stated]	GHG Emissions [kgCO ₂ e]	Annualised Area [m ²]	Data Coverage %	Consumption [unit stated]	GHG Emissions [kgCO ₂ e]	Annualised Area m ²	Data Coverage % Area
CATEGORY 1: DIRECT GHG EMISSIONS								
1.1 Direct Emissions from Stationary Combustion [kWh]	6,450,965	1,202,687	58,537	100%	Not Available	Not Available	58,537	0%
■ Corporate Offices	42,266	7,772	576	100%	8,045,848	1,483,896	576	100%
■ Wembley Park Estate	6,498,699	1,194,916	57,961	100%	Not Available	Not Available	57,961	0%
1.2 Direct emissions from Mobile Combustion [kWh]	54,728	12,546	N/A	100%	Not Available	Not Available	N/A	0%
■ Wembley Park Estate	54,728	12,546	N/A	100%	Not Available	Not Available	N/A	0%
CATEGORY 2: INDIRECT GHG EMISSIONS FROM IMPORTED ENERGY								
2.1 Indirect Emissions from Imported Electricity [kWh]	9,407,046	2,193,159	218,652	98%	7,743,152	1,979,150	140,563	99%
■ Corporate Offices	381,545	88,953	2,645	73%	763,419	195,430	2,526	90%
■ Wembley Park Estate	2,905,106	677,296	132,575	99%	2,505,512	640,409	98,703	100%
■ Quintain Living	3,213,710	749,244	47,897	100%	1,538,426	393,222	18,602	100%
■ Wembley Park Residential	715,148	166,730	13,680	100%	844,717	215,910	13,632	100%
■ Wembley Park Retail	1,447,673	337,511	6,041	48%	1,945,188	497,190	2,551	60%
■ Wembley Park Commercial	743,863	173,424	15,814	100%	145,891	37,290	4,549	100%
2.2 Indirect Emissions from Imported Energy – Heat [kWh]	790,062	157,485	15,814	100%	113,760	25,846	4,549	100%
■ Wembley Park Commercial	790,062	157,485	15,814	100%	113,760	25,846	4,549	100%
CATEGORY 4: INDIRECT GHG EMISSIONS FROM PRODUCTS & SERVICES								
4.1 Emissions from Purchased Goods & Services ¹	N/A	69,407,238	N/A	N/A	N/A	80,460,419	N/A	N/A
4.1a Embodied Emissions (Life Cycle Stages A1 – A5) [m ²]	N/A	69,363,392	N/A	N/A	N/A	80,418,549	N/A	N/A
■ Wembley Park Estate	127,757	68,667,182	N/A	66%	117,804	79,759,097	N/A	83%
■ Wembley Park Estate	40,647	Not Available	N/A	0%	N/A	N/A	N/A	N/A
■ Quintain Living	84,354	68,667,182	N/A	100%	90,945	74,032,375	N/A	100%
■ Wembley Park Residential	N/A	N/A	N/A	N/A	7,035	5,726,722	N/A	100%
■ Wembley Park Retail	2,756	Not Available	N/A	0%	4,010	Not Available	N/A	0%
■ Wembley Park Commercial	N/A	N/A	N/A	N/A	15,814	Not Available	N/A	0%
4.1b Fuel and Energy Related Emissions [kWh]	16,792,801	696,210	218,652	98%	15,855,948	659,452	306,246	99%
■ Corporate Offices	423,811	21,992	2,645	73%	763,419	46,095	2,526	78%
■ Wembley Park Estate	9,458,533	318,568	132,575	99%	10,551,360	343,659	98,703	100%
■ Quintain Living	3,213,710	176,722	47,897	100%	1,491,374	90,049	18,602	100%
■ Wembley Park Residential	715,148	39,326	13,680	100%	844,717	51,004	13,641	100%
■ Wembley Park Retail	1,447,673	79,608	6,041	48%	1,945,428	117,465	2,552	59%
■ Wembley Park Commercial	1,533,925	59,995	15,814	100%	259,651	11,179	170,223	100%
4.3 Emissions from the Disposal of Solid and Liquid Waste	N/A	43,846	N/A	N/A	N/A	41,871	N/A	N/A
4.3a Water [m ³]	26,465	27,842	110,321	98%	11,591	12,193	68,218	78%
■ Corporate Offices	906	953	2,582	46%	937	986	2,526	28%
■ Wembley Park Estate	2,919	3,071	62,095	100%	6,105	6,422	31,554	99%
■ Quintain Living	5,223	5,494	14,912	100%	1,488	1,565	14,717	40%
■ Wembley Park Residential	6,476	6,813	13,565	100%	2,751	2,895	13,518	84%
■ Wembley Park Retail	6,439	6,774	1,354	92%	Not Available	Not Available	1,354	0%
■ Wembley Park Commercial	134	141	15,814	100%	309	325	4,549	86%
■ Wembley Park Leisure	4,369	4,596	N/A	N/A	Not Available	Not Available	N/A	N/A

Category 1

Direct GHG Emissions

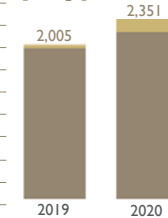
[tCO₂e]



Category 2

Indirect GHG Emissions from Imported Energy

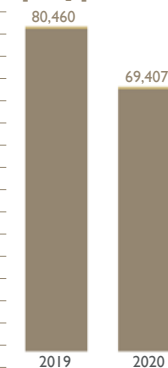
[tCO₂e]



Category 4

Indirect GHG Emissions from Products

[tCO₂e]

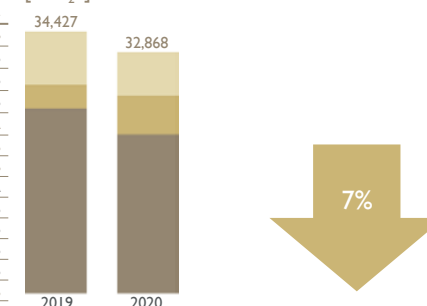


C. Absolute Scope GHG Emissions by GHG Inventory Category and by Entity (continued)

	2020				2019			
	Consumption [unit stated]	GHG Emissions [kgCO ₂ e]	Annualised Area m ²	Data Coverage % Area	Consumption [unit stated]	GHG Emissions [kgCO ₂ e]	Annualised Area m ²	Data Coverage % Area
4.3b Waste ¹ [tonnes]	762,748	16,004	129,212	99%	1,435,880	29,677	73,904	98%
■ Corporate Offices	7,021	140	1,007	26%	Not Available	Not Available	1,007	0%
■ Wembley Park Estate	755,500	15,860	127,763	100%	1,435,880	29,677	72,455	100%
■ Wembley Park Retail	228	5	443	100%	Not Available	Not Available	443	0%
5 USE OF PRODUCT	N/A	32,867,567	N/A	N/A	N/A	34,426,730	N/A	N/A
5.1 Emissions from the Use Stage of the Product	127,757	20,899,618	N/A	67%	117,804	24,275,580	N/A	83%
5.1a Embodied Emissions (Life-cycle Stages B1 – B5) [m ²]	127,757	20,899,618	N/A	67%	117,804	24,275,580	N/A	83%
■ Wembley Park Estate	40,647	Not Available	N/A	0%	N/A	N/A	N/A	N/A
■ Quintain Living	84,354	20,899,618	N/A	100%	90,945	22,532,587	N/A	100%
■ Wembley Park Residential	N/A	N/A	N/A	N/A	7,035	1,742,992	N/A	100%
■ Wembley Park Retail	2,756	Not Available	N/A	0%	4,010	Not Available	N/A	0%
■ Wembley Park Commercial	N/A	N/A	N/A	N/A	15,814	Not Available	N/A	0%
5.2 Emissions from Downstream Leased Assets	N/A	5,023,889	614,517	89%	N/A	3,085,400	251,291	25%
5.2a Tenant Gas [kWh]	1,248,804	259,476	12,040	48%	3,068,683	639,330	11,037	53%
■ Wembley Park Retail	1,248,804	259,476	12,040	48%	3,068,683	639,330	11,037	53%
5.2b Tenant Electricity [kWh]	9,333,040	2,689,129	163,517	89%	7,388,825	2,334,721	89,921	33%
■ Quintain Living	3,087,342	889,556	116,816	100%	132,045	41,724	44,709	21%
■ Wembley Park Retail	4,612,562	1,329,018	38,162	54%	7,256,70	2,292,997	37,037	54%
■ Wembley Park Leisure	1,633,137	470,556	8,175	85%	Not Available	Not Available	8,175	0%
5.2c Tenant Heat [kWh]	6,928,149	1,942,371	116,816	98%	422,885	108,573	44,709	15%
■ Quintain Living	6,928,149	1,942,371	116,816	98%	422,885	108,573	44,709	15%
5.2d Tenant Water [m ³]	119,568	125,786	198,144	82%	2,640	2,777	105,624	19%
■ Quintain Living	102,550	107,882	151,807	99%	2,640	2,777	59,456	34%
■ Wembley Park Retail	1,902	2,001	38,162	10%	Not Available	Not Available	37,993	0%
■ Wembley Park Leisure	15,116	15,903	8,175	85%	Not Available	Not Available	8,175	0%
5.2e Tenant Waste [tonnes]	339,533	7,127	124,362	94%	Not Available	Not Available	61,675	0%
■ Quintain Living	258,582	5,476	104,974	100%	Not Available	Not Available	44,937	0%
■ Wembley Park Retail	55,292	1,134	11,212	49%	Not Available	Not Available	8,562	0%
■ Wembley Park Leisure	26,659	518	8,175	85%	Not Available	Not Available	8,175	0%
5.3 Emissions from End-of-Life Stage of the Product	127,757	6,944,060	N/A	66%	117,804	8,065,750	N/A	83%
5.3a Embodied Emissions (Life-cycle stages C1 – C4) [m ²]	127,757	6,944,060	N/A	66%	117,804	8,065,750	N/A	83%
■ Wembley Park Estate	40,647	Not Available	N/A	0%	N/A	N/A	N/A	N/A
■ Quintain Living	84,354	6,944,060	N/A	100%	90,945	7,486,627	N/A	100%
■ Wembley Park Residential	N/A	N/A	N/A	N/A	7,035	579,123	N/A	100%
■ Wembley Park Retail	2,756	Not Available	N/A	0%	4,010	Not Available	N/A	0%
■ Wembley Park Commercial	N/A	N/A	N/A	N/A	15,814	Not Available	N/A	0%

Category 5

Indirect GHG Emissions from Services
[tCO₂e]



BENCHMARKING

In 2021, we will be submitting performance data relating to the energy use, water use, waste and GHG emissions of our business to the Global Real Estate Sustainability Benchmark (GRESB), allowing us to compare the performance of our portfolio of standing assets with those of companies of a similar composition.

TARGET SETTING

In 2021, we will also be using the Carbon Risk Real Estate Monitor (CRREM) to support the development of a GHG reduction pathway in line with globally agreed reduction targets and our emerging approach to setting a timeline and strategy for achieving Zero Carbon. The objective of CRREM is to provide the industry with appropriate science-based carbon reduction pathways at building, portfolio and company level and with financial risk assessment tools to cost-effectively manage carbon mitigation strategies.

EXPLANATORY NOTES

2019 figures have been restated to reflect adjusted reporting boundaries and include portions of previously missing data. Some previously estimated data has been updated to reflect actual data that has become available since the publication of our 2019 Annual Report. Annualised Area is a metric used to reflect the partial year operation of assets (for example, where they are completed and become standing assets within the reporting year. This differs depending on the specific GHG emission generating activity, but in the above table represents the total asset area covered by Scope 1, Scope 2 and Scope 3 data.

Scope 3 emissions are broken down into GHG Inventory Categories 3 to 6.

Only emissions that have been assessed as being in scope are included in the above table; a full description of GHG Inventory Categories and decisions regarding emission sources included in the Methodology section at the end of this report.

¹The use of the Envac system at Wembley Park prevents waste from being broken down by entity; all Envac waste is recorded under Category 4.3b Waste, irrespective of whether it is generated via our own operations or generated by our downstream leased assets.

For full details of the calculation methodology, exclusions, and data sources relating to the data in this table, refer to the Methodology section at the end of this report.

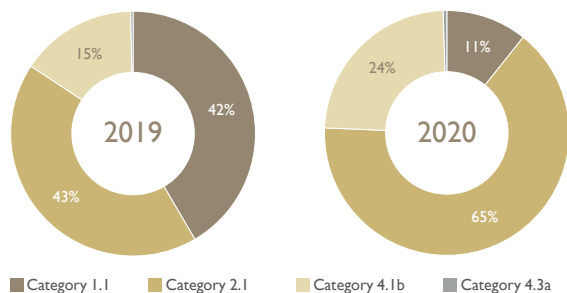


D. Like-for-Like GHG Emissions by GHG Inventory Category and by Entity

	Annualised Area [m ²]	2020				2019			
		Consumption [unit stated]	GHG Emissions [kgCO ₂ e]	GHG Intensity [kgCO ₂ e/m ²]	Consumption [unit stated]	GHG Emissions [kgCO ₂ e]	GHG Intensity [kgCO ₂ e/m ²]	Consumption [unit stated]	GHG Emissions [kgCO ₂ e]
TOTAL GHG INVENTORY	-	-	2,817,831	-	-	3,569,312	-	-	-
CATEGORY 1: DIRECT GHG EMISSIONS	57,961	6,498,699	1,194,916	21	8,045,848	1,483,896	26	57,961	6,498,699
1.1 Direct Emissions from Stationary Combustion [kWh]	57,961	6,498,699	1,194,916	21	8,045,848	1,483,896	26	57,961	6,498,699
Wembley Park Estate	57,961	6,498,699	1,194,916	21	8,045,848	1,483,896	14	57,961	6,498,699
CATEGORY 2: INDIRECT GHG EMISSIONS FROM IMPORTED ENERGY	109,879	5,063,104	1,180,412	11	5,965,563	1,524,798	14	109,879	5,063,104
2.1 Indirect Emissions from Imported Electricity [kWh]	109,879	5,063,104	1,180,412	11	5,965,563	1,524,798	14	109,879	5,063,104
Corporate Offices	1,671	286,120	66,706	40	335,639	85,789	51	1,671	286,120
Wembley Park Estate	89,515	2,332,336	543,994	6	2,256,078	576,653	6	89,515	2,332,336
Quintain Living	5,950	471,175	109,850	18	704,392	180,042	30	5,950	471,175
Wembley Park Residential	11,496	568,075	132,441	12	726,982	185,817	16	11,496	568,075
Wembley Park Retail	1,246	1,404,397	327,421	263	1,942,472	496,496	398	1,246	1,404,397
CATEGORY 4: INDIRECT GHG EMISSIONS FROM PRODUCTS & SERVICES	-	-	442,503	-	-	560,618	-	-	-
4.1 Emissions from Purchased Goods & Services	109,591	11,561,072	433,804	4	13,964,359	549,736	5	109,591	11,561,072
4.1b Fuel and Energy Related Emissions (FERA) [kWh]	109,591	11,561,072	433,804	4	13,964,359	549,736	5	109,591	11,561,072
Corporate Offices	1,384	286,120	15,734	11	335,639	20,266	15	1,384	286,120
Wembley Park Estate	89,515	8,832,035	283,694	3	10,301,926	328,598	4	89,515	8,832,035
Quintain Living	5,950	471,175	25,910	4	657,340	39,690	7	5,950	471,175
Wembley Park Residential	11,496	568,075	31,238	3	726,982	43,895	4	11,496	568,075
Wembley Park Retail	1,246	1,404,397	77,228	62	1,942,472	117,286	94	1,246	1,404,397
4.3 Emissions from the Disposal of Solid and Liquid Waste	48,360	8,269	8,699	0.18	10,344	10,882	0.23	48,360	8,269
4.3a Water [m ³]	48,360	8,269	8,699	0.18	10,344	10,882	0.23	48,360	8,269
Wembley Park Estate	31,254	821	864	0.03	6,105	6,422	0.21	31,254	821
Quintain Living	5,815	2,556	2,689	0.46	1,488	1,565	0.27	5,815	2,556
Wembley Park Residential	11,291	4,892	5,146	0.46	2,751	2,895	0.26	11,291	4,892

Our Changing Emission Profile

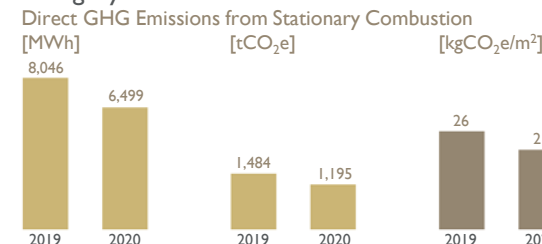
% Like-for-Like Emissions by GHG Inventory Category



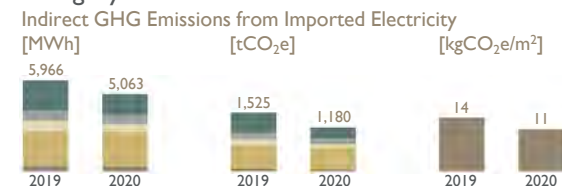
With the exception of water consumption across landlord areas of our residential assets, we have seen a reduction in GHG emissions across all like-for-like categories. In GHG Inventory Category 2.1 (emissions associated with imported electricity within our operational control), the 15% reduction in consumption that we achieved translated into a 23% reduction in emissions; this is due to continuing reduction in GHG emissions associated with the consumption of grid electricity. This is similar for GHG Inventory Category 4.1b, which relates to the upstream emissions associated with all energy transmission and distribution, although the difference between our reduction in consumption by 17% and our reduction in emissions of 20% is smaller.

In 2020, a greater proportion of our like-for-like emissions resulted from electricity consumption, with a significantly smaller proportion resulting from gas consumption. Emissions as a result of water treatment and use remain negligible.

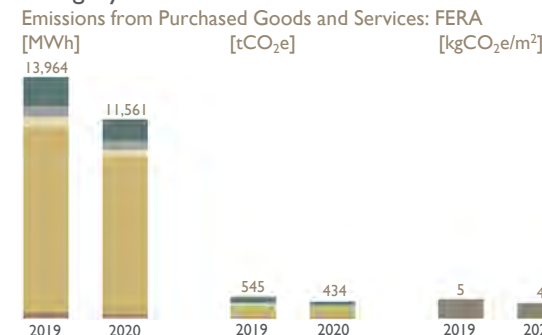
Category 1.1



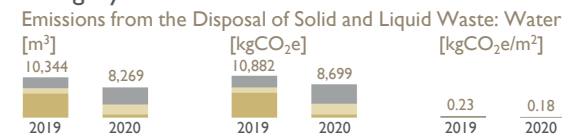
Category 2.1



Category 4.1a



Category 4.3a



BASE-YEAR RECALCULATION

Quintain was a very different organisation in our 2013/14 GHG emission base year: we had a different ownership and legal structure; we operated assets across multiple locations in multiple sectors; and we were undertaking very little development activity compared with 2020.

Despite our change in ownership, our 2013/14 base-year includes many of the estate assets we operate today, so we have chosen to maintain this as our formal base year.

When comparing absolute emission with our baseline, we apply a base-year recalculation procedure, which factors in changes in the portfolio such as divestments, acquisitions, and movements in scope. The key changes to our base-year are summarised below:

- All assets sold since 2013/14 have been removed
- All assets acquired (including those we lease) have been included, with the first year of available consumption data included as the base-year for each asset
- Some assets have moved between scopes, reflecting our current operational control approach
- We have excluded some emission sources that we measured in 2013/14 as they are no longer material to us; these remain in the base-year for reference
- We have included some emission sources that were not included in the 2013/14 inventory; where they relate to assets that existed in the base-year, base-year estimates have been made based on the first year of available data for the new emission source.

Development growth is not added to the new base-year total, reflecting the fact that newly constructed assets did not previously exist so could not generate emissions. Just 9% of our current standing assets by floor area existed in 2013/14, which demonstrates the significant pace of construction we have undertaken since then. Emissions from our downstream leased assets are now a significant part of our GHG Inventory, where previously they were not measured. The most significant inclusion however is emissions relating to embodied carbon at the three main life-cycle stages. These emissions overshadow those from any other source, which is why as outlined earlier in this section, we are investing significant effort into making reductions in this area.

Table E sets out our original base-year, as well as our adjusted base-year taking into account the factors described above.

We have then provided a direct comparison with our recalculated base-year, taking into account only the assets and emission categories that are included in that total.

This shows an 18% reduction in Scope 1 emissions; a 46% reduction in

Scope 2 emissions; and a 39% reduction in Scope 3 emissions.

Table E breaks down the 2013/14 base-year and the recalculated base-year by GHG Inventory Category to allow a comparison with our 2020 GHG Inventory figures.

E. Base-Year and Recalculated Base-Year Emissions

	2013/14 Base-Year			Recalculated Base-Year			2020 Direct Comparison with Base-Year		
	Scope 1 [tCO ₂ e]	Scope 2 [tCO ₂ e]	Scope 3 [tCO ₂ e]	Scope 1 [tCO ₂ e]	Scope 2 [tCO ₂ e]	Scope 3 [tCO ₂ e]	Scope 1 [tCO ₂ e]	Scope 2 [tCO ₂ e]	Scope 3 [tCO ₂ e]
TOTAL	2,919	4,862	2,591	1,492	1,873	3,727	1,215	1,019	2,271
Corporate Offices	40	166	109	8	120	68	8	58	15
Wembley Park Estate	2,078 ¹	1,953 ¹	863	1,484	1,137	339	1,207	632	325
Quintain Living	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Wembley Park Residential	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Wembley Park Retail	N/A	N/A ¹	Not Available	N/A	615	2,182	N/A	329	1,440
Wembley Park Commercial	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Wembley Park Leisure	N/A	N/A	Not Available	N/A	N/A	1,195	N/A	N/A	492
iQ Property Partnership (50%)	547	1,311	233	Removed	Removed	Removed	N/A	N/A	N/A
Other Assets	77	653	1,247	Removed	Removed	Removed	N/A	N/A	N/A
Assets Sold in Reporting Year	177	779	139	Removed	Removed	Removed	N/A	N/A	N/A

DATA QUALITY, COVERAGE & UNCERTAINTY

All GHG assessments – unless obtained through the direct measurement of gases released at source – are estimates. The quality of our reporting is determined by the quality of our input data, the treatment of that data, the proportion of the overall data within scope that is available and the level of certainty we have that the activity data and emission factors we are applying are accurate.

Our GHG Data Management Procedures set out how our data is obtained and treated in order to generate our GHG Inventory, and there are several measures used that provide indications of completeness and data quality.

Our emissions are reported alongside a coverage figure, which sets out the proportion of data within scope that we have reported on. Our target is to further improve data to achieve a coverage level of 90% of data by Gross Internal Area across all emission sources. Whilst we do estimate some data, this is only in specific circumstances, such as where we are missing a small portion of data across the year and we have sufficiently robust actual data from which to make an educated estimate. In 2020 there were a number of vacant retail units at Wembley Park that were handed over in the previous 12 months, but where due to the pandemic, we have not had the resource and/ or access to obtain

meter readings; this also applies to individual tenant water meters, which we hope to be able to collect in the future.

To factor in missing data, we provide a coverage figure which gives an indication of the percentage of data that we have been able to obtain in each category based on floor area. Floor area isn't a perfect metric – not all supplies relate to a specific area (for example those that supply the public realm); and floor area is not a reliable indicator for the proportion of activity data and emissions that are missing, but it is the most consistently available data available to us.

On completion of the GHG Inventory, an assessment of uncertainty in our GHG Inventory is made by applying an uncertainty interval to each source of activity and emission factor data based on the quality of the data.

Our Methodology section outlines each source of activity and emission factor data applied to our GHG Inventory and reported in this report, along with the uncertainty interval applied to that data and the calculation procedure we have adopted that results in the aggregated uncertainty levels in Table F.

Based on the uncertainty estimates, we have also provided an upper and lower limit of potential emissions by emission source, as well as an aggregated total for all emissions.



PROPERTY

CLIMATE CHANGE



Note that the more data included in the assessment, the lower the overall uncertainty level becomes; aggregated totals reflect this and are not a sum of the reported sub-category totals.

Our Category 1 emissions are a 'Good' representation of the emissions in this category; gas supplies from national grids show a small level of variation in emissions, and emission factors are therefore generally reliable. Our activity data is also of good quality, the majority based on actual meter reads or apportioned from actual meter reads. Vehicle emissions are based on fuel card consumption, which is deemed to be of good quality.

