Capital Investment Plan 2011

(CIP 2011)

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Prepared by: Capital

Status: **Public**

Heathrow

Making every journey better

Contents

1 Consultation Status

This document is for consultation. HAL encourages airlines to submit views on this document by the end of July 2011, so that they are taken into account in the development of the airport's future capital investment plans.

2 Introduction

This document is Heathrow Airport Limited's (HAL's) Capital Investment Programme for 2011, and is known as "CIP 2011".

The document sets out the capital investment projects currently being proposed by HAL for the regulatory period from April 2008 to March 2013 (Q5). Its purpose is to provide a progress update to airlines and facilitate consultation on capital investment at Heathrow. Where airlines require further information to understand proposed investments HAL will endeavour to respond to these requests.

HAL also intends to consult airlines during 2011 on the key strategic issues that will influence the overall size and shape of HAL's ten-year investment programme and need to be included in Q6.

During 2011 and 2012, HAL will also be working with airlines and other stakeholders to develop a new Heathrow masterplan which will set out how it intends to develop the airport over the period to 2030.

The CIP 2010 document was circulated amongst the Heathrow airline community in May 2010, together with a request for feedback. The period of consultation closed at the end of July 2010. Heathrow welcomes the responses it received from airlines which have helped inform CIP 2011 and assisted work associated with the masterplan.

2.1 Regulatory years

2.1.1 Q5 Extension

In March 2011 the CAA confirmed that, exercising its powers under Section 40 of the Airports Act, it had decided to extend Q5 to March 2014. The extension of Q5 by a year was largely due to the CAA's desire that the Airport Economic Regulation Bill be enacted prior to determining the terms for Q6 regulatory period.

HAL has agreed with the airline community a cap for its capital programme in the extension year, 2013/14 of £735m (2007/08 prices). All existing Q5 capital investment triggers will continue, but are subject to on-going negotiation through the existing change control processes.

CIP 2011 includes high level information for the Q5 extension year – 2013/14.

2.1.2 Q6

As a result of the CAA's decision to extend Q5 by one year, Q6 will now commence in 2014/15. As part of the Q6 constructive engagement process the CAA has encouraged HAL and the airline community, in the remainder of 2011, to seek consensus on the key issues that need to be addressed in Q6.

HAL will consult the airline community on the strategic issues which will influence the overall size and shape of the ten-year investment programme, and will integrate this into HAL's draft business plan submission for the Q6 settlement process. This will include traffic forecasts and other critical assumptions. HAL currently envisages issuing a Q6 business plan consultation document by the end of 2011. This will enable airlines to see the high level options for a ten-year investment programme within the overall context of the service delivered at the airport and estimates of the range of charges. This will be followed by the publication of a CIP document in May 2012 and a detailed Q6 Business Plan to be published during the summer of 2012 for review. The Q6 Business plan will be updated in March 2013 to help inform the publication of CIP 2013, which will include the remainder of Q5 and a 10 year investment plan. Final submission of the Q6 Business Plan will be in November 2013.

2.2 CIP 2010 to CIP 2011

As agreed with Heathrow airlines at the CIP Working Group on 21st April 2011 and the Joint Steering Team on 9th May 2011, the cost information for CIP 2011 includes:

- Q5 projects only
- Q5 extension Projects (high level)

3 Strategy and Vision

Heathrow Airport is the United Kingdom's only international hub airport and a vital piece of national infrastructure.

Flying is of great value to the United Kingdom, for the economy, for society and for consumers. It fosters investment, trade and links multicultural Britain to an increasingly globalised world. What matters most to travellers is being able to get where they want to go, when they want to go. Heathrow's strong network of short-haul and long-haul traffic enables it to offer a wide-range of destinations which point-to-point UK airports cannot match. Heathrow is able to serve important long-haul destinations, at higher frequencies with bigger planes, which benefits London and the UK. HAL also recognises the importance of point-to-point traffic for airlines and the mutually reinforcing relationship between a strong point-to-point business and a strong hub.

Heathrow competes for customers with other hubs across Europe. The shared vision of HAL and airlines is to make Heathrow Europe's 'hub of choice'. HAL believes the most important way to achieve this vision is to prioritise continuous improvements in passengers' experience. Over the long term, this means investing in Heathrow's infrastructure and capacity. To become a hub of choice such investments at Heathrow must also be affordable, and within a range of charges that is competitive for airlines given the market yields they can achieve at Heathrow. Achieving a good balance between improved experience for passengers and overall long term affordability is an important aspect of HAL's consultation on investment plans, especially in the context of the Government decision to stop plans for a third runway at the airport.

3.1 Vision for Heathrow Airport

During 2009 HAL consulted with the airline community and agreed a common vision statement. HAL continues to focus on this vision.

The shared vision for a future Heathrow is:

> " ***To be a world class airport - the UK's direct connection to the world and Europe's hub of choice by making every journey better"***

For Heathrow to provide the direct international connections that support economic growth in the UK, it needs to persuade airlines and passengers who have a choice that it is better to fly from Heathrow.

During Q5 HAL has taken steps towards becoming Europe's hub of choice. The capital investment programme has modernised Heathrow to provide a better airport experience for passengers. Terminal 5, the first new Heathrow terminal for a quarter of a century is now serving over a third of Heathrow passengers and achieving scores equal to the best in Europe in passenger surveys. Terminal 5C opens in 2011 and will build on this improvement for passengers. 2011 is also seeing steady progress on the new Terminal 2. Major refurbishments have been completed in areas of Terminals 3 and 4 and are beginning to show results in passenger feedback. Operational metrics such as baggage misconnections are also showing steady improvement, and Q1 2011 has seen a strong performance in punctuality.

There is still much to do, from providing new facilities to ensuring resilience or courteous service for every passenger, every time. HAL is striving to continuously improve, making every journey better for its customers.

However, HAL does not operate many of the critical activities on the airport – check-in, ground handling or immigration are examples. Thus while capital investment by HAL can drive major improvements, in many cases it is also imperative that HAL works collaboratively with airlines and others on better processes and agreed standards for passengers. Close collaboration is also imperative to ensure that HAL understands the business requirements of airlines at Heathrow and responds to those requirements with Heathrow's investments and operations.

Through consultation HAL has agreed a number of strategic statements with the airline community which help to describe the vision for a future Heathrow. Discussed with airlines in 2010, HAL intends to hold to these intents for the medium term. These are statements of 'strategic intent' and they set out how the vision statement might be achieved.

HAL's strategic intents for Heathrow are to:

- Deliver an airport experience that is the preferred choice for passengers
- Deliver a hub airport supported by the airline community
- Run an operation that is reliable, resilient and efficient
- Deliver an airport outcome that is successful in financial terms
- Enable a positive employee experience that is focused on increased productivity and efficiency
- Design and deliver quality, predictable, value for money infrastructure
- Deliver an airport which is sustainable
- Be responsive to the needs of stakeholders

3.2 Heathrow Airport Strategic Overview

3.2.1 Heathrow Traffic Forecasts for Q5, Q6 and beyond

3.2.1.1 Introduction

HAL provided forecasts to 2019/20 in CIP 2010 that were prepared in March 2010. They were developed in a context where a third runway was expected to deliver new capacity, and less than two years into a Q5 settlement in which the CAA anticipated strong growth – for example reaching 72.5 million passengers in 2009/10 and 74.5 million passengers in 2010/11.

HAL received feedback from airlines indicating their concerns over aspects of the forecasts in CIP 2010. Airlines expressed reservations over the continuing relevance of HAL's historical forecasting model. In light of actually achieved increases in load factor and aircraft size at Heathrow, respondents noted HAL forecasts had developed a tendency to be over optimistic, with implications for affordability. Airlines also asked for more transparency over forecasting methods and assumptions and for third party validation of the modelling process.

In addition, in May 2010 the UK Government withdrew support for a third runway, taking a clear stance opposing any airport expansion in the South East. This change in policy direction raised the question of whether airlines could commercially pursue the same investment and growth path at an indefinitely constrained two runway Heathrow.

HAL accepts these points on long term forecasts and believes they require review and detailed consideration. In response HAL has from January 2011 begun joint discussions with airlines at Heathrow to review Heathrow passenger forecasts. These discussions are intended as a structured and objective way to debate approaches, clarify assumptions and externally validate Heathrow forecasts. As such, they allow for a comprehensive

review of market conditions at Heathrow. HAL's aim is to jointly achieve a more accurate forecast as a basis for affordable and realistic future planning to the benefit of the entire Heathrow community.

Given this joint review, HAL has begun to revise its internal modelling approach as an initial base for these discussions. However, at the point of publication, airlines have not had the chance to fully respond, validate and input into these forecasts, therefore HAL is not yet formally revising Heathrow's long term passenger forecasts.

Over the course of 2011, HAL will highlight the potential for joint discussions to lead to additional revisions in methods, assumptions or numbers from those emerging from the HAL internal work. HAL invites any airlines interested in these discussions to participate in the joint working group alongside airlines already involved.

As background to these discussions, the remainder of this section describes the industry context underlying Heathrow forecasts and the approach and key high level assumptions adopted in the latest internal forecast revisions.

3.2.1.2 Recent traffic trends

Heathrow passenger volumes grew steadily through the 1990s, reaching 64.3 million passengers in 2000. Recession and 9/11 led to a sharp fall in volumes early in the last decade, with some recovery through to 2007 as the world economy grew. Even in this period, overall passenger growth at Heathrow, and growth in average aircraft size, slowed compared to the 1990s. With the advent of the major worldwide recession in 2008-9 Heathrow traffic has proven more resilient than other hubs in Europe and other non-hub UK airports. The result is that overall passenger growth in the decade 2000 to 2010 has been 0.2% per annum and average seats per aircraft has actually slightly declined from an average of 202 in 1999 to 196 seats/aircraft in 2010. While these numbers do not adequately capture periods of stronger growth because they are at different points in the economic cycle (Heathrow's highest ever passenger numbers to date were in 2005) they are illustrative of a prolonged period of slower growth than seen in previous decades.

HAL identifies a number of potential factors for this change in traffic patterns:

- Changing airline business models, most noticeably a shift in network strategies which has slowed the trend from smaller to larger aircraft. New aircraft have allowed airlines to achieve lower unit costs per seat with smaller planes. Premium traffic has become a larger portion of many network airlines' business also resulting in lower seat densities. Airlines have also benefited from greater flexibility or shorter lead times in making capacity decisions. These changes have allowed network carriers to respond to the challenge of short haul low cost carriers and increased network competition. The need to maintain a viable network with a mix of short and long haul connections also slows the overall trend at Heathrow to switch from short haul to long haul flights.

- The increasing impact of the air traffic movement capacity constraint on market dynamics at Heathrow. A formal constraint of 480,000 ATMs was introduced as part of the Terminal 5 planning decision. The effects of this have potentially increased as total movements have approached the cap. The Government decision against expansion in 2010 can only have reinforced the effects of the cap on the way economic demand is translated into actual passenger numbers in a constrained two runway Heathrow.

- An increase in airline or passenger costs sustained over a number of years and through the economic cycle, such as UK Air Passenger Duty, a sustained upward shift in real terms in the oil price and indeed airport charges. At the same time airlines remain under financial pressure to rebuild their yields and profitability, so reducing their long term ability to absorb cost increases for passengers.

- A series of 'one off' events ranging from 9/11, SARS and security changes to volcanic ash, extreme weather and strikes have reduced passenger numbers. While each event in itself can be viewed as a random occurrence, the frequency of impact on Heathrow traffic has apparently increased, and Heathrow's ability in an increasingly capacity constrained airport to respond to compensatory positive events may have reduced

Balanced against these factors is the strong evidence for continued growth in demand to travel through Heathrow. A large body of evidence, and preliminary regressions of Heathrow behaviour, suggest that sustained economic growth will translate into some growth in passenger numbers. Heathrow's exposure to global markets, including emerging economies with higher potential for increased levels of flying as they grow richer, also supports the case for future growth.

Such underlying growth factors are part of the explanation for Heathrow's underlying resilience in traffic numbers despite the slow recovery of the world economy. HAL estimates that if the adverse effects of volcanic ash, strikes and snow disruption were removed Heathrow would have seen around 68.3 million pax in 2010. This would have represented growth versus 2009 as the world economy recovered, and indeed Heathrow saw a number of record months in summer 2010. With the impact of these events the actual figure was 65.7m – a reduction of 0.2%. Actual figures for Q5 to date are shown in Table A below.

Regulatory year	**2008/09**	**2009/10**	**2010/11**
CAA settlement forecast	70.4	72.5	74.5
Actual volumes	65.9	66.1	66.1
% Growth	-3.1%	0.3%	0.0%

Passenger values in millions

Table A: Actual Heathrow trends in Q5 to date

3.2.1.3 Heathrow's Approach to Traffic Forecasting

Heathrow forecasts have long been a product of both top down and bottom up methods. The most recent work on forecasts has modelled long term trends using both econometric and airline capacity methodologies. In particular it has begun to directly model market behaviour at a constrained Heathrow with econometric approaches based on historical analysis. Previously the only method that imposed the 480,000 ATM cap was via a capacity model. Our work is now trying to develop an alternative to use as a cross-reference. The method under development also hopes to retain, even for an indefinitely constrained two runway Heathrow, the long established econometric modelling tools used in aviation to link growth to fundamental economic drivers. It

should be noted that these forecasts are therefore not designed to estimate latent demand at Heathrow nor any scenario that would allow for extra capacity in the future.

HAL and others' passenger forecasts have also historically produced a single line estimate of passenger numbers. Feedback from stakeholders identified some limitations of this approach. Firstly it does not capture the inherent uncertainty in forecasting Heathrow numbers given the complex interactions of multiple factors such as economic growth, the oil price or aircraft purchases which are themselves hard to forecast. Secondly, the appropriate level of forecast may differ depending on the purpose intended. For example, the scoping for some capacity investments might be more sensibly based upon the possibility of a faster increase in passenger numbers than considered in the most likely case. For these reasons HAL has attempted to produce a ranged forecast. A similar methodology for producing ranges has been adopted as is used in other industries when forecasting uncertain, complex trends, for example by the Bank of England in forecasting inflation. A probability based range has been estimated for both the econometric and the capacity based models.

Work so far has also led to some revision in assumptions. For example in the econometric modelling the impacts of potential increases in Air Passenger Duty or airport charges have been more fully included, although the possibility of no increase in APD is also included. The provisional model now also includes some allowance for periodic events akin to the volcanic ash cloud or SARS impacting traffic numbers. Modelling also assumes that airlines could achieve fuel efficiency gains of up to 2.37%, in line with Sustainable Aviation estimates, and pass these through as reduced fares. Price and income elasticity estimates have also been revised based on regressions of actual Heathrow responses over the last decade, currently as far back as fare data allows. Elasticity estimates have also been cross-checked against comprehensive academic studies. We are now working toward expert third party validation of the approaches with the airline community to help further validate and refine emerging forecasts.

3.3 Heathrow's Masterplan and Land Use Plan

3.3.1 Existing Masterplan

The airport masterplan provides the basis for consultation on the long term vision for the capital development of the airport over an extended time frame. Given the scale of master planning work and the long term nature of the content they should be reviewed approximately every five years, or as required given the broader context within which the specific airport is operating.

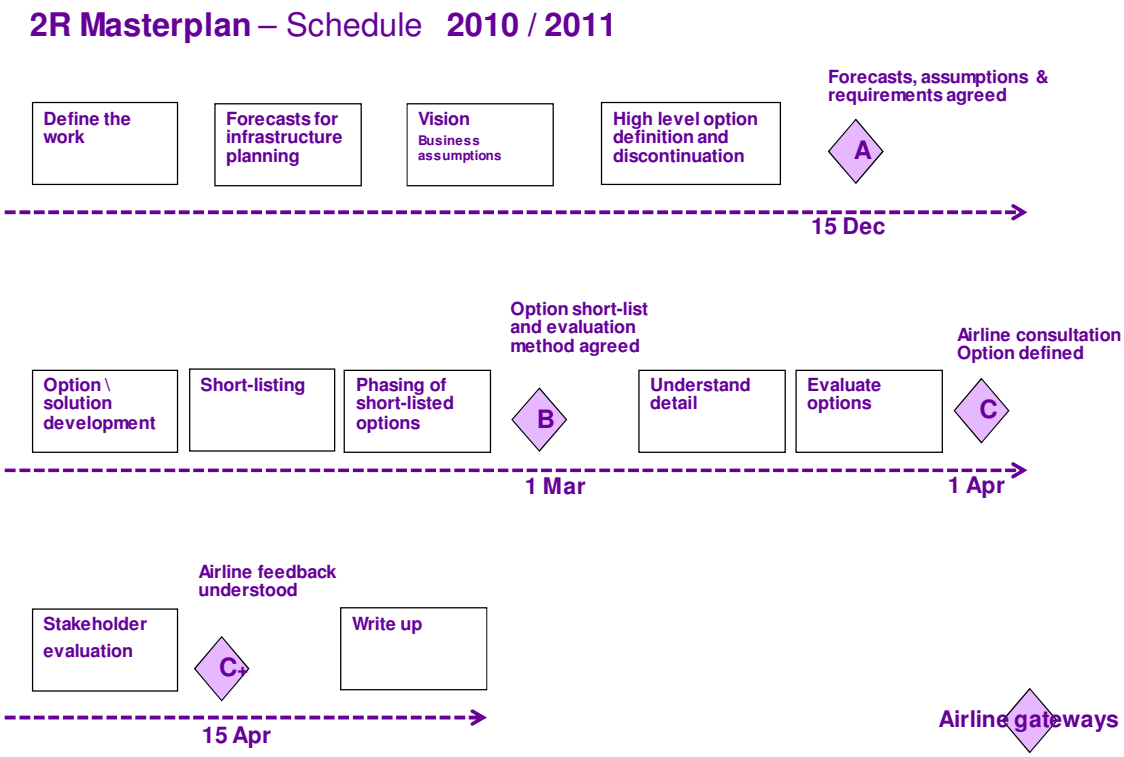
In 2005 HAL published its interim masterplan taking into account the Government's 2003 Air Transport White Paper and the Department for Transport's guidance on airport master plans. The interim masterplan set out the long term proposals for a two runway airport and updated the position at that time in respect of the third runway.

The 2005 masterplan was prefixed by the term "interim" to reflect the on-going nature of the policy consultation and the resultant fact that any Heathrow masterplan produced at that time, for either a two or three runway layout, could not be definitive given the range of potential outcomes from the policy process.

3.3.2 Masterplan and Land use Plan Development Process

In response to the then existing Government policy, between Jan 2009 and May 2010 HAL prepared detailed proposals for the development of the airport to accommodate a third runway at Heathrow.

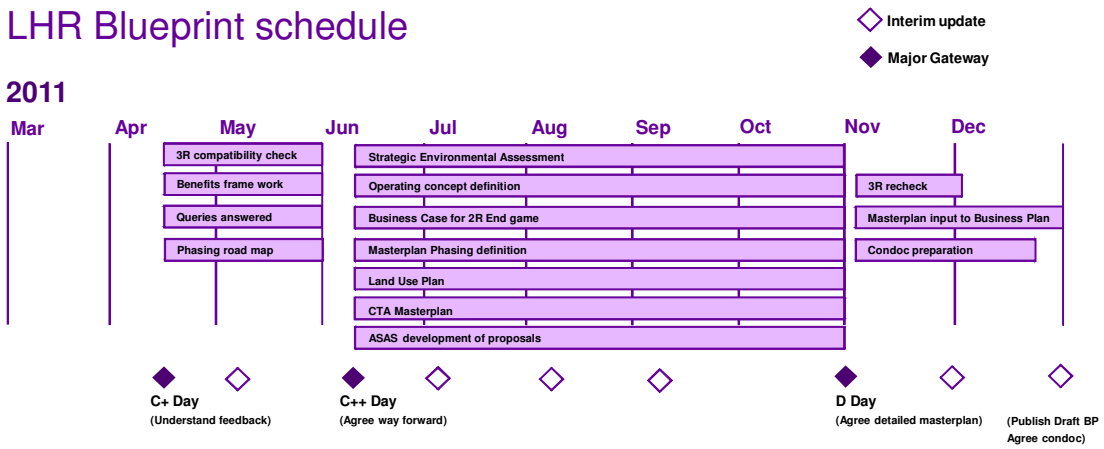
Following the change to Government policy in May 2010, Heathrow has commenced the definition of a two runway, policy compliant masterplan. The headline milestones for the first half of this process (Nov 2010 to April 2011) are described in schedule A below:



Schedule A

Stakeholder involvement has been ensured through the use of a series of gateway events and the establishment of an airline working group, with the result that the airline community has expressed confidence in the methodology being followed and broad agreement with the development options now being considered.

Having established the direction for the layout of terminals and aprons by June 2011, the masterplan definition process will continue through the second half of 2011 to determine the other elements required to complete the masterplan picture or "Heathrow Blueprint". The high level process is shown in Schedule B below:



Schedule B

Once the elements of the complete masterplan are agreed, it is Heathrow's intention to publicly consult on the content. The timing of this consultation has yet to be finalised.

Whilst there is detail that still needs to be developed, the significant work that has been carried out on the third runway and two runway masterplans in the last two years has established a clear understanding of the long term direction for investment at Heathrow and thus provides a solid foundation from which Q6 infrastructure planning can be undertaken with confidence.

3.3.3 Risks and Assumptions

HAL records the risks and assumptions that underpin long term development plans. It is intended that such records be one of the main cornerstones of the plan and how they might be implemented/impact on the airport with any points being clearly linked back to the master-planning aspirations.

As work is currently on going with the airline community to develop a new masterplan at this time no record of risks and assumptions is included in CIP 2011.

3.3.4 Sustainability

Heathrow provides valuable economic and social benefits. The airport also has impacts on the local communities and environment around the airport. As a responsible business, HAL needs to find the right balance between economic, social and environmental objectives: enhancing the positive impacts that Heathrow brings, while minimising the negative impacts and meeting agreed environmental limits.

Delivering an airport which is sustainable is one of the strategic intents that underpins HAL's vision for Heathrow to be 'Europe's hub of choice'. This means creating a future Heathrow which:

- is safe and secure for staff, passengers and the airport community
- enables the achievement of positive social and economic effects
- seeks to prevent, reduce or offset significant effects on communities and the environment
- has surface access which limits congestion and other local effects
- HAL has set long-term goals on key environmental issues, with accompanying strategies to deliver them. The goals include:
- Climate change: by 2020 reducing carbon emissions from energy use in fixed assets at the airport by 34% compared to 1990 levels
- Noise: limit and where possible, reduce the impacts of noise at the airport (see HAL's Noise Action Plan for further detail on specific targets)
- Air quality: Heathrow's role in driving full compliance with EU air quality limits
- Waste: by 2020 recycling 70% of airport waste

HAL sets annual performance targets on these and other issues, and regularly reviews and updates its goals and strategies.

3.3.5 Surface Access

HAL has maintained a clear, consistent and evolving Surface Access Strategy for Heathrow since the first consultation document was launched in 1996. The latest version of this was published in October 2008 called "Sustaining the Transport Vision:

2008-2012". The strategy has been reviewed and updated at regular intervals, with the latest edition to be published in 2012.

In April 2011 HAL announced a new rail strategy with a view to improving passenger experience, taking cars off the road and placing the economic benefits of the UK's only hub airport at the centre of the national rail network. The new programme, called the Wider Heathrow Integrated Rail Strategy (WHIRS), seeks to build on previous investment by ensuring that Heathrow has fast, frequent and comfortable rail connections for passengers, whilst at the same time significantly improving links to the surrounding community.

The first priority for WHIRS will be to ensure that Crossrail provides passenger-friendly, convenient connections for Heathrow travellers. The airport operator will also continue to invest in enhancements to Heathrow Express to ensure that passengers continue to have the choice of a premium, express service into central London.

There is a strong case for rail access from the west of Heathrow, providing a direct connection with Slough, Reading and the Thames Valley for the first time, as well as the South West via the Great Western Mainline.

The concept of connecting the airport to the south has long been mooted and Heathrow remains supportive of a southern connection to the airport. However, HAL has decided after a very careful evaluation to terminate all works on the Airtrack project and therefore withdraw the Airtrack Transport and Works Order application. This decision was made after an internal review and in consultation with airlines and other key stakeholders. The decision took account of the difficulties in progressing aspects of the project and the likelihood that, in the current financial circumstances, there would be no public sector funding support forthcoming for the project. HAL remains supportive in principle of a southern connection to Heathrow.

Beyond connectivity to the airport for passengers, the strategic nature of Heathrow Airport as a UK transport node and its ability to act as an interchange and 'hub' for bus, coach and rail routes is increasingly recognised. HAL is keen to see the development of even stronger public transport links as part of airport development.

3.3.6 High Speed Rail

In January 2009, the Government established High Speed Two Ltd (HS2 Ltd) to consider options for a new high speed rail network in Britain. On 20th December 2010 the Government announced its preference for serving Heathrow by a spur from a main London-West Midlands high speed line. Such a spur would retain the flexibility to be extended to form a loop back onto the main line in future, enabling through services via the airport to London. The Government proposes to work with BAA and others to determine the optimal location for a station at the airport, and HS2 Ltd has been commissioned to develop route proposals for a spur by the end of 2011.

Heathrow welcomes the Government's plan for placing the airport at the heart of the UK's high speed rail network, and will work with them to ensure high speed rail is properly linked to Heathrow and the regional rail network for the benefit of all passengers.

4 Regulatory and Legislative Context

Capital development at Heathrow, as outlined in this document, takes place within a framework of regulatory and legislative policy. This section provides an overview of the current issues that have an influence on capital investment at Heathrow.

4.1 Aviation and Airport Policy

Since 2003 the Air Transport White Paper provided the Government policy context for the development of the third runway and associated infrastructure at Heathrow. In May 2010 the new Coalition Government made clear through its joint policy document 'The Coalition: Our Programme for Government' that the previous policy support for a third runway would be withdrawn.

In response to the Coalition Government's change of policy to resist further runway expansion in the South East HAL announced that it had stopped work on the planning application for a third runway.

In the Queen's Speech in May 2010 the new Government made clear that, having ruled out new runways in the South East, it would engage with all stakeholders in the sector to develop a new vision for a competitive aviation industry to support UK economic growth and designed within the constraints of the existing runway infrastructure

4.2 Economic Regulation

4.2.1 Current Regulation

The 1986 Airports Act established a system of economic regulation for those airports with an annual turnover in excess of £1 million (in at least two of the three previous financial years). Under the terms of the Act, such airports must have permission, granted by the Civil Aviation Authority (CAA), in order to levy airport charges.

In addition, the act also allows for the designation of airports, by the Secretary of State, for price cap regulation. Heathrow airport is currently a designated airport and is therefore subject to economic regulation by the CAA. The CAA conducts a regulatory review every five years (Quinquennium). The latest regulatory review took place in 2007/08 (i.e. price control review), where the regulator set the price cap for airport charges effective 1st April 2008 to 31st March 2013.

Section 39 of the Airports Act imposes four duties on the CAA in determining the price formula, namely:

- To further the reasonable interests of users of airports within the United Kingdom;
- To promote efficient, economic and profitable operation of such airports;
- To encourage investment in new facilities at airports in time to satisfy anticipated demand by the users of such airports; and
- To impose the minimum restrictions that are consistent with the performance by the CAA of its functions under those sections.

It should be noted that under the third duty above, anticipated demands for airport users includes future users as well as current users. The definition of users (in Section 82 of the Airports Act 1986) includes both airlines and passengers, and no priority is specified between these two groups.

The March 2008 CAA Decision[1] sets out the relevant regulatory parameters for Q5 which include the planned capital expenditure totals for Q5. CIP 2011 relies on the capital expenditure allowances set forth in the decision document

4.2.2 Future Regulation

In April 2008, the Secretary of State announced a review of the regulatory framework for UK airports. The regulatory system for airports is one of the oldest systems having been in place since the Airports Act of 1986.

There were three objectives set for the future development of the regulatory framework which reflected the Government's policy objectives:

- Improving the passenger experience
- Encouraging appropriate and timely investment in additional capacity to help deliver economic growth in line with wider Government policy
- Addressing the wider environmental impacts of aviation on airport development.

The Government published its decision on the framework for the economic regulation of airports in December 2009.

The Queen's Speech in May 2010 set out the new Coalition Government's intended legislative programme for 2010 and 2011. The Government stated its intention to bring forward an Airport Economic Regulation Bill during this period to replace the current framework for airport regulation contained in the Airports Act 1986. The Government stated that Ministers will consider the content of these reforms and provide further detail in due course.

In July 2010 the Government confirmed its approach to reforming economic regulation of airports. Under the plans, the CAA will have a single primary duty to promote the interests of passengers, with a number of further duties including a duty to ensure regulated companies can finance their activities. The proposals would also see a switch to a new regulatory licensing regime.

In February 2011 the CAA launched a consultation on the potential extension of Heathrow's current regulatory period by one year to 31 March 2014. This reflects the fact that the Bill is now unlikely to be introduced into parliament before the 2012 session and the CAA's desire that the Airport Economic Regulation Bill is enacted prior to determining the terms for Q6 regulatory period.

In March 2011 the CAA confirmed that, exercising its powers under Section 40 of the Airports Act, it had decided to extend Q5 to March 2014.

The CAA's view was that it was not in the interests of users to start Q6 under one legislative framework and then switch to another framework part way through, and that users' interests would be furthered by undertaking Q6 under the proposed legislation. In this regard in March 2011 the Secretary of State for Transport confirmed in a written material statement to parliament that it intends to introduce legislation to reform airport economic regulation, early in the next parliamentary session which is assumed to start in May 2012.

[1] Economic Regulation of Heathrow and Gatwick Airport 2008 - 2013, CAA Decision, March 2008.

4.3 Other Relevant Issues

4.3.1 The Town and Country Planning System

4.3.1.1 Airport Development

All development is regulated by primary legislation set out in the 1990 Town and Country Planning Act and the 2008 Planning Act. Secondary legislation, such as the General Permitted Development Order (GPDO) 1995, further defines what types of development may not require planning permission, including aviation development before they are carried out.

The GPDO defines what types of development at an airport can be regarded as 'permitted development', i.e. development not requiring planning permission. Generally, this is defined as development, undertaken by the airport operator, on operational land, required in connection with the operation of the airport. This covers most forms of airport related development, such as new aircraft hangars, industrial and cargo buildings, multi-storey car parks, office buildings, aircraft stands, piers and satellites etc.

Although 'permitted development' does not require planning permission, there is a requirement to consult the planning authority, which means following a similar process as that for a planning application, albeit that the planning authority cannot refuse approval for the development. This does not however prevent the planning authority from either applying considerations for HAL to take into account (similar to planning conditions), objecting to a specific development, or in extreme cases, the planning authority could request the Secretary of State to remove HAL's permitted development rights. There is also the possibility that any permitted development over 1ha in site area, and likely to cause a significant environmental impact, could also be subject to the Environmental Impact Assessment (EIA) process, in which case permitted development rights would be lost and the normal planning application process needs to be followed.

Generally, any development at Heathrow involving the extension of a runway or terminal, the provision of a new terminal, or a non-operational building (i.e. not connected to the operation or function of the airport) will require planning permission with an application made to the local planning authority.

Any development requiring planning permission, and likely to cause a significant environmental impact, could also be subject to the EIA process, whereby the planning application would need to be accompanied by an Environmental Statement (ES) setting out all likely significant environmental impacts arising from the development. The requirements for EIA are also set out in secondary legislation but in respect of Heathrow only usually apply to major projects, such as substantial new stand capacity or new terminal buildings.

4.3.1.2 Planning Policy

In determining whether development at an airport is acceptable or not, the Planning Act (2004) sets out the hierarchy and format of the development plan process which forms the basis on which decisions are made and controls the amount and type of development at the national, regional and local levels. The 2010 Localism Bill currently being considered in the House of Commons will amend this process by removing the requirement for regional strategies and by introducing a power for local communities to require local planning authorities to draw up neighbourhood plans.

At the national level, aviation policy is set by the Department for Transport with airport development guided by the Air Transport White Paper, (2003) (ATWP), but this will be replaced by the Coalition Government's sustainable framework for UK aviation, a draft of which is due for consultation in March 2012 . National planning policy will also see the Government introduce a National Planning Policy Framework during 2011.

At the regional level for Heathrow, the London Plan (consolidated with alterations since 2004) provides the relevant planning policy framework for London and must be in general conformity with national policy. At the local level, planning policies for the Heathrow area are contained within the Hillingdon Unitary Development Plan, which must also conform to the higher tier regional and national policies.

Local and regional planning policy specific to Heathrow is generally supportive of development that is contained within the limits of growth set down by Government in its decision to permit Terminal 5 and within the defined airport boundary.

In October 2009, the Mayor published his proposals for a new London Plan – Consultation Draft Replacement Plan. The inspector's report on the Replacement London Plan was published in May 2011, with the final version of the Plan expected to be published in the summer of 2011. This document sets out the Mayor's opposition to a third runway at Heathrow.

At the local level, Hillingdon Borough Council are currently preparing their Core Strategy for the Borough, including land in and around Heathrow, a local hearing is expected to take place in the summer of 2011 conducted by an independent inspector.

4.3.1.3 The Planning Act (2008)

The Planning Act (2008) provides a new procedure for dealing with Nationally Significant Infrastructure Projects (NSIP's), through the establishment of National Policy Statements (NPS's) and an Infrastructure Planning Commission (IPC). The Act focuses on the delivery mechanism for any NSIP and aims to overcome the perceived deficiencies and delay inherent in the previous planning inquiry process. The need for such major infrastructure projects is being addressed in 12 sector based NPS's (e.g. Energy, Waste, Water, Rail & Highways) produced by the relevant Government Department, and providing the strategic planning policy framework for each type of major infrastructure. In the future, any airport developments that result in new buildings or runways that would generate in excess of 10mppa or 10,000 cargo air traffic movements would be subject to the new procedure.

The 2008 Act also introduced the creation of an Infrastructure Planning Commission (IPC). The IPC started receiving applications in March 2010 and is an independent decision making authority responsible for examining applications made for a development consent order for a NSIP. The Act has permitted that only under very limited and specific circumstances may a planning decision for a major infrastructure project be determined by the Secretary of State. However, the 2010 Localism Bill will, if enacted, amend this process to the extent that all decisions on major infrastructure projects will be made by the relevant Secretary of State and will abolish the IPC and merge its functions into the Planning Inspectorate.

The 2008 Planning Act also brings the introduction of a Community Infrastructure Levy (CIL). This is a new charge which local authorities will be empowered to collect on most forms of development in their area. CIL will be based on a formula which relates to the size and character of the development it is being charged against. The levy will be used by the local authorities to fund new local and sub regional infrastructure.

4.3.2 Climate Change Policy

Under the UK Climate Change Act 2008 the UK Government has set itself a legally binding national climate change target to reduce climate change emissions across the economy, including domestic aviation, by 80% by 2050 on 1990 levels, and by 34% by 2020

UK Government policy is that the price of air travel should, over time, reflect its environmental and social impacts. The DfT's 2008 Aviation Cost Assessment Study concluded that aviation was covering its external carbon emissions costs.

In 2008 the European Commission adopted a Directive to include aviation in the EU ETS from 2012. The UK has translated this directive into UK legislation and identified the Environment Agency as the UK's enforcement agency.
The UK Government is also working towards international agreement on a way to bring international aviation emissions within the wider post-Kyoto 2012 framework. Heathrow supports this work and views action at a European level as an interim step towards a global aviation climate policy framework. Heathrow is a founding member of the Aviation Global Deal group which supports a global sectoral approach for aviation.

At an international global level IATA has committed to 1.5% year on year fuel efficiency improvements until 2020, and the aspiration to not increase on 2020 emissions and a 50% net reduction in CO2 by 2050 on 2005 levels. The ICAO general assembly in 2010 confirmed support for the 2020 and 2050 aspirational goals as well as a 2% annual fuel efficiency target to 2020.

The UK has set an aviation sector target to limit emissions from all departing flights to 2005 levels by 2050. The Committee on Climate Change concluded in its December 2009 report that UK aviation passengers could grow by up to 60% and still meet this target and that this level of growth was consistent with the DfT's Air Transport White Paper 2003.

Heathrow currently has a target to reduce CO2 emissions from its energy use in fixed assets by 34% below 1990 levels by 2020. Heathrow is subject to the UK's Carbon Reduction Commitment on Energy Efficiency starting April 2010, the EU Emissions Trading Scheme, as well as energy efficiency building regulations (Part L).

As a strategic airport, Heathrow is required to report by May 2011 to the Government Environment on climate change adaptation risks and planned adaptation response.

4.3.3 New EU Air Quality Directive

In April 2008, the EU published a new directive (2008/50/EC) allowing member states to apply for a time extension to meet the EU air quality limit values. For nitrogen dioxide, a maximum time extension of 5 extra years is allowed, meaning that concentration limits would have to be met in 2015. HAL's understanding is that DEFRA will apply to the EU and request this time extension for the UK, where it will lay out the measures to be taken to meet the target by the new date.

BAA is committed to playing a role in tackling air quality and has a number of projects underway under the current Heathrow Air Quality Action Plan. These projects include tackling emissions from aircraft (e.g. through reducing use of auxiliary power units) and by encouraging the use of low-emission vehicles in landside and airside locations.

4.3.4 Noise

There are three main tiers of regulation which govern aircraft noise at Heathrow: International; European and national.

At an international level ICAO requires Member States to adopt a "balanced approach" to noise management. It also sets progressively tighter certification standards for noise emissions from civil aircraft. Aircraft operating in member states must conform to these standards, which are known as Chapters.

The EU has issued various directives relating to the management and control of environmental issues and is increasingly assuming responsibility for the regulation of aircraft noise standards. Member States are obliged to comply with the requirements of the directives and incorporate them into national legislation.

The directives of most relevance to aircraft noise are:

EC Directive 2002/30 which has various elements, including:

- Introducing discretionary powers to restrict the operation of marginally compliant Chapter 3 aircraft, where circumstances support this measure;
- Requiring the publication of environmental noise objectives for the airport;
- Requiring the adoption of a balanced approach to noise management, including the four elements agreed by ICAO.

EC Directive 2002/49 ("Environment Noise Directive") requires Member States to create noise maps from all transport sources in urban areas by 2007 and to adopt action plans to manage noise by 2008. The directive also aims to harmonise methods for measuring noise across the EU.

In accordance with the Environmental Noise Directive (2002/49/EC), HAL has prepared a draft noise action plan which is awaiting Government adoption in 2011 following public consultation in 2009. This follows publication of noise Lden contours at UK airports in 2006. HAL will publish the noise action plan within 28 days of adoption notification.

The UK Government has an important role in setting and developing the policy framework for aircraft noise control at UK airports. The DfT has recently issued its Sustainable Framework for Aviation Scoping Document for public consultation. The new policy framework will replace the previous Government's The Future of Air Transport White Paper which was published in 2003.

Pursuant to its powers under the Civil Aviation Acts, the Department for Transport (DfT) has direct control over noise at Heathrow, Gatwick and Stansted airports. The DfT has implemented the following specific noise abatement objectives for the course of the current night flight regime which runs from 2006 to 2012:

- Minimise sleep disturbance resulting from over flight of the noisiest types of aircraft;
- Mitigate the effects of noise, in particular sleep disturbance. This will be done by encouraging the airport to adopt night noise related criteria in order to determine which residents of domestic or noise sensitive premises should be offered insulation schemes;
- Limit the 6.5 hour, 48 dB(A) Leq contour (for the winter and summer seasons combined) to 55km² by 2011 – 2012.

The DfT is committed to consulting on the issue of night flight restrictions prior to the end of the existing arrangements.

Finally there are a number of limit values in place at Heathrow. These include:

- Under Terminal 5 Planning Condition A4, the number of air transport movements at Heathrow Airport shall be limited to 480,000 each year.
- With effect from the 1 January 2016, the area enclosed by the 57dBA Leq 16hr (07:00-23:00) contour shall not exceed 145km^2
- The 6.5hr 47dBALeq night quota period contour (for winter and summer seasons combined) is limited to 55km^2.
- There are also limits on the number and type of aircraft permitted to operate at night between 2330 and 0600.

4.3.5 Airspace Issues

The December 2006 Air Transport White Paper Progress Report stated that the current air traffic arrangements for some UK airports are already nearing capacity (especially in the South East), and the related airspace is among the most congested in the world. The White Paper recognised the need for a structured programme for the redesign of UK airspace that would help protect safety standards, relieve current constraints, reduce delays, take account of environmental impacts and accommodate the forecast increase in air transport movements where additional capacity was supported in the White Paper.

As a result the DfT, National Air Traffic Services (NATS) and CAA (Directorate of Airspace Policy) have convened a group looking at Future Airspace Strategy (FAS). NATS have begun work on a two year scoping study for FAS.

BAA is three years into a five year contract with NATS for the provision of aerodrome control and certain approach services at each of the six UK airports. With the end to "direct charging" these services are now paid for by the airports and recovered from airlines at a rate per landing capped by the regulator. The traffic volume risk is borne by NATS initially but then transfers to BAA beyond agreed limits. The contract sets out governance structures; services included tariffs, procedures for capital projects and exit management provisions for each airport.

NATS have consulted on a proposed piece of airspace change for TC North (a wide area covering North London and parts of East Anglia). This proposes changes to holding patterns and arrival and departure routes for BAA and non BAA airports in the area, in particular to take account of precision navigation (PR-NAV), the need to reduce holding and distance flown, maintain safety and allow for traffic growth. There are implications for noise profiles on the ground. Consultation closed in June 2008, however the proposals were rejected and NATS are now reviewing this in light of the feedback received before submitting fresh information.

Any possible impacts on HAL's investment plans arising from this process are currently excluded from the plans detailed in this document.

4.3.6 Public Safety Zones Review

Public Safety Zones (PSZ's) are areas of land, at the end of runways at the busiest UK airports, within which development is restricted in order to control the number of people on the ground, at risk of death or injury, in the event of an aircraft accident on take-off or landing. The runways at Heathrow have PSZ's associated with them.

Guidance on the policy and administration of Airport Public Safety Zones in England and Wales is published by the Department for Transport (DfT).

The PSZ's currently published for BAA airports are based on risk contours modelled for 2015. PSZ policy stipulates the circumstances when PSZ's should be remodelled. This can be required due to:

- A significant expansion of an airport (The DfT has indicated the broad objectives of PSZ policy as applicable to existing runways should be applied where possible to proposed future runways),
- A change to an existing runway's configuration,
- The requirement for a general update. (It is a requirement of PSZ policy that PSZ's should undergo a general review approximately every 7 years.)

Initial work has begun to develop the programme for reviewing Public Safety Zones. HAL will work with DfT as appropriate to progress this work.

Pending progression of this work, any capital expenditure associated with complying with any revision to the PSZ's at Heathrow is currently excluded from the investment plans.

5 Q5 Delivery

5.1 Q5 Programme Delivery

The Q5 delivery programme is within its fourth year of the quinquennium. To enable efficient delivery of the capital investment detailed in this CIP, HAL has divided the overall plan into programmes for management purposes. Since the publication of last CIP document the baggage programme (which covered pan-airport and local terminal baggage systems) has been encompassed within Eastern, Western and Infrastructure programmes in order to improve efficiency. Furthermore a Design and Development programme has been created which encompasses projects Pre Construction decision in order to provide a seamless handover to delivery.

The Design and Development projects have been presented in their respective programmes within this document.

For the delivery of Q5, the programmes for the main Capital Projects investment works are:

- Eastern Campus (this covers the facilities in the geographic areas of T1 and T2 including all land to the eastern edge of the operational airport)
- Western Campus (this covers the geographic areas of Terminals 3, 4, and 5.)
- Infrastructure (this covers all airfield areas not explicitly included in Eastern or Western Campuses together with landside facilities)
- Airline Relocations (this covers the relocation activities for airlines moving between terminals)

In addition to the Capital Projects investment programmes outlined above, the following other programmes are included in the HAL CIP:

- Information Technology (IT) / Systems (which covers stand alone IT / Systems investment not delivered as part of a main capital investment works)
- Rail (which covers Heathrow Express and other rail led investments)
- Project for the Sustainable Development of Heathrow (PSDH) Programme (which covers future capacity and resilience works)

5.1.1 Q5 Capital Expenditure Programme

Table B sets out HAL's current proposed Q5 Capital Expenditure Plan in 2007/08 prices. Table C sets out the capital expenditure included in the CAA's regulatory settlement for Q5. These tables show that HAL is delivering a CIP that is within the CAA's settlement. The savings in capital expenditure are largely explained by the cessation of work on a third runway.

CIP 2011 *Cost base: 07/08 Real*

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Capital Projects*	683	701	678	922	1037	4021
Rail**	12	14	9	54	67	156
IT	10	31	37	37	8	123
PSDH***	0	19	49	35	59	162
Total	**705**	**765**	**773**	**1048**	**1171**	**4462**

All values in £ millions.

* Capital projects includes payments related to Land Purchased for the Construction of Terminal 5 & transfers from PSDH

** Rail includes unallocated Airtrack budget

*** Excludes unallocated PSDH budget and budget transferred to Capital Projects

Table B: Total CIP Values - CIP 2011 (07/08)

CAA Q5 Decision *Cost base: 07/08 Real*

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Capital Projects	831	1005	840	641	298	3615
Thames Water	3	4	6	6	7	25
Rail	28	35	33	29	26	151
IT	24	23	23	21	20	112
PSDH	163	80	97	123	177	640
Total	**1050**	**1146**	**999**	**820**	**527**	**4542**

All values in £ millions.

Table C: Total CIP Values - Q5 Decision
(Refer Table 8.3 CAA's Determination)

5.1.2 Q5 Extension Year

HAL has agreed with the airlines a cap for its capital programme in 2013/14 of £735m (2007/08 prices). This will be managed in three distinct budgets (See Figure 1 below) - £435m for projects already started in Q5 (e.g. Eastern Campus and T3IB), £90m for the Crossrail project and £210m for new projects. The exact allocation of monies is subject to consultation with the Heathrow airline community. This exercise is to be completed by June 2012.

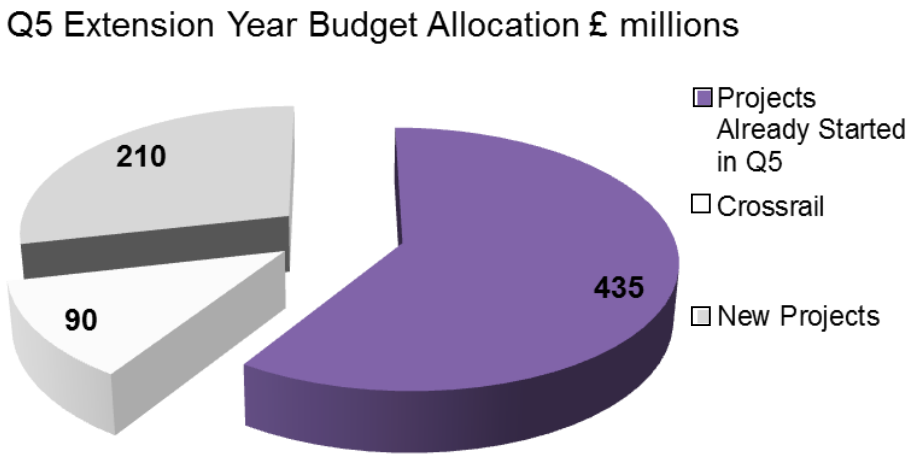


Figure 1

5.2 Eastern Campus Programme

5.2.1 Overview

To date the Eastern Campus Programme has delivered a number of projects (i.e. T2B Phase 1) that have enabled the relocation of STAR airlines into Terminal 1 and the clearance of the site for the building of the new terminal (T2A) and satellite pier (T2B Phase 2). The enabling work has required the demolition and re-provision where necessary of significant parts of Heathrow's infrastructure (including T2, Queen's Building, parts of Europier and Pier 3, MSCP2) and will conclude with the phased demolition of the old control tower building (OCT). The principal elements of the programme moving forward are the construction of Phase One of the new terminal building itself (T2A), the satellite pier (T2B), the short stay car park (MSCP East) including the forecourt and associated landside works and the compliance and capacity works within the existing Terminal 1 baggage system.

Below is a list of projects that are on-going or have not commenced that are over £3m in value (nominal) at April 2011.

5.2.2 List of Projects

BCT Number and Project Name as presented in Schedules

3814 : MSCP East New Build
4201 : T2B Phase 2
7664 : T2A Ph2 Baggage System
7720 : T2A Phase 2
8888 : OCT Demolition
9351 : T1 Baggage Prolongation Programme
9723 : Eastern Campus Accommodation and Ancillary Facilities
9805 : Eastern Campus Information & Control Systems
10309 : T1 Transitions
Various: T2A & Associated Projects

5.3 Western Campus Programme

5.3.1 Overview

An extensive programme of refurbishment works has been delivered in the Western Campus, focused on transforming Heathrow and improving the passenger experience. In Terminal 3 these include: the Landside Departures concourse, the Immigration and Baggage Reclaim Halls and the Flight Connections Centre which were all completed during the first quarter of 2011, the Central Search Area which is due to be completed at the end of May 2011 and the Departures Lounge at the end of July 2011. During the early part of Q5 significant investment was made to refurbishing Piers 5 and 7.

To date Terminal 4 has delivered a number of projects which are key enablers to the success of the Airline Moves sequence. The new interim VIP Suite was opened in July 2010 replacing the Spelthorne Suite, additional off-pier coaching capacity was created, a new departure check-in area was provided, the Landside Arrivals concourse underwent a major refurbishment, two additional Baggage Reclaim Belts were installed, and the refurbishment of the Departures Lounge is due to commence early 2012 for completion a year later.

For Terminal 5 the investment centres on the new Terminal 5C facility. The new satellite is planned to be fully operational and utilised by the end May 2011. On opening it will provide an additional 12 pier served stands, improving the passenger experience by reducing the frequency with which passengers have to be transported in buses between Terminal 5 and their aircraft.

Below is a list of projects that are on-going or have not commenced that are over £3m in value (nominal) at April 2011.

5.3.2 List of Projects

BCT Number and Project Name as presented in Schedules

1851 : Post T5 Transfer Baggage System
3801 : T3 Integrated Baggage System
3841 : Western Campus A380 Stands
9508 : Pier 5 A380 Stands
9516 : T4 Baggage Works for Step
9640 : MCP4 Relife Works
9644 : T4 Departures Phase 2
9844 : T4 Airbridge Replacement
10094 : T3 HBS Replacement

5.4 Infrastructure Programme

5.4.1 Overview

The Infrastructure programme has been delivering projects throughout Q5 across the breadth of Heathrow in order to maintain and transform the critical assets which support our terminal and baggage operations. The programme has delivered benefits by generating new stand capacity aligned to the terminal developments, constructed new taxiway sections to allow larger aircraft, new control post infrastructure and also improvements to our core infrastructure including the pollution control & stormwater system and the main Central Terminal Area tunnel. Also, the programme has delivered

numerous projects across all campuses in order to replace and enhance existing assets, such as the toilets, escalators and wayfinding.

The focus for the remainder of the Q is on delivering critical supporting assets for the opening of Terminal 2 such as the Energy Centre, which will achieve significant environmental benefits and the stands and taxiway infrastructure for T2B. Also, across the programme, there will be the completion of the Control Post Programme ensuring the right control post capacity for Q5, and the delivery of Airfield Infrastructure to support the releasing of the Cranford agreement in order to improve the resilience of the airfield.

Finally, the most recent addition to the infrastructure programme has been the Winter Resilience Programme which has emerged following the Begg report commissioned after the December 2010 snow disruption.

The enquiry's report made 14 recommendations, all of which have been incorporated into a detailed action plan to improve Heathrow's winter resilience and passenger service. The capital spend requirement has not been fully determined and is subject to consultation with the airline community, but will be funded from the Q5 Capital plan. The plan is envisaged to consist of the following Sub-Projects, based on recommendations from the Begg report:

- Snow Clearing Equipment
- Additional Glycol Storage facilities
- Snow disposal - snow melting equipment
- Storage & maintenance facilities for the new snow clearing equipment
- Command & Control Centre
- LBRT Control Centre
- De-icer pads

Below is a list of projects that are on-going or have not commenced that are over £3m in value (nominal) at April 2011.

5.4.2 List of Projects

BCT Number and Project Name as presented in Schedules

3353 : Major Fire Appliance Replacement
4185 : VIP Strategy
4202 : EA Airside Rd and Taxilane UnderPass
6527 : HAL Minor Projects
6793 : Heathrow Storm Water Catchment
7209 : Eastern Campus Apron
7666 : Energy Infrastructure
7718 : Eastern Maintenance Base Redevelopment
8452 : Control Post Programme
8735 : T5 Phase 2 Airfield Works
8818 : Baggage Product Improvement
8857 : Taxiway and CDS Rebuilds
9105 : New Model Line
9213 : Security Projects
9301 : Infrastructure Safety Critical Project
9382 : PiccEx Station Works
9501 : Heathrow Resilience
9575 : T5 Transfers Add Security Lanes
9843 : Low Cost Security Projects

5.5 Airline Relocation Programme

5.5.1 Overview

The Airline Relocation Programme continues with the latest Sequence 4.3. Since the publication of the last CIP Air Mauritius, Qatar and Saudi have moved to T4 - Step 9.2 will initiate the airline relocation of Air India to T4. Governance continues to be via the Airline Relocation Working Group, and JST.

The sequence 4.3 is shown below:

Step Name	Move Description	Date of 1st Op. in New Term.	Notes / ✓ = Completed
Switch 1	BA T1 exc 757, T4 short haul, & T3 MIA from T1, T3 & T4 to T5	27/03/2008	✓
Switch 2	BA T4 long haul exc JSA via SIN/BKK from T4 to T5 (Now delivered in 3 sub-switches)	2.1 - 05/06/08 2.2 - 17/09/08 2.3 - 22/10/08	✓ ✓
Step 3	STAR Phase 1 (UA & NZ) from T3 to T1	04/07/2008	✓
Step 4.1	oneworld T1 (AY)	27/01/2009	✓
Step 4.2	BA T1 757 Ops, **one**world T2 (IB and XG) from T1 & T2 to T3	25/02/2009	✓
	Complete closure of Queen's Building	09/06/2009	✓
Step 4a	STAR Ph2 (LH, LX, OS, OU, TP) from T2 to T1	11/06/2009 - 16/06/2009	✓
	Early Closure of T2 Stands key to T2A delivery	01/07/2009	✓
Step 5.1	T3 Non-aligned (EY) from T3 to T4	30/09/2009	✓
Step 5.2	T3 Non Aligned (9W, MU) from T3 to T4	14/10/2009	✓
Step 5.3	QF & BA JSA via SIN/BKK from T4 to T3	29/10/2009	✓
Step 5.4	T3 Non-aligned (GF, MH) from T3 to T4	29/10/2009	✓
Step 6 / 7a	Alitalia : AZ, B3, FB, HY, JU, J2, OA, RO from T2 to T4. KE from T3 to T4	10/11/2009	✓
Step 6 / 7b	Servisair : AH, AT, KC, SU, W3 from T2 to T4.	17/11/2009	✓
Step 6 / 7c	Cobalt : AF, FV, HM, IY, LN, OK, RB, TS, TU from T2 to T4	24/11/2009	✓
	Operational closure of Terminal 2, Stands and related Infrastructure	01/12/2009	✓
Step 9.1a	T3 Non-aligned (BG, BI) from T3 to T4	09/03/2010	✓
Step 9.1b	T3 Non-aligned (KU) from T3 to T4	14/04/2010	✓
Step 9.2a	T3 Non-aligned (MK) from T3 to T4	24/11/2010	✓
Step 9.2a	T3 Non-aligned (QR) from T3 to T4	18/12/2010	✓
Step 9.2b	T3 Non-aligned (SV) from T3 to T4	30/03/2011	✓
Step 9.3	T3 Non-aligned (AI) from T3 to T4	24/05/2011	
Steps 11 / 12	STAR Phase 3 from T1 & T3 to T2A	Balance BA Ops (best use of T3) between T3 and T5 — Dec-13	

5.5.2 List of Projects

7702 : Relocation of Airlines IT Operations

5.6 IT / Systems Programme

5.6.1 Overview

The strategic operating plan for IT was developed during 2009 to support the strategic intents for Heathrow through improving IT service, reducing operating costs and implementing technology which delivers improved value to Heathrow's business, airline and passenger stakeholders.

The IT Programme projects are included in the CIP within the IT line. Projects with an IT component are included within the Capital Programme.

