

Legend

- Main Building
- Wings on Main Building
- Ancillary Buildings
- Harrop Building
- Vocational Workshop Building
- Art and Design Building
- Music and Learning Resource Centres
- Sports
- mAOD



CASCADE

Not to Scale

Note: All locations are approximate
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Drawing Source: HoK Number SK-69

Project Title:
Richmond Education and Enterprise Campus Development

Figure Title:
Existing College Layout

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Figure Number: Figure 3.2	Date: June 2015
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3.2.3 The buildings have an existing floorspace of 34,252 m² gross external area (GEA). **Table 3.1** provides details of the current use and floor space of each building. The buildings and block references are shown in **Figure 3.2**.

Table 3.1 Existing RuTC Building Size and Function

Building	Block Reference	GEA (m ²)	Building description / function
Main	A-D	12,476	Main College Building- administration; sixth form; student services; health and social care
	Stores	377	Outbuildings/Stores -storage
	C	875	Refectory
	C	579	Careers/Glades - social space
	C	74	Glades Shop - storage
	C	134	C16 & B11 – careers services
	N	2,375	Science Block - science/STEM
	E	1,902	E Block - learning support
	LSW	194	Learning Skills Extension - LRC space
Workshop	G & H	2,605	Workshop Block - construction / installation trades
	Stores	68	Workshop Stores - storage
	Ext.	550	Brick Workshop Building - brick/construction workshop
KLM	KLM	4,917	Art/Design/Catering - art and design
Z	Z	566	Admin Block - staff offices
Music	Music/C	587	Music Centre - music and performance
Sports	Sports/H	1,096	Sports Hall - sports
Harrop	Q	3,295	Terrapin Building - computing, maths engineering
Library	LRC	1,417	Learning Resource Centre - library
E Annex	HE	165	HE Annex - home economics classrooms

3.2.4 The sports centre and pitches are also operated as a community sports facility outside normal college hours. The main operating times for these are as follows:

Term Time: Monday – Friday 16.30-22.00 / Saturdays and Sundays 09.00-17.00

Holidays: Monday – Friday 16.30-22.00 / Saturdays and Sundays 09.00-17.00

Bank Holidays: Closed.

3.2.5 The OPA Site is bounded to the north by the A316 (Chertsey Road), a dual carriageway which eventually joins the A4 and provides access into central London (eastbound). The OPA Site is located to the west of Whitton Road Roundabout, and only has access from the westbound side of the A316. The OPA Site is bounded residential properties on Egerton Road to the east, including properties immediately adjacent to the site boundary. The south of the college site is bounded by residential properties on Craneford Way.

3.2.6 To the south of Craneford Way are the existing playing fields. The College playing field is bounded to the east by residential properties located on Heatham Park Road. The southern boundary is formed by the River Crane whilst the western boundary is

formed by a Council-owned playing field, Craneford Way West. The two playing fields are separated by Marsh Farm Lane, a tarmac path which provides access from Craneford Way.

The Surrounding Area

- 3.2.7 The OPA Site is located within an area of predominantly residential development. To the east of the site is the residential neighbourhood known as the Heatham Estate, whilst to the west is the Challenge Court residential complex, and further west the Rosecroft Gardens Conservation Area (known locally as the Dene Estate). A further residential area lies to the north of the A316, beyond which is the Rugby Football Union's Twickenham Stadium.
- 3.2.8 Marsh Farm Lane, a public right of way (PRoW), extends along the western boundary of the site and connects the A316 to the open ground on Craneford Way playing fields and to allotments and buildings, including a rifle club, located to the south of the River Crane. Two watercourses run close to the site; the River Crane which flows east, forming the southern boundary of the College playing fields south of Craneford Way, and the Duke of Northumberland's River which flows north between Twickenham Stoop and the Dene Estate (Rosecroft Conservation Area). Further open ground is located to the south of the River Crane, known as Twickenham Rough.
- 3.2.9 Planned and ongoing developments, including those for Twickenham Rough and the Former Royal Mail Sorting Office near Twickenham station (see Chapter 2 – EIA Methodology), will serve to increase public access via a footpath from Twickenham Station, linking into Marsh Farm Lane.
- 3.2.10 Pedestrian access to the site is primarily off Egerton Road, with the majority of College pupils approaching the site from Twickenham Railway Station to the south east. Primary vehicle access is off the A316 via Langhorn Drive with secondary access from Egerton Road via Court Way and Craneford Way. On site parking consists of approximately 280 spaces with a further 290 spaces available off site at the Harlequin FC car park off Langhorn Drive (an unadopted road).