Fugitive emissions are deemed to be immaterial based on their contribution to 2013/14 totals and have therefore been scoped out of our 2020 inventory.

Our Category 2 emissions are a 'Fair' representation of the emissions

in this category; unlike gas from national grids, grid electricity fluctuates significantly depending on when it is consumed, and we do not have that level of granularity on our data, or the actual emissions associated with the electricity we consume.

This is typical of the market, and we do not envisage any improvements on this score in the medium-term, until electricity consumption and associated emissions are reported more accurately by suppliers. In our base-year, there were no heat supplies across our portfolio, in either Category 2 or Category 5. There is only one heat supply that sits within our operational control, and this is a new asset. Similar to our treatment of fugitive emissions, we have scoped out emissions relating to transport from our 2020 GHG Inventory. Again, this is based on their minimal contribution to our total emissions and the fact that the majority of business travel is local, using sustainable

modes of transport.

Our Category 4 and Category 5 emissions provide a 'Poor' representation of emissions; this is mainly due to the high level of uncertainty associated with embodied carbon assessments and the inclusion of the different life-cycles in these two categories. In particular, the emissions associated with future events, such as those relating to in-use and end-of-life stages, are particularly difficult to estimate, and we believe provide a significant over-estimate of emissions. This is because as the grid decarbonises, industrial processes will also decarbonise by default. If as a country we are to remain on target to meet legally binding GHG reduction commitments, then these emissions will drop to zero within the 60-year design life accounted for in the calculation of these emissions.

F. Uncertainty Analysis & GHG Inventory

Base-Year Comparisons

	2013/14 Base-Year	Recalculated Base-Year	2020 GHG Inventory			
	GHG Inventory [tCO ₂ e]	GHG Inventory [tCO ₂ e]	GHG Inventory [tCO ₂ e]	Aggregated Uncertainty	Lower Limit Emissions [tCO ₂ e]	Upper Limit Emissions [tCO ₂ e]
GHG INVENTORY	10,372	7,148	105,841	+/- 29.9%	74,224	137,459
CATEGORY 1: DIRECT GHG EMISSIONS	2,919	1,492	1,215	+/- 9.6%	1,099	1,332
1.1 Direct Emissions from Stationary Combustion	2,907	1,476	1,203	+/- 9.7%	1,086	1,319
1.2 Direct Emissions from Mobile Combustion	0	3	13	+/- 15.7%	11	15
1.4 Direct Fugitive Emissions in Anthropogenic Systems	13	13	N/A	-	-	-
CATEGORY 2: INDIRECT GHG EMISSIONS FROM IMPORTED ENERGY	4,862	1,873	2,351	25.4%	1,753	2,948
2.1 Indirect Emissions from Imported Electricity	4,862	1,873	2,193	27.2%	1,597	2,789
2.2 Indirect Emissions from Imported Energy – Heat	0	0	157	27.3%	114	200
CATEGORY 3: INDIRECT GHG EMISSIONS FROM TRANSPORTATION	59	56	N/A	N/A	-	-
3.5 Emissions from Business Travel	59	56	N/A	-	-	-
CATEGORY 4: INDIRECT GHG EMISSIONS FROM PRODUCTS & SERVICES	1,578	412	69,408	40.8%	41,095	97,720
4.1 Emissions from Purchased Goods & Services ¹	1,290	379	69,364	40.8%	41,051	97,676
4.3 Emissions from the Disposal of Solid and Liquid Waste ² excludes water	19	33	44	20.2%	35	53
4.4 Emissions from the Use of Assets Leased by the Organisation	268	0	0	-	-	-
CATEGORY 5: USE OF PRODUCT	954	3,315	32,868	42.8%	18,806	46,929
5.1 Emissions from the Use Stage of the Product ³	954	0 ⁴	20,900	+/- 60.8%	8,187	33,612
5.2 Emissions from Downstream Leased Assets	N/A	3,315	5,024	17.8%	4,130	5,918
5.3 Emissions from End-of-Life Stage of the Product	N/A	N/A	6,944	85.6%	1,001	12,887

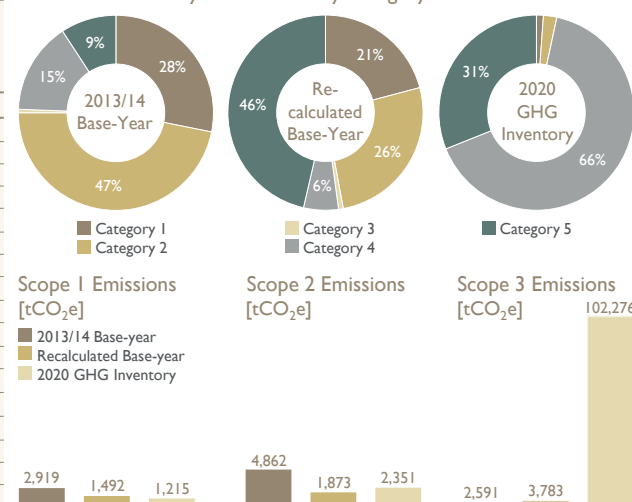
EXPLANATORY NOTES

¹ Emissions from Purchased Goods & Services: This Category includes upstream fuel and energy related emissions only in our 2013/14 Base-Year and recalculated base-year; our 2020 GHG Inventory also includes emissions from life-cycle stages A1 – A5 (also referred to as 'Embodied Carbon') for construction projects completed within the reporting year. As new construction is always additional, the base-year has not been adjusted to reflect a new source of emissions. ² 2013/14 figures excluded water consumption; this is included in the recalculated base-year and 2020 GHG Inventory. ³ In 2013/14, this included emissions relating to the life-cycle energy consumption of assets completed and sold within the reporting year. The 2020 GHG Inventory instead includes emissions associated with the maintenance and replacement of building materials, or life-cycle stages B1 – B3, which were not previously calculated, and for the reasons stated previously are additional and therefore not reflected in the recalculated base-year. ⁴ Our recalculated base-year excludes these to avoid double counting (these are now included on an annual basis in the emissions from our downstream assets where they remain within our operational control).

⁵ These uncertainty figures need to be read with caution as the methodology for calculating parametric uncertainty is not appropriate for use where individual uncertainty figures are greater than 60%.

Base-Year Comparison

% Total Emissions by GHG Inventory Category



RESILIENCE & ADAPTATION

Our objective is to ensure our assets and infrastructure are resilient and where necessary, adaptable in the face of a changing climate and potential increases in events such as flooding and overheating.

Changes to climate and increased weather events linked to climate change in the UK include warmer and wetter winters; hotter and drier summers; and more frequent and intense weather extremes. 2020 was the UK's third warmest, sixth wettest and eighth sunniest year, and the only year that features in the Top 10 ranking for all three measures.

RESILIENCE THROUGH DESIGN

Ensuring that our buildings and public realm are resilient in the face of these changes will ensure their longevity and fitness for purpose into the future, so we are planning now for these future scenarios.

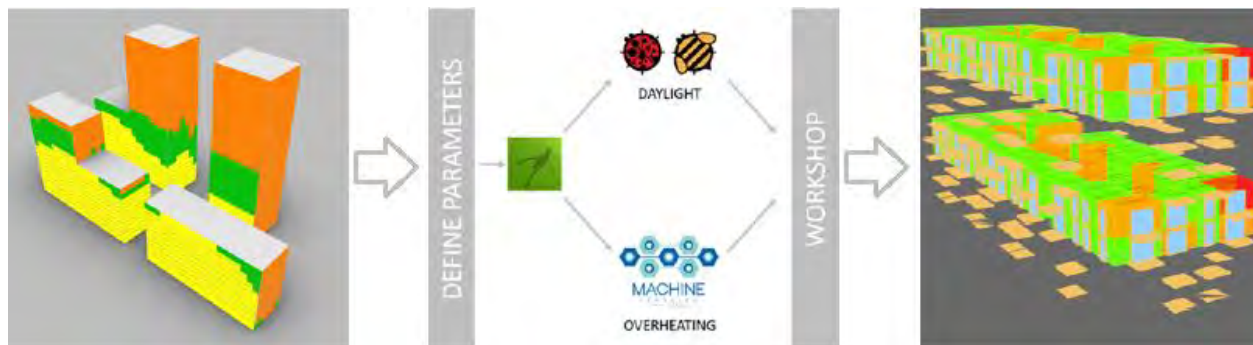
In the UK, we can expect warmer and wetter winters; hotter and drier summers; and more frequent and intense weather extremes. This is already having an impact on buildings and infrastructure, so considerations around the materials and methods we use, and the ways in which we design play an integral part in our design process. This will help to reduce our exposure to climate-related financial risks; and for our occupants, will result in a more comfortable environment.

OVERHEATING

All of the UK's ten warmest years on record have occurred since 2002, and heatwaves are now 30 times more likely to happen due to climate change. At the same time, improvements in the insulation of buildings and increased airtightness can mean that during periods of high temperatures, heat is trapped, resulting in overheating. One of the challenges we have is balancing the need for adequate daylight – which has significant health and wellbeing benefits and is

therefore desirable – with allowing in too many solar gains. Early in the design process, a massing exercise is carried out using award-winning software developed by Buro Happold Engineering. This generates a model that includes all surrounding objects that could contribute to overshadowing the proposed buildings. A high-level overheating and daylight analysis is then carried out on the massing model, simulating internal daylight and using machine learning algorithms that can predict the overheating risk without detailed modelling; this identifies areas of the façade where it is likely to be challenging to meet overheating and/or daylighting targets, identifying the areas where a specific design response is required. A colour-coded model is produced which highlights areas of the façade which are likely to pose overheating and/or daylighting challenges, and which allows the design team to make design interventions to reduce the risk of overheating and/or improve daylighting performance. Measures can include changes to glazing widths and depths; the inclusion and location of balconies to provide shading; the use of special glazing coatings which adjust the quantity of solar gains that are absorbed into the building; and the use of mechanical ventilation with heat recovery to mechanically purge the warm air. Some of these options have impacts on energy performance, so thermal modelling is also carried out to ensure this also stays within defined parameters.

As the design progresses, more detailed analysis is carried out by our design teams, using CIBSE Guide TM52 to ensure that a peak day solar gain of 2.25kWh/m² is not exceeded.



An assessment optimising daylighting and overheating using parametric analysis and machine learning carried out by our MEP Engineers at Buro Happold for forthcoming Plot NE02

FLOODING & DROUGHT

Rainfall measurements fluctuate from year to year, but UK climate projections suggest increases in winter rainfall in most parts of the country and significantly drier summers, and although summers will be drier, we can expect less frequent but much more intense summer rainfall, which poses a greater risk of 'flash flooding', because without regular rainfall, the ground becomes dry, and it is then more difficult for rainwater to be absorbed.

Droughts are already relatively common in the UK, but a severe drought, which would typically occur after 24-36 months of below average rainfall, could have significant impacts on our daily lives. In London, Thames Water estimate the cost of a severe drought to London's economy at £330m per day, resulting in severe economic, social and environmental consequences.

Whilst many of the mitigation methods for dealing with severe drought and flooding involve large infrastructure interventions and are outside our scope of influence, we incorporate measures to ensure that our buildings and public realm are not using more water than is necessary and can manage large influxes of rain and stormwater should they occur. Water efficient appliances, drought-resilient planting and natural rainwater and stormwater treatment across our public realm are some of the ways in which we manage this.

Further details of infrastructure measures can be found in the Biodiversity & Natural Capital section of this report.



PROPERTY

RESOURCE EFFICIENCY

OUR OBJECTIVES

Sustainable consumption helps to ensure that the many natural resources that are fundamental to our health, wellbeing and quality of life will still be available for us to use in the future.

By using resources efficiently, we reduce our impact on the environment and improve the overall sustainability of our business and of our occupants through reduced GHG emissions and reduced spend.

ENERGY USE & EFFICIENCY

Objective: To design, construct and operate our assets in an energy efficient manner, identifying opportunities for reductions and over time, reducing overall energy consumption.

WATER USE & EFFICIENCY

Objective: To design, construct and operate our assets in a water efficient manner, identifying opportunities for reductions and over time, reducing overall water consumption.

WASTE & CIRCULAR ECONOMY

Objective: To reduce the quantity of material described as waste; efficiently manage the waste that we and our occupants generate; and to optimise facilities and opportunities for reuse and recycling across our value chain.



PROPERTY

RESOURCE EFFICIENCY



ENERGY USE & EFFICIENCY

Our objective is to design, construct and operate our assets in an energy efficient manner, identifying opportunities for reductions, and over time, reducing overall energy consumption.

Whilst our assets are predominantly residential in archetype, we have a wide variety of assets and occupants in our portfolio, as well as a wider estate that we manage.

In the first instance, we aim to design buildings and infrastructure that are energy efficient from the outset; our approach to the design of our buildings has evolved over time, adapting to the needs of our occupiers and operational management teams. The feedback we receive as a result of our longstanding operational presence is hugely valuable in understanding and improving energy performance, and lessons learned in our existing assets are actively applied in the design of our new buildings.

ENERGY EFFICIENT DESIGN

Reducing the demand for energy is the first step in our approach to energy efficient design, contributing to lower operational costs and reduced GHG emissions.

Building Regulations Part L is the primary tool for estimating energy consumption at the design stage of a project and is generally the basis against which improvements are measured. It provides a calculation methodology that compares a compliant notional building of the same size, shape and orientation with the building under design or construction and checks for compliance, ensuring that the building fabric meets a minimum standard and that other efficiency measures are incorporated.

Part L makes standardised assumptions and was never intended to be a design tool, but so long as we understand the design assumptions

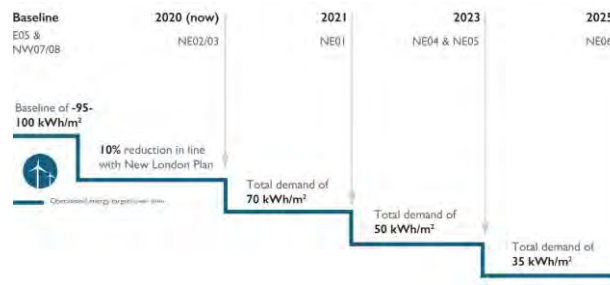
used, these can be accounted for to provide more accurate assessments of energy in use.

We know, for example, that Part L only includes regulated (heating, lighting, pumps and fans) consumption, which in many scenarios cannot be easily separated from the measurement of unregulated (for example plug-in equipment) consumption, so when making comparisons between design and as-built performance, we need to factor this in.

We also know that Part L applies certain assumptions based on the floor area of a property regarding occupancy and usage patterns, which won't necessarily correspond with how the building is used. In commercial buildings, CIBSE TM54: *Evaluating Operational Energy Performance of Buildings at the Design Stage* can be applied to provide a more accurate estimate of consumption in-use, adjusting those assumptions so that they relate to how the building is actually going to be operated. In residential buildings, where there are a large number of different occupants, all with different patterns of usage, it isn't possible to adopt this approach, so we must instead just be aware of how individual apartment consumption can vary as a result of occupancy and the behaviours of individual occupants.

DESIGN TARGETS

Part of our Pathway to Zero Carbon workstream has been to develop targets for maximum energy consumption in our new buildings, reducing over time. Taking into account best practice guidance from the Royal Institute of British Architects (RIBA), the London Energy Transformation Initiative (LETI), as well as the ambitions of the Greater London Authority (GLA) we have defined the following trajectory for the next phase of development at Wembley Park, the North East Lands:



Our targets currently only apply to our residential development, but as this is the majority of our development portfolio over the next five years, it is sensible for us to focus on this part of our asset portfolio.

DESIGN APPROACH

To achieve these levels, we adopt a 'fabric first' approach, prioritising passive measures and ensuring our buildings are well-insulated and airtight, with controlled, energy-efficient ventilation is incorporated to ensure occupant comfort. We carry out parametric modelling at an early stage to understand the effects that orientation and glazing areas will have on energy consumption, as well as other parameters such as overheating and daylighting. Measures to reduce summer overheating can have the effect of reducing beneficial solar gains in winter, increasing energy consumption, so our approach involves fine tuning to ensure a balance across the different measures is achieved.

Our construction teams are appointed early in the process so that they can work in collaboration with our design teams; this helps to ensure that everybody understands what we are trying to achieve, and that 'value engineering' measures that could jeopardise energy performance are limited.

CONSTRUCTION

We appoint a specialist independent cladding consultant who is involved at all stages, from developing the brief to reviewing external works and providing final sign-off of the completed building. This addresses the issue of ownership that was identified by Dame Hackett in her review of Building Regulations and fire safety, and applies equally to ensuring continuity in the thermal performance of our buildings and the avoidance of thermal bridges.

We also appoint a site-wide Mechanical, Electrical and Plumbing (MEP) guardian, whose remit is to review technical submissions, carry out regular site inspections as construction progresses, and support the commissioning and handover process. Installation can have an adverse effect on performance, particularly for example, with ductwork, so ensuring construction is in compliance with design drawings is essential to ensuring the intended performance of this equipment.

COMMISSIONING & HANDOVER

The commissioning and handover process typically commences 12 months before the due handover date, when our mobilisation team begin to familiarise themselves with the operational details of the building and are involved in regular discussions with the project and construction teams to ensure a 'no-surprises' environment on



PROPERTY

RESOURCE EFFICIENCY



completion. We adopt a soft handover process which involves training and familiarisation sessions with building users, ensuring that the right people are present. Where additional training is required, this is carried out before handover.

At Quintain Living, the increasing scale of our operations and gaps in the skillset of the existing team have led to the recent appointment of a dedicated facilities manager who will focus on the efficiency of our residential assets.

ENERGY EFFICIENT OPERATION

Once a building is completed and handed over to our operational teams, we monitor energy use and adopt a number of strategies to reduce energy consumption.

METERING STRATEGIES

The metering strategy for a building plays an important role in providing an in-depth understanding of how assets are performing. The level of detail at which sub-metering is applied needs to relate to sensible end uses, but also be manageable. It can be difficult to understand at design stage what will be useful to measure and monitor, but effort made here can ensure our assets are operated more efficiently.

Our metering strategy for our build to rent (BtR) residential assets has evolved over time as we develop a greater understanding of our data needs and uses. We have an advantage over traditional 'build for sale' in the fact that we are directly responsible for energy supplies and are therefore able to access individual apartment consumption data without any data protection constraints. We originally followed a traditional metering approach, providing individual smart electricity, heat and water meters to each apartment. Despite this, we have had unexpected difficulties in obtaining accurate consumption data and bills from our suppliers, with a large proportion of our billing still based on estimated readings several years post-completion. As a result, our metering strategy has been adjusted so that we have better control over our data, and we now provide separate landlord and bulk apartment supplies that are then sub-metered and monitored separately via our own data platform. The bulk supplies provide a single total that we use for reporting and for understanding aggregated building performance; whereas the sub-metered supplies can be used to understand individual apartment consumption and assist with resident engagement.

ENERGY CONSUMPTION

All of our assets are monitored on at least a quarterly basis, with the vast majority more frequently, and where potential consumption issues are identified, increased monitoring is carried out to help identify the reason.

We benchmark assets of a similar type against each other which helps to identify outliers and potential performance issues. Whilst in some cases, large differences can be justified through differences in services provided, equipment and operational patterns, where this is not the case, further investigation is carried out. For the reasons mentioned in the previous section, benchmarking performance against design can be difficult, but where possible and where data can be broken down so that it is comparable, we also carry out this analysis.

ENERGY WITHIN OPERATIONAL CONTROL

Our energy consumption within operational control covers the gas, electricity and heat supplies where we have the most influence over consumption. This includes our own offices and the supplies across the Wembley Park Estate, as well as landlord supplies in our residential, retail and commercial assets. This also includes where we are responsible for the generation of heat for others to consume. For several of our earlier residential assets, where we are responsible for the management of landlord areas which supply both our own BtR apartments and private apartments not included within our portfolio, consumption is split between Quintain Living and Wembley Park Residential on a proportional basis.

INSIGHTS

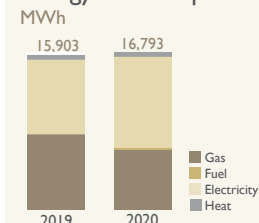
A small increase in absolute consumption, against a 55% increase in floor area

In 2020, absolute energy consumption increased by 5.6%, however this is against a backdrop of a 55.5% increase in operational floor area.

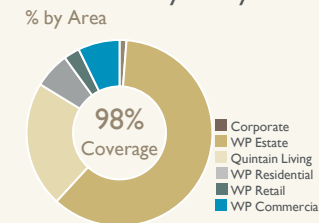
We have seen a significant drop in gas consumption, but as our only gas supply feeds the boilers that provide heat for Wembley Hilton, Raffles House Student Accommodation and London Designer Outlet, this is not surprising - these assets have all been impacted in one way or another by COVID-19 and the various periods of lockdown. Similarly, energy consumption within our own offices and landlord areas of retail assets has reduced, corresponding with reduced occupation of these assets.

All residential development completed in 2020 is part of Quintain Living, resulting in a 157% increase in operational area compared with 2019; this explains our higher consumption across those assets. Whilst many people have spent more time at home in 2020, this does not appear to be reflected in consumption figures.

Energy Consumption



Breakdown by Entity



A. Absolute Energy Consumption within Operational Control

	2020						2019					
	Gas kWh	Other Fuel kWh	Electricity kWh	Heat kWh	Annualised Area m ²	Data Coverage % Area	Gas kWh	Electricity kWh	Heat kWh	Annualised Area M ²	Data Coverage % Area	
TOTAL	6,540,965	54,728	9,407,046	790,062	218,652	98.04%	8,045,848	7,743,152	113,760	140,563	98.79%	
Corporate Offices	42,266	N/A	381,545	N/A	2,645	77.95%	Not Available	763,419	N/A	2,526	72.96%	
Wembley Park Estate	6,498,699	54,728	2,905,106	N/A	132,575	99.59%	8,045,848	2,505,512	N/A	98,703	100.00%	
Quintain Living	N/A	N/A	3,213,710	N/A	47,897	100.00%	N/A	1,538,426	N/A	18,602	100.00%	
Wembley Park Residential	N/A	N/A	715,148	N/A	13,680	100.00%	N/A	844,717	N/A	13,632	100.00%	
Wembley Park Retail	N/A	N/A	1,447,673	N/A	6,041	47.82%	N/A	1,945,188	N/A	2,551	60.16%	
Wembley Park Commercial	N/A	N/A	743,863	790,062	15,814	100.00%	N/A	145,891	113,760	4,549	100.00%	



PROPERTY

RESOURCE EFFICIENCY



B. Like-for-Like Energy Consumption

	2020		2019	
	Gas kWh	Electricity kWh	Gas kWh	Electricity kWh
TOTAL	6,498,699	5,072,573	8,045,848	5,965,563
Corporate Offices	0	286,120	0	335,639
Wembley Park Estate	6,498,699	2,342,805	8,045,848	2,256,078
Quintain Living	0	471,175	0	704,392
Wembley Park Residential	0	568,075	0	726,982
Wembley Park Retail	0	1,404,397	0	1,942,472

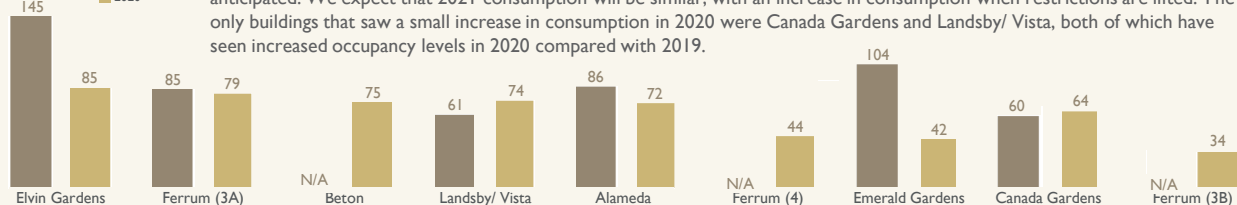
As our portfolio of assets is rapidly growing, we have few energy supplies where we are able to make full-year like-for-like comparisons, and fewer still where we are able to compare directly with our 2013/14 baseline; on top of this, 2020 has been an exceptional year in terms of energy consumption, and 2021 is likely to follow a similar pattern due to continued lockdowns. Whilst it is expected that office, retail and general estate consumption would be lower as a result of the significantly reduced activity across those types of asset, we have also achieved a reduction in landlord electricity consumption across our residential assets. Whilst more people are spending time at home, we have seen a 33% reduction in landlord consumption at Quintain Living, and a 22% reduction across Wembley Park Residential. This is most likely as a result of reduced use of communal spaces such as in-building gyms, lounges and entertainments spaces which have been closed for significant periods due to social distancing requirements.