The key strategic IT sub programmes for delivery in Q5 are as follows:

- Enabling/Pre-works to support delivery of a Real Time Airport integrated management system for Heathrow; generating a more cost effective, service differentiating capability for the airport by maximising the flow of information for operations, management and security.
- Vanilla implementation of Oracle E-Business Suite & Programme Controls systems which will drive business change by the adoption of best practice process and supports the programme to simplify the business, raise professional standards and personal accountability and reduce costs.
- Simplification and cost reduction of the current technology architecture and infrastructure which will reduce customisation, the number of vendors and duplication of technology whilst providing an improved, more reliable IT toolset and user experience.
- Early works supporting the delivery of the IT Baggage Programme which is a critical enabler to support the replacement baggage systems across Heathrow. These works include integration of Management Information Systems and cross-campus systems that support the provision of the new automatic baggage tunnels for transfer bags for example.
- Deliver innovation and reliable technology to support Capital construction programmes

Activity funded & managed within the Capital CIP and undertaken by IT include works to support deliveries of Eastern Campus, Western Campus and Infrastructure e.g. replacement of the SCADA Baggage System for Eastern Campus

5.6.2 List of Projects

BCT Number and Project Name as presented in Schedules

IT01: Airport Operational Systems
IT02: IT Infrastructure Renewal
IT03: Business Planning & Support IT Solutions

5.6.3 Additional Explanatory Notes

IT01, IT02 and IT03 are portfolios of projects.

Following an OJEU competition Capgemini has been appointed as the outsource provider of IT Services under a five year contract which will deliver enhanced service levels and other benefits at a lower cost to BAA. The contract does not afford Capgemini any exclusivity and there is an on-going requirement for Capgemini to demonstrate value for money in the delivery of core IT services and any project work that is awarded to it. The cost-effective delivery of the CIP is therefore enhanced by these new arrangements.

5.7 Rail

5.7.1 Overview

Rail investments are led by Heathrow Express (HEx). The programme is designed with the following objectives:

- Continue the mode shift from car to rail, for both passengers and employees
  - Reducing emissions and carbon reduction
  - Reducing the impact of road congestion
- Enhance passenger experience by reducing the journey anxiety, through
  - Integrating with aviation
  - Providing frequency, certainty, reliability
  - Quality service

The Programme comprises of around 80 projects, the projects have been rolled up into key categories according to type.

5.7.2 List of Projects

BCT Number and Project Name as shown in Schedules

10146 : Fleet Modernisation
Various: HEx Growth Projects
Various: HEx Renewal Projects

5.7.3 Additional Explanatory Notes

Various are portfolios of projects

5.8 Q5 PSDH

5.8.1 Overview

The Q5 regulatory settlement allowed for £640m (2007/08 prices) of capital investment for PSDH.

HAL and the airline community agreed that the £640m (inflated to £672m at 2008/09 prices in CIP 2009) should be split between different categories of expenditure. These were:

- £440m for third runway and master-planning activity.
- £62m for runway resilience work, including the ending of the Cranford Agreement.
- £170m for other capacity increasing projects.

This split being broadly equivalent to the manner in which the possible sums for PSDH were outlined by HAL in the period leading up to the Q5 settlement and forming the basis of the £640m.

This split was agreed by the airline community in June 2009 and formally recorded, with the full project control and ex post arrangements, in November 2009.

In May 2010, the UK Government withdrew support for a third runway; this has resulted in third runway expenditure becoming unallocated. These funds can only be allocated to new capacity and resilience based projects/ scope with prior approval from CIPWG, JST and CAA.

The T3 IB project is awaiting CAA endorsement for transfer of £47m from PSDH to Capital Projects.

The recent Winter Resilience Programme initiated, as a result of the Begg report, requires monies in the region of £30m-£50m, and could potentially be transferred from the PSDH budget.

Unallocated R3 Monies within PSDH currently equates to £305m (Table F).

PSDH monies have been included in the CIP 2011 in Projected Outturn prices at £174m (£705m less transfers to Capital for runway resilience and other capacity increasing projects, £226m and unallocated budget.)

PSDH Forecast May 2011 10/11 Prices

	2008/09	2009/10	2010/11	2011/12	2012/13	Total
R3	0	20	51	36	277	385
Resilience		1	1	22	38	62
Other	0	3	19	103	100	225
Total	0	24	71	162	415	672
Projected Outturn	0	**24**	**71**	**165**	**444**	**705**

Actuals to 2010/11

All values in £ millions. *Table D*

LESS:

PSDH transfers to Capital through formal change control

	2008/09	2009/10	2010/11	2011/12	2012/13	Total
Resilience	0	-1	-1	-22	-18	-42
*Other	0	-3	-19	-105	-57	-184
Total	0	-4	-20	-127	-75	-226

All values in £ millions. *Table E*

Net PSDH (including budget yet to be transferred & unallocated budget)

	2008/09	2009/10	2010/11	2011/12	2012/13	Total
R3	0	20	51	36	0	108
Resilience	0	0	0	0	19	19
**Other	0	0	0	0	47	47
Unallocated	0	0	0	0	305	305
Sub- total	0	20	51	37	371	479
Less Unallocated	0	0	0	37	-305	-305
Projected Outturn	0	20	51	37	66	174

All values in £ millions. *Table F*

*Includes other Capacity increasing projects

**Other includes £47m for T3IB

5.9 Trigger Milestones

5.9.1 Overview

A feature of the CAA price control at Heathrow is a series of projects (so called 'capital investment trigger projects') where a deferral in project delivery would lead to an adjustment to aeronautical charges that can be levied on HAL. These adjustments are intended to ensure that HAL only starts to earn a return on investment once the relevant project is delivered.

There are a total of 24 such projects that cover approximately 60% of HAL's original Q5 capital investment programme. The CAA regulatory settlement for Q5 at Heathrow provided that if none of these projects were delivered at all during Q5, a maximum cumulative reduction to aeronautical charges of £259 million would occur. Forecast total aeronautical charges over Q5 in the CAA's price control document are £5,531 million meaning that the maximum potential reduction is about 5% of total aeronautical income. Note: All figures in this section are in 2007/08 prices. Table 13-2 of the CAA March 2008 publication "Economic Regulation of Heathrow and Gatwick Airports" provides further details.

The specifications of those capital triggers were set out in broad terms and the relevant dates and rebates determined in the CAA decision. They were, however, not defined to a working level. In March 2009, following a period of joint working between HAL and the airline community and formal consultation by the CAA, the CAA published the final definitions of the trigger projects.

5.9.2 Trigger Completion

5.9.2.1 Process

The CAA has set out that the process for testing whether a trigger has been met will be as follows:

- The airport will send certification of completed works to the CAA for confirmation of successful performance against the triggered project milestone(s); and
- The CAA will then consult the airline community (by means of a letter to the AOC) and investigate if any concerns are raised.

In practice the detailed process as implemented by HAL and the airline community is as follows:

- HAL and relevant airline community representatives meet on site and formally record the completion of the project / project element including any agreed outstanding items.
- HAL writes to the CAA providing copies of the relevant documentation from the site meeting. (Point 1 above)
- The CAA then writes to the Heathrow AOC to request comment on the completion, or otherwise, of the trigger. (Point 2 above)
- The AOC writes to the CAA to comment on the completion.

5.9.2.2 Trigger Status

The status of the capital investment trigger projects at March 2011 is that 6 milestones have been delivered on time and endorsed by the CAA. These are the:

- T1 - Completion of BMI Nose Building Facility
- Completion of T2B Ph 1 Stage 1 for OR
- T3 - Completion of pier 5 refurbishment
- T4 - New CIP (stand 407) Lounge Access for Fit-out
- T4 - Completion of 3rd jetties on each 2 A380 stands
- T4 - Completion of North East bank of Check in desks

In total 4 milestones have been delivered but incurred a rebate and have been endorsed by the CAA. These are:

- Completion of T4-T1 baggage tunnel refurbishment - Rebate incurred £0.2m
- T4 - Completion of Baggage Sorter (Replacement) - Rebate incurred £0.6m
- T3 pier 7 Refurbishment Complete - Rebate incurred £0.2m
- Completion of Diversion of East Church Road – not completed yet, incurring a rebate
- T4 Check-in Ph completion of South West bank of check in desks – Rebate incurred £0.2m

Two further projects have been completed and signed off by the airlines, but have yet to be endorsed by the CAA:

- T3 – Completion of Immigration, Landside Departures & Baggage Hall Refurb
- T2A – Ph 1 T2 demolition complete and T2A substructure complete

Details of the status of all the capital investment trigger projects, as at March 2011 month end, is set out in Appendix J: Triggers.

5.9.2.3 Change Control

The CAA's change control process is outlined in Appendix A. HAL and the airline community are developing a working level process to define how they will work together to bring any proposed changes to triggers before the CAA after a period of consultation. Consultation on any changes to scope or date of triggers is progressed through the CIPWG with final ratification by the JST.

Q5 Extension Year

All existing Q5 capital triggers will continue into the extension year with the existing change control process used to agree changes to the current milestones. This process

will also be used to agree any new triggers which may apply to the capital programme during 2013/14. HAL and the airline community will agree any changes to the capital triggers by June 2012.

6 Technical Notes

6.1 Project Definition Sheets

The purpose of a Project Definition Sheet (PDS) is to provide an overview of each individual project. The key content / process in the PDS are:

- PDS completed for all projects with a budget greater than £3m.
- Information on HAL and airline higher level objectives for the project.
- Information on scope, delivery and operational assumptions underpinning the project.
- A section to capture Operational Costs related to the completed investment. e.g. Additional security resource.
- A section to capture Revenue Impact related to the completed investment. e.g. Incremental additional revenue.
- A section on capital financial information, with Estimated At Completion (Outturn) being shown in the main body of the PDS.
- Key context drawings or images in an appendix.

PDS's will not be provided for projects that are due to complete in the regulatory year preceding CIP publication. i.e. for CIP 2011 any projects substantially complete by April 2011 will not have a PDS.

For projects starting in Q5 the EAC will be provided from "live" March month end information.

6.2 Enhancements Made to CIP 2011 Project Definition Sheets

Since the production of CIP 2010, the Mid Q Report findings have been released. The findings have highlighted improvements that have been incorporated in this year's project definition sheets.

The following are new to CIP 2011:

- Project Benefits to both HAL and Airlines.
- Airline engagement, this section provides dates and forums where the airlines have been engaged.
- Airline Financial impact and assumptions.
- An indicative Impact on user charge.
- Non - construction risk, these will include all known operational risk to the airlines.
- Cost benchmarking Details

6.3 User Charge Impact

This is an indicative impact on the airport charges yield of individual capital projects. All inputs and outputs are in real prices, i.e. excluding inflation. The model used to calculate this employs the approach used by the regulator to set maximum airport charge yields for the airport. However, it is not a substitute for the full regulatory model, neither is it a tool suitable for conducting a financial appraisal of projects. The results are for information purposes only and full detailed modelling would be required to accurately forecast impact on yields.

6.3.1 User Charges Q5

The CAA's decision as to the maximum allowed airport charge revenues per passenger at Heathrow for Q5 are summarised in Table G.

	2008/09	2009/10	2010/11	2011/12	2012/13
Yield per Passenger 2007/08 prices	£12.80	£13.72	£14.76	£15.84	£16.99

Table G: Maximum Level of Airport Charges per Passenger in Q5
(Refer Table 15.6 CAA's Determination)

6.4 Time Schedule Data

The integrated schedule agreed at IBR7 for the remainder of Q5 represents all the project scope agreed at IBR6 for Capital Projects. All schedule data provided is as at March 2011.

The schedules have been divided into the Capital Programme categories of:

- Capital Projects
  - Eastern Campus (T1 & T2)
  - Western Campus (T3, T4 & T5C)
  - Infrastructure (Airfield and projects crossing or outside campus areas)
  - Baggage (Baggage scope integrated into other programmes).
- PSDH work is allocated to the appropriate programmes as listed above.
- IT work by its nature is a steady stream of work and has not been shown on any schedule
- Future rail project work
- The CAA has endorsed to extend Q5 by one year, this will allow Q5 projects that spilled over into Q6 to be an integral part of Q5
- Work for Q6 and beyond has not been defined and is undergoing a process of constructive engagement with airlines

6.5 Inflation

HAL has continued to maintain its Heathrow-specific Blended Index, "HBI" which tracks actual material and labour prices in volumes and at rates appropriate to Heathrow, recognising the management position taken by HAL on, for example, wage agreements.

CIP 2011 utilises the revised spend profile agreed at March 2011 month end and baselines it to a 2011/12 price base. HAL has elected to maintain its position in line with the HBI predictions that construction inflation can be managed to 2% for the year and no uplift is therefore incorporated for the year.

6.5.1 Work Breakdown Structure and Price Base

6.5.1.1 Work Breakdown Structure

The Work Breakdown Structure (WBS) for the programme is current at the report date of March 2011.

The capital Expenditure Lines are:

- Capital Projects
- IT
- Rail
- PSDH

Appendix H provides a 'tracker' detailing how the current WBS relates to the original Settlement (where practical) and identifies notable scope changes between CIP 2008 and CIP 2011. The tracker also cross-references to the PDS sheets provided in the body of the document. The tracker is presented in 07/08 prices.

6.5.1.2 Price Base

The Q5 regulatory Settlement in March 2008 was published in real 2007/08 prices. The following tables (Tables H to J) provide a comparison of the total capital investment plan for Heathrow between the CAA 2008 Settlement in the 2007/8 Price Base, and the CIP 2011 (Outturn prices and 2007/08 Price base).

CAA Q5 Decision				*Cost base: 07/08* *Real*		
	Year 1	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Total**
Capital Projects	831	1005	840	641	298	3615
Thames Water	3	4	6	6	7	25
Rail	28	35	33	29	26	151
IT	24	23	23	21	20	112
PSDH	163	80	97	123	177	640
Total	**1050**	**1146**	**999**	**820**	**527**	**4542**

All values in £ millions.

Table H: Total CIP Values - Q5 Decision
(Refer Table 8.3 CAA's Determination)

CIP 2011 *Cost base: 07/08 Equivalent*

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Capital Projects*	683	701	678	922	1037	4021
Rail**	12	14	9	54	67	156
IT	10	31	37	37	8	123
PSDH	0	19	49	35	59	162
Total	**705**	**765**	**773**	**1048**	**1171**	**4462**

All values in £ millions.
* Capital projects includes payments related to Land Purchased for the Construction of Terminal 5 & transfers from PSDH

**Rail includes unallocated Airtrack budget

*** Excludes unallocated PSDH budget

Table I: Total CIP Values - CIP 2011

CIP 2011 *Cost base: Projected Outturn*

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Capital Projects*	716	737	712	987	1167	4319
Rail**	13	14	10	58	75	170
IT	11	33	39	39	9	131
PSDH***	0	20	51	37	66	174
Total	**740**	**804**	**812**	**1121**	**1317**	**4794**

All values in £ millions.
* Capital projects includes payments related to Land Purchased for the Construction of Terminal 5 & transfers from PSDH

**Rail includes unallocated Airtrack budget

*** Excludes £305m PSDH budget (Unallocated budget)

Table J: Total CIP Values - CIP 2011

Table J shows total Heathrow Q5 Capital expenditure (outturn prices) of £4,794m. This compares to the CAA's outturn Q5 Capital expenditure forecast of £5,137m. HAL has agreed with the airline community that it will work to ensure that the overall Heathrow Q5 Capital expenditure (outturn prices) will not exceed the CAA's outturn Q5 Capital expenditure forecast.

When deflated to the price base of the original CAA decision (07/08) the Heathrow Q5 expenditure has decreased. The decrease is related primarily to the unallocated PSDH budget that has been removed.

6.6 Risk

6.6.1 Portfolio Risk Provision

Portfolio level risks, i.e. those with low probability of occurrence which are impractical to carry at project level such as catastrophic asset failure, major safety concerns or operational crises and portfolio uncertainties such as inflation fluctuating from expectations and gaps at project interfaces were also considered in the model. HAL elected to exclude the potential financial impact of these risks in order to minimise any latent money in the baseline. The baseline is thus fully deployed in actual work.

With the baseline set at an aggregate P50 (exclusive of portfolio risk), the theory is that 50% of projects will deliver below the P50 which will offset the 50% which cannot. If portfolio risks occur the ability to maintain planned projects would be assessed.

The current overall risk provision represents the lowest threshold of Capital's guideline range for projects entering construction (7%-10%). This value will reduce as remaining pre-implementation works enhance in design maturity.

6.7 Change Control

HAL is continuing with the established change control process which was introduced in June 2008 to capture all changes to projects arising from baseline reviews, budget or scope change. This process is called Client Change Control and ensures that all changes are assessed, consulted upon with airlines and approved for implementation.

The CIP Working Group has been used as a final consultation on behalf of the JST. In addition the CIP Working Group has agreed the categories of client change on which consultation should be conducted, the forum (Stakeholder Programme Boards or CIP Working Group) that should consider each category of change and the airline representatives who have the authority to endorse changes on behalf of the community.

Impacts and status of all change requests are captured on a central Client Change Register. This information is shared with airlines each month via Stakeholder Boards and the CIP Working Group. A dashboard report is also produced for the CIP Working Group each month that is designed to illustrate the volume and status of client changes across the CIP and give an indication of how successfully consultation is being concluded in relation to the implementation of change.

7 Consultation

7.1 Delivery of Annex G commitments in Q5

7.1.1 Consultation on Capital Projects including Stakeholder Programme Boards

A comprehensive structure has been established to consult the airline community on the Q5 programme and beyond. The Joint Steering Team (JST) provides a forum for cross campus consultation and is attended by representatives from the home based carriers, the alliances, IATA and the AOC.

7.1.1.1 Stakeholder Programme Boards

Stakeholder Programme Boards (SPBs) are operating within each of the three Heathrow programmes with the Western Campus divided into 3 respective subsets due to the specific needs of each terminal (Terminals 3, 4 and 5). The Baggage strategy stakeholder board still exists in its current form. The SPBs, which meet on a monthly basis, are chaired by the Heads of Development who have full accountability for all aspects of the programme. The SPBs provide a forum for individual project consultation including change and progress reporting. Membership includes representatives of airlines, alliances, IATA and the AOC.

7.1.1.2 Consultation at Gateways

Recognising that full consultation on all projects would not be appropriate, the airline community were asked to nominate which of the Q5 projects should be treated as 'key projects' for the purposes of consultation. For 'key projects', gateway consultation events are held in line with HAL's project management process at Brief, Option and Construction Decision gateway stages. For the largest projects, consultation has been undertaken through dedicated working groups. For other 'key projects', the airline community have deemed it appropriate to consult through the SPBs. The wider airline community are provided with updates on the outcomes of all gateway consultation events through the JST.

7.1.1.3 Change Control

The Change Control Process is built around the principle of consultation at the earliest stage possible and HAL consults the airline community extensively on changes to cost or scope in the CIP. The status of outstanding change issues is reviewed and reported regularly and a pan airport view of significant items is provided to the CIP Working Group which considers cross campus issues, change that effects more than one sub programme or trigger projects.

It has been recognised that consulting on change effectively with large airline groups is challenging and two Airline Leads have been appointed for each SPB. There are agreed terms of reference for this role the Airline Lead reviews each item of change and confirms that consultation has taken place. The SPBs retain visibility of all significant change issues.

7.1.1.4 Consultation on Risk Allowances

The SPBs and CIP Working Group receive monthly reports on the use of risk allowances with Airline Leads consulted on the significant use of risk monies.

7.1.2 Rail Stakeholder Programme Board

Rail Stakeholder Programme Board was formed in November 2009, the programme Board meets on a quarterly basis and is chaired by the Heathrow Rail Project Manager.

The purpose is to:

- ensure airlines and key stakeholders are engaged with the Programme objectives and delivery, so that the objectives are achieved
- provide stakeholders with an overview of all solutions in the Programme to assure alignment
- Demonstrate compliance with the CAA Q5 CIP Settlement Annex G

Membership includes HEX, AOC, IATA and representatives of airlines and alliances.

7.1.3 Information Technology (IT) / Systems

The IT/Systems scope is covered by three separate portfolios; Airport Operational Systems, Infrastructure Renewal and Business Planning and Support Solutions

In support of Annex G commitments, an Airline Consultation Process has been established for IT; the IT Stakeholder Board is a quarterly meeting which is focussed on high level strategic plans for the future of technology at Heathrow and is attended by Chief Information Officer level representation from British Airways (also representing One World), Virgin Atlantic, Emirates, British Midland, KLM, Star Alliance and the AOC[1]. The IT Stakeholder Board is supported by the IT Working Group which is a monthly meeting attended by IT Senior Managers from the Airlines and alliances referenced above, with individual representatives nominated by each IT Stakeholder Board member. The IT Working Group is responsible for reviewing and endorsing the IT CIP portfolio and carrying out detailed consultation on key IT projects.

7.1.4 Project for the Sustainable Development of Heathrow (PSDH)

In response to the Coalition Government's clear indication that policy support would be withdrawn HAL announced that it will stop work on the planning application for a third runway. With this the agreed governance, through the 3RR3 Airline Working Group (formally the PSDH Working Group) has been dissolved. The Joint Steering Team (JST) and then the CAA for ratification is the set governance for the PSDH funds.

7.1.5 CIP Working Group

In addition to the Stakeholder Programme Boards, HAL consults with the airline community and the overall delivery and development of the CIP through a monthly CIP Working Group (a sub-committee of the JST) These meetings review the high level progress of Q5 delivery together with monitoring of capital efficiency, Annex G compliance and overreaching financial issues for current and future quinquennia.

7.2 Mid Q Report and Findings

7.2.1 Mid Q Report

In its March 2008 price control decision for Heathrow airport for the five year period starting 1 April 2008 to 31 March 2013 (known as the fifth quinquennium or Q5), the

[1] Heathrow Airline Operations Committee

CAA set out its intention to conduct an assessment, around the midpoint of Q5, of the airport's performance in relation to capital expenditure and consultation with airlines on airport development and investment (referred to as the assessment).

In March 2010 the CAA commissioned Currie and Brown (C&B) to conduct the assessment of capital expenditure, supported by Steer Davies Gleave (SDG) to lead on the assessment of consultation. The CAA considers the findings of the review in terms of informing a wider review of the Q5 CIP on its completion and in particular any lessons learnt that are of value to inform the Q6 regulatory review.

7.2.2 Mid Q Report Findings

Overall, the CAA considers that Currie & Brown's findings indicate that progress has been made in the first two years of Q5, but there is still room for further improvement in the way that HAL plans, implements, measures and evaluates capital expenditure projects. Looking ahead to the Q6 review, the CAA would expect the airports to take proper account of C&B's findings in preparing and implementing capital investment plans for the remainder of Q5, and for the capex plans that will underpin the airport's regulatory submissions for Q6.

7.3 Information Provision

HAL has provided the detailed information on Q5 to enable effective consultation, through projects, programme boards, and through the CIP. If further information is required by the airline community to enable them to better understand the proposed investment then HAL will endeavour to provide this.

8 CIP 2011 Consultation

HAL would encourage airlines to submit views on the projects and issues set out in CIP 2011 by the end of July 2011, so that they are taken into account in the development of the airports future capital investment plans.

Consultation responses should be sent to:
Sanjay Vadhera, CIP Manager
BAA Limited
The Compass Centre
Hounslow
Middlesex
TW6 2GW
sanjay_vadhera@baa.com

Appendices

Appendix A: Trigger Change Control

Trigger Change Control

In order to cater for significant external events which could have an adverse impact on BAA's ability to adhere to its original project schedules, the CAA proposed that there should be a clearly defined change control process for capital investment triggers incorporated within the relevant terms of the price control conditions.

The CAA envisaged that it would amend the standards and rebates in one of two ways: Changes agreed by the airport and the airlines through the relevant LACC Committee and notified in writing to be approved by the CAA on an expedited basis. The process would be:

- The CAA publishes any proposed agreement between the LACC and the airport inviting objections from interested parties.
- The CAA then allows 28 days for any objections.
- Unless the agreement raises significant issues, the CAA would expect to approve the agreement within 14 days of the end of the consultation period.
- The CAA would anticipate that changes of this sort are likely to redistribute money at risk for triggers between projects reflecting changes to the anticipated content or phasing of the programme. While the CAA would be prepared to approve changes which either added to or reduced the amounts at risk it would not anticipate that this would be likely.

Alternatively the CAA could revise the substance of the triggers in the price control without the agreement of users. This may occur in a range of circumstances where BAA made a formal application to the CAA for a change which was not agreed by airlines generally or which did not have sufficient support to allow the agreement of the relevant LACC committee. It might also be brought forward at the instigation of the CAA because it considered that such a change would be best calculated to meet its statutory duties. The process under these circumstances would require the following elements:

- Any change to the price control condition would require the agreement of the airport operator under the Airports Act 1986. The CAA would not proceed with any prospective change unless this was expected to be forthcoming;
- The CAA would publish proposals for consultation and invite interested parties to respond.
- It would allow an adequate period for written submissions which would not be less than 12 weeks.
- Depending on the significance of the changes the CAA may then decide to hold meetings with some of the respondents.
- The CAA would publish a decision with reasoning together with any revision to the price control to reflect the new triggers.

The CAA would normally seek to limit changes to the price control under these arrangements to triggers and would not seek to make other changes.

The CAA would expect to withhold approval only in limited circumstances where it concluded that the change was inconsistent with its statutory duties, for example where such agreements did not give adequate weight to the interests of passengers as users,

on the basis of objections made, the agreement did not seem to the CAA to represent the interests of users generally or which appeared unreasonably to discriminate against any user or class of user.

The CAA has drawn emphasis to the point that it would expect change control to allow the process of triggers to adapt to circumstances where airport and users priorities change and monies originally projected for capital expenditure on one project are diverted to extend the scope of, or bring forward the scope of some other project. It is certainly not intended to allow the airport to cancel trigger payments where it is no willing or able to pursue projects (unless the capital expenditure is redirected to extending the scope or expediting other projects). In this context it should be recognised that the building block projections allowed a return on such capital expenditure and it would be unreasonable for the airport to be able to avoid the mechanism in place to reduce at least some of that return if the relevant projects do not take place.

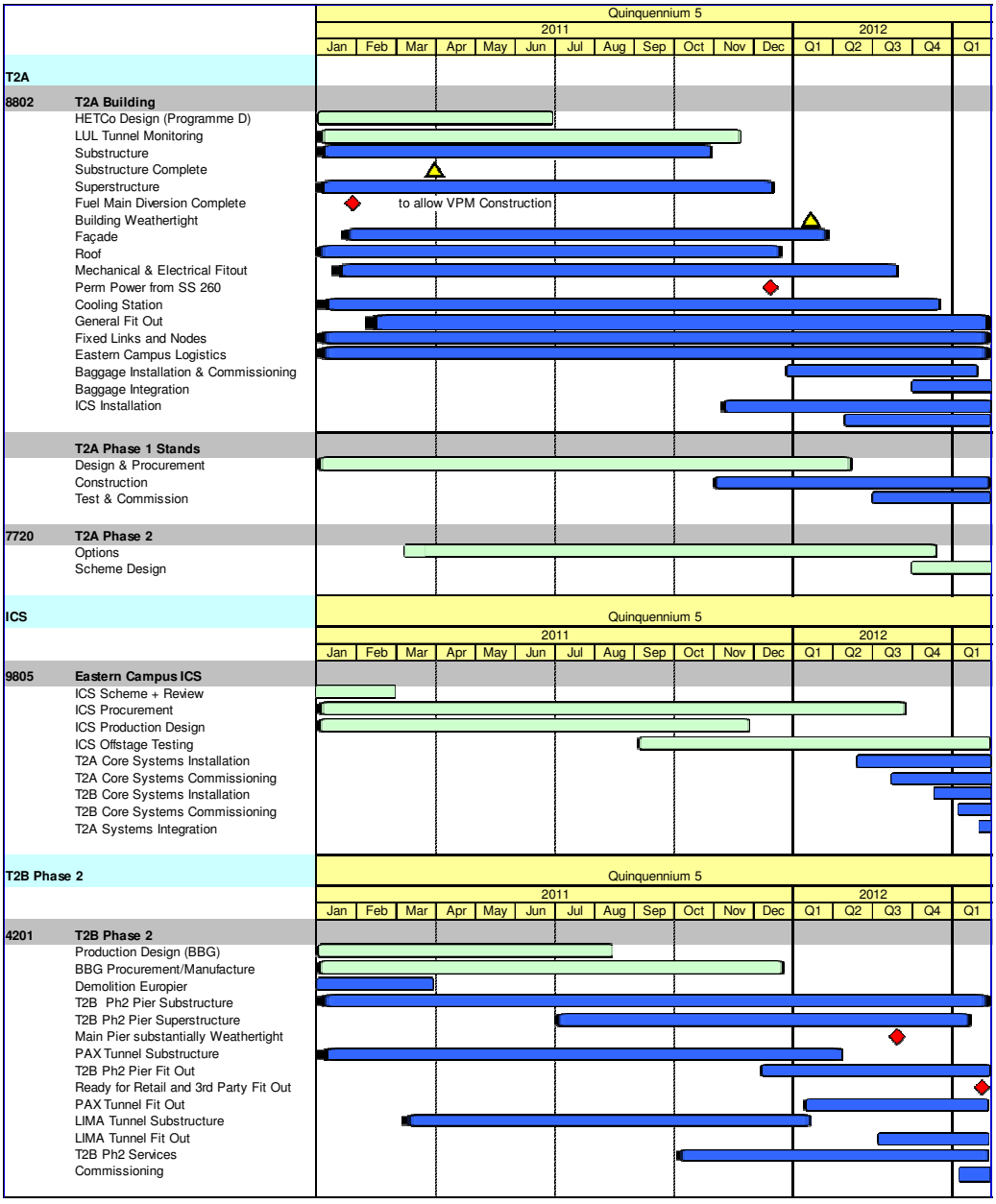
Appendix B: PDS Eastern Change Control

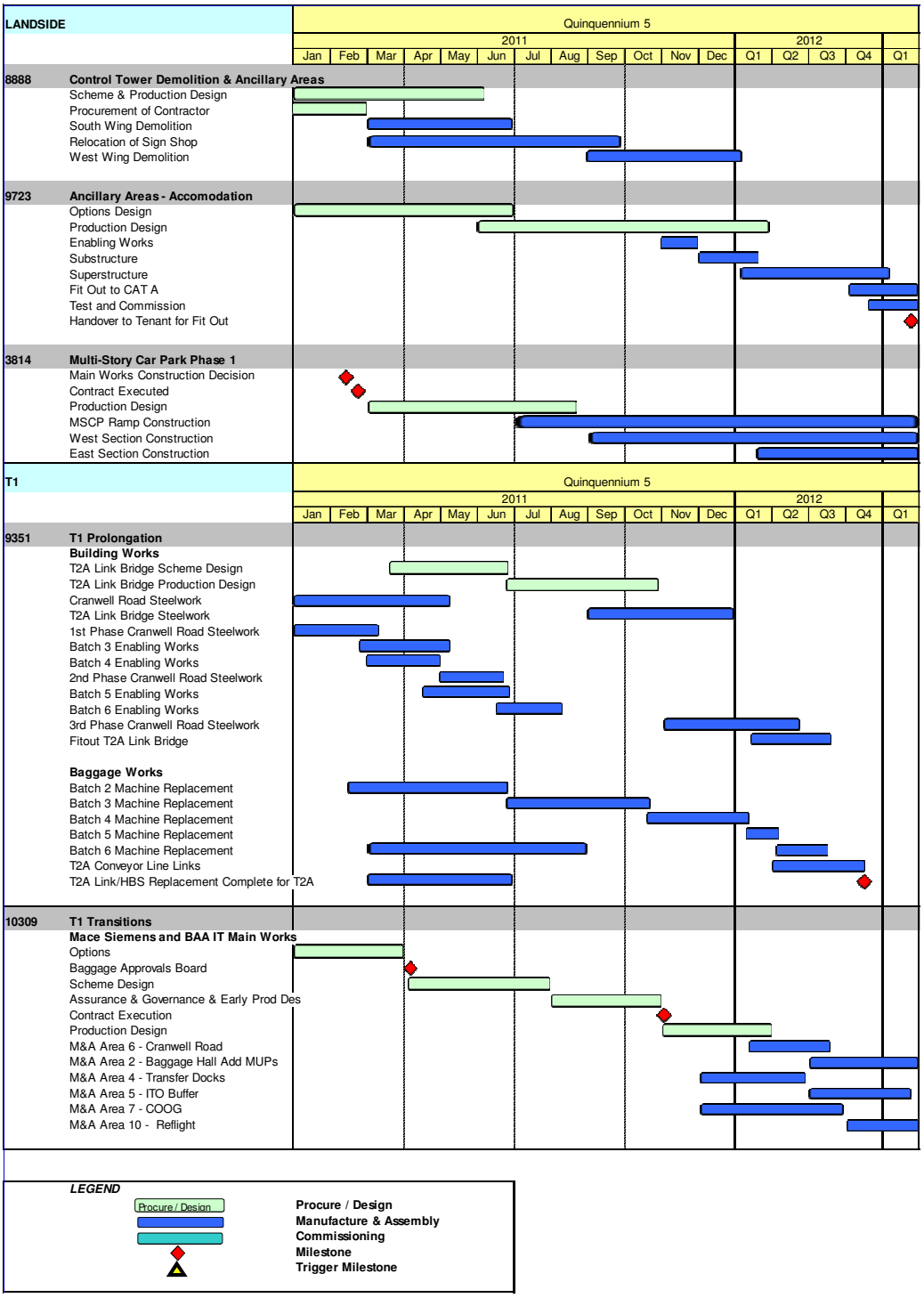
Project Definition Sheets

BCT Number and Project Name as shown in Schedules

3814	:	MSCP East New Build
4201	:	T2B Phase 2
7664	:	T2A Ph2 Baggage System
7720	:	T2A Phase 2
8888	:	OCT Demolition
9351	:	T1 Baggage Prolongation Programme
9723	:	Eastern Campus Accommodation and Ancillary Facilities
9805	:	Eastern Campus Information & Control Systems
10309	:	T1 Transitions
Various:		T2A & Associated Projects

Q5 Eastern Campus Schedule




LANDSIDE
Quinquennium 5
2011
2012
Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Q1 Q2 Q3 Q4 Q1
8888 Control Tower Demolition & Ancillary Areas
Scheme & Production Design
Procurement of Contractor
South Wing Demolition
Relocation of Sign Shop
West Wing Demolition
9723 Ancillary Areas - Accomodation
Options Design
Production Design
Enabling Works
Substructure
Superstructure
Fit Out to CAT A
Test and Commission
Handover to Tenant for Fit Out
3814 Multi-Story Car Park Phase 1
Main Works Construction Decision
Contract Executed
Production Design
MSCP Ramp Construction
West Section Construction
East Section Construction
T1
Quinquennium 5
2011
2012
Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Q1 Q2 Q3 Q4 Q1
9351 T1 Prolongation
Building Works
T2A Link Bridge Scheme Design
T2A Link Bridge Production Design
Cranwell Road Steelwork
T2A Link Bridge Steelwork
1st Phase Cranwell Road Steelwork
Batch 3 Enabling Works
Batch 4 Enabling Works
2nd Phase Cranwell Road Steelwork
Batch 5 Enabling Works
Batch 6 Enabling Works
3rd Phase Cranwell Road Steelwork
Fitout T2A Link Bridge
Baggage Works
Batch 2 Machine Replacement
Batch 3 Machine Replacement
Batch 4 Machine Replacement
Batch 5 Machine Replacement
Batch 6 Machine Replacement
T2A Conveyor Line Links
T2A Link/HBS Replacement Complete for T2A
10309 T1 Transitions
Mace Siemens and BAA IT Main Works
Options
Baggage Approvals Board
Scheme Design
Assurance & Governance & Early Prod Des
Contract Execution
Production Design
M&A Area 6 - Cranwell Road
M&A Area 2 - Baggage Hall Add MUPs
M&A Area 4 - Transfer Docks
M&A Area 5 - ITO Buffer
M&A Area 7 - COOG
M&A Area 10 - Reflight
LEGEND
Procure / Design
Procure / Design
Manufacture & Assembly
Commissioning
Milestone
Trigger Milestone

Header Information

BCT No.	3814
Op No.	23451
Project Name:	MSCP EAST New Build

Project Overview, Objectives and Status

Overview:	
Description:	New build MSCP & Forecourt to Serve Eastern Campus
Ref. Drawings / Images:	Refer to Appendix A
Objectives:	
BAA:	BAA's project objectives are to provide: ▪ Short stay parking facilities for T2A and the consequential net retail income ▪ Direct passenger access and from to the terminal ▪ The transition towards a free flowing central terminal area road network
Airline:	The Airline community objectives: ▪ Support the co-location of the STAR Alliance ▪ Direct passenger access to and from the terminal ▪ Support airline community revenue opportunities through commercial products

Project Benefits:
MSCP EAST Phase 1 Project Benefits: ▪ ASQ – supporting the LHR ASQ targets: ambience of the airport / ground transportation to and from the airport ▪ QSM – supporting the LHR SQM targets: ease of getting to the terminal / ease of finding a space ▪ Sustainability benefits - CO2 emission reductions ▪ Net retail income increase

Status:	
Programme:	Project Gateway Stage:
Eastern Campus	Construction Decision

Airline Engagement:	
The airline community have been engaged throughout the full project process, signing off the project at the following gateways:	
▪ Brief Decision:	13th February 2009
▪ Options Decision:	9th November 2010
▪ Scheme Design Gateway:	4th August 2010
▪ Construction Decision:	10th January 2011

Project Delivery

Current Control Budget:	
Total Capital Budget *(Estimated At Completion)*:	**£90,292,998**
Refer to appendix B for cost information detail.	

Schedule:			
MSCP EAST Phase 1 & 2 Brief Decision:	**MSCP EAST Phase 1 Start on Site:**	**MSCP EAST Phase 1 Completion on Site:**	**MSCP EAST Phase 1 Operational Use Commences:**
02/ 2009	05 / 2011	11 / 2013	Q2/2014

Assumptions:

The following points cover the significant delivery assumptions related to this project:

Project Scope (Phase 1&2):

- New short stay multi-storey car park, with integral forecourt provision at high and apron levels. (Kerb length provision to suit car park footprint) and vehicular vertical circulation via external ramps (3nr – one of which is recirculation only).
- Provision of 1980 parking spaces
  - Assumes increase in spaces per mppa from 85 (existing T2) to 90
  - Assumes demand for car park is 22.3m pax in 2025 (STAR, Aer Lingus, Virgin)
- Re-alignment of the CTA road network to facilitate ramped vehicle access to the new MSCP 2 and forecourt, and consequential revised approach road to serve Terminal 3, Control Post 5 and Central Bus Station
- Landside infrastructure services associated with the decommissioning of the ESR Gantry
- Walkways and link bridges at arrivals and departures level to provide passenger connectivity between the car park and terminal building, within the area of the terminal canopy (covered court); including vertical circulation via lifts and escalators
- Extension of the existing subway system to provide public transport passenger connectivity to terminal 2
- Landscaping to the external areas of the car park and road network.
- Accommodation associated with the car park operator
- Motorcycle and bicycle parking

Exclusions:

- demolition of the old MSCP 2 car park
- Demolition of the old control tower and relocation of the associated facilities / tenants / utilities
- Reconfiguration of T3 forecourt or MSCP 3 entrance
- Relocation of the chapel or multi faith room
- Demolition of the pedestrian foot bridge between central bus station and Queens Building

Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.

Operational Issues

BAA Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
Retail Income	£11,900,000	MSCP East Phase 1 only
Opex	-£1,880,000	MSCP East Phase 1 only

Assumptions:

The following points cover the significant operational assumptions related to this project:

Opex composed of:

- Cleaning and maintenance
- Staffing (3rd party)
- Utilities
- Business Rates
- Management fees
- Other variable operational costs

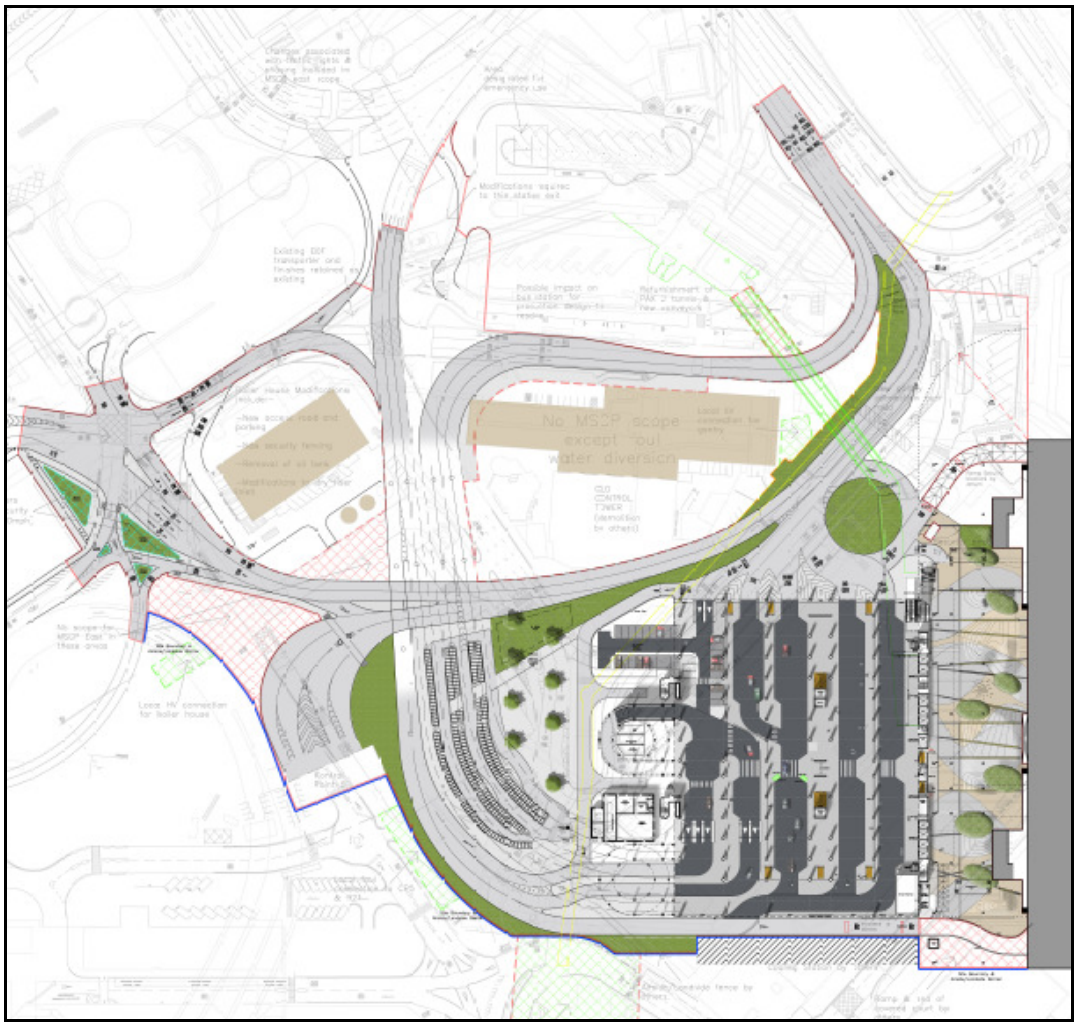
Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
N/A	N/A	None
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
None		

Average Asset life:	
Average Asset Life:	30 Years
Commentary:	
The asset life of the MSCP and Roads has been identified as 30 years, however the car park does not attract depreciation.	
Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.	
Impact on User Charges:	
Estimated Per Passenger Cost Impact:	5.2p
Commentary:	
None	
Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only (see Section 5.3 for further details)	

Non Construction Risk:
The following points cover any significant areas of risk for the Airline Community regarding this project:
Risks associated with the bringing into use of the MSCP EAST Phase 1 project have been identified: ▪ The CTA road operations may be affected by construction activities leading to disruption. ▪ Possible delays to opening of the new T3 approach road as a consequence of the Olympics. There remains a risk that prior to the completion of Phase 2 the Phase 1MSCP may exceed its capacity leading to the use of MSCP1a for contingency purposes.

<u>Appendix A:</u> Overview:

MSCP EAST Phase 1 General Arrangement



Appendix B: Project Delivery: Cost Information:

Project Information

Project Name: New Build MSCP EAST
BCT No.: 3814

Cost Information

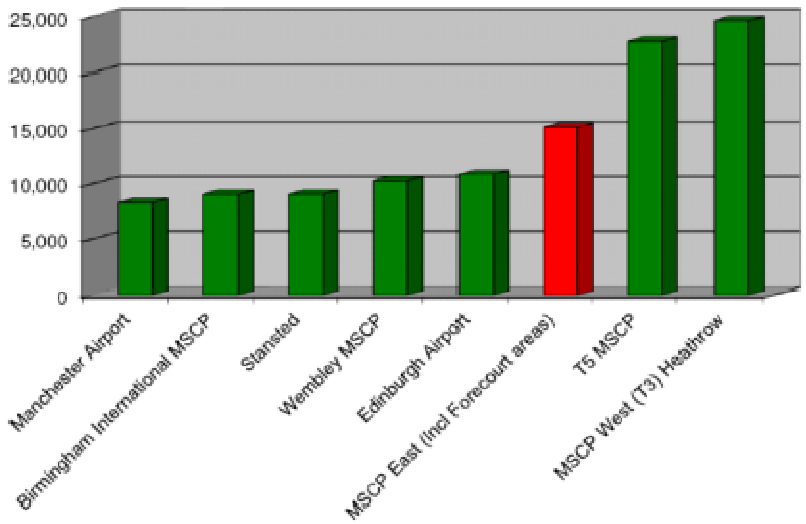
All information extracted from March 2011 month end

Base Costs:	£61,399,239	68	%
On-Cost:	£9,932,230	11	%
Inflation	£10,835,159	12	%
Opportunity	-£2,708,789	-3	%
Risk	£10,835,159	12	%
Total	**£90,292,998**	100	%

Commentary:
The EAC relates to both Phase 1 and Phase 2 of the project.
The estimated total On Cost for Phase 1 and Phase 2 is based on a prorated percentage of Phase 1.

Cost Benchmark Comparisons:	
Project Name:	New Build MSCP EAST
Total Capital Budget *(Nominal Prices)*:	£90,292,998
Guidance Notes:	
MSCP EAST Phase 1 cost per parking space compares well to projects of a similar design standard at Heathrow (LHR MSCP 5 and MSCP West) and with external samples. This has been achieved through the "open market" tendering process undertaken.	
Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.	

MSCP EAST Phase 1 Benchmarking Graph – cost per parking space



Header Information

BCT No.	4201
Op No.	23463
Project Name:	T2B Phase 2

Project Overview, Objectives and Status

Overview:	
Description:	T2B Phase 2 completes T2B, providing pier service to an additional 10 stands and interim passenger connectivity from T2A. It also provides safeguarding of permanent passenger connectivity and baggage processing out to a future T2C Pier.
Ref. Drawings / Images:	Refer to Appendix A
Objectives:	
BAA:	Operational efficiency through "toast racking". Service improvement. Alliance co-location.
Airline:	As per BAA

Project Benefits:
▪ Increased airfield operational efficiency through the creation of the "toast rack" ▪ Improved transfer product through the colocation of the STAR Alliance airlines ▪ Replacement of old assets providing improved passenger experience

Status:	
Programme:	Project Gateway Stage:
Eastern Campus	Construction Decision

Airline Engagement:
Formal Gateway reviews have been held with the airline community at the key stages of the development process as follows: ▪ Option Decision 3rd December 2008 ▪ Construction Decision, Shell & Core 9th December 2009 ▪ Construction Decision 12th May 2010 In between the formal Gateway Reviews on going consultation occurs on an as required basis with the primary forum being the STAR PET meetings which are held bi weekly.

Project Delivery

Current Control Budget:	
Total Capital Budget *(Estimated At Completion)*:	**£571,411,684**
Refer to appendix B for cost information detail.	

Schedule:

Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
02/2008	10/2010	11/2013	Q2/2014

Assumptions:

The following points cover the significant delivery assumptions related to this project:

T2B is a core element of the Eastern Campus development in meeting the following strategies:
Eastern Campus Masterplan – fits with the "toastrack" vision
Passenger Connectivity – provides safeguarding for a TTS system to be installed for T2A Phase 2 opening providing T5 equivalence
Baggage Strategy – provides safeguarding for an intra pier baggage system to be installed at a future date

Key enablers for project delivery are:

- Central services provision through Eastern Campus and Infrastructure projects
- Delivery of the Eastern Campus Apron project
- Delivery of T2A

Key scope assumptions for this project are:

- Segregated pier completed with open gateroom format
- Conversion of T2B Phase 1 (North) from closed gaterooms to open gatelounge
- Local flight connections centre
- Retail provision of approx 1,275m2
- Total CIP provision of 3,600m2 in 3 lounges
- Approx 4,000m2 of ramp accommodation
- Basement structure for Baggage Masterplan 6 facility. Baggage fitout excluded.
- Demolition of Europier & Eurolink South
- Connectivity
- Vertical passenger circulation within T2B for underground connectivity
- T2A-T2B passenger tunnel with segregated corridors between T2A and T2B
- Safeguarded space for TTS station under T2B and running tunnels to a future T2C across the Lima taxiway
- Safeguarded baggage tunnel to a future T2C across the Lima taxiway
- Taxilanes & Stands

Scope Exclusions are:

- Fit out of baggage systems
- Fit out of TTS

Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.

Operational Issues

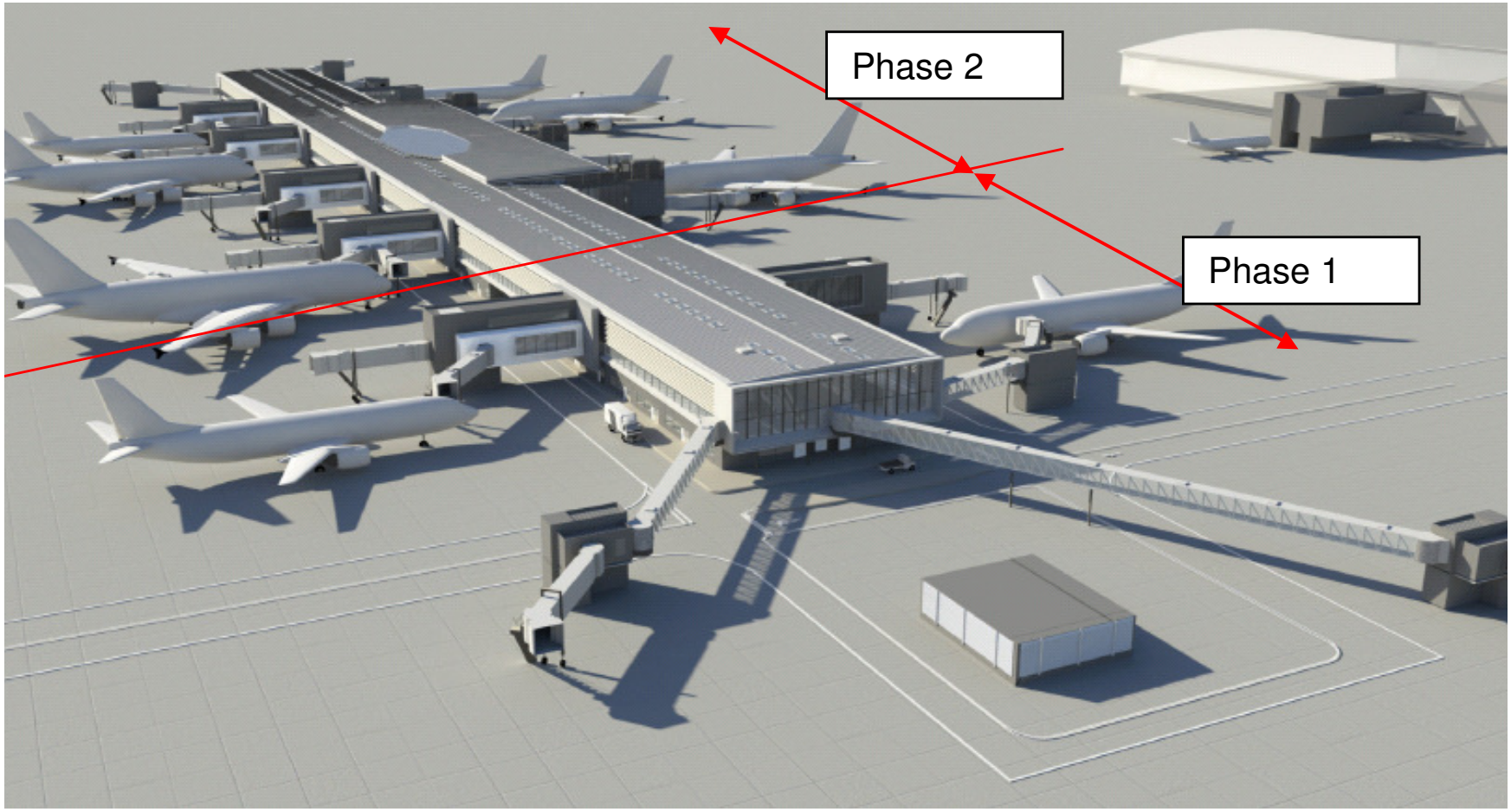
BAA Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
Retail	£1,450,000	
Property Income	£3,820,000	
Other income (inc utility rebate)	£10,000	
Cleaning	-£3,500,000	
Maintenance	-£55,000	
Staffing	-£1,600,000	
Rates	-£2,590,000	
Utilities	-£1,300,000	
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
▪ Revenue and operating costs are total (not incremental) estimates ▪ IT/ICS operating costs not included ▪ Income and costs include T2B Phase 2 stands		

Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
N/A	N/A	None
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
None		

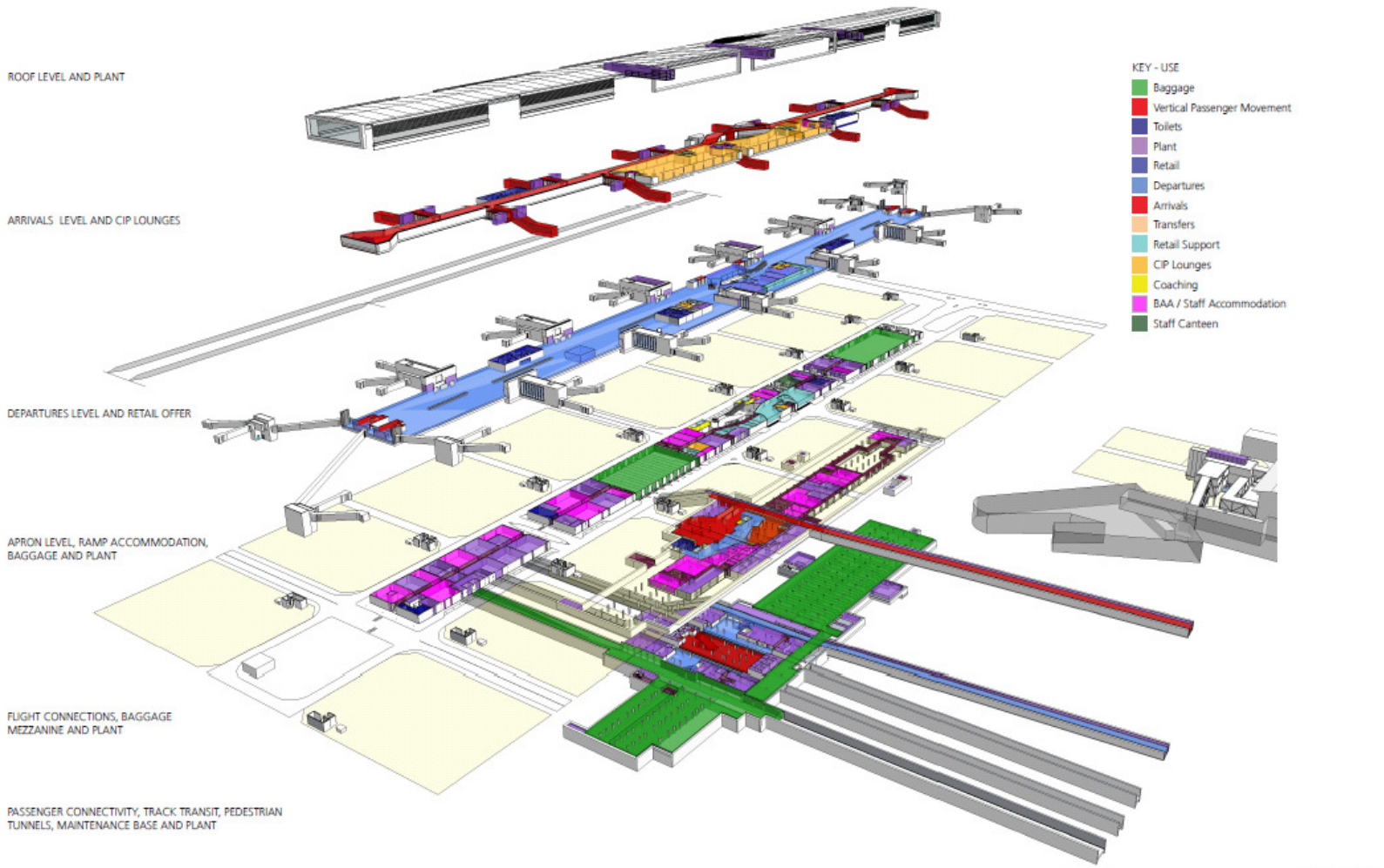
Average Asset life:	
Average Asset Life:	See below
Commentary:	
The development comprises of different elements with differing asset life as follows: Structures 50 years M&E 20 – 30 years Fit out 5 – 15 years	
Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.	
Impact on User Charges:	
Estimated Per Passenger Cost Impact:	81.9p
Commentary:	
None	
Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only (see Section 5.3 for further details)	

Non Construction Risk:
The following points cover any significant areas of risk for the Airline Community regarding this project:
To form the basement structures circa 800,000m³ of excavated material needs to be removed from site. A robust logistics plan has been agreed but a risk remains that the volume of construction traffic could disrupt airport operations.