4 ALTERNATIVES AND DESIGN EVOLUTION

4.1 INTRODUCTION

4.1.1 This chapter describes the main alternatives to the REEC development which have been considered by RuTC, and the key reasons which have led to the outline design.

4.1.2 Under the EIA Regulations, an ES is required to provide:

‘An outline of the main alternatives studied by the applicant...and an indication of the main reasons for the choices made, taking into account the environmental effects’.

4.1.3 As well as explaining the evolution of the REEC development, this chapter also sets out the key principles which have informed and been incorporated into the design in response to environmental issues associated with the Site and surrounding area. Many of these were developed in consultation with the Local Community Forum.

4.2 ALTERNATIVES

4.2.1 The main alternatives that were studied by RuTC, taking into account potential environmental effects, were alternative layout designs.

4.2.2 The ‘Do Nothing scenario’ and ‘Alternative Sites scenario’, which are often considered in the EIA process, are not applicable in this case because the site allocation and need for the redevelopment are well established. The LBRuT Core Strategy (2009-2026) included Policy CP18.B which outlined that land in educational use will be safeguarded and the *‘potential of existing educational sites will be maximised through redevelopment, refurbishment or re-use to meet educational needs’*. The LBRuT Local Plan Proposals Map (2013) also includes an allocation, T29, that carries forward the saved policy from the Unitary Development Plan (2005) which envisages *‘Redevelopment to provide college and enabling residential development. Retention and upgrading of Craneford Way East Playing Field’*. The allocation is retained as TW10 in the emerging Site Allocations Development Plan Document, and the draft designation for the site states *‘Redevelopment to provide a new college, offices, secondary school and special school, residential including affordable and open space’*.

4.2.3 These policies establish the use of the site for educational and enabling residential development. The need for, and the effect of a ‘Do Nothing scenario’, on the educational elements of the REEC development is set out in Appendix 4.1. Without the enabling residential development, the educational elements would not be able to be progressed because the land sale provides part of the funding for the college

development.

- 4.2.4 The history of how the scheme design evolved over the period 2005-2015, summarised from the Design and Access Statement accompanying the OPA, is given in Section 4.3 below.
- 4.2.5 The design principles developed for the scheme, taking into account potential environmental effects, are set out in Section 4.4.

4.3 DESIGN EVOLUTION

2005 Proposals

- 4.3.1 Original proposals for redevelopment of the college site were first put forward in 2005 in response to supplementary planning guidance (SPG) issued by LBRuT – Crane Valley Planning Guidelines, April 2005. The 2005 Proposals included a large new College of over 30,000m² built across the open playing field at the north of the site, and the centre of the site. As illustrated **Figure 4.1**, the majority of the educational site would have been occupied by buildings. Sports pitches were to be provided on the College playing field.
- 4.3.2 The residential site in the 2005 Proposals occupied approximately half of the main College site, and would have been composed of a range of blocks of flats, including some large and relatively tall buildings. The 2005 Proposals were significantly more dense than the current proposals on both the educational and residential sites, as illustrated in **Figure 4.1**.

2009 Proposals

- 4.3.3 In 2008 a site specific Planning Brief SPG for Richmond upon Thames College was adopted by LBRuT. The RuTC Planning Brief SPG recognised and supported the potential to redevelop the site for educational and residential purposes and provided useful guidance on the building scale to which new buildings would be expected to comply. A further proposal for redevelopment was put forward in response to the SPG in 2009.
- 4.3.4 The 2009 Proposals were for a larger College than in either the 2005 or in the current proposals. This was proposed to be delivered as one large and densely built first phase at the north of the main site, followed by a second phase for a very large sports building at the centre of the site. A small enabling residential redevelopment was proposed facing Egerton Road. The College playing fields were also proposed to be upgraded. The masterplan is shown in **Figure 4.1**. High costs and a failure to secure funding led to the 2009 Proposals being abandoned.