INSIGHTS

Residential Landlord Areas Energy Intensity

kWh/m²

2019 2020



Across the majority of our residential assets, consumption per m² of landlord area has reduced in 2020, on average by 13%. Our landlord areas include the common social spaces, gyms and other facilities that during lockdown have had to close, so this is anticipated. We expect that 2021 consumption will be similar, with an increase in consumption when restrictions are lifted. The only buildings that saw a small increase in consumption in 2020 were Canada Gardens and Landsby/ Vista, both of which have seen increased occupancy levels in 2020 compared with 2019.

INSIGHTS

W05

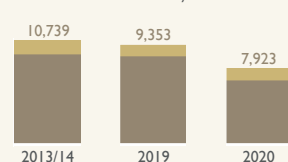
W05 - which includes the Envac Waste Transfer Station, the Gold Parking, the Western Lands Energy Centre and other centralised plant that we operate that supplies mechanical and electrical services to Hilton London Wembley, iQ Student Accommodation Raffles House, and London Designer Outlet - has been in operation since 2012, so we have several years of data for this asset, and we have seen a continuous improvement in energy performance over time.

We did see a small increase in electricity consumption in 2020 compared with 2019, however this is associated with a 50% increase in asset area connected to Envac, and this still represents a 9% reduction compared with our baseline. Overall heat demand increased by 11% in 2020 compared with 2019, largely due to increased space heating consumption in the residential-led assets. We don't have access to occupancy data, but this is likely to be due to these assets still being used during periods of lockdown, which occurred during the heating season and led to more people being confined

Annual Consumption

MWh

Gas Electricity



to their living spaces during the day, increasing overall space heating demand. Our gas consumption continued to fall despite this, with boiler seasonal efficiency improving and now achieving 86% after continued adjustment of return temperature setpoints to achieve more efficient operation.

INSIGHTS

Parking

At Wembley Park, parking is a significant component of our estate wide electricity consumption. Historically, the majority of this was provided by surface parking facilities, which have now been replaced by new development. In order to maintain the capacity required for event day parking, as we build, we are replacing our surface parking with multi-storey parking facilities and event day parking within buildings.

In 2012, we opened Gold Parking, located inside W05, followed in 2013 by Red Parking, a large multi-storey facility adjacent to London Designer Outlet. This was followed in 2020 by Pink Parking, another multi-storey facility with space for 656 cars and 246 coaches. In 2021, we will be opening the new Green Parking in E03 and Blue Parking in E05.

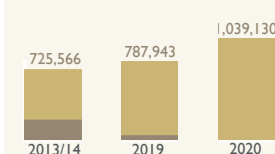
By their nature, covered parking facilities require additional lighting and have higher electricity consumption due to their lighting and ventilation needs. Gold Parking is underground and fully enclosed, whereas Red Parking is open to the sides, and consumption differences can be seen as a result of this difference. It is too early to provide a comparison with Pink Parking, which has had abnormal usage patterns in its first year of operation and has been mainly used as parking for contractors and key workers who have needed to avoid public transport.

The drop in consumption at Gold Parking in 2019 is being retrospectively investigated; there are limited options for reducing consumption in this asset without a full lighting retrofit, so it is unclear how such a reduction was achieved.

Annual Consumption

kWh

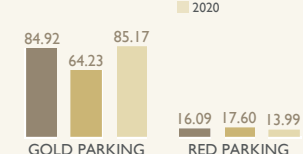
Covered Surface



Energy Intensity (covered)

kWh/m²/year

2013/14 (Base Year) 2019 2020



LfL Reduction over 2019: Gas

19%

LfL Reduction over 2019: Electricity

15%



PROPERTY

RESOURCE EFFICIENCY



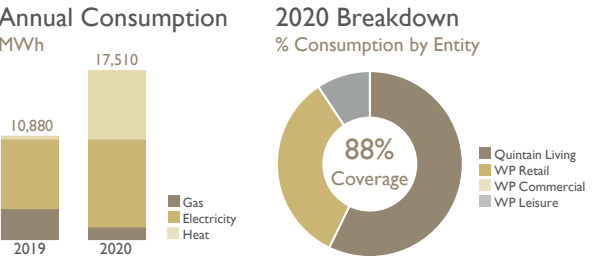
ENERGY OUTSIDE OPERATIONAL CONTROL

In 2020, we once again began collecting data from our tenant areas to improve our overall understanding of energy consumption within our assets. Whilst we have previously collected some of this data, we do not have a full dataset for 2019 to allow a full comparison to be made, and whilst on the surface it appears that there has been an increase in absolute consumption of 61%, this corresponds with an 60% increase in data coverage.

Our most significant area of consumption outside our control currently relates to our residential occupiers and retail tenants, however this is because of the very limited activity across our leisure assets in 2020. In a year with a ‘normal’ event schedule, it is likely that consumption at The SSE Arena, Wembley would contribute more significantly to our total.

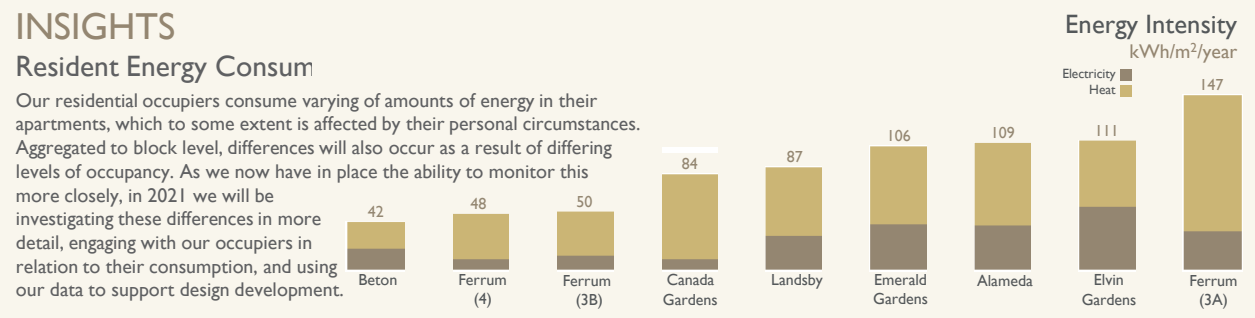
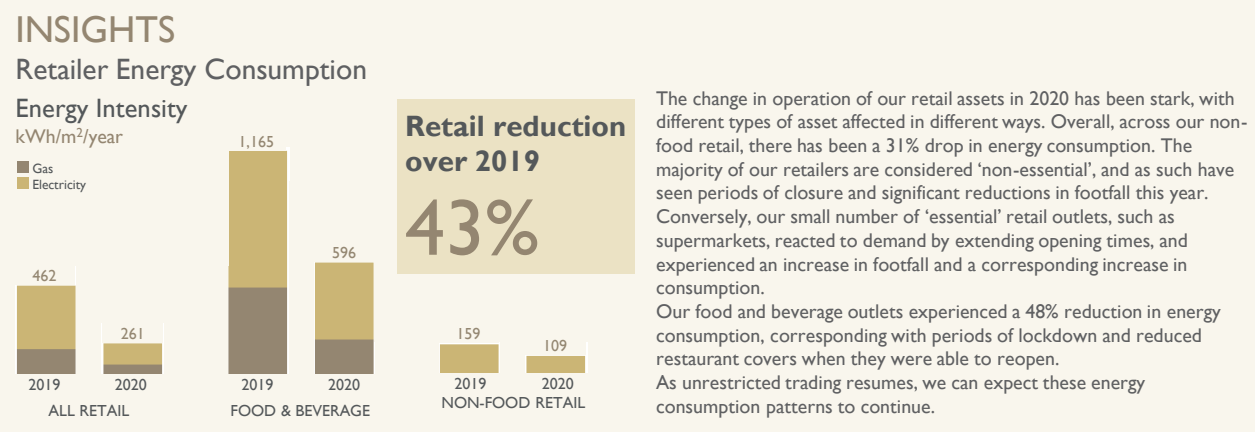
Our metering strategy discussed on the previous page has allowed us to more easily collect data relating to consumption in our residential assets through the use of bulk supplies, and we have achieved 99% data coverage in 2020 as a result – the small quantities of missing data relate to the period between handover from the construction team and operation of the building as an active asset, where handover meter readings were not available. We are confident that consumption during this period is minimal.

We have over 130 individual retail units within Wembley Park, and whilst the majority of meters are read on a monthly basis, we have had some difficulties gaining access and having the resource to read these meters in 2020. Wembley Park Boxpark is also included in these figures, although we only have a 50% stake in this asset and have no operational involvement; this accounts for 12% of our retail area. A further 9.5% is accounted for by Cineworld at LDO, where again, we do not have access to meters or consumption data.



C. Absolute Energy Consumption outside Operational Control

	2020					2019				
	Gas kWh	Electricity kWh	Heat kWh	Annualised Area m²	Data Coverage % Area	Gas kWh	Electricity kWh	Heat kWh	Annualised Area m²	Data Coverage % Area
TOTAL	1,248,804	9,333,040	6,928,149	163,154	87.49%	3,068,683	7,388,825	422,885	76,801	27.17%
Quintain Living	N/A	3,087,342	6,928,149	116,816	98.92%	N/A	132,045	422,885	44,709	17.95%
Wembley Park Retail	1,248,804	4,612,562	N/A	38,162	52.98%	3,068,683	7,256,780	N/A	23,916	53.69%
Wembley Park Leisure	N/A	1,633,137	N/A	8,175	85.23%	N/A	0	N/A	8,175	0%



PROPERTY

RESOURCE EFFICIENCY



WATER USE & EFFICIENCY

Our objective is to design, construct and operate our assets in a water efficient manner, identifying opportunities for reductions, and over time, reducing overall water consumption.

In a similar vein to our approach to energy use and efficiency, we design our assets to be water efficient from the outset, and then ensure that this is monitored during operation to identify any issues and potential reduction opportunities.

WATER EFFICIENT DESIGN

Reducing the demand for water in our buildings and across our public realm are the first steps in our approach to reducing our overall water consumption.

WATER USE IN OUR BUILDINGS

Building Regulations Part G includes a method for estimating water consumption per person, per day in residential apartments is based on the types of fittings installed. Average UK water consumption per person per day in a single person household is currently estimated to be 149 litres. New dwellings are required to include fittings to reduce this to 125 litres per person per day, and our design requirements push this further, ensuring the combination of fittings and appliances we provide allow a maximum of 105 litres per person, per day to be consumed. We use a combination of fittings and appliances that reduce consumption, without impacting on the experience of our occupants. Across our commercial assets, we adopt a similar approach, in addition installing leak detection equipment to identify any potential supply problems.

WATER USE IN OUR LANDSCAPING

Our landscaping strategies vary depending on their location within the public realm. Particularly in recent years, we have installed planting that requires minimal water and can survive in periods of drought, and a large proportion of the new park currently under development will be of this low-maintenance type.

There are certain species, particularly of trees, that do have specific watering requirements in the first few years after installation. One of the measures we have adopted is the use of systems such as Silva Cells, which provide stormwater storage, contributing to a reduction in watering volumes required to promote healthy tree development.

WATER USE ACROSS THE PUBLIC REALM

Across the public realm, we have several thousand square feet of hard landscaping which needs cleaning on a regular basis. Two of the main items we have to contend with are manmade chewing/ bubble gum litter; and the natural problem of algae, particularly on our concrete surfaces. Instead of cleaning by jet washing these surfaces, which would use large volumes of water, we adopt alternative approaches such as the use of the EcoGum system for sticky substances.

EcoGum safely removes chewing gum, sticky labels, oils stains, rubber and other similar products that are difficult to sweep away in the public realm. An eco-friendly detergent is fed into a boiler located in a backpack powered by a rechargeable lithium battery that vaporizes the sticky substance; it can then be safely swept away.

Water has a great amenity value across the public realm, so it is carefully incorporated to reduce the need to top up with potable water supplies. The layout of our new park for example includes the use of rain gardens that will help to keep the new pond topped up with rainwater and manage stormwater as well as providing an attractive visual landscape with amenity value.

WATER EFFICIENT OPERATION

Once a building is completed and handed over to our operational teams, we monitor water use and adopt a number of strategies to reduce consumption; the same applies across our public realm.

METERING STRATEGIES

Similar to the way in which we monitor our energy consumption, our metering and monitoring strategies allow us to understand how assets are performing.

Most notably in our newer residential buildings, we now include a single bulk supply that feeds both landlord and resident areas. Whilst individual sub-meters are useful for honing in on areas of consumption, the aggregated total can be unreliable due to failed or non-communicative sub-meters, so this approach provides a definitive

total and reduces our risk of under-reporting, allowing us to compare and understand total building consumption. As the majority of water consumption in our residential buildings is resident consumption, the total for these buildings is recorded as being outside our operational control; a building total comparison has been provided by residential asset on the following page for all residential buildings.

WATER CONSUMPTION

In 2020, our water consumption within operational control has almost doubled, however this is against a backdrop of a 21% increase in data coverage by floor area and a 62% increase in floor area; outside our operational control, this is our first year of reporting.

We monitor water and benchmark water consumption in the same way that we monitor energy consumption.

Water consumption in our buildings is monitored on an absolute basis, so is difficult to compare with design consumption which is based on a maximum level of consumption per occupant. We do, however, benchmark consumption across our buildings, using different methods depending on the water area supplied.

WATER WITHIN OPERATIONAL CONTROL

The following pages set out our 2020 consumption (and where available, compares this with 2019), providing insights into our usage patterns where possible.

We have achieved 98% data coverage this year, a vast improvement on the 77% coverage we achieved in 2019. This is mainly due to increased visibility of across our residential assets.

The only asset across the Wembley Park Estate for which like-for-like water consumption comparing 2019 and 2020 is available is the Red Parking. This has seen an 87% reduction in consumption, partly due to reduced car park usage – but mainly due to the provision of car cleaning services. Originally intended to be a steam cleaning operation, it was discovered in 2019 that full car washing services were being provided that were not being carried out in a water efficient manner. The lease was ultimately terminated, and this service is no longer offered, resulting in the significant reduction in water consumption we have witnessed.



PROPERTY

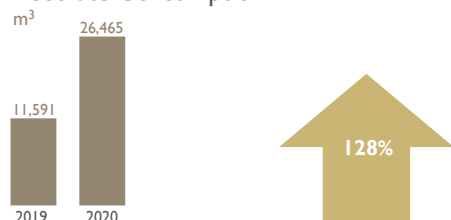
RESOURCE EFFICIENCY



A. Absolute Water Consumption within Operational Control

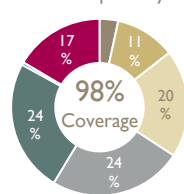
	2020			2019		
	Water m ³	Annualised Area m ²	Data Coverage % Area	Water m ³	Annualised Area m ²	Data Coverage % Area
TOTAL	26,465	110,321	98.37%	11,591	68,218	77.63%
Corporate Offices	906	2,582	46.13%	937	2,526	27.74%
Wembley Park Estate	2,919	62,095	99.52%	6,105	31,554	99.05%
Quintain Living	5,223	14,912	100.00%	1,488	14,717	39.51%
Wembley Park Residential	6,476	13,565	100.00%	2,751	13,518	83.53%
Wembley Park Retail	6,439	1,354	92.05%	0	1,354	0.00%
Wembley Park Commercial	134	15,814	100.00%	309	4,549	85.71%
Wembley Park Leisure	4,369	N/A	N/A	Not Available	N/A	N/A

Absolute Consumption



2020 Breakdown

% Consumption by Entity



B. Like-for-Like Water Consumption within Operational Control

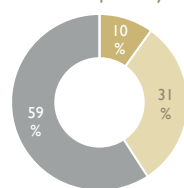
	2020	2019		
	Water m ³	Water m ³	Area m ³	% Change
TOTAL	8,269	10,344	48,360	-20.06%
Wembley Park Estate	821	6,105	31,254	-86.55%
Quintain Living	2,556	1,488	5,815	71.81%
Wembley Park Residential	4,892	2,751	11,291	77.78%

Like-for-Like Consumption



2020 Breakdown

% Consumption by Entity



WATER OUTSIDE OPERATIONAL CONTROL

For assets outside our operational control, there is no like-for-like comparison as no water data was collected in 2019; in 2020 we have achieved 82% coverage by area across the assets that are outside our operational control. The majority of missing data is from our retail assets, where, due to COVID-19 restrictions, we were unable to arrange access to obtain this data for most of the year. As our newer residential assets include a single bulk supply that serves both landlord and resident areas, this is the basis for which we compare the water consumption of our residential assets. Due to the metering arrangements in our earlier residential buildings outlined earlier in this section, we currently only have estimated water consumption data from the supplier in those apartments.

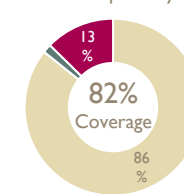
Our leisure assets include The SSE Arena, Wembley and Troubadour Wembley Park Theatre, both of which were closed for large portions of the year, so we expect that this will be reflected with higher consumption in future years when COVID-19 restrictions are no longer in place. Data is currently only available for The SSE Arena, Wembley which is the most significant asset by floor area.

C. Absolute Water Consumption outside Operational Control

	2020		
	Water m ³	Annualised Area m ²	Data Coverage % Area
TOTAL	119,568	198,144	82.00%
Quintain Living	102,550	151,807	100.00%
Wembley Park Retail	1,902	38,162	9.69%
Wembley Park Leisure	15,116	8,175	85.23%

2020 Breakdown

% Consumption by Entity



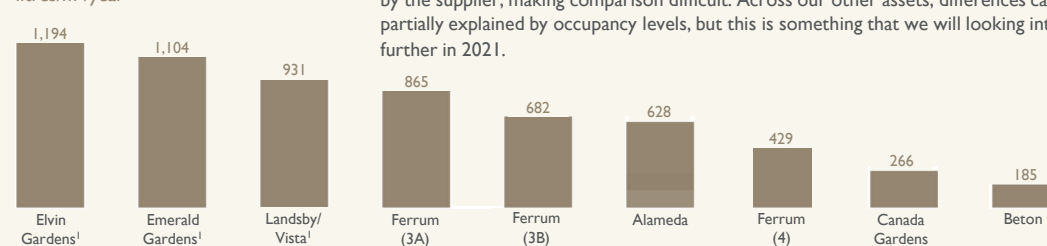
INSIGHTS

Landlord and Resident Water Consumption

Given that some of our residential assets have a single water supply for consumption both within and outside our operational control, the combined total of supplies is most appropriate total for comparison. There is a wide range of water consumption across our buildings; resident water consumption forms the majority of building water consumption, but in our first generation of assets, this is currently estimated by the supplier, making comparison difficult. Across our other assets, differences can partially be explained by occupancy levels, but this is something that we will look into further in 2021.

Water Intensity

litres/m²/year



WASTE & CIRCULAR ECONOMY

Our objective is to reduce the quantity of material described as waste; efficiently manage the waste that we and our occupants generate; and to optimise facilities and opportunities for reuse and recycling across our value chain.

How we manage waste has been an important part of our public realm strategy for over a decade. The decision to pioneer the UK's first - and until recently, only - underground vacuum waste system was made over a decade ago, and we continue to identify ways to reduce, reuse, recycle and recover our waste, achieving 100% diversion of waste from landfill across our operations.

DESIGNING OUT WASTE

Identifying opportunities to reduce waste begins at the design and procurement stages of a project, so we set design briefs to target waste reduction and identify opportunities for higher-value reuse of materials.

OFF-SITE MANUFACTURE

The production of building components off-site in a factory environment can result in significant savings compared with construction on-site – we estimate that we have achieved a 6% reduction in waste through the use of pre-fabricated bathroom pods, MEP risers, precast columns and precast facades at Wembley Park. When constructing specific components in a controlled environment, materials are used more efficiently and offcuts, for example, are significantly reduced. Precast concrete manufacturing facilities employ exact-batch making technologies, resulting in reduced waste when compared with on-site mixing and we are currently investigating the opportunity for using prefabricated plasterboard walls for internal partitions to reduce plasterboard offcuts.

MATERIAL STORAGE

The correct storage of materials can result in significant waste and cost savings by reducing the quantity of materials that are rejected on site because they are damaged. Our off-site consolidation centre offers the advantages of economies of scale in the procurement of materials, whilst safe and secure storage reduces the likelihood of damage. Materials are called-off as required by each contractor, so are not left out overnight or stored in areas open to the elements. The Waste and Resources Action Program (WRAP) estimates that waste savings of between 7% and 15% can be made through reduced damage and shrinkage of materials.

CONSTRUCTION WASTE MANAGEMENT

Each contractor produces a waste management plan and waste predictions are used to determine the best site set up and waste routes for materials, prioritising reduction and reuse where possible. All of our contractors have identified measures to reduce packaging waste and take-back schemes from manufacturers are used where possible to deal with packaging. Our contractors identify offsite opportunities for reusing and reclaiming materials where possible, partnering with charities such as Community Wood Recycling, or working with local organisations to donate materials. A joint project in 2018 as part of our Contractor Community Framework involved the refurbishment of the playground for Ark Academy primary school, carried out using reclaimed materials from the various project sites. These measures have resulted in lower than industry average waste generation totals and higher diversion from landfill figures than industry averages.

A NEW LEASE OF LIFE

Evaluating the materials we already have on hand and finding new ways to reinvent them is an approach we are taking across the business.

DECONSTRUCTION VS. DEMOLITION

The next phase of construction at Wembley Park is on land currently occupied by several industrial buildings. By carefully deconstructing these assets and creating an asset register of the materials we find, we hope to reduce the amount of waste that is removed from site for further processing by identifying higher-value uses for it in the design of the new buildings that will be located in this area of the site.

Our design team has been briefed to identify material that we can reuse from the decommissioned buildings in new buildings, or failing that, identify other potential users in the industry.

PARTNERSHIPS

Our fully-furnished apartments across Quintain Living are designed to withstand robust usage, with furniture and other products selected accordingly. In 2018, we entered into a partnership with John Lewis & Partners to furnish the majority of our apartments across Quintain Living. By building long-term relationships with key suppliers, we can ensure that we are procuring high-quality items that will last, but at the same time, can work together to identify opportunities to meet our shared vision for reducing waste and transitioning to a circular economy.

We are currently planning a refresh of furniture across our earlier apartments; our preference is to repair rather than replace, however, this won't always be possible whilst still maintaining our high standards. Following the partnership that John Lewis formed with The Reuse Network, who have been successfully running the John Lewis Sofa Reuse Scheme since 2014, furniture that is no longer suitable for use in our apartments will be given a second lease of life and passed on to those in need.

John Lewis have committed that by 2025, all own-brand product categories will have a 'buy back' or 'take back' solution, and they are already developing sustainable rental and resale options for their customers. This model is consistent with our BtR model and is something we will be discussing in detail as our partnership progresses.

BUY SWAP SELL

In a recent British Heart Foundation survey, 45% of Londoners revealed that they have thrown away furniture, electrical items and homewares in good enough condition that they could have been reused, sold or donated. This is particularly common when moving home - people want to get rid of items quickly and often don't have the means to move them. In developing our newly-launched Quintain Living App, we have incorporated a 'Buy Swap Sell' feature, which allows residents to exchange unwanted goods easily with each other across Quintain Living. This isn't a new idea, but the heavily localised nature of these exchanges brings a unique community element, reducing packaging and transport, and providing additional opportunities for people to meet.



PROPERTY

RESOURCE EFFICIENCY

WASTE PERFORMANCE

Although we are not directly responsible for the majority of waste generated at our assets, we monitor waste data so that we can provide targeted support to our occupiers.

We are currently working in partnership with Veolia for the collection of waste across Wembley Park, both via Envac and through standard refuse and recycling collections for our retail tenants. From late 2020, this has also included residential waste, which as a service included in Council Tax payments made by residents, has traditionally been collected by the local authority.