Appendix A: Overview: Reference Drawing / Image:



T2B EXPLODED AXONOMETRIC
VOLUMETRIC RELATIONSHIPS - ALL FUNCTIONS

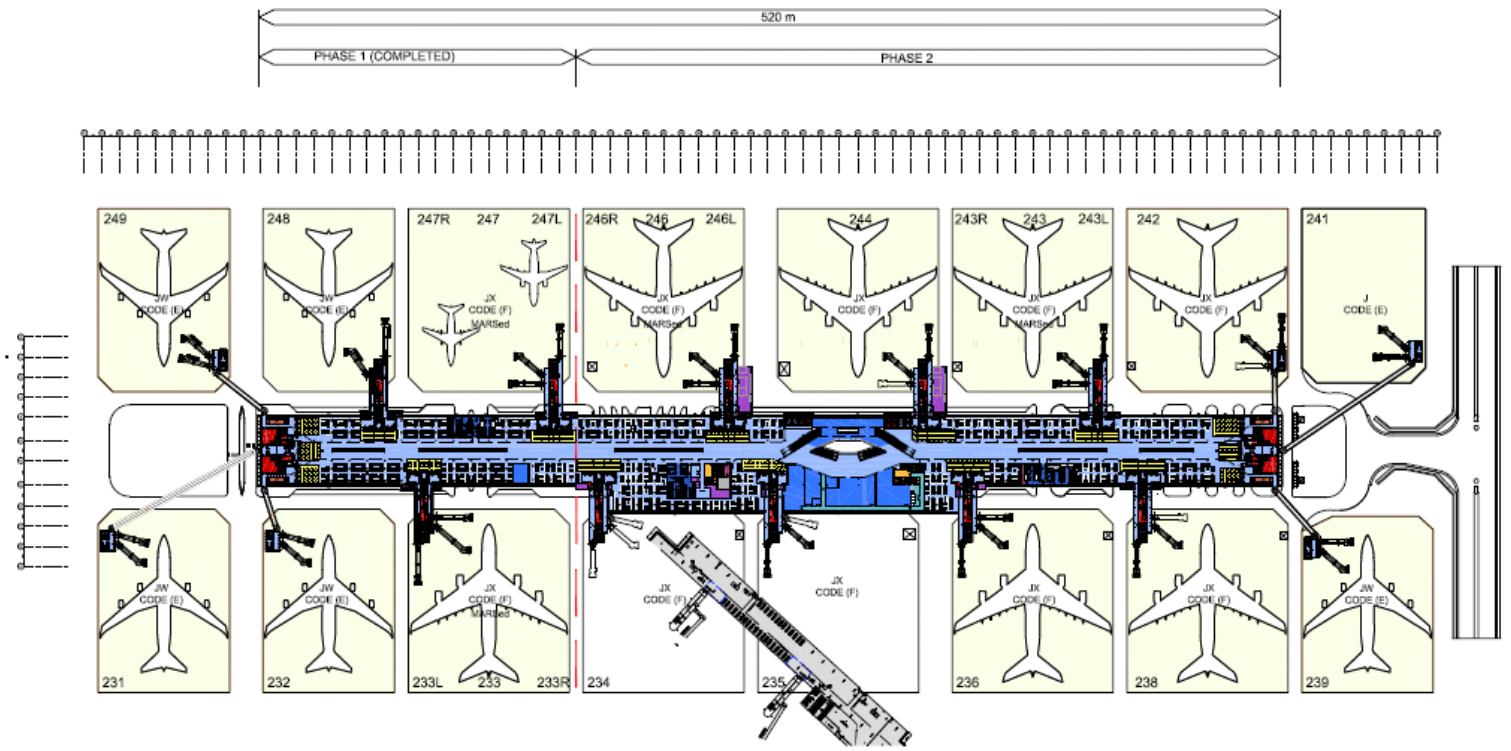


Note: Drawing Indicative Only, All Dimensions and Levels to Be Confirmed By Final Survey

Balfour Beatty GRIMSHAW

DEPARTURES LEVEL

GENERAL ARRANGEMENT - OPEN GATE LAYOUT



COLOUR LEGEND

ARRIVALS FLOOR
DEPARTURES FLOOR
RETAIL
RETAIL SUPPORT
TOILETS
BUILDING SERVICES
BAGGAGE DOCKS
STAFF CATERING
C&P, LOUNGES
NON PUBLIC CIRCULATION
PUBLIC CIRCULATION
COACHING
QUEUING
BAA & AIRLINES OPERATION ACCOMMODATION
TRANSFER CONTROL AUTHORITIES ACCOMMODATION
TRANSFER SEARCH
TTS MAINTENANCE BASE

SCALE BAR 1:1000

SCALE @ A1 1:1000

12.05.10 T2B CENTRE PHASE 2

Note: Drawing Indicative Only, All Dimensions and Levels to Be Confirmed By Final Survey

Balfour Beatty GRIMSHAW

Appendix B: Project Delivery: Cost Information:

Project Information

Project Name: T2B Phase 2
BCT No.: 4201

Cost Information

All information extracted from March 2011 month end

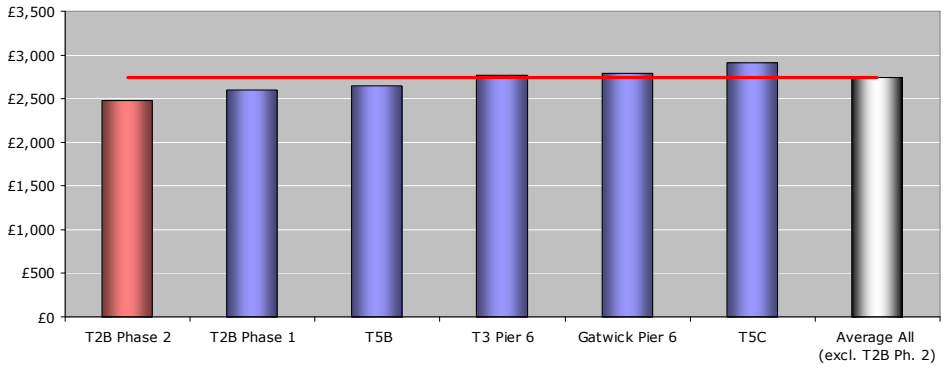
Base Costs:	£434,272,880	76	%
On-Cost:	£79,997,635	14	%
Inflation	£11,428,234	2	%
Opportunity	-£ 5,714,116	-1	%
Risk	£51,427,051	9	%
Total	**£571,411,684**	100	%

Commentary:
The above figures:

- Include Q4, Q5 & Q6 values
- On Cost is calculated as a % of the total cost

Cost Benchmark Comparisons:	
Project Name:	T2B Phase 2
Total Capital Budget *(Nominal Prices)*:	£571,411,684
Guidance Notes:	
Based upon the Construction Decision cost plan the project at facility level benchmarks favourably against the sample projects at £2,473/m2 against the sample average of £2,743/m2 and a highest benchmark of £2,910/m2. T2B Phase 2 is achieving a 4.80% improvement on T2B Phase 1 and is achieving a 15% improvement on the highest sample project. The benchmark analysis, shown overleaf, reflects pier facilities where the T2B Phase 2 project has been adjusted to exclude the basement scope to facilitate a comparable exercise to be undertaken with the sampled pier facilities.	
Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.	

Construction Cost per m²of GIFA



Header Information

BCT No.	7664
Op No.	25026
Project Name:	T2A Ph2 Baggage System

Project Overview, Objectives and Status

Overview:	
Description:	Phase 2 of the Eastern campus includes the provision of the baggage system for T2A and B. This project enables Q5 funding of early design and management resources to enable the creation of the Brief and Options for the Eastern Campus Phase 2 baggage which will inform the project development in Q6.
Ref. Drawings / Images:	Refer to Appendix A
Objectives:	
BAA:	▪ Alliance collocation ▪ Service quality improvement ▪ Operational efficiencies
Airline:	▪ As per BAA ▪ Baggage performance improvements (missed bags) ▪ Connection time improvements

Project Benefits:
▪ Inform and enable the T2 Ph2 project. ▪ Ensure that the Q5 Phase 1 projects are integrated with the Heathrow baggage strategy.

Status:	
Programme:	Project Gateway Stage:
Design and Development	Pre Brief

Airline Engagement:
Formal Gateway reviews have been held with the airline community at the key stages of the development process as follows: EC Baggage Master Plan Stakeholder Gateway Review July 2009 In between the formal Gateway Reviews on going consultation occurs at the following forums as and when required: The Baggage Stakeholder Strategy Board, The Eastern Campus Stakeholder Board and The Eastern Campus Baggage Working Group.

Project Delivery

Current Control Budget:			
Total Capital Budget *(Estimated At Completion)*:		**£3,500,000**	
Refer to appendix B for cost information detail.			
Schedule:			
Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
Jun-11	TBA	TBA	TBA
Assumptions:			
The following points cover the significant delivery assumptions related to this project:			

Key assumptions for this project are:

- Enablers to the commencement of this project are:
  - Completion of Eastern Campus Phase 1
  - Relocation of the Terminal 1 Non Aligned Airlines
  - Re-provision of the British Airways Cathedral Hanger
- The need for a Phase 2 of the Eastern Campus is driven by passenger growth and T1 asset life expectancy. Current forecasts excluding mixed mode effects suggest T2A Phase 1 will reach its design capacity by 2020, along with this Pier Service demands in Terminal 3 and the Eastern Campus would suggest the construction of additional infrastructure. Other key drivers are the life expectancy of Terminal 1 and the removal of T2A reliance on the Terminal 1 Baggage System.
- Baggage System fit out of T2A and B
- Retrofit and integration works required inside T2A Phase 1

Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.

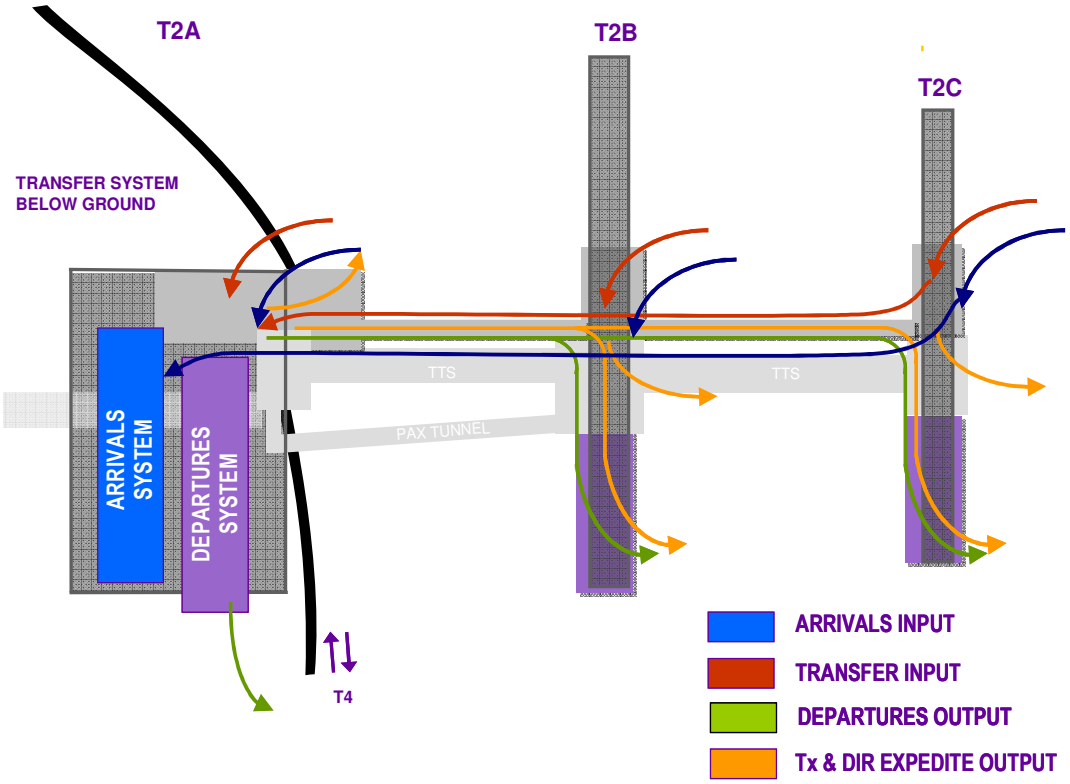
Operational Issues

BAA Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
	TBA	Opex costs will be assessed and evaluated as part of the optioneering phase of the project.
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
Baggage design will take full account of operational issues with a view to reducing end to end operating costs		

Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
	TBA	Opex costs will be assessed and evaluated as part of the optioneering phase of the project.
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
Baggage design will take full account of operational issues with a view to reducing end to end operating costs		
Average Asset life:		
Average Asset Life:	See below	
Commentary:		
This project is comprised of different elements with differing asset lives as follows: IT 7 years M&E 15 years		
Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.		
Impact on User Charges:		
Estimated Per Passenger Cost Impact:	3.7p	
Commentary:		
None.		
Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only (see Section 5.3 for further details)		

Non Construction Risk:
The following points cover any significant areas of risk for the Airline Community regarding this project.
Occupancy changes that exceeds capacity.

Appendix A: Overview: Eastern Campus Baggage Concept



Appendix B: Project Delivery: Cost Information:

Project Information

Project Name: T2A Ph2 Baggage System
BCT No.: 7664

Cost Information

All information extracted from March 2011 month end

Base Costs:	£0	0	%
On-Cost:	£3,500,000	100	%
Opportunity	£0	0	%
Risk	£0	0	%
Total	**£3,500,000**	100	%

Commentary:
Q5 funding of this project is for, early feasibility assessments, early constructability assessments, early optioneering assessments and early design cost advice.

Cost Benchmark Comparisons:	
Project Name:	T2A Ph2 Baggage System
Total Capital Budget *(Nominal Prices)*:	£3,500,000
Guidance Notes:	
Not applicable at this stage.	
Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.	

Header Information

BCT No.	7720
Op No.	24184
Project Name:	T2A Phase 2

Project Overview, Objectives and Status

Overview:	
Description:	Continued Development of the Eastern Campus
Ref. Drawings / Images:	Refer to Appendix A
Objectives:	
BAA:	▪ Alliance co-location ▪ Service quality improvement ▪ Operational efficiencies
Airline:	As per BAA

Project Benefits:
▪ Increased capacity – additional revenues ▪ Alliance co-location – increased airport flexibility ▪ Service quality improvement – for both direct and transfer passengers ▪ Operational efficiencies – creating resilience and cost benefits

Status:	
Programme:	Project Gateway Stage:
Development	Brief Decision

Airline Engagement:
Updates and reviews have been held with the airline community at the following forums at appropriate times or on request: ▪ STAR PET ▪ Eastern Campus Stakeholder Board ▪ Infrastructure Stakeholder Board ▪ Eastern Maintenance Stakeholder Events ▪ Eastern Campus Stakeholder Events ▪ JST ▪ Strategic Choices ▪ LACC

Project Delivery

Current Control Budget:	
Total Capital Budget *(Estimated At Completion)*:	**£31,362,718**
Refer to appendix B for cost information detail.	

Schedule:			
Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
09 / 2008	N/A	N/A	N/A

Assumptions:
The following points cover the significant delivery assumptions related to this project:
Key scope assumptions for this project during Q5 are: ▪ Early feasibility assessments ▪ Early constructability assessments

- Early optioneering assessments
- Early design cost advice
- Enablers to the commencement of this project are:
- Completion of T2A Phase 1
- Completion of the Eastchurch Road re-alignment and Cathederal Hanger Reprovision
- Completion of a new CTA VIP suite prior to the demolition of the Hounslow Suite
- Key Eastern Campus Phase 2 Safeguarding to be completed during Q5

Overall key project scope assumptions at this stage are:

- Demolition & Enabling
- Vacant Possession of all demolition & work zones
- Part Demolition of BA facility TBE
- Demolition of BA facility Cathedral Hanger
- Demolition of southern sections of T1 Piers 3, 4, Eurolounge and FCC
- Demolition of MSCP1 and the T2A Phase 1 VCC Passenger Connector
- Re - alignment of the Nth/Sth Alpha and Bravo Taxiways including the necessary AGL substations
- Re - alignment of the Northern & Southern Runway Holding areas
- Code F compliant re-alignment of a section of the Bravo Taxiway north of T1
- Remodelling of Terminal 1 to facilitate demolition zones and continuing airline operations I
- Maintenance Base property acquisition costs to support the construction of T2C
- New Infrastructure
- Eastern Airside Road extension to either Viscount Way or the diverted Eastchurch Road including a new control post
- Additional infrastructure services to support EC Phase 2
- New segregated T2C Pier with an additional 7 Code F and 5 Code E stands (with 2 (Code E)/3 (Code F) Airbridges & PCA per stand)
- Fitout of TTS Maintenance base between T2B and T2C
- Civil Construction of the TTS and Baggage tunnels between T2A, B the remaining sections connecting T2B to T2C and the safeguarding of tunnels to a future T2D
- Fitout of T2A, B and C TTS station zones and the interconnecting running tunnels
- Installation, testing and putting into operation of the new TTS System
- TTS system safeguarding for potential Inter-Terminal TTS operation.
- Baggage System fitout of T2A, B and C based on Masterplan Option 6 including T2D safeguarding
- Cross Campus Connectivity Baggage System fitout from T3 to T2 and from T2 to T4
- Extension of the T2A Terminal per existing Planning Permission for an additional 10MPPA with additional 4 Code C and 1 code F stand (Code F stand to have 3 Airbridges & PCA)
- Baggage civils zones & basements in the extension of the T2A Terminal based on Baggage Masterplan Option 6 including T2D safegaurding and cross campus baggage connectivity.
- Passenger transport zones in the extension of the T2A Terminal based on an Eastern Campus TTS System including safeguarding for a potential inter-terminal TTS.
- Civil Construction and fit out of a further 2 Code F, 2 Code E and 1 Code D remote stands associated with the extension of the T2A Terminal
- Retrofit and integration works required inside T2A Phase 1
- Eastern Campus Phase 2 Operational Readiness
- Excludes the removal of the remaining elements of the ESR Gantry
- and the necessary Forecourt/MSCP extension/CTA works required for this development.

Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.

Operational Issues

BAA Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
N/A	N/A	None
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
▪ Open Gate lounge basis ▪ Flexible use of infrastructure ▪ Levels of baggage automation		

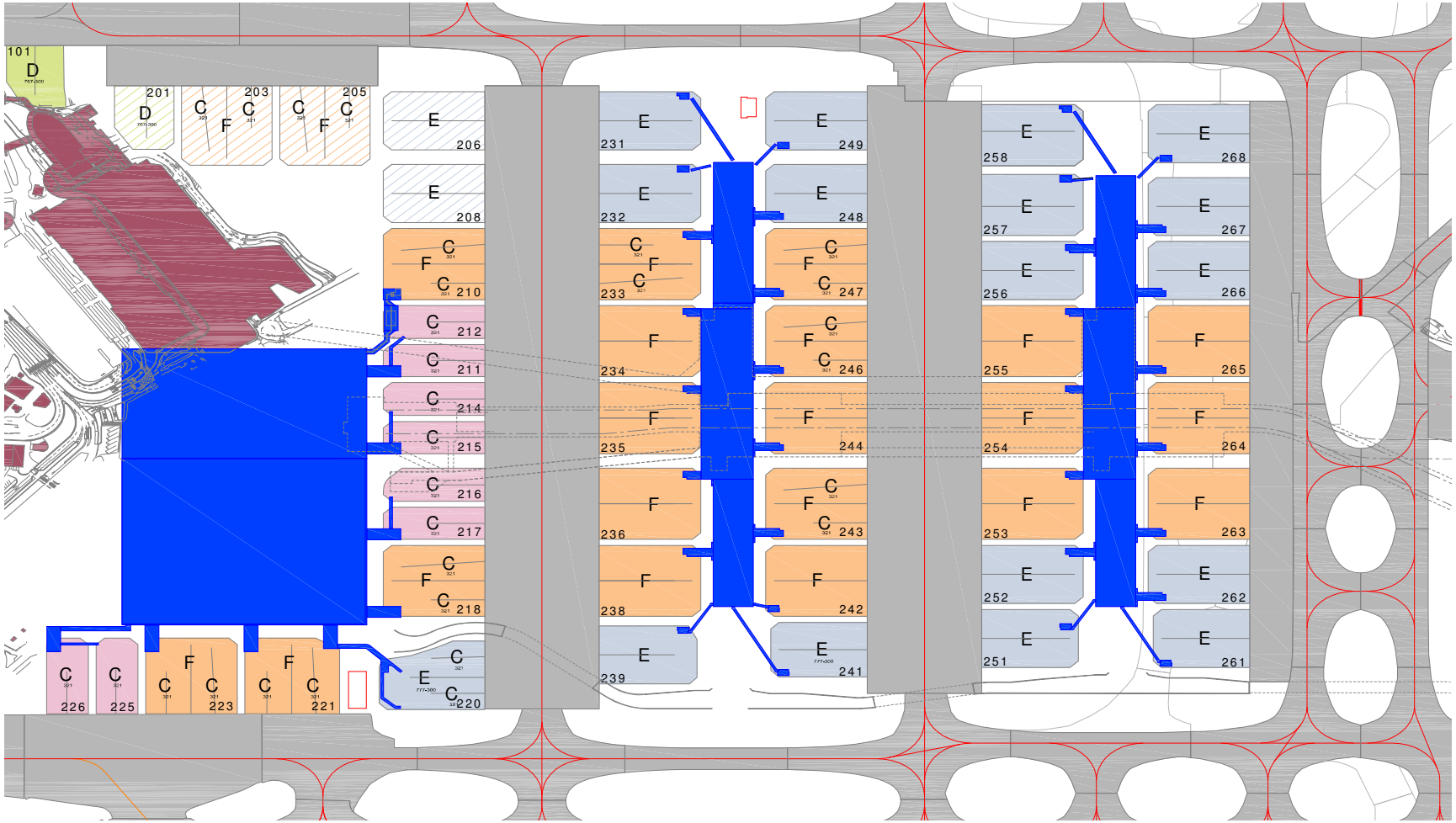
Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
N/A	N/A	None
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
None		

Average Asset life:	
Average Asset Life:	10 - 50 Years
Commentary:	
The development will comprise different elements with differing asset lives	
Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.	

Impact on User Charges:	
Estimated Per Passenger Cost Impact:	3.6p
Commentary:	
None	
Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only (see Section 5.3 for further details)	

Non Construction Risk:
The following points cover any significant areas of risk for the Airline Community regarding this project:
▪ A series of airline moves may be required prior to the commencement of this project. ▪ Airline moves will be required upon completion of this project.

Appendix A: Overview: Reference Drawing / Image:



Appendix B: Project Delivery: Cost Information:

Project Information

Project Name: T2A Phase 2
BCT No.: 7720

Cost Information

All information extracted from March 2011 month end

Base Costs:	£0	0	%
On-Cost:	£29,154,064	93	%
Inflation	£1,304,160	4	%
Opportunity	£0	0	%
Risk	£904,494	3	%
Total	**£31,362,718**	100	%

Commentary:
Q5 funding of this project is for, early feasibility assessments, early constructability assessments, early optioneering assessments and early design cost advice.

Cost Benchmark Comparisons:	
Project Name:	T2A Phase 2
Total Capital Budget *(Nominal Prices)*:	£31,362,718
Guidance Notes:	
Not applicable at this stage.	
Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.	

Header Information

BCT No.	8888
Op No.	25192
Project Name:	Old Control Tower Demolition

Project Overview, Objectives and Status

Overview:	
Description:	The Demolition of the Old Control Tower (OCT) splits into three stages: ▪ Stage 1 – The construction of phase 1 of MSCP 2 requires the partial demolition of the Old Control Tower (South and West wings) and relocation of the Sign Shop ▪ Stage 2 – Relocation of IT Infrastructure to facilitate demolition of the remainder of the Old Control Tower. Relocation of IT Infrastructure from the Early Services Gantry. ▪ Stage 3 - Demolition of the remainder of the OCT, this is required to be complete before MSCP 2 Phase 2 can start in Q6
Ref. Drawings / Images:	Refer to Appendix A
Objectives:	
BAA:	Facilitate access to and construction of the new MSCP2 phase 1 and phase 2 and consequent reconfiguration of the roads within the CTA
Airline:	As per BAA objectives

Project Benefits:
▪ Allows the build of MSCP2 ▪ Facilitating access to the multi-storey car park ▪ Realignment of the CTA roads

Status:	
Programme:	Project Gateway Stage:
Eastern Campus	Construction Decision

Airline Engagement:	
The project has been presented and endorsed by the airlines on the following dates:	
▪ Eastern Campus Stakeholder Programme Board	13 Apr 10
▪ Brief Gateway Sign Off	10 Jun 10
▪ Options Gateway Sign Off	19 Oct 10
▪ Eastern Campus Stakeholder Programme Board	16 Nov 10
▪ Scheme Design Gateway Sign Off	17 Dec 10

Project Delivery

Current Control Budget:	
Total Capital Budget *(Estimated At Completion)*:	**£31,999,997**
Refer to appendix B for cost information detail.	

Schedule:			
Brief Decision:	Start on Site Stage 1 & 2 Only :	Completion on Site Stage 1 & 2 Only :	Operational Use Commences:
04 / 2010	03 / 2011	06/2012	N/A
Assumptions:			
The following points cover the significant delivery assumptions related to this project; ▪ High Temperature Hot Water (HTHW) pipe remains on its current alignment ▪ OCT and Chapel remain in use during demolition of south and west wings of the OCT ▪ Main OCT Building demolition is currently not required until after T2A Phase 1 opens			
Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.			

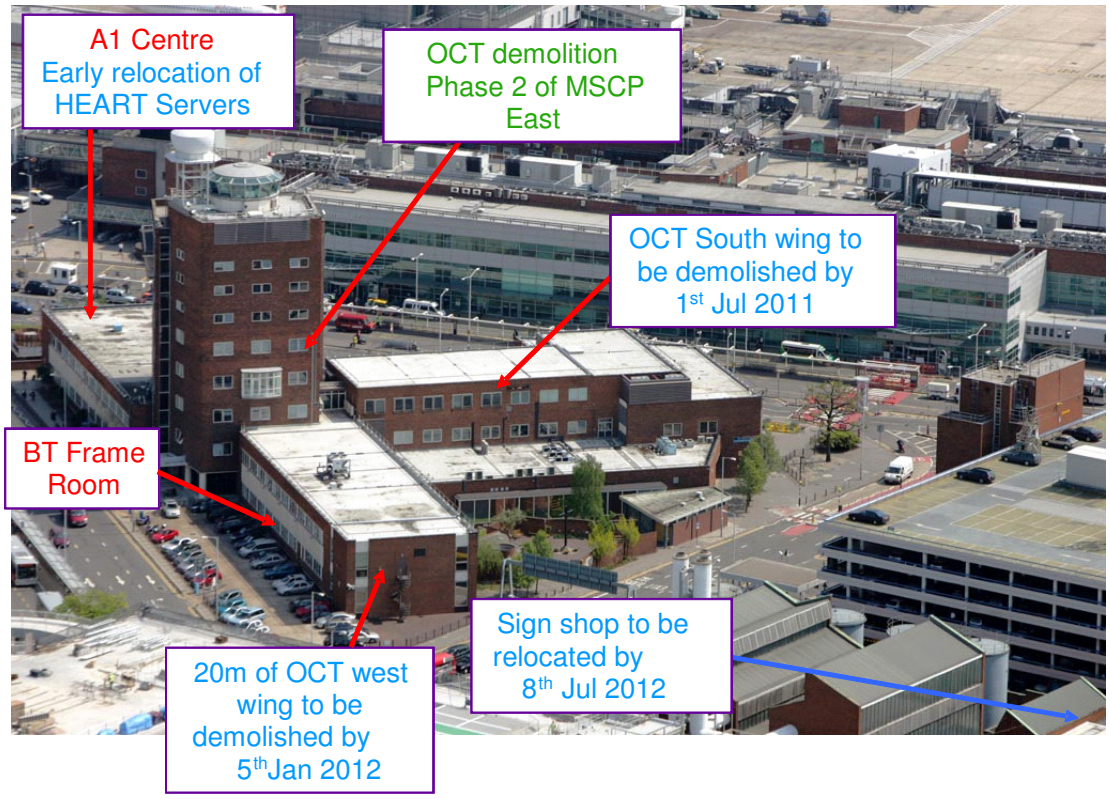
Operational Issues

BAA Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
Maintenance	£136,000	The OCT is currently operational as an accommodation area for Eastern Campus
Utilities	£65,000	
Rent and Rates	£326,000	
Assumptions:		
The following points cover the significant operational assumptions related to this project: ▪ As this is a demolition project there is an eventual positive Opex impact is as a result of removing the existing facility operating costs subject to the following. ▪ When the remaining OCT is vacated staff are not required to be relocated on the assumption that the Eastern Campus Phase 1 is complete		

Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
N/A	N/A	None
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
None		
Average Asset life:		
Average Asset Life:	0 Years	
Commentary:		
The Old Control Tower has zero asset life as it scheduled for demolition.		
Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.		
Impact on User Charges:		
Estimated Per Passenger Cost Impact:	N/A	
Commentary:		
None		
Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only (see Section 5.3 for further details)		

Non Construction Risk:
The following points cover any significant areas of risk for the Airline Community regarding this project.
▪ The High Temperature Hot Water pipe provides the hot water supply to Terminal 1. This will be protected during demolition but there is a risk that this is impacted during demolition ▪ Traffic management will be employed to manage the sequencing of CTA road traffic during demolition. However there is a risk of CTA road traffic disruption during the demolition phase.

Appendix A: Overview: Reference Drawing / Image:



Key:

Blue text – stage 1
Red text – stage 2
Green text – stage 3

Appendix B: Project Delivery: Cost Information:

Project Information

Project Name: Old Control Tower Demolition
BCT No.: 8888

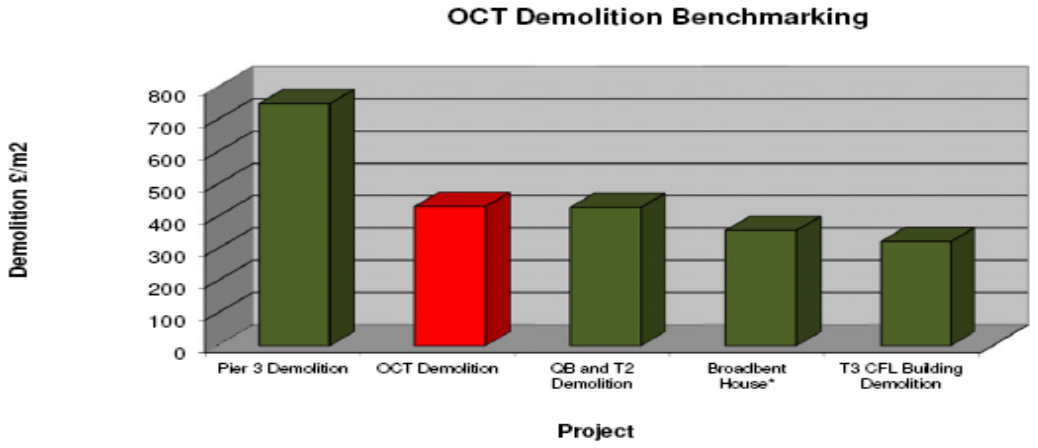
Cost Information

All information extracted from March 2011 month end

Base Costs:	£25,399,854	79	%
On-Cost:	£3,058,142	10	%
Inflation	£0	0	%
Opportunity	-£1,653,000	-5	%
Risk	£5,195,001	16	%
Total	**£31,999,997**	100	%

Commentary:
The On Cost % is calculated as a % of the total cost.

Cost Benchmark Comparisons	
Project Name:	Old Control Tower Demolition
Total Capital Budget *(Nominal Prices)*:	£31,999,997
Guidance Notes:	
The following benchmark graph compares the current OCT Demolition against other demolition projects. The figures compared include soft strip, decommissioning and hard demolition costs, as well as project specifics such as service diversions. The graph demonstrates that the OCT Demolition sits towards the high end of benchmarked Heathrow demolition projects. It also sits above the external demolition comparators. This project is benchmarked higher than the other projects due to the level of service diversions and remedial works required in order to keep the remainder of the building live post the demolition phases.	
Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.	



Header Information

BCT No.	9351
Op No.	24932
Project Name:	T1 Baggage Prolongation Programme

Project Overview, Objectives and Status

Overview:	
Description:	The project aim is to prolong the life of the Terminal 1 baggage system, also enable the T1 Transition project to deliver the key T2A Phase 1 direct and transfer baggage requirements within Terminal 1.
Ref. Drawings / Images:	Refer to Appendix A
Objectives:	
BAA:	▪ Replace Standard 1 baggage screening machines with Standard 2 to maintain regulatory compliance and integrate US carrier screening into the direct baggage system. ▪ To prolong the life of the Terminal 1 Baggage system by updating Information Technology systems so that they remain supportable and resilient. ▪ To reduce down time through improving the speed of fault identification and rectification.
Airline:	As per BAA

Project Benefits:
▪ Regulatory Compliance ▪ ASQ and QSM baggage performance to be maintained

Status:	
Programme:	Project Gateway Stage:
Eastern Campus	Implement

Airline Engagement:
Formal Gateway reviews have been held with the airline community at the key stages of the development process as follows: ▪ Option Decision 17 March 2010 ▪ Construction Decision 27 September 2010 In between the formal Gateway Reviews on going weekly/monthly consultation occurs at the following forums: The Baggage Stakeholder Strategy Board, The Eastern Campus Stakeholder Board, The Terminal 1 Operations Working Group and The Eastern Campus Baggage Working Group.

Project Delivery

Current Control Budget:			
Total Capital Budget *(Estimated At Completion)*:	**£54,243,096**		
Refer to appendix B for cost information detail.			
Schedule:			
Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
11/2009 & 01/2010	04/2010	03/2013	Ongoing

Assumptions:
The following points cover the significant delivery assumptions related to this project:
▪ Standard 1 Hold Baggage Screening replacement must be completed prior to Sept 2012 (BAA Olympic Embargo on works June 2012) ▪ Project completion must align with T2A testing ▪ Only 1 Direct and 1 Transfer HBS line to be impacted at any one time ▪ The baggage systems operation will need to be maintained throughout and disruption minimised ▪ Passenger experience is to be maintained at an acceptable level
Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.

Operational Issues

BAA Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
HBS Machines (opex)	-£406,000	HBS Standard 2 support
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
▪ HBS Spare parts will not be free-issued. ▪ Additional L3 resource required to support the more technically complex standard 2 machines. ▪ L3 Resource will be utilised across the Heathrow Campus in T3 and T4 once machines are installed. ▪ The cost for this resource will not increase proportionately to the number of new machines because BAA is able to take advantage of economy of scale by stretching this resource across all Baggage areas at Heathrow.		

Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
HBS Conveyor Systems	-£40,000	New conveyor systems for Standard 2 HBS machines
SCADA	-£60,000	SCADA Technical Support

Assumptions:
The following points cover the significant operational assumptions related to this project:
▪ There is no change in the BAA facilities charges. ▪ Operating costs relate to the BAA baggage operation only, other airline impacts outside of the BAA impact have not been fully defined at this point.

Average Asset life:	
Average Asset Life:	See below
Commentary:	
This project is comprised of different elements with differing asset lives as follows: IT 7 years M&E 15 years	
Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.	

Impact on User Charges:	
Estimated Per Passenger Cost Impact:	10.8p
Commentary:	
None.	
Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only (see Section 5 for further details)	

Non Construction Risk
The following points cover any significant areas of risk for the Airline Community regarding this project.
▪ Embargo periods resulting from the London 2012 Olympics shorten the available delivery period. ▪ Further changes in legislation

Appendix B: Project Delivery: Cost Information:

Project Information

Project Name: T1 Baggage Prolongation Programme
BCT No.: 9351

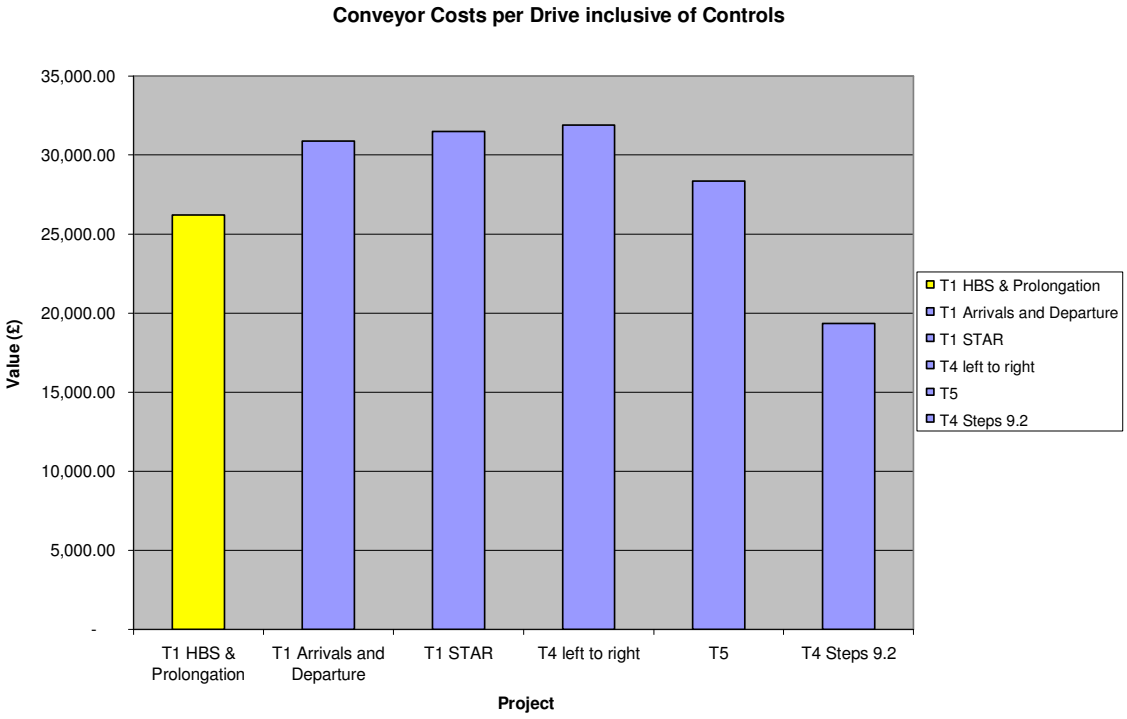
Cost Information

All information extracted from March 2011 month end

Base Costs:	£46,649,064	86	%
On-Cost:	£5,424,310	10	%
Inflation	£542,430	1	%
Opportunity	-£1,627,292	-3	%
Risk	£3,254,584	6	%
Total	**£54,243,096**	100	%

Cost Benchmark Comparisons:	
Project Name:	T1 Baggage Prolongation Programme
Total Capital Budget *(Nominal Prices)*:	£54,243,096
Guidance Notes:	
Data sourced from T1 Transition Interim Funding Paper March 2011. The fragmented scope of the T1 Prolongation project does not easily lend itself to extensive external benchmarking as a means to demonstrate value for money. With this in mind the project team have worked closely with the suppliers selected through the procurement process to deliver a robust set of bottom up tender pricing from their respective supply chains as a means to demonstrate value for money. In summary 59% of the total cost plan was based on tender pricing, equating to 80% of the Base Costs (the remaining 20% being the L3 machines procured by an existing BAA call off arrangement and the BAA IT costs, both of which are bottom up costs. Procuring the HBS machines directly has avoided OHP mark-up).	
Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.	

Benchmarking of conveyor costs per drive



Explanation

The graph demonstrates that conveyor costs per drive for the T1 Baggage HBS project benchmarks favourably against other Heathrow projects and is £3m of the total cost plan. This element does not include HBS machines.

Header Information

BCT No.	9723
Op No.	25032
Project Name:	Eastern Campus Accommodation Equipment and Ancillary Facilities

Project Overview, Objectives and Status

Overview:	
Description:	This project will provide the facilities and deliver the following business benefits: ▪ Accommodation block for ramp and baggage operations of 2,100m² when T2A phase 1 becomes operational ▪ An accommodation facility that fits with the equipment parking strategy, aligned to the location of the ramp and baggage equipment
Ref. Drawings / Images:	Refer to Appendix A
Objectives:	
BAA:	Operational Efficiency Service Improvement
Airline:	As per BAA

Project Benefits
Facilitates smooth operation of the airfield by providing accommodation for below wing operations.

Status:	
Programme:	Project Gateway Stage:
Eastern Campus	Construction Decision

Airline Engagement:

- Brief Decision Gateway — December 2009
- Brief Sign Off — June 2010
- Options Decision Gateway — October 2010

In addition to this there have been fortnightly stakeholder meetings with the STAR Alliance and regular reviews with handlers (BMI, Menzies, ASIG) as required during the project.

Project Delivery

Current Control Budget:	
Total Capital Budget *(Estimated At Completion)*:	**£29,199,994**
Refer to appendix B for cost information detail.	

Schedule:			
Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
01/2010	11/2011	04 / 2013	Q2/ 2014

Assumptions:
The following points cover the significant delivery assumptions related to this project:
▪ Equipment parking can be made to fit within the Eastern Campus site ▪ The transfer coaching route to T1 can be relocated if required during construction ▪ Services are to be taken from the cooling station ▪ Menzies, BMI and Lufthansa will occupy the Accommodation Block ▪ The building is required to be ready for 04/2013 to allow tenant fit out to be complete in time for Operational Trials to begin ▪ There are four ground handlers for Terminal 2
Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.

Operational Issues

BAA Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
Property	£710,000	Delta between available accommodation for rent in T1 and the space provided within T2B and the accommodation block.
Cleaning	-£16,000	Cleaning for the new accommodation block
Maintenance	-£70,000	Maintenance for the new accommodation block
Utilities	-£19,000	Utilities costs for the new accommodation block
Rent and Rates	-£81,000	Rates for new accommodation block
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
▪ Space in T1 pier 4 & pier 4A is vacated and available to be let to another party ▪ Space in T1 pier 3 is vacated, but is not available to be let to another party		

Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
N/A	N/A	None

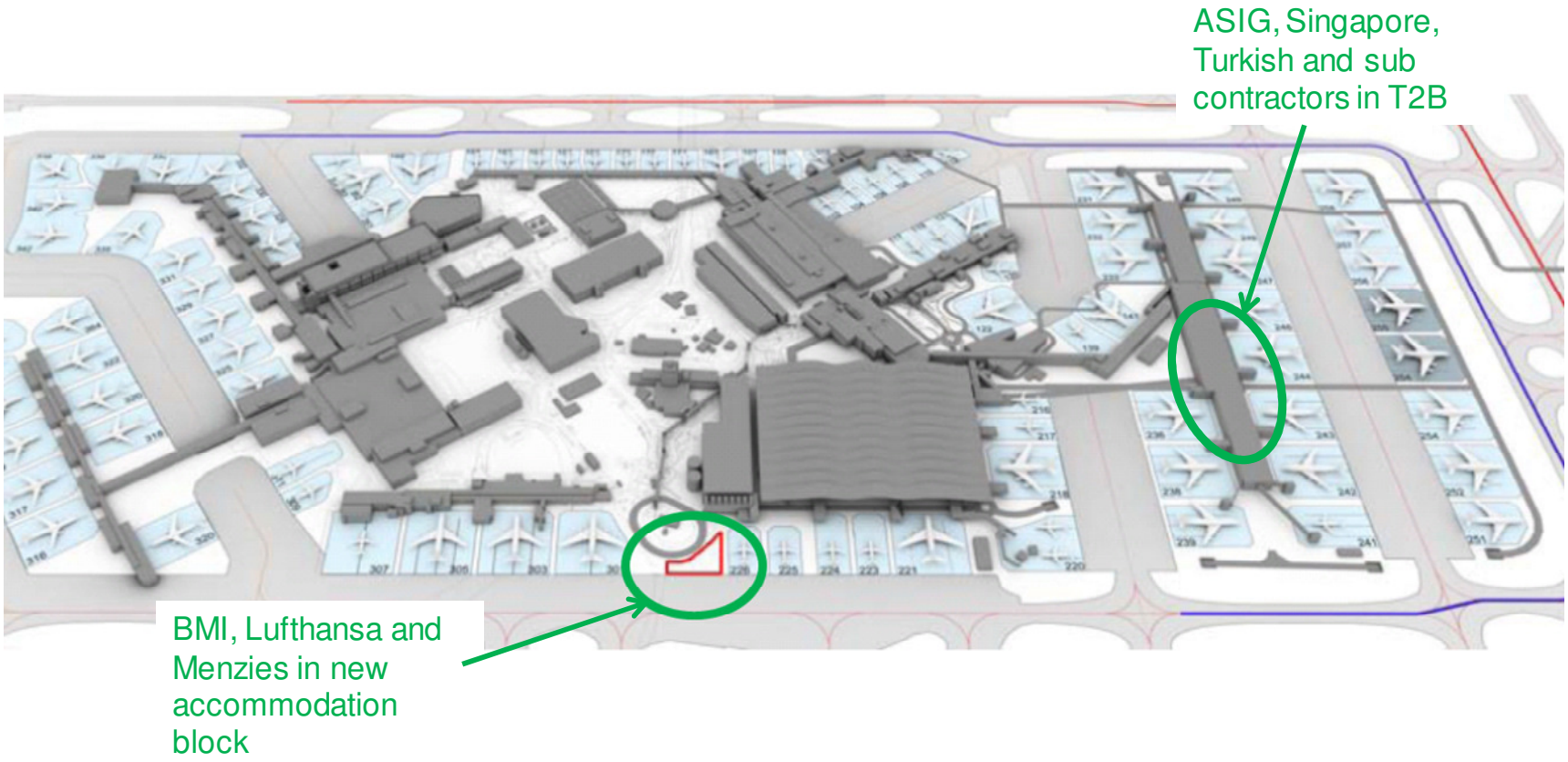
Assumptions:
The following points cover the significant operational assumptions related to this project:
Airlines and handlers are serving the same number of airlines when T2A opens as they were prior to opening.

Average Asset life:	
Average Asset Life:	40 Years
Commentary:	
None	
Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.	

Impact on User Charges:	
Estimated Per Passenger Cost Impact:	2.5p
Commentary:	
None	
Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only (see Section 5.3 for further details)	

Non Construction Risk:
The following points cover any significant areas of risk for the Airline Community regarding this project:
The site is constrained by the transfer coaching route to T1 on one side, the taxiway on another and the cargo tunnel on the other side. Currently it is anticipated that there will be no impact on the operation, but there is a risk that the transfer coaching route to T1 will need to be relocated during construction.

Appendix A: Overview: Reference Drawing / Image:



Appendix B: Project Delivery: Cost Information:

Project Information

Project Name: Eastern Campus Accommodation Equipment and Ancillary Facilities
BCT No.: 9723

Cost Information

All information extracted from March 2011 month end

Base Costs:	£24,006,994	82	%
On-Cost:	£3,480,000	12	%
Inflation	£0	0	%
Opportunity	-£921,500	-3	%
Risk	£2,634,500	9	%
Total	**£29,199,994**	100	%

Commentary:
The On Cost % is calculated as a % of the total cost.

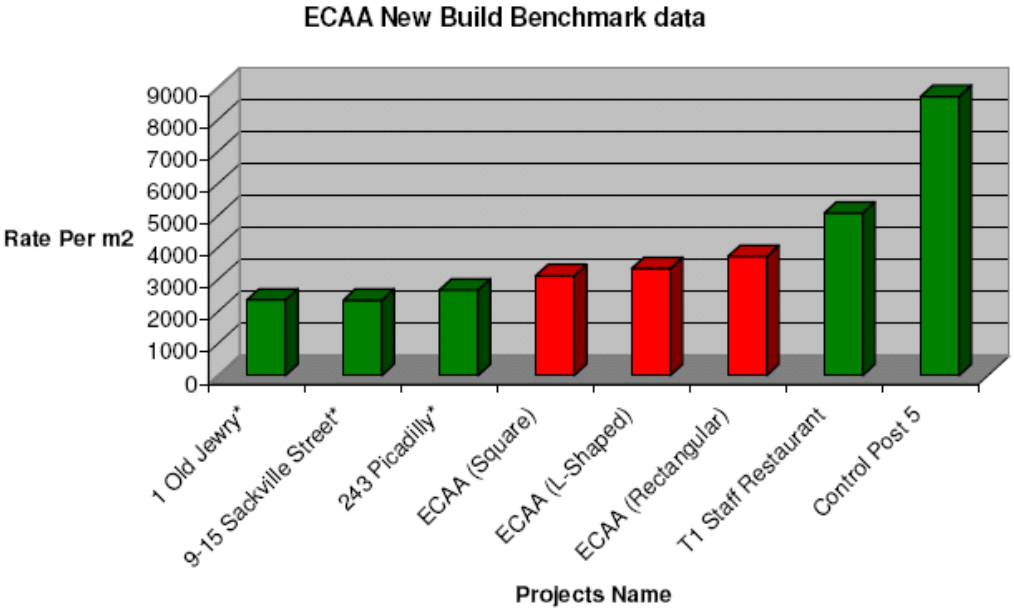
Cost Benchmark Comparisons:	
Project Name:	Eastern Campus Accommodation Equipment and Ancillary Facilities
Total Capital Budget *(Nominal Prices)*:	£29,199,994

Guidance Notes:

The following graph demonstrates that ECAA Option 11 (highlighted in red) benchmarks well against other New build projects at London Heathrow, but sits marginally above similar projects outside of the airport environment. This is explained by abnormals, such as the stilted nature of the design, the relatively small area of the build and working in an airside environment.

This graph also demonstrates the cost differential between the proposed footprints of Option 11. The square shaped building works out at £3,069/m2, the L-shaped at £3,306/m2 and the rectangle shaped at £3,655/m2, which is explained by the differing wall to floor ratios of each shape. The L shaped option works out near the average of the 3 options at £3,343/m2, and has been picked as the favoured one at this stage. These efficiencies will be analysed further during the next design stage.

Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.


ECAA New Build Benchmark data
Rate Per m2
9000
8000
7000
6000
5000
4000
3000
2000
1000
0
1 Old Jewry*
9-15 Sackville Street*
243 Picadilly*
ECAA (Square)
ECAA (L-Shaped)
ECAA (Rectangular)
T1 Staff Restaurant
Control Post 5
Projects Name

Header Information

BCT No.	9805
Op No.	25564
Project Name:	Eastern Campus Information & Control Systems

Project Overview, Objectives and Status

Overview:	
Description:	Eastern Campus wide specialist packages of the Information & Control Systems (ICS) consisting of: ▪ Communications Systems ▪ Security Systems ▪ Building Systems ▪ Operational Systems ▪ Systems Integration – Terminal, Airport & Airline Other packages of Information & Control Systems remain within the relevant Eastern Campus projects.
Ref. Drawings / Images:	Refer to Appendix A
Objectives:	
BAA:	Deliver flexible, scalable and standardised solutions consistently across the Eastern Campus.
Airline:	Enable the airlines and the AOC to deploy common airline systems to simplify terminal operations and improve capacity.

Project Benefits:
Efficient airline and airport operations on the Eastern Campus will be dependent on the successful interaction of People, Process and Technology within the new Eastern Campus facilities. The Information & Control Systems provides the technology elements.

Status:	
Programme:	Project Gateway Stage:
Eastern Campus	Construction Decision

Airline Engagement:
Airlines and the AOC have been consulted in defining the requirements for the systems and in review the scheme design, through the EC IT Working Group. The IT Working Group, was formed in 2008 and has met fortnightly since 2009, includes representatives of the AOC, STAR Alliance and the major airlines.

Project Delivery

Current Control Budget:			
Total Capital Budget *(Estimated At Completion)*:			**£74,480,204**
Refer to appendix B for cost information detail.			
Schedule:			
Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
06/2009	06/2012	11/2013	Q2/2014

Assumptions:
The following points cover the significant delivery assumptions related to this project:
▪ Common Infrastructure Policy to minimise the extent of infrastructure to be deployed. ▪ Existing airport wide solutions will be deployed wherever appropriate. ▪ Only tried and tested technology will be deployed. ▪ Airlines deliver their own back office IT systems and the AOC deliver the Common Use Systems. ▪ Schedule integrated with T2A & T2B schedules.
Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.

Operational Issues

BAA Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
IT	-£5,200,000	Current view of increased Opex from Eastern Campus, with target to reduce to £4m as project progresses. (For all T2A & T2B ICS)
Engineering	-£900,000	Current view of increased Opex. (For all T2A & T2B ICS)
Assumptions:		
The following points cover the significant operational assumptions related to this project;		
Opex has been assessed from historic data and will be refreshed following transition to IT Outsourcing.		

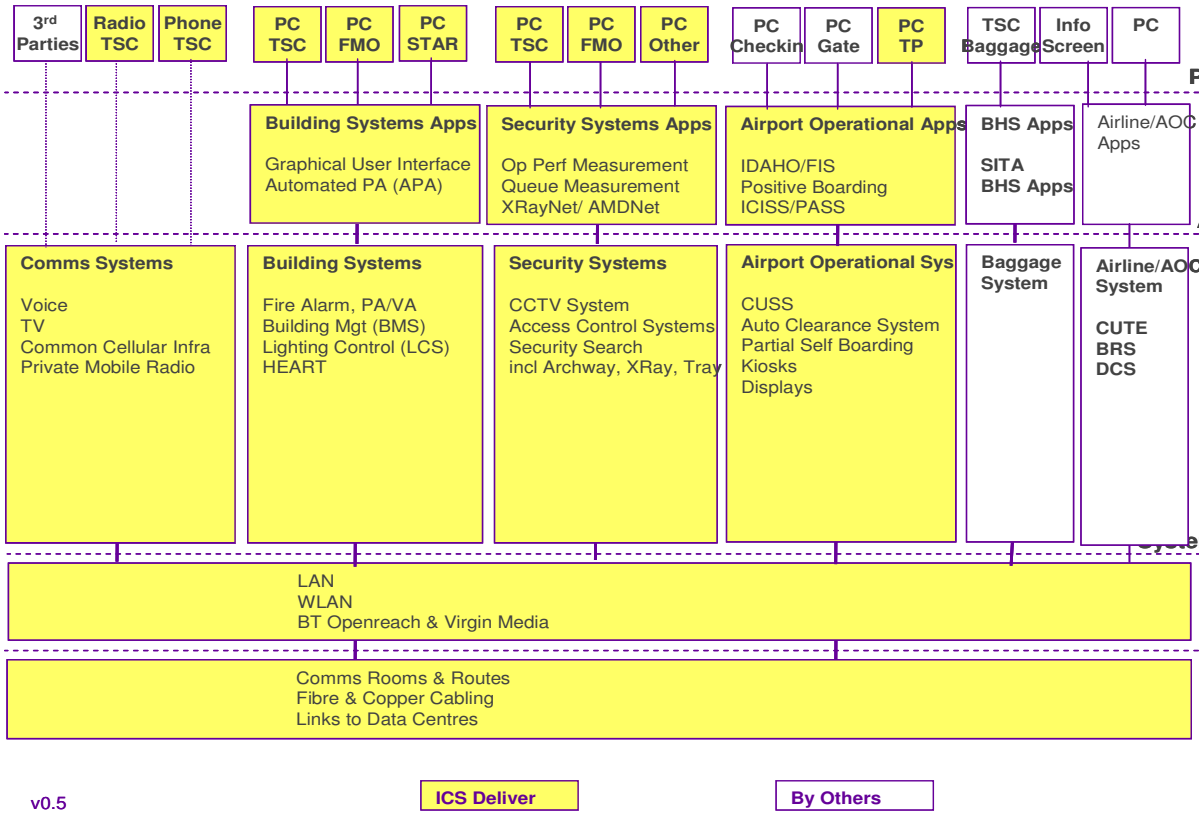
Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
N/A	N/A	None
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
Implementation of Common Infrastructure and Common Systems for the Airline should reduce the Opex costs for all airlines.		

Average Asset life:	
Average Asset Life:	10 Years
Commentary:	
Asset life for ICS varies depending on individual systems, and hence varies from 5 years to over 20 years.	
Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.	

Impact on User Charges:	
Estimated Per Passenger Cost Impact:	25.0p
Commentary:	
None	
Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only (see Section 5.3 for further details)	

Non Construction Risk:
The following points cover any significant areas of risk for the Airline Community regarding this project:
▪ Inability to achieve systems integration across terminal, airport and airlines, causing operational challenges and stakeholder issues, as a result of BAA, AOC or Airline systems issues or process misalignment. ▪ Commissioning and Systems Integration impacts operational systems elsewhere at Heathrow.

Appendix A: Overview: Reference Drawing / Image:



Appendix B: Project Delivery: Cost Information:

Project Information

Project Name: Eastern Campus Information & Control Systems
BCT No.: 9805

Cost Information

All information extracted from March 2011 month end

Base Costs:	£50,646,540	68	%
On-Cost:	£11,172,030	15	%
Inflation	£3,724,010	5	%
Opportunity	£0	0	%
Risk	£8,937,624	12	%
Total	**£74,480,204**	100	%

Commentary:
The On Cost % is calculated as a % of the total cost.