2005 - Masterplan



2009 - Masterplan



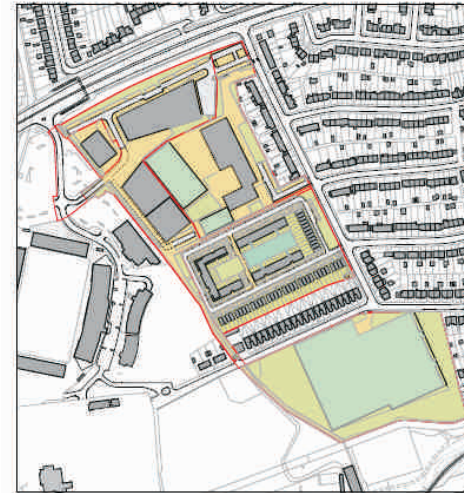
Late 2012 - Masterplan



2014 - Masterplan



Early 2015 - Masterplan



Spring 2015 - Masterplan



Not to scale

Note: All locations are approximate
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Richmond Education and
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Figure Title:
Design Evolution

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Figure 4.1

Date:
June 2015

2012 Proposals

- 4.3.5 By 2012, several important factors had changed leading to a different vision for redevelopment. The College continued to occupy deteriorating facilities, had undergone a dramatic reduction in student population, and was anticipating further pressures on enrolment due to increased competition - meaning the 2009 Proposals no longer provided a relevant vision for the College's future. At the same time, local demographic changes had resulted in a need for a new secondary school in the Twickenham area.
- 4.3.6 An initial study was undertaken to consider various options for how a new secondary school could be provided on the College Site, respecting the planning and site constraints and the College's plans for renewal. A vision was reached where the College and Secondary School could provide a unique learning opportunity and benefit from extensive shared facilities, whilst retaining for each institution a distinct identity and entrance. Subsequently, a detailed feasibility study was undertaken to provide a College, SEN School on the main site. The masterplan for the college and school shared facilities in the northern part of the site is shown in **Figure 4.1**.
- 4.3.7 It was proposed that the remaining site area would be used to provide necessary funding via an enabling residential redevelopment, as the other available funding sources were inadequate to finance the project.

2014 Proposals

- 4.3.8 By early 2014, a vision had begun to coalesce to redevelop the College site as a campus for Education and Enterprise, and thereby enable the creation of College and Schools with a unique educational offering, but also to provide meaningful employment and pathways to employment on the College site. This was named the REEC. The REEC proposal included the provision of the College, Secondary and SEN Schools, as well a new headquarters for the Haymarket Media Group, and an enabling residential redevelopment in the southern part of the main site.
- 4.3.9 Various layouts were considered and consulted on during 2014. Also during this period it was determined that the College playing fields would not be designated as a Village Green, thereby allowing them to be retained and upgraded. The masterplan developed by late 2014 is shown in **Figure 4.1**. Public consultation indicated broad support for the scheme as presented, with demands for additional detail on the residential proposals.

2015 Proposals

- 4.3.10 In early 2015, a further consultation was undertaken and an illustrative masterplan was developed that incorporated feedback and presented a residential site layout for

the first time. Consultation on the outline planning application approach based on parameter plans was also undertaken. The illustrative masterplan incorporated a number of refinements and showed an illustrative residential scheme connecting to the existing street network of the Heatham Estate (**Figure 4.1**).