52% of operational waste by floor area is currently collected via Envac, 60% of which is via a direct connection, with the remainder collected by the Estate Operations Team and manually deposited into the Envac inlets in the W05 service yard. This includes waste collected from the public realm and from our various offices, hubs and marketing

A. Absolute Waste within Operational Control

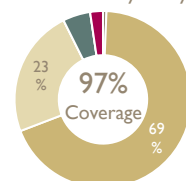
	2020						2019					
	Refuse [kg]	Mixed Recycling [kg]	Organic [kg]	Annualised Area m ²	Data Coverage % Area	Recycling Rate %	Refuse [kg]	Mixed Recycling [kg]	Organic [kg]	Annualised Area m ²	Data Coverage % Area	Recycling Rate %
TOTAL	703,945	35,862	22,942	129,212	99.42%	7.71%	1,272,080	75,520	88,280	73,904	98.04%	11.41%
Corporate Offices	3,977	2,162	882	1,007	26%	43%	Not Available	Not Available	Not Available	1,007	0%	N/A
Wembley Park Estate	699,740	33,700	22,060	127,763	100%	7%	1,272,080	75,520	88,280	72,455	100%	11%
Wembley Park Retail	228	0	0	443	100%	0%	Not Available	Not Available	Not Available	443	0%	N/A

B. Absolute Waste outside Operational Control

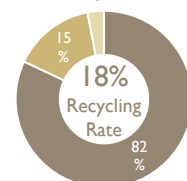
	2020					
	Refuse [kg]	Mixed Recycling [kg]	Organic [kg]	Annualised Area m ²	Data Coverage % Area	Recycling Rate %
TOTAL	197,961	131,592	9,980	124,362	94.46%	41.70%
Quintain Living	142,838	112,456	3,289	104,974	100%	45%
Wembley Park Retail	32,105	19,136	4,051	11,212	49%	42%
Wembley Park Leisure	23,019	0	2,640	8,175	85%	10%

2020 Breakdown

% All Waste by Entity



% All Waste by Waste Stream



facilities.

Our partnership with Veolia is evolving, and we are currently working together to identify opportunities for engagement with our various occupiers on waste, with the intent of reducing waste generation and improving recycling rates. Now that we are collecting residential waste and recycling directly, we are receiving data on the quantity of waste and proportion of recycling for each collection.

Household recycling rates across London are typically lower than the UK average recycling rate of 45%; the London Borough of Brent achieved a recycling rate of 34% in 2019/20 for example.

The population density and resulting large proportion of purpose-built residential accommodation with communal bin stores is often considered to be a key reason for this difference and a Resource London research project that concluded in January 2020 in collaboration with the Peabody Estate and WRAP found that average recycling rates in London apartments are circa 10.7%. Across the seven residential buildings not currently connected to Envac, we achieve an average recycling rate of 45%, which is significantly better than these figures.

As described in our case study below, technical problems with our Envac waste system have resulted in poor recycling rates over the last two years.

All waste collected via Envac is deemed to be within our operational control, even if we don't generate it ourselves. This is because we are unable to breakdown the source of waste from our different assets and in 2021, once the issues described have been repaired, we plan to carry out an audit of waste by diverting waste, one inlet at a time, into separate containers so that it can be weighed. We will study the waste, recycling and where relevant, organic waste pulled from each inlet over a period of a week so that we can determine a 'typical' waste week for each location. This will help us to estimate overall proportions of waste for each asset, from which we will be able to identify the assets with the best and worst recycling rates and target

INSIGHTS

Envac

Envac has many advantages over traditional waste collection methods, but the collection of waste on such a large scale brings its own challenges. Since May 2019, we have encountered problems with groundwater ingress into the collection pipework at various locations due to cracked pipework. We are currently working with Envac and our contractors to rectify these problems, which we now believe were as a result of a change in supplier of manufactured bends which have cracked under stress from increased groundwater over a period of poor weather. The presence of water has led to other problems within the system, where several gaskets have perished because they are wet.

Due to the complexity and scale of the infrastructure, as well as the logistical difficulties as a result of the pandemic, it is taking longer than we would like to resolve these issues, but we expect the majority of problems to be solved by mid-year. To ensure that we have identified all possible problems, once scheduled works are complete, we will be carrying out an extensive CCTV condition of the pipework to ensure we have identified all issues.

The ingress of water has had two significant impacts on our waste collection totals and our recycling rates. In the first instance, water has saturated everything deposited into the system and has increased the overall weight of our waste; it has also resulted in the contamination of our dry recycling and organics collections. In addition, during the first lockdown, many of the facilities to which our dry recycling was being taken to were shut for a period, resulting in all waste being collected as residual waste for several weeks.

EXPLANATORY NOTES:

Wembley Park Estate includes all residential, retail, commercial and other occupier waste collected via Envac, all of which would a) normally be considered outside of our operational control and b) would be aggregated under Quintain Living, Wembley Park Retail or Wembley Park Commercial. Wembley Park Residential is out of scope for waste collection as it is not owned or operated by Quintain. Recycling Rate includes dry recyclables and organics.



PROPERTY

SUSTAINABLE PROCUREMENT

OUR OBJECTIVES

The management of our supply chain is central to the delivery of many of our other sustainability objectives; through the careful specification of goods and services and extensive engagement with our key suppliers, we build strong relationships and a better understanding of any support required to ensure the delivery of a sustainable and high-quality product; and through strict monitoring procedures, we ensure compliance with our requirements is met and delivery is to a high standard.

RESPONSIBLE SOURCING

Objective: To identify and expand our criteria for the responsible sourcing of materials, goods and services, to ensure that they meet our wider sustainability objectives.

SUPPLY CHAIN ENGAGEMENT

Objective: To build meaningful relationships with our supply chain, enabling us to benefit from each other's experience and use our collective resources to deliver greater social value.

SUPPLY CHAIN MONITORING

Objective: To ensure that our high standards are maintained through performance monitoring, review and continuous improvement.



PROPERTY

SUSTAINABLE PROCUREMENT



RESPONSIBLE SOURCING

Our objective is to identify and expand our criteria for the responsible sourcing of materials, goods and services, to ensure that they meet our wider sustainability objectives.

Across the Group, we procure from many suppliers, both directly and indirectly. To date, we have adopted an individualised approach to procurement, setting performance standards on a case-by-case basis. Going forward, we recognise the advantages of standardising specifications and formalising minimum standards across the business.

MINIMUM SOURCING STANDARDS

The materials, goods and services we procure form the most significant areas of spend for Quintan, and we have several mechanisms in place to ensure they are responsibly sourced.

All of our Principal Contractors have in place environmental management systems certified to ISO 14001 and are audited on a regular basis to maintain their certification. More broadly, all consultants and suppliers are required to sign up to our Supplier Code of Conduct which sets out our expectations in relation to a wide range of ESG issues.

MATERIAL SOURCING REQUIREMENTS

In relation to our construction activities, we have identified a number of requirements and preferences for the sourcing of materials.

As outlined in our Climate Change section, reducing the embodied emissions of our development is one of our priority areas and in support of the assessment process, an Environmental Product Declaration (EPD) is required for materials used in all key building elements.

In addition, all timber must be legally sourced and certified with a full chain of custody by either the Forestry Stewardship Council (FSC) or the Programme for the Endorsement of Forest Certification (PEFC). Additional material sourcing preferences are set out opposite:

- Materials sourced in compliance with the BES 6000 Framework Standard for Responsible Sourcing
- Locally extracted or recovered materials (refer also to our Resource Efficiency section and the use of Asset Registers for deconstructed assets)
- Materials with low embodied carbon impacts
- Materials that emit low levels of Volatile Organic Compounds (VOCs)
- Rapidly renewable materials and materials with recycled content
- Packaging that can be taken back and/or easily reused or recycled
- Other locally sourced materials.

SUSTAINABILITY BRIEF FOR DEVELOPMENT

We have recently developed a Sustainability Brief for Development which applies across all future development at Wembley Park and sets out our policy, objectives, specific requirements and detailed guidance for how projects can demonstrate they are being designed and constructed in accordance with our sustainability policy and objectives. For some objectives, we have identified target trajectories to provide our design teams with an indication of our future performance intentions. This approach is designed to encourage innovation and indicate our seriousness and expectations for continuous improvement. The brief will be updated on a regular basis to ensure that it evolves along with our policy and in particular, the development of further targets and KPIs.

Beyond a brief for new development, we are also considering the introduction of a brief for our managing agents and a brief for acquisitions, however these are currently not a priority given the existing management arrangements we have in place and our limited acquisition activity.

SUPPLY CHAIN ENGAGEMENT

Our objective is to build meaningful relationships with our supply chain, enabling us to benefit from each other's experience and use our collective resources to deliver greater social value.

We are committed to working with companies who uphold our values when it comes to the delivery of works, services and products.

CONTRACTOR FRAMEWORK

We have identified a select group of Principal Contractors with whom we have partnered with, who each share our vision for collaboration and allow us to improve the speed at which we can deliver our objectives.

Our Contractor Framework was put in place to guarantee capacity in the market and to engender collaboration and innovation, whilst ensuring we complete construction at pace. However, this framework also helped to standardise the processes and controls used to select and award our significant construction contracts to our key contractors in a transparent and unbiased manner.

Confirmation of the selected contractors is made publicly available on our website. We selected contractors who demonstrated the behaviours that we were keen to encourage, including the sharing of knowledge and solutions, and ensuring success for the whole, rather than the individual contractor.

This approach supports collaboration and the sharing of ideas and goals, setting challenges for each member to improve their performance against their peers and ultimately supports our approach to Sustainable Procurement.

The framework has allowed us to deliver more effectively across a wide range of topics, from logistics management, to health and safety and community engagement. It has also supported improved management of supply chain risks, particularly in relation to market saturation.

By openly discussing forthcoming projects and the sub-contractor supply chains being considered by each contractor, we are able to collectively make decisions, in some cases, opening up the supply chain to additional entities to reduce concentration risk.

Our Contractor Forum is a space for all of our contractors to meet with us to discuss a wide range of topics, from challenges in the market, innovations we might consider, feedback around performance of new technologies and approaches and other lessons learned.

When we made the decision to change our approach to metering and future smart tech capability, early interface with our contractors and their knowledge sharing allowed us to develop a better approach; the early adopters of our new metering strategy provided feedback to our design and construction teams across other projects, allowing us to more quickly identify and correct issues for future buildings.



PROPERTY

SUSTAINABLE PROCUREMENT



SUPPLY CHAIN MONITORING

Our objective is to ensure that our high standards are maintained through performance monitoring, review and continuous improvement. We monitor our supply chain performance and adherence to our requirements in a number of ways. Ongoing checks are carried out throughout the life of the relationship with each supplier, with additional measures in place to manage our higher-risk relationships.

SUPPLIER PORTAL

To support our Procurement Policy, in 2015 we worked with sustainability software providers Greenstone to develop and implement a cloud-based system which provides a mechanism for implementing the controls required to deliver our procurement objectives.

Across the business, SupplierPortal is used as a database for corporate governance enquiries with respect to all our suppliers, and for the storage of all supporting documentation; this prevents contracts from being awarded to suppliers outside of the agreed framework, effectively preventing the occurrence of a significant bribery or corruption event. Where our annual spend with a supplier of services, works and/or products is greater than £10k, or our spend with a consultant is greater than £100k, the supplier is invited to register online, respond to several questionnaires which we deem to be critical in understanding their approach to ESG issues, and provide the required supporting documentation. This is then checked for compliance and if satisfactory, their registration is confirmed. Once a supplier has progressed successfully through SupplierPortal, they are deemed to be a preferred supplier, which indicates that all corporate governance checks have been completed and are in order. In addition to a standard form of engagement (where applicable), SupplierPortal includes questionnaires on a variety of topics. Our questions have been carefully crafted to ascertain compliance, but also to signal our interest in various topics and provide our suppliers with an indication of what we might ask them for in the future. Various insights into our supply chain approach to key issues covered by our Sustainability Policy can be found on the following pages.

SUPPLIER QUESTIONNAIRES

Our questions have been carefully crafted to ascertain compliance, but also to signal our interest in various topics and provide our suppliers with an indication of what we might ask them for in the future. Our questions cover the following key topics:

- Environmental Policy
- Health & Safety
- Labour
- Anti-bribery & Corruption
- Information Security
- Commercial Information
- GDPR Adherence

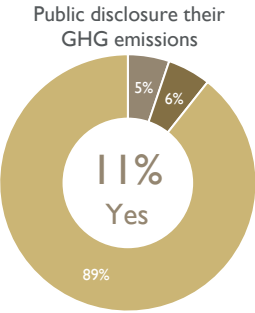
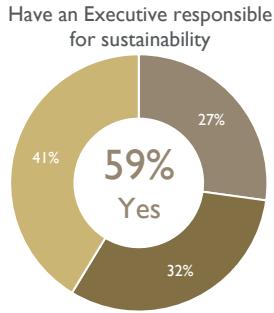
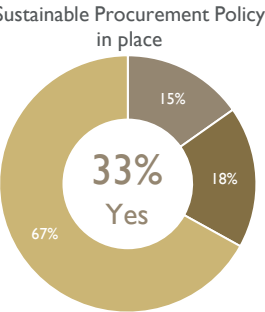
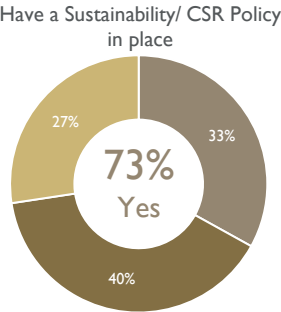
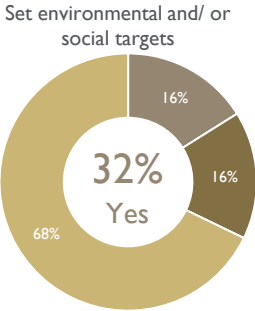
Eligible spend >£10k via SupplierPortal	Eligible spend <£10k via SupplierPortal
92%	15%
Total approved suppliers	Active approved suppliers
460	251

HOW OUR SUPPLIERS PERFORM ON KEY SUSTAINABILITY ISSUES

The following graphs provide a snapshot of the sustainability actions of the suppliers with whom we currently engage.

KEY

- Yes (Active Suppliers)
- Yes (Other Suppliers)
- No



PROPERTY

SUSTAINABLE PROCUREMENT



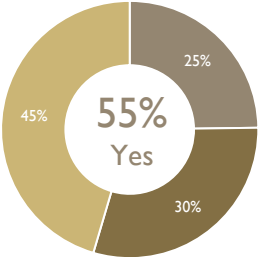
HOW OUR SUPPLIERS PERFORM ON OTHER KEY GOVERNANCE ISSUES

In addition to understanding the actions of our supply chain on specific sustainability issues, we also seek to understand what policies, procedures and other mechanisms they have in place against a wide range of governance and compliance issues. This helps us to understand our level of risk exposure and where an organisation does not have the full suite of desirable policies in place, to identify this and manage the risks that may pose accordingly. The following graphs provide a snapshot of the governance actions of the suppliers with whom we currently engage.

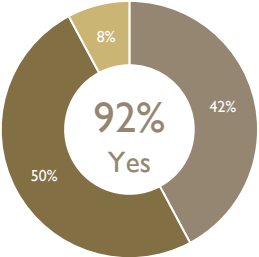
- KEY**
- Yes (Active Suppliers)
 - Yes (Other Suppliers)
 - No

ANTI-BRIBERY & CORRUPTION

Have an Anti-bribery & Corruption Policy in place

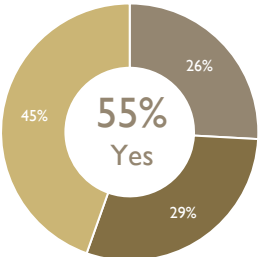


Have agreed to abide by Quintain's Anti-bribery & Corruption Policy

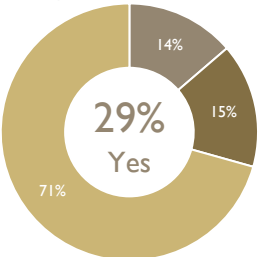


IT SECURITY

Have an IT Security Policy in place

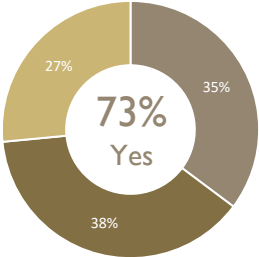


Carry out external penetration tests

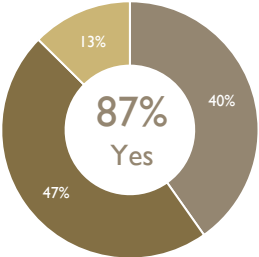


HEALTH & SAFETY

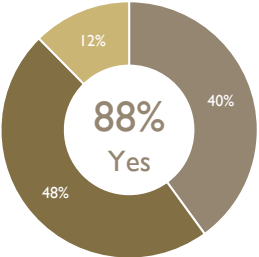
Have a H&S Management System in place



Carry out H&S Risk Assessments

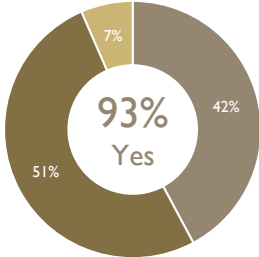


Provide employees with H&S training

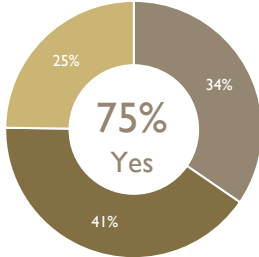


LABOUR

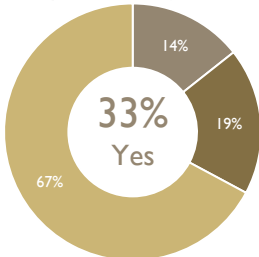
Pay the Local Living Wage



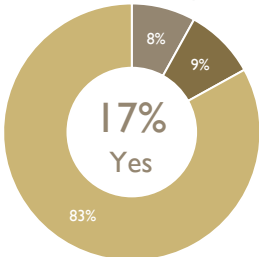
Have an Equal Opportunities Policy in place



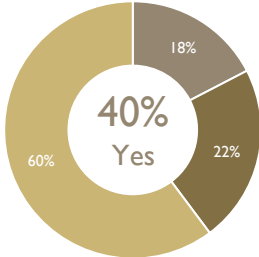
Are required to publish a Modern Slavery & Trafficking Statement



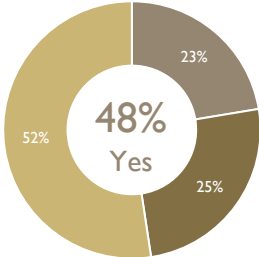
Are required to report on Modern Slavery



Have a Modern Slavery policy in place



Carry out Modern Slavery due diligence within their supply chain



PROPERTY

TECHNOLOGY & INNOVATION

OUR OBJECTIVES

Technology plays an important role in all our lives, and for the most part, makes them easier: opening up opportunities that might not otherwise be there; allowing us to better understand our assets; and providing better experiences for our customers.

We recognise however that ownership of and access to personal data is an increasingly important consideration for people; that the storage and processing of data isn't without environmental cost; and that equipment lifecycles can be relatively short compared with other products, so we are also focused on understanding and addressing these issues.

SMART INFRASTRUCTURE

Objective: To apply a data driven approach and identify appropriate technological solutions to support better sustainability outcomes and encourage more sustainable behaviours across our different business functions.

DIGITAL ETHICS

Objective: To be a trusted data partner by embedding best practice in our use of personal data and through the identification and enforcement of digital ethics standards across our business and digital supply chain.

SUSTAINABLE TECHNOLOGY

Objective: To ensure a sustainable technology life-cycle through the consideration of key sustainability issues in the procurement, in-use and end-of-life stages of any technology solutions we adopt.



SMART INFRASTRUCTURE

Our objective is to apply a data driven approach and identify appropriate technological solutions to support better sustainability outcomes and encourage more sustainable behaviours across our different business functions.

In 2020, we appointed our first Chief Technology Officer (CTO), Jim Eaton-Terry, to bring together our unique integrated fibre network, our ambitious building information, modelling and data capabilities, and Quintain Living's digital marketing, leasing and customer engagement platform; all underpinned by our integrated fibre network. The resulting end-to-end technology and innovation function will develop new ways of engaging existing and potential residents, whilst maximising efficiency, safety and sustainability of building operations.

SMART NETWORKS

Our investments in physical and cloud-based infrastructure are future-proofing our developments and will allow us to take advantage of new technologies as and when they materialise.

Velocity1 is a Wembley Park based technology company that has been responsible for the design, delivery and support of the Fibre to the Home (FTTH) network across the Wembley Park estate since 2008. The FTTH infrastructure provides up to 1Gbps connectivity that underpins many of our site-wide technology initiatives and as a result of this relationship, Velocity1 have been instrumental in the rollout of a converged fibre optic network throughout Wembley Park, providing superfast broadband to our residents, businesses and visitors through the provision of superfast broadband, delivered at greater efficiencies. Full fibre-to-the-premises (FTTP) has significant advantages over the more commonly utilised fibre-to-the-cabinet (FTTC). FTTC overlays fibre to new, parallel-built street cabinets, leaving the original copper

in place between the cabinet and the end-user. Although often advertised as 'superfast' broadband, actual broadband speeds are ultimately dependent on the distance of the premises from the cabinet and can be significantly lower. Conversely, FTTP is more robust, offers greater performance and is future-proofed. The network can be easily upgraded without replacing cables and is easily manipulated to ramp speeds up and down in accordance with customer demands.

We are now moving to a Gigabit Passive Optical Network (GPON) for all future buildings, which will allow us to futureproof our network asset further. GPON's simple architecture is flexible, scalable, high-bandwidth and multi-service. It will reduce the number of active switches on site, which will reduce the operational power consumption of the network by an estimated 20%. As well as deploying GPON into our new buildings we will also be retrofitting GPON to existing assets when the current hardware comes up for renewal.

In addition to the significant reduction in life-cycle emissions compared with a copper network, and the improved speeds offered to our end-users, the most significant advantage is the potential this offers in the future; FTTP is the only viable infrastructure that can support the vast expansion of tech-enabled solutions that we need to create truly smart cities. In 2020, we rolled out footfall counting across the public realm, as well as extensive digital signage installations and Smart lighting to improve the user experience when visiting Wembley Park. We also upgraded to a high-capacity public WiFi network, enhancing the quality of free public access WiFi that has been in place since 2013.

Since its formation, we have had a stake in the Velocity1 business, but in 2020, it became a full subsidiary of Quintain Ltd, allowing us to gain full control over service, maintenance and support. This will allow us to better guide the direction of the business and allow us to further improve the service offered to our customers

“I'm delighted to have joined Quintain at such an exciting time in our development. Quintain has been leading the adoption of technology in both our development processes and the infrastructure of Wembley Park since 2008. As we continue to evolve the estate and the Quintain Living business, our priority is to bring the same spirit of innovation to our growing operational business.”

JIM EATON-TERRY
CHIEF TECHNOLOGY OFFICER

SMART DATA

We have invested heavily in technology that can collect multiple types of data across our buildings – the challenge now is in communicating that data in a way that is accessible and actionable.

A challenge can often be in measuring the right things – particularly in commercial development and landlord areas. Historically, we have installed top of the range Building Management Systems (BMS), but without understanding what actually needed to be measured.

Over the last 12 months, we have consolidated our utility data into a single data warehouse, allowing us to monitor performance of the telemetry and track trends across the estate.

By comparing datasets automatically with occupancy and attributes of our estate, we start to gain deeper insight into the way our buildings behave versus how they were designed. The learning from this data will be used to support the design process, allowing us to design leaner and build better in the future.

We have also recently launched a portal to enable our residential customers at Quintain Living to monitor their energy, heat and water consumption. This coincides with a move away from a bundled utility charge, enabling us to pass individual savings in utility consumption on to customers. Once this process is fully embedded, we will begin exploring opportunities to use our data to nudge our residents to conserve resources and adopt more sustainable lifestyles.

SMART DELIVERY

We were early adopters of Building Information Modelling (BIM), using it to help us design and construct more efficiently; we are now beginning to integrate our wealth of asset data into our facilities management processes.