Cost Benchmark Comparisons:	
Project Name:	Eastern Campus ICS
Total Capital Budget *(Nominal Prices)*:	£74,480,204
Guidance Notes:	
ICS by its nature is driven by airline and passenger expectations, regulatory requirements and BAA aspiration's to provide a flexible and future proof terminal. Benchmarking against floor area provides an indication but should be considered with caution as the functionality of the terminal is not proportional to its size. A combined benchmark for ICS across T2A & T2B shows a cost of £511 per m^2, which is within the range of £270 - £545 per m^2 for projects from Stansted Extension through to Terminal 5. This confirms that T2A & T2B ICS compare favourably with other developments.	
Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.	

Header Information

BCT No.	10309
Op No.	25646
Project Name:	T1 Transitions

Project Overview, Objectives and Status

Overview:	
Description:	The outbound and transfer baggage systems serving Terminal T2A Phase 1 will be processed by the existing Terminal 1 baggage system. This project delivers the necessary additional capacity and system alterations to enable the exiting Terminal 1 baggage system to accommodate the incremental demand created by the T2A Phase 1 project.
Ref. Drawings / Images:	Refer to Appendix A
Objectives:	
BAA:	▪ Provide the necessary additional capacity within the Terminal 1 baggage system. ▪ Improve health and safety through the installation of manual handling aids where possible. ▪ Ensure solution sustainability during the future development of Eastern Campus.
Airline:	▪ As per BAA ▪ Increase airline alliance co-location by delivering T2A Phase 1 baggage solution in Terminal 1 for opening day.

Project Benefits:
▪ Provide additional capacity within the T1 baggage system to enable the opening of T2A Phase 1. ▪ ASQ and QSM baggage performance to be maintained by providing sufficient capacity for T2A Phase 1 bags in the T1baggage system.

Status:	
Programme:	Project Gateway Stage:
Eastern Campus	Options Decision

Airline Engagement:
A number of Option Decision Gateway reviews leading to a final Option Decision Gateway have been held with the airline community on this project. Dates and detail are as follows: ▪ Option Decision T1/STAR MOU 21 Jun 2010 ▪ Option Decision T1/STAR MOU (T1-T4 Tunnel Closed) 22 Oct 2010 ▪ Option Decision T1/STAR MOU (T1-T4 Tunnel Open) 04 Mar 2011 In between the formal Gateway Reviews on going weekly/monthly consultation occurs at the following forums: The Baggage Stakeholder Strategy Board, The Eastern Campus Stakeholder Board, The Terminal 1 Operations Working Group and The Eastern Campus Baggage Working Group.

Project Delivery

Current Control Budget:	
Total Capital Budget *(Estimated At Completion)*:	**£49,637,143**
Refer to appendix B for cost information detail.	

Schedule:			
Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
Part of 8802 T2A & Associated Projects	02 / 2012	07 / 2013	Q2 2014

Assumptions:

The following points cover the significant delivery assumptions related to this project:

Key delivery assumptions for this project are:

- Terminal 1 Passenger experience to be maintained at acceptable level
- A T4 Transfer EBS required by August 2013

Key scope assumptions for this project are:

- Design occupancy is based on Star MOU, T1 Star non-MOU and T1 non aligned (A3, AC, BD, CA, CY, EI, FI, JJ, LH, LO, LV, LY NH, NZ, OS, OU, OZ, SA, SK, SN, SQ, TG, TK, TP, UA, UN, US)
- Standard 3 HBS replacement excluded from scope.
- Provision of T4 Automated Early Bags Store (EBS) for T4 transfer bags

Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.

Operational Issues

BAA Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
Hold Baggage Screening	-£54,000	Additional standard 2 HBS machine provided for Reflight.

Assumptions:

The following points cover the significant operational assumptions related to this project:

- L3 Resource for maintenance has been included for under the additional resource required for 9351: T1 Baggage Prolongation Project.
- A more detailed review of opex will be completed prior to Construction Decision in September 2011.
- The majority of the HBS impact is shown as part of 9351 T1 Baggage Prolongation

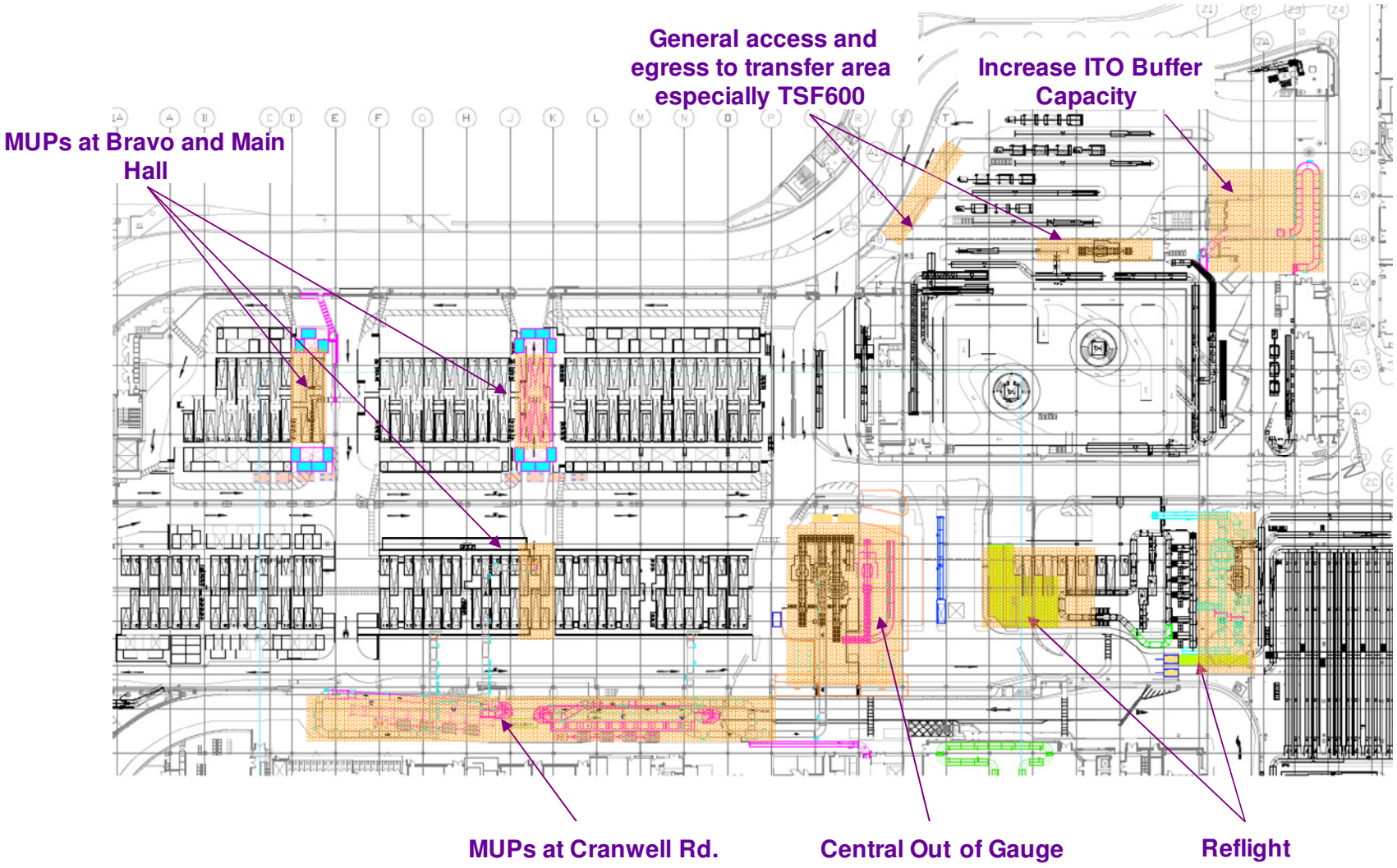
Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
Baggage Operation & Maintenance	-£895,000	Terminal 1
Baggage Operation & Maintenance	-£874,000	Terminal 4
Facilities Charges	-£275,000	Terminal 1
Facilities Charges	-£632,000	Terminal 4

Assumptions:
The following points cover the significant operational assumptions related to this project:
▪ A more detailed review of opex will be completed prior to Construction Decision in September 2011. ▪ These are incremental numbers and only relate to the BAA baggage operation; other airline impacts outside of the BAA impact have not been fully defined at this point.

Average Asset life:	
Average Asset Life:	See below
Commentary:	
This project is comprised of different elements with differing asset lives as follows: IT 7 years M&E 15 years	
Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.	
Impact on User Charges:	
Estimated Per Passenger Cost Impact:	11.0p
Commentary:	
None	
Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only (see Section5.3 for further details)	

Non Construction Risk:
The following points cover any significant areas of risk for the Airline Community regarding this project.
▪ Further changes in legislation ▪ Changes in occupancy particularly Terminal 1 may impact scope causing an increase in cost and schedule resulting in a possible delay to the project completion.

Appendix A: Overview:



Appendix B: Project Delivery: Cost Information:

Project Information

Project Name: T1 Transitions
BCT No.: 10309

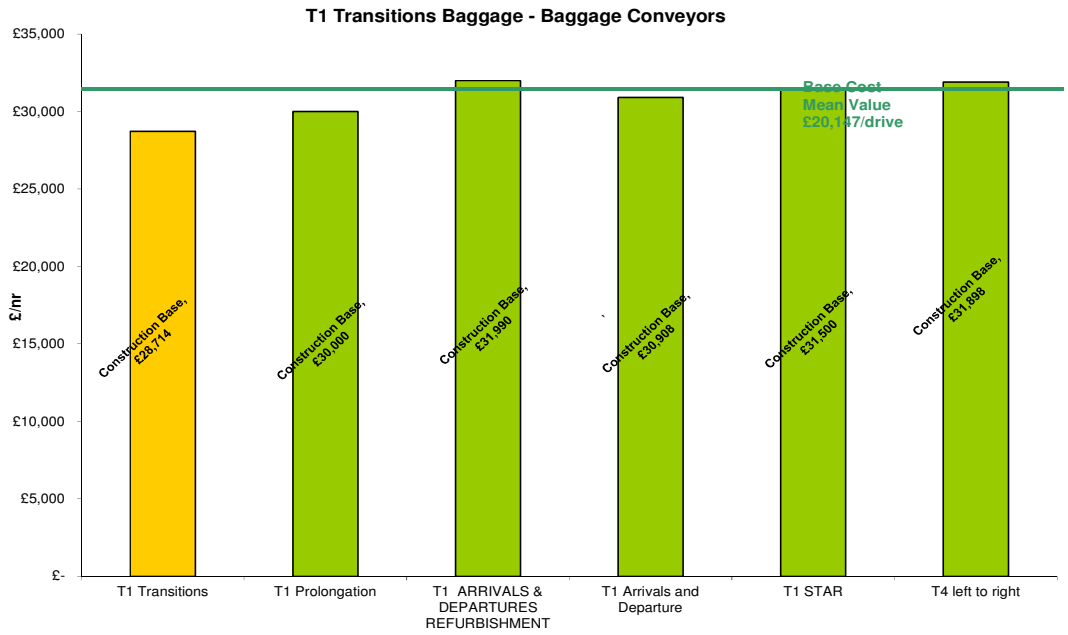
Cost Information

All information extracted from March 2011 month end

Base Costs:	£33,256,885	67	%
On-Cost:	£8,438,314	17	%
Inflation	£1,985,486	4	%
Opportunity	£0	0	%
Risk	£5,956,458	12	%
Total	**£49,637,143**	100	%

Commentary:
Within the EAC is £4m is for the T1-T4 Tunnel H&S Upgrade and T4 Early Bag Store.

Cost Benchmark Comparisons:	
Project Name:	T1 Transitions
Total Capital Budget *(Nominal Prices)*:	£49,637,143
Guidance Notes:	
Benchmark data provided from T1 Transition Interim Funding Paper March 2011. The project carried out initial benchmarking. Two approaches have been used so far to demonstrate value for money; ▪ Benchmarking of key baggage elements ▪ Market Tendering (OJEU selected Contractors)	
Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.	



The above graph presents the Baggage Conveyors cost per drive for T1 Transition when compared with other similar projects.

Header Information

BCT No.	Various
Op No.	24000, 23994, 24013, 24006, 23225, 23993, 23223
Project Name:	T2A & Associated Projects

Project Overview, Objectives and Status

Overview:	
Description:	T2A Phase 1 is part of a programme that replaces the out dated facilities of the original Terminal 2 with a new building primarily for the use of Star Alliance airlines to further consolidate their operations at Heathrow. The new building will provide competitive equivalence, and will be designed to meet the needs of Star Alliance passengers and BAA requirements for flexibility and future proofing. The BCT numbers captured within this Project Definition Sheet are as follows: ▪ 6100 T2A Early Stage Cost ▪ 8828 Eastern Campus EIS ▪ 7767 T2A Scheme Design Stage ▪ 8802 T2A Building including baggage scope within T2A ▪ 8799 QB & T2 Demolition ▪ 8807 T2A Phase 1 Stands ▪ 8794 Eastern Campus Leadership Team ▪ 8798 Eastern Campus Logistics ▪ 9022 Automation Prove Out
Ref. Drawings / Images:	Refer to Appendix A
Objectives:	
BAA:	▪ Colocation of the STAR Alliance airlines ▪ Improve passenger experience ▪ Reduce operational expenditure both airline and airport ▪ Improve operational efficiency
Airline:	▪ Star Alliance move under one roof ▪ Greater Star Alliance connectivity ▪ Above will improve Alliance working together, and ease of transfers / connectivity for passengers using Star member airlines.

Project Benefits:
▪ Improve QSM and ASQ scores ▪ Improve hub connections for STAR Alliance ▪ Airport income increase ▪ Operational expenditure reduction both airline and airport ▪ 40% reduction in CO2 emissions and achievement of "very good" BREEAM rating

Status:	
Programme:	Project Gateway Stage:
Eastern Campus	Construction Decision

Airline Engagement:
Details of airline engagement / consultation to date:

Key Gateways:

- 7th April 2008 – Basis of Design (Sprint 33)
- 25th June 2008 – Shell & Core and GA's
- 10th June 2009 – Pre-Construction Decision endorsement of scheme
- 14th May 2010 – Project update overview and final design

Ongoing consultation:

- Eastern Campus Stakeholder Programme Board – monthly
- Eastern Campus Airline Baggage Working Group – Weekly or as required
- CIP Working Group (as necessary) – monthly
- Joint Steering Team (JST) - quarterly
- STAR / BAA Integrated Programme Board – monthly
- STAR Project Execution Team meetings – fortnightly
- Ad-hoc working groups
- STAR Airline Champions workshops – quarterly

Project Delivery

Current Control Budget:	
Total Capital Budget *(Estimated At Completion)*:	**£1,111,521,240**
Refer to appendix B for cost information detail.	

Schedule:

Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
07/2007 (Options)	07/2009	11/2013	Q2 / 2014

Assumptions:

The following points cover the significant delivery assumptions related to this project:

This project excludes all work associated with the T2A forecourt and links to the new MSCP East Phase1 and also excludes any baggage capacity works required in Terminal 1 to support the operation of T2A Phase 1. This project includes the main building the VPM building and the section of the passenger tunnel to T2B under the T2A stands, the baggage within T2A and the structure of the baggage link to Terminal 1, the stands around T2A Phase 1, together with the associated services, fixed links, nodes and passenger boarding bridges and the cooling station needed to support T2A Phase 1 and T2B.

The full scope of the Logistics and Leadership projects cover the whole of the Eastern Campus and not just the T2A Project referred to in this PDS.

Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.

Operational Issues

BAA Financial Revenue and Operational Cost (Opex) Impact:

Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
Retail	£60,050,000	
Property	£9,391,000	
Other	£1,851,000	
Cleaning	-£7,950,000	
Maintenance	-£6,900,000	
Staffing	-£39,500,000	

Rates	-£13,651,000	
Utilities	-£4,599,000	
Other	-£1,550,000	
Hold Baggage Screening Out Of Gauge	-£248,000	

Assumptions:

The following points cover the significant operational assumptions related to this project:

- Revenue and operating costs are total (not incremental) estimates
- IT/ICS operating costs not included
- Income and costs include T2A Phase 1 stands and baggage

Airline Financial Revenue and Operational Cost (Opex) Impact:

Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
Baggage Operation & Maintenance	-£6,780,000	
Out Of Gauge Van Service	-£1,180,000	
Facilities Charges	-£3,711,000	

Assumptions:

The following points cover the significant operational assumptions related to this project:

- Operating costs relate to the T2A BAA baggage operation only T1 elements are covered in projects 24932 and 25646
- Other airline impacts outside of the BAA impact have not been fully defined at this point.

Average Asset life:

Average Asset Life:	See Below

Commentary:

The development comprises of different elements with differing asset life as follows:

Structures	50 years
M&E	20 – 30 years
Fit out	5 – 15 years

Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.

Impact on User Charges:

Estimated Per Passenger Cost Impact:	N/A

Commentary:

Various Projects

Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only (see Section 5.3 for further details)

Non Construction Risk:

The following points cover any significant areas of risk for the Airline Community regarding this project:

- Systems integration and testing causing disruption across the Heathrow network which will be managed by BAA IT
- Impact on Central Terminal Area traffic flows as a result of construction activities during latter fit out stages
- Impact on airside traffic flows as a result of construction activities
- Overall delay to project completion and therefore an impact on future occupancy changes. The critical path for the project is being managed on a weekly basis and routes of escalation are in place to address any major concerns

Appendix A: Overview: T2A Phase 1 Image:

Appendix B: Project Delivery: Cost Information:

Project Information

Project Name: T2A & Associated Projects
BCT No.: Various as per overview description

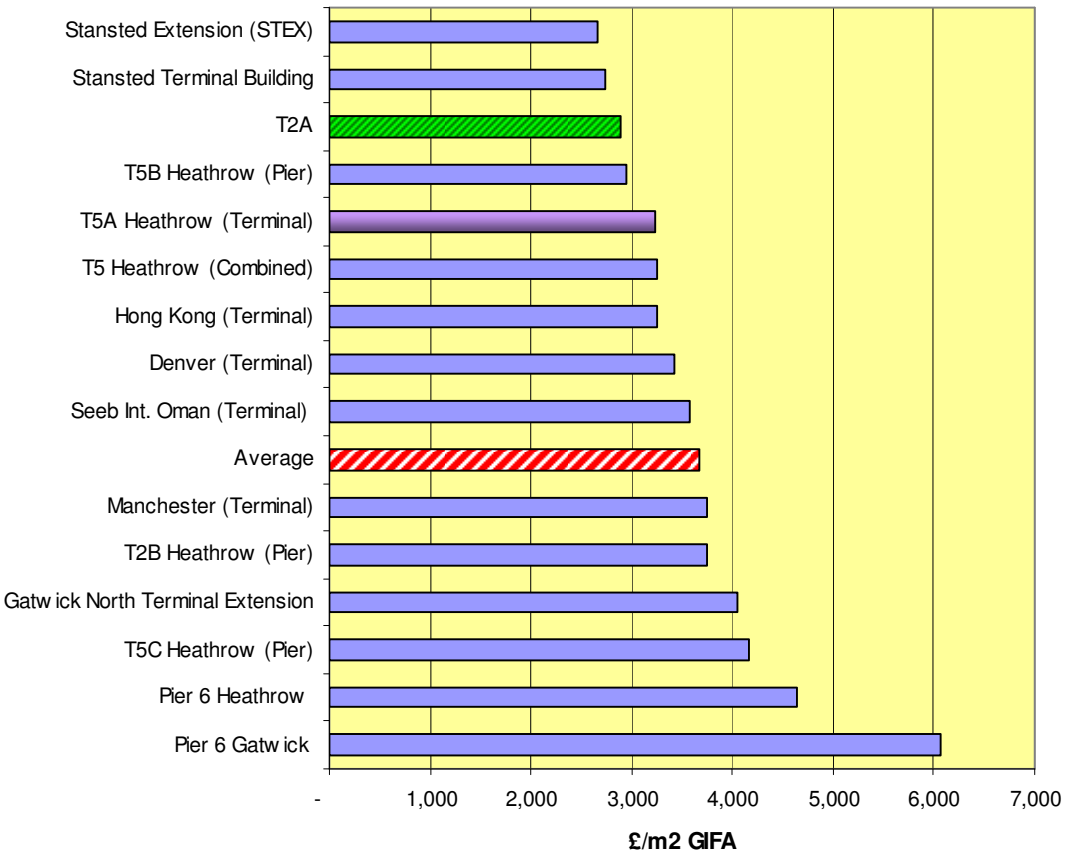
Cost Information

All information extracted from March 2011 month end

Base Costs:	£844,756,144	76	%
On-Cost:	£188,958,610	17	%
Inflation	£11,115,212	1	%
Opportunity	£0	0	%
Risk	£66,691,274	6	%
Total	**£1,111,521,240**	100	%

Commentary:
The On Cost is calculated as a % of total cost. The scope and cost of the Eastern Campus Logistics and Leadership project in this sheet covers the whole of the Eastern Campus and not just the T2A Sub Programme within this project definition sheet.

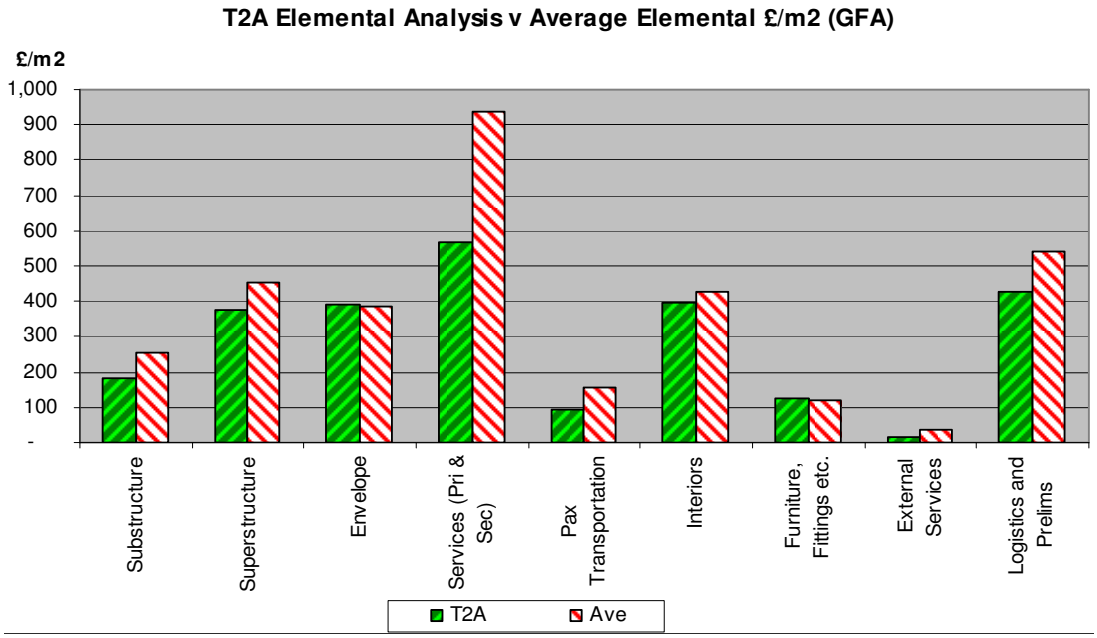
Cost Benchmark Comparisons:	
Project Name:	T2A Building & Associated Projects
Total Capital Budget *(Nominal Prices)*:	£1,111,521,240
Guidance Notes:	
The Demonstrating Value Report (issued at the time of Construction decision in December 2009) demonstrates that the T2A Building (Phase 1) project represents good value for money when benchmarked against comparable schemes. This takes into consideration both current market conditions and constraints (design and operational) placed upon the project. Against the most recent comparator T5A, T2A Building (Phase 1) is 10% less. Demonstration of value has been achieved through benchmarking against other BAA projects, non BAA aviation projects and external commercial schemes. Review has been undertaken at a Facility, Elemental and Component level to demonstrate value at an increasing level of detail. At a Facility Level, the T2A Terminal Building at £2,894/m2, benchmarks well below the average of £3,679/m2.	



Major elements of the project – substructures, structural steelwork, roof and façade – have been externally tendered and have realised savings against the benchmarked cost plan. The project team also carried out market testing for significant elements of the M&E and fit-out packages.

Overall 74% of the HETCo target cost plan has been tendered or market tested which gives added confidence to the EAC.

In addition to the high level facility review the building costs have been analysed at elemental and component level. These analyses utilise the same group of BAA projects used at facility level plus further non-BAA and commercial projects. These again demonstrate that the T2A project delivers value for money.



Benchmarking at this level disguises the impact of building geometry and other factors which need to be considered such as wall to floor ratios and building scale. This analysis reveals that when these factors are considered the T2A Building continues to reflect good value for money.

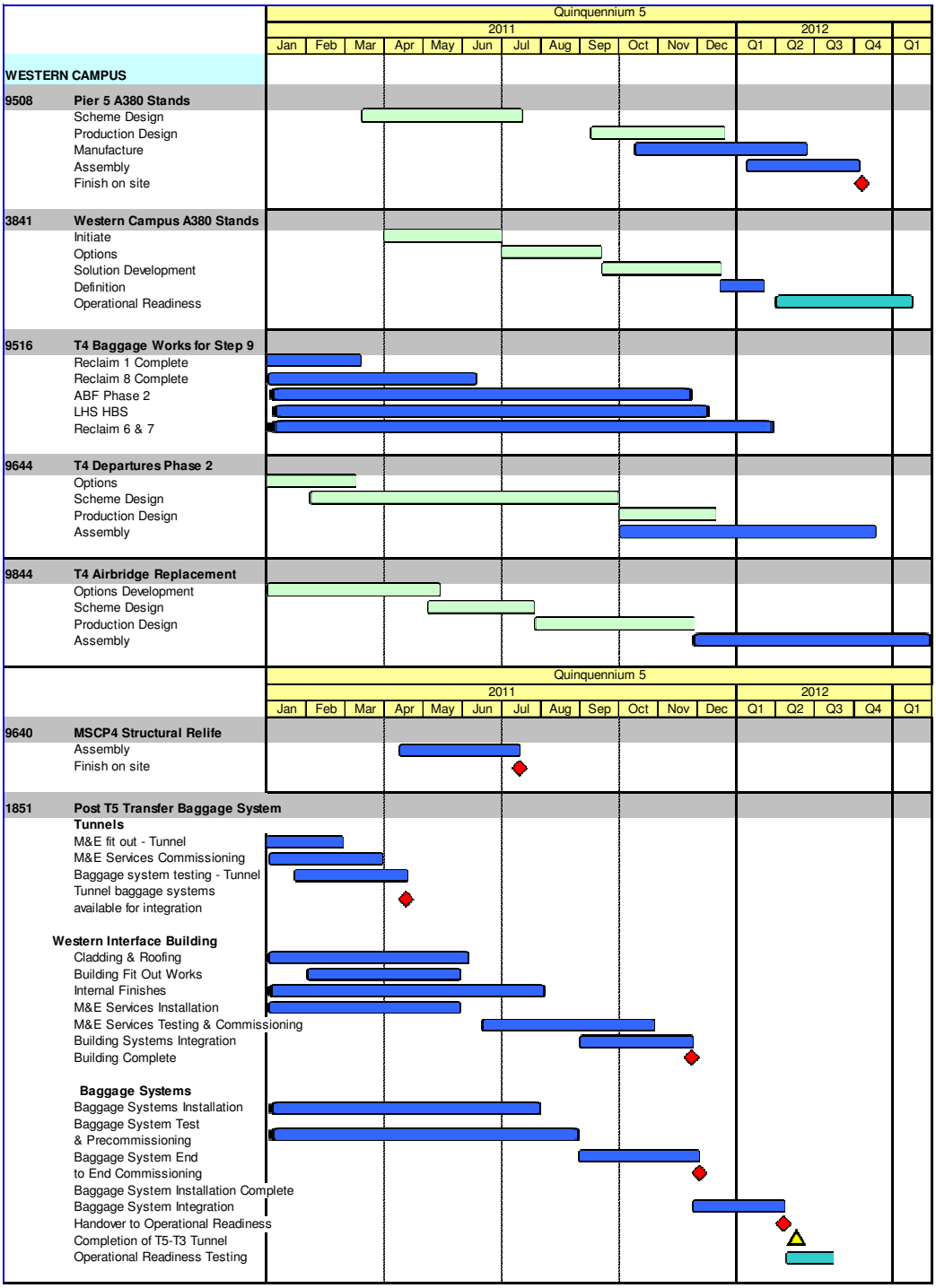
Appendix C: PDS – Western Campus

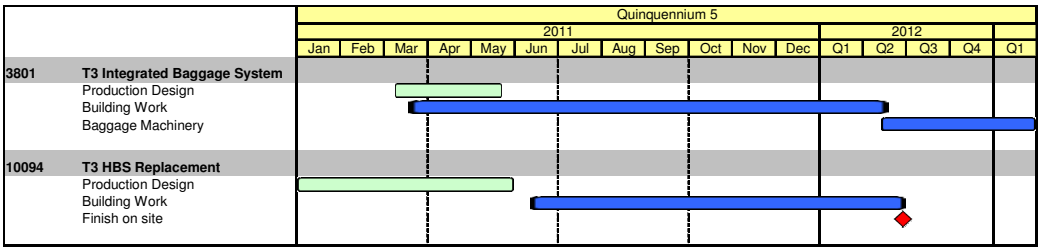
Project Definition Sheets

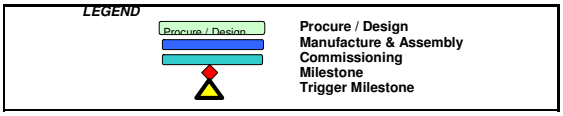
BCT Number and Project Name as shown in Schedules

1851 : Post T5 Transfer Baggage System
3801 : T3 Integrated Baggage System
3841 : Western Campus A380 Stands
9508 : Pier 5 A380 Stands
9516 : T4 Baggage Works for Step
9640 : MCP4 Relife Works
9644 : T4 Departures Phase 2
9844 : T4 Airbridge Replacement
10094 : T3 HBS Replacement

Q5 Western Campus Schedule




Quinquennium 5
2011
2012
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Q1
Q2
Q3
Q4
Q1
3801
T3 Integrated Baggage System
Production Design
Building Work
Baggage Machinery
10094
T3 HBS Replacement
Production Design
Building Work
Finish on site


LEGEND
Procure / Design
Procure / Design
Manufacture & Assembly
Commissioning
Milestone
Trigger Milestone

Header Information

BCT No.	1851
Op No.	16701
Project Name:	Post T5 Transfer Baggage System

Project Overview, Objectives and Status

Overview:	
Description:	In order to deliver the strategic vision for Heathrow there is a need to provide a transfer baggage product that improves performance within a campus that has multiple terminal connections for both inter and intra baggage movements. This project provides an automated DCV transfer baggage system (for in gauge bags) to operate as an extension to the T5 system to provide a transfer link between T3 and T5.
Ref. Drawings / Images:	Refer to Appendix A
Objectives:	
BAA:	▪ Passenger service improvement (predictability of transfer baggage process including reduction in missed bag rates and reduction in minimum connection times) ▪ Business Improvements (income, health and safety and environmental efficiencies)
Airline:	▪ Predictability of the transfer baggage process ▪ Reduction in missed bag rates ▪ Reduction in minimum connection times ▪ Reduced overall operating costs ▪ Improved manual handling techniques

Project Benefits:
▪ Improvement on minimum connect times between T5-T3 compared to the current Inter Terminal Operator (ITO) van process. ▪ Greater predictability of transfer baggage process. ▪ Reduction in manual handling. ▪ Improvement in volume of transfer bags tracked. ▪ Reduction in Opex from saving of reduction on ITO vehicles.

Status:	
Programme:	Project Gateway Stage:
Western Campus	Implement

Airline Engagement:
▪ Option Decision July 2008 ▪ Construction Decision 4th June 2009 In between the formal Gateway Reviews on going monthly consultation occurs at the following forums: The Baggage Stakeholder Strategy Board, The Post T5 Transfer Baggage System Working Group and T5C Working Group.

Project Delivery

Current Control Budget:	
Total Capital Budget *(Estimated At Completion)*:	**£244,703,577**
Refer to appendix B for cost information detail.	

Schedule:			
Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
09/2008	01/2008	03/2012	06/2012

Assumptions:

The following points cover the significant delivery assumptions related to this project:

Key assumptions for this project are:

- The Western Interface Building (WIB) function will be located, as an early phase, within an extended T3 Integrated Baggage building and will provide an integrated facility and system.
- Construction completion T5 to T3 on 30.11.11 defined as: The tunnel completed and fully equipped with M&E services with the cart tracks installed and fully tested to meet the bag through put and 'in system time' trials (using test bags). Operational readiness will proceed after this completion date.
- At the T5 to T3 milestone completion date discharge from the tunnel at T3 will be onto docks at the WIB for onward transport of transfer bags to the T3 baggage system, as the new system will not be fully integrated.
- Operational readiness will be carried out from November 2011 for the fully integrated system at T5C and the dock arrangement at WIB. Operational readiness will then be carried out again when the new T3 Baggage system is complete.

Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.

Operational Issues

BAA Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
N/A	N/A	None

Assumptions:

The following points cover the significant operational assumptions related to this project:

- Potential £3m pa saving on the current Inter Terminal Operation (ITO) van based baggage service, after estimated tunnel opex costs taken into account, achieved when full T5 to T1 System complete.
- Until T3IB is fully operational the overall opex will be higher as the existing ITO van service will be parallel running of ITO van service with the tunnel.
- Out of gauge transfer baggage ITO van service will remain between terminals and will be utilised in tunnel system down time contingency.

Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
N/A	N/A	None

Assumptions:

The following points cover the significant operational assumptions related to this project:

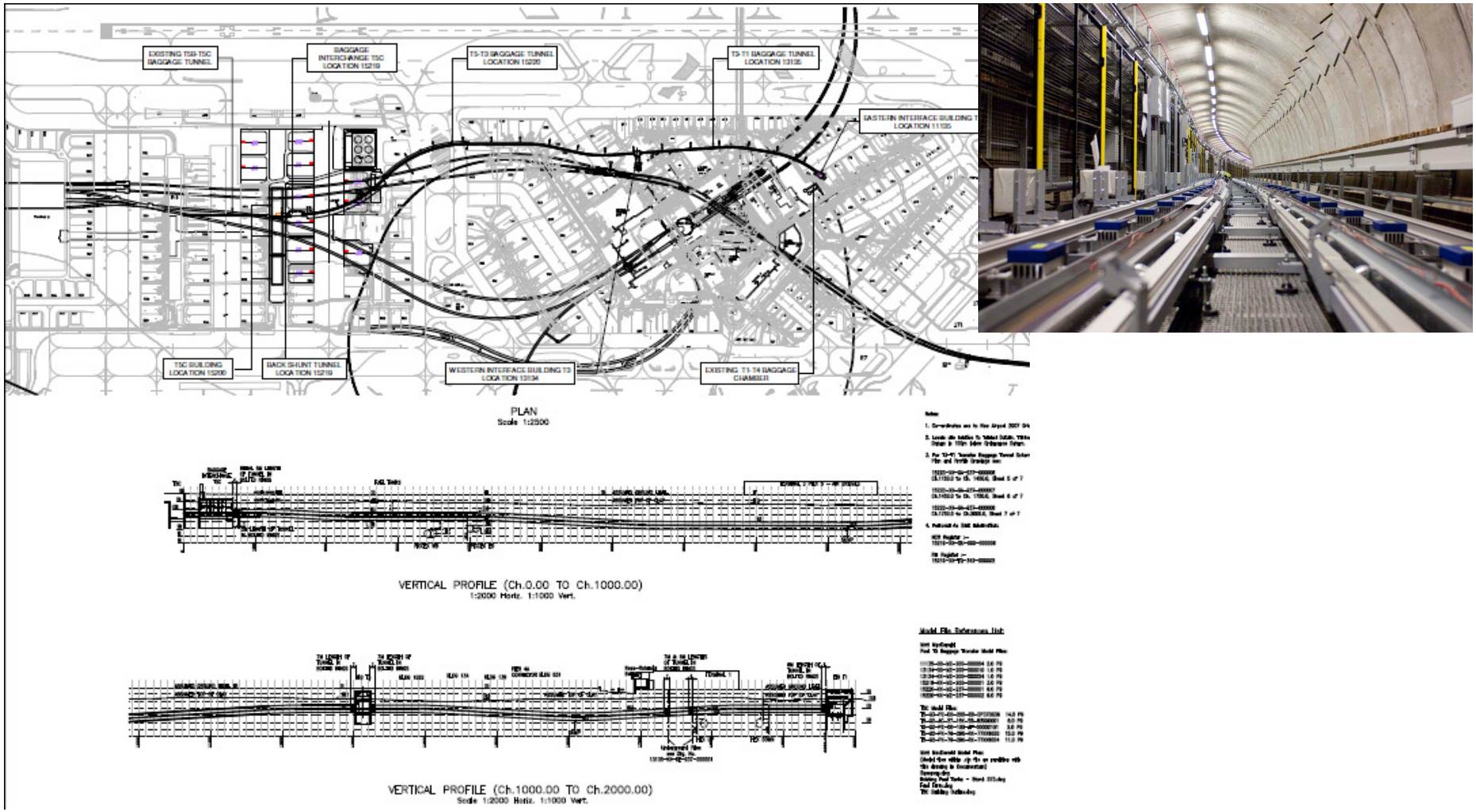
None

Average Asset life:	
Average Asset Life:	See below

Commentary:	
This project is comprised of different elements with differing asset lives as follows: IT 7 years M&E 15 years Building 25 years	
Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.	
Impact on User Charges:	
Estimated Per Passenger Cost Impact:	34.0p
Commentary:	
None	
Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only (see Section 5.3 for further details)	

Non Construction Risk:
The following points cover any significant areas of risk for the Airline Community regarding this project.
T3IB Delay will result in a longer period of ITO Vans

Appendix A: Overview: Reference Drawing / Image:



Appendix B: Project Delivery: Cost Information:

Project Information

Project Name: Post T5 Transfer Baggage System
BCT No.: 1851

Cost Information

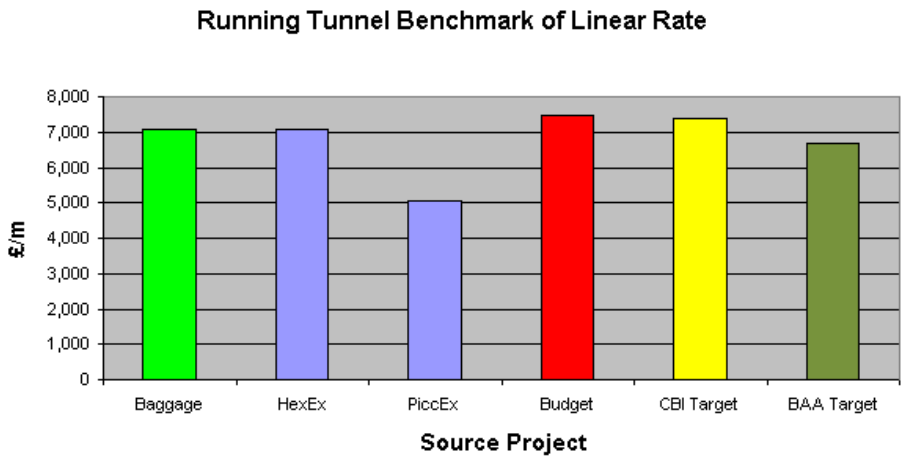
All information extracted from March 2011 month end

Base Costs:	£199,544,783	82	%
On-Cost:	£37,227,631	15	%
Opportunity	-£532,500	0	%
Risk	£8,463,663	3	%
Total	£244,703,577	100	%

Cost Benchmark Comparisons:	
Project Name:	Post T5 Transfer Baggage System
Total Capital Budget *(Nominal Prices)*:	£244,703,577
Guidance Notes:	
Benchmark analysis provided from the Post T5 Transfer Baggage System Construction Decision Paper presented in June 2009.	
Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.	

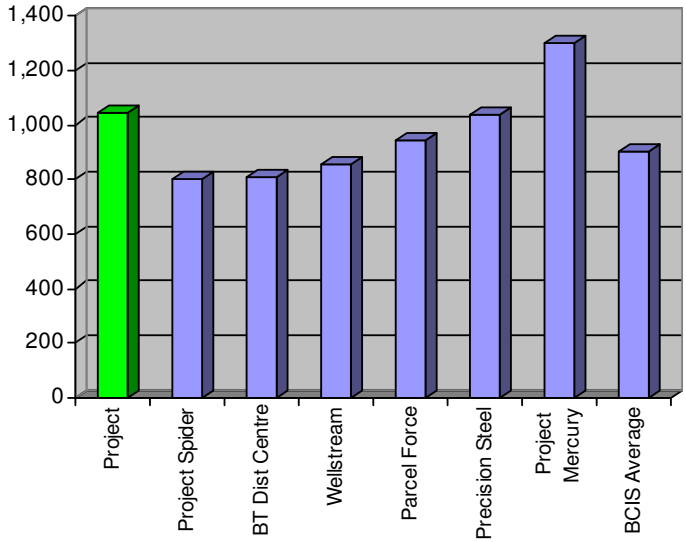
Benchmarking of Tunnel Drive

This benchmark reflects delivered tunnel works at T5 and reflects the commercial model implemented for this contract in that the CBI target was set as a Guaranteed Maximum Price, with the BAA Target reflecting a level where an incentive would be paid. The 'Baggage' column reflects the budget provision for this package of work.



Benchmarking of Western Interface Building

The building base costs have been assessed against warehouse type buildings as the nearest external comparison.



Explanation

The assessment has been made on a £/m2 basis, although the majority of warehouse type buildings are single storey with a lesser specification, which would explain the benchmark positioned at the higher end of the scale.

Header Information

BCT No.	3801
Op No.	22380
Project Name:	T3 Integrated Baggage System

Project Overview, Objectives and Status

Overview:	
Description:	Replacing the life expired baggage infrastructure in Terminal 3, the T3IB project is a major composite part of the Baggage Strategic Development plan for Heathrow airport and allows further passenger terminal and apron developments to subsequently take place, in due course. The Project will provide the Terminal 3 airline community with a T5 equivalent baggage facility.
Ref. Drawings / Images:	Refer to Appendix A
Objectives:	
BAA:	▪ Create a new single integrated direct and transfer baggage system product. ▪ Replace the life expired existing baggage system assets. ▪ Improve the baggage delivery punctuality and delivery reliability. (reduce system miss connects) ▪ Provide a system that has suitable growth capacity ▪ Contain the Operating Cost (OPEX) for the solution ▪ Produce a DfT compliant system
Airline:	As BAA

Project Benefits:
▪ Reduces the missed bag rate to be equivalent to T5 performance levels. ▪ Improves safety in the Terminal 3 baggage hall ▪ Provides adequate space within the system to enable growth ▪ Enables early bags to be stored and processed in advance of flight open times ▪ Reduction of T3 intra terminal minimum connect time. ▪ Enables consolidation of handler operations through integration of direct and transfer baggage make-up.

Status:	
Programme:	Project Gateway Stage:
Western Campus	Consultation

Airline Engagement:
Formal Gateway reviews have been held with the airline community at the key stages of the development process as follows: ▪ Option Decision 13th February 2009 ▪ Construction Decision 5th January 2010 ▪ Construction Decision Update 8th March 2011 In between the formal Gateway Reviews on going weekly/monthly consultation occurs at the following forums: The Baggage Stakeholder Strategy Board and The T3IB Working Group.

Project Delivery

Current Control Budget:			
Total Capital Budget *(Estimated At Completion)*		**£252,204,761**	
Refer to appendix B for cost information detail.			
Schedule:			
Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
24/05/2007	04/2010	12/2014	10/2013 until 12/2014
Assumptions:			
The following points cover the significant delivery assumptions related to this project:			
Key scope assumptions for this project are: ▪ The solution has 120% capacity provision, where 100% of the flight makeup is achieved on conventional lateral devices. The airline/handlers will operate the new processes. ▪ Bag to passenger ratio remain as existing as do the transfer: direct bags ratio and average flight load factors.			
Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.			

Operational Issues

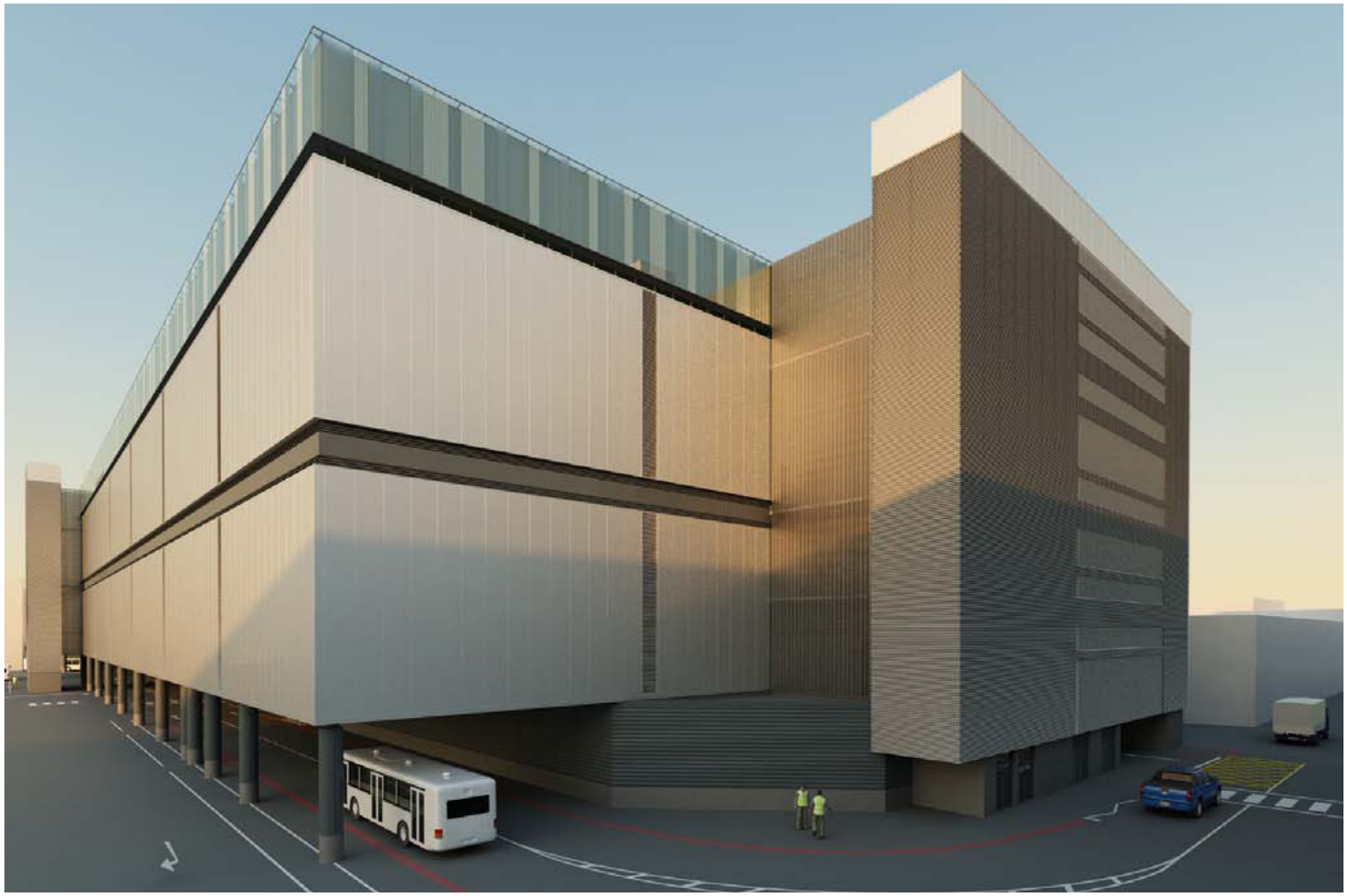
BAA Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
Existing baggage hall, LIMA 18, Building B139 T3IB facility	-£4,300,000	Capacity enabling baggage projects do not attract true revenue; only recover BAA operating cost/bag costs.
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
▪ For the first year T3IB is operating the Opex will be higher as the existing T3 baggage system will be operating concurrently, with the T3IB to enable the cut-ins. ▪ T3IB future OPEX relates to the facilities at T3 LIMA 18 and T3 departures transfer & O.O.G automation operation and the T3IB baggage factory.		

Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
Existing baggage hall, LIMA 18, building B139 T3IB facility	£3,700,000	This reduction in airline handler costs is anticipated through the integration of make-up for direct and transfer bags. Further cost reduction is expected through reduced numbers of mis-handled bags.
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
Assumes 20% use of automation		

Average Asset life:	
Average Asset Life:	See below
Commentary:	
Existing check-in desks will be connected to new T3IB function. These are due for Q6 project replacement: IT 7 years M&E 15 years Building 25 years	
Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.	
Impact on User Charges:	
Estimated Per Passenger Cost Impact:	39.7p
Commentary:	
None	
Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only (see Section 5.3 for further details)	

Non Construction Risk:
The following points cover any significant areas of risk for the Airline Community regarding this project.
▪ Whilst the project incorporates 100% conventional build, this is conventional build within a compressed build period of 90 weeks. The airlines accept that working practices need to change to accommodate this. The use of automation is optional; if and when this product requires new working practices to be accommodated. ▪ The early build function is a new product that requires airlines to use empty ULD in advance of flight open times. The airlines accept that ULD logistics remain their responsibility.

<u>Appendix A:</u> Overview:



Appendix B: Project Delivery: Cost Information:

Project Information

Project Name: T3 Integrated Baggage System
BCT No.: 3801

Cost Information

All information extracted from March 2011 month end

Base Costs:	£176,543,333	70%
On-Cost:	£ 45,396,857	18%
Inflation	£12,610,238	5%
Opportunity	-£5,044,095	-2%
Risk	£22,698,428	9%
Total	**£252,204,761**	100%

Cost Benchmark Comparisons:	
Project Name:	T3 Integrated Baggage System
Total Capital Budget *(Nominal Prices)*:	£252,204,761
Guidance Notes:	
T3IB project is in the process of re-validating its benchmark information as part of the planned Targets Confirmation in June 2011. Benchmark information will be provided at Targets Confirmation following the tender exercise with its complex build integrator.	
Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.	

Header Information

BCT No.	3841
Op No.	
Project Name:	Western Campus A380 Stands

Project Overview, Objectives and Status

Overview:	
Description:	Construction of additional A380 stands for the Western Campus in Q5. The total scope will need prioritising, in relation to timescales required. Likely scope for consideration under this project will be: T3: Additional 2no. pier-served JX stands T4: Additional 2no. remote JX stands Additional 3no. pier-served JX stands
Ref. Drawings / Images:	None
Objectives:	
BAA:	Additional Capacity
Airline:	As per BAA

Project Benefits:
Increase T3/T4 A380 stands capability in preparation for anticipated additional A380 aircrafts.

Status:	
Programme:	Project Gateway Stage:
Infrastructure	Pre Explore

Airline Engagement:
Limited airline engagement at this time.

Project Delivery

Current Control Budget:			
Total Capital Budget *(Estimated At Completion)*:	**£5,314,713**		
Refer to appendix B for cost information detail.			
Schedule:			
Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
05/2011	04/2012	03/2013	Unknown
Assumptions:			
The following points cover the significant delivery assumptions related to this project:			
This project will involve conversion of some existing Pier served Code E stands into Code F (JX) stands. Therefore, delivery will require certain stand closures to be approved.			
Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.			

Operational Issues

BAA Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
N/A	N/A	None

Assumptions:
The following points cover the significant operational assumptions related to this project:
▪ Stands will have to be decommissioned and there is likely to be a reduction in overall number of stands, following completion of works. ▪ The pier serve stands will have 3 jetties.

Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
N/A	N/A	None
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
This project will be delivered to meet additional A380 operational needs for T3 and T4.		

Average Asset life:	
Average Asset Life:	15 Years
Commentary:	
None	
Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.	
Impact on User Charges:	
Estimated Per Passenger Cost Impact:	0.8p
Commentary:	
None	
Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only (see Section 5.3 for further details)	

Non Construction Risk:
The following points cover any significant areas of risk for the Airline Community regarding this project.
There will be a need to align this programme with the operational and capacity needs of T3 and T4 in order to minimise disruption.

Appendix B: Project Delivery: Cost Information:

Project Information

Project Name: Western Campus A380 Stands
BCT No.: 3841

Cost Information

All information extracted from March 2011 month end

Base Costs:	£3,943,450	0	%
On-Cost:	£695,903	0	%
Opportunity	£0	0	%
Risk (R1 Allowance Only)	£675,360	0	%
Total	**£5,314,713**	100	%

Project Name:	Western Campus A380 Stands
Total Capital Budget *(Nominal Prices)*:	£5,314,713
Guidance Notes:	
Benchmarking has not yet been conducted at this point.	
Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.	

Header Information

BCT No.	9508
Op No.	N/A
Project Name:	Pier 5 A380 Stands

Project Overview, Objectives and Status

Overview:	
Description:	To enable best use of stands for a Code F aircraft ▪ Provision of one additional airbridge ▪ Enabling works, incl. foundations ▪ Wayfinding, MAID and FIDS ▪ Gate room alteration to accommodate airbridges and larger capacity ▪ New stand and apron infrastructure
Ref. Drawings / Images:	Refer to Appendix A
Objectives:	
BAA:	▪ Provide sufficient capacity for the growing A380 fleet ▪ Fulfil Heathrow's strategy to provide 3rd airbridges on all Code F stands
Airline:	▪ Enable expansion of the Code F fleet (A380s at this time) ▪ Enhance the A380 customer experience through quicker loading and unloading as well as product segregation

Project Benefits:
▪ Enable the increase in passenger numbers for each aircraft movement ▪ Improve take off punctuality – a Heathrow KPI ▪ Improve passenger experience

Status:	
Programme:	Project Gateway Stage:
Western Campus	Pre Construction Decision

Airline Engagement:
▪ Airlines have been involved in Options Development workshops ▪ Project presented for endorsement prior to each governance gateway

Project Delivery

Current Control Budget:	
Total Capital Budget *(Estimated At Completion)*:	**£5,617,614**
Refer to appendix B for cost information detail.	

Schedule:			
Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
10/2010	11/2011	12/2012	From 09/2012

Assumptions:
The following points cover the significant delivery assumptions related to this project:
▪ Taxiways and lanes can accommodate A380 ▪ Some aircraft will still be able to use the stand during installation

▪ Existing structure can accommodate change ▪ Gaterooms will need alteration ▪ Stand 340 will need to be reconfigured in order to continue accommodating Code E aircraft. ▪ Stands and airbridges can be closed for installation ▪ Out of hours working will occur
Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.

Operational Issues

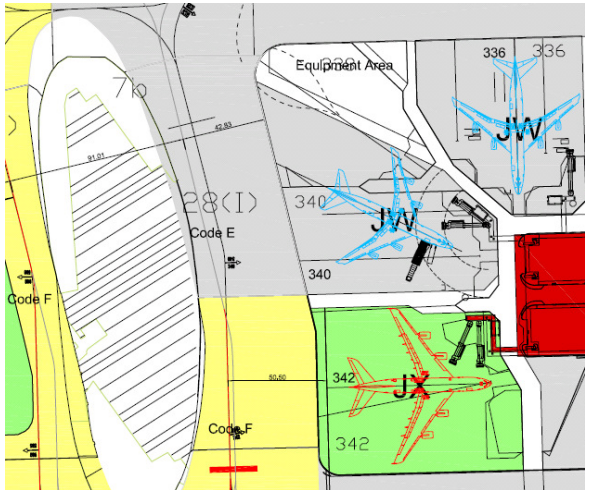
BAA Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
Maintenance	-£6,000	Maintenance of additional airbridge
Cleaning	-£1,000	Additional cleaning cost of larger gateroom
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
None		

Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
Income/ACM	Varies	This project will allow the T3 carriers to expand their A380 flight meaning that they can operate more fuel efficient aircraft and carry more pax per landing or take off.
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
Use of Code F aircraft will expand as scheduled		

Average Asset life:	
Average Asset Life:	15 Years
Commentary:	
None	
Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.	
Impact on User Charges:	
Estimated Per Passenger Cost Impact:	0.9p
Commentary:	
None	
Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only (see Section 5.3 for further details)	
Non Construction Risk:	
The following points cover any significant areas of risk for the Airline Community regarding this project:	
Code F stand is not fully utilised due to reduction in number of A380s being brought to Heathrow.	

Appendix A: Overview: Reference Drawing / Image:

1.