- 4.3.11 While broad support for the scheme as a whole remained, local residents expressed significant concerns about the impact of traffic from the scheme on the Heatham Estate.
- 4.3.12 In response to this consultation and feasibility studies considering potential layouts of the internal and external spaces of the College and Schools, significant revisions were made to the redevelopment proposals shown in **Figure 4.1**. These were consulted on in a series of Local Community Forum meetings and a public meeting held at the College in April 2015.
- 4.3.13 The access strategy for the college was revised to eliminate any vehicular access to the College Site from the Heatham Estate and the proposed service access off Langhorn Drive was removed, simplifying vehicular access onto the REEC Site. A study was also undertaken regarding the potential and the costs associated with reconfiguring the junction of the A316 and Langhorn Drive including a right turn out onto the A316.
- 4.3.14 In response to costs and environmental concerns, a previously proposed footbridge and footpath across the college playing fields were removed from the proposals. The Local Community Forum was engaged regarding a potential east-west footpath across the redevelopment (between the residential and REEC sites), which based on feedback from the forum was ultimately rejected in order to discourage College students from choosing to walk through the Heatham Estate.
- 4.3.15 Feasibility studies undertaken for the College and schools also resulted in changes to the proposed planning of the REEC site. These revised the proposed phasing of the redevelopment to deliver the Sports Centre and College STEM Building in a large second phase building, with a separate College first phase building running alongside the A316. The footprint of the second phase College building pushed towards the site boundary near Harlequin FC, while the footprint of the first phase College building displaced the School buildings southward.
- 4.3.16 The two schools' aspirations and thinking evolved such that they desired a closer relationship in buildings and operations. Consequently, the proposed secondary and SEN schools development and building zones were combined.
- 4.3.17 These changes resulted in corresponding shifts in the location of open spaces and building entrances on the main College site. A new shared surface along Marsh Farm Lane was added to enable access to the Sports Centre in its new location, while

limiting the impact on pedestrian access to the College. This route was also provided to ensure construction access to the Residential Site via the A316, reducing the potential impact on the Heatham Estate. Consequently the College and Tech Hub entrance area was relocated northward and reconfigured.

- 4.3.18 The residential site was modified to ensure that the existing trees and open space along Egerton Road could be retained, and to reduce the extent of surface car parking while creating more clearly defined private and shared open spaces. Aspects of the residential proposals that had been favourably received – in particular locations for houses, flats and open spaces - were not changed. Responding to concerns about potential building heights, these were reduced across the site.
- 4.3.19 Feedback on these revised proposals focussed on the continuing concerns of local residents regarding the impact of traffic from the residential redevelopment on the Heatham Estate. In direct response to these concerns, the access to the Residential Site has been revised to be via the A316 as illustrated in Chapter 5, **Figure 5.1** and as detailed in Chapter 5 – Proposed Development.
- 4.3.20 While revising the access to the residential site in this manner conflicts with the Planning Brief for the site, it is a direct response by RuTC to the concerns of local residents about potential environmental impacts from traffic from the REEC development.

4.4 KEY PRINCIPLES OF THE REEC DEVELOPMENT

- 4.4.1 The design principles for the REEC are set out fully in the Design Code accompanying the OPA. The key principles relating to environmental considerations include:
- Setting the development back from the A316 to avoid air quality and noise issues, with non sensitive uses such as car parking along the northern boundary. Setting car parking back to avoid root zones of trees along A316.
 - Provision of access to the College, Tech Hub and residential development via Langhorn Drive, through a junction amendment, in order to reduce potential impacts on residential areas to the east of the Site.
 - Articulating building elements to create visual interest and local landmarks, such as the College buildings when viewed from the A316 and from Marsh Farm Lane.
 - Reducing the apparent scale and mass of large blocks through the detailed design of the elevations and roofscape, including the use of set backs and projections, fenestration, entrances and materials to reduce townscape and visual impact.
 - Designing buildings with good quality elevation and roofing materials with attention to the variety of materials, their colour and prominence within the

townscape and views, to reduce impacts on views particularly from Richmond Hill and Rosecroft Gardens.