In 2013, we made it clear that potential contractors needed to be BIM-ready, and we have worked with our supply chain to ensure that they and we are in a position to benefit from the advantages the technology brings. From our early work in 2012 with BIM Academy and ASite, to our current work with Flanagan Lawrence Innovations, we have developed our Employers Information Requirements (EIR) - the baseline that all project delivery is required to adhere to - to ensure that our design and construction supply chain are capable of delivering



PROPERTY

TECHNOLOGY & INNOVATION



against our objectives. The EIRs are an integral part of the pre-selection criteria of the contractors we work with and are monitored during construction through regular external audits on data delivery to ensure our defined outcomes are achieved.

As a result of our early signaling, our contractors have also invested significantly and are now reaping the benefits. Their learning has allowed them to innovate, and they are now achieving significant time savings, reducing material wastage and improving safety.

Having successfully embedded BIM and the digital delivery of asset data throughout our development and construction processes, in 2021/22 we plan to integrate our facilities management software; as well as enabling efficiencies in our maintenance processes, this will allow our design team to build real data on asset performance into the design process.

To allow this to happen, in 2018, we appointed Zutec to provide a digital collaboration platform for the submission, collation and review of all project BIM Models and building information across Wembley Park. All maintainable plant and equipment are now tagged to the BIM Model using the Zutec platform; and in 2020, we commissioned a piece of work to retrospectively create Asset Information Models for our existing maintainable assets, providing us with a complete dataset for facilities management purposes.

We already use a digital platform to enable us to manage our landscaping activities across Wembley Park (for more details, refer to the Biodiversity & Natural Capital section of this report), and going forward, it is our intention to utilise the Asset Management Models we have created to more efficiently manage the maintenance, repair and replacement cycles of our buildings, and we will be rolling out implementation of systems and processes to allow us to do this effectively over the next year.

INNOVATION

Our employees, tenants and residents are full of ideas and are often best-placed to truly understand what the problems are that need solving. Our job is to help them find a pathway to turn those ideas into reality.

Within the technology team we are establishing a framework to embed innovation, resilience, security, ethics and sustainability in all our design decisions. We have identified three key innovation priorities to support the business over the next three years:

- Developing great experiences to make Wembley Park London's most appealing place to live, work & visit
- Maturing our operational businesses to support the UK's largest Build to Rent development as efficiently and sustainably as possible
- Consolidating Wembley Park infrastructure to minimise disruptive, expensive and wasteful maintenance activity.

In addition, in 2020, we introduced a structured innovation programme which ensures that we focus our innovation effort effectively. Cross-functional groups are in place to review opportunities in different areas, from community building to energy use, and to support this, our tech team will spend at least 10% of their time on research and development. We have also introduced quarterly innovation days, designed to scope the challenges the business is trying to overcome, and identify potential solutions that we will then invest in to progress further.

Our most recent innovation day addressed some of the issues related to the pandemic and explored an option to improve remote and self-guided tours of our buildings. Not only did this reduce face-to-face contact, making our customers feel safer in the short-term, in the longer-term, it will also improve the efficiency of our viewings team. We are also prototyping a 'Quintain Pets' project, which when put into production in 2021 will support our efforts to build awareness of our pet-friendly proposition, while also creating a community to connect our resident pet-owners and allow us to better understand their needs in order to cater for and provide pet-specific services to those with animals.



CASE STUDY

Global recognition for Sisk's use of BIM at Wembley Park

In 2019, Sisk received global recognition via the Autodesk AEC Excellence Award, in the Construction Medium Project (\$100 million - \$500 million) category, for our E03 Canada Gardens and E05 The Robinson developments at Wembley Park. This was in recognition of the avoidance of £90,000 worth of concrete rework through the use of clash detection processes; and time savings of 35% in their quality assurance processes by switching to BIM from a paper-based process.

Through the use of 4D planning as a virtual construction rehearsal tool, simulating different project scenarios and identifying potential clashes, the construction team were able to make more informed decisions prior to construction. On earlier phases of their project work, problems with traditional 3D models led to reworks on basement floors; using dynamic reports to track and resolve clashes pre-construction, significant savings estimated at least £90,000 in concrete costs alone were made as a result of reducing these reworks.

Resolving quality assurance issues during the handover process can involve a lot of people on site, working across multiple disciplines and in multiple locations. Traditional paper methods required staff to travel between the site and office to print off the latest information and daily reports. This process was automated by the introduction of a 'digital container' solution, which allowed real time monitoring of when an apartment was checked, by whom, whether any issues were found (with images and location tags) and the status of any remedial works. The digital smart containers integrate several processes that were traditionally executed in silos into a single environment to enhance efficiency and understanding across the site, resulting in an estimated 35% time saving for this aspect of the project.

To further demonstrate their commitment to innovation, technology and smart solutions, Sisk have also been pioneering the use of drones in construction. Drone footage is fed into monthly progress and cost value reconciliation reports to contextualise for the latest site conditions, with the team also providing 'planned vs. actual' comparisons against the 4D Model. On E03 Sisk trialled the use of drone technology, training their own drone pilots on site at Wembley successfully utilised the technology in the delivery of E03 for weekly ariel imagery for logistics planning and progress tracking, producing accurate information for updating external programs, and up to date logistics for site inductions, including for fire drills and daily roof checks.



DIGITAL ETHICS & SUSTAINABLE TECHNOLOGY

Our objectives are to be a trusted data partner by embedding best practice in our use of personal data and through the identification and enforcement of digital ethics standards across our business and digital supply chain; and to ensure a sustainable technology life-cycle through the consideration of key sustainability issues in the procurement, in-use and end-of-life stages of any technology solutions we adopt.

In 2020 we formalised our data governance policies to ensure we act as responsible custodians of data and continue to meet our legal obligations.

As we evolve our technology function, we will be developing and implementing a digital ethics framework to ensure that our supply chain are aware of the standards we expect them to achieve when supplying digital goods and services to our business.

PROTECTING PRIVACY

With increasing amounts of data collected, we hold ourselves to a high standard when it comes to ensuring that it is protected and remains private.

At the most basic level, we comply fully with the requirements of the General Data Protection Regulations (GDPR) and we require our supply chain to demonstrate their compliance with the same. Our basic data hygiene measures involve a quarterly review of data ownership and strategy, as well as an internal structure to manage and report on risks to personal data.

Our increasing use of digital technologies to drive improvements in the performance of our buildings and improve customer experience both within our buildings, and across the wider estate, mean that we

are the custodians of an ever-increasing quantity of data. Single pieces of data on their own don't necessarily present any privacy concerns, but when connected to other forms of data we hold about individuals, could become intrusive. We are mindful of this, and aggregate data to avoid any privacy intrusions. Over the coming year, we will be reinforcing our approach with additional best practice measures and will report on our progress in due course.

DATA STORAGE

The storage of an ever-increasing quantity of data requires enormous amounts of energy to provide power and cooling to data centres across the globe.

Initially, we operated multiple servers operating at each of our sites, each with their own power and cooling needs. In 2015, we expanded our data centre at Wembley Park and migrated all of our servers to a single location to improve efficiency and data security. In 2021/22 we will be migrating all non-building specific services to cloud alternatives to further optimise our efficiency and energy performance.

The growing use of Internet-as-a-Service (IaaS) allows computing resources to be shared across many organisations, which in turn enables higher efficiency and resource utilisation levels. In reviewing potential cloud providers, we will be factoring in the following efficiency considerations:

- Server utilisation factor: How much of the total processing capacity is effectively utilised by the server
- Power Usage Effectiveness (PUE): The efficiency of the facility housing the server
- Electricity emission factor: The GHG emissions associated with the electricity used to power the data centre, which could be located anywhere in the world.

One of the outputs of this project will be the measurement and publication of the actual energy and emissions savings made by making the switch.

ETHICAL PROCUREMENT

Governance issues are important when procuring our digital goods and services in order to maintain digital security, protect the environment, reduce GHG emissions and avoid potential harmful practices across the globe.

Our digital supply chain includes those who provide physical electrical goods and electronic components, as well as those who process or store data on our behalf.

In addition to ensuring this element of our supply chain meets their legal obligations with respect to GDPR, in 2021, we will be introducing a Digital Ethics Framework that sets out additional best practice procurement criteria. This will supplement the questions we already ask our supply chain in relation to their IT policies that include whether or not the company:

- have identified staff responsible for Information Security;
- have a current, management approved and published, IT Security Policy;
- provides access to data or services via an online platform and if so, whether the company undergoes independent external penetration tests; and
- has a backup strategy which incorporates, includes or involves a documented and tested disaster recovery programme.

We will also be developing sustainability metrics to support our decision-making process when procuring new technology to address the impacts our product selection has on resources and GHG emissions, helping to identify the most sustainable technology solution for a given situation.

This will be supplemented by a Sustainable Asset Lifecycle Policy that will address ESG issues at all stages of a product life-cycle.

The production of certain electronic components relies on rare earth metals that are often found in areas of conflict, or countries where there is a high-risk of child labour and modern slavery; in developing our framework, we will be carrying out a risk assessment to fully understand our exposure in relation to procuring electronic equipment that may have originated from such locations.

Rapidly evolving technologies can have significant societal benefits, and some technological solutions may help us to reduce our impacts on the environment, but replacement cycles can be very short compared to other products, with obsolescence and redundancy often built in.

We currently recycle our electronic goods using a company that has a zero waste to landfill policy and works with an IT-based charity to recycle unwanted IT equipment and as part of our policy development, we will be investigating options for extending the useful life of digital equipment. We will also be exploring options for supporting the residents, tenants and public at Wembley Park to do the same.





METHODOLOGY

Only by measuring and understanding our impact on the environment, society and the wider economy, can we effectively evaluate our contribution, manage our business risks and identify opportunities to create lasting value for all.

Underpinning our strategy are a series of commitments to help us in achieving our goals, amongst which is to measure and disclose our performance in a transparent way.

To support this commitment, this section describes our data sources, methodologies we have adopted, and approach our to reporting against each of our objectives.

METHODOLOGY

PEOPLE DATA

DIVERSITY & INCLUSION

ONE QUINTAIN

BREAKDOWN OF EMPLOYEES BY ROLE, GENDER & AGE (p9)

Definitions of the categories for reporting are described below and highlighted where different from when we last reported in 2015. Figures provided are a snapshot of the business at 31/12/20 and not an average of the composition over the reporting year.

BOARD OF DIRECTORS: The Board of Directors is the final decision-making entity with legal accountability for the business and is composed of all Non-Executive Directors and Executive Directors listed at Companies House.

NON-EXECUTIVE DIRECTORS: Note that whilst Non-Executive Directors are included in Total figures, they are not employees of the company.

EXECUTIVE DIRECTORS: Include our Chief Executive Officer, James Saunders, and Chief Financial Officer, Philip Slavin. In 2015, there were fewer Executive Directors, all of whom sat on the Board of Directors.

SENIOR PROFESSIONALS: In 2020, we have expanded this category to reflect the different levels of seniority within it.

OPERATIONAL BOARD: The Operational Board is the most senior level tier of management within the business outside the Board of Directors, with responsibility for delivery of the medium/long term business objectives and consists of Executive and Operational Directors, as well as our in-house Legal Counsel. Members of this tier will individually have overall management responsibility for a strategically significant part of the business.

Whilst our CEO and CFO also sit on the Operational Board, they have been counted at the highest level at which they sit and are not duplicated here to avoid double-counting.

SENIOR MANAGERS: Senior managers have day-to-day responsibility for a specific function/ discipline within their area of the business.

Members of this tier will report to an Executive or Operational Director.

ALL OTHER EMPLOYEES: All other employees who fall outside of the above definitions.

EDUCATION

ENGAGEMENT WITH SCHOOLS

SKILLS BUILDER (p12)

The number of participating students and participating schools was provided by Skills Builder to outline the impact of our 2019-20 partnership. During the reporting year, Skills Builder switched to a new reporting system which showed that 2,675 students were taking part, however technical errors made it possible for students to be double counted and reported figures were reduced to reflect this. In addition, 108 teachers and support staff took part in the project.

LIFELONG LEARNING

THE CORNER (p13)

Whilst ad-hoc activities were carried out in the space prior to 2019, the figures reported reflect the structured program that was put in place in 2019 and monitored by team programming the space.

SKILLS & EMPLOYMENT

CONTRACTOR COMMUNITY FRAMEWORK

LOCAL EMPLOYMENT (p15)

Data is provided on a monthly basis by each contractor operating at Wembley Park and aggregated to generate a total for the whole site. This includes the postcode of the employee as well as details of their post-employment destination where known.

APPRENTICESHIPS (pp15-16)

Full data collection commenced in 2018, with only highlighted figures provided before this; we therefore have full data for 137 out of the 155 apprentices that have been employed at Wembley Park.

APPRENTICESHIP STATISTICS: Data used to generate these graphs excludes the 18 apprentices for which we have no data.

SOCIAL VALUE: The Themes, Outcomes & Measures (TOMs) framework developed by Social Value Portal is widely used across the construction sector to report the social value attributable to construction activities. In the case of apprentices, the proxy value of £207.40 per week has been computed as follows: "combining the

current economic benefit to the individual (based on minimum pay given the distribution of achievements by age and their average length), and the annualised future lifetime value to society of achieving the qualification (based on Unit Cost Database (UCDB) v2.0 updated to 2019/2020 prices, and the distribution of achievements by level). Value to the individual therefore includes current increased earnings and annualised value of future increased earnings as a result of achieving the qualification. It is the lower estimate and reflects an assumption that 50% of the employment benefit is attributed to the qualification (see UCDB v2.0 for details). Estimates of distribution of achievements by age, average length, and level are based on data from the FE data library: further education and skills (<https://www.gov.uk/government/statistical-data-sets/fe-data-library-vocational-qualifications-2>), and BIS Returns to Intermediate and Low Level Vocational Qualifications, 2011. Per week attribution of lifetime benefits is based on the assumption that each week equally contributes to achieving the qualification. This assumption is likely to be revisited in future editions, to pick up on non-linearities."

The total number of weeks on site for Level 2+ apprentices has been multiplied by the 2019/20 rate of £207.40, resulting in a total of £1,128,878 in social value; this has been rounded to £1.1m to compensate for the small over-estimate likely as a result of applying the 2019/20 weekly rate to 2017 and 2018 apprentices.

SAFETY

PERFORMANCE DATA

HEALTH & SAFETY PERFORMANCE DATA (p19)

We use Health & Safety Executive (HSE) definitions of accidents and incidents in accordance with The Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR). Whilst we also seek to understand the safety culture of the companies we work with, RIDDOR is an industry-wide agreed standard for measuring our safety record, allowing comparability with other organisations.

RIDDOR ACCIDENT: A work-related event that causes a specified physical injury or ill health.

RIDDOR INCIDENT: An event, such as a dangerous occurrence, where nobody was injured but the incident was either severe enough, had potential for injury, or falls into a RIDDOR specific category that it then, legally, needs to be reported to the enforcing authority, the Health & Safety Executive.



METHODOLOGY

PEOPLE DATA

QUINTAIN OPERATIONS: Relates to our Head Office and Wembley Park offices, including those of our project management team, estate management team, Quintain Living and marketing suites.

WEMBLEY PARK ESTATE: Relates to the public realm and estate infrastructure, such as Envac.

WEMBLEY PARK EVENTS: Relates to events held at Wembley Park, outside our physical assets and typically within the public realm. This includes regular events such as Wembley Park Market, as well as outdoor event-day related activities and one-off events such as the RISE opening event for LBOC.

The above data are all recorded and reported by the Quintain Health & Safety team.

LONDON DESIGNER OUTLET: Relates to our shopping centre at Wembley Park and the public realm within its boundary. This data is recorded and reported on a monthly basis to us by our Managing Agent, Realm.

BOXPARK: Relates to Boxpark at Wembley Park and the public realm within its boundary. This data is recorded and reported on a monthly basis to us by our Joint Venture partner, Boxpark. *We also measure footfall across the Wembley Park Estate, which is used to calculate the accident/ incident rate across Wembley Park Estate, Wembley Park Events, London Designer Outlet and Boxpark. In 2019, footfall was approximately 16million; in 2020, there were 3.2million visitors to site.*

CONSTRUCTION: Relates to all construction (currently only at Wembley Park). Data from all Principal Contractors (which includes any work undertaken on their sites) is recorded and reported to Quintain on a monthly basis and collated along with total working hours to determine the overall total accidents and incidents for the period, along with an accident/ incident rate (accidents/ incidents per 1,000,000 hours worked). Total working hours for 2019 were 6.6m, compared with 2.4m in 2020.

WELLBEING

EMPLOYEES

EMPLOYEE STEP CHALLENGE (p21)

Each participant in our Employee Step Challenge registers with our partner, HiMotiv, downloads the HiMotiv app and synchronises their step recording devices for the duration of the challenge. Step totals are then aggregated to provide a total for the year.

LOCAL COMMUNITIES

THE YELLOW

PARTICIPATION STATISTICS (p25)

The Yellow was closed for much of 2020 due to COVID-19, and although the spaces was used for specific activities by various groups during lockdowns, staff were placed on furlough during closures and there is no data available for the year; figures stated are for 2019. Activity leaders are asked to report attendance figures on a monthly basis, and free space is calculated based on the number of hours used by community groups free of charge. As this data relates to 2019, it has not been recorded in the 2020 in-kind figures described under Community Investment below.

Whilst this information is requested from activity leaders, it is not always provided and so figures are an under-estimate of participation.

WEMBLEY PARK COMMUNITY FUND

FUNDING STATISTICS (p28)

Data is collected from each funded organisation by London Community Foundation, our funding partner. Participant numbers and relevant outcomes are then reported to us on annual basis following the completion of the funding round.

COMMUNITY INVESTMENT & CHARITABLE CONTRIBUTIONS

HOW, WHAT & WHY WE SUPPORT (p30)

As in 2015, we have applied London Benchmarking Group's *From Inputs to Impact: Measuring corporate community contributions through the LBG framework – A Guidance Manual* in the calculation of our community investment and charitable contributions. The frameworks sets out the principles for recording this data and the descriptions below describe how we have obtained the figures reported.

We have reported on the resources we have contributed during the reporting year, the driver for our contribution, the broad issues our contributions address and the reason we support, as well ascertain outputs as a result of our funding.

HOW WE CONTRIBUTE

CASH

The gross monetary amount paid to support a community project/ organisation and includes direct donations and grants, social sponsorship of cultural events; employee match funding; expenses of employee involvement; paying for new facilities or services; and memberships and subscriptions to community organisations. Significant components of our 2020 contributions include our donation the Wembley Park Community Fund, our sponsorship of Brent 2020 as the London Borough of Culture (LBOC).

STAFF TIME

Where Quintain employees contribute time during working hours, this is recorded and reported based on an estimate of the cost of employee time that takes into account all employee contributions. In accordance with LBG guidance, we have used the average employee costs reported in our 2020 Annual Report, minus the remuneration of the Executive Directors on the Board of Directors. This is then divided by the number of working days in the year (260) and by the number of working hours in a day (7.5) to give an hourly rate of £65.14/hour.

IN-KIND

Space: We often provide space for charities and community groups in void space across our portfolio. This can be for one-off events or for longer periods of time. Where space is provided in void space, we account only for the cost of providing services to those spaces, and not for the rent that would have been incurred if the organisation was paying the market rate of the space.

This includes the proportion of service charge cost foregone and the cost of any additional services such as electricity to the area that is paid for by Quintain and would otherwise not have been consumed. **Space** in our community facilities that is provided to groups free of charge is not currently recorded.

Equipment: During the reporting year, a small number of items have been donated. Where these items no longer have a 'book' value, an estimate of their second-hand value has been made and reported.

Other: In 2020, in-kind support also included £28k in marketing costs for the LBOC launch event, RISE, held at Wembley Park and £18k for event branding and signage across the Wembley Park Estate.

MANAGEMENT COSTS

We have four members of staff at Wembley Park for whom community investment related activity forms 100% of their role.



METHODOLOGY

PEOPLE DATA

This includes two people in our Skills Team who manage the Wembley Park Community Fund, Contractor Community Framework and Employee Volunteering Program; and two people at The Yellow who manage our community centre. The average employee cost calculated previously is applied to these roles to generate a management cost.

WHAT WE SUPPORT

We use the issues identified in the LBG Model to build a picture of the issues that our community contributions support. Where there are multiple issues, the classification is made according to the primary purpose of the activity. Issues include:

- Education, Skills & Employment
- Health & Wellbeing
- Economic Development
- Arts & Culture
- Emergency Relief
- Social Welfare
- Environment
- Other support

'Other Support' includes instances where funding covers multiple issues, and no further breakdown can be provided and includes the management costs of our community engagement team.

In 2020, the majority of specific funding was for 'Arts & Culture' as a result of our significant contribution to Brent 2020 as the London Borough of Culture.

WHY WE CONTRIBUTE

CHARITABLE DONATIONS

Charitable gifts tend to be reactive in that they respond to appeals from charities or staff; these are ad-hoc contributions without any strategic aim or anticipated return. Whilst this could include the awarding of grants via our community fund, we have chosen to record this as Community Investment as this is more strategic spend.

COMMUNITY INVESTMENT

These projects address social issues that we have identified as being relevant to the company and the community in which we operate and are linked to our wider community objectives. This includes volunteering linked to our activities at Wembley Park and all funds directed via the Wembley Park Community Fund.

OUTPUTS & IMPACTS

SOURCES OF ADDITIONAL FUNDING (LEVERAGE)

We have made an estimate of additional resources contributed to community organisations and activities that come from outside of

Quintain as a result of our own direct contributions, encouragement and/ or support.

CONTRIBUTIONS FROM QUINTAIN EMPLOYEES

The cash value of donations made by our employees (through payroll giving, direct donations or funds raised by employees) are recorded as additional funds, as are funds raised by our customers where we have facilitated the fundraising activity or provided free space to allow the activity to take place.

CONTRIBUTIONS FROM QUINTAIN SUPPLY CHAIN

The cash and in-kind value of donations made by our construction supply chain (through company donations, payroll giving, employee volunteering, or funds raised by their employees) are reported to Quintain on a monthly basis as part of our Contractor Community Framework, as are the number of individuals and organisations reached by their activities. This includes contractor contributions to the Wembley Park Community Fund.

In calculating the value of the staff time of our contractors, we are not in possession of the same type of data, and instead have adopted the figure provided in the TOMs framework previously described. This reflects the replacement cost for the wage of the individual volunteering activity. It is "the ONS hourly value of volunteering, based on different types of volunteering being identified in survey data (Community Life Survey) and valued at the closest market equivalent wage rate from the ASHE dataset. Updated to 2019 prices.

(<https://www.ons.gov.uk/economy/nationalaccounts/satelliteaccounts/articles/changesinthevalueanddivisionofunpaidcareworkintheuk/2015#valuation-of-unpaid-formal-volunteering>)."

Whilst this figure can be localised by selecting appropriate wages for the relevant geographical area, we have not done so. The figure of £16.07 significantly under-estimates staff costs but has been used in lieu of missing alternative proxy data.

This data is collated and aggregated to provide a total from our supply chain. No other supply chain members are included in our totals at this stage.

BENEFICIARIES

TOTAL NUMBER OF INDIVIDUALS & ORGANISATIONS

BENEFITTING FROM COMMUNITY INVESTMENT

This includes direct beneficiaries of activities supported by Quintain and our supply chain. Where a 3rd party manages a program such as Skills Builder, totals are based on data provided by the program operators. Where the number of beneficiaries of an activity are

unknown, zero beneficiaries are conservatively assumed.

IMPACTS

We do not currently include a comprehensive review of our impacts in our community investment reporting; however, certain elements of impact are reported elsewhere – for example, the value of the impact on individuals achieved through the provision of apprenticeships by our contractors is reported in Education, Skills & Employment. The methodology applied has been previously described.

COMMUNITY INVESTMENT NOT INCLUDED

OTHER COMMUNITY INFRASTRUCTURE

We have made significant investment in community infrastructure, particularly at Wembley Park. However, this is considered part of our general placemaking strategy and is not included in the data reported.

RESIDENTS & TENANTS

QUINTAIN LIVING

RESIDENT SATISFACTION SURVEYS (p31)

In July 2020, we partnered with HomeViews to invite residents at each building to write a review of their buildings. The results were collated in a report produced by HomeViews to give us a more in-depth understanding of our performance across aspects including the facilities on offer, design, location, value and management. A total of 91 responses were received, of which 79 could be verified and were used to generate average scores across each category, for each of our residential buildings, and to provide an average HomeStar Rating for Quintain Living as a whole. The report also provided an average Net Promoter Score based on the number of residents who would recommend Quintain Living to a friend.