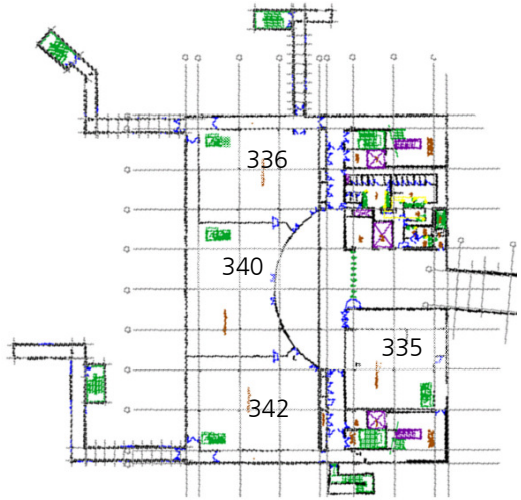


Feasibility Study drawing of Code F expansion on Pier 5. The project will only upgrade 342. 340 will have to be altered to accommodate the change.

2.

Existing aerial view of Pier 5 highlighting the stands to be altered and adjacent stands for reference.

3.



Appendix B: Project Delivery: Cost Information:

Project Information

Project Name: Pier 5 A380 Stands
BCT No.: 9508

Cost Information

All information extracted from March 2011 month end

Base Costs:	£3,223,000	58	%
On-Cost:	£810,000	14	%
Project Specifics	£611,000	11	%
Risk (R1 Allowance Only)	£941,000	17	%
Total	**£5,586,000**	100	%

Cost Benchmark Comparisons:	
Project Name:	Pier 5 A380 Stands
Total Capital Budget *(Nominal Prices)*:	£5,586,000
Guidance Notes:	
Benchmark analysis provided at Pier 5 A380 Stands Options Decision stage.	
Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.	

Header Information

BCT No.	9516
Op No.	24595
Project Name:	T4 Baggage Works for Step 9

Project Overview, Objectives and Status

Overview:	
Description:	This project aims to prolong the life of the Terminal 4 baggage system and enable the Airline Step 9 moves.
Ref. Drawings / Images:	Refer to Appendix A
Objectives:	
BAA:	▪ Replace Standard 1 baggage screening machines with Standard 2 to maintain regulatory compliance. ▪ To prolong the life of the Terminal 4 Baggage system by updating Information Technology systems so that they remain supportable and resilient. ▪ To provide additional capacity for the Step 9 airlines ▪ To provide T4 airlines A380 capacity (Summer 2012).
Airline:	As per BAA

Project Benefits:
▪ Regulatory Compliance ▪ ASQ and QSM baggage performance to be maintained

Status:	
Programme:	Project Gateway Stage:
Western Campus	Implement

Airline Engagement:
Formal Gateway reviews have been held with the airline community at the key stages of the development process as follows: ▪ Option Decision 5th February 2010 ▪ Construction Decision 13th May 2010 In between the formal Gateway Reviews on going weekly/monthly consultation occurs at the following forums: The Baggage Stakeholder Strategy Board, T4 Baggage Working Group, T4 Stakeholder Programme Board & T4 Weekly Handler Forum.

Project Delivery

Current Control Budget:			
Total Capital Budget *(Estimated At Completion)*:	**£60,574,320**		
Refer to appendix B for cost information detail.			
Schedule:			
Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
01/2010	02/2010	03/2013	11/2010

Assumptions:
The following points cover the significant delivery assumptions related to this project:
▪ Standard 1 Hold Baggage Screening replacement must be completed prior to Sept 2012 (BAA Olympic Embargo on works June 2012) ▪ The baggage systems operation will need to be maintained throughout and disruption minimised ▪ Passenger experience is to be maintained at an acceptable level
Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.

Operational Issues

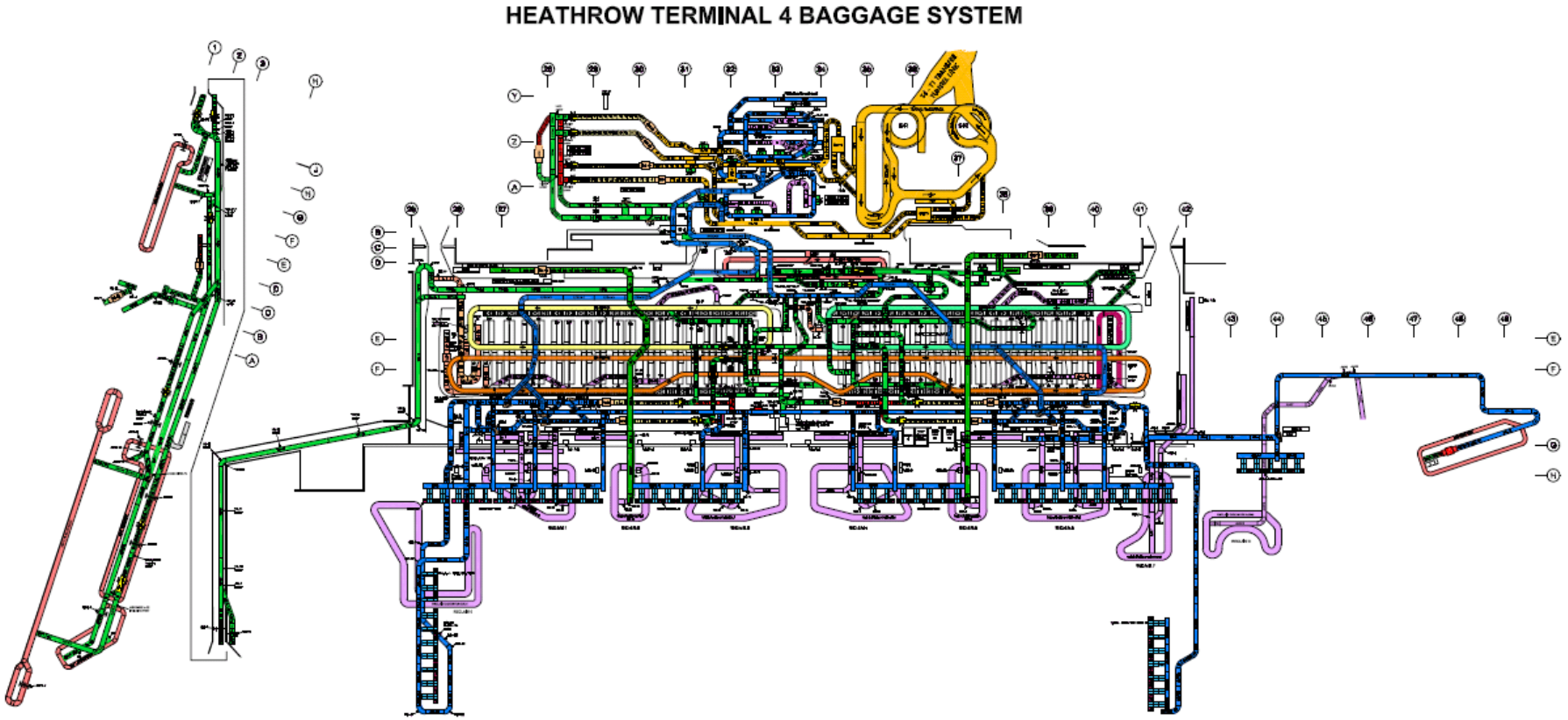
BAA Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
HBS Machines(opex)	-£135,000	HBS Standard 2 support
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
▪ The remaining prolongation works will not incur additional maintenance or support Opex ▪ There is no change in the facilities charges. ▪ L3 Resource will be utilised across the Heathrow Campus in T1, T3 and T4 once machines are installed. This resource has been included in 9351 T1 Baggage Prolongation Project Opex costs. ▪ The cost for this resource will not increase proportionately to the number of new machines because BAA is able to take advantage of economy of scale by stretching this resource across all Baggage areas at Heathrow.		

Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
HBS Conveyor Systems	-£40,000	New conveyor systems for Standard 2 HBS machines
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
There is no change in facilities charges.		

Average Asset life:	
Average Asset Life:	See below
Commentary:	
This project is comprised of different elements with differing asset lives as follows: IT 7 years M&E 15 years	
Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.	
Impact on User Charges:	
Estimated Per Passenger Cost Impact:	11.9p
Commentary:	
None	
Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only (see Section 5.3 for further details)	

Non Construction Risk
The following points cover any significant areas of risk for the Airline Community regarding this project.
▪ Embargo periods resulting from the London 2012 Olympics shorten the available delivery period. ▪ Further changes in legislation ▪ T4 Airline growth and capacity pressure

Appendix A: Overview:



Appendix B: Project Delivery: Cost Information:

Project Information

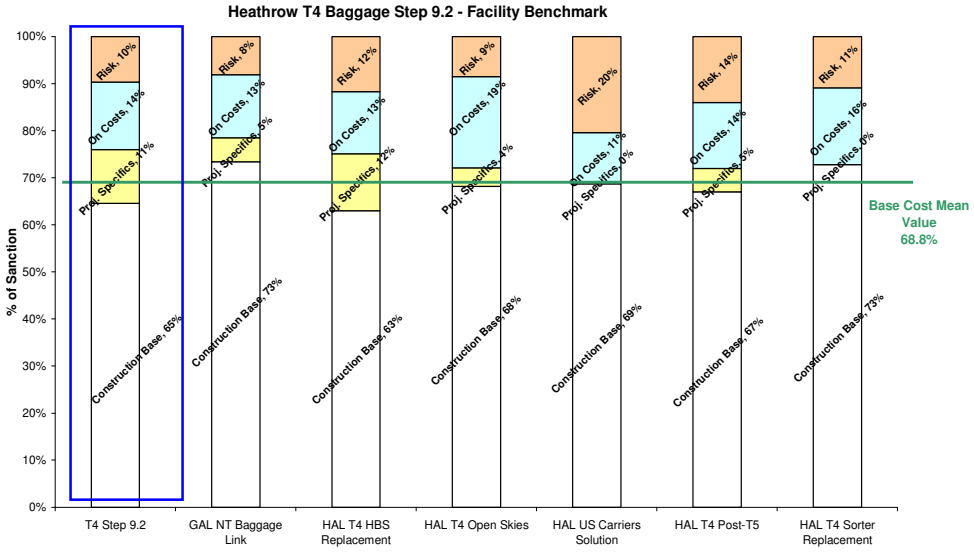
Project Name: T4 Baggage Works for Step 9
BCT No.: 9516

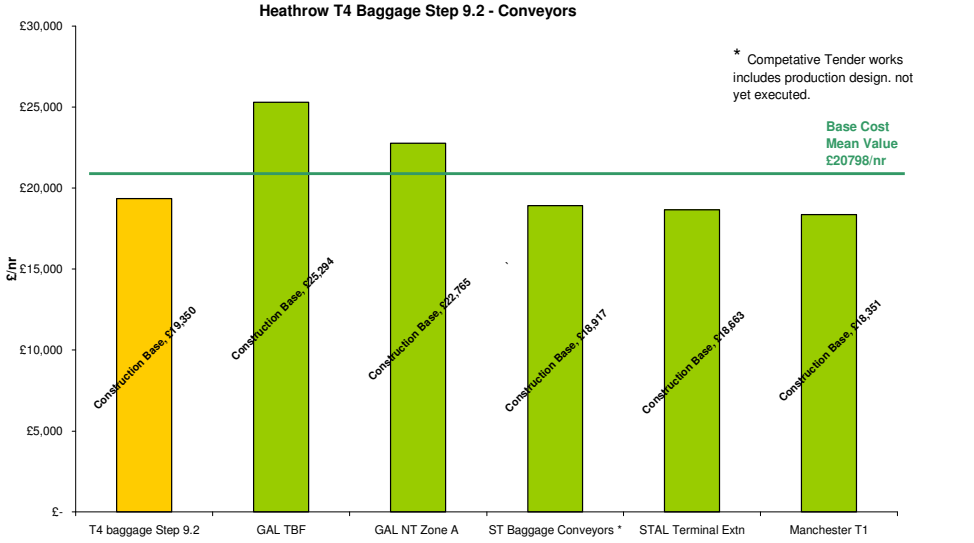
Cost Information

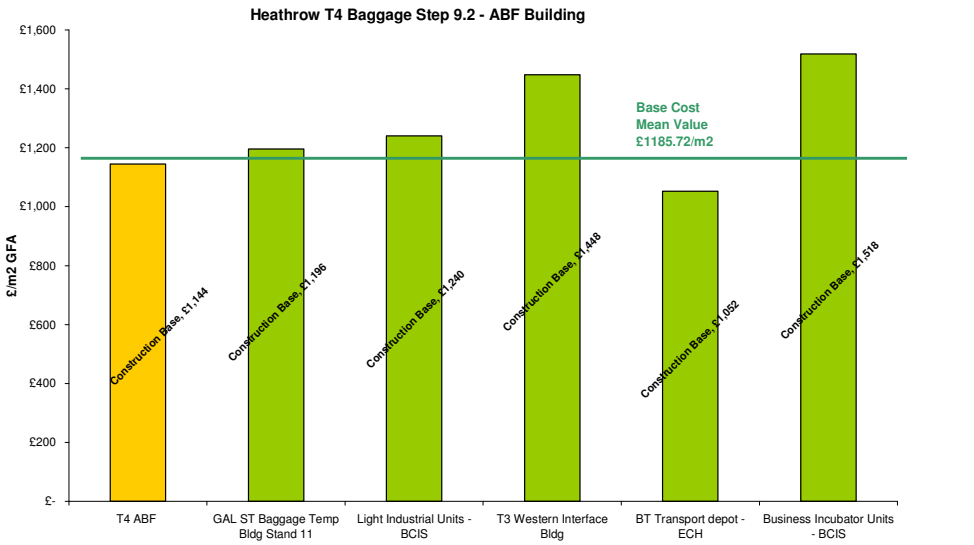
All information extracted from March 2011 month end

Base Costs:	£47,813,032	79	%
On-Cost:	£9,105,538	15	%
Opportunity	-£319,250	-1	%
Risk	£3,975,000	7	%
Total	**£60,574,320**	100	%

Cost Benchmark Comparisons:	
Project Name:	T4 Baggage Works for Step 9
Total Capital Budget *(Nominal Prices)*:	£60,574,320
Guidance Notes:	
Benchmark data provided at Construction Decision April 2010. Approximately 78% of the total project costs have been benchmarked against a selection of BAA Heathrow, non-BAA Airports and, where appropriate, non-airport data.	
Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.	


Heathrow T4 Baggage Step 9.2 - Facility Benchmark
% of Sanction
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Risk, 10%
On Costs, 14%
Proj. Specifics, 11%
Construction Base, 65%
Risk, 8%
On Costs, 13%
Proj. Specifics, 5%
Construction Base, 73%
Risk, 12%
On Costs, 13%
Proj. Specifics, 12%
Construction Base, 63%
Risk, 9%
On Costs, 19%
Proj. Specifics, 4%
Construction Base, 68%
Risk, 20%
On Costs, 11%
Proj. Specifics, 0%
Construction Base, 69%
Risk, 14%
On Costs, 14%
Proj. Specifics, 5%
Construction Base, 67%
Risk, 11%
On Costs, 16%
Proj. Specifics, 0%
Construction Base, 73%
Base Cost Mean Value 68.8%
T4 Step 9.2
GAL NT Baggage Link
HAL T4 HBS Replacement
HAL T4 Open Skies
HAL US Carriers Solution
HAL T4 Post-T5
HAL T4 Sorter Replacement


Heathrow T4 Baggage Step 9.2 - Conveyors
£/nr
£30,000
£25,000
£20,000
£15,000
£10,000
£5,000
£-
* Competative Tender works includes production design. not yet executed.
Base Cost Mean Value £20798/nr
Construction Base, £19,350
Construction Base, £25,294
Construction Base, £22,765
Construction Base, £18,917
Construction Base, £18,663
Construction Base, £18,351
T4 baggage Step 9.2
GAL TBF
GAL NT Zone A
ST Baggage Conveyors *
STAL Terminal Extn
Manchester T1


Heathrow T4 Baggage Step 9.2 - ABF Building
£/m2 GFA
£1,600
£1,400
£1,200
£1,000
£800
£600
£400
£200
£-
Base Cost Mean Value £1185.72/m2
Construction Base, £1,144
Construction Base, £1,196
Construction Base, £1,240
Construction Base, £1,448
Construction Base, £1,052
Construction Base, £1,518
T4 ABF
GAL ST Baggage Temp Bldg Stand 11
Light Industrial Units - BCIS
T3 Western Interface Bldg
BT Transport depot - ECH
Business Incubator Units - BCIS

Header Information

BCT No.	9640
Op No.	25092
Project Name:	MSCP4 Relife works

Project Overview, Objectives and Status

Overview:	
Description:	Phase 1 of this project is due for completion in April 2011. The scope of Phase 1 is as follows: Extensive refurbishment works to both access ramps, the main car park areas on levels 1, 2 and 3 and all three stair cores. The works involve the following**:** ▪ Structural Concrete repairs to the soffits and to the flooring ▪ Cathode protection to the access ramps and concrete repairs to them ▪ Cleaning and Re-lighting the entire car park ▪ Repairs to drainage ▪ Barrier replacement and adjustments ▪ Re location of payment machines ▪ Formation of 8 additional parking bays ▪ Repairs to external corbelling ▪ Re surfacing the core staircases ▪ Replacing doors and frames ▪ White lining Phase 2 of this project is due for completion in August 2011 and comprises of the construction of a surface-only car park on the Swindon Road site at Terminal 4. The car park will be for the sole use of BAA and airline staff, and will accommodate approximately 140 spaces.
Ref. Drawings / Images:	Refer to Appendix A
Objectives:	
BAA:	▪ Significantly improve the passenger and user experience of Terminal 4 ▪ Enable our airline partners to successfully grow their businesses ▪ Comply with statutory H&S requirements ▪ Create additional capacity within the current MSCP4 for passengers The main benefit of this project is to create a "pressure valve" on the overall long-term capacity issue. It enables premium spaces to be released for passenger use, through the decant of staff into the Swindon Road facility.
Airline:	▪ Provides for future growth at Heathrow ▪ Comply with statutory H&S requirements
Status:	

Programme:	Project Gateway Stage:
Western Campus Programme	Delivery (Construction Decision March 2011)

Airline Engagement:
A considerable amount of stakeholder consultation events, reviews and presentations have already taken place. ▪ Brief Decision – Infrastructure Programme Board 12 Jul 2010 ▪ Terminal 4 Stakeholder Programme Board Update – November 2010 ▪ Option Decision – Infrastructure Programme Board 13 Dec 2010 ▪ Option Decision – Western Campus Programme Board 16 Dec 2010 ▪ Terminal 4 Stakeholder Programme Board Update – January 2011 ▪ Explanation of proposal and rationale for interim solution – 2 sessions held with stakeholders in January 2011 ▪ Construction Decision – Western Campus Programme Board – 16 March 2011

Project Delivery

Current Control Budget:			
Total Capital Budget *(Estimated At Completion)*:			**£6,662,519**
Refer to appendix B for cost information detail.			
Schedule:			
Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
05/2010	09/2010	07/2011	07/2011
Assumptions:			
The following points cover the significant delivery assumptions related to this project: ▪ Impact on operation, passenger experience, retail disruption to be minimised and phased delivery programme ▪ Works to be suspended at peak times – weekends, holidays ▪ Continual liaison with car park operators to ensure capacity is not compromised during works			
Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.			

Operational Issues

BAA Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
N/A	N/A	None
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
None		

Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
N/A	N/A	No impact
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
▪ Complex delivery phases ▪ Delivery in a live terminal ▪ Minimise negative impact on passenger experience during delivery		

Average Asset life:	
Average Asset Life:	Interim Car Park – 5 years
Commentary:	
None	
Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.	
Impact on User Charges:	
Estimated Per Passenger Cost Impact:	2.0p
Commentary:	
None	
Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only (see Section 5.3 for further details)	

Non Construction Risk:
The following points cover any significant areas of risk for the Airline Community regarding this project:
▪ Further changes to the currently agreed Airline Move sequence ▪ The introduction of new entrants to Terminal 4, affecting any modelling results forming the basis for design

Appendix A: Overview: Reference Drawing / Image:

Appendix B: Project Delivery: Cost Information:

Project Information

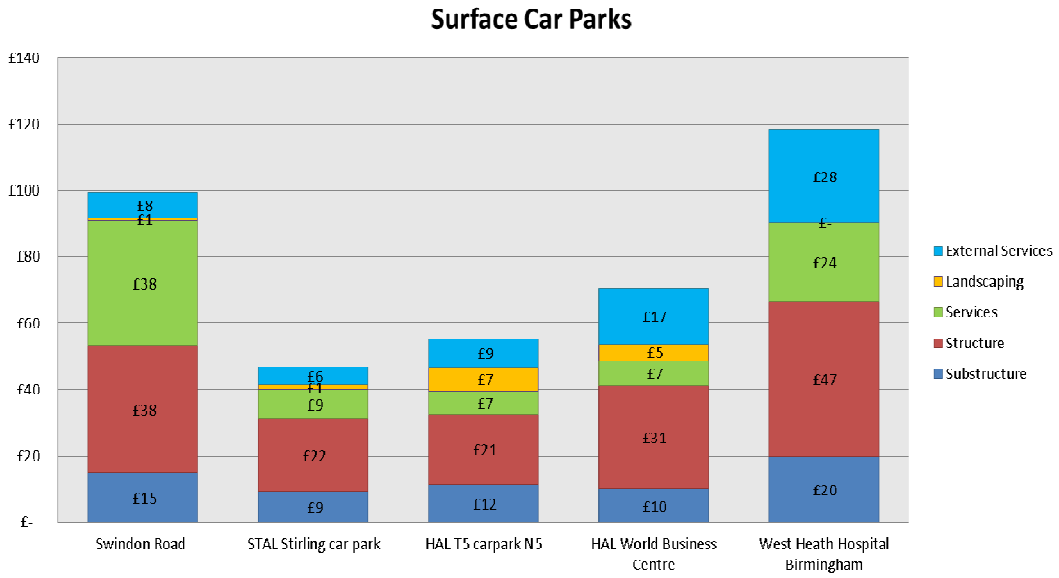
Project Name: MSCP4
BCT No.: 9640

Cost Information

All information extracted from March 2011 month end

Base Costs:	£3,950,874	59.3	%
On-Cost:	£739,540	11.1	%
Project Specifics:	£899,440	13.5	%
Risk:	£1,072,665	16.1	%
Total	**£6,662,519**	100	%

Cost Benchmark Comparisons:	
Project Name:	MSCP4
Total Capital Budget *(Nominal Prices)*:	£6,662,519
Guidance Notes:	
Elemental benchmarking analysis has been completed for the project construction base costs in terms of cost per square metre (£/m²). It was considered appropriate to analyse the project in terms of £/m² rather than £/per space given design uncertainty. The cost plan is based on a site area of 4000m² which is considered the maximum appropriate footprint for a surface only car park within constraints of the site topography.	
Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.	



Header Information

BCT No.	9644
Op No.	25267
Project Name:	T4 Departures Phase 2

Project Overview, Objectives and Status

Overview:	
Description:	▪ Removal or relocation of existing travelators ▪ New and enhanced lighting solutions ▪ Increase natural daylight penetration ▪ New ceiling solution ▪ Consistent and new bulkheads/details to support retail concessionaire frontages / sightlines ▪ New flooring ▪ New gate area desks ▪ Review of way-finding and media sites ▪ Review of passenger flows, processing & queuing spaces ▪ Review of seating provision (location, number, style) ▪ Removal or enhancement of bulkhead to allow a smoother transition between IDL and Gate areas.
Ref. Drawings / Images:	Refer to Appendix A
Objectives:	
BAA:	▪ Significantly improve the passenger and user experience of Terminal 4 ▪ Enable our airline partners to successfully grow their businesses ▪ Maximise value for space and money
Airline:	▪ Supports a new generation of large aircraft ▪ Refreshes the airport environment, so improving passenger/tenant experience ▪ Provides for future growth at Heathrow

Project Benefits:

The refurbishment of the Departures Lounge must aim to ultimately improve the level of net retail income per passenger. This will be achieved through improvements to retail access, circulation space, and overall ambience of the IDL. In turn, these refurbishment works will aim to improve the Departures QSM ratings, in relation to the criteria set out below.

Criteria	Current QSM score (March 2010)	Target score
layout/feel of the seating area	3.73	>4.0
general passenger perception of the IDL	3.87	>4.0

Status:	
Programme:	Project Gateway Stage:
Western Campus	Options Decision March 2011

Airline Engagement:

A considerable amount of stakeholder consultation, reviews and presentations have already taken place. An initial, high-level brief for the scope of works was written in February 2010, in consultation with both internal and external stakeholders.

Project Delivery

Current Control Budget:			
Total Capital Budget *(Estimated At Completion)*:		**£21,422,790**	
Refer to appendix B for cost information detail.			
Schedule:			
Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
09/2010	03/2012	03/2013	04/2013
Assumptions:			
The following points cover the significant delivery assumptions related to this project:			
▪ Impact on operation, passenger experience and retail disruption to be minimised. ▪ Mostly night works ▪ Phased delivery programme required – mostly night works because of live terminal ▪ Executive Board sign off required (one month lag after Construction Decision) ▪ Design package requires tendering to demonstrate value ▪ Gateway approval granted in line with programme dates above			
Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.			

Operational Issues

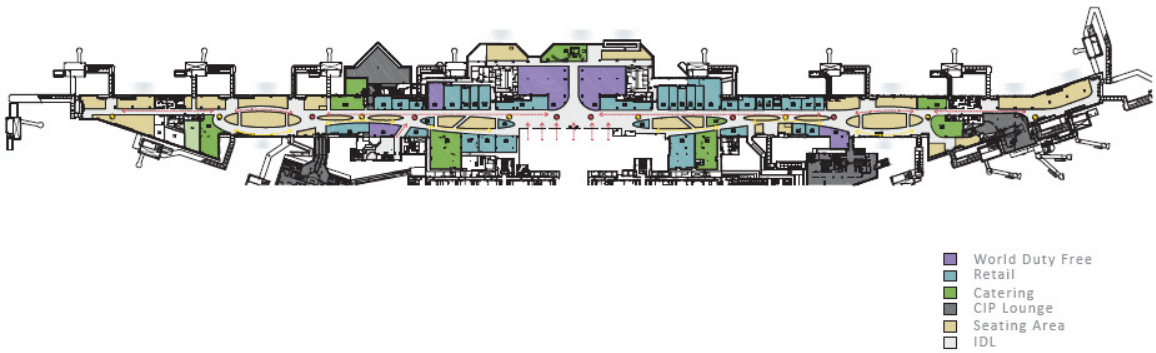
BAA Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
Catering	£310,000	New catering unit in South-west of concourse
General retail	£620,000	Improvement of ambience will incur spend per pax by 3% (11p)
Cleaning	N/A	None
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
▪ Complex delivery phases ▪ Delivery in a live terminal ▪ Impact on passenger experience and retail units to be reduced during delivery ▪ Nightworks		

Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
N/A	N/A	None
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
None		

Average Asset life:	
Average Asset Life:	20 years
Commentary:	
None	
Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.	
Impact on User Charges:	
Estimated Per Passenger Cost Impact:	1.5p
Commentary:	
Cannot be determined at this stage.	
Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only (see Section 5.3 for further details)	

Non Construction Risk:
The following points cover any significant areas of risk for the Airline Community regarding this project:
▪ Impact on retail income, as a result of the project delivery ▪ Further changes to the currently agreed Airline Move sequence ▪ The introduction of new entrants to Terminal 4, affecting any modelling results forming the basis for design ▪ Penalties associated with the failure of IDL-related QSM scores

Appendix A: Overview: Reference Drawing / Image:



Appendix B: Project Delivery: Cost Information:

Project Information

Project Name: T4 Departures Phase 2
BCT No.: 9644

Cost Information
All information extracted from March 2011 month end

Base Costs + specifics	£14,595,790	68.1	%
On-Cost:	£3,206,000	15.0	%
Risk	£3,203,000	15.0	%
Inflation	£420,000	1.9	%
Total	**£21,424,790**	100	%

Cost Benchmark Comparisons:	
Project Name:	T4 Departures Phase 2
Total Capital Budget *(Nominal Prices)*:	£21,424,790
Guidance Notes:	
None available	

Header Information

BCT No.	9844
Op No.	25180
Project Name:	T4 Air Passenger Boarding Bridge (APBB) replacement project

Project Overview, Objectives and Status

Overview:	
Description:	The primary business need for this project is to replace life expired APBBs which are becoming increasingly unreliable and costly to maintain. A secondary objective is to install a second APBB on two stands in line with an agreement with the Airline community. In addition, safeguarding for the provision of a second on all Code E stands is in scope This project will deliver the objective of ensuring the new APBBs meet the needs of the needs of future aircraft types being introduced into T4.
Ref. Drawings / Images:	Refer to Appendix A
Objectives:	
BAA:	▪ Asset Replacement ▪ Improved passenger experience
Airline:	▪ Passenger experience. ▪ Flexibility for future aircraft types ▪ Second APBB on two stands

Project Benefits:
Replacement of life-expired assets, reducing increasing, and maintenance costs. Improved customer service through better APBB availability

Status:	
Programme:	Project Gateway Stage:
Western Campus	Options Development

Airline Engagement:
Full stakeholder engagement on-going. Approval of Options decision recommendation at T4 Stakeholder Programme Board on 6 April 2011

Project Delivery

Current Control Budget:	
Total Capital Budget *(Estimated At Completion)*:	**£5,950,000**
Refer to appendix B for cost information detail.	

Schedule:			
Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
07/2008	09/2012	08/2013	10/2013

Assumptions:
The following points cover the significant delivery assumptions related to this project:
▪ Minimise disruption within a ,live operating terminal ▪ Only 1 gate will be closed at a time

▪ The APBB replacement and departures refurbishment projects will align where possible
Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.

Operational Issues

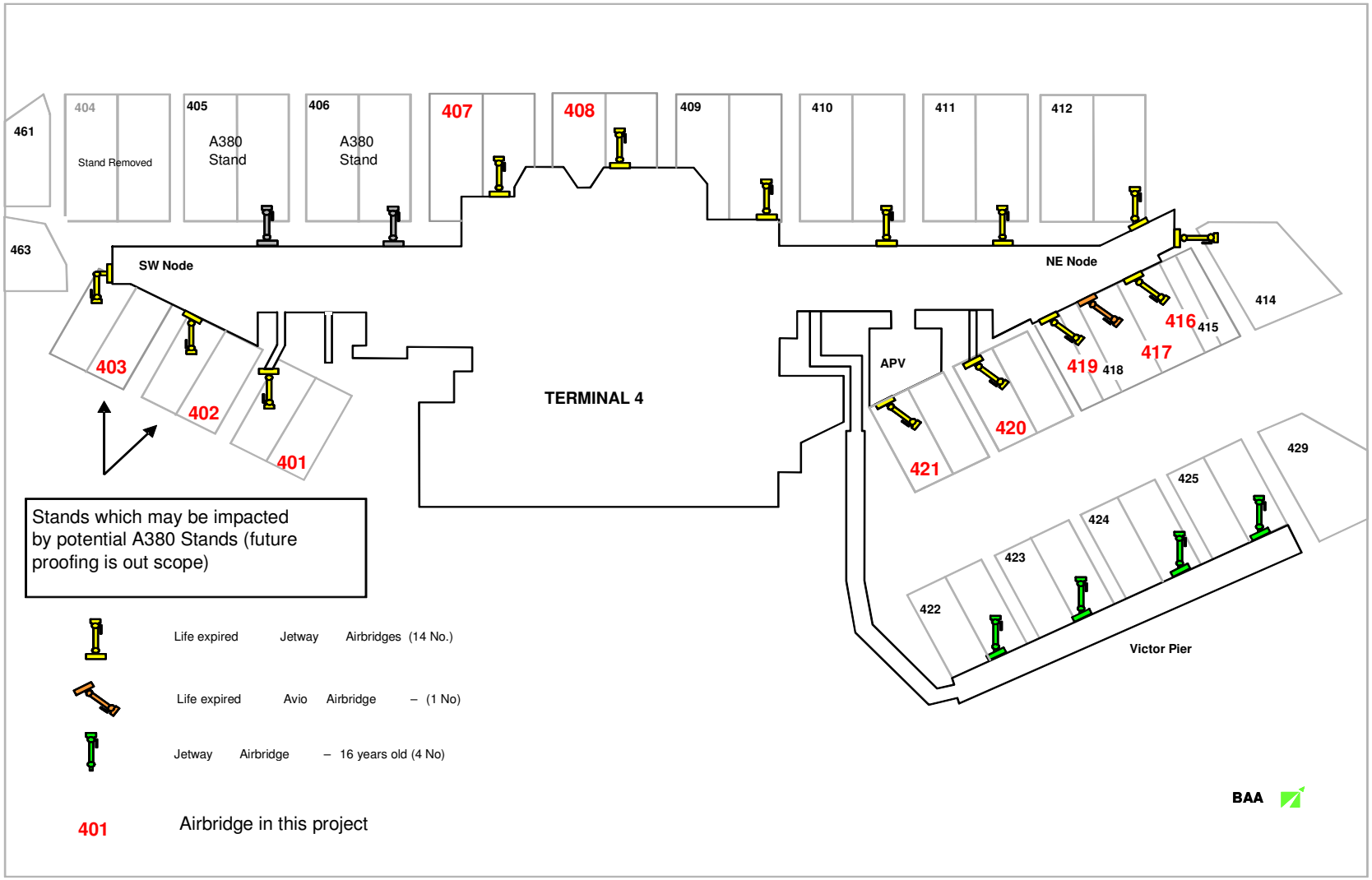
BAA Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
None	£77,000	Reduced maintenance costs.
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
Planning will ensure where possible, coordination with the IDL refurbishment project to minimise stand outages.		

Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
None	Unknown	No significant OPEX and revenue impact expected.
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
None		

Average Asset life:	
Average Asset Life:	20 Years
Commentary:	
None - the APBBs being replaced are currently 25 years old	
Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.	
Impact on User Charges:	
Estimated Per Passenger Cost Impact:	0.8p
Commentary:	
None	
Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only (see Section 5.3 for further details)	

Non Construction Risk:
The following points cover any significant areas of risk for the Airline Community regarding this project:
▪ Changing Fleet mix - The Airline mix and aircraft in T4 may be subject to change as a result of the need to re-balance demand and capacity. ▪ For this project, we have taken and applied the latest data from Airport Masterplanning. ▪ Loss of available stands - this project will impact on stand availability and the passenger experience. It may be possible to align this project with the IDL refurbishment and minimise gate outages

Appendix A: Overview: Reference Drawing / Image:



Appendix B: Project Delivery: Cost Information:

Project Information

Project Name: T4 Air Passenger Boarding Bridge (APBB) replacement project
BCT No.: 9844

Cost Information
All information extracted from March 2011 month end

Base Costs:	£3,843,000	63%
On-Cost:	£856,000	15%
Project specifics	£406,000	7%
Risk (R1 Allowance Only)	£845,000	15%
Total	**£5,950,000**	100%

Cost Benchmark Comparisons:	
Project Name:	T4 Air Passenger Boarding Bridge (APBB) replacement project
Total Capital Budget *(Nominal Prices)*:	£5,950,000
Guidance Notes:	
The rate of £300,000 for the T4 Airbridge Replacement project is based on communication with BAA supply chain, as well as benchmark data across other Heathrow projects.	
Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.	

Header Information

BCT No.	10094
Op No.	25398
Project Name:	T3 HBS Replacement

Project Overview, Objectives and Status

Overview:	
Description:	The UK Department for Transport (DfT) and European Union legislation mandates that all Hold Baggage Screening (HBS) equipment in operation at European member state airports shall be of a Standard 2 type by the 1st September 2012. The rescheduling of the T3IB programme, combined with the current BAA Security view has created the need for this T3 HBS replacement project.
Ref. Drawings / Images:	Refer to Appendix A
Objectives:	
BAA:	Replace Standard 1 baggage screening machines with Standard 2 to maintain regulatory compliance.
Airline:	As per BAA

Project Benefits:
Regulatory Compliance

Status:	
Programme:	Project Gateway Stage:
Western Campus	Options Decision

Airline Engagement:
Formal Gateway reviews have been held with the airline community at the key stages of the development process as follows: Option Decision: 12th October 2010 In between the formal Gateway Reviews on going weekly/monthly consultation occurs at the following forums: The Baggage Stakeholder Strategy Board and The HBS Working Group.

Project Delivery

Current Control Budget:	
Total Capital Budget *(Estimated At Completion)*:	**£18,208,797**
Refer to appendix B for cost information detail.	

Schedule:			
Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
08/2010	06/2011	09/2012	Ongoing

Assumptions:
The following points cover the significant delivery assumptions related to this project:
▪ Standard 1 Hold Baggage Screening replacement must be completed prior to Sept 2012 (BAA Olympic Embargo on works June 2012)

- The baggage systems operation will need to be maintained throughout and disruption minimised
- Passenger experience is to be maintained at an acceptable level

Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.

Operational Issues

BAA Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
HBS Machines (opex)	-£272,213	HBS Standard 2 support

Assumptions:

The following points cover the significant operational assumptions related to this project:

- There is no change in the facilities charges.
- L3 Resource will be utilised across the Heathrow Campus in T1, T3 and T4 once machines are installed. This resource has been included in 9351 T1 Baggage Prolongation Project Opex costs.
- The cost for this resource will not increase proportionately to the number of new machines because BAA is able to take advantage of economy of scale by stretching this resource across all Baggage areas at Heathrow.

Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
HBS Conveyor Systems	-£60,000	New conveyor systems for Standard 2 HBS machines

Assumptions:

The following points cover the significant operational assumptions related to this project:

There is no change in facilities charges.

Average Asset life:	
Average Asset Life:	See below

Commentary:

This project is comprised of different elements with differing asset lives as follows:

IT	7 years
M&E	15 years

Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.

Impact on User Charges:	
Estimated Per Passenger Cost Impact:	3.8p

Commentary:

None

Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only (see Section 5.3 for further details)

Non Construction Risk
The following points cover any significant areas of risk for the Airline Community regarding this project.
▪ The presence of asbestos within the existing baggage hall could cause operational constraints. ▪ Embargo periods resulting from the London 2012 Olympics shorten the available delivery period. ▪ Operational disruption due to the replacement of electro mechanical and structural hardware. ▪ Restricted contingency flow capability whilst replacement work is being carried out. ▪ Obsolescent SCADA and Controls systems preventing full integration of machines.

<u>Appendix A:</u> Standard 2 HBS Machine

L3 Comms MVT-HR

Appendix B: Project Delivery: Cost Information:

Project Information

Project Name: T3 HBS Replacement
BCT No.: 10094

Cost Information

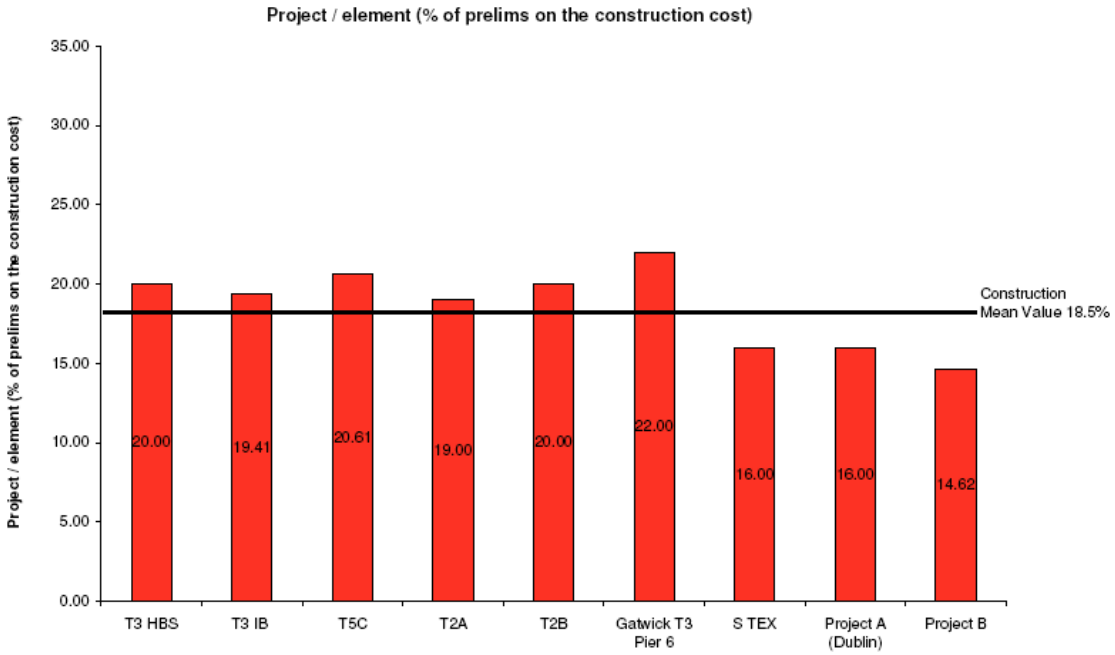
All information extracted from March 2011 month end

Base Costs:	£11,869,797	65	%
On-Cost:	£3,313,000	18	%
Inflation	£357,000	2	%
Opportunity	-£181,000	-1	%
Risk	£2,850,000	16	%
Total	**£18,208,797**	100	%

Commentary:
The On Cost % is calculated as a % of the total cost.

Cost Benchmark Comparisons:	
Project Name:	T3 HBS Replacement
Total Capital Budget *(Nominal Prices)*:	£18,208,797
Guidance Notes:	
The fragmented scope of the project does not easily lend itself to extensive external benchmarking as a means to demonstrate value for money. Approximately 86% of the costs either have been or will be tendered either through the existing framework agreements or through planned competitive tenders for elements of the works. The project has carried out an initial benchmarking exercise. Approximately 39% of the total project costs have been benchmarked against a selection of BAA Heathrow, non BAA airports and, where appropriate, non-airport data. Graphs comparing Preliminaries, OH&P, Risk & Opportunities and Project Non Direct Costs with various other projects are also given here. Benchmark data is taken from the Interim Funding Paper March 2011.	
Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.	

Benchmarking of % of prelims on the construction cost



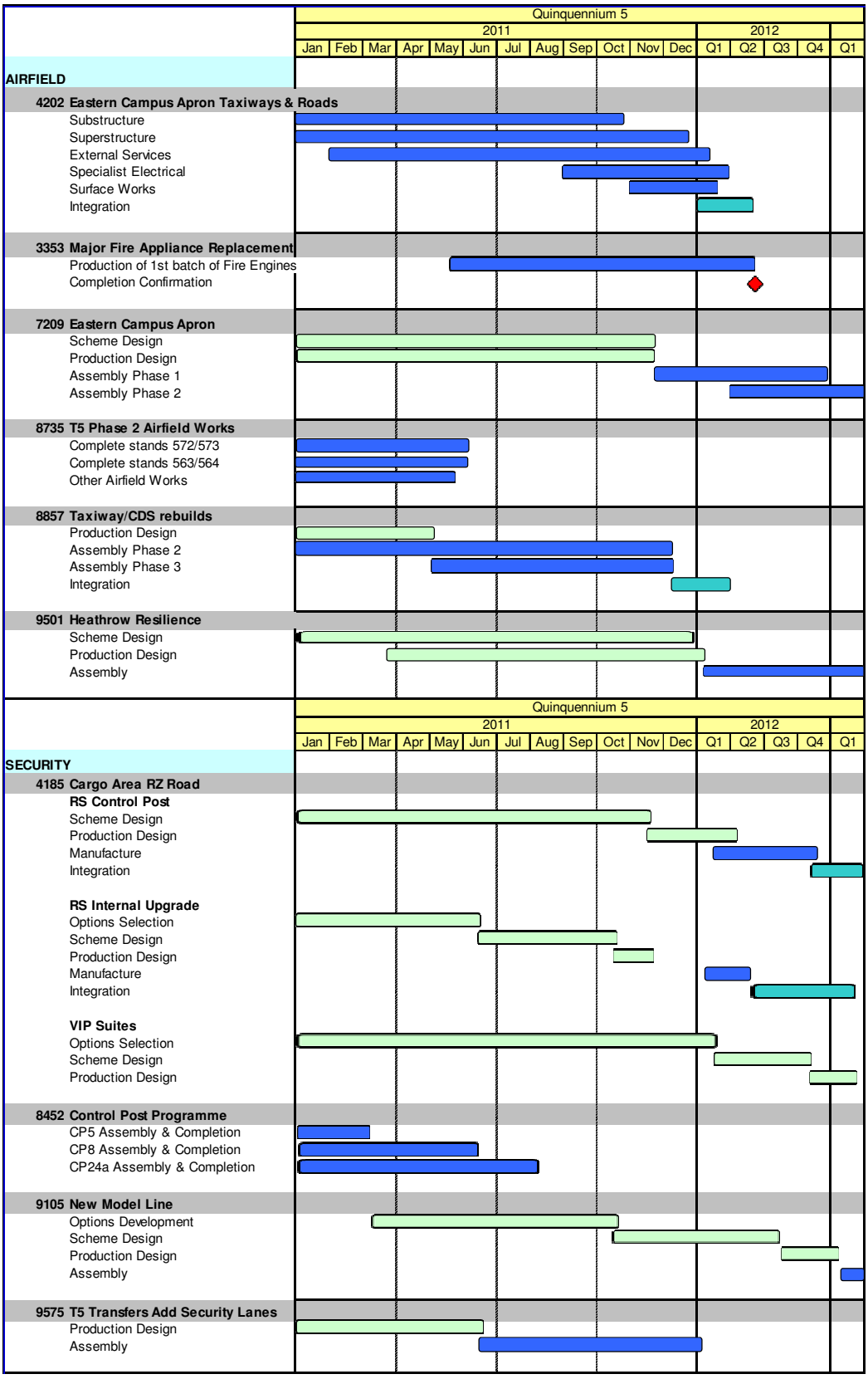
Appendix D: PDS – Infrastructure

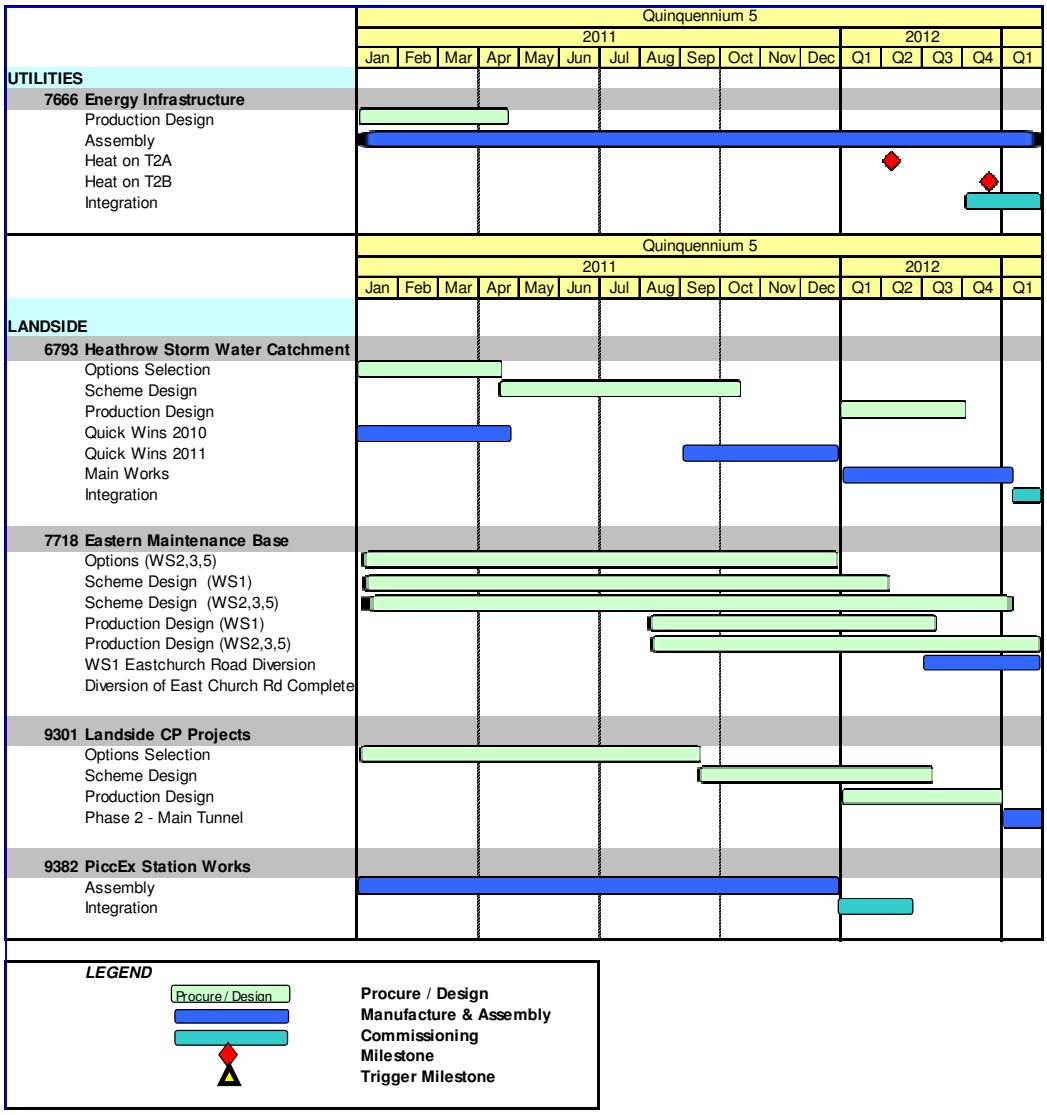
Project Definition Sheets

BCT Number and Project Name as shown in Schedules

3353	:	Major Fire Appliance Replacement
4185	:	VIP Strategy
4202	:	EA Airside Rd and Taxilane UnderPass
6527	:	HAL Minor Projects
6793	:	Heathrow Storm Water Catchment
7209	:	Eastern Campus Apron
7666	:	Energy Infrastructure
7718	:	Eastern Maintenance Base Redevelopment
8452	:	Control Post Programme
8735	:	T5 Phase 2 Airfield Works
8818	:	Baggage Product Improvement
8857	:	Taxiway and CDS Rebuilds
9105	:	New Model Line
9213	:	Security Projects
9301	:	Infrastructure Safety Critical Project
9382	:	PiccEx Station Works
9501	:	Heathrow Resilience
9575	:	T5 Transfers Add Security Lanes
9843	:	Low Cost Security Projects

Q5 Infrastructure Schedule




Quinquennium 5
2011
2012
Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Q1 Q2 Q3 Q4 Q1
UTILITIES
7666 Energy Infrastructure
Production Design
Assembly
Heat on T2A
Heat on T2B
Integration
Quinquennium 5
2011
2012
Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Q1 Q2 Q3 Q4 Q1
LANDSIDE
6793 Heathrow Storm Water Catchment
Options Selection
Scheme Design
Production Design
Quick Wins 2010
Quick Wins 2011
Main Works
Integration
7718 Eastern Maintenance Base
Options (WS2,3,5)
Scheme Design (WS1)
Scheme Design (WS2,3,5)
Production Design (WS1)
Production Design (WS2,3,5)
WS1 Eastchurch Road Diversion
Diversion of East Church Rd Complete
9301 Landside CP Projects
Options Selection
Scheme Design
Production Design
Phase 2 - Main Tunnel
9382 PiccEx Station Works
Assembly
Integration
LEGEND
Procure / Design
Procure / Design
Manufacture & Assembly
Commissioning
Milestone
Trigger Milestone

Header Information

BCT No.	3353
Op No.	24092
Project Name:	Major Fire Appliance Replacement

Project Overview, Objectives and Status

Overview:	
Description:	Replacement of HAL major foam tenders.
Ref. Drawings / Images:	None
Objectives:	
BAA:	To maintain safety and statutory fire coverage compliance.
Airline:	As per BAA

Project Benefits:
This project will provide Heathrow with the vehicles required to maintain the airports mandated fire cover. The new vehicles will ensure a reliable up to date fleet, using the latest technology for now and the foreseeable future.

Status:	
Programme:	Project Gateway Stage:
Infrastructure	Construction Decision

Airline Engagement:
This project has been presented to the Infrastructure Stakeholder Board on 10th March 2011 and the option approved.

Project Delivery

Current Control Budget:			
Total Capital Budget *(Estimated At Completion)*.		**£3,781,781**	
Refer to appendix B for cost information detail.			
Schedule:			
Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
05/2008	N/A	N/A	01 / 2012
Assumptions:			
The following points cover the significant delivery assumptions related to this project:			
▪ This project will purchase 8 major foam tenders for Heathrow Airport. 5 will be standard vehicles and 3 will have high reach extended turret system (HRET). ▪ Only 3 standard vehicles and 1 HRET vehicle will be purchased in Q5, the remainder will be produced after Q5			
Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.			

Operational Issues

BAA Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
Unknown	N/A	The new fleet with have a reduced impact on maintenance costs.

Assumptions:
The following points cover the significant operational assumptions related to this project:
These foam tenders will maintain the mandatory fire cover. They will maintain a rescue and fire fighting service (RFFS) to category 10, which is required for A380 and B787 operations.

Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
		None
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
None		

Average Asset life:	
Average Asset Life:	10 Years
Commentary:	
None	
Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.	
Impact on User Charges:	
Estimated Per Passenger Cost Impact:	1.2p
Commentary:	
None	
Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only (see Section 5.3 for further details)	

Non Construction Risk:
The following points cover any significant areas of risk for the Airline Community regarding this project:
None

Appendix B: Project Delivery: Cost Information:

Project Information

Project Name: Major Fire Appliance Replacement
BCT No.: 3353

Cost Information

All information extracted from March 2011 month end

Base Costs:	£3,696,781	97	%
On-Cost:	£85,000	3	%
Opportunity	£0	0	%
Risk (R1 Allowance Only)	£0	0	%
Total	**£3,781,781**	100	%

Cost Benchmark Comparisons:	
Project Name:	Major Fire Appliance Replacement
Total Capital Budget *(Nominal Prices)*:	£3,781,781
Guidance Notes:	
Formal benchmarking data is not available. Value gained through procurement process as this project was competitively tendered through OJEU.	
Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.	

Header Information

BCT No.	4185
Op No.	24231
Project Name:	VIP Strategy (Formerly Cargo Road RZ)

Project Overview, Objectives and Status

Overview:	
Description:	This project was established to understand the VIP Strategy for Heathrow as there were a number of projects being carried out which impacted the current VIP suites. In addition to this there were serious DfT security deficiencies with the VIP process which needed to be addressed. Therefore this project will determine the overall strategy for VIP's, deliver immediate solutions to resolve any security concerns and do all design and development activities for a Q6 VIP solution.
Ref. Drawings / Images:	None
Objectives:	
BAA:	The VIP Programme will meet the following objectives: ▪ Security – provide long term security compliance and provide opportunities in infrastructure to react to future security changes. ▪ Financial – Reduce opex and underutilised resource through improved facilities at optimum locations. Also providing additional revenue opportunities ▪ Service – create a world class VIP produce with modern and efficient facilities. Improve the VIP experience for all users ▪ Sustainability – Ensuring product is protected from further operational disruption through alignment with other capital projects. Ensure VIP programme aligns to Heathrow's growth.
Airline:	The VIP Service must provide: ▪ Security ▪ Competitive equivalence ▪ Consistently high quality service to customers ▪ Modern and efficient facilities

Project Benefits:
The VIP Programme will establish quantative benefits through the options phase, however they will be aligned to the objectives of robust security, reduction in opex and increase opportunities for revenue from the VIP product. Enable additional revenue opportunities for the Business. Provide the necessary supporting Capital Investment to realise these revenue opportunities.

Status:	
Programme:	Project Gateway Stage:
Infrastructure	Brief Decision was reached in November 2010.

Airline Engagement:
The VIP Strategy has full endorsement from the airlines through the following engagement approvals/gateways: ▪ AOC VIP endorsement of a multi-campus (not consolidated) VIP Strategy was reached on Friday 30th April 2010 at the VIP AOC workshop and again in more detail by the same workshop on 25th June 2010 ▪ The multi-campus strategy was further endorsed at the July 2010 BAA Infrastructure Board and subsequent Airline Stakeholder Board in July 2010 ▪ The detailed delivery of the VIP Strategy was presented and endorsed by the VIP AOC on 23rd August 2010. This agreed to a number of initial deliverables by reprioritising the Royal Suite Control Post Project funding. This was then endorsed at the September JST ▪ At the November 2010 Infrastructure Board Brief Decision of the above was reached.

Project Delivery

Current Control Budget:			
Total Capital Budget *(Estimated At Completion)*:		**£8,584,247**	
Refer to appendix B for cost information detail.			
Schedule:			
Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
11/2010	N/A	N/A	N/A
Assumptions:			
The following points cover the significant delivery assumptions related to this project:			
▪ Closure of the Royal Suite in Q6 and opening of a combined T4/Royal Suite Facility ▪ Closure of the T4 Spelthorne Suite and opening of a combined T4/Royal Suite Facility ▪ Closure of T1 Hounslow Suite and opening of a new CTA facility ▪ T5 Windsor Suite remains in situ			
Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.			