- Retaining and enhancing valuable habitats as far as possible, for example by providing additional tree planting to strengthen the retained trees along the A316 boundary, Marsh Farm Lane, and habitat areas along the River Crane.
- Providing an important benefit to the wider community through improvements and widening of the existing pedestrian and cycle route along Marsh Farm Lane. Encouraging walking and cycling as key transport modes to reduce transport impacts.
- Ensuring the residential development is 'self sufficient' in terms of open space and amenity areas by providing these in line with policy requirements, to minimise pressure on existing open space areas.
- Siting of sports pitches away from the southern and eastern boundaries of the College playing fields south of Craneford Way to protect habitat used by foraging bats and to leave an 8m buffer area along the riverbank for future naturalisation of the river banks (by others).
- Provision of a contribution to support the Environment Agency's restoration programme for the Crane River corridor (which may include naturalisation of the river banks as above).
- Lighting to be prohibited on sports pitches on the College playing fields and lighting on the main site to be designed to avoid glare and minimise spillage outside the areas to be lit.
- Providing a new pedestrian access to the eastern side of the College playing fields to allow a circular walk around the perimeter.
- Phasing the development to allow the College to continue to operate throughout and to constrain construction impacts to parts of the Site at a time. Undertaking demolition from the middle outwards to reduce impacts to receptors outside the Site.
- Using permeable areas wherever possible to reduce run off, for example the all weather pitches, roads and car parking will be permeable to support the development's sustainable drainage strategy.
- Development of an outline sustainable drainage strategy which retains surface water runoff on site and disposes of it through soakaways, to reduce surface water drainage and flood risk to neighbouring properties.
- The use of living roofs, including green and brown roofs, on buildings as part of the sustainable drainage strategy and to provide additional habitat areas.
- Designing the residential development in accordance with the Lifetime Homes Standards included within the London Housing Design Guide and the London Design Guide's requirements for climate change mitigation and adaptation.

- Providing use of facilities, including the sports centre and pitches on the main site and on the College playing fields, and other facilities within the College and Schools, for the wider community.

5 PROPOSED DEVELOPMENT

5.1 INTRODUCTION

5.1.1 This chapter describes the REEC development and the parameters that have been established for the Outline Planning Application (OPA) on the basis of which the ES has been prepared.

5.1.2 The Applicant is seeking an OPA for the following:

The demolition of the existing college buildings, site clearance and groundwork's together with the comprehensive redevelopment to provide:

(i) *A new campus for education and enterprise – comprising:*

- *Replacement College (Use Class D1) of up to 16,000m² (square metres) Gross External Area (GEA) to accommodate up to 3,000 FTE day time students, as well as evening and weekend use;*
- *A Science, Technology, Engineering and Maths (STEM) Centre (Use Class D1) of up to 6,100m² GEA*
- *A new Secondary School (Use Class D1) of up to 7,000m² (GEA) for up to 750 students;*
- *A new Special Education Needs (SEN) School (Use Class D1) of up to 4,000m² GEA;*
- *A new ancillary 'Tech Hub' for Haymarket Media (Use Class B1) of up to 1,700m² GEA; and*
- *Replacement on-site sports centre (Use Class D2) of up to 3,900m² GEA to serve the college, schools and the wider community.*

(ii) *Upgrading of existing Craneford Way Playing Fields for use by the College, schools and the local community;*

(iii) *Alterations to the existing means of access for vehicles, pedestrians and cyclists from the A316 and a minor realignment of Langhorn Drive as well as alternations to the existing means of access points on Egerton Road;*

(iv) *Provision of on-site parking for the College, Schools and Tech Hub for up to 230 vehicles, open space and landscaping; and*

(v) *New residential development of up to 180 units together with associated parking for up to 190 vehicles, open space and landscaping.*

5.1.3 The OPA seeks outline planning permission for the proposed development. However, the application includes detailed plans for all the proposed vehicular access points onto the site (whether these involve new arrangements or alterations to existing

access to/exits from the site) and seeks approval of these details as part of the consent.

5.1.4 The OPA seeks to establish the principles for the REEC development against which subsequent detailed Reserved Matter Applications will be considered, both in terms of the general scale of development and the land uses considered appropriate for the OPA Site. The following matters are therefore reserved for future approval:

- **Layout** - detailed layouts showing ‘...*the way in which buildings, routes and open spaces within the development are provided, situated and orientated in relation to each other and to buildings and spaces out the development*’.
- **Scale** - detailed scale plans showing ‘...*the height, width and length of each building*’.
- **Appearance** - detailed design and external appearance of buildings to show ‘...*the aspects of a building or place within the development which determine the visual impression of the building or place makes, including the external built form of the development, its architecture, materials, decoration, lighting, colour and texture*’.
- **Landscaping** - details of the ‘...*means of treatment of land (other than buildings) for the purpose of enhancing or protecting the amenities of the site and the area in which it is situated*’.
- **Access** - the design of the internal access arrangements, including layout to facilitate movement and circulation between and within each development zone.