EMPLOYEES

ANNUAL EMPLOYEE SURVEY (p35)

Employees are asked the extent to which they agree with a series of 55 statements and an average of positive ('agree' or 'strongly agree') statements is used to calculate an overall score for each of the competency areas summarized in the charts on p35.

Due to the pandemic, no survey was carried out in 2020, so 2019 results are presented; out of the 150 employees who were asked to participate, 136 responses were received.



METHODOLOGY

PLACE DATA

BIODIVERSITY

WEMBLEY PARK

TREES (p39)

Existing and newly planted trees within the ownership of Quintain at Wembley Park are recorded by the Wembley Park Estate Operations team on a publicly available database, Curio. This provides a live updated figure of trees and tree species at any given time. Data retrieved on 31/12/20 within the drawn boundary of Wembley Park as shown below.



For a live update, search for 'Wembley Park' in the location field at: <https://www.curio.xyz/world/tagged-trees/overview>

GREEN ROOFS (p39)

Podium amenity space, rooftop amenity space, areas of green and brown roofs and total roof area figures calculated by LDA Design for completed Quintain owned buildings and meanwhile uses.

SUSTAINABLE INFRASTRUCTURE

ENVAC (p47)

RESIDENTIAL WEEKLY WASTE GENERATION AT COMPLETION: Average waste per annum of 337.2 kg per person per year for London (SOURCE: Local Authority Collected Waste Statistics - Local Authority data available at: <https://www.gov.uk/government/statistical-data-sets/env18-local-authority-collected-waste-annual-results-tables>), multiplied by 20,000 (estimated total number of residents on completion), divided by 52 weeks = 129,615 kg of waste per week.

PERCENTAGE OF ASSETS CONNECTED TO ENVAC BY AREA: The area of all operational standing assets within Quintain ownership that have a direct or indirect connection to the Envac waste collection system.

DIRECT: Dedicated portals within the building or within the building boundary.

INDIRECT: Where waste is collected and deposited into the Envac portals within the W05 service yard by the Wembley Park Estate team.

ENVAC SPACE SAVINGS: Calculated by our architects in the design of our Landsby building, comparing traditional bin storage meeting the standards set out by London Borough of Brent with the reduced storage requirements as a result of installing Envac in the building.

ACTIVE TRAVEL

15-MINUTE NEIGHBOURHOODS

WALKING (p56)

WALK SCORE

Walk Score measures the walkability of any address by analysing walking routes to nearby amenities and awarding points based on the distance to amenities in each category. The full methodology and access can be found at: www.walkscore.com.

Various locations at Wembley Park were entered into the search function of the website, including Fulton Road, Engineers Way and Atlantic Crescent, resulting in Walk Scores of between 85 and 90.

CYCLING (p57)

RESIDENT CYCLE SPACES & CYCLE SPACES IN THE PUBLIC REALM: The Wembley Park Strategic Travel Plan produced by WSP and published in October 2019 sets out the number of cycle spaces associated with each building and the public realm as installed and designed. Only spaces for completed buildings have been included in the figures.

PUBLIC & PRIVATE TRANSPORT

THREE STATIONS STRATEGY (p58)

CAR CLUBS & ELECTRIC VEHICLE CHARGING

ACTIVE & PASSIVE EV CHARGING POINTS: The Wembley Park Strategic Travel Plan (see above) sets out the number of active and passive EV charging spaces associated with each building and the public realm as installed and designed. Only spaces for completed buildings have been included in the figures.

LOGISTICS

CONSTRUCTION LOGISTICS PLAN

(p60)

NO. LOGISTIC VEHICLES SINCE 2017 & PEAK NO. LOGISTICS VEHICLES PER MONTH: Calculated from records kept on vehicles entering the logistics hub between 2017 and 2020.

OPERATIONAL LOGISTICS (p61)

PARCELS PER DAY PRE-COVID & DURING LOCKDOWN:

Averages are based on records kept by residential building concierges which show an average of 5.5 parcels per occupied apartment, per month pre-COVID, and 11 parcels per occupied apartment per month during the COVID-pandemic.

FUTURE PARCELS ON FULL OCCUPATION AT COMPLETION: 8,500 apartments x 11 parcels per month = 93,500 parcels per month = 1,122,000 parcels per year = 3,074 parcels per day.



METHODOLOGY

PROPERTY DATA

GHG EMISSIONS

EMBODIED EMISSIONS (p64)

RIBA STAGE 2 EMBODIED CARBON REDUCTIONS OVER BASELINE & EMBODIED CARBON BY BUILDING ELEMENT: Calculated by Buro Happold for North East Lands Plots NE02 and NE03 in December 2020 and reported in Stage 2 reports.

OPERATIONAL EMISSIONS

EMISSION FACTORS (p65)

2010 BEIS EMISSION FACTOR:

<https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2010>

2012 SAP EMISSION FACTOR:

https://www.bre.co.uk/filelibrary/SAP/2012/STPI1-CO204_emission_factors.pdf

2020 BEIS EMISSION FACTOR:

<https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2020>

2020 ACTUAL EMISSION FACTOR: National Grid '2020 Greenest year on record for Britain':

<https://www.nationalgrid.com/stories/journey-to-net-zero-stories/2020-greenest-year-record-britain>

BEIS 2030 PROJECTED EMISSION FACTOR: BEIS 2019 Updated Energy & Emissions Projections v1.0 28-10-2020, Figure 5.2 GB emissions intensity (all power producers) available at:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/931215/Web_figures_EEP2019_ods

GHG EMISSION REPORTING (p66-71)

In accordance with the reporting requirements of ISO 14064, this section provides full details of our data collection and treatment in order to produce the figures reported in this section of the report.

OBJECTIVES & APPROACH

As noted in the Climate Change section of this report, we have identified objectives relating to the reduction of GHG emissions across our value chain, and for the reporting of our emissions on an annual basis.

We have been collecting data and reporting on our GHG emissions since 2013, and in 2020 reviewed and updated our procedures in line

with updated guidance on GHG emissions reporting. We also updated our assessment of potential emission sources to determine those that are currently material to understanding our organizational emissions. Our GHG emissions are calculated and reported by implementing the guidance set out in ISO 14064:1 (2018).

INFORMATION MANAGEMENT & MONITORING PROCEDURES

Our *GHG Data Management Procedures* set out the decisions made and actions required to ensure that the data we report is accurate, transparent and comparable; these are available on our website, and details relevant to our GHG Inventory and the transparency of our data are detailed in this Methodology section.

Our GHG emissions are calculated by multiplying relevant activity data by a relevant emission factor; sources of activity data and emission factors are described in our Reporting Boundary and Emission Factors sections below.

Our monitoring procedures depend on the type of activity we are measuring. For supplies that relate to the consumption of resources such as energy and water, we collect data on monthly and internally report this on a quarterly basis to help identify reduction opportunities. Other types of data are monitored at a frequency appropriate to the activity.

EXTERNAL ASSURANCE

Our GHG Inventory, and the Climate Change, Resource Efficiency and their respective Methodology sections of this report have been externally assured by BDO who performed a limited assurance engagement in accordance with ISAE 3410.

REPORTING ORGANISATION & ORGANISATIONAL BOUNDARY

The data published in the Climate Change section of this report reflects the 2020 GHG emissions for Quintain Ltd. Our organizational boundary includes all of our subsidiaries.

Significantly, this includes our Build to Rent business, Quintain Living, and Wembley Park Estate Management Ltd, which manages the public realm at Wembley Park. Other subsidiaries include the holding companies within which our assets reside.

All assets included within our Gross Asset Value (GAV) calculations are included within our boundary, in addition to any estate assets and

supplies over which we have control.

Quintain Ireland provides development management services and does not hold any real estate assets.

REPORTING BOUNDARY

We have adopted an operational control approach to our reporting, which means that our Category 1 and 2 (previously known as Scope 1 and Scope 2) emissions are those over which we have a level of operational control.

There are two main aspects of our business activity: the construction, and then the subsequent operation of real estate assets. The design and project management of our construction activities is carried out in-house, at our various corporate offices. The physical build element is delivered by our framework contractors and their sub-contractors, whose activities are outside our operational control, but result in our most significant emissions.

Relevant emission sources are identified in accordance with the emission categories recommended in Annex B of ISO 14064-1, taking into account our organisational boundary.

Our operational activities within completed buildings are managed by our asset management teams, who supervise the activities of our various managing agents. As we are in a position to directly influence the management approach, we class our managing agents as an extension of ourselves, and report emissions in landlord-operated areas of our buildings as our own Category 1 and 2 emissions. Our estate management team operates the wider Wembley Park Estate, which in addition to our assets, includes significant areas of public realm.

In addition, we report on emissions outside of our operational control, but which influence or are influenced by our operational activities. These emissions are recorded under GHG Inventory Categories 3 - 6, also referred to as our 'Scope 3' emissions.

SIGNIFICANCE CRITERIA

We have adopted three tests to determine whether an emission source is considered significant:

- 1) Is the data required for identified external benchmarking or reporting purposes?
- 2) Does the data contribute more than 5% of total Scope 1 and Scope 2 emission sin the reporting year used for assessing significance?
- 3) Is data readily available, or can processes be put in place easily to



METHODOLOGY

PROPERTY DATA

1) Is data readily available, or can processes be put in place easily to collect data in a cost-effective manner?

In preparation for our 2014/15 reporting, data was collected for the majority of GHG Inventory Categories identified in Annex B of ISO 14064-1; we have used this as the basis for determining if the data is likely to contribute to more than 5% of our Scope 1 and 2 total.

Where a category was not reported, and we have more recent data, this is used as the basis for the threshold assessment instead.

Our GHG sources and quantification approach are described in detail by category below; we do not currently have any emission sinks or sources of biogenic emissions.

Emissions are aggregated according to the area of the business to which they apply; different parts of the business have different individuals responsible for energy management, so this approach to aggregation allows us to easily compare performance over time by owner. The aggregation categories are:

- Corporate Offices: Our owned and leased office space across our multiple locations
- Wembley Park Estate: Our estate assets and public realm, managed by our Estate Team
- Quintain Living: Our Build to Rent residential assets, managed by FirstPort and Pod Management.
- Wembley Park Residential: Residential assets that we no longer own but have operational responsibility for
- Wembley Park Retail: Our retail assets, managed by Realm
- Wembley Park Commercial: Our commercial office space, managed by Savills
- Wembley Park Leisure: Our leisure assets, managed by different entities depending on the asset.

GHG INVENTORY CATEGORIES

CATEGORY 1 DIRECT GHG EMISSIONS & REMOVALS

Previously referred to as 'Scope 1' emissions, this category relates to the direct burning of fuels and release of gases within our operational control.

1.1 DIRECT EMISSIONS FROM STATIONARY COMBUSTION EMISSION SOURCES

Our emissions sources include the stationary combustion of gas in boilers and CHP plant that we own and operate. Where we generates heat for 3rd party users (e.g. W05), this is recorded as a Scope 1

emission source within operational control. Note that the end users of the heat generated are not Quintain tenants and are outside the scope of our reporting.

SIGNIFICANCE

Stationary combustion accounted for 54% of total Scope 1 and Scope 2 emissions in 2018/19. Components of this data are also used to provide asset consumption and GHG emissions relevant to the GRESB assessment. This emissions source is therefore considered to be material and is included in our GHG Inventory and reporting.

QUANTIFICATION MODEL

The volume of gas consumption is measured using meter read data and converted into kWh using the following formula :

$(\text{Volume (m}^3\text{)} \times \text{Calorific Value (MJ/m}^3\text{)}) / (3.6 \text{ MJ/kWh})$.

The UK is subdivided into thirteen charging areas, and daily CV averages are provided by National Grid to gas shippers and suppliers in the are based on this data. As a gas consumer, we are billed on the basis of the daily averages for the area in which our gas supplies are located. Where a specific calorific value is not provided by the supplier, the daily average figure for the year for North Thames Local Distribution Zone (LDZ) obtained from National Grid is applied to annual consumption.

The total kWh is then multiplied by the emission factor for natural gas obtained via *Government Conversion Factors for Company Reporting of Greenhouse Gas Emissions*. Further details are provided in the Emission Factors section on pages 101 - 103.

1.2 DIRECT EMISSIONS FROM MOBILE COMBUSTION EMISSION SOURCES

Mobile combustion in vehicles owned or leased by the organisation. The only source of such emissions within Quintain is the estate vehicles used for maintenance and security across Wembley Park.

SIGNIFICANCE

Mobile combustion emissions were assessed in 2015/16 and accounted for 0.04% of total Scope 1 and Scope 2 emissions.

However, this data is included in SECR reporting, it is therefore considered material for voluntary compliance with these requirements and is included in our GHG Inventory and reporting.

QUANTIFICATION MODEL

Vehicle fuel cards are used for the purchase of all fuel consumed in the vehicles, which are provided with details of mileage, type of fuel and quantity of fuel purchased.

Consumption in litres is then multiplied by the emission factor for

petrol/ diesel (average biofuel blend) via *Government Conversion Factors for Company Reporting of Greenhouse Gas Emissions*. Further details are provided in the Emission Factors section on pages 101 - 103.

DIRECT PROCESS EMISSIONS AND REMOVALS FROM INDUSTRIAL PROCESSES EMISSION SOURCES

No industrial processes are undertaken by the organisation, and this GHG Inventory Category is therefore outside the scope of our GHG Inventory and reporting.

1.4 DIRECT FUGITIVE EMISSIONS FROM THE RELEASE OF GHGS IN ANTHROPOGENIC SYSTEMS EMISSION SOURCES

Refrigerant leakage in building and vehicle air-conditioning equipment.

SIGNIFICANCE

Refrigerant leakage was assessed in 2014/15 and found to contribute 0.38% of total Scope 1 and Scope 2 emissions. This data is not required for any other 3rd-party reporting at this time and is therefore considered to immaterial to the current GHG Inventory and reporting.

1.5 DIRECT EMISSIONS AND REMOVALS FROM LAND USE, LAND USE CHANGE AND FORESTRY EMISSION SOURCES

There is no land use, land use change or forestry associated with the organisation and this GHG Inventory Category is therefore scoped out of our reporting.

CATEGORY 2 INDIRECT GHG EMISSIONS FROM IMPORTED ENERGY

Previously referred to as 'Scope 2' emissions, this category relates to the consumption of electricity and heat generated by 3rd parties.

2.1 INDIRECT EMISSIONS FROM IMPORTED ELECTRICITY EMISSION SOURCES

Landlord electricity supplies in operational assets and estates supplies; leased office electricity consumption supplied by others.

EMISSION SOURCES

This data accounted for 45% of total Scope 1 and Scope 2 emissions in 2014/15 and electricity used in operational assets is additionally used in the GRESB assessment. This emissions category is therefore considered to be material.

QUANTIFICATION MODEL

The quantity of electricity consumed is measured in kWh and is multiplied by the emission factor for grid electricity obtained via



METHODOLOGY

PROPERTY DATA

Government Conversion Factors for Company Reporting of Greenhouse Gas Emissions. Further details are provided in the Emission Factors section on pages 101-103.

2.2 INDIRECT EMISSIONS FROM IMPORTED ENERGY EMISSION SOURCES

Landlord heat supplies in operational assets. The only non-electricity energy supply within the operational control of Quintain relates to W06A (Wembley Park Commercial). All other heat generation is accounted for under Category 1.1 Emissions from stationary combustion, and all other heat consumed is accounted for in Category 5.2 Downstream Leased Assets. Where Quintain generates heat for 3rd party users (e.g. W05), this is recorded as a Category 1.1 emission source (within operational control). Where this includes the generation of heat for individual assets, heat consumed by those assets (e.g. LDO) is assigned to the relevant asset for the purpose of GRESB assessment.

SIGNIFICANCE

This consumption is significant in relation to the total consumption of the commercial asset to which it relates and is therefore included within our GHG Inventory and reporting.

QUANTIFICATION MODEL

The quantity of heat consumed is metered and measured in kWh and is multiplied by the emission factor calculated for the relevant heat source.

Heat is supplied to W06A by Metropolitan, the operator of the Eastern Lands Energy Centre. Data on gas and electricity consumed, as well as heat and electricity generated, has been provided by Metropolitan, allowing the calculation of a carbon factor for heat using the emission factors for grid electricity and natural gas obtained via *Government Conversion Factors for Company Reporting of Greenhouse Gas Emissions*. Further details are provided in the Emission Factors section on pages 101 - 103

CATEGORY 3 INDIRECT GHG EMISSIONS FROM TRANSPORTATION

Previously referred to as a category within 'Scope 3' emissions.

3.1 UPSTREAM TRANSPORT & DISTRIBUTION OF GOODS EMISSION SOURCES

There are no significant freight services paid for by the organisation and this GHG Inventory Category is therefore outside the scope of our GHG Inventory and reporting.

3.2 DOWNSTREAM TRANSPORT AND DISTRIBUTION OF GOODS EMISSION SOURCES

The 'product' produced by the organisation are stationary physical assets and there are therefore no downstream transport and distribution of goods associated with the business. This GHG Inventory Category is therefore outside the scope of our GHG Inventory and reporting.

3.3 EMPLOYEE COMMUTING EMISSION SOURCES

Employees travelling to and from work.

SIGNIFICANCE

Due to the location of the organisation's business activities, the majority of employees commute to work via public transport, by cycling, or on foot. Working from home is permitted as required and currently actively encouraged. It is assumed that employee commuting emissions would account for significantly less than the threshold 5% of total Scope 1 and Scope 2 emissions, and this data is not required for any other reporting purposes. It would be difficult to obtain this data reliably without significant burden on staff, which is likely to be resisted and potentially counter-productive. Additionally, it is not considered that any further action could be taken to reduce emissions associated with employee commuting.

In 2020, those employees who fulfil roles that require them to be in the office or on the estate have been encouraged to use private vehicles rather than public transport to avoid the spread of COVID infection. Whilst this would increase emissions associated with their movement, the vast majority of employees are now working from home and no longer commuting.

As such, this GHG Inventory Category is outside the scope of our GHG Inventory and reporting.

3.4 CLIENT & VISITOR TRANSPORT EMISSION SOURCES

Visitors to assets operated by the organisation (e.g. London Designer Outlet). There may also be a small number of visitors by clients and partners.

SIGNIFICANCE

Wembley Park attracts visitors from near and far, but it is difficult to distinguish between visitors that are attending estate operated assets and those operated by 3rd parties. Often the primary reason for a visit will be to an event operated by others at Wembley Stadium, SSE

Arena, Wembley or Troubadour Theatre, Wembley Park but will involve a stop at the LDO for further reduce transport emissions. There is a transport strategy in place to encourage modal shift to example, as a secondary attraction. Visitor numbers are known, and visitor transport emissions could be estimated by undertaking modal surveys, but this would be of little real value; the proximity of multiple public transport nodes with frequent services lends itself to visits by public transport, and very little could be undertaken in addition to active travel and public transport options, which will mitigate some of these emissions.

In 2020, there have also been significantly fewer visitors to the various sites operated by Quintain due to COVID restrictions.

This GHG Inventory Category is therefore outside the scope of our GHG Inventory and reporting.

3.5 BUSINESS TRAVEL EMISSION SOURCES

Taxis, flights and public transport associated with business activities and any overnight hotel accommodation associated with business trips.

SIGNIFICANCE

Flights and taxi use data were collected in 2015/16 accounted for less than 0.34% of total Scope 1 and 2 emissions. This data is not used for any other reporting and has therefore been excluded from the GHG Inventory. Journeys made by private vehicle that are reimbursed by the organisation are within the Scope of SECR reporting, however due to the central location of offices and developments, they are limited in quantity. Currently, fuel is reimbursed based on distance travelled and government reimbursement rates. Insufficient data is available to allow an accurate calculation of resulting emissions, but as these will be less than 1%, of total emissions, this GHG Inventory Category is outside the scope of our GHG Inventory and reporting.

CATEGORY 4 INDIRECT GHG EMISSIONS FROM THE USE OF PRODUCTS & SERVICES

Previously referred to as a category within 'Scope 3' emissions.

4.1 EMISSIONS FROM PURCHASED GOODS (ASSOCIATED WITH THE FABRICATION OF PRODUCTS)

EMISSION SOURCES

Goods supplied to the organisation include those used in the construction of assets (i.e. 'Embodied Carbon'). This category also includes emissions associated with the production of energy



METHODOLOGY

PROPERTY DATA

purchased (GHG Protocol termed as 'Fuel and Energy Related Emissions').

SIGNIFICANCE

4.1a Embodied Emissions (Life-cycle Stages A1 – A5)

An embodied carbon assessment was undertaken in relation to the construction of NW07/08 by Cundall in 2019. This includes transport emissions within lifecycle stages A1- A5 (emissions at practical completion) but does not itemise this separately. The total emissions for A1-A5 are significant, resulting in 814 kgCO₂e/m² of residential development. Based on 2018/19 completions, in 2018/19 this accounted for 82,844 tCO₂e, or 2,358% of total Scope 1 and 2 emissions. This makes emissions from purchased goods relating to life cycle stages A1 – A4 for new construction as the most significant emission source, and it is therefore considered material and included in our GHG Inventory and reporting.

4.1b Fuel and energy related activities (FERA)

FERA emissions accounted for 11% of total Scope 1 and Scope 2 emissions in 2018/19, and data is readily available through the application of additional emission factors to natural gas and electricity consumed to Scope 1 and Scope 2 activity data. This sub-category is therefore included in our GHG Inventory and reporting.

QUANTIFICATION MODEL

4.1a Embodied Emissions (Life-cycle Stages A1 – A4)

The total emissions calculated for NW07/08 per m²GIA for life-cycle phases A1 - A5 are multiplied by the total GIA of residential assets where construction is completed during the reporting year. This data is only applied to the residential asset typography, and no data is currently available for other asset types.

4.1b Fuel and energy related activities (FERA)

The total Category 1.1 and 2.1 energy activity data are multiplied by the appropriate emission factors for upstream fuel and electricity emissions obtained from *Government Conversion Factors for Company Reporting of Greenhouse Gas Emissions*. Further details are provided in the Emission Factors section on pages 101-103.

4.2 EMISSIONS FROM CAPITAL GOODS

EMISSION SOURCES

There are no significant sources of emissions related to capital goods.

4.3 EMISSIONS FROM THE DISPOSAL OF SOLID AND LIQUID WASTE

EMISSION SOURCES

Waste and water from office operations, as well as waste and water in

assets owned and managed by the organisation, including assets connected to the Envac waste removal system at Wembley Park.

SIGNIFICANCE

Waste and water emissions were calculated in 2014/15 and accounted for 0.43% and 0.34% of total Scope 1 and Scope 2 emissions respectively. Whilst below the threshold for significance on their own, this data is required for GAV assets by the GRESB survey, and also represents wider environmental interests around resource consumption. They are both therefore considered to be material and are included in our GHG Inventory and reporting.

QUANTIFICATION MODEL

4.3a Water

The volume of water consumed is metered and meter data is collected for all landlord supplies within operational control. The m3 of water consumed is multiplied by the emission factors in Government conversion factors for company reporting of greenhouse gas emissions for water treatment and water supply.

4.3b Waste

Waste collected via Envac is considered to be within the operational control of Quintain, even though it is not generated by the organisation. Waste from assets not connected to Envac is reported under Category 5.2e Downstream Leased Assets.

The quantity of waste generated in kg is multiplied by the emission factors obtained via *Government Conversion Factors for Company Reporting of Greenhouse Gas Emissions* for waste disposal, depending on the route of disposal (e.g. recycling, composting, combustion or landfill). Further details are provided in the Emission Factors section on pages 101 – 103.

4.4 EMISSIONS FROM THE USE OF ASSETS LEASED BY THE ORGANISATION

EMISSION SOURCES

None (Corporate office at Great Portland Street is accounted for under Category 1.1).

4.5 EMISSIONS FROM THE USE OF SERVICES NOT DESCRIBED ABOVE

EMISSION SOURCES

Cleaning, maintenance, mail delivery, banking, consultancy.

SIGNIFICANCE

Whilst without measurement, emission totals from services cannot be properly understood, the scale of these emissions is likely to be low as it will be a small proportion of the emissions of organisations

providing services to the organisation. Due to the introduction of SECR requirements, there may be an increase in reporting by other organisations that could be used to estimate our portion of these emissions (based on spend for example).