Operational Issues

BAA Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
PAX/HBS Security in CTA	£1,000,000	Additional manned post created.
PAX/HBS Security in T4	£1,000,000	Additional manned post created
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
▪ Fully manned security facilities for PAX and CBS/HBS in CTA, T4 and T5 facilities. ▪ No change in VIP or GA forecast PAX/Movement Numbers ▪ No changes in security process will occur		

- No further major change to the VIP Suites will be required until the new T3 and T4 Suites are in place in Q6 (except where Security change may be necessary)
- The sites for T3 (Under Virgin Upper Class Wing) and T4 (Capital Car Park/CP14) are available early Q6
- The T4 430 stands will be made available to support the new T4/Royal Suite Development in Q6

Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
Not known at this stage	N/A	None

Assumptions:

The following points cover the significant operational assumptions related to this project:

- Competitive equivalence between terminal areas will be maintained
- No/minimal financial or reputational disruption to VIP Services

Average Asset life:	
Average Asset Life:	10 years systems / 25 years buildings (BAA Standard)
Commentary:	
None	

Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.

Impact on User Charges:	
Estimated Per Passenger Cost Impact:	4.0p
Commentary:	
None	

Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only (see Section 5.3 for further details)

Non Construction Risk:

The following points cover any significant areas of risk for the Airline Community regarding this project:

- Increased Opex to achieve full security compliance in each terminal
- Failure to deliver an exceptional VIP service (reputation impact)
- Foreign Commonwealth Office approval/engagement
- UKBA approval and buy in to new processes
- Step 9 Airline Moves and other Capital Project impacts
- Security – existing and future requirements - reacting quickly to changing DfT demands
- Failure to provide on-going DfT compliance may lead to the VIP service being closed down
- Lack of sustainable future VIP product if revenue opportunities cannot be implemented and cost viability achieved

Appendix B: Project Delivery: Cost Information:

Project Information

Project Name: VIP Programme (Cargo Road RZ)
BCT No.: 4185

Cost Information

All information extracted from March 2011 month end

Base Costs:	£6,320,146	73.6	%
On-Cost:	£1,058,195	12.3	%
Opportunity	-£0	0	%
Risk (R1 Allowance Only)	£1,205,906	14.1	%
Total	**£8,584,247**	100	%

Commentary:
Current Project Scope (Q5 CIP):

1. Royal Suite Control Post Project: cancelled - £0.4m
2. HBS Facility at Windsor Suite (T3 Hillingdon Suite Closure and transfer of operations to T1 Hounslow Suite): £1.3m
3. Long - term VIP Strategy Report: £0.1m
4. Long term design of T3 and T4/Royal Suite Facilities £2.82m
5. Royal Suite Interim Upgrade and T4 Interim VIP Suite Extension Design and Surveys £3.82m

Cost Benchmark Comparisons:	
Project Name:	Control Post Project (24023)
Total Capital Budget *(Constant Prices)*:	£8,584,247
Guidance Notes:	
Limited benchmarking has been completed at this stage given the project is at Brief Decision. More detailed benchmarking will be completed at Options decision when the solutions are established. However some benchmarking has been completed on the design and on-cost elements.	
Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.	

Header Information

BCT No.	4202
Op No.	22750
Project Name:	E/A Airside Rd and Taxilane UnderPass

Project Overview, Objectives and Status

Overview:	
Description:	Grade separated airside road between T2A, B and C.
Ref. Drawings / Images:	Refer to Appendix A
Objectives:	
BAA:	▪ Provide reliable airside journey times ▪ Minimise the risk of conflict between aircraft and vehicles ▪ Provide a more straightforward east to west airside route
Airline:	As per BAA

Project Benefits:
During low visibility procedures ground handlers can continue to operate. It maintains minimum connect times for passengers and baggage.

Status:	
Programme:	Project Gateway Stage:
Infrastructure	Construction

Airline Engagement:
The airlines have been consulted on the project via the Infrastructure Stakeholder Board. The Construction Decision was agreed in January 2010.

Project Delivery

Current Control Budget:	
Total Capital Budget *(Estimated At Completion)*:	**£53,730,148**
Refer to appendix B for cost information detail.	

Schedule:			
Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
04 / 2007	04 / 2010	05 / 2012	12 / 2013

Assumptions:
The following points cover the significant delivery assumptions related to this project;
The Project involves the construction of a grade separated airside road to provide access to the new T2B Terminal and T2C remote stands, which are being developed as part of the Eastern Campus Programme. The Kilo and Lima taxilane will be operational by Spring 2013. Prior to these dates the new grade separated road is anticipated to be complete in order not to conflict with the other construction work. It is also programmed to be carried out in conjunction with the redevelopment of the southern taxiway. The road has been designed to fit within physical and logistical constraints especially the London Underground Limited (LUL) criteria.
Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.

Operational Issues

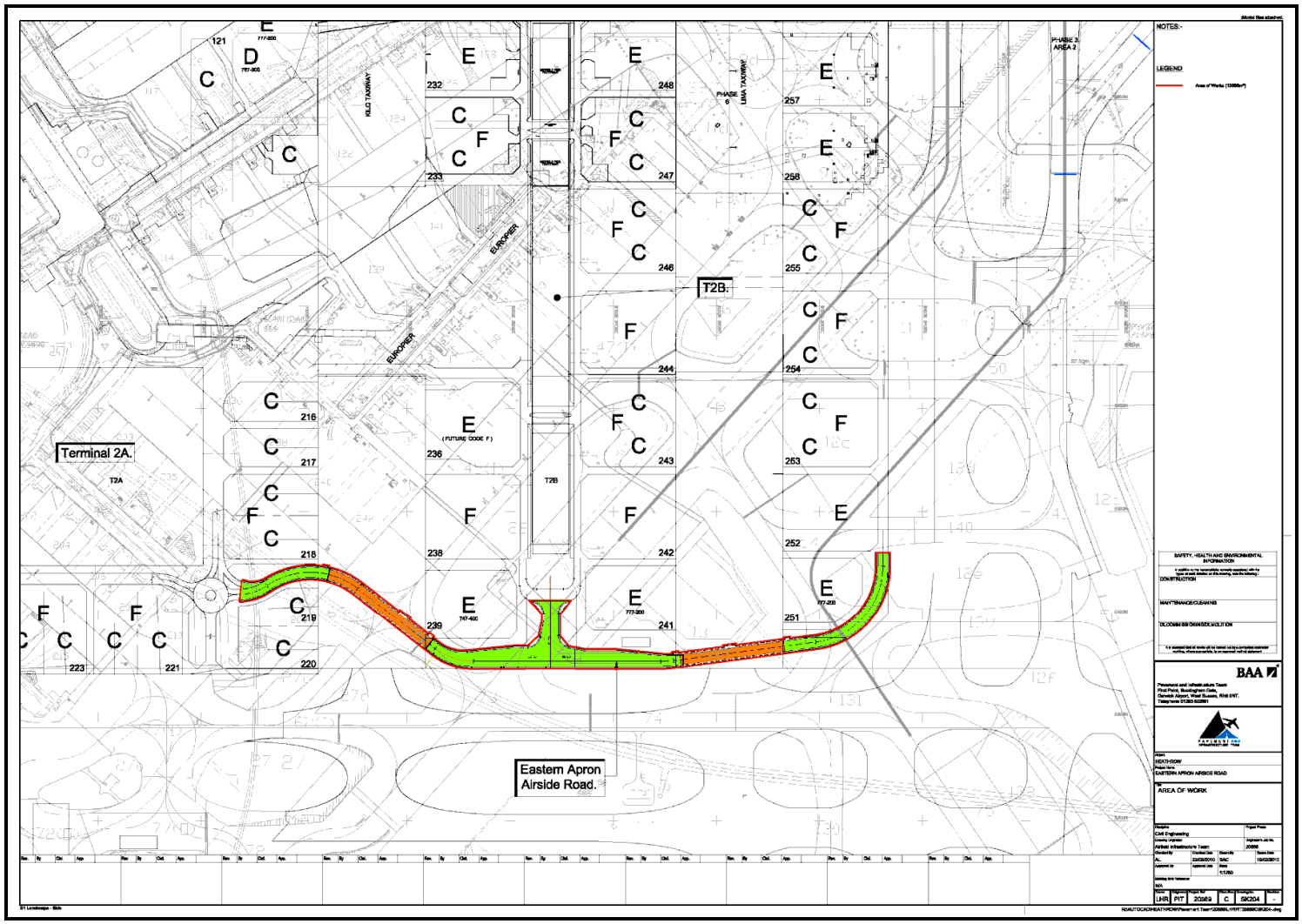
BAA Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
Maintenance	-£55,000	▪ Maintenance costs ▪ General cleaning of the roadway and structures ▪ M & E equipment – lighting, drainage and pumps, fire protection, traffic management and control.
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
None		

Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
N/A	N/A	None
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
None		

Average Asset life:	
Average Asset Life:	See below
Commentary:	
M&E within underpass – 20 year design life. Asphalt – 20 year design life. Underpass Structure – 120 year design life.	
Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.	
Impact on User Charges:	
Estimated Per Passenger Cost Impact:	5.1p
Commentary:	
None	
Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only (see Section 5.3 for further details)	

Non Construction Risk:
The following points cover any significant areas of risk for the Airline Community regarding this project.
None

Appendix A: Overview: Reference Drawing / Image:



Appendix B: Project Delivery: Cost Information:

Project Information

Project Name: EA A/side Rd and Taxilane U/Pass
BCT No.: 4202

Cost Information

All information extracted from March 2011 month end

Base Costs:	£410,561,520	76	%
On-Cost:	£10,570,378	19	%
Opportunity	-£195,000	0	%
Risk (R1 Allowance Only)	£2,853,250	5	%
Total	**£53,730,148**	100	%

Cost Benchmark Comparisons:	
Project Name:	EA A/side Rd and Taxilane U/Pass
Total Capital Budget *(Nominal Prices)*:	£53,730,148
Guidance Notes:	

This project was benchmarked at Construction decision January 2010. The EAAR project is "unique" with regards to the infrastructure works as it utilises construction techniques which are not found anywhere else on the airfield. T5 (Northern & Southern Airside Road Underpasses have been used as reference but utilise different construction techniques). EAAR and T5 Projects have been benchmarked at a facility level only (Bridge & Road) and due to variances of different construction techniques have not been applied at component level. The proximity of the LUL tunnels also increase the complexity of construction.

Benchmarking EAAR against current airfield projects has not been a straightforward process and resulted in a low level of benchmarking (55% of construction value at component level), when compared with other projects.

The principle elements of the project that have already been benchmarked against similar elements from other civil engineering and airfield projects are:

1. Secant piled walls – 15.5% of base costs
2. Excavation – 5% of base costs
3. Structural concrete – 4% of base costs
4. Preliminaries – 22% of the base cost

Note: Assumptions stated here re to aid understanding and are not necessarily exhaustive.

Header Information

BCT No.	6527
Op No.	N/A
Project Name:	HAL Minor Projects (incl Retail and Property)

Project Overview, Objectives and Status

Overview:	
Description:	The Minor Projects portfolio consists of a large number of smaller, lower value projects rolled up to maximise delivery efficiencies, predominantly asset replacement and refurbishment projects. Minor Projects also includes compliance and health and safety works. Works are delivered across the whole of Heathrow, terminals, airside, landside, Retail and Property This portfolio also includes the following BCTs currently in delivery: ▪ BCT 3428 – CO2 Strategy ▪ BCT 9738 – 2010 LPI – Minor Projects ▪ BCT10232 – 2011 – 2012 Minor Projects ▪ BCT 10295 – 2011 – 2012 Retail Concessions – Minor Works ▪ BCT 10296 – 2011 – 2012 Retail Services – Minor Works
Ref. Drawings / Images:	None
Objectives:	
BAA:	Support the Heathrow operation through investment in critical assets and facilities.
Airline:	As per BAA

Project Benefits:
Minor Projects is a diverse portfolio of works delivering a range of benefits that support improving the passenger journey, operational efficiency, compliance and Health & safety.

Status:	
Programme:	Project Gateway Stage:
Infrastructure	Various

Airline Engagement:
The Minor Projects plan is presented to the Infrastructure Stakeholder Board annually for consultation and agreement with bi-annual updates on progress.

Project Delivery

Current Control Budget:	
Total Capital Budget *(Estimated At Completion)*:	**£143,653,262**
Refer to appendix B for cost information detail.	

Schedule:			
Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
Various	Various	Various	Various

The following points cover the significant delivery assumptions related to this project:
The prioritisation of projects is carried out annually and focuses on asset replacement/refurbishment and service enhancement including commercial/retail areas. For information the total number of projects for 2011 & 2012 is circa 300. Individual works are delivered in coordination with business units to mitigate operational disruption.
Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.

Operational Issues

BAA Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
N/A	N/A	N/A due to the nature of individual works
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
The majority of asset replacement works are planned to ensure assets are addressed timely to mitigate unplanned operational costs, financial penalty due to non-compliance taking into consideration operational efficiency.		

Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
N/A	N/A	N/A due to the nature of individual works
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
None		

Average Asset life:	
Average Asset Life:	Various
Commentary:	
None	
Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.	
Impact on User Charges:	
Estimated Per Passenger Cost Impact:	N/A
Commentary:	
Various Projects	
Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only (see Section 5.3 for further details)	

Non Construction Risk:
The following points cover any significant areas of risk for the Airline Community regarding this project:
None

Header Information

BCT No.	6793
OP No.	24157
Project Name:	Heathrow Storm Water System

Project Overview, Objectives and Status

Overview:	
Description:	This project is to improve the Heathrow storm water and pollution control system to address : ▪ Current flooding capacity issues and future requirements associated with development in the East. ▪ Current failures of the pollution control system and improvements required to achieve revised discharge consents issued by the EA. Solutions continue to be investigated to provide additional water storage capacity, water treatment facilities and foul water discharge points. Some "Quick Wins" delivered in 2011.
Ref. Drawings / Images:	Refer to Appendix A
Objectives:	
BAA:	▪ Compliance - Ensure compliance with environmental regulations ▪ Prevention - Improve upstream management controls to prevent pollution entering our reservoirs ▪ Clean up - Reduce historic contamination where it may present a threat to water quality ▪ Flood prevention and water level management- Manage water flows and levels to minimise risk of flooding ▪ Management - Ensure that the right governance, systems, incentives and procedures are in place to support the delivery of the water strategy and to maintain good relationships with our regulators
Airline:	As per BAA

Project Benefits
Reduction in unplanned OPEX; Improved Reputation; Reduced risk of prosecution; Steps towards improving the Pollution Control System

Status:	
Programme:	Project Gateway Stage:
Infrastructure	Brief Decision

Airline Engagement:
Stakeholder Boards: ▪ March 2010 ▪ July 2010.

Project Delivery

Current Control Budget:	
Total Capital Budget *(Estimated At Completion)*:	**£17,588,497**
Refer to appendix B for cost information detail.	

Schedule:			
Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
03/ 10 Quick Wins New Quick Wins Main Contract	10 / 2010 08 / 2011 Q1 2012	04 / 2011 10 / 2011 Q1 2013	04 / 2011 10 / 2011 Staged
Assumptions:			
The following points cover the significant delivery assumptions related to this project:			
Further tightening of the discharge consents by the Environment Agency will not be issued within Q5 (including if extended).			
Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.			

Operational Issues

BAA Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
Maintenance Utilities Rent & Rates	-£53,000 -£75,000 -£188,000	None
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
None		

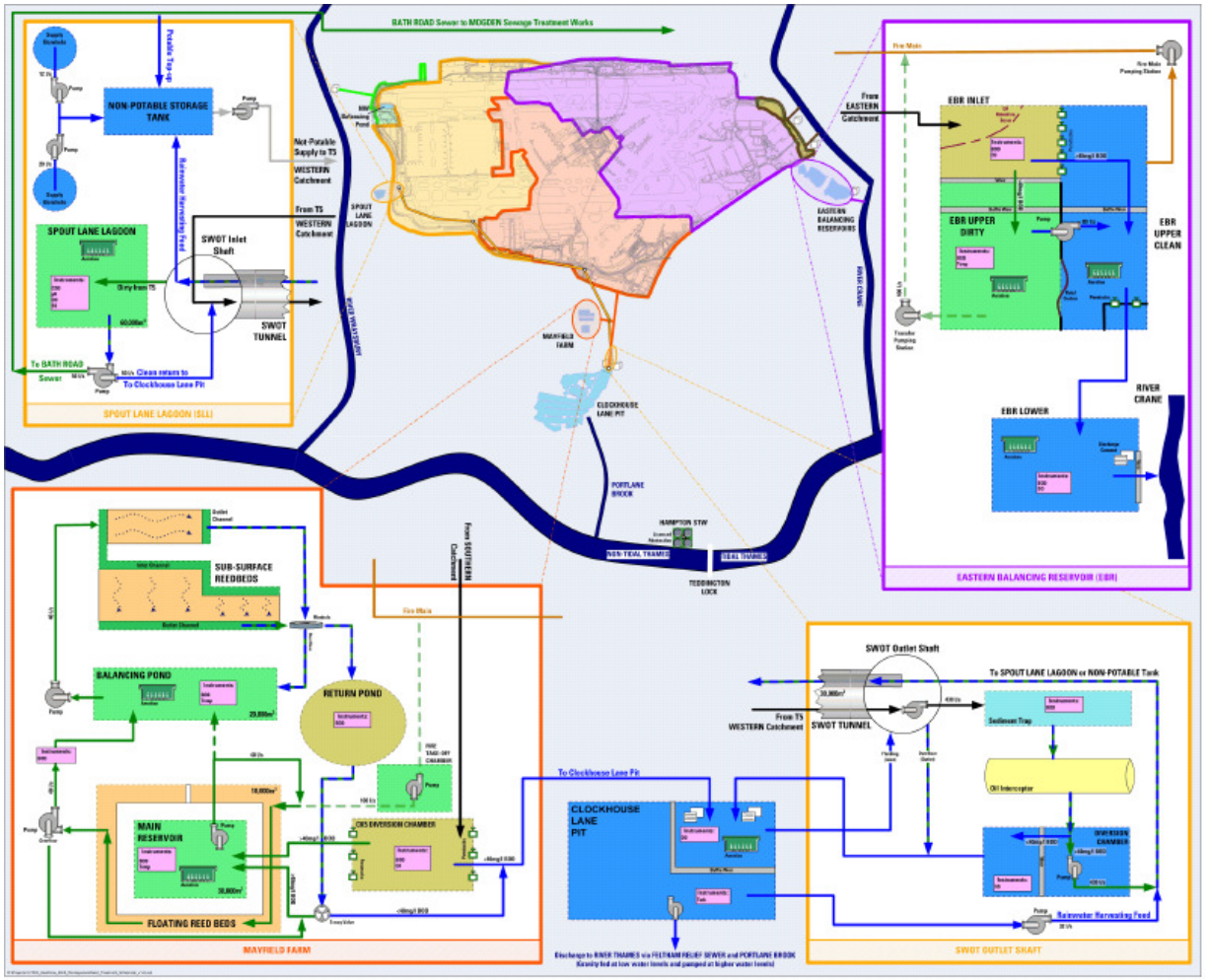
Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
		None
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
None		

Average Asset life:	
Average Asset Life:	15 years
Commentary:	
The average life is for a number of assets being delivered in different locations.	
Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.	

Impact on User Charges:	
Estimated Per Passenger Cost Impact:	3.0p
Commentary:	
None	
Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only (see Section 5.3 for further details)	

Non Construction Risk:
The following points cover any significant areas of risk for the Airline Community regarding this project:
There has been a recent exponential rise in the usage of de-icant fluids and concern that the Airlines are a major contributor to this. Should the airport exceed its discharge consents there is a risk that the Airline Community will be implicated in any further prosecutions brought by the Environment Agency.

Appendix A: Overview: Reference Drawing / Image:



Appendix B: Project Delivery: Cost Information:

Project Information

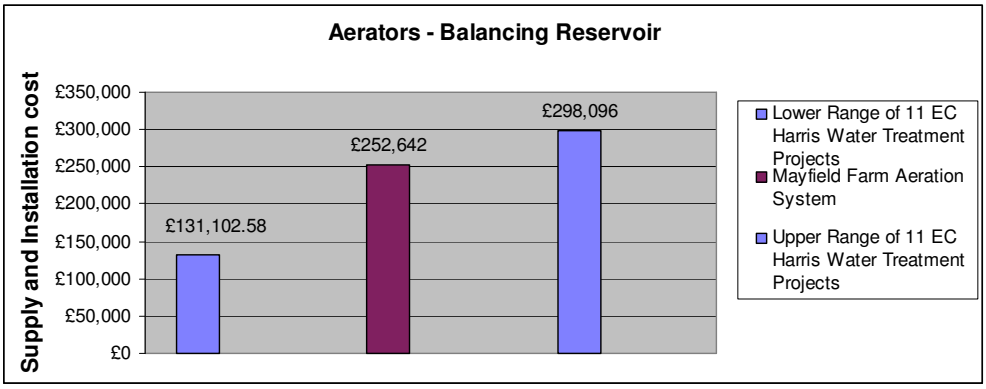
Project Name: Heathrow Storm Water System
BCT No.: 6793

Cost Information

All information extracted from March 2011 month end

Base Costs:	£2,136,063	69	%
On-Cost:	£2,110,620	12	%
Opportunity:	0	0	%
Risk:	£3,341,814	19	%
Total	**£17,588,497**	100	%

Cost Benchmark Comparisons:	
Project Name:	Heathrow Storm Water System
Total Capital Budget *(Nominal Prices)*:	£17,588.497
Guidance Notes:	
Quick Wins 2010 (Complete) - Benchmarking is in the Construction Decision Paper. *Short Term Measures 2011* - Predominantly Aeration in the EBR Lower Pond The EBR Lower Pond is a brown field site. The Short Term Measures aim to increase the treatment efficiencies of the existing facility by reducing the Biological Oxygen Demand concentrations and inform the EA Regulator's discharge limit consideration. The project involves understanding and re-engineering the uniqueness of this existing facility making it difficult to obtain like-for-like cost comparisons. However, "aeration" comparisons have been provided by using project information from the EC Harris Cost Database of waste water treatment projects. The "Quick Wins" Project data will also become available shortly for use.	
Note: Assumptions stated here re to aid understanding and are not necessarily exhaustive.	



Main Project (Q5) Scope not sufficiently developed for reporting benchmarking at this time.

Header Information

BCT No.	7209
Op No.	24352
Project Name:	Eastern Campus Apron

Project Overview, Objectives and Status

Overview:	
Description:	▪ The provision of 11 stands and taxilanes to serve T2B Phase2. ▪ Eastern Campus Ancillary Buildings.
Ref. Drawings / Images:	Refer to Appendix A
Objectives:	
BAA:	Increase pier served stand supply and improve airfield operations.
Airline:	As per BAA

Project Benefits:
Provide a mix of pier served and remote stands which safeguard the long term airfield capability of 90mppa.

Status:	
Programme:	Project Gateway Stage:
Infrastructure	Production Design

Airline Engagement:
The airlines have been consulted throughout the project via the Infrastructure Stakeholder board and through joint gateway events with the Eastern Campus Pier team. In March 11 a joint T2B and EC Apron stakeholder gateway received formal sign off of the design.

Project Delivery

Current Control Budget:			
Total Capital Budget *(Estimated At Completion)*:			**£66,587,248**
Refer to appendix B for cost information detail.			
Schedule:			
Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
03 / 2009	01 / 2012	10 / 2013	04 / 2014
Assumptions:			
The following points cover the significant delivery assumptions related to this project:			
▪ This project has delivered stand 255 and will deliver the 11 stands starting April 2012. ▪ There will be 3 MARS stands delivered initially with a further 3 MARS stands to be implemented at later dates. ▪ The project will also deliver the Taxiway to serve the stands. ▪ Within the scope of this project is the provision of ancillary and equipment parking with a EAC of £10.8m.			
Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.			

Operational Issues

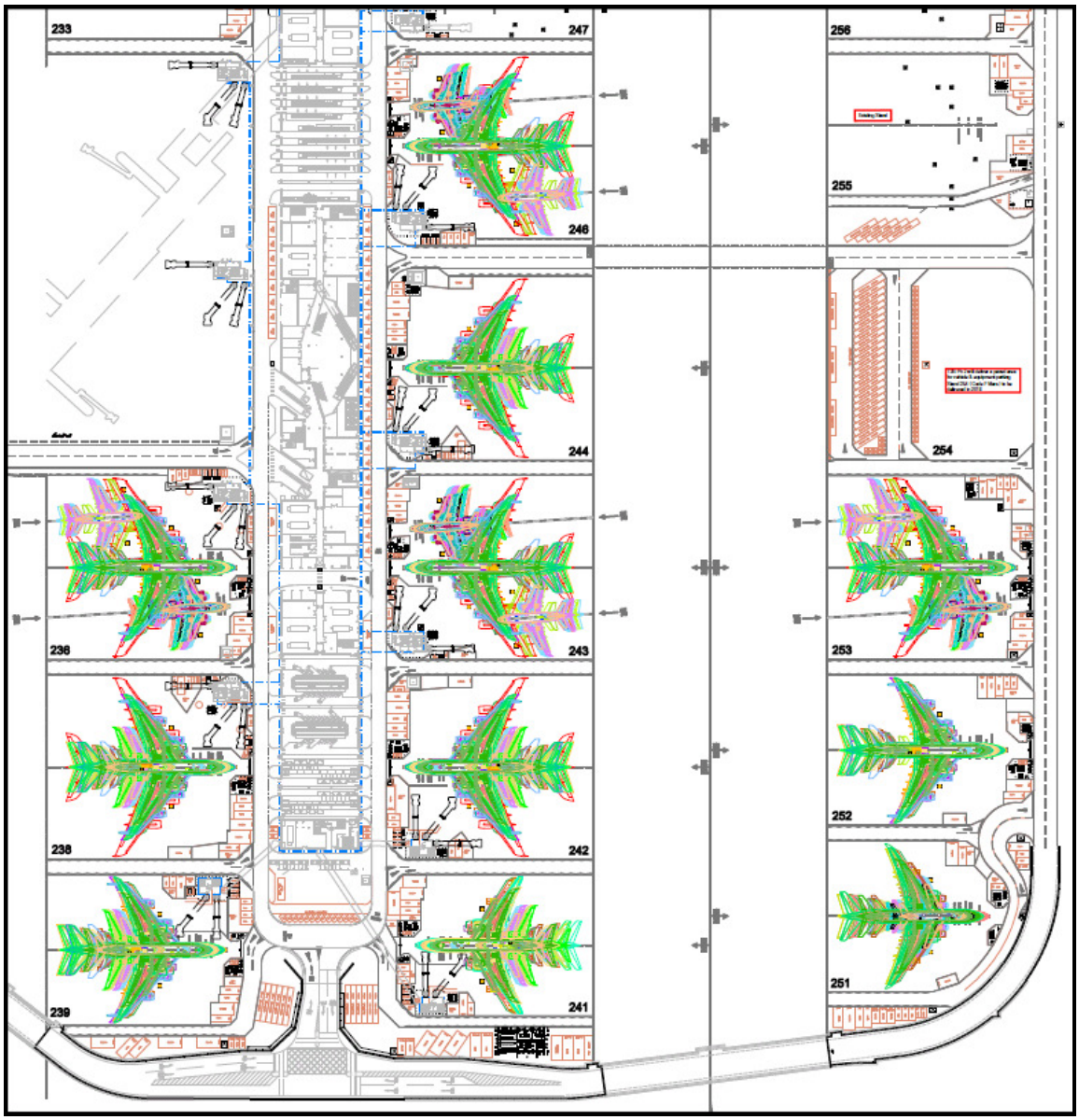
BAA Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
		To be developed at Construction Decision
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
▪ No requirements to install loop detectors outside baggage roller door entrances ▪ The requirements of baggage stillage to the south of T2B pier fir with current design		

Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
		To be developed
Assumptions:		
The following points cover the significant operational assumptions related to this project;		
None		

Average Asset life:	
Average Asset Life:	30 Years
Commentary:	
The works are predominantly Pavement Quality Concrete (PQC) which requires only limited maintenance in 30 years. Any areas of Asphalt will be relatively small with a greater maintenance regime to achieve 30 years.	
Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.	
Impact on User Charges:	
Estimated Per Passenger Cost Impact:	12.1p
Commentary:	
None	
Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only (see Section 5.3 for further details)	

Non Construction Risk:
The following points cover any significant areas of risk for the Airline Community regarding this project:
In order to complete stands 246, 247 and 255 they must be closed. It is currently assumed that the Remote Stands (251, 252 and 253) will be delivered first so that they can be replacements.

Appendix A: Overview: Reference Drawing / Image:



Appendix B: Project Delivery: Cost Information:

Project Information

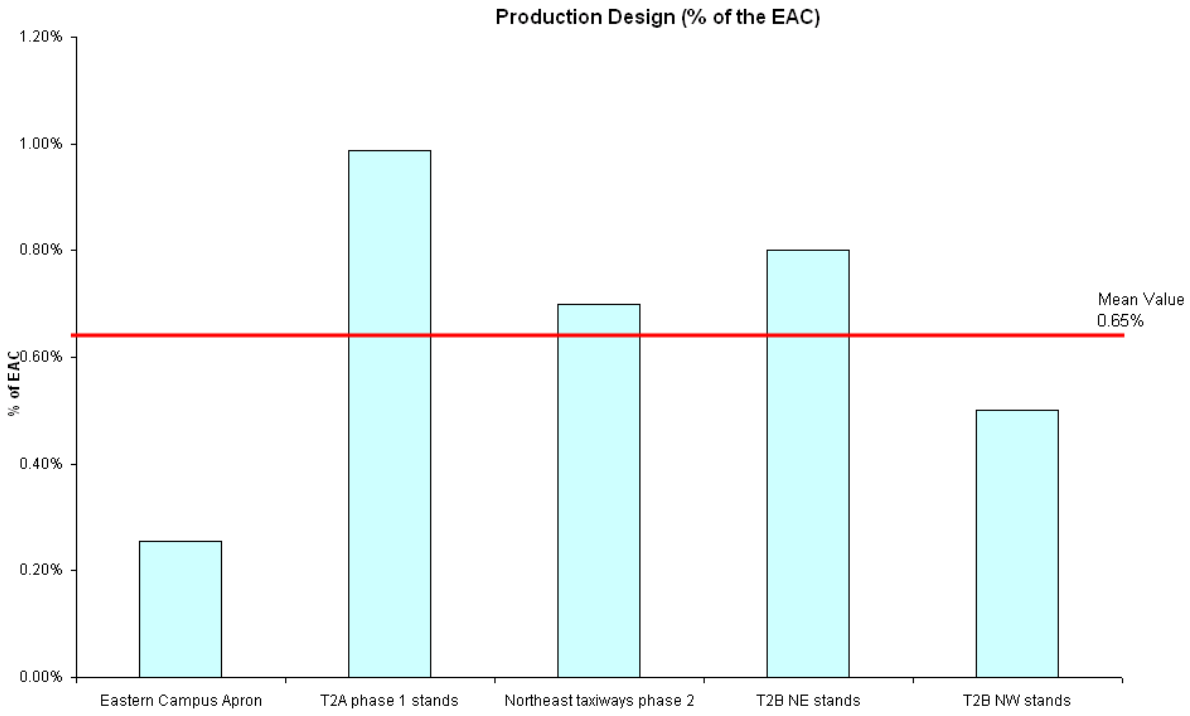
Project Name: Eastern Campus Apron
BCT No.: 7209

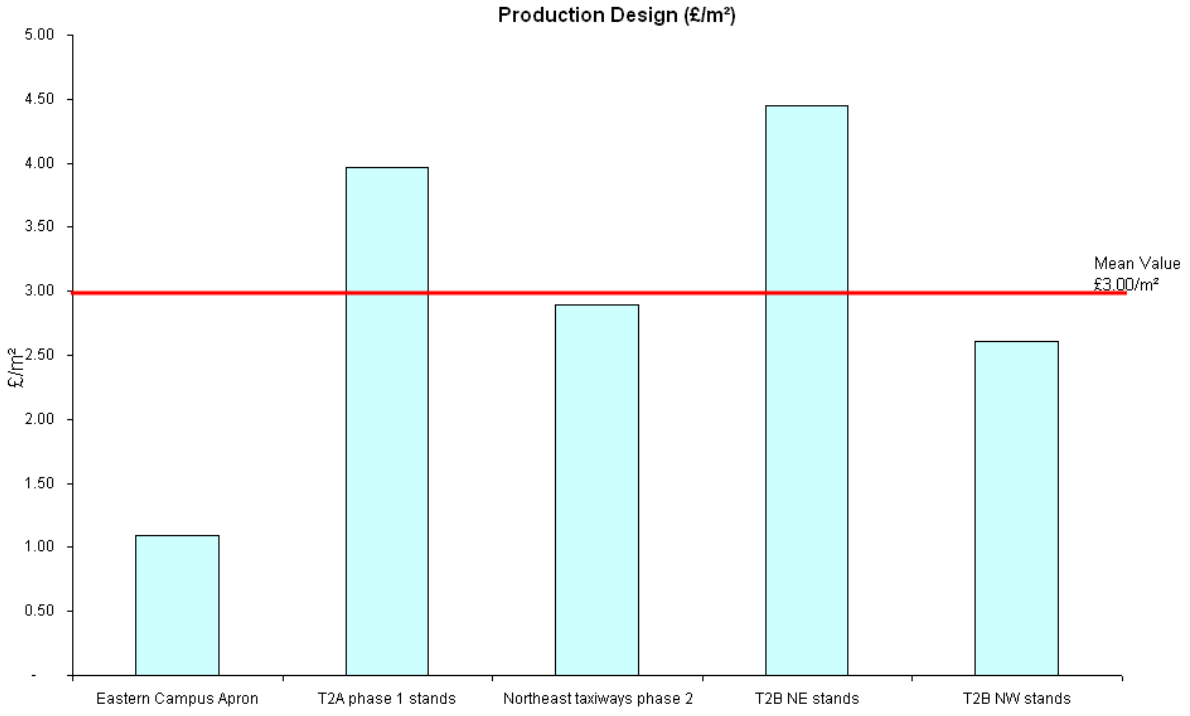
Cost Information

All information extracted from March 2011 month end

Base Costs:	£55,267,416	83	%
On-Cost:	£11,985,704	18	%
Opportunity	-£3,329,362	-5	%
Risk (R1 Allowance Only)	£2,663,490	4	%
Total	**£66,587,248**	100	%

Cost Benchmark Comparisons:	
Project Name:	Eastern Campus Apron
Total Capital Budget *(Nominal Prices)*:	£66,587,248
Guidance Notes:	
Detailed benchmarking will be completed at construction decision, however elements of the projects have been benchmarked against other Airfield projects. For example, the production design for this project compares favourably to other projects due to efficiencies achieved as a result of the overall size of the project and discounts from the supplier following negotiations.	
Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.	


Production Design (% of the EAC)
1.20%
1.00%
0.80%
0.60%
0.40%
0.20%
0.00%
% of EAC
Mean Value
0.65%
Eastern Campus Apron
T2A phase 1 stands
Northeast taxiways phase 2
T2B NE stands
T2B NW stands


Production Design (£/m²)
5.00
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
-
£/m²
Mean Value
£3.00/m²
Eastern Campus Apron
T2A phase 1 stands
Northeast taxiways phase 2
T2B NE stands
T2B NW stands

Header Information

BCT No.	7666
Op No.	23821
Project Name:	Energy Infrastructure

Project Overview, Objectives and Status

Overview:	
Description:	This project will: ▪ Deliver the new energy centre to support T2A phase 1 and T2B phase 2. The energy centre will include the biomass CHP plant required by the T2A Energy Strategy and natural gas boilers. ▪ Deliver the district heating mains to connect the energy centre to T5 and to the heating mains being delivered as part of the Eastern Campus Programme ▪ Support the Heathrow wide Energy Strategy ▪ Actively safeguard for the future connection of T1 and T3 to the new energy centre ▪ Passively safeguard for other future connections
Ref. Drawings / Images:	Refer to Appendix A
Objectives:	
BAA:	▪ Define the optimum solution for combined heat and power (CHP) at Heathrow considering CO2 emissions versus value and supporting Heathrow's Low Carbon Energy Strategy ▪ Reduce Heathrow energy supply and energy systems maintenance costs ▪ Support Q6 strategy and future development at Heathrow ▪ Provide heating supply infrastructure to support T2A phase 1 and T2B
Airline:	▪ Provide efficient and reliable energy supply. ▪ CO2 reduction

Project Benefits:
This project provides a biomass (wood chip) CHP plant that will deliver CO_2 savings that exceed the target set for T2A and contribute towards HAL's site wide targets for 2020. It will also provide an OPEX benefit of £2.2m per annum over a 'business as usual' case of using natural gas boilers for heating and power from the electricity grid. The negative impact on EBITDA reflects the additional fuel and maintenance costs over the current situation i.e. due to increasing the overall facilities at LHR by delivering T2A and T2B.

Status:	
Programme:	Project Gateway Stage:
Infrastructure	Production Design

Airline Engagement:
Consulted throughout project development. Last consultation at Gateway Review in preparation for Construction Decision in May 2010.

Project Delivery

Current Control Budget:			
Total Capital Budget *(Estimated At Completion)*:		**£45,592,717**	
Refer to appendix B for cost information detail.			
Schedule:			
Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
09 / 2008	02 / 2011	12 / 2012	12 / 2012
Assumptions:			
The following points cover the significant delivery assumptions related to this project:			
▪ The T2A building will meet the Section 106 planning agreement obligations related to the building and comply with the Detailed Energy Strategy. ▪ The following Eastern Campus Projects will deliver elements of the district heating network within their sites: T2A, T2B, EIS (cooling station). This is co-ordinated through Milestone and Interface definitions. ▪ The airfield operation continues to allow overnight closure of the Cargo Tunnel within the constraints of the runway alternation pattern.			
Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.			

Operational Issues

BAA Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
Utilities	-£2,200,000	Additional cost of operating the new energy centre and heating the new T2
Utilities	+£2,000,000	Saving through using biomass CHP
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
▪ It is assumed that this facility will be operated by Heathrow Airport Ltd ▪ It is assumed that Renewable Heat Incentive and/or Renewable Obligation Certificates will apply and that government policy will continue to encourage renewable generation		

Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
N/A	N/A	None

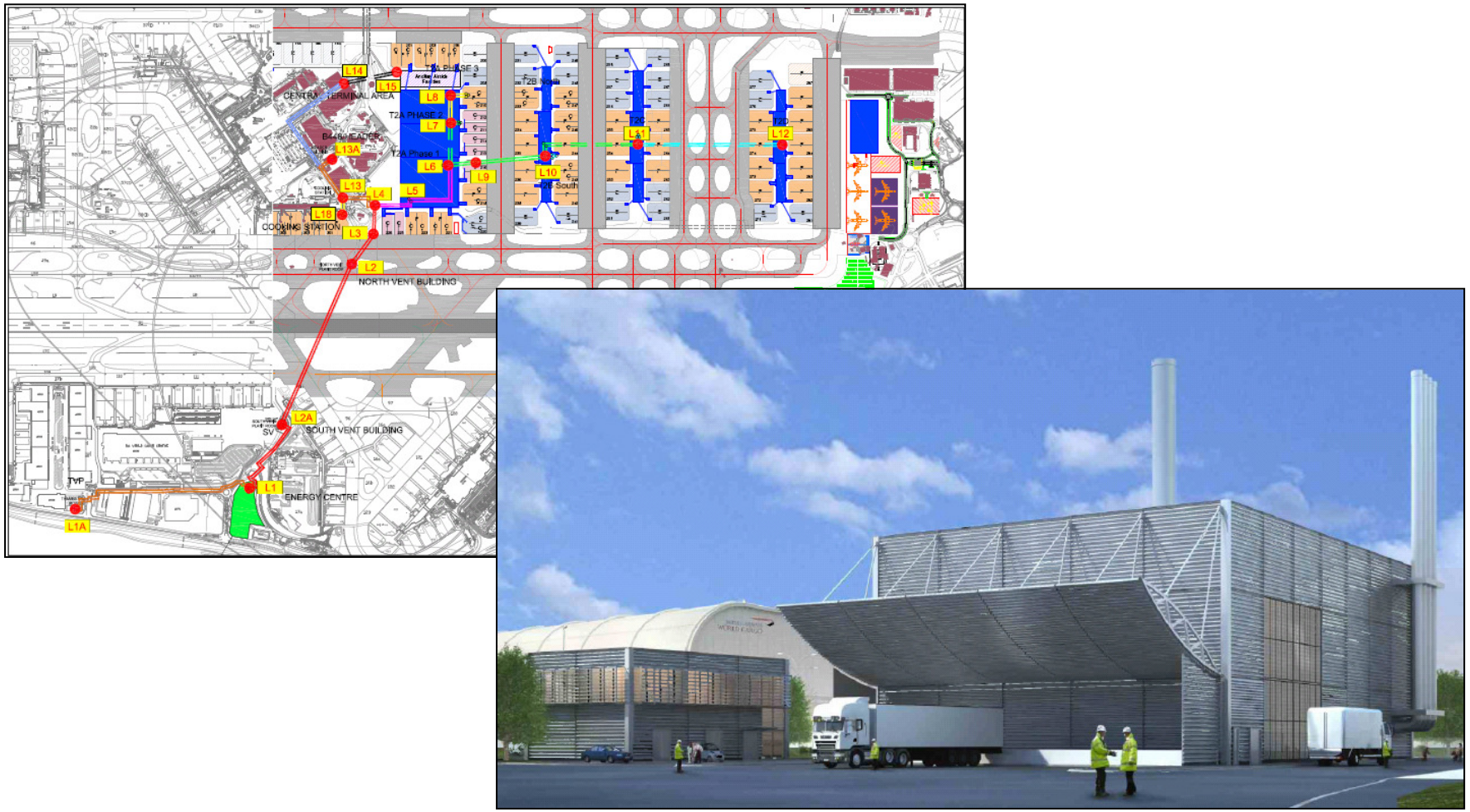
Assumptions:
The following points cover the significant operational assumptions related to this project:
None

Average Asset life:	
Average Asset Life:	25 Years
Commentary:	
None	
Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.	
Impact on User Charges:	
Estimated Per Passenger Cost Impact:	5.9p

Commentary:
None
Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only (see Section 5.3 for further details)

Non Construction Risk:
The following points cover any significant areas of risk for the Airline Community regarding this project:
None

Appendix A: Overview: Reference Drawing / Image:



Appendix B: Project Delivery: Cost Information:

Project Information

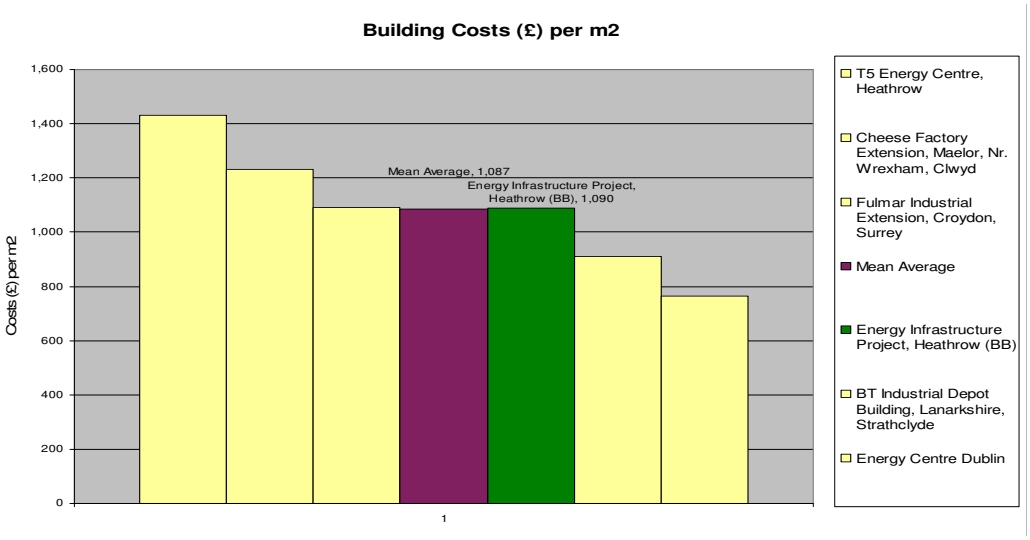
Project Name: Energy Infrastructure
BCT No.: 7666

Cost Information

All information extracted from March 2011 month end

Base Costs:	£ 34,871,698	76.5	%
On-Cost:	£ 6,353,920	13.9	%
Opportunity	£ -413,400	-0.9	%
Risk (R1 Allowance Only)	£ 4,780,499	10.5	%
Total	**£ 45,592,717**	100	%

Cost Benchmark Comparisons:	
Project Name:	Energy Infrastructure
Total Capital Budget *(Nominal Prices)*:	£45,592,717
Guidance Notes:	
This is a unique facility and the project team has not been able to find equivalent benchmarks at a facility scale. Analysis has been completed on other biomass and CHP schemes. Each of these facilities are bespoke to their site and the cost/business case for each is different. The chart below confirms that the Energy Infrastructure Project is in the mid range but that wide variation between projects makes benchmarking of the facility difficult. Component level benchmarking was also carried out for the structural steel framework, cladding, fire alarm connections and mechanical protective installations along with Distribution cost pre m2 of area served.	
Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.	



Header Information

BCT No.	7718
Op No.	23923
Project Name:	Eastern Maintenance Base Redevelopment

Project Overview, Objectives and Status

Overview:	
Description:	This project is to redevelop the Eastern Maintenance Base to align with interim Eastern Maintenance Base Masterplan and support the delivery of the wider Eastern Campus Masterplan. The project will be executed through a number of works streams the high level scope of each can be summarised as follows: WS 1 – East Church Road Diversion (design & construction) ▪ Site Clearance ▪ Road Diversion ▪ Service Diversions ▪ Modifications to Virgin, BMI and BA Demise WS 2 – Ancillary Relocations (design only in Q5) ▪ Ground Run Pen Relocation ▪ Control Post (CP) 16 Relocation ▪ Fire Training Ground Relocation ▪ Aviance Motor Transport(MT) Facility Relocation ▪ ASIG Facility Relocation ▪ TCR MT Facility Relocation ▪ Vanguard House Relocation ▪ Demolition, Site and Services Clearance WS 3 – Replacement Hangar (design only in Q5) ▪ Replacement hangar facility ▪ West Base modifications ▪ TBE modifications ▪ Operational Moves WS 4 – A380 Access (design & construction) ▪ Partial widening of Mike taxiway to Code F ▪ Modifications at Delta crossing & CP16 ▪ Modifications to stands TC1&703 WS5 – Taxiway Relocations (design only in Q5) ▪ Realignment of Alpha & Bravo to the East ▪ Reconfiguration of the Northern Hold ▪ Extension of the EAAR tunnel
Ref. Drawings / Images:	Refer to Appendix A
Objectives:	
BAA:	Strategic Growth – Enable terminal & pier served stand growth in the east through the efficient use of land within the airport boundary at Heathrow.
Airline:	Enable the earliest opportunity of releasing the T2C Land assembly. Support future proposed maintenance & fleet operations and create opportunity for consolidation of operations.
Project Benefits:	
This project is an enabler to a future T2C, which will deliver growth & capacity	

Status:	
Programme:	Project Gateway Stage:
Infrastructure Programme	WS1 - Scheme Design WS2- Explore WS3 – Explore WS4 – Scheme Design WS5 - Explore

Airline Engagement:
Regular Consultation is undertaken through the Infrastructure Stakeholder Board monthly, and through the T2C Land Assembly Working Group bi-weekly.

Project Delivery

Current Control Budget:			
Total Capital Budget *(Estimated At Completion)*:		**£33,166,171**	
Refer to appendix B for cost information detail.			
Schedule:			
Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
Aug 2008	Jan 2011	Q4 2018	Staged
Assumptions:			
The following points cover the significant delivery assumptions related to this project;			
▪ WS 1 & 4 will be delivered in their entirety in Q5. ▪ WS2,3,&5 will be designed in Q5. ▪ The construction of WS 2,3&5 are outside of the current Q5 CIP funding.			
Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.			

Operational Issues

BAA Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
N/A	N/A	To be assessed through Scheme Design
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
None		

Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
N/A	N/A	To be assessed through Scheme Design

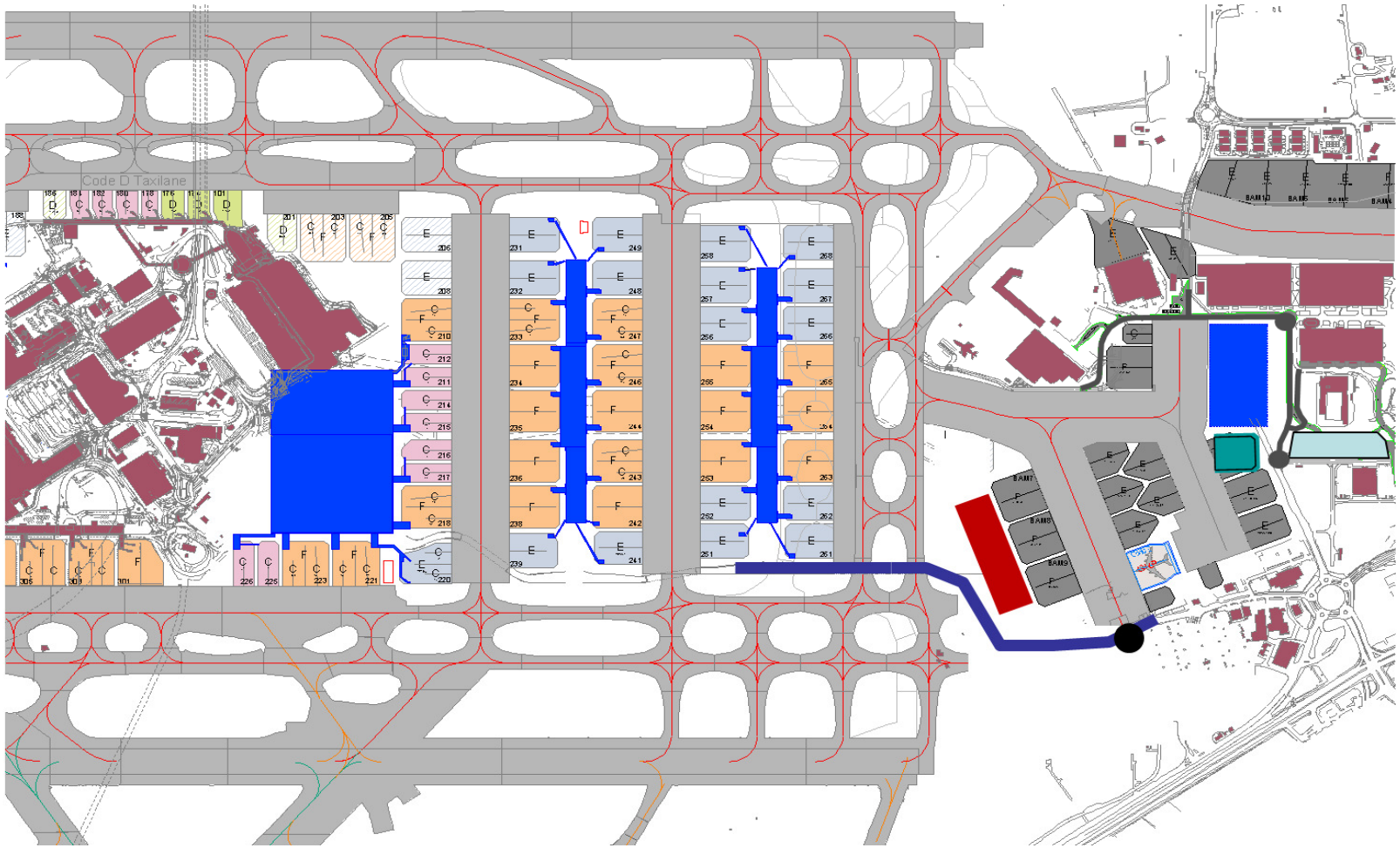
Assumptions:
The following points cover the significant operational assumptions related to this project:
None

Average Asset life:	
Average Asset Life:	10-50yrs

Commentary:	
None	
Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.	
Impact on User Charges:	
Estimated Per Passenger Cost Impact:	4.0p
Commentary:	
None	
Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only (see Section 5.3 for further details)	

Non Construction Risk:
The following points cover any significant areas of risk for the Airline Community regarding this project.
Operational disruption to the maintenance facilities of home base carriers will be kept to a minimum.

Appendix A: Overview: Reference Drawing / Image:



Appendix B: Project Delivery: Cost Information:

Project Information

Project Name: Eastern Maintenance Base Redevelopment
BCT No.: 7718

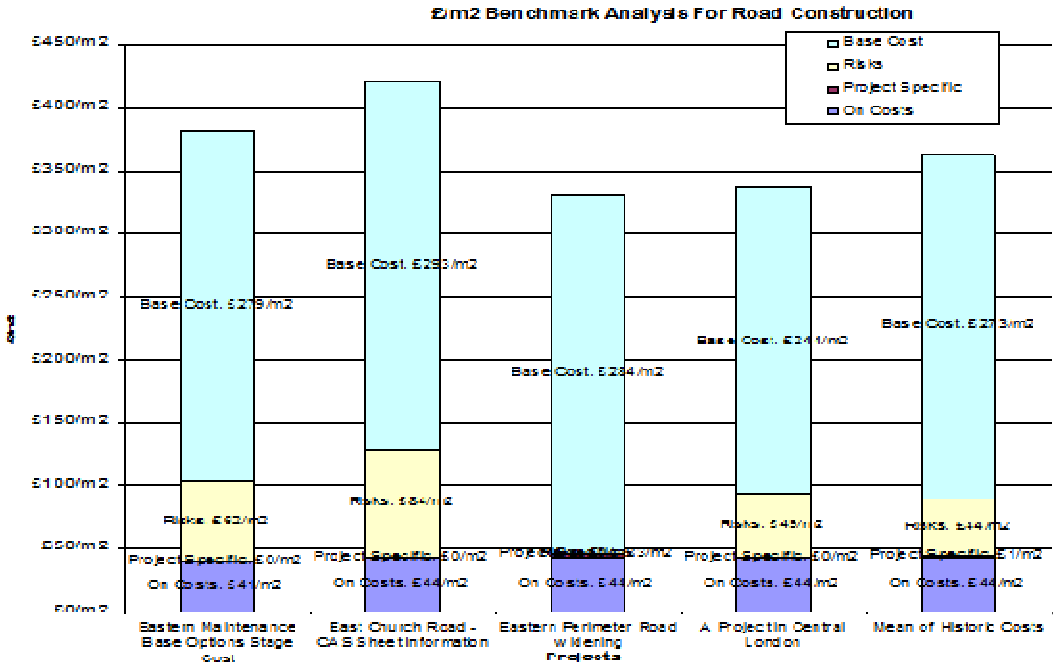
Cost Information

All information extracted from March 2011 month end

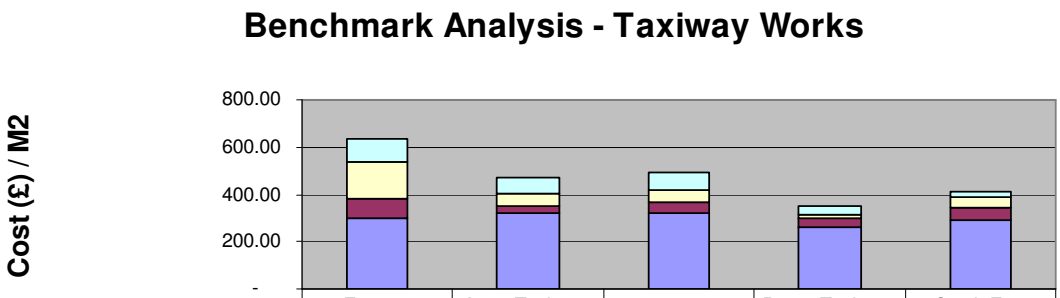
Base Costs:	£24,012,307	72.4	%
On-Cost:	£4,013,107	12.1	%
Net Risk, Opportunity & Inflation	£5,140,757	15.5	%
Total	**£33,166,171**	100	%

Cost Benchmark Comparisons	
Project Name:	Eastern Maintenance Base Redevelopment
Total Capital Budget *(Nominal Prices)*:	£33,166,171
Guidance Notes:	
WS1 Road Diversion – Benchmarking carried out at Options Decision, a summary graph is provided on the following page. WS4 A380 Access – Benchmarking carried out at Options Decision, a summary graph is provided on the following page. Both workstreams benchmarked positively against similar projects. WS2,3& 5 will be benchmarked at Options Decision	
Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.	

WS1 Road Diversion



WS4 A380 Access



	Eastern Maintenance	A380 Taxiway Around Pier 1	HAL Resilience	Bravo Taxiway Realignment	South East Taxiway
Risk and Inflation	95.51	64.39	72.37	33.88	23.00
Project Specific	159.57	54.00	53.71	18.25	42.00
On-cost	80.35	34.37	42.28	35.12	53.00
Construction Base Cost	302.02	319.00	321.66	264.06	292.00

Header Information

BCT No.	8452
Op No.	24023
Project Name:	Control Post Programme

Project Overview, Objectives and Status

Overview:	
Description:	This project covers a series of sub projects that will gradually be completed through Q5. These include: ▪ Fourth Lane to CP5 ▪ 2 extra lanes at CP8- enables closure of CP2 ▪ 4 extra lanes at CP24 - enables closure of CP21 and CP14 ▪ 2 construction lanes at CP18 and CP24 ▪ Warehouse – to replace facility removed to enable CP8 expansion
Ref. Drawings / Images:	Refer to Appendix A
Objectives:	
BAA:	▪ Close CP2 to enable T2A baggage link to proceed in July 2011 ▪ Create construction capacity through CP18 and 24 to enable T2 build ▪ Expand capacity to 8 Control Post lanes in the CTA and 7 southside to meet SQR target of 20 mins and safeguard for a 10 mins SQR ▪ Fewer but larger Control posts – increased efficiency ▪ Enable and maintain predictability at Control Posts
Airline:	As per BAA

Project Benefits
▪ Increased capacity ▪ Avoidance of SQR penalties

Status:	
Programme:	Project Gateway Stage:
Infrastructure	Manufacture and Assemble

Airline Engagement:
Construction Decision approved December 2009. Consultation via the Infrastructure Stakeholder Board

Project Delivery

Current Control Budget:	
Total Capital Budget *(Estimated At Completion)*:	**£29,467,795**
Refer to appendix B for cost information detail.	