5.1.5 The **Site Location Plan** (see Chapter 1, **Figure 1.2**) identifies the extent of the Application Site within which development is proposed. To demonstrate that the OPA Site is capable of accommodating the quantum of development proposed in an acceptable manner, a series of plans have been produced to show the maximum and minimum parameters (height, width and length), known as **Parameter Plans**, together with **Detailed Access Plans** (**Appendix 5.1**). These are accompanied by a **Development Specification** and supported by a **Design Code**. These plans and documents form the Primary Control Documents for the OPA.

5.1.6 An **Illustrative Masterplan** demonstrating how the REEC development might be built out (**Figure 5.1**) and an **Illustrative Landscape Plan** to show how it could be landscaped (**Figures 5.2** and **5.3**) have also been produced.

5.1.7 The Parameter Plans and the Illustrative Masterplan have been used in the EIA, where applicable, to ensure that a worst case assessment is completed, identifying all likely significant effects. For clarity, each topic chapter states where the Parameter Plans and/or the Illustrative Masterplan have been used. Providing the development when taken forward at reserved matters stage remains within these parameters, the

environmental effects should be no greater than assessed in this ES.

5.1.8 Therefore, to summarise, the EIA has been completed using the following Primary Control Documents:

- **Red Line Boundary Plan** - this identifies the extent of the Application Site within which development is proposed (see Chapter 1, **Figure 1.2**).
- **Parameter Plans** - these define the extent of the proposed routes, spaces and buildings across the OPA Site. The OPA Site has been divided into a number of Development Zones; College Development Zone, Schools Development Zone, Tech Hub Development Zone, College Playing Fields Development Zone and a Residential Development Zone. There are a series of general site wide parameter plans (e.g. general layout, access, landscaping) and then a number of plans for each Development Zone.
- **Development Specification** - a written account of the Parameter Plans and a detailed description of the REEC development and the type and quantity of development that could be provided within each Development Zone across the OPA Site.
- **Design Code** - a set of guidelines for future design teams involved in the preparation of Reserved Matters Applications. The document sets qualitative rules and aspirations for the scheme design, including buildings, open space and landscaping, and provides an indication of how the final development may appear.

5.2 OVERVIEW OF THE PROPOSED DEVELOPMENT

Quantum of Development

5.2.1 The OPA is seeking permission for the maximum floor spaces identified in **Table 5.1**.

Table 5.1 Development Components and Maximum Floorspace

Use	Maximum Floorspace (GEA)
Replacement College (Use Class D1)	16,000m ²
STEM Centre (Use Class D1)	6,100m ²
Sports Centre (Use Class D2)	3,900m ²
New Secondary School (Use Class D1)	7,000m ²
New SEN School (Use Class D1)	4,000m ²
Tech Hub (Use Class B1)	1,700m ²
Residential Development (Use Class C3)	22,250m ² (including 5,000m ² podium parking area)
Car Parking	Up to 420 spaces for scheme as a whole
TOTAL GEA	60,950m²



Legend

- Application Site Boundary
- Existing Buildings
- Building Zones
- Roadways
- Predominantly Hard Landscape
- Predominantly Soft Landscape
- Predominantly Grass Sports
- Predominantly All-Weather Sports
- Predominantly Private Gardens
- Predominantly Soft Landscape with Podium Parking Underneath
- Existing Trees
- New Trees

CASCADE

Not to Scale

Note: All locations are approximate

Drawing Source: HoK Number PL-17





Project Title:
Richmond Education and Enterprise Campus Development




Figure Title:
Illustrative Masterplan
For Information Only

Figure Number: Figure 5.1	Date: June 2015
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Legend

-  Landscape Structures
1. Cycle Shelter 2. Cloister 3. Pergola
-  Furniture
-  Lawn
-  Hard Landscape - Typically Tarmac with Painted Lines or PCC Flag Paving with Stone Trim. SUDS Compliant where Practical

-  Native Shrub Planting
-  Native Tree Planting to Boundaries e.g. Birch and Similar
-  Ornamental Tree Planting. Flowering Species e.g. Cherry



0 100m

Note: All locations are approximate
Drawing Source: LUC Landscape Plan

Project Title:

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Development

Figure Title:

Illustrative Landscape
Plan Part 1

For Information Only

Figure Number:

Figure 5.2

Date:

June 2015