However, at this point in time, there is insufficient quality data to this effect. This GHG Inventory Category is therefore outside the scope of our GHG Inventory and reporting.

CATEGORY 5 INDIRECT GHG EMISSIONS FROM THE USE OF PRODUCTS

Previously referred to as a category within 'Scope 3' emissions.

5.1 EMISSIONS OR REMOVALS FROM THE USE STAGE OF THE PRODUCT

EMISSION SOURCES

The organisations produces built assets, which are either retained and leased (see Category 6) or sold and operated independently. In some cases, the organisation retains operational control of landlord areas (for example where they form part of a wider block that contains retained assets). In this case, emissions are reported under Category 1 or 2. Emissions in Category 4 include those related to energy, water and waste in property constructed for sale.

SIGNIFICANCE

5.1a Embodied Emissions (Life-cycle Stages B1 – B5)

The Cundall report previously outlined provides an estimate of maintenance and replacement emissions over a 60-year building life-cycle (Stages B1 - B5). These emissions would be the responsibility of the asset owner (which may or may not be the organisation) and care must therefore be taken not to double count. As such, any emissions associated with materials used in the maintenance and replacement of assets shall be excluded from future inclusion in the GHG Inventory where they are within Quintain control.

The total emissions for B1-B5 are significant, resulting in 248 kgCO₂e/m²GIA of residential development. Based on 2018/19 completions, in 2018/19 this accounted for 25,014 tCO₂e, or 718% of total Scope 1 and 2 emissions. This makes emissions from maintenance and replacement in use a significant emission source, and it is therefore considered material and included in our GHG Inventory and reporting.

5.1b In-Use Energy, Water and Waste (Sold Assets)

Whilst Quintain has an influence on the energy and water consumed in newly constructed assets through design decisions made, these



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emissions will not remain static over the life of the building (the sold product) due to changes in building fabric and equipment replaced during the life of the building and changes to emission factors over time due to the decarbonisation of energy supplies. It would misrepresent emissions in this case to report them over a defined lifespan when for retained assets, these emissions are reported under *Category 5.2 Emissions from downstream Leased Assets* on an annual basis. It would be within the organisational boundary of the building owner to report these emissions under their *Category 5.2* emissions, so these are excluded to avoid double counting.

As a developer, beyond the provision of waste and recycling facilities, Quintain has no influence on waste generated in assets sold.

QUANTIFICATION MODEL

5.1a Embodied Emissions (Life-cycle Stages B1 – B5)

The total emissions calculated for NW07/08 per m² GIA for life-cycle phases B1 - B5 are multiplied by the total GIA of assets where construction is completed during the reporting year.

5.2 EMISSIONS FROM DOWNSTREAM LEASED ASSETS

EMISSION SOURCES

Energy, water and waste across all residential and commercial leased assets.

SIGNIFICANCE

The majority of assets across the Wembley Park estate are leased to either residential (Quintain Living) or commercial tenants. Across the residential assets, the all-inclusive tariff arrangement means that the organisation has a vested interest in reducing resident energy and water consumption. In 2018/19, energy use across Wembley Park, but excluding that within Quintain Living, accounted for 151% of total Scope 1 and Scope 2 emissions. This is therefore the second most significant emission source to the organisation, and will increase further when Quintain Living emissions, and emissions relating to water and waste are included.

Where waste is managed via Envac, there are operational considerations that make the total waste generated a material consideration (space, capacity etc.); where plots are not connected to the Envac system however, collection has historically been arranged via the local authority and paid for via Council Tax, so whilst there is an incentive to collect waste data via GRESB, the lack of ability of the local authority and its contractors to measure and provide waste generation data results in a data gap. This is now being addressed, with the commencement of commercial waste collections from

residential blocks for household waste and recycling arranged by Wembley Park Estate in 2020. Energy, water and waste used on our downstream leased assets are therefore material and the GHG Inventory Category is included in our GHG Inventory and reporting.

QUANTIFICATION MODEL

5.2a Gas

There are a small number of gas supplies across the site serving tenant areas; these are generally provided to F&B units and in all new retail, are installed at the discretion of the tenant. Where a meter is installed is read on a monthly basis and data is provided by Realm. No data regarding the calorific value of the gas supplied is available, as the organisation is not responsible for billing, so a calorific value of 39.5MJ/m³ is applied in accordance with the procedure identified under *Category 1.1* emissions.

The total kWh is multiplied by the 'Natural Gas' emission factors previously outlined in *Categories 1.1* and *4.1b*.

There is a supply at W07 that is obtained by the organisation and recharged based on consumption to individual F&B tenants within the shopping centre. Here, the calorific value provided via billing is applied where available.

5.2b Electricity

Electricity consumption data is multiplied by the relevant emission factors previously outlined in *Categories 1.1* and *4.1b*.

5.2c Heat

Heat is metered in some cases at an apartment level (older plots on NW Lands) making it difficult to obtain, although efforts have been made to automate this data and allow it to be received on a regular basis (where previously it was estimated).

Heat is provided across the estate via energy centres located in NW06 and E03, under the control of EOn and Metropolitan respectively. Data is provided to the estate team relating to the gas input and heat generation of the system, allowing emissions and losses to be calculated using the emission factors for grid electricity and natural gas previously outlined in *Categories 1.1* and *4.1b*.

5.2d Water

Water is metered either at the individual occupier/ tenant level, or in some cases as a bulk supply to the whole building.

For GHG reporting, total water consumption is multiplied by the emission factors for water supply and water removal previously outlined in *Category 4.1b*.

5.2e Waste

It isn't possible to determine the origin of waste generated via Envac, which means only a total waste generation figure for the whole estate can be provided; this is recorded under 'Wembley Park Estate' emissions under operational control in *Category 4.3b*.

As all commercial and residential waste is now managed by Wembley Park Estate, partial year data has been retrospectively applied to estimate waste generation and waste breakdowns for the rest of the year; this is considered to be a more accurate assessment of waste generation than the alternative - average data for the borough. Depending on the waste contractor, data can be provided as a volume (m³) or actual weight (tonnes). Where waste is provided as a volume, a conversion factor is applied based on the type of waste collected. The Conversion Factor Guidance for WRAP Tools provides the European Waste Catalogue (EWC) code, and the factor required to convert 1m³ into tonnes. For GHG reporting, the total waste generated by waste route is multiplied by the emission factors for waste removal previously described.

5.3 EMISSIONS FROM END-OF-LIFE STAGE FOR THE PRODUCT

EMISSION SOURCES

End of life emissions occur when assets are dismantled.

SIGNIFICANCE

The Cundall report previously outlined provides an estimate of end-of-life emissions after 60 years. These emissions would be the responsibility of the demolition company.

No allowance has been made for emission sinks as a result of material reuse and recycling, so the figure currently calculated is likely to be a significant over-estimate of emissions..

The total emissions for C1 - C3 emissions result in 82 kgCO₂e/m²GIA of residential development. Based on 2018/19 completions, in 2018/19 this accounted for 8,311 tCO₂e, or 238% of total Scope 1 and 2 emissions. This makes emissions from demolition a significant emission source, and it is therefore considered material and included in our GHG Inventory and reporting.

QUANTIFICATION MODEL

The total emissions calculated for NW07/08 per m² GIA for life-cycle phases C1 - C3 are multiplied by the total GIA of residential assets where construction is completed during the reporting year.

5.4 EMISSIONS FROM INVESTMENTS

EMISSION SOURCES

There are no sources of emissions from investments.



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CATEGORY 6: EMISSIONS FROM OTHER SOURCES

No other emission sources have been identified.

UNCERTAINTY

It is important to recognise that unless emissions are measured with accurately calibrated equipment at source, then all emission factors and resulting emissions are estimates. The quality of activity and emission factor sources will have a direct impact on the quality of the GHG Inventory, and the robustness of emissions reporting is dependent on the quality of data used to calculate the emissions profile, and the communication of any uncertainties. in accordance with the requirements of ISO 14064:1, we assess the uncertainty associated with the quantification approaches we use and conduct an assessment that determines the level of uncertainty at the GHG Inventory Category level.

SOURCES OF UNCERTAINTY

Sources for uncertainty arise along the value chain when any assumptions are made, or emissions are not directly measured. In relation to our emissions data, the following have been identified as the key uncertainties:

- **Scientific Uncertainty:** Calculated in the UK by BEIS, based on a range of inputs and outputs. The process does not measure exact emissions into the air, but rather uses a series of educated assumptions, presenting a degree of scientific uncertainty. The use of BEIS emissions factors is widespread across UK companies reporting their UK emissions. For this reason, despite the scientific uncertainty in those factors, the ability to compare data between companies, and over time, will not be affected, and it is beyond the scope of our analysis to measure beyond the induced parameter uncertainty.
- **Model Uncertainty:** The use of equations to characterise the relationships between various parameters and emissions process can introduce model uncertainty if incorrect inputs and / or equations are used. Our quality management procedures and external assurance processes are used to address and eliminate this risk and model uncertainty risks are therefore not considered further.
- **Parameter Uncertainty:** Quantifying the parameters used as inputs, for example activity data or emissions factors, can lead to parameter uncertainty.

Emission estimation models that consist of only activity data multiplied

by an emission factor only involve parameter uncertainties, assuming that emissions are perfectly linearly correlated with the activity data parameter.

Parameter uncertainties are the subject of the uncertainty analysis that we carry out annually on our data and are included in this report.

PARAMETER UNCERTAINTIES

SYSTEMATIC UNCERTAINTY: Systematic uncertainty occurs if data are systematically biased – if the average of measured or estimate values is always higher or lower than the true value. Such biases can arise because emissions factors are constructed from non-representative samples, all relevant source activities or categories have not been identified, or incorrect or incomplete estimation methods or faulty measurement equipment have been used. Our data management procedures are implemented to ensure that errors in transcription and calculation are reduced or eliminated, but systematic uncertainties are not considered beyond this.

STATISTICAL UNCERTAINTY: Statistical uncertainty results from natural variations (e.g. random human errors in the measurement process, fluctuations in equipment) and can be estimated, assuming a normal distribution of the relevant variables.

Measurement of statistical uncertainty is presented as an uncertainty range of +/- percent of the mean value reported.

THE GHG PROTOCOL UNCERTAINTY TOOL: The GHG Protocol produce an Uncertainty Tool for the calculation of parametric uncertainty in GHG inventories. We have adopted the use of this tool for calculating the parametric statistical uncertainty of our GHG Inventory.

The tool applies the first order error propagation method (Gaussian Method) to calculate a simple assessment of statistical uncertainty. GHG guidance provides a typical, although arbitrary, scale for the quantitative assessment of data accuracy for the different inputs; we have used this as a basis for determining uncertainty levels, but do not use the High/ Good/ Fair/ Poor scale directly.

Data Accuracy	Interval as % of Mean Value
High	+/- 5%
Good	+/- 15%
Fair	+/- 30%
Poor	> 30%

It then ranks data accuracy based on the scale above at several levels:

- Single source data for indirectly measured emissions (activity data and emission data)

- The sub-total and total level

Additional advice is provided on the ranking that should be given to different types of data; where relevant, this has been used to determine the rankings of data quality described for activity and emission data, summarised below.

At the end of each reporting period, an assessment of uncertainty is made by inputting the quantities of emissions by GHG Inventory sub-category with the data quality factors determined. An overall assessment of quality is presented for each emission category using the High – Poor scale above.

The GHG Inventory includes an assessment of data quality for each Inventory sub-category. For metered supplies, this is calculated by allocating the activity data to the relevant data type and corresponding data quality. This data is aggregated at the GHG Inventory sub-category level, and uncertainty analysis is applied to each sub-category. For other data types, the data quality is applied in accordance with the descriptions below.

ACTIVITY DATA BY SOURCE

Uncertainty intervals for data sources are summarized in Table M1 by GHG Inventory Category on page 106. These are calculated based on the assumptions stated below.

METER READINGS

Meter readings relate directly to the assets and supplies under consideration and are considered 'Primary Data'. Meter reads are the main source of activity data for most electricity, gas, heat and water supplies, including those that are remotely read (in this case, meter reads are used to corroborate automated data).

GRID ELECTRICITY & WATER

Electricity and water meters measure precise volumes or pulses and are considered to be highly accurate in their measurement of consumption. Main incoming supplies are preferred over sub-metered data as these are payment-grade and provide additional reassurance over the quality of the data.

Where data is based entirely on meter reads between the start and end date of the reporting period, this is considered to be of 'High quality, and an uncertainty interval of +/- 5% is applied.

Where data is apportioned based on actual data for periods outside the reporting period, this is considered to be of 'Good-High' quality, and an uncertainty interval of +/- 10% is applied.

Data is only estimated where historic supply information is available



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within the reporting period. Historic daily consumption covering an appropriate time period is applied to missing data periods and as this is specific to the supply, this is considered to be 'Good' quality, with an uncertainty interval of +/- 15% applied. Estimates that are not based on supply data, including that provided by suppliers, are not used; the supply is instead reported as having 0% data coverage for the period.

NATURAL GAS

Although the measurement of gas volumes is as accurate as that for electricity and water, an additional calculation has to be performed to convert the volume of gas consumed into energy. This is based on standard conversion factors and the calorific value of the gas, which varies throughout the day. Where billing data is available, this includes the conversion figures required and is applied to the consumption total. Where a calorific value specific to the supply is not available, gas transmission data, including calorific value, is available from National Grid, specific to the Local Distribution Zone (LDZ); supplies in London are located in LDZ NT (North Thames) and an annual average calorific value for gas supplies at Wembley Park of 39.26 MJ/m³ has been calculated and applied where calorific data from the supplier is unavailable. Where this is the case, data quality is downgraded to the same level as apportioned electricity and water data. If already apportioned, the increase in uncertainty is considered to already be accounted for in the increased uncertainty interval.

HEAT

Heat is metered by measuring the temperature differential between two points, which is less accurate than measuring a pulse or volume if not correctly installed (e.g. the distance between measured points is too short or too long, or there is a bend in pipework between two points), then an inaccurate reading will be produced. The quality of heat meter read data is therefore considered to be slightly lower than that of electricity and water meter data:

- Meter data interval of +/- 10%
- Apportioned data interval of +/- 15%
- Estimated data interval of +/- 20%

FUEL CARD DATA

Fuel consumed in vehicles is recorded by fuel cards and is deemed to be a highly accurate record of consumption with an interval of +/- 5% applied. Where apportioned to cover periods at the start or end of a year, the start and end mileage between fuel tank refills is used to apportion fuel use by day. As the data is recorded weekly, this is not likely to result in any significant uncertainty, and no adjustments to the

uncertainty interval are applied.

COMMERCIAL WASTE COLLECTION DATA

Primary activity data is used, based on actual waste generated and quantified at source; as this is directly measured, it is considered to be of 'High' quality, with an interval of +/- 5% applied. Prior to 2020 residential waste not collected via Envac was collected by the local authority. Data was not available relating to the weight or breakdown of this waste, and it was proposed that we would make an estimate of residential waste based on local authority collection data. In late 2020, a decision was made to appoint a commercial waste contractor to collect residential waste, so actual data for the latter final quarter of the year is now available; this has been used to estimate waste generation and waste routes for the rest of the year as it is considered to be more accurate than borough-wide averages. However, this is only considered to be a 'Fair-Good' representation of activity data, with an interval of +/- 20% applied.

A small quantity of waste is removed by bin size and is not weighed; in this instance, a conversion factor is applied to generate the total waste volume to a tonnage. This is considered to be of 'Good-High' quality, with a +/- 10% interval applied.

EMBODIED CARBON

The activity factor for the purposes of embodied carbon is the Gross Internal Area (GIA) of the asset (or partial asset) completed and handed over in the reporting year. This is calculated based on labelled drawings and records for each asset. As actual floor area can differ from design data, this data is considered to be of 'Good-High' quality with an interval of +/- 10% applied.

EMISSION FACTORS BY SOURCE

Uncertainty intervals for emission factors are summarized in Table M2 by GHG Inventory Category on page 106. These are calculated based on the assumptions stated below.

NATURAL GAS, PETROL & DIESEL (BEIS 2020 & 2019)

Direct & Indirect (upstream) Emissions

All fuel conversion factors in the BEIS dataset are based on the emission factors used in the UK GHG Inventory (GHGI) for 2018 (2017).

Natural gas consumption figures quoted in kWh by suppliers in the UK are generally calculated from the volume of gas used, on a Gross CV basis, and the Gross CV emission factor is the default factor for the calculation of emissions.

Information on quantities and source of imported gas are available annually from Digest of UK Energy Statistics (DUKES), which relates to two-years prior to the year the emission factors will be applied to (i.e. 2020 emission factors apply 2018 DUKES data) and are used to calculate the proportion of gas in UK supply coming from each source. This is used to provide a weighted average for UK supply.

As there are only very small changes in the emissions associated with mains gas between different years, the fact that the emissions data applied is two-years out of date is not considered to be a significant issue.

The GHG Protocol guidance on uncertainty determines that carbon content is almost standard for national supplies, and emission factor data calculated in this way is 'High' quality; however, as the data used to calculate UK emission factors is an average of data from multiple countries from within the EU, an uncertainty interval of +/- 10% has been applied.

Upstream emission factors used to report FERA emissions are taken from a 2015 study by Exergia. Indirect Well-to-Tank (WTT) emissions for natural gas are based on:

- Estimates of emissions associated with supply in major gas procuring countries supplying the EU (piped gas and LNG)
- The pattern of supply for each member state
- A combination of emission data associated with supply patterns

The methodology developed allows for the value calculated for gas supply in the UK to be updated annually, reflecting changes in the sources of imported gas to be reflected in the emission factor.

For petrol and diesel, the Exergia study is based on:

- Detailed modelling of upstream emissions associated with 35 crude oils used in EU refining, accounting for 88% of imported oil in 2012.
- Estimates of emissions associated with then transport of these oils
- Emissions from refining, modelled on a country by country basis, based on specific refinery types by location and the calculation of an EU average based on the proportion of each crude oil going to each refinery type
- An estimate of emissions associated with imported finished products from Russia and the US.

Conversion factors are also calculated for forecourt petrol and diesel biodiesel as a proportion of the total supply based on Department for Transport statistics taking into account the component of bioethanol (petrol) and Transport Renewable Fuel statistics.



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As the background data used in these studies is now several years out of date, an uncertainty interval of +/- 15% has been applied.

GRID ELECTRICITY (BEIS 2020 & 2019)

Electricity conversion factors represent the average CO₂ emissions from the UK national grid per kWh of electricity generated. The UK grid electricity factor changes from year to year as the fuel mix consumed in UK power stations and autogenerators changes, and the proportion of net imported electricity also changes. Since 2012, the proportion of energy generated from coal has decreased significantly from circa 40% to less than 20%, with the proportion of electricity generated from gas and renewables has increased.

The UK electricity emission factors provided in the 2020 (2019) GHG Conversion Factors are based on emissions from sector 1A1a (power stations) and 1A2b (autogenerators) in the GHGI for 2018 (2017) according to the amount of CO₂, CH₄ and N₂O emitted per unit of electricity consumed (DUKES 2019 (2018)). The UK is a net importer of electricity from the interconnectors with France, the Netherlands and Ireland, and net imports are calculated from DUKES data, with an average imported electricity emission factor calculated from the individual factors for the relevant countries weighted by their respective share of net imports.

The GHG Protocol guidance on uncertainty states that electricity emission factors are to be considered 'Fair' if an annual average is used for a grid with multiple fuel sources. This is downgraded to 'Poor' to reflect that emissions are based on data that is two years old and there is significant variation between years in how electricity is generated. Emission factors are likely to significantly over-estimate actual emissions as a result and a resulting uncertainty interval of +/- 30% is therefore applied.

HEAT (calculated from generator data)

Heat emission factors are calculated based on gas and electricity import and export data, total heat generation and total heat delivery provided by the heat generator.

EASTERN LANDS ENERGY CENTRE (METROPOLITAN)

Metropolitan provide detailed data on each of the three boilers and two combined heat and power (CHP) engines that contribute to the generation of heat at the Eastern Lands Energy Centre, in addition to emission factors (described earlier) to generate the total carbon emissions associated with the generation of heat and power. This is all electricity imported and exported from the energy centre. Total input mains gas and grid electricity are multiplied by their respective

then divided by the total heat and power exported to derive a quantity of CO₂e per kWh of energy by end user.

The underlying energy import and export data is assumed to be reliable, although this has not been assured or verified. The emission factors applied are the same as those described for Mains Gas and Grid Electricity, with their respective uncertainties applied.

Conservatively, an uncertainty interval of +/- 30% is applied.

NORTH WEST LANDS ENERGY CENTRE (EON)

The NW Lands Energy Centre is designed to initially operate using gas boiler plant. Eon have had some difficulties in obtaining accurate gas consumption data, either from the main supply or via the BMS, and currently estimate their gas consumption based on an assumed efficiency of their boilers. The total gas consumed is compared with the total heat consumed by end users, some of which is also estimated, to calculate an emission factor for heat. Due to the high level of uncertainty in the inputs used for calculating the emission factor for heat, and uncertainty interval of +/- 50% is applied.

WATER (BEIS 2020 & 2019)

The emission factors for water supply and treatment in sections "Water supply" and "Water treatment" of the 2020 (2019) GHG Conversion Factors were sourced from *Water UK* (for reporting in 2008, 2009, 2010 and 2011) and are based on submissions by UK water suppliers. Water UK represents all UK water and wastewater service suppliers at national and European level.

Water UK (2011) gives total GHG emissions from water supply, wastewater treatment, offices, and transport. In the 2012 update of the GHG Conversion Factors, these emissions were split between Water Supply and Water Treatment using the same proportional split from previous years. However, since this publication, Water UK has discontinued its "Sustainability Indicators" report and so no longer produces further updates to these emission factors. Therefore, the Conversion Factors have been unchanged since the 2012 GHG Conversion Factors values.

Data has not been updated since 2011, and in the intervening period there have been significant reductions in emissions from sources likely to affect water treatment operations; these emission factors are therefore likely to be over-estimates and are considered to be 'Poor' quality with an uncertainty level of +/- 30% applied.

WASTE (BEIS 2020 & 2019)

The methodology applied in calculating the waste emission factors assumes emissions attributed to the company which generates the

waste cover only the collection of waste from their site. Under this standard, in order to avoid double-counting, the emissions associated with recycling are attributed to the user of the recycled materials, and the same attribution approach has also been applied to the emissions from energy generation from waste. Only transportation and minimal preparation emissions are attributed to the entity disposing of the waste. Landfill emissions remain within the accounting Scope of the organisation producing waste materials.

Figures for Refuse Collection Vehicles have been taken from the Environment Agency's *Waste and Resource Assessment Tool for the Environment (WRATE)* (Environment Agency, 2010).

Waste collected at Wembley Park is sent to the Veolia Waste Transfer Station at Marsh Road, located just over 5km away. From there, waste is segregated further and sent either for recycling (dry recycling) at various facilities depending on the material; for the production of compost/ bioenergy (organics); or to an Energy from Waste (EfW) facility located in Lewisham (30km away).

The transport distances for waste used to calculate emission factors are estimated, assuming 10km by road to a transfer station, 25km by road to a MRF or 50km to a municipal waste incineration/ EfW plant. Given the proximity of Wembley to these end destinations, this is likely to result in an over-estimate of distances and resulting emissions.

Road vehicles are volume limited rather than weight limited. For all HGVs, an average loading factor (including return journeys) is used based on the HGV factors provided in the 2017 Conversion Factors. Waste vehicles leave a depot empty and return fully laden. A 50% loading assumption reflects the change in load over a collection round which could be expected.

The above described methodology has not been updated since 2010, and conversion factors for transport apply 2017 figures. The freight sector, including the transportation of waste has seen significant improvements over recent years, so this is likely to over-estimate emissions.

For the reasons outlined above, waste emission factors are considered to be a poor representation of emissions, resulting in an uncertainty interval of +/- 30%.