Schedule:			
Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
11/2008	03/2010	02/2012	Various

Assumptions:
The following points cover the significant delivery assumptions related to this project:
▪ Smiths to remain the preferred supplier of key security equipment ▪ Government regulations do not change the screening requirements ▪ Access to site enabled by operation/other capital programme as appropriate ▪ No works to be done to existing CP 2, 5, 8, 14, 24 or 21 ▪ No works to be done to close CP2, CP14 or CP21 ▪ Base data and forecast traffic demand data is accurate. ▪ CFL agree to Heads of Terms for future site ▪ CFL man own CP and deliver Cat B fitout over an 8 week period
Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.

Operational Issues

BAA Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
Security	-£190,000	Project represents an overall decrease of 5 FTE
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
▪ Adoption of cluster operation Southside ▪ Manning of all additional lanes		

Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
N/A	N/A	None
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
None		

Average Asset life:	
Average Asset Life:	25 Years
Commentary:	
None	
Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.	
Impact on User Charges:	
Estimated Per Passenger Cost Impact:	4.8p
Commentary:	
None.	
Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only (see Section 5.3 for further details)	

Non Construction Risk:
The following points cover any significant areas of risk for the Airline Community regarding this project.
Possible partial closure of CP lanes to enable construction activity – low risk

Appendix A: Overview: Reference Drawing / Image:

Appendix B: Project Delivery: Cost Information:

Project Information

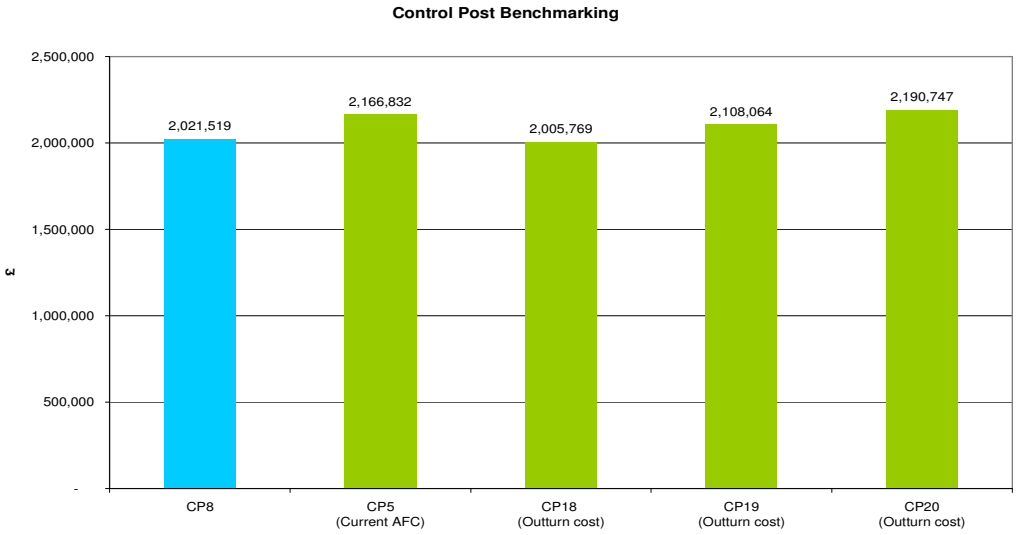
Project Name: Control Post Programme
BCT No.: 8452

Cost Information

All information extracted from March 2011 month end

Base Costs:	£23,417,613	79.9	%
On-Cost:	£5,192,350	17.3	%
Opportunity	-£27,600	-0.1	%
Risk (R1 Allowance Only)	£885,432	2.9	%
Total	**£29,467,795**	100	%

Cost Benchmark Comparisons:	
Project Name:	Control Post Programme
Total Capital Budget *(Nominal Prices)*:	£29,467,795
Guidance Notes:	
The elements of the project can be broken down into a number of distinct sub-projects. Control Posts (CP8 and CP24), the CFL Industrial Building and an additional lane to CP5. CP8, CP24 and CFL have been competitively tendered through Mace's 2nd tier supply chain in order to gain a competitive price. The sub-projects have also been benchmarked against similar categories of projects to further demonstrate value for money. The cost of preliminaries has been included within this benchmarking as well as being analysed separately.	
Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.	



Source: Construction Paper

Header Information

BCT No.	8735
Op No.	23936
Project Name:	T5 Phase 2 Airfield Works

Project Overview, Objectives and Status

Overview:	
Description:	The T5 programme will deliver 30 to 35mppa of additional operational capacity into Heathrow Airport. The main terminal building (T5A) and first satellite building (T5B) opened to passengers in March 2008. T5C is the second satellite building within the T5 family and it is under this programme of works that this project sits. The airfield works associated with the T5C project comprises 10 new aircraft stands and associated infrastructure, completion of the Delta taxilane, 3 substations and an access facility into the T5 service tunnel. These works have been split into two and the T5 Phase 2 Airfield Works project comprises: ▪ Construction of stands 561 and 562 ▪ Construction of sub station 191 ▪ Construction of the substructure and associated infrastructure for sub station 141 ▪ Relocation of the T5 batcher plant ▪ Remediation of T5 batcher site and construction of stands 557 and 558 ▪ Construction of sub station 182 extension and the access to the T5 service tunnel ▪ Construction of stands 572 and 573 ▪ Construction of stands 563 and 564 ▪ Construction of aircraft tug park ▪ Fit out of foul pumping chamber FD263
Ref. Drawings / Images:	Refer to Appendix A
Objectives:	
BAA:	To deliver 5 pier served and 3 remote stands to accord with stand demands and to meet the T5C programme phasing.
Airline:	To operate from the T5C satellite with a full compliment of pier served and remote stands.

Project Benefits:
T5C compliance with the pier service SQR.

Status:	
Programme:	Project Gateway Stage:
Infrastructure	Construction Decision

Airline Engagement:
Regular consultation has been carried out throughout the project via the Western Campus Stakeholder Board and fortnightly meetings with BA's Airfield Development Manager.

Project Delivery

Current Control Budget:			
Total Capital Budget *(Estimated At Completion)*:	**£27,070,758**		
Refer to appendix B for cost information detail.			
Schedule:			
Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
06 /2008	05/2008	05/2011	1 0/2009 onwards (phased)
Assumptions:			
The following points cover the significant delivery assumptions related to this project:			
The remaining phases of this project will be delivered on 31 May 2011.			
Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.			

Operational Issues

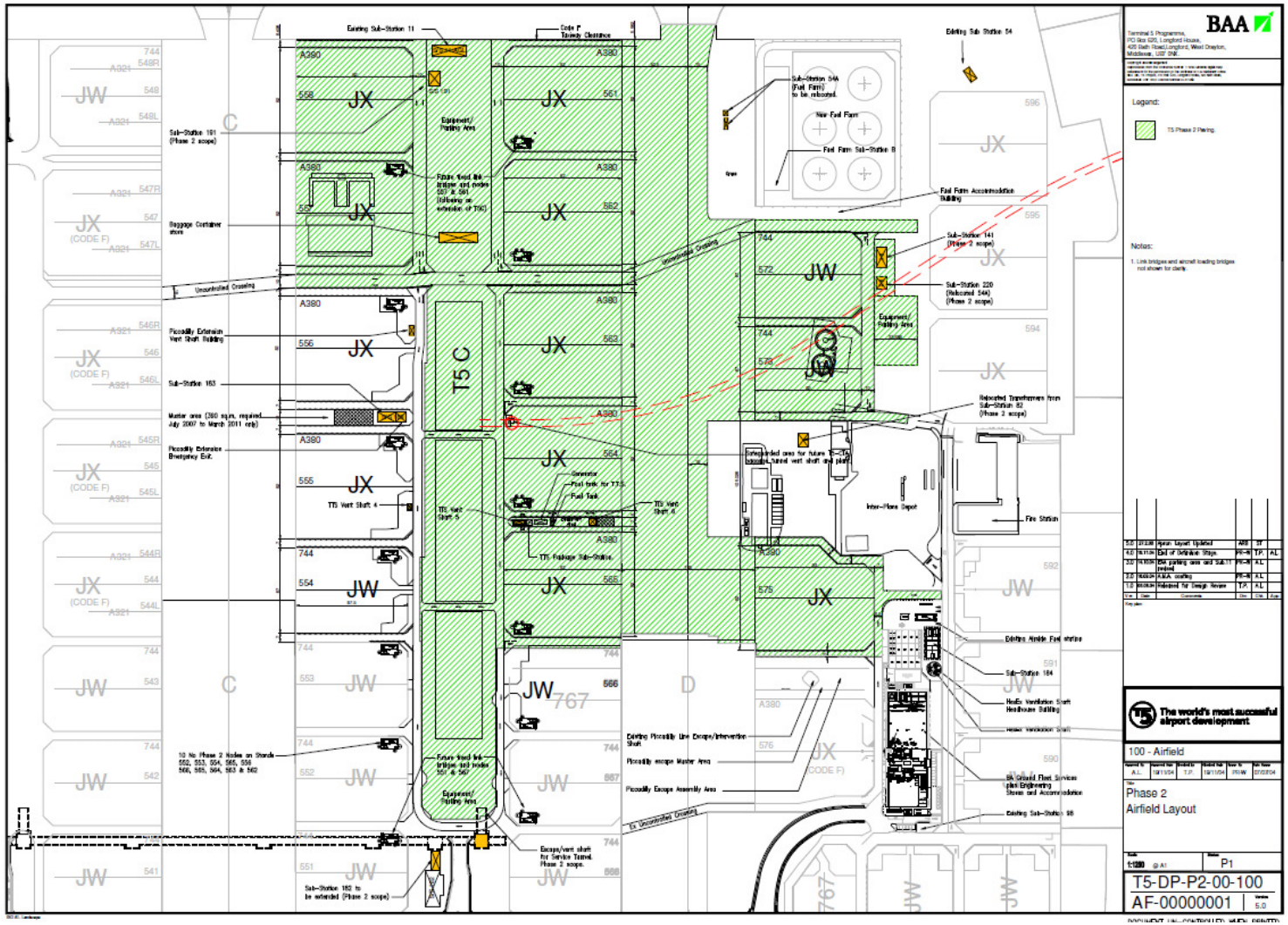
BAA Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
Revenue	Nil	None
Opex	Nil	None
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
None		

Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
N/A	N/A	None
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
None		

Average Asset life:	
Average Asset Life:	30 Years
Commentary:	
None	
Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.	

Impact on User Charges:	
Estimated Per Passenger Cost Impact:	3.3p
Commentary:	
None	
Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only.	
Non Construction Risk:	
The following points cover any significant areas of risk for the Airline Community regarding this project.	
None	

Appendix A: Overview: Reference Drawing / Image:



Appendix B: Project Delivery: Cost Information:

Project Information

Project Name: T5 Phase 2 Airfield Works
BCT No.: 8735

Cost Information

All information extracted from March 2011 month end

Base Costs:	£23,146,107	86	%
On-Cost:	£3,243,651	12	%
Opportunity	£681,000	2	%
Risk (R1 Allowance Only)	£0	0	%
Total	**£27,070,758**	100	%

Cost Benchmark Comparisons:	
Project Name:	T5 Phase 2 Airfield Works
Total Capital Budget *(Nominal Prices)*:	£27,070,758
Guidance Notes:	
The various elements of the T5 Phase 2 Airfield Works have been benchmarked prior to letting the construction contracts. The final element of these works (construction of stands 563, 564, 572, 573 and the BA aircraft tug park) was tendered in open competition through OJEU and benchmarked in August 2010, against recently completed airfield projects.	
Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.	

Header Information

BCT No.	8818
Op No.	N/A
Project Name:	Baggage Product Improvements

Project Overview, Objectives and Status

Overview:	
Description:	Minor projects fund for baggage system improvements during Q5 to maintain performance, reduce opex or improve safety.
Ref. Drawings / Images:	None
Objectives:	
BAA:	▪ Provide a robust & reliable baggage operation across the baggage portfolio that aligns with the functionality agreed under airline constructive engagement. ▪ Provide greater baggage operational reliability, flexibility & maintainability ▪ Fit with future terminal occupancy strategy ▪ Standardise baggage product solutions across the portfolio
Airline:	▪ Service quality equivalence ▪ Standard baggage product solutions across the portfolio

Project Benefits:
Consultation on-going with airlines during early 2011 to agree priority baggage scope for the remaining budget.

Status:	
Programme:	Project Gateway Stage:
Design and Development	Various

Airline Engagement:
No formal gateway reviews have been held to date with the airline community, the concept of the project was presented to the airlines on the 17th November 2010 at the Baggage and Flight Connections Stakeholder Board. On going consultation occurs at the following forums as and when required at the Baggage Stakeholder Strategy Board.

Project Delivery

Current Control Budget:			
Total Capital Budget *(Estimated At Completion)*:		**£9,021,728**	
Refer to appendix B for cost information detail.			
Schedule:			
Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
05/2011	Various	03/2013	On-going

Assumptions:
The following points cover the significant delivery assumptions related to this project;
Key scope assumptions for this project are: ▪ This fund is used to provide budget for additional minor projects identified by the airlines and other users which were not known about at the time of the creation of the Baggage Programme. **Key delivery assumptions for this project are:** ▪ As the required scope is identified, a new BCT project is created to execute the works and the funds transferred to it from this holding fund, demand, government decision, basis of a major cost element.
Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.

Operational Issues

BAA Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
N/A	N/A	None
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
Opex will be assessed as and when projects are prioritised and created.		

Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
		None
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
Opex will be assessed as and when projects are prioritised and created.		

Average Asset life:	
Average Asset Life:	See below
Commentary:	
This project is comprised of different elements with differing asset lives as follows: IT 7 years M&E 15 years	
Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.	

Impact on User Charges:	
Estimated Per Passenger Cost Impact:	1.7p
Commentary:	
None	
Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only (see Section 5.3 for further details)	

Non Construction Risk:
The following points cover any significant areas of risk for the Airline Community regarding this project.
▪ Money will be used to fund shortfalls in other programmes of work. ▪ The budget is insufficient for Q5.

Appendix B: Project Delivery: Cost Information:

Project Information

Project Name: Baggage Product Improvements
BCT No.: 8818

Cost Information

All information extracted from March 2011 month end

Base Costs:	£9,021,728	0	%
On-Cost:	£0	0	%
Opportunity	£0	0	%
Risk	£0	0	%
Total	**£9,021,728**	100	%

Commentary:
BCT8818 is set up to hold budget which will eventually be transferred to a dedicated new BCT for project execution. Risk and on-cost allowances will be assigned in each project once the scope is defined.

Cost Benchmark Comparisons:	
Project Name:	Baggage Product Improvements
Total Capital Budget *(Nominal Prices)*:	£9,021,728
Guidance Notes:	
As and when projects are identified, the projects will be individually benchmarked.	
Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.	

Header Information

BCT No.	8857
Op No.	24092
Project Name:	Taxiway and CDS Rebuilds (Q5)

Project Overview, Objectives and Status

Overview:	
Description:	This project represents a financial provision for the rebuild and rehabilitation of areas of the existing airfield (taxiway system and cul-de-sac) that will reach the end of their operational life during the course of Q6. These works will be carried out in phases. Additional deleathalisation of the runway emergency safety areas and the clear and graded areas is also included in the scope.
Ref. Drawings / Images:	None
Objectives:	
BAA:	Refurbishment of the taxiways and cul-de-sac to minimise operational disruption from unplanned maintenance.
Airline:	As per BAA

Project Benefits:
This project will contribute to improve take off punctuality by reducing the potential for stand closures due to unplanned maintenance. Additionally this project will have a positive indirect impact on the airline satisfaction measure by refurbishment of time expired airfield assets.

Status:	
Programme:	Project Gateway Stage:
Infrastructure	Construction Decision

Airline Engagement:
The airlines have been consulted through the February 2011 Infrastructure Stakeholder Board.

Project Delivery

Current Control Budget:	
Total Capital Budget *(Estimated At Completion)*.	**£19,538,108**
Refer to appendix B for cost information detail.	

Schedule:			
Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
10 / 2008	03/ 2009	12 / 2011	12 / 2011

Assumptions:
The following points cover the significant delivery assumptions related to this project:
▪ This project is refurbishing assets on a like for like basis. ▪ This project is set up to respond to specific requirements as they arise and the scope is developed and prioritised to match the EAC.
Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.

Operational Issues

BAA Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
None	None	Opex will reduce as the refurbishment eliminates the requirement for unplanned maintenance.
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
This project responds to an annual condition survey of the airfield. The work is reactive responding to the survey. The works are then prioritised and tailored to fit the budget.		

Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
N/A	N/A	None available
Assumptions:		
The following points cover the significant operational assumptions related to this project;		
None		

Average Asset life:	
Average Asset Life:	30 Years
Commentary:	
Each area is refurbished (Airfield Concrete, Airfield Ground Lighting (AGL), Airfield Asphalt) to align with the proposed airfield strategy.	
Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.	
Impact on User Charges:	
Estimated Per Passenger Cost Impact:	2.3p
Commentary:	
None	
Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only (see Section 5.3 for further details)	

Non Construction Risk:
The following points cover any significant areas of risk for the Airline Community regarding this project:
If identified assets are not refurbished the asset might fail causing unplanned operational disruption.

Appendix B: Project Delivery: Cost Information:

Project Information

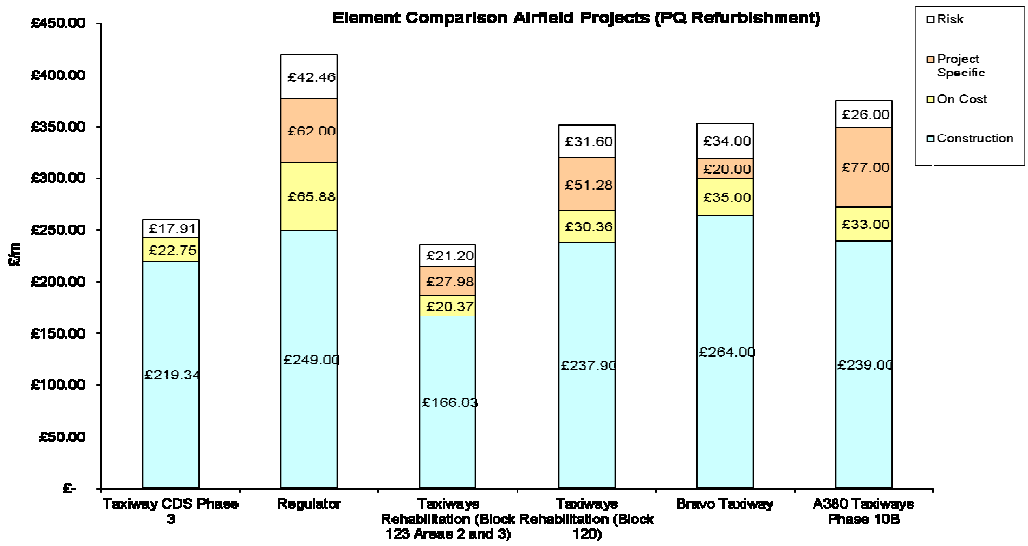
Project Name: Taxiway and CDS Rebuilds (Q5)
BCT No.: 8857

Cost Information

All information extracted from March 2011 month end

Base Costs:	£17,377,955	89	%
On-Cost:	£1,760,800	9	%
Opportunity	£0	0	%
Risk (R1 Allowance Only)	£399,353	2	%
Total	**£19,538,108**	100	%

Cost Benchmark Comparisons:	
Project Name:	Taxiway and CDS Rebuilds (Q5)
Total Capital Budget *(Nominal Prices)*:	£19,538,108
Guidance Notes:	
This project has been benchmarked and compares favourably with other similar projects. The asphalt costs have been compared with previous projects and are competitive. The concrete costs have been compared and are very competitive due to no site restrictions or night works. Refer to Appendix D.	
Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.	



Header Information

BCT No.	9105
Op No.	24230
Project Name:	New Model Line (Formerly ATRS)

Project Overview, Objectives and Status

Overview:	
Description:	Following a review of the outcomes arising from the Next Generation Auto-Tray Return System (ATRS) prototype by the Security Governance Group a view has been formed that to be able to deliver the required business benefits security development work moving forward must take a more holistic view focusing not solely on the cabin baggage element of the security search process. The Security Strategic Initiative was formed with comprises 3 workstreams. Of these workstreams, the New Model Line element focuses on delivering the optimum physical technology and infrastructure.
Ref. Drawings / Images:	None
Objectives:	
BAA:	This project is part of a wider Strategic Security Initiative which initially includes two other project workstreams namely Leveraging Best Practice and Get The Best From Our People. The three workstreams combined aim to deliver the required operational performance improvements to keep pace with our competitors and support long term business planning requirements.
Airline:	▪ Improved Passenger Service Levels in Security ▪ Reduced Opex ▪ Increase Security Efficiency

Project Benefits:
NML supports the security strategy to provide a safe, secure and compliant airport which enables efficient and effective processes to deliver a world class service to passengers and stakeholders. Going forward this project will incorporate the work required to validate the suitability of body scanner deployment in line across Heathrow. The three workstreams combined aim to deliver the following operational performance improvements. ▪ Increasing operational efficiency through all Security Areas ▪ Peak hourly flow rate increases across all Terminals ▪ Increase in ASQ scores for feeling of being safe and secure, thoroughness or security inspection courtesy and helpfulness of security staff. ▪ Maintaining or improving compliance levels. ▪ Increasing operational efficiency at ticket presentation.

Status:	
Programme:	Project Gateway Stage:
Infrastructure	Brief Decision Gateway was obtained in February 2011.

Airline Engagement:
The ATRS project has been consulted previously through the Infrastructure Stakeholder Board. The high level details of the Strategic Security Initiative has also been shared at the AOC Executive and further detail regarding the initiative was provided at the same forum in December 2010 and CIP Working Group in January 2011. The re-alignment of the scope of the ATRS Project to that of the New Model Line workstream was agreed at the December Infrastructure Stakeholder Board.

Project Delivery

Current Control Budget:			
Total Capital Budget *(Estimated At Completion)*:		**£5,700,516**	
Refer to appendix B for cost information detail.			
Schedule:			
Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
02/2011	TBC	TBC	TBC
Assumptions:			
The following points cover the significant delivery assumptions related to this project:			
▪ Proposed trials fit within existing space constraints ▪ Domestic passengers are capable of interacting with the automated biometric capture unit unaided ▪ Approvals required from the Department for Transport for untested technologies will be granted (body scanner auto detect mode & secondary screen at the bag search position)			
Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.			

Operational Issues

BAA Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
Security Opex	-£6,000,000	Opex currently estimated to reduce by £6-12m per annum as a result of the project
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
Security staff will engage in the customer service aspects of the Get The Best From Our People workstream to deliver the ASQ improvements		

Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
N/A	N/A	None
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
This will be discussed with the airlines through the next stage of works		

Average Asset life:	
Average Asset Life:	10 years (Equipment based on BAA standard)
Commentary:	
Assets typically involve security screening equipment. Minor changes to infrastructure and/or internal building may also be required.	
Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.	
Impact on User Charges:	
Estimated Per Passenger Cost Impact:	7.4p
Commentary:	
None	
Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only (see Section 5.3 for further details)	

Non Construction Risk:
The following points cover any significant areas of risk for the Airline Community regarding this project.
▪ Terrorist incident at Heathrow or elsewhere in the world requiring significant change to the current search process ▪ Varying solutions across Terminal reducing staff flexibility

Appendix B: Project Delivery: Cost Information:

Project Information

Project Name: New Model Line (formerly ATRS)
BCT No.: 9105

Cost Information

All information extracted from March 2011 month end process

Base Costs:	£4,100,742	71.9	%
On-Cost:	£559,192	9.8	%
Opportunity	£0	0	%
Risk (R1 Allowance Only)	£1,040,582	18.3	%
Total	**£5,700,516**	100	%

Commentary:
The NML Project has concluded it's explore phase. The output of this phase developed 4 potential new model security lines and 1 new ticket presentation line which has been translated into 6 phases of operational trails. Due to the existing physical constraints particularly in Terminals 3 and 1 not all of the security model lines are universally deployable across Heathrow.

Cost Benchmark Comparisons:	
Project Name:	New Model Line (Formerly ATRS)
Total Capital Budget *(Nominal Prices)*:	£5,700,516
Guidance Notes:	
Both the capital costs and operational benefits have been benchmarked against existing security projects and existing operational deployment scenarios. However, at this stage the benchmarking is limited until a clear solution is selected following the options stage.	
Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.	

Header Information

BCT No.	9213
Op No.	N/A
Project Name:	Security Projects

Project Overview, Objectives and Status

Overview:	
Description:	This project provides a year on year financial provision to deliver works to support a fully compliant security operation at Heathrow and allow: ▪ Response at short notice to changes in legislation from the DfT which requires a capital project to be set up in order to maintain compliance. ▪ Response to threats that the airport faces from terrorist and criminal activities which have been identified by the Heathrow MATRA Working Group. Development of solutions to transform security at Heathrow in line with the Q5 Security Strategy.
Ref. Drawings / Images:	None
Objectives:	
BAA:	To provide a safe, secure and compliant airport which enables efficient and effective processes to deliver a world class service to passengers and stakeholders
Airline:	As per BAA

Project Benefits:
This projects is driven by compliance and therefore there are no additional benefits, only an enabler to ensure the airport continues to operate

Status:	
Programme:	Project Gateway Stage:
Infrastructure	Explore Stage

Airline Engagement:
Airlines have yet to be consulted on this project as it is the Brief stage and hence, is prior to any gateway

Project Delivery

Current Control Budget:	
Total Capital Budget *(Estimated At Completion)*:	**£12,000,137**
Refer to appendix B for cost information detail.	

Schedule:			
Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
Dec 11	TBC	TBC	TBC

Assumptions:
The following points cover the significant delivery assumptions related to this project:
Projects are selected if they provide works to support a fully compliant security operation at Heathrow and allow:

- Response at short notice to changes in legislation from the DfT which requires a capital project to be set up in order to maintain compliance.
- Response to threats that the airport faces from terrorist and criminal activities which have been identified by the Heathrow MATRA Working Group.
- Response to the Q5 Security Strategy.
- Response to implementation of technology to support improvements in detection and compliance

DfT statement regarding CA/RZ boundary solution awaited in Mid 2011following the installation of the Doplar Radar system in both the Cargo area and Eastern Maintenance Base. This will inform scope clarity & define the programme for Q5

Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.

Operational Issues

BAA Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
N/A	N/A	On a project by project basis
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
None		

Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
N/A	N/A	None
Assumptions:		
The following points cover the significant operational assumptions related to this project;		
None		

Average Asset life:	
Average Asset Life:	TBC
Commentary:	
None	
Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.	
Impact on User Charges:	
Estimated Per Passenger Cost Impact:	1.8p
Commentary:	
None	
Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only (see Section 5.3 for further details)	

Non Construction Risk:
The following points cover any significant areas of risk for the Airline Community regarding this project.
TBC, when scope is clarified

Appendix B: Project Delivery: Cost Information:

Project Information

Project Name: Security Projects
BCT No.: 9213

Cost Information

All information extracted from March 2011 month end

Base Costs:	£7,203,453	60.0%	%
On-Cost:	£982,289	8.2%	%
Opportunity	£0	0%	%
Risk (R1 Allowance Only)	£3,814,395	31.2%	%
Total	**£12,000,137**	100%	%

Cost Benchmark Comparisons	
Project Name:	Security Projects
Total Capital Budget *(Nominal Prices)*:	£12,000,137
Guidance Notes:	
No benchmarking has been carried out to date. This will be carried out when the scope is clarified.	
Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.	

Header Information

BCT No.	9301
Op No.	24506
Project Name:	Infrastructure Safety Critical Project

Project Overview, Objectives and Status

Overview:	
Description:	▪ Refurbishment of the Main & Cargo tunnels to address both life safety & business continuity risks to a level of ALARP. The works may incorporate: active and passive fire protection systems ▪ repair of civil elements ▪ replacement of M&E elements ▪ safety systems and associated controls ▪ improvement to the means of escape
Ref. Drawings / Images:	Refer to Appendix A
Objectives:	
BAA:	Maintain safe operational links to the CTA and between the CTA and the T4 Cargo Area by adopting where appropriate the regulations for the operation and maintenance of tunnels as they relate to the public roads. Additionally for the Main Tunnel, to create an improved first impression for passengers into to the CTA.
Airline:	As per BAA

Project Benefits:
▪ Improve the performance and resilience of critical operation links at HAL. ▪ Reduce the life safety and business risks associated with operating the main and cargo tunnels.

Status:	
Programme:	Project Gateway Stage:
Infrastructure	Options Stage

Airline Engagement:
The Airlines were consulted at the April 2009, August 2010, October 2010, March 2011 Airline Stakeholder Boards where key risks, programme and costs were discussed.

Project Delivery

Current Control Budget:	
Total Capital Budget *(Estimated At Completion)*:	**£24,386,412**
Refer to appendix B for cost information detail.	

Schedule:			
Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
10 / 2010	12 / 2012	03 / 2014	Maintained throughout the project
Assumptions:			
The following points cover the significant delivery assumptions related to this project:			
▪ Only the Main and Cargo Tunnels are being refurbished (other tunnels currently excluded).			

▪ Install current UK and EU best practice fire detection and response systems. ▪ Complete replacement of the ventilation system. ▪ Complete road resurfacing including access ramps. ▪ Repair of all civil engineering elements. ▪ Replacement of all M&E systems. ▪ Access ramps to include up to 50m from tunnel portals only (main tunnel). ▪ Recladding of tunnel lining. ▪ Implementation of best practice tunnel management processes. ▪ Majority of works will need to be done at night with the cargo tunnel additionally subject the runway alternation restrictions.
Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.

Operational Issues

BAA Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
Revenue	None	No revenue increase.
Opex	TBA	Negligible opex impact is expected. To be established as project progresses and scope is defined.
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
A solution can be found to mitigate the impact of operational constraints on night-time working, e.g. alternation restrictions have a significant impact on working windows in the cargo tunnel.		

Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
Revenue	None	No revenue impact is expected.
Opex	None	No opex impact is expected.
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
None		
Average Asset life:		
Average Asset Life:	c. 25 Years	
Commentary:		
None		
Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.		
Impact on User Charges:		
Estimated Per Passenger Cost Impact:	3.0p	
Commentary:		
None		
Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only (see Section 5.3 for further details)		

Non Construction Risk:
The following points cover any significant areas of risk for the Airline Community regarding this project:
None

Appendix A: Overview: Reference Drawing / Image:

Main tunnel location plan

Cargo tunnel location plan

Appendix B: Project Delivery: Cost Information:

Project Information

Project Name: Infrastructure Safety Critical Projects
BCT No.: 9301

Cost Information

All information extracted from March 2011 month end

Base Costs:	£14,374,628	59	%
On-Cost:	£6,642,659	27	%
Opportunity	£0	0	%
Risk (R1 Allowance Only)	£3,369,125	14	%
Total	**£24,386,412**	100	%

Commentary:
The reported EAC of £24,386,412 will be adjusted at the Project Gateways going forward to reflect the actual scope development.

Cost Benchmark Comparisons:	
Project Name:	Infrastructure Safety Critical Project
Total Capital Budget *(Nominal Prices)*:	£24,386,412
Guidance Notes:	
Benchmarking information will be provided at the completion of an Options Study.	
Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.	

Header Information

BCT No.	9382
Op No.	24479
Project Name:	PiccEx Station Works

Project Overview, Objectives and Status

Overview:	
Description:	Including new lifts from platform to ticket hall. Station refurbishment.
Ref. Drawings / Images:	Refer to Appendix A
Objectives:	
BAA:	To increase the flow capacity of T123 London Underground station. Provide usable reduced mobility access to platform level. Provide a more ambient environment
Airline:	As per BAA

Project Benefits:

The business benefits of the project are:

- Reduced accidents in the CTA Station
- Improved level of passenger service – easier access to lifts
- Improved ambience in the station

Status:	
Programme:	Project Gateway Stage:
Infrastructure	Construction

Airline Engagement:

The airlines have been consulted throughout the project via the Infrastructure Stakeholder Board. This was presented in:

- June 09 Options decision
- Jan 10 At construction decision

Project Delivery

Current Control Budget:	
Total Capital Budget *(Estimated At Completion)*:	**£21,660,441**
Refer to appendix B for cost information detail.	

Schedule:

Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
03 / 2009	05 / 2010	11 / 2011	12 / 2011

Assumptions:

The following points cover the significant delivery assumptions related to this project:

Background:
As part of the delivery of T5, funds were allocated to London Underground for "remodelling the Terminal 123 Station"
Inclusions

- 2 x 16 person lifts from ticket hall to platform level to provide 'step free access' and unlock capacity on the escalators – reducing accident rate.
- A refurbishment of the station is already in plan by LU (using PPP funds).

Remaining funds from the lift project will be used to enhance the refurbishment project to focus on ambience related items: recladding of columns, walls and escalator surround, clean up of station, replace ceiling at platform level and deep clean for the station Exclusions: Standard communications systems upgrade and 'deep clean' refurbishment – funded by LUL.
Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.

Operational Issues

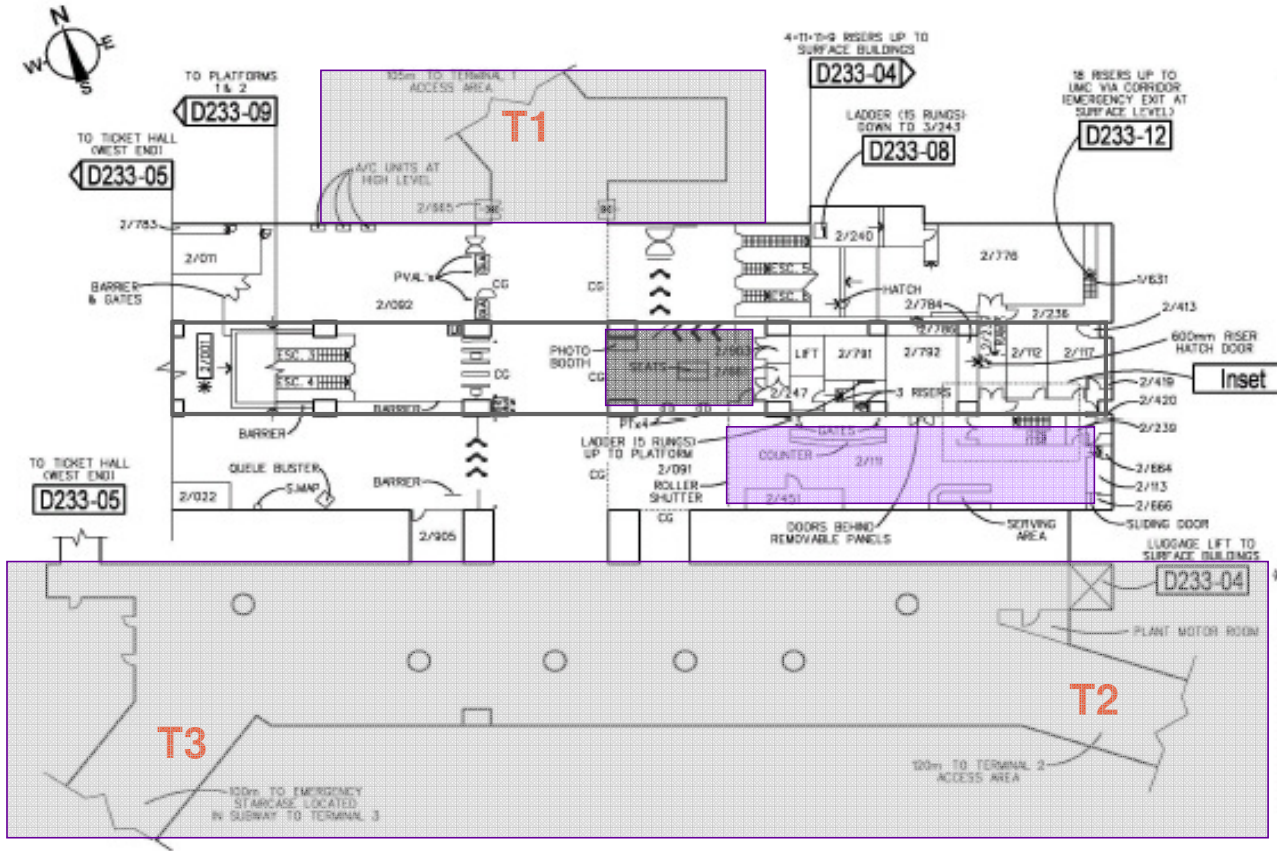
BAA Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
N/A	N/A	All delivered works within LUL station area
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
None		

Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
N/A	N/A	All delivered works within LUL station area
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
None		

Average Asset life:	
Average Asset Life:	25 years
Commentary:	
None	
Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.	
Impact on User Charges:	
Estimated Per Passenger Cost Impact:	2.7p
Commentary:	
Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only (see Section 5.3 for further details)	
Non Construction Risk:	
The following points cover any significant areas of risk for the Airline Community regarding this project.	
None	

Appendix A: Overview: Reference Drawing / Image:

Preferred Option - Existing Ticket Hall Level



Heathrow

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Appendix B: Project Delivery: Cost Information:

Project Information

Project Name: PiccEx Station Works
BCT No.: 9382

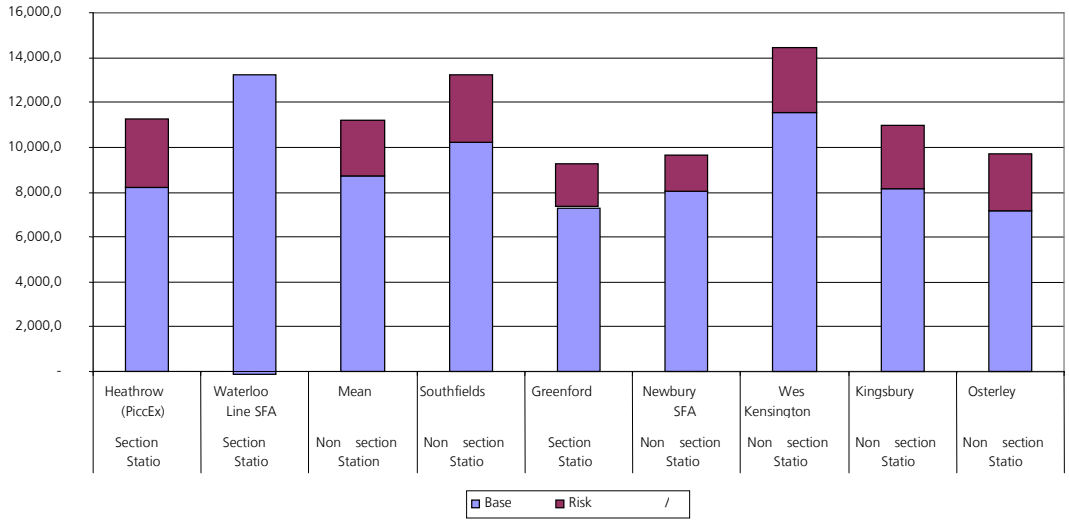
Cost Information

All information extracted from March 2011 month end

Base Costs:	£20,750,004	96	%
On-Cost:	£910,437	4	%
Opportunity	£0	0	%
Risk (R1 Allowance Only)	£0	0	%
Total	**£21,660,441**	100	%

Cost Benchmark Comparisons:	
Project Name:	PiccEx Station Works
Total Capital Budget *(Nominal Prices)*:	£21,660,441
Guidance Notes:	
The PiccEx Station Works have been benchmarked against other lift installation projects at London Underground (LUL) stations. The most comparable (Section 12) lift project is the Waterloo City Line project which shows a higher base cost compared to the Construction Base and Risk provision of the PiccEx project. The PiccEx project also compares favourably against the mean of non Section 12 projects.	
Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.	

Appendix 4 -



Header Information

BCT No.	9501
Op No.	24679
Project Name:	Heathrow Resilience

Project Overview, Objectives and Status

Overview:	
Description:	17 different work packages aimed at allowing the ending of the Cranford agreement and improving the resilience of the airfield.
Ref. Drawings / Images:	Refer to Appendix A
Objectives:	
BAA:	The Heathrow Resilience Programme was commissioned to deliver changes that will improve the resilience of the airport operation. The key objectives being; ▪ Improve punctuality and predictability at Heathrow airport ▪ Improve Heathrow airport's ability to reorganise runway usage during periods of unplanned high demand ▪ Facilitate effective and timely recovery of aircraft flow rate ▪ Implementation of departures on 09L which redistributes noise around the airport by operating 09L as the designated departure runway in conjunction with a runway alternation pattern providing a robust and sustainable operation
Airline:	To reduce delays and cancelled flights

Project Benefits:
▪ Improved departures and arrivals punctuality ▪ Reduced numbers of cancellations with a consequent increase of aeronautical and retail revenue ▪ A reduction in the numbers of night jet movement dispensations ▪ An improvement in aircraft efficiency through the elimination of excess time in schedules ▪ Improvements in QSM and ASQ scores ▪ Improvements in our reputation amongst airline and external stakeholders ▪ Increased EBITDA

Status:	
Programme:	Project Gateway Stage:
Infrastructure	WP 2&3 Taxiways enabling the ending of the Cranford agreement – next gateway to be Construction Decision. Other operational resilience work packages at Options stage

Airline Engagement:
Airline engagement on the Heathrow Resilience Programme is achieved through a dedicated Heathrow Resilience Steering Group which includes AOC representation as well as Scheduling Committee representation. In addition, airline engagement is achieved through the Joint Steering Team (JST) in relation to the governance of the Projects for the Sustainable Development of Heathrow (PSDH) funds and through Capital governance at the Infrastructure Stakeholder Board in relation to the investment of funds transferred from PSDH to CIP for delivery.

Project Delivery

Current Control Budget:			
Total Capital Budget *(Estimated At Completion)*:		**£42,559,847**	
Refer to appendix B for cost information detail.			
Schedule:			
Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
03 / 2010	01 / 2012	04 / 2012	04 / 2012
Assumptions:			
The following points cover the significant delivery assumptions related to this project: ▪ WP 2&3 covering the taxiways enabling the ending of the Cranford agreement respond to the government decision to end this agreement. A Public consultation on noise mitigations schemes is part of this work package and planning approval is required. ▪ Other work packages include o Landing Rate Resilience o Tactically Enhanced Arrivals Mode o Tactically Enhanced Departures o Capacity and Schedule o Departures Resilience o Low Visibility Operations o Non-standard flights o Airspace Classification o Microwave Landing System o Departure Rate Resilience ▪ These work packages contain a variety of operational changes to improve the resilience of the airfield. Some contain infrastructure requirements, some consultancy requirements and some are purely operational process changes.			
Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.			

Operational Issues

BAA Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
EBITDA	£1,000,000	Increased revenue through a reduction in cancelled flights
Operational expenditure	-£400,000	Possible operating costs of landing rate resilience system
Assumptions:		
The following points cover the significant operational assumptions related to this project: ▪ There is a small reduction in pavement area as a result of the project to enable the ending of the Cranford area as the total pavement area is being reduced. This will reduce maintenance requirements. ▪ NATS are yet to confirm the ongoing operating costs of the landing rate resilience system but there may be an annual operational requirement		

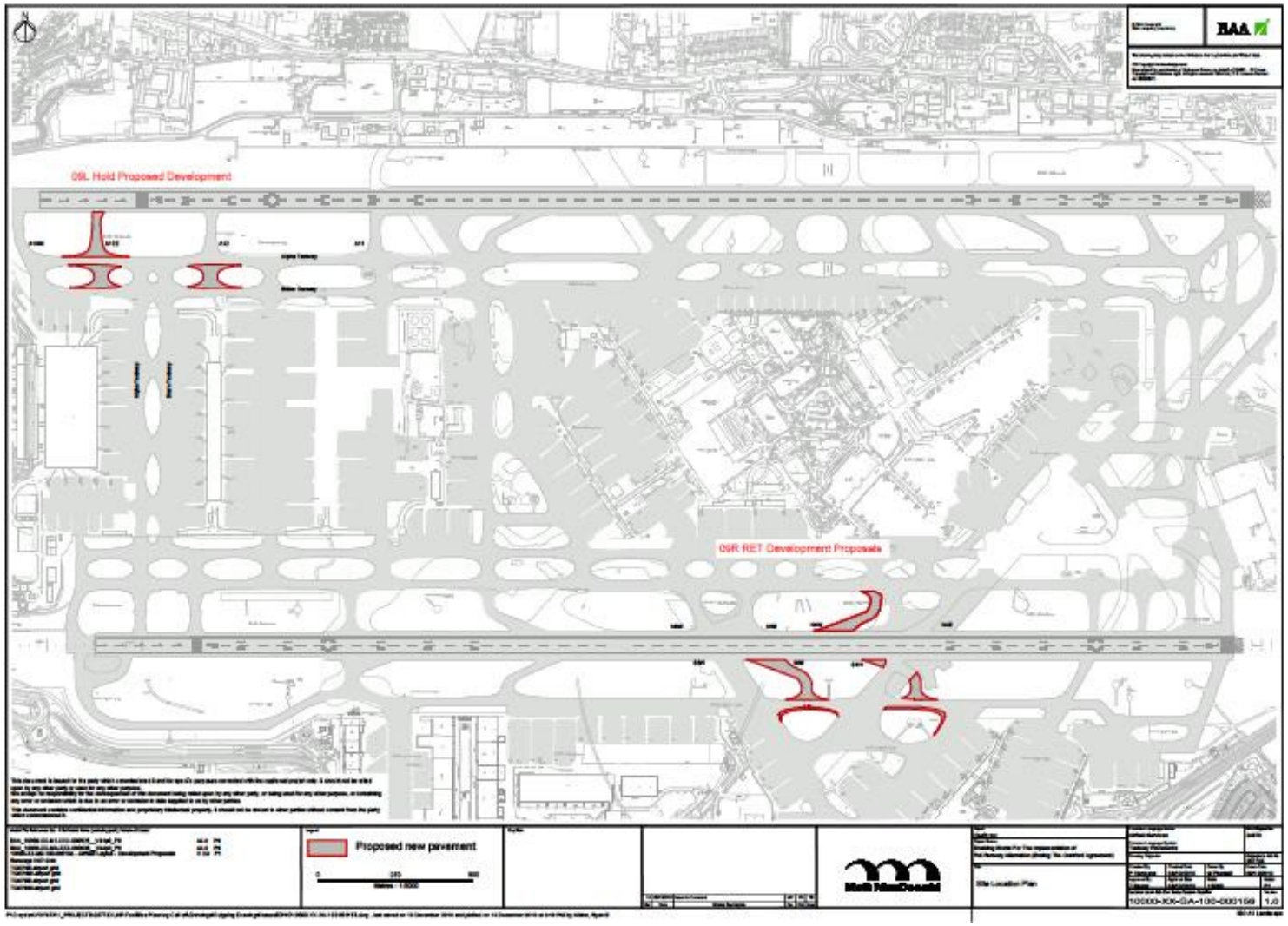
Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
Opex	£6,000,000	NATS estimate of cost of delay savings to airlines as a result of implementing the landing rate resilience system

Assumptions:
The following points cover the significant operational assumptions related to this project:
The Opex saving figure, above, assumes that the system will save approximately 200,000 minutes of delay per annum.

Average Asset life:	
Average Asset Life:	30 Years
Commentary:	
30 years is a typical design life of the new pavement in the WP to enable the ending of the Cranford agreement.	
Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.	
Impact on User Charges:	
Estimated Per Passenger Cost Impact:	4.9p
Commentary:	
None	
Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only (see Section 5.3 for further details)	

Non Construction Risk:
The following points cover any significant areas of risk for the Airline Community regarding this project:
None

Appendix A: Overview: Reference Drawing / Image:



Appendix B: Project Delivery: Cost Information:

Project Information

Project Name: Heathrow Resilience
BCT No.: 9501

Cost Information

All information extracted from March 2011 month end

Base Costs:	£32,858,474	87	%
On-Cost:	£1,439,938	3	%
Opportunity	£188,500	0	%
Risk (R1 Allowance Only)	£4,449,935	10	%
Total	**£42,559,847**	100	%

Commentary:
This cost information relates to WP 2&3 Taxiways to enable the ending of the Cranford agreement.

Cost Benchmark Comparisons:	
Project Name:	Heathrow Resilience
Total Capital Budget *(Nominal Prices)*:	£42,559,847
Guidance Notes:	
WP 2&3 Taxiways enabling the ending of the Cranford agreement was benchmarked in the Sept 2010 Options paper. Key points are: ▪ The base cost includes an amount of 'abnormals' (noise attenuation wall to Longford Village, removing earth mounds north of T5, special protection to major mains services, works to links N5E, N5W & N4E, creation of land drainage areas to offset new pavement areas). When 'abnormals' are excluded, the base cost is comparable to other similar projects. ▪ Because the works have to be carried out during temporary, nightly possessions of areas of runways and taxiways, with return to live operations each morning, the roller compacted concrete with asphalt overlay method of construction has been identified as the most appropriate for the new RAT/Links, RETs and Sierra Taxiway Code F works. Although this form of construction carries a cost premium, the overall benchmark remains comparable due to large areas in the project comprising (lower cost) re-surfacing only works. ▪ Project Specifics reflect the 100% night shifts, non sequential working, with no runway de-alternation or permanent site closures. The Risk provision allows for the complex planning and programming issues, third party requirements associated with this project, and additional construction risks.	
Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.	

Header Information

BCT No.	9575
Op No.	24450
Project Name:	T5 Transfers Add Security Lanes

Project Overview, Objectives and Status

Overview:	
Description:	This project is tasked with increasing passenger search capacity through the provision of 2 new search lanes in the southern search area to enable the operation to manage passenger flows better and thereby respond to the urgent need to improve passenger experience.
Ref. Drawings / Images:	None
Objectives:	
BAA:	▪ To improve flow rates and minimise the threat of SQR losses ▪ To improve the passenger experience and enhance QSM scores
Airline:	As per BAA

Project Benefits:
This project increases the capacity of the southern security area reducing waiting times for passengers

Status:	
Programme:	Project Gateway Stage:
Infrastructure	On Hold

Airline Engagement:
The airlines have been consulted on the project through the prioritisation process in 2009.

Project Delivery

Current Control Budget:			
Total Capital Budget *(Estimated At Completion)*:		**£3,500,000**	
Refer to appendix B for cost information detail.			
Schedule:			
Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
Project on hold			
Assumptions:			
The following points cover the significant delivery assumptions related to this project:			
▪ Access to site enabled by operation ▪ Programme to accommodate operational peaks ▪ Enhanced HVAC performance not in scope			
Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.			

Operational Issues

BAA Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
	£420,000	Project represents an increase in FTE of 12.
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
Project represents an increase in FTE of 12 FTE based on a 4-8 hour daily opening window.		

Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
N/A	N/A	None
Assumptions:		
The following points cover the significant operational assumptions related to this project;		
None		

Average Asset life:	
Average Asset Life:	15 years
Commentary:	
The project has yet to deliver any permanent infrastructure, therefore asset life will be established when the scope if fully understood.	
Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.	
Impact on User Charges:	
Estimated Per Passenger Cost Impact:	1.1p
Commentary:	
None	
Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only (see Section 5.3 for further details)	

Non Construction Risk:
The following points cover any significant areas of risk for the Airline Community regarding this project.
None

Appendix B: Project Delivery: Cost Information:

Project Information

Project Name: T5 Transfers Add Security Lanes
BCT No.: 9575

Cost Information

All information extracted from March 2011 month end

Base Costs:	£2,849,600	81.4	%
On-Cost:	£371,400	10.6	%
Opportunity	-£63,000	-1.8	%
Risk (R1 Allowance Only)	£342,000	9.8	%
Total	**£3,500,000**	100	%

Cost Benchmark Comparisons	
Project Name:	T5 Transfers Add Security Lanes
Total Capital Budget *(Nominal Prices)*:	£3,500,000
Guidance Notes:	
No benchmarking has been completed at this stage as the project is on hold. Benchmarking will be carried out when the full project scope is understood.	
Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.	

Header Information

BCT No.	9843
Op No.	25148
Project Name:	Low Cost Security Projects (LCSP)

Project Overview, Objectives and Status

Overview:	
Description:	The LCSP portfolio contains a large number of small, low cost security compliance-led projects, managed together through a Local Projects Integrator in order to maximise efficiency and speed of delivery. It is designed to pre-empt and/or react to a deficiency notice from the DfT and therefore must be delivered to the required standard and in a timely manner
Ref. Drawings / Images:	None
Objectives:	
BAA:	The programme of work is defined by the need to respond quickly to ever changing security regulations and to prevent/respond to the issue of any DfT Deficiency Notices, Enforcement Notices or an Article 15 which would jeopardise the continued smooth and secure operation of BAA airports.
Airline:	As per BAA

Project Benefits:
Aids the delivery of a safe, compliant and secure airport.

Status:	
Programme:	Project Gateway Stage:
Infrastructure	Various

Airline Engagement:
Approval gained March 2009

Project Delivery

Current Control Budget:	
Total Capital Budget *(Estimated At Completion)*.	**£7,749,152**
Refer to appendix B for cost information detail.	

Schedule:			
Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
N/A	N/A	N/A	Various

Assumptions:
The following points cover the significant delivery assumptions related to this project:
Low Cost Security Projects sit within the Security Projects portfolio but are administered though a separate defined governance route. The governance team consists of representatives from Minor Projects, Capital, Group Security, IT and Commissioning, meeting on a monthly basis and ensuring that the requested projects are correctly identified, scoped and relate to the improvement of security, in particular compliance, at Heathrow.
Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.

Operational Issues

BAA Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
Security	Variable	Variable dependent upon project scope
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
All Security compliance-led Statements of Need requiring low cost capital input should be able to be accommodated within this Q5 CIP line provided that they meet the LCSP criteria		

Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
N/A	N/A	None
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
None		

Average Asset life:	
Average Asset Life:	Variable
Commentary:	
Variable dependent upon project scope	
Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.	
Impact on User Charges:	
Estimated Per Passenger Cost Impact:	1.8p
Commentary:	
None	
Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only (see Section 5.3 for further details)	

Non Construction Risk:
The following points cover any significant areas of risk for the Airline Community regarding this project:
None

Appendix B: Project Delivery: Cost Information:

Project Information

Project Name: Low Cost Security Projects
BCT No.: 9843

Cost Information

All information extracted from March 2011 month end

Base Costs:	£6,897,519	89.01	%
On-Cost:	£726,587	9.38	%
Opportunity	£-613,159	-7.91	%
Risk (R1 Allowance Only)	£738,205	9.53	%
Total	**£7,749,152**	100	%

Cost Benchmark Comparisons:	
Project Name:	Low cost Security Projects
Total Capital Budget *(Nominal Prices)*:	£7,749,152
Guidance Notes:	
No benchmarking has been completed at this stage	
Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.	

Appendix E: PDS – Airline Relocation

Project Definition Sheets

BCT Number and Project Name as shown in Schedules

7702 : Relocation of Airline IT Operations

Header Information

BCT No.	7702
Op No.	23198
Project Name:	Relocation of Airline IT Operations

Project Overview, Objectives and Status

Overview:	
Description:	Works on airline IT systems to enable Airline Relocations
Ref. Drawings / Images:	None
Objectives:	
BAA:	Improve the passenger experience by collocation of Alliance Airlines. Enable Airlines and Alliances to grow their business.
Airline:	As per BAA

Project Benefits:
▪ Improve the passenger experience by collocation of Alliance Airlines. ▪ Enable Airlines and Alliances to grow their business.

Status:	
Programme:	Project Gateway Stage:
Airline Relocation	Step 9.2 – M&A Step 9.3 – Production Design

Airline Engagement:
Detailed and continuous, direct engagement with all affected airlines coordinated to align with their own move schedule.

Project Delivery

Current Control Budget:	
Total Capital Budget *(Estimated At Completion)*:	**£13,056,369**
Refer to appendix B for cost information detail.	

Schedule:			
Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
11/2007	03/2008 (phased, this date relates to step 3)	June 2011(phased, this date relates to step 9.3)	07/2008 (phased, this date relates to step 3)

Assumptions:
The following points cover the significant delivery assumptions related to this project:
The project was developed as part of the overall strategy to deliver the Airline Moves Programme. The business objectives of Airline Moves are to: ▪ Enable closure of T2 to support HET delivery ▪ Improve the transfer product through collocation of alliances ▪ Ensure competitive equivalence post T5 opening ▪ Ensure robust operations post T5 opening ▪ Create opportunities for growth This project is part of the Airline Moves programme for Heathrow and involves the relocation, decommissioning and re-provision of existing IT systems. Relocation agreements are based on the provision of like-for-like facilities and services.