EMBODIED CARBON (NW07/08 Cundall Report)

STAGES A1 – A5: PRODUCT & CONSTRUCTION

The product emissions generated at this stage arise from extracting the raw materials from the ground, their transport to a point of



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manufacture and then the primary energy used (and the associated carbon impacts that arise) from transforming the raw materials into construction products. During construction, impacts arise from the transportation of construction products to site and their subsequent processing and assembly in the building. Emissions from MEP were excluded from the assessment, but benchmark data for similar projects were used to estimate their contribution, and this is included in the total. The remaining data is based on actual materials used, their locations of manufacture and manufacturing methods, and their distance to the construction site. Much of this data is obtained via Environmental Product Declarations, but where these are not available, other sources of emission factor data, such as embodied carbon databases, have been used to determine total emissions. Site emissions are also included specific to monitoring at NW07/08.

The following materials were excluded from the assessment:

- Furniture in residential apartments
- WC fittings/ sanitaryware
- External services (e.g. utilities, manholes etc.)
- Soft landscaping and water features.

No estimates of emissions were applied to these items.

The study provides a comparison between other similar assets that Cundall have assessed, with emissions ranging from between 600kgCO₂e/m² to 1,150kgCO₂e/m². Given that all construction at Wembley Park is relatively similar, and the figure for NW07/08 is just under the average figure for similar projects, it is applied to the GIA of other residential assets where no site-specific study is undertaken. Due to the excluded elements, assumptions relating to MEP, and the potential for error that arises when utilising multiple 3rd party activity These emissions are recorded in the reporting year that the building is completed but are estimates of emissions that will occur in the future. A 60-year life-cycle period has been assumed, and maintenance and replacement schedules, based on manufacturer guidance, has been used to determine the frequency of these events which will result in data sources to generate an emission factor, an uncertainty interval of 30% has been applied to the emission factor that is derived from this phase of the embodied carbon assessment where it is applied to the asset that was assessed, downgraded to +/- 40% when applied to a different asset of the same building type. This data is only used to represent residential assets.

STAGES B1 – B5: IN-USE

This stage covers a wide range of sources, from the embodied carbon emissions associated with the operation of the building, including the materials used during maintenance, replacement and refurbishment. emissions. These are guidelines, and are likely to be conservative, resulting in an over-estimate of frequency. The building life-cycle is also likely to be an under-estimate.

The emissions associated with materials used in the maintenance and replacement of materials installed during construction are also likely to over-estimate emissions as a result of the increasing decarbonisation of energy supplies and industrial practices. If a zero -carbon economy is achieved by 2050, then there will be zero emissions associated with these materials in thirty years, just mid-way through the life-cycle period under review.

For the reasons stated above, the emission factor generated through the consideration of in-use emissions is assigned an uncertainty level of +/- 50% where it is applied to the asset that was assessed, downgraded to +/- 60% when applied to a different asset of the same building type. This data is only used to represent residential assets.

STAGES C1 – C4: END-OF-LIFE

The eventual deconstruction and disposal of the building at the end of its life takes into account the on-site activities of the demolition contractors. No 'credit' is taken for any future carbon benefit associated with the reuse or recycling of a material into new products. Although this activity is assumed to be carried out in 2079, at the end of the 60-year design life, there is no consideration of the committed actions to deliver a zero-carbon economy by 2050. In addition, the carbon benefit of materials reuse – which is already widespread – has not been taken into account. In combination, rather than a source of emissions, this stage is more likely to generate an emission sink, and the uncertainty interval applied is therefore +/- 75% where it is applied to the asset that was assessed, downgraded to +/-85% when applied to a different asset of the same building type. This data is only used to represent residential assets.

AGGREGATION OF GHG EMISSION DATA

GHG emissions are aggregated in a number of ways, generating totals by GHG Emission Scope, GHG Emission Category and Sub-Category, and for each of the above, by the following reporting entities within the business:

- Corporate Offices
- Wembley Park Estate

- Quintain Living
- Wembley Park Residential
- Wembley Pak Retail
- Wembley Park Commercial
- Wembley Park Leisure

DATA COVERAGE

Data coverage is calculated based on the Gross Internal Area for which we have been able to obtain data as a proportion of the total Gross Internal Area for assets included within a GHG Inventory Category. This data forms the basis for the measurement of our performance against our annual target to achieve 90% data coverage across all data sources.

In some instances, for example where an energy or water supply supplies the public realm, no area is included and the supplies are excluded from the coverage calculation. As in most cases we have data for these areas, coverage figures are likely to under-estimate actual data coverage

ANNUALISED AREA

As our portfolio of standing assets increases year on year, and assets are handed over from construction part-way through reporting years, we calculate an 'annualised area' based on the proportion of the year the asset was considered a 'standing asset'. This is calculated by multiplying the area by the number of days it was operational and dividing by the number of days in the year.

GLOBAL WARMING POTENTIAL (GWP)

All emission factors used in the GHG Inventory present non-carbon dioxide (CO₂) GHGs as CO₂ equivalents (CO₂e), using Global Warming Potential (GWP) factors from the Intergovernmental Panel on Climate Change (IPCC)'s Fourth Assessment Report that describes the total warming impact of the six greenhouse gases covered by the Kyoto Protocol: methane (CH₄); nitrous oxides (N₂O); hydrofluorocarbons (HFCs); perfluorocarbons (PFCs); and sulphur hexafluoride (SF₆). Only CO₂, CH₄ and N₂O are included in the BEIS GHG Conversion Factors. This is consistent with reporting under the United Nations Framework Convention on Climate Change (UNFCCC) and with the UK Greenhouse Gas Inventory, upon which the 2019 and 2020 GHG Conversion Factors are based. The underlying methodology states that this is because although the IPCC has

Greenhouse Gas	GWP
Carbon dioxide (CO ₂)	1
Methane (CH ₄)	25
Nitrous oxide (N ₂ O)	298



METHODOLOGY

PROPERTY DATA

prepared a newer version of GWP figures, methods have not yet been officially accepted for use under the UNFCCC.

RESILIENCE & ADAPTATION

RESILIENCE THROUGH DESIGN (p72)

2020 WARM, WET & SUNNY: <https://www.carbonbrief.org/met-office-a-review-of-the-uks-climate-in-2020>

INCREASED LIKELIHOOD OF HEATWAVES:

https://www.metoffice.gov.uk/research/climate/understanding-climate/uk-extreme-events_heatwaves

AWARD WINNING SOFTWARE: BuroHappold Engineering won the Best Process & Application for their Parametric Dwelling Optioneering tool at the CIBSE Digital Engineering Awards 2019.

FLOODING & DROUGHT

LONDON SEVERE DROUGHT COSTS:

<https://www.london.gov.uk/press-releases/assembly/leonie-cooper/london-facing-water-crisis-warns-new-report>

ENERGY USE & EFFICIENCY

ENERGY CONSUMPTION (pp75-77)

Energy consumption is calculated according to the procedures set out in GHG Emission Reporting on pages 95-104.

ENERGY WITHIN OPERATIONAL CONTROL: In accordance with our Operational Boundary described on page 96, all activity data that contributes to GHG Inventory *Category 1 Direct GHG Emissions* and *Removals* and *Category 2 Indirect GHG Emissions and Removals* are included within this figure, representing consumption related to assets where we have a level of operational control. This typically includes landlord areas and supplies that have a master building-level control element, such as the heat provided to tenant areas in our commercial assets.

ENERGY OUTSIDE OPERATIONAL CONTROL: This includes energy activity data in GHG Inventory *Category 5.2 Emissions from Downstream Assets* - specifically, all activity data in sub-categories 5.2a *Natural Gas*, 5.2b *Grid Electricity* and 5.2c *Heat*. This represents consumption of tenants of our buildings that falls outside our operational control. It excludes consumption by residents of Wembley Park Residential, where whilst we have operational responsibility for the ongoing management of common areas of

those renting from owner-occupiers, or housing associations.

ENERGY INTENSITY: Is calculated at asset level based on the energy consumed by an asset divided by the annualised area previously described.

COVERAGE: Specific to energy consumption, where there are multiple energy types supplied to an asset, coverage is calculated by dividing the annualised area by the number of energy types. This allows the aggregated area to add up to the actual area of the asset but avoids double counting in terms of coverage; where an asset has an electricity and a heat supply, 50% of coverage is attributable to electricity and 50% to heat. This is required where we have data for one supply but not the other.

WATER USE & EFFICIENCY

WATER EFFICIENT DESIGN (p78)

AVERAGE UK WATER CONSUMPTION: Average for a single person household; note that the per person average typically reduces as households increase in size, reflecting economies of scale. <https://www.statista.com/statistics/827278/liters-per-day-household-water-usage-united-kingdom-uk/#:~:text=A%20single%20member%20household%20in,within%20a%20household%20of%20five.>

WATER CONSUMPTION (pp78-79)

Water consumption is calculated according to the procedures set out in GHG Emission Reporting on pages 95-104.

Refer also to Energy Consumption opposite.

WATER WITHIN OPERATIONAL CONTROL: this includes all activity data that contributes to GHG Inventory *Category 4.3a Emissions from the disposal of solid and liquid waste: Water*.

WATER OUTSIDE OPERATIONAL CONTROL: This includes activity data in GHG Inventory *Category 5.2 Emissions from Downstream Assets* - specifically, all activity data in sub-category 5.2d *Water*.

WASTE & CIRCULAR ECONOMY

DESIGNING OUT WASTE (p80)

OFF-SITE MANUFACTURE: Estimated reductions achieved through design measures are taken from the Site Waste Management Plan produced by BuroHappold Engineering for the planning submission as part of the Wembley Park Masterplan in November 2015.

MATERIAL STORAGE: Estimates taken from *Using Construction Consolidation Centres to reduce construction waste and carbon emissions*, published by WRAP in 2011.

A NEW LEASE OF LIFE (p80)

BUY SWAP SELL: Percentage of Londoners throwing away goods that could be reused from <https://www.bhf.org.uk/what-we-do/news-from-the-bhf/news-archive/2019/october/uk-adults-wasting-furniture>

WASTE PERFORMANCE (p81)

UK & LONDON BOROUGH OF BRENT AVERAGE RECYCLING RATES: <https://www.gov.uk/government/statistical-data-sets/env18-local-authority-collected-waste-annual-results-tables>

RECYCLING RATES IN LONDON FLATS: Average Pre-intervention recycling rate excluding contamination from p24 of *Report – Making Recycling Work for People in flats: A research project on recycling in London's purpose-built flats*, January 2020 (https://relondon.gov.uk/wp-content/uploads/2021/02/LVWARB-Making-recycling-work-for-people-in-flats-full-report_200128-1.pdf)

Waste generation (including recycling and food waste) is calculated according to the procedures set out in GHG Emission Reporting on pages 95-104.

Refer also to Energy Consumption opposite.

WASTE WITHIN OPERATIONAL CONTROL: this includes all activity data that contributes to GHG Inventory *Category 4.3b Emissions from the disposal of solid and liquid waste: Waste*.

WASTE OUTSIDE OPERATIONAL CONTROL: This includes activity data in GHG Inventory *Category 5.2 Emissions from Downstream Assets* - specifically, all activity data in sub-category 5.2e *Waste*.



METHODOLOGY

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SUPPLY CHAIN MONITORING

SUPPLIER PORTAL (pp84-85)

HOW OUR SUPPLIERS PERFORM ON KEY SUSTAINABILITY & ESG ISSUES

2020 spend with suppliers has been cleaned to remove non-eligible spend, including:

- Payments to government bodies and local authorities (e.g. planning fees, business rates)
- Subscriptions and memberships
- Service providers with whom we have limited engagement or ability to influence (e.g. utility providers, company credit card providers, internet search engine providers)
- Employee expenses
- Charitable contributions and community investments

TOTAL APPROVED SUPPLIERS: All suppliers who are registered with SupplierPortal and have responded to the Supplier Portal questionnaires.

ACTIVE SUPPLIERS: Are those with whom we have spent with during 2020.

OTHER SUPPLIERS: Are suppliers who have been through the SupplierPortal process and responded to questionnaires, but whose services we did not engage in 2020.

ELIGIBLE SPEND: All spend by Quintain and its subsidiaries that falls outside the categories described above. This is broken down into spend greater than and less than £10k in 2020; where annual supplier spend is less than £10k, suppliers are not required to respond to the questionnaire.



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PROPERTY DATA

TABLES

TABLE M1: DATA SOURCE UNCERTAINTY INTERVALS

Category & Data Source	Uncertainty Interval
1.1a & 5.2a Mains Gas, 2.1a & 5.2b Grid Electricity, 4.1b FERA, 4.3a & 5.2d Water	
Meter Read Data: Actual	+/- 5%
Meter Read Data: Apportioned	+/- 10%
Meter Read Data: Estimated Data	+/- 15%
1.2a Petrol, 1.2b Diesel	
Fuel card data	+/- 5%
2.1b & 5.2c Heat	
Actual Data	+/- 10%
Apportioned Data	+/- 15%
Estimated Data	+/- 20%
4.1a Embodied Carbon (Life-cycle stages A1 – A5)	
Measured Building Area	+/- 10%
4.3b & 5.22 Waste	
Waste tonnage measured on removal	+/- 5%
Waste tonnage calculated based on measured volume	+/- 10%
Waste tonnage estimated	+/- 20%
5.1a Embodied Carbon (Life-cycle stages B1 – B5)	
Measured Building Area	+/- 10%
5.3a Embodied Emissions (life-cycle stages C1 – C3)	
Measured Building Area	+/- 10%

TABLE M2: EMISSION FACTORS & EMISSION FACTOR UNCERTAINTY INTERVALS

GHG Emission Category & Data Source	EF 2020	EF 2019	Emission Factor Source	Uncertainty Interval
1.1 Direct emissions from stationary combustion	-	-		-
1.1a Mains Gas	0.184	0.18443	BEIS 2020> Fuels> Natural Gas> > kgCO ₂ e/kWh(Gross CV)	+/- 10%
1.2 Direct emissions from mobile combustion	-	-		-
1.2a Petrol (average biofuel blend)	0.229	N/A	BEIS 2020> Fuels> Petrol (average biofuel blend) > kgCO ₂ e/kWh (Gross CV)	+/- 15%
1.2b Diesel (average biofuel blend)	0.241	N/A	BEIS 2020> Fuels> Diesel (average biofuel blend) > kgCO ₂ e/kWh (Gross CV)	+/- 15%
2.1 Indirect emissions from imported electricity	-	-		-
2.1a Grid electricity	0.233	0.256	BEIS 2020> UK Electricity> Electricity Generated> kgCO ₂ e	+/- 30%
2.2 Indirect emissions from imported energy	-	-		-
2.2a Eastern Lands Energy Centre (Metropolitan)	0.199	0.227	kgCO ₂ e/kWh > EL Energy Centre Heat Calculations	+/- 30%
2.2b NW Lands Energy Centre (EON)	0.361	0.391	kgCO ₂ e/kWh > NW Energy Centre Heat Calculations	+/- 50%
4.1 Emissions from purchased goods	-	-		-
4.1a Residential Embodied Carbon (Life-cycle stages A1 – A5)	814.033	814.033	Quintain Wembley – Embodied Carbon Review (NW07/08) > kgCO ₂ e/m ² GIA>	+/- 40%
4.1b Fuel and Energy Related Activities	-	-		-
4.1ba Gas Supply	-	-		-
- Well-to-tank	0.024	0.024	BEIS 2020> WTT-Fuels> Natural Gas> kWh (Gross CV) > kgCO ₂ e/kWh	+/- 10%
4.1bb Electricity Supply	0.055	0.060		-
- Well-to-tank (generation)	0.032	0.036	BEIS 2020> WTT-UK & Overseas elec> WTT- UK electricity (generation) > kgCO ₂ e/kWh	+/- 30%
- Well-to-tank (transport & distribution)	0.003	0.003	BEIS 2020> WTT-UK & Overseas elec> WTT- UK electricity (T&D) > kgCO ₂ e/kWh	+/- 30%
- Transmission & distribution	0.020	0.022	BEIS 2020> T&D> UK Electricity> kgCO ₂ e/kWh	+/- 30%
4.1bc Eastern Lands Energy Centre (Metropolitan)	0.024	0.030	kgCO ₂ e/kWh > EL Energy Centre Heat Calculations	+/- 30%
4.1bd North West Lands Energy Centre (EON)	0.047	0.051	kgCO ₂ e/kWh > NW Energy Centre Heat Calculations	+/- 50%
4.1be Petrol Supply	-	-		-
- Well-to-tank (extraction, refining, transport)	0.063	N/A	BEIS 2020> WTT-Fuels> Fuels> Petrol (average biofuel blend) > kgCO ₂ e/kWh (Gross CV)	+/- 15%
4.1bf Diesel Supply	-	-		-
- Well-to-tank (extraction, refining, transport)	0.058	N/A	BEIS 2020> WTT-Fuels> Fuels> Diesel (average biofuel blend) > kgCO ₂ e/kWh (Gross CV)	+/- 15%
4.3 Emissions from the disposal of solid and liquid waste	-	-		-
4.3a Water	1.052	1.052		-
- Mains Incoming Water Supply	0.344	0.344	BEIS 2020> Water Supply> cubic metres> kgCO ₂ e/ cubic metre	+/- 30%
- Mains Incoming Water Removal	0.708	0.708	BEIS 2020> Water Treatment> cubic metres> kgCO ₂ e/ cubic metre	+/- 30%
4.3b Waste	-	-		-
4.3aa Household/ Commercial EFW	21.317	21.354	BEIS 2020> Waste disposal> tonnes> kgCO ₂ e	+/- 30%
4.3ab Open or closed loop recycling	21.317	21.354	BEIS 2020> Waste disposal> tonnes> kgCO ₂ e	+/- 30%
4.3ac Organic (composting/ anaerobic digestion)	10.204	10.204	BEIS 2020> Waste disposal> tonnes> kgCO ₂ e	+/- 30%
5.1 Emissions or removals from the use stage of the product	-	-		-
5.1a Residential Embodied Carbon (Life-cycle stages B1 – B5)	247.760	247.760	Quintain Wembley – Embodied Carbon Review (NW07/08) > kgCO ₂ e/m ² GIA	+/- 60%
5.2 Emissions from downstream leased assets	-	-		-
5.2a Gas	0.208	0.208	1.1a + 4.1ba above	+/- 10%
5.2b Electricity	0.288	0.316	2.1a + 4.1bb above	+/- 30%
5.2c Heat	-	-		-
5.2ca Eastern Lands Energy Centre (Metropolitan)	0.223	0.257	2.2a + 4.1bc above	+/- 30%
5.2cb North West Lands Energy Centre (EON)	0.408	0.441	2.2b + 4.1bc above	+/- 50%
5.2d Water	4.3a above	4.3a above	4.3a above	+/- 30%
5.2e Waste	4.3b above	4.3b above	4.3b above	+/- 30%
5.3 Emissions from end-of-life stage of the product	-	-		-
5.3a Residential Embodied Emissions (life-cycle stages C1 – C3)	83.320	83.320	Quintain Wembley – Embodied Carbon Review (NW07/08) > kgCO ₂ e/m ² GIA	+/- 85%



METHODOLOGY

ALIGNMENT WITH THIRD-PARTY STANDARDS

EPRA SUSTAINABILITY BEST PRACTICE MEASURES 2017

Although we are no longer members of EPRA, we continue to report in alignment with the measures set out in EPRA sBPR 2017.

ENVIRONMENTAL MEASURES

Code	Performance Measure	Location
Elec-Abs	Total electricity consumption	p75
Elec-LfL	Like-for-like electricity consumption	p76
DH&C-Abs	Total district heating & cooling consumption	p75
DH&C-LfL	Like-for-like total district heating & cooling consumption	p76
Fuels-Abs	Total fuel consumption	p75
Fuels-LfL	Like-for like fuel consumption	p76
Energy-Int	Building energy intensity	p76
GHG-Dir-Abs	Total direct greenhouse gas (GHG) emissions	p66
GHG-Indir-Abs	Total Indirect greenhouse gas (GHG) emissions	p66
GHG-Int	Greenhouse gas (GHG) emissions intensity from building consumption	p69
Water-Abs	Total water consumption	p79
Water-LfL	Like-for-like water consumption	p79
Water-Int	Building water intensity	p79
Waste-Abs	Total weight of waste by disposal route	p81
Waste-LfL	Like-for-like total waste by disposal route	p81
Cert-Tot	Type and number of sustainably certified assets	See below

Energy-Int, GHG-Int & Water-Int

2020 was an outlier year in relation to occupancy for several reasons (e.g. COVID-19 and a high number of newly completed assets), and therefore asset-specific intensity metrics are of little value for comparison purposes for most asset types; we have therefore only applied a general intensity metric of per m² of Gross Internal Area (GIA).

Where appropriate, we will extend our application of asset-specific intensity metrics in 2021 to further enhance our understanding of asset performance.

Cert-Tot

This figure is not reported in the main body of the report, but sustainably certified assets equate to 26% of standing assets by floor area and 28% of standing assets by GAV, broken down by certification type as follows:

- BREEAM Excellent (W06A The Hive & W07A London Designer Outlet)
- BREEAM Outstanding (Brent Civic Centre Retail)

- CODE FOR SUSTAINABLE HOMES Level 4 (NW01 Emerald Gardens, NW06 Elvin Gardens, NW07/08 Landsby/ Vista & W03 Alameda)

SOCIAL MEASURES

Code	Performance Measure	Location
Diversity-Emp	Employee gender diversity	p9
Diversity-Pay	Employee gender pay ratio	See below
Emp-Training	Employee training and development	See below
Emp-Dev	Employee performance appraisals	See below
Emp-Turnover	Employee turnover and retention	See below
H&S-Emp	Employee health and safety	p19, p92
H&S-Asset	Asset health and safety assessments	See below
H&S-Comp	Asset health and safety compliance	See below
Comty-Eng	Community engagement, impact assessments and development	pp11-16, 24-33

Diversity-Pay

This is not something we currently measure.

Emp-Training

Whilst we record the training our employees receive, we do not currently record the number of hours of training received. We are currently investigating options for a training portal which will allow us to track this data in future.

Emp-Dev

All employees receive a performance development review every year.

Emp-Turnover

- New starters in 2020: 42
- Leavers in 2020: 23
- Turnover Rate: 12.6%

H&S-Emp

We report the number of accidents and incidents, as defined by RIDDOR for each component of our business, and where relevant, an Accident Frequency Rate. In 2020, there were zero accidents, incidents or injuries in across our employee-related activities, resulting in an Accident Rate of 0%.

H&S-Asset & H&S-Comp

Health and safety impacts are assessed across all assets over which we exert operational control, which include those managed on our behalf by 3rd party managing agents. There were no incidents on non-compliance with regulations or voluntary codes concerning the health and safety impacts across our assets in 2020.

Safety audits of all directly managed or operated workplaces are, in normal circumstances, carried out annually in accordance with ISO 45001. Audits include inspections to ensure safety and compliance in

relation to access/ egress, lighting and noise, ergonomics, fire safety and general housekeeping. Observations are recorded and action plans are produced to address any identified issues. In 2020, this process was adapted to ensure all office workspaces were COVID-safe, and that all employees working from home were working in safe environments.

Comty-Eng

We have set objectives within our People focus area to deliver sustainable communities, and details can be found in the 'People' section of this report.

GOVERNANCE MEASURES

Code	Performance Measure	Location
Gov-Board	Composition of highest governance body	p9, see below
Gov-Selec	Nominting and selecting the highest governance body	See below
Gov-Cal	Process for managing conflicts of interest	See below

Gov-Board

- No. Executive Board Members: 2
- No. Non-Executive Board Members: 7
- Average Tenure: 31 months
- No. Non-Executive Directors with relevant ESG experience: 0

Gov-Selec

The selection of the Board is made in conjunction with the sole shareholder and principal stakeholder, with the additional appointment of directors independent to Quintain Ltd or parent Group in accordance with governance best practice. The group cover a wide range of expertise relevant to the business and seek additional advice from two specialist advisors to the Board who both have relevant ESG expertise: Sir David Higgins was knighted for his services to regeneration, and Professor Ricky Burdett is Professor of Urban Studies at the London School of Economics and Founder of LSE Cities and Urban Age.

Gov-Cal

All members of the Board are screened by our Governance department prior to appointment to ensure that there are no political exposures, sanctions, or company appointments not previously declared. All are required to complete an annual 3rd party disclosure, which is shared with our external auditors. Executive Directors are also required to complete our annual Employee Compliance Declaration that includes notifications of conflicts of interest.

¹Total leavers during the reporting year divided by total employees at the end of the reporting year. Non-Executive Directors are not included in this figure.



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