- The scale of these works and the potential for operational disruption is greater than any prior systems project at Heathrow, as the works contain Airline, Terminal, Ground Handler and Airport related activities. The airlines cannot fulfil their operational activities and run their business without their supporting IT systems. Many Airlines share the same hosting services and the same service providers and ground handlers. Relocation agreements are based on the provision of like-for-like facilities and services. As a result the Airline Moves programme requires a supporting Systems work-stream, both to prove systems operationally and to relocate airlines with minimal operational disruption.
- The Airlines have been consulted and are supportive.
- Airlines move to agreed schedule.
- Like for like systems replacement/re-provision only.
- All Operation requirements are managed through other work streams within the Airline Moves Programme

Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.

Operational Issues

BAA Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
N/A	N/A	No increase in Opex.
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
Like for Like provision assumes no increase in Opex		

Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
N/A	N/A	No increase in opex
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
Like for Like provision assumes no increase in opex		

Average Asset life:	
Average Asset Life:	N/A
Commentary:	
None	
Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.	
Impact on User Charges:	
Estimated Per Passenger Cost Impact:	None
Commentary:	
None	
Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only (see Section 5.3 for further details)	

Non Construction Risk:
The following points cover any significant areas of risk for the Airline Community regarding this project.
None

Appendix B: Project Delivery: Cost Information:

Project Information

Project Name: Relocation of Airline IT Operations
BCT No.: 7702

Cost Information

All information extracted from March 2011 month end

Base Costs:	£9,792,277	75	%
On-Cost:	£2,350,147	18	%
Opportunity	£0	0	%
Risk (R1 Allowance Only)	£913,945	7	%
Total	**£13,056,369**	100	%

Cost Benchmark Comparisons:	
Project Name:	Relocation of Airline IT Operations
Total Capital Budget *(Nominal Prices)*:	£13,056,369
Guidance Notes:	
Key requirement is to provide assurance on the capex efficiency of the project through benchmarking against similar projects. Refer to and summarise the most recent benchmark report provided in the latest approval paper (or standalone report if applicable), making reference to internal and external comparator projects indicating reasons for variance.	
Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.	

Appendix F: PDS – IT / Systems

Project Definition Sheets

BCT Number and Project Name as shown in Schedules

IT01 : Airport Operational Systems
IT02 : Infrastructure Renewal
IT03 : Business Planning & Support IT Solutions

Header Information

BCT No.	IT01
Op No.	Various
Project Name:	Airport Operational Systems

Project Overview, Objectives and Status

Overview:	
Description:	Value delivery of a portfolio of systems to support the operational needs of Heathrow Airport in terms of passengers, airlines, Baggage handlers, other business partners and BAA staff. Key strategic programmes within the IT01 portfolio for Q5 include: ▪ Real Time Heathrow (previously Total Airport Management System – TAMS) ▪ Heathrow Baggage Infrastructure
Ref. Drawings / Images:	None
Objectives:	
BAA:	▪ Simplify and rationalise the existing operational systems ▪ Enable delivery of an integrated airport management system to o Maximise the flow of information for operations, management and security. o Improve the efficiency, performance and robustness of the airport, thus improving our service to the Airlines, passengers and ground handlers. o Deliver IT Infrastructure to support the Heathrow integrated Baggage Programme o Reduce operational costs for IT solutions o Support improvement in airport operational KPI's.
Airline:	Airline priorities and strategic objectives are consulted via the quarterly IT Stakeholder Board and monthly IT Working Group

Project Benefits:
Each project has different benefits – all link through to Heathrow Strategic intents such as Making every journey better e.g. by improving Passenger Information and reducing baggage miss-connect rates

Status:	
Programme:	Project Gateway Stage:
IT	Various

Airline Engagement:
All projects/programmes are presented & consulted with our airline representatives via the monthly IT Working Group and then at the quarterly strategic IT Stakeholder Board (airline CIO level). Latest submission to the IT Stakeholder Board on 3rd March 2011 included Real Time Heathrow and Integrated Baggage presentations. Through these consultation bodies we are able to share learning and best practice to ensure value of delivery. Full audit trail of individual consultation timetable and minutes available on request

Project Delivery

Current Control Budget:			
Total Capital Budget *(Estimated At Completion)*:		**£29,691,201**	
Refer to appendix B for cost information detail.			
Schedule:			
Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
n/a	n/a	n/a	n/a
Assumptions:			
The following points cover the significant delivery assumptions related to this project:			
▪ This portfolio is an allowance for works done in a range of business areas ▪ Individual projects within this portfolio will be subject to IT Investment Governance processes and the BAA financial approvals process so have differing schedule dates			
Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.			

Operational Issues

BAA Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
N/A	N/A	See Assumptions: assessed on a per project basis
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
▪ Investments are aimed at reducing operational impact of IT solutions when asset refreshes take place and minimising additional operational costs for any new business improvement solutions. ▪ Value for Money is targeted through OJEU competition and the new IT Outsourcing Contract will deliver operational cost reductions for Q5. ▪ Projects such as CARZ and RMS will make savings in the business units around headcount		

Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
N/A	N/A	None
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
A number of the projects within this CIP funding line will have an operational impact on both BAA and Airlines e.g. CUSS, Baggage/Bag Messaging		

Average Asset life:	
Average Asset Life:	5 Years
Commentary:	
None	
Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.	

Impact on User Charges:	
Estimated Per Passenger Cost Impact:	N/A
Commentary:	
Various Projects	
Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only (see Section 5.3 for further details)	

Non Construction Risk:
The following points cover any significant areas of risk for the Airline Community regarding this project:
None

Appendix B: Project Delivery: Cost Information:

Project Information

Project Name: Airport Operational Systems
BCT No.: IT01

Cost Information

All information extracted from March 2011 month end

Base Costs:	£29,691,201	100	%
On-Cost:	£0	0	%
Opportunity	£0	0	%
Risk (R1 Allowance Only)	£0	0	%
Total	**£29,691,201**	100	%

Cost Benchmark Comparisons:	
Project Name:	IT01 – Airport Operational Systems
Total Capital Budget *(Nominal Prices)*:	£29,691,201
Guidance Notes:	
All IT projects & programmes either go through formal OJEU tender compliant Procurement Process or use framework suppliers who have been appointed through such OJEU compliant tendering to ensure value. As part of the IT Outsourcer OJEU competition, project and programme work may be awarded to CapGemini on a "preferred" basis (i.e. without further competition) provided that it is able to demonstrate that it delivers value for money and is competitive. Additionally, through Monthly and Quarterly Airline Consultation we are able to compare experience and cost for similar work with our Airline Partners.	
Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.	

Header Information

BCT No.	IT02
Op No.	Various
Project Name:	Infrastructure Renewal

Project Overview, Objectives and Status

Overview:	
Description:	Value delivery of a portfolio of systems to renew centralised IT Infrastructure required to run IT business systems and applications at Heathrow. The procurement hardware to maintain data centres and licences are also funded from IT02 Key strategic programmes within the IT02 portfolio for Q5 : ▪ Technology Programme (Spartan) ▪ Radio Infrastructure ▪ Node Room Remediation ▪ Data Centre Refresh
Ref. Drawings / Images:	None
Objectives:	
BAA:	▪ Refresh and rationalisation of BAA's desktop technology & infrastructure ▪ Reduce the number of applications at Heathrow ▪ Remediate and rationalise all node rooms at Heathrow to address health and safety and security issues and to reduce operational cost ▪ Mitigate current Health and Safety issues with the Radio infrastructure at Heathrow ▪ Implement rack based chilling for server rooms & data centres at Heathrow to sufficiently reduce
Airline:	Airline priorities and strategic objectives are consulted via the quarterly IT Stakeholder Board and monthly IT Working Group

Project Benefits:
Each project has different benefits – all link through to the Heathrow Strategic intents such as Making every journey better e.g. by mitigating Health & Safety issues with the Radio infrastructure and Reduced Cost of Service through refresh and rationalisation of desktop and applications

Status:	
Programme:	Project Gateway Stage:
IT	Various

Airline Engagement:
All projects/programmes are presented & consulted with our airline representatives via the monthly IT Working Group and then at the quarterly strategic IT Stakeholder Board (airline CIO level). For example, Spartan was endorsed at IT Working Group on 08/06/2010 and Radio Programme on 03/08/2010.

Through these consultation bodies we are able to share learning and best practice to ensure value of delivery. They are also a further chance for airlines to raise concerns e.g. to ensure changes to Radio do not impact Airline changes in similar areas by disrupting frequencies. Full audit trail of individual consultation timetable and minutes available on request

Project Delivery

Current Control Budget:			
Total Capital Budget *(Estimated At Completion)*:		**£53,100,585**	
Refer to appendix B for cost information detail.			
Schedule:			
Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
N/A	N/A	N/A	N/A
Assumptions:			
The following points cover the significant delivery assumptions related to this project:			
▪ This portfolio is an allowance for works done in a range of business areas ▪ Individual projects within this portfolio will be subject to IT Investment Governance processes and the BAA financial approvals process so have differing schedule dates			
Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.			

Operational Issues

BAA Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
N/A	N/A	See Assumptions: assessed on a per project basis
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
▪ Investments are aimed at reducing operational impact of IT solutions when asset refreshes take place and minimising additional operational costs for any new business improvement solutions. ▪ Value for Money is targeted through OJEU competition and the new IT Outsourcing Contract will deliver operational cost reductions for Q5.		

Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
N/A	N/A	None
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
Projects/programmes such as Radio/Cellular remediation and Node Room Remediation could have an operational impact on airlines around coverage and as part of consultation and project due diligence engagement is initiated and managed.		

Average Asset life:	
Average Asset Life:	5 Years

Commentary:	
None	
Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.	
Impact on User Charges:	
Estimated Per Passenger Cost Impact:	N/A
Commentary:	
Various Projects	
Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only (see Section 5.3 for further details)	

Non Construction Risk:
The following points cover any significant areas of risk for the Airline Community regarding this project:
None

Appendix B: Project Delivery: Cost Information:

Project Information

Project Name: Infrastructure Renewal
BCT No.: IT02

Cost Information

All information extracted from March 2011 month end

Base Costs:	£53,100,585	100	%
On-Cost:	£0	0	%
Opportunity	£0	0	%
Risk (R1 Allowance Only)	£0	0	%
Total	**£53,100,585**	100	%

Cost Benchmark Comparisons:	
Project Name:	IT02 Infrastructure Renewal
Total Capital Budget *(Nominal Prices)*:	£53,100,585
Guidance Notes:	
All IT projects & programmes either go through formal OJEU tender compliant Procurement Process or use framework suppliers who have been appointed through such OJEU compliant tendering to ensure value. As part of the IT Outsourcer OJEU competition, project and programme work may be awarded to CapGemini on a "preferred" basis (i.e. without further competition) provided that it is able to demonstrate that it delivers value for money and is competitive. Additionally, through Monthly and Quarterly Airline Consultation we are able to compare experience and cost for similar work with our Airline Partners.	
Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.	

Header Information

BCT No.	IT03
Op No.	Various
Project Name:	Business Planning & Support IT Solutions

Project Overview, Objectives and Status

Overview:	
Description:	Value delivery of a portfolio of systems to meet the needs of back office business areas of Heathrow Airport such as HR, Finance, Commercial and Programme Controls. Key strategic programmes within the IT03 portfolio for Q5 include : ▪ Back Office Improvement Programme (BOIP) ▪ Commercial Management Systems including eCommerce & Property Management ▪ Capital Programme Controls ▪ Asset Management
Ref. Drawings / Images:	None
Objectives:	
BAA:	▪ Enable Q6 works by delivering tactical improvements in Asset Management ▪ Maximise business return from our core Oracle platform (delivered under the BOIP project) which should be the first choice solution for other major projects such as Capital Programme Controls, mitigating risk to the CIP delivery and also making savings ▪ Deliver vanilla (non-bespoke) solutions wherever possible ▪ Enable exploitation of management information and ▪ Enable collaborative working opportunities with business partners. ▪ Coordination of Asset Management ownership
Airline:	Airline priorities and strategic objectives are consulted via the quarterly IT Stakeholder Board and monthly IT Working Group

Project Benefits:
Each project has different benefits – all link through to Heathrow Strategic intents such as Reduced Cost of Service through exploitation of management information, collaborative working and vanilla processes and solutions

Status:	
Programme:	Project Gateway Stage:
IT	Various

Airline Engagement:
All projects/programmes are presented & consulted with our airline representatives via the monthly IT Working Group and then at the quarterly strategic IT Stakeholder Board (airline CIO level). For example, Back Office Improvement Programme progress was presented to the IT Stakeholder Board on 3rd March 2011 and Programme Controls Options Decision case went to IT Working Group on 8th March

Through these consultation bodies we are able to share learning and best practice to ensure value of delivery. Full audit trail of individual consultation timetable and minutes available on request.

Project Delivery

Current Control Budget:			
Total Capital Budget *(Estimated At Completion)*:	**£38,886,034**		
Refer to appendix B for cost information detail.			
Schedule:			
Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
N/A	N/A	N/A	N/A
Assumptions:			
The following points cover the significant delivery assumptions related to this project:			
▪ This portfolio is an allowance for works done in a range of business areas ▪ Individual projects within this portfolio will be subject to IT Investment Governance processes and the BAA financial approvals process so have differing schedule dates			
Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.			

Operational Issues

BAA Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
N/A	N/A	See Assumptions: assessed on a per project basis
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
▪ Investments are aimed at reducing operational impact of IT solutions when asset refreshes take place and minimising additional operational costs for any new business improvement solutions. ▪ Value for Money is targeted through OJEU competition and the new IT Outsourcing Contract will deliver operational cost reductions for Q5. ▪ Projects such as Programme Controls and BOIP will make savings in the business units e.g. around headcount		
Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
N/A	N/A	None
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
It is not expected that projects in this area will impact Airport operational expenditure or processes		

Average Asset life:	
Average Asset Life:	5 Years
Commentary:	
None	
Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.	

Impact on User Charges:	
Estimated Per Passenger Cost Impact:	N/A
Commentary:	
Various Projects	
Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only (see Section 5.3 for further details)	

Non Construction Risk:
The following points cover any significant areas of risk for the Airline Community regarding this project:
None

Appendix B: Project Delivery: Cost Information:

Project Information

Project Name: Business Planning & Support IT Solutions
BCT No.: IT03

Cost Information

All information extracted from March 2011 month end

Base Costs:	£38,886,034	100	%
On-Cost:	£0	0	%
Opportunity	£0	0	%
Risk (R1 Allowance Only)	£0	0	%
Total	**£38,886,034**	100	%

Cost Benchmark Comparisons:	
Project Name:	IT03 Business Planning & Support IT Solutions
Total Capital Budget *(Nominal Prices)*:	£38,886,034
Guidance Notes:	
All IT projects & programmes either go through formal OJEU tender compliant Procurement Process or use framework suppliers who have been appointed through such OJEU compliant tendering to ensure value. As part of the IT Outsourcer OJEU competition, project and programme work may be awarded to CapGemini on a "preferred" basis (i.e. without further competition) provided that it is able to demonstrate that it delivers value for money and is competitive. Additionally, through Monthly and Quarterly Airline Consultation we are able to compare experience and cost for similar work with our Airline Partners.	
Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.	

Appendix G: PDS – Rail

Project Definition Sheets

BCT Number and Project Name as shown in Schedules

10146 : Fleet Modernisation
Various: HEx Growth Projects
Various: HEx Renewal Projects

Header Information

BCT No.	10146
Op No.	25573
Project Name:	Connect 4 trains per hour (now Fleet Modernisation)

Project Overview, Objectives and Status

Overview:	
Description:	Modernise the Hex fleet of 332 trains in order to protect its current customer base and to facilitate further volume and yield growth in the next five to ten years. This project is planned to be accommodated in the rail CIP for Q5, through a change of use of project BCT4133 (OP 24298) – T4 Service Enhancement.
Ref. Drawings / Images: *(Refer to Appendix A)*	None
Objectives:	
BAA:	▪ Creating a more desirable and comfortable fleet to improve customer journey experience and encourage usage and retention. ▪ Protect and grow future revenues. ▪ Differentiate the first class offering and align to airline premium customer expectations.
Airline:	▪ Improve passenger access to airline services at Heathrow. ▪ Encourage increased use of Heathrow and rail access. ▪ Improve passenger information system (PIS), to improve links to onward journey at airport. ▪ Reduced airport charges through rail revenue improvements.

Project Benefits:
As per above objectives

Status:	
Programme:	Project Gateway Stage:
Rail	BAA Exec approval at Options stage for first stage £0.8m to develop design. This should take until May 2011.

Airline Engagement:
Engaged through quarterly Rail Stakeholder Programme Board meetings. Change of use (from BCT4133 to BCT10146) presented to the airlines for the first time at CIP Working Group, December 2010.

Project Delivery

Current Control Budget:	
Total Capital Budget *(Estimated At Completion)*:	**£21,000,000**
Refer to appendix B for cost information detail.	

Schedule:			
Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
Options decision at November 2011	Subject to full approval stage – anticipated Q3 2011	Project will take up to 18 months from start of full implementation.	Carriages will be put into operational service
Assumptions:			
The following points cover the significant delivery assumptions related to this project:			
Subject to BAA funding review.			
Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.			

Operational Issues

BAA Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
		▪ First Class volume & yield uplift potential 3.8m ▪ Revenue from reconfiguring void space (CLA) 2.4m ▪ Express Class volume potential 4.2m £4.2m
Assumptions:		
The following points cover the significant operational assumptions related to this project;		
▪ Hex volume growth continues into Q6. ▪ No Crossrail service before 2018 ▪ Over a ten year period the project will deliver an IRR of 15.3% (pre-tax).		

Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
		Not known; however improved Hex revenues will facilitate reduced overall Q6 airport charges.
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
None		

Average Asset life:	
Average Asset Life:	N/A
Commentary:	
Various Projects	
Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.	
Impact on User Charges:	
Estimated Per Passenger Cost Impact:	N/A
Commentary:	
Various Projects	
Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only (see Section 5.3 for further details)	

Non Construction Risk:
The following points cover any significant areas of risk for the Airline Community regarding this project:
None

Appendix B: Project Delivery: Cost Information:

Project Information

Project Name: Fleet Modernisation
BCT No.: 10146

Cost Information

	Cost £
Stage 1	
Design/ Mockup	0.8m
Stage 2	
Window replacement/ traction power cable replacement	2.2m
Driver cab environment improvement	0.2m
Egress Lighting Replacement	0.1m
Other customer amenity upgrades; luggage/coat hooks/ bins	0.7m
PIS – passenger information systems, including comms backbone	1.3m
Express TV upgrade	1.0m
Convert void luggage carriage (CLA) to revenue earning area	0.8m
Fleet preparation/ strip out/ transport/ design finalisation	0.6m
Design finalisation	0.4m
External rebranding, including relivery	0.75m
First class seating/ carpeting/ power	1.5m
Express class seating upgrade	1.0m
Lighting/ ceilings upgrade	1.4m
Panel/ door upgrade	1.4m
Project Management fees	0.9m
Unfunded Excess budget	5.5m
Total	**£20.55m**

Commentary:

Stage1: The purpose of this first phase is to agree the scope of the class 332 fleet re-branding such that it will be possible to approach potential suppliers and obtain a fixed cost and programme to deliver the full fleet re-brand of fourteen trains. The output of this will provide a clear understanding of the costs to be included in the main business case for the re-brand. The mock-up will be supported by concept design information to include technical descriptions, suppliers, costs, fire safety approvals, procurement specifications etc to facilitate Heathrow Express to progress to stage two should it decide to do so.
Stage 2: Final costs for the second stage, full implementation of the modernisation project, will be firmed up as part of stage1. Estimated scope and cost are as follows:

Cost Benchmark Comparisons	
Project Name:	Fleet Modernisation
Total Capital Budget *(Nominal Prices)*:	£21,000,000
Guidance Notes:	
As part of the project an expression of interest letter and ITT had been sent out by Siemens to test the market and undertake a high level benchmarking exercise. Three tender responses were received from Railcare, Brush Barclay and Wabtec. Following an extensive tender review process, Railcare was chosen as the preferred bidder with whom we intend to work with to develop the full scope of stage two. Brush Barclay were discounted on price and Wabtec on the quality of their bid in terms of no innovation and a non compliant programme.	
Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.	

Header Information

BCT No.	Various
Op No.	Various
Project Name:	0000 : Hex Growth Projects

Project Overview, Objectives and Status

Overview:	
Description:	Projects to improve revenue earning opportunities for Heathrow Express
Ref. Drawings / Images:	None
Objectives:	
BAA:	▪ Increase revenue earning through: ▪ Improving customer experience ▪ Make it easier to buy tickets and travel on HEx/ Connect services – ▪ Exploit non fare revenue earning opportunities ▪ Wayfinding improvements to ensure ease of location of HEx network
Airline:	▪ Improve passenger access to Heathrow ▪ Encourage increased use of Heathrow airlines

Project Benefits:
As per above objectives

Status:	
Programme:	Project Gateway Stage:
Rail	Projects at varying stages of completion

Airline Engagement:
Engaged through quarterly Rail Stakeholder Programme Board meetings, which commenced November 2009.

Project Delivery

Current Control Budget:			
Total Capital Budget *(Estimated At Completion)*:		**£19,400,000**	
Refer to appendix B for cost information detail.			
Schedule:			
Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
N/A	N/A	N/A	N/A
Assumptions:			
The following points cover the significant delivery assumptions related to this project:			
Delivery of projects depends on availability of assets, supplier availability, and service scheduling.			
Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.			

Operational Issues

BAA Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
		None
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
Each project is evaluated on the basis of its revenue return on capital spend.		

Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
		None
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
Impacts on airlines considered/ discussed as part of capital disclosure for the RSPB meetings.		

Average Asset life:	
Average Asset Life:	4+ Years
Commentary:	
Asset lives in this section vary from 4 years upwards.	
Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.	
Impact on User Charges:	
Estimated Per Passenger Cost Impact:	N/A
Commentary:	
Various Projects	
Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only (see Section 5.3 for further details)	

Non Construction Risk:
The following points cover any significant areas of risk for the Airline Community regarding this project.
None

Appendix B: Project Delivery: Cost Information:

Project Information

Project Name: Hex Growth
BCT No.: Various

Cost Information

Key growth projects in Q5 include the following:

Project	BCT	£m
Digital Conversion escalators	8871	1.7
T5 Infrastructure	7626	1.3
Ticketing / Technology upgrade	10018	1.2
HHT renewals (incl. E-ticketing)	4122	1.1
T5 Strategic Spares	5919	0.8
Wayfinding	8180	0.8
Stations Upgrade - Heathrow	10019	0.7
Internet site upgrade (New Web Platform)	8179	0.6
Gnosis- Process Mapping system	8840	0.5
Media server upgrade - Express TV	10344	0.5
Competence Management system	8182	0.4
Energy efficiency improvements	5921	0.4
HR database	6629	0.4
		10.3
Other smaller projects/ provision for projects not yet started		8.7
		19.0

Commentary:
Growth projects are designed to increase revenue earning through Improving customer experience; Make it easier to buy tickets and travel on HEx/ Connect services; Exploit non fare revenue earning opportunities; Signage improvements to ensure ease of location of HEx network; Improve passenger access to Heathrow; Encourage increased use of Heathrow airlines

Cost Benchmark Comparisons:	
Project Name:	Hex Growth
Total Capital Budget *(Nominal Prices)*:	£19,400,000
Guidance Notes:	
Growth projects are usually procured through key business partners Siemens Rail fleet), Amey (Buildings & infrastructure) and JC Decaux (media), who will undertake appropriate tendering and cost/ value for money reviews as part of scoping out the projects.	
Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.	

Header Information

BCT No.	Various
Op No.	Various
Project Name:	0000 : Hex Renewal Projects

Project Overview, Objectives and Status

Overview:	
Description:	Projects to renew Heathrow Express rail assets through Majo Replacement/ renewal.
Ref. Drawings / Images:	None
Objectives:	
BAA:	▪ Maximise useful asset lives ▪ Ensure asset availability and reliability is maximised ▪ Protect customer experience ▪ Minimise on-going cost of maintenance through proactive identification replacement needs
Airline:	▪ Maintain/ improve passenger access to Heathrow ▪ Encourage increased use of Heathrow

Project Benefits:
As per above objectives

Status:	
Programme:	Project Gateway Stage:
Rail	Individual projects at varying stages of completion

Airline Engagement:
Engaged through quarterly Rail Stakeholder Programme Board meetings, which commenced November 2009.

Project Delivery

Current Control Budget:			
Total Capital Budget *(Estimated At Completion)*:		**£36,500,000**	
Refer to appendix B for cost information detail.			
Schedule:			
Brief Decision:	Start on Site:	Completion on Site:	Operational Use Commences:
N/A	N/A	N/A	N/A
Assumptions:			
The following points cover the significant delivery assumptions related to this project:			
Delivery of replacement projects depends on availability of assets, supplier availability, and service scheduling.			
Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.			

Operational Issues

BAA Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
		None
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
None		

Airline Financial Revenue and Operational Cost (Opex) Impact:		
Revenue / Opex Cost Area:	Revenue (+) / Cost (-) Impact per Annum:	Commentary:
		None
Assumptions:		
The following points cover the significant operational assumptions related to this project:		
None		

Average Asset life:	
Average Asset Life:	N/A
Commentary:	
Asset lives in this section vary from 4 years (mechanical elements) to 50+ years (tunnel infrastructure).	
Note: Asset lives are subject to a number of complex variables and therefore information is indicative only.	
Impact on User Charges:	
Estimated Per Passenger Cost Impact:	N/A
Commentary:	
Various Projects	
Note: Impact on User Charge is subject to a number of complex variables and regulatory decisions and therefore information is indicative only (see Section 5.3 for further details)	

Non Construction Risk:
The following points cover any significant areas of risk for the Airline Community regarding this project:
None

Appendix B: Project Delivery: Cost Information:

Project Information

Project Name: Hex Renewal
BCT No.: Various

Cost information

Project	BCT	£m
Rolling stock - mechanical: provision for projects to be undertaken later in Q5		6.0
Track/ signalling: provision for later in Q5		6.0
Control/ IT systems: provision for later in Q5		7.3
Class 332 Door overhaul	7065	2.7
Fleet overhaul- 1.3m mile	5954	1.4
Fleet overhaul - M&E	2552	1.3
T5 Glass Floor Repairs - Design/Specification	9240	1.1
S&C / Rail / signal renewals, incl conversion to LED signals	4116	1.0
GSM-R	2565	0.9
332 refresh	4126	0.8
Structural Repairs (based on GL Hearne Report)	7066	0.8
Class 332 Gangways	10259	0.8
332 Exterior Door Button	9435	0.6
Asset Life Extension Project	10256	0.6
Track Slab Repairs/ replacements	5930	0.6
Class 332 Batteries	10258	0.6
Building Asset Upgrade/ Undercroft	10257	0.5
		32.9
Other smaller projects		3.1
		36.0

Commentary:
Maximise useful asset lives; Ensure asset availability maximised; Protect customer experience; Minimise ongoing cost of maintenance through proactive identification replacement needs; Maintain/ improve passenger access to Heathrow; Encourage increased use of Heathrow.

Cost Benchmark Comparisons:	
Project Name:	Hex Renewal
Total Capital Budget *(Nominal Prices)*:	£36,500,000
Guidance Notes:	
Renewal projects are usually procured through key business partners Siemens Rail fleet), Amey (Buildings & infrastructure) who will undertake appropriate tendering and cost/ value for money reviews as part of scoping out the projects.	
Note: Assumptions stated here are to aid understanding and are not necessarily exhaustive.	

Heathrow Airport Limited Q5 Capital Investment Programme as at CIP2011		Actuals/ Forecast Outturn (Capital as Artemis)					
BCT	Project Name	08/09	09/10	10/11	11/12	12/13	TOTAL
	HEATHROW TOTAL	739,871,901	803,445,259	811,809,545	1,122,505,896	1,316,649,865	4,794,282,466
	BAA IT	10,909,541	32,232,280	38,981,606	39,133,875	8,841,953	130,099,308
	BAA RAIL	13,054,570	14,491,000	9,677,000	58,306,260	75,112,443	170,641,273
	HAL Capital Projects	686,907,790	726,708,002	708,357,837	988,065,761	1,194,695,469	4,304,734,859
	PSDH	0	19,837,411	51,493,022	37,000,000	66,000,000	174,130,433
	Adjustments	29,000,000	10,376,563	3,300,000	0	-28,000,000	14,676,563
Eastern Campus Total		**268,117,186**	**176,060,837**	**283,554,571**	**673,940,242**	**920,240,638**	**2,321,913,474**
3212	North East Taxiways	30,442	260,232	0	0	0	290,674
4119	Reconfiguration of stand 240/242	631,906	0	-69,897	0	0	562,009
4243	T1 P4A Wst Demo & 4 rem JS Stn	3,153,655	209,224	270,559	0	0	3,633,438
Eastern Campus Airfield		**3,816,003**	**469,456**	**200,662**	**0**	**0**	**4,486,121**
6100	T2A Early Stage Cost	-6,368	0	0	0	0	-6,368
8828	Eastern Campus EIS	378,668	1,916,428	1,474,868	55,366	0	3,825,330
7767	P23225 - T2A Scheme Design Stage	20,247,592	-938,022	0	0	0	19,309,570
8802	T2A Building	24,711,965	43,688,334	110,105,325	373,303,212	400,908,854	952,717,690
8799	QB & T2 Demolition	2,773,125	19,458,648	3,847,848	0	0	26,079,621
8800	T2 Demolition	587,068	-587,068	0	0	0	0
8805	T2A Baggage	1	0	0	0	0	1
8807	T2A Phase 1 Stands	105,145	621,105	837,073	11,027	0	1,574,350
9022	Automation Prove Out	1,804,338	922,651	-25,365	0	0	2,701,624
T2A Phase 1 & Associated Projects		**50,601,534**	**65,082,076**	**116,239,749**	**373,369,605**	**400,908,854**	**1,006,201,818**
AAAA	Budget Transfer to Western Campus	0	0	0	0	0	0
8794	Eastern Campus Leadership Team	4,137,942	6,406,934	4,178,928	13,774,870	21,943,595	50,442,269
8798	Eastern Campus Logistics	1,388,527	6,741,039	6,409,754	19,368,226	20,969,608	54,877,154
Leadership & Logistics		**5,526,469**	**13,147,973**	**10,588,682**	**33,143,096**	**42,913,203**	**105,319,423**
2016	T1 Departures Lounge Development	1,971	0	0	0	0	1,971
2887	T1 Integrated Lounge Security Search	-123,625	0	403	0	0	-123,222
3884	T1 Pier 4 Segregation	2,226,983	-27,767	0	0	0	2,199,216
4630	T1 Star Parent Project	-7,761,388	-24,650	106,500	55,014	0	-7,624,524
7164	T1 Site Welfare & Site Office facilities	1,461,171	342,313	0	0	0	1,803,484
1826	START Development Cost s to Apri	-1,174	0	1,174	0	0	0
6635	T1 Europier US/TSA Requirements	555,424	-13,332	0	0	0	542,092
7793	Airline Relocations - Cat B fit out - CIP (Arrivals)	2,689,790	0	0	0	0	2,689,790
3822	T1 FCC & Immigration	6,889,117	68,692	-51,343	0	0	6,906,466
6645	T1 Pier 3 Segregation	352,037	-17,573	0	0	0	334,464
3823	T1 HBS & Transfer Baggage System	11,065,716	90,215	213,001	0	0	11,368,932
7612	T1 Pier 4A Segregation	2,261,408	-21,231	0	0	0	2,240,177
4075	T1 Arrivals & Departures Refurbishment	31,219,000	2,663,000	-154,500	0	0	33,727,500
6944	T1 Displacements	10,061,476	1,801,786	-106,506	0	0	11,756,756
8216	T1 Arrivals Forecourt	1,383,056	0	0	0	0	1,383,056
6646	T1 Remote Coaching	2,897,515	-29,457	0	0	0	2,868,058
9104	BMI CIP Lounge Fit Out (cont)	200,000	1,050,000	0	0	0	1,250,000
9128	T1 Zone R Security Standardisation	818,657	3,221,343	-37,813	0	0	4,002,187
9168	Infra for CDL Verification	15,000	-15,000	0	0	0	0
9181	T1 Additional Works	62,000	5,019,796	5,262,808	0	0	10,344,604
6634	T2A VP - HMRC Decants	1,795,041	93,381	0	0	0	1,888,422
7769	P23224 - T2A L/S Early Services Relocation	15,930,397	4,034,175	270,072	0	0	20,234,644
6917	T2A VP - BMI Relocation	2,051,722	42,828	75,000	0	0	2,169,550
6918	VAA Crew Clearance	3,791,281	-79,280	-36,091	0	0	3,675,910
7226	ID Centre Relocation	1,432,484	95,891	-2,246	0	0	1,526,129
7227	T2A VP Airside Sec decant	3,689,467	226,795	-56,402	0	0	3,859,860
7229	T2A VP - B941 Fit Out	10,146	20,818	-23,375	0	0	7,589
7230	P22848 - QB Staff Rest Decant	2,287,385	1,376,607	-26,638	0	0	3,637,354
7232	BA Workshops Decant	2,800	0	0	0	0	2,800
7233	D'Ibiac Tenant Fit Out	1,070,105	754,815	-6,255	0	0	1,818,665
7386	P22940 - T2A VP - Specialist Sys Decant	1,039,315	227,665	10,198	0	0	1,277,178
7483	T2A VP - D'Albiac Occ Health	565,227	-12,429	-21,781	0	0	531,017
7623	T2A VP - T3 Eastwing refit	1,034,178	1,345,328	-44,706	0	0	2,334,800
8016	P23388 - T2A VP - Customs Clearance	614,932	900,123	0	0	0	1,515,055
8017	P23389 - T2A VP - QB Bussing decant	178,120	1,023,904	-13,756	0	0	1,188,268
6936	T2A VP - WBC1 HALL Occup	14,000	0	0	0	0	14,000
8434	T2A VP - Rent & Staff Costs	1,670,923	1,610,380	0	0	0	3,281,303
8542	HET VP - T2A Spec Sys Decant	309,317	792,562	39,712	0	0	1,141,591

Heathrow Airport Limited Q5 Capital Investment Programme as at CIP2010		Actuals/ Forecast Outturn (Capital as Artemis)					
BCT	Project Name	08/09	09/10	10/11	11/12	12/13	TOTAL
9256	T3 HAL C&B	0	2,212,025	15,628	0	0	2,227,653
3814	New Build MSCP - East	200,000	2,304,880	2,593,130	21,259,111	63,955,877	90,292,998
8450	Control Tower Site Purchase for MSCP East	46,046,726	13	0	0	0	46,046,739
8888	Control Tower Demolition	0	0	827,277	8,232,712	22,940,008	31,999,997
9723	Eastern Campus Accommodation	0	0	288,731	2,681,718	26,229,545	29,199,994
Landside, T1 & VP		**150,007,700**	**31,078,616**	**9,122,222**	**32,208,555**	**113,125,430**	**335,542,523**
4201	T2B Phase 2	6.670,371	14,997,628	52,339,402	179,295,872	278,108,411	571,411,684
4539	T2B Phase 1	47,283,356	50,579,434	3,736,923	0	0	101,649,913
6495	Relocation of 10cm Radar	1.144,355	0	-77,464	0	0	1,066,551
7212	Relocation of Substation 56	2.200,589	1,298,862	-74,808	0	0	3,424,643
9487	Tunnels Across Lima and Kilo	0	-1	1	0	0	0
9488	T2B Ph2 Station Box	0	-1	1	0	0	0
6716	Pier 3 Demolition	867,629	-889,396	1	0	0	-21,766
T2B Building & Associated Projects		**58.165.480**	**65.986.526**	**85.073.741**	**179.295.872**	**278.108.411**	**677.530.030**
9853	T2A Baggage	0	0	14,755,420	466,554	88,858	14,473,116
9351	T1 Baggage Prolongation Programme	0	256,790	20,836,357	22,760,714	10,349,795	
10309	T1 Transitions	0	0	1,930,284	15,339,857	32,366,992	
T1 Baggage		**0**	**256,190**	**36,922,101**	**38,507,135**	**42,627,929**	**14,473,116**
9805	Eastern Campus ICS	0	0	14,507,414	17,415,979	42,556,811	74,480,204
Eastern Campus ICS		**0**	**0**	**14,507,414**	**17,415,979**	**42,556,811**	**74,480,204**
Western Campus Total		**261.635.417**	**386.310.305**	**283.673.945**	**181.145.748**	**147.977.589**	**1.260.743.004**
7540	T3 Office Refurbishment Airline Moves (No CIP 2007 Provision)	5.841,277	971,940	176,465	267,846	0	6,904,607
7886	T3 CIP New Airline Moves (No CIP 2007 Provision)	7.519,370	241,485	-239,658	5,000	0	7,526,197
3656	T3 Forecourt Redevelopment	1.871,529	79,371	-17,637	0	0	1,933,263
6476	T3 Kerbside check in	20,000	-602,530	0	0	0	-582,530
7150	T3 Zone A Virgin Contribution	-917,880	0	0	0	0	-917,880
6068	T3 Zone A Refit	0	278,765	0	0	0	278,765
4168	T3 Virgin Developments	20,155	-81,475	0	0	0	-61,320
140	T3 Arrivals Development	10,775	-11	0	0	0	10,764
7633	T3 KBCI AA Contribution	0	601,416	0	0	0	601,416
3876	T3 Pier 7 Horizontal Segregation	3.388,624	-121,437	866	0	0	3,268,053
5094	Pier 5 Departures Walkway	4.704,792	757,215	-301,554	0	0	5,159,853
8002	Pier 7 stands works	833,816	2,146,043	144,988	0	0	3,125,747
9310	T3 Additional Jetty Provision	0	650,269	2,041,027	92,641	0	2,783,937
9508	Pier 5 A380 Stands	0	0	155,005	2,268,810	3,193,795	5,617,614
6714	T3 Refurbishments	-119,455	0	6,847	0	0	-112,618
7484	Zone A CUSS Installation	393,905	0	0	0	0	393,905
7593	T3 Zone B-G Upgrade	10,985,028	3,871,594	-22,813	0	0	14,833,809
7609	Virgin Arrivals	-21,119	33,107	0	0	0	11,988
8406	Pier 7 Connector Refurb	5.477,297	5,874,699	-310,025	0	0	11,041,971
8494	Pier 5 Gateroom Enclosures	1.604,424	1,137,569	-168,228	0	0	2,573,765
8510	Landside Departures 1st Floor	65,871	550,091	3,101,528	374,505	0	4,091,995
8563	Immigration Hall Refurb	521,534	2,190,767	12,050,389	5,747,667	0	20,510,357
7733	T3 Southwing Facade Upgrade	-6,854	13,063	0	0	0	6,209
8569	T3 Baggage Hall Refit	457,490	-457,490	0	0	0	0
9222	T3 CSA	0	8,040,913	4,712,617	1,000,407	0	13,753,937
9223	T3 Connections Security SQR	0	1,088,362	5,921,415	694,442	0	8,654,219
9269	T3 Transformation Scope Gap 09	0	3,225,305	-123,800	264,742	0	3,366,241
9648	T3 UKBA Watch House & SO15 Accommodation	0	0	175,871	1,777,344	0	1,953,215
9651	T3 Queue Measurement	0	0	0	119,000	181,000	300,000
9652	T3 IDL Transformation	0	40,540	1,316,104	2,409,861	0	3,766,514
9379	T3 VAT Reclaim Desk	0	39,316	218,667	1,056,990	0	1,314,973
9801	Zone A Desk Capacity	0	0	79,060	0	0	79,060
10005	Stand 355 Works	0	0	0	355,000	0	355,000
Terminal 3		**42,650,929**	**30,459,805**	**29,564,188**	**16,434,255**	**3,374,799**	**122,483,086**
6604	T4 Airline Relocation	4.277,975	8,106,527	563,778	0	0	12,948,280
4677	T4 ESP & Central Search Upgrad	-2,501	0	0	0	0	-2,501
2303	T4 A380 Stand/Gate Provision	20,335,317	3,439,057	-755,033	0	0	23,019,935
3831	T4 Check-in Capacity	55,107,359	37,974,842	-592,525	0	0	92,489,972
6693	Terminal 4 Refurbishment	1.880,855	9,833,248	201,666	0	0	11,715,769
8008	T4 Open Skies Landside Offices	178,601	-95,952	0	0	0	82,649
8275	T4 Victor Pier Refurbishment	542,476	-283,225	0	0	0	259,251
187	Fire Alarm Replacement	-83,780	71,658	0	0	0	-12,122
9028	T4 Additional Transfer Security Lanes	64,319	5,843,900	67,993	0	0	6,976,212
8274	T4 Flooring	970,246	-56,797	0	0	0	913,449

Heathrow Airport Limited Q5 Capital Investment Programme as at CIP2010		Actuals/ Forecast Outturn (Capital as Artemis)					
BCT	Project Name	08/09	09/10	10/11	11/12	12/13	TOTAL
9399	T4 Baggage Airline Moves - T407	0	1,338,098	2,983,995	716,628	0	5,038,721
9276	T4 Transformation Scope Gap 09	0	218,424	218,423	0	0	1
9643	T4 Arrivals Concourse	0	180,648	5,885,447	260,186	0	6,326,281
9516	T4 Baggage Works for Step 9	0	5,298,554	40,950,511	12,550,251	5,789,425	60,574,521
9645	T4 Baggage Reclaim Hall Refurb	0	0	99,348	8,239	3,583,695	3,691,282
9646	T4 Cat B Accommodation	0	0	224,016	1,175,493	0	1,399,509
9844	T4 Airbridge Replacement	0	0	264,724	2,082,297	3,602,975	5,950,000
9640	MSCP4 Structural Refife	0	13,150	2,334,646	4,264,723	0	6,662,515
9940	T4 Gulf Air CIP Lounge	0	0	521,378	0	0	521,378
9944	T4 Off Pier Coaching	0	0	966,784	30,577	0	997,361
9951	T4 Interim VIP suite	0	0	381,432	528,253	0	909,685
Terminal 4		**83,271,761**	**70,481,932**	**53,015,533**	**21,816,627**	**19,976,109**	**248,461,956**
5221	Heathrow Terminal TSC	92,443,042	139,122,583	98,944,453	10,897,205	0	341,407,283
9657	TSC Weather Proof BA Baggage Docks	0	0	99,464	0	0	99,464
	TSC Land Purchases	900,000	39,240,000	0	0	0	40,140,000
Terminal 5		**93,343,042**	**178,362,583**	**99,043,917**	**10,897,205**	**0**	**381,646,747**
1851	Post T5 Transfer Baggage System	36,279,498	88,568,190	74,958,555	40,342,488	4,554,806	244,703,577
9520	T5 A380 Dock Weathering	0	57,518	120,373	131,709	0	309,600
9527	T5 DFV Bypass	0	0	695,375	29,105	0	724,480
T5 Baggage		**36,279,498**	**88,625,708**	**75,774,303**	**40,513,302**	**4,554,806**	**245,747,617**
3801	T3 Integrated Baggage System	6,091,087	18,180,277	23,478,747	78,100,870	126,353,780	252,204,761
10094	T3 HBS Replacement	0	0	1,907,207	13,583,489	2,718,101	18,208,797
T3 Baggage		**6,091,087**	**18,180,277**	**25,385,954**	**91,884,359**	**129,071,881**	**270,413,558**
Infrastructure Total		**99,270,458**	**128,364,739**	**139,882,949**	**145,462,740**	**194,668,751**	**707,649,637**
3020	Tug Charging & Stillage	0	849,176	-12,907	0	0	836,269
1832	Cargo Tunnel Refurbishment	12,190	-12,190	0	0	0	0
2222	A380 Northern CTA Code F/G Tax	-76,764	0	0	0	0	-76,764
3817	South East Taxiways	27,964,247	27,828,433	3,836,963	0	0	55,629,637
7779	P23223 - T2A A/S Early Services Relocation	1,457,760	2,060,398	473,429	0	0	3,990,987
8335	T5 Phase 2 Early Stands	8,158,493	165,767	-787,295	0	0	7,576,961
3018	Stretch 454-456	280,292	16,913	-809	0	0	296,396
8735	T5 Phase 2 Airfield Works	5,754,720	8,061,337	7,843,987	5,411,312	0	27,070,758
2809	A380 Taxiways around Pier 7	168,377	5,931,577	1,357,647	0	0	7,457,601
7205	T2B NW Stands & Taxilanes	1,025,572	11,984,711	23,014,825	866,463	0	35,991,031
2855	Western Taxiways Rehab	7,641	0	0	0	0	7,641
4202	Eastern Campus Airfield Taxiways and Road	1,901,896	1,368,934	29,919,655	19,472,179	1,067,444	53,730,148
3353	Major Fire Appliance Replacement	0	34,136	0	2,380,939	1,366,706	3,781,781
7206	T2B NE Stands & Taxilanes	10,833,576	3,626,289	17,227	0	0	14,442,529
7207	EAD Mid Stands & Taxilanes	115,693	-175,693	0	0	0	-60,000
3401	T5 Remote JX Stands (A380)	-61,602	0	-17,578	0	0	-79,180
7209	Eastern Campus Apron	0	853,295	700,259	1,518,592	63,515,102	66,587,248
7210	T2B SW Stands & Taxilanes	0	-2	0	0	0	-2
2179	HEX intervention pt relocation	-16,086	-1	0	0	0	-16,087
4995	Concrete Batcher Infra	0	-88,483	0	0	0	-88,483
4308	SIS Replacement project	79,837	0	-2,700	0	0	77,137
4582	Sub Fire Stn Relocation Ph 2	838,084	0	-5,116	0	0	832,968
4761	Runway radar FOD detection	3,096,570	21,980	0	0	0	3,118,550
6296	AGL substation enhancements	125,390	11,011	-11,416	0	0	124,985
6652	T4 - T5 Cargo Road	-97,630	0	3,443	0	0	-94,187
8547	T4 A380 stands	2,633,650	778,718	-44,902	0	0	3,367,466
3060	TTT - Northern Taxiways	305	0	0	0	0	305
3857	Taxiway / CDS Rebuilds (Q5)	882,788	9,681,012	2,169,155	5,531,638	873,515	19,538,108
221	A380 Southern CTA Taxiways	-889,975	-415	0	0	0	-890,391
574	New AGL Contro System	-2,523	0	0	0	0	-2,523
8810	Link 35	2,310	0	0	0	0	2,310
9501	Heathrow Resilience	0	540,324	1,343,637	7,112,178	33,563,708	42,559,847
8902	T1 Airfield Remediation Pier 3	0	0	6,236	1,103,241	290,526	1,400,003
3222	TTT - Southern Taxiway	-72,090	0	0	0	0	-72,090
1655	Northern Runway Widen Code F	0	0	-45,851	0	0	-45,851
Airfield		**58,054,815**	**72,637,219**	**71,723,031**	**43,796,542**	**100,677,001**	**347,488,608**
3785	Managed Campus - CCTV	0	0	-87,769	0	0	-87,769
5056	Physical Perimeter Security	2,848,441	955,898	690,943	0	0	4,495,282
5058	P22629 - B5 - Guard Tour	230,798	0	0	0	0	230,798
6330	CSA Security Improvements	0	300	0	0	0	300
6708	CSA Security Improvement	-65,951	1,315	0	0	0	-64,636
7360	P23453 - Enhanced Cargo Control Posts	95,070	0	0	0	0	95,070
8403	P23637 - Security Standardisation	4,043,097	-4,043,097	-415	0	0	-415
4242	Self Service Boarder Control	235,000	4,126,935	2,894,675	1,001,101	0	8,257,712
4185	Cargo Area RZ Road (T5-T4 Rout	94,985	238,887	1,348,383	3,888,663	3,013,325	8,584,247

Heathrow Airport Limited Q5 Capital Investment Programme as at CIP2010		Actuals/ Forecast Outturn (Capital as Artemis)					
BCT	**Project Name**	**08/09**	**09/10**	**10/11**	**11/12**	**12/13**	**TOTAL**
8452	Control Post Programme	585,864	1,769,819	15,613,980	6,191,820	5,306,312	29,467,795
3703	Plantroom Access Control	-2,110	0	0	0	0	-2,110
8801	CP5	751,109	5,793,878	36,668	0	0	6,581,655
9109	Fixed POST Reduction	19,810	1,625,323	2,960	0	0	1,648,093
9303	Wellington Road Security Search	0	88,897	745,526	50,127	0	884,550
9843	Low Cost Security Projects	0	1,134,908	2,437,333	2,386,932	1,789,979	7,749,152
Security		**8,834,113**	**11,692,464**	**23,682,284**	**13,518,643**	**10,109,620**	**67,837,124**
7050	N1 Car Parking Decking Project	-58,294	1,223	0	0	0	-57,071
6541	MSCP West Phase 2	-11,962	0	0	0	0	-11,962
6793	Heathrow Storm Water Catchment	30,326	149,499	5,865,337	3,777,817	7,765,518	17,588,497
7718	Eastern Maint Base Redev	445,483	428,793	764,086	5,538,892	25,988,917	33,166,171
9301	Infra Safety Critical Projects	0	1,121,527	3,857,886	3,599,082	15,807,917	24,386,412
9382	PiccEx Station Works - LUL	0	3,057,539	1,728,342	16,874,560	0	21,660,441
9720	Remove Fowles Yard	0	8,500	117,221	1,493,253	492,399	2,111,373
3519	Chilled Water Expansion	0	-34,739	0	0	0	-34,739
6595	MSCP2 Prolongation works	192,895	27,410	-17,424	0	0	202,881
7047	HEX Media Sites	750,000	-750,000	-98,580	0	0	-98,580
7049	JCD Media Sites	2,027,053	818,553	162,177	374,115	0	3,381,898
3275	Car Rental Consolidation	50,625	-8,400	0	0	0	42,225
4611	P20486 - Cargo CHP/T5 LTHW link	-20,865	11,250	0	0	0	-9,615
7666	Energy Infrastructure	130,576	1,488,053	6,528,738	29,505,535	7,939,815	45,592,717
6478	T3 CIP Waste Management Facility	6,397	0	0	0	0	6,397
Landside		**3,542,234**	**6,319,208**	**18,907,783**	**61,163,254**	**57,994,566**	**147,927,045**
3428	CO2 Strategy	0	500,000	2,105,423	894,577	0	3,500,000
6527	HAL Minor Projects (Incl Retail & Property)	22,697,454	9,791,981	1,641,402	617,997	400,000	35,148,834
6	HAL Minor Projects	0	0	0	0	0	0
6548	Foul Sewer project	351,418	0	-401,185	0	0	-49,767
7758	EAA Fuel Facility	14,600	41,122	-43,371	0	0	12,351
4549	FIDS Upgrade Programme	-10,629	1,240	0	0	0	-9,389
5225	SE Baggage remediation - Shield	112,164	-30,045	0	0	0	82,119
6369	HAL Airbridge Refurb 2006/2007	45,997	0	0	0	0	45,997
7441	T4 Toilet Refurb 2007 Ph2	79,205	43,960	2,349	0	0	125,514
7517	HAL Welcome Signage	-8,876	0	0	0	0	-8,876
7628	Remote Goods Screening	66,700	-9,000	-3,134	0	0	54,566
3516	BS - Performance Mngt 2004	18,956	0	0	0	0	18,956
5988	T1 - Re-roofing	158,922	0	0	0	0	158,922
6391	T1 Re-flooring	1,588,750	-40,592	0	0	0	1,548,158
7701	T3 PR10 AHU Replace Ph2	1,296,059	46,855	-4,350	0	0	1,338,564
4347	T3 AHU replacement	4,689	0	0	0	0	4,689
6545	T3 Fire Alarm Delay	-33,353	10,704	0	0	0	-22,649
7799	People with reduced mobility	475,875	-40,687	0	0	0	435,188
6547	T3 Services Subway Refurb	26,490	0	-811	0	0	25,679
7443	T3 Flooring 07/08	107,908	0	0	0	0	107,908
8265	Lisa & Montage T5	-23,031	-294	0	0	0	-23,325
8376	Northern Perimeter Congestion	615,000	0	-17,937	0	0	597,063
8541	T3 Esculator replacement	191,451	655,189	-7,483	0	0	839,157
8553	T3 Arrivals lift cladding	16,357	0	-16,357	0	0	0
8138	T3 Connections Branding	174,190	-5,760	0	0	0	168,430
9106	LPI1 - Inviron	70,000	7,325,519	1,497,286	7,195	0	8,900,000
9107	LPI2 - Kier	85,000	10,445,861	348,217	8,157	0	
9108	LPI3 - ROK	118,000	8,519,795	1,029,609	738,578	0	10,405,982
9738	2010 LPI Works	0	460,000	17,672,238	7,199,510	13,186	25,344,934
9778	Retail 2010 (CWF) Concessions	0	0	818,451	243,549	0	1,062,000
9785	Retail 2010 (CWF) Services	0	0	403,000	0	0	403,000
10232	2011 - 2012 Minor Projects	0	0	546,504	17,274,738	25,474,378	43,295,620
Minor (CWF)		**28,239,296**	**37,715,848**	**25,569,851**	**26,984,301**	**25,887,564**	**133,509,625**
D&D		**817,219**	**1,740,705**	**1,142,387**	**22,181,062**	**75,574,545**	**101,455,918**
3809	Overlay Runways	0	0	0	0	1,385,091	1,385,091
3841	Western Campus A380 Stands	0	0	0	1,979,085	3,335,628	5,314,713
9105	New Model Line (formerly ATRS)	73,289	236,075	69,149	2,887,323	2,434,680	5,700,516
9213	Security Projects	0	0	0	0	12,000,137	12,000,137
9575	T5 Transfers Add Security Lanes	0	450,000	-4,763	0	3,054,764	3,500,001
9721	Landside Road Safety Compliance	0	0	20,303	23,065	2,626,382	2,669,750
D&D Infrastructure		**73,289**	**686,075**	**84,689**	**4,889,473**	**24,836,682**	**30,570,208**
3828	T3 Dept/CI Development Ph2	0	0	0	265,200	734,800	1,000,000
4214	Pier 7 Redevelopment & Stands	0	0	0	220,194	1,858,275	2,078,469
9654	T3 Check-In Enhancements	0	0	0	178,195	1,821,809	2,000,004
9644	T4 Departures Phase 2	0	0	323,905	4,433,756	16,665,129	21,422,790

Heathrow Airport Limited Q5 Capital Investment Programme as at CIP2010		Actuals/ Forecast Outturn (Capital as Artemis)					
BCT	**Project Name**	**08/09**	**09/10**	**10/11**	**11/12**	**12/13**	**TOTAL**
D&D Western Campus		**0**	**0**	**323,905**	**5,097,345**	**21,080,013**	**1,000,000**
7720	T2A Phase 2	743,930	1,054,630	348,284	4,212,739	25,003,135	31,362,718
D&D E.C. Phase 2		**743,930**	**1,054,630**	**348,284**	**4,212,739**	**25,003,135**	**31,362,718**
7664	T2A Ph2 Baggage System	0	0	276,523	933,720	2,289,758	3,500,001
3871	Baggage Combined Control Centres	0	0	108,986	391,014	0	500,000
8818	Baggage Product Improvements	0	0	0	6,656,771	2,364,957	9,021,728
D&D Baggage		0	0	385,509	7,981,505	4,654,715	13,021,729
Other		**64,121,796**	**27,177,130**	**103,985**	**1,358,226**	**322,974**	**93,084,111**
7966	Operational Readiness	3,337,835	3,062,073	-119,723	0	0	6,280,185
8467	Wayfinding	51,699	14,162	5,089	106,076	322,974	500,000
7630	Airline Relocations Staff	-426,200	0	0	0	0	-426,200
Airline Moves		**2,963,334**	**3,076,235**	**-114,634**	**106,076**	**322,974**	**6,353,985**
5296	BS - T4 Operations Network	265,691	2,381	-1,657	73,396	0	339,811
8622	Systems Integration	329,793	35,580	0	0	0	365,373
7702	Relocation of Airlines IT Operations	6,825,752	4,438,638	699,513	1,092,466	0	13,056,369
IT		**7,421,236**	**4,476,599**	**697,856**	**1,165,862**	**0**	**13,761,553**
9999	Capital Programme Reserve	21,038,379	-5,000,000	0	0	0	16,038,379
Management Reserve		**21,038,379**	**-5,000,000**	**0**	**0**	**0**	**16,038,379**
7257	T3 Wayfinding Signage	12,731	0	0	0	0	12,731
6005	T5 Integrated DL IT Trial	-19,978	0	0	0	0	-19,978
6006	T5 Live Team Costs	2,672,123	1,223,608	0	0	0	3,895,731
6042	T5 Live Trials and Studies	-13,367	0	0	0	0	-13,367
6056	5T HCC Stockley Park	-103,133	0	0	0	0	-103,133
6057	T5 Welcome Roundabout	172	0	0	0	0	172
6060	Retail Capital Contributions	481,000	0	0	0	0	481,000
2781	T5/HAL Integration	-1,112	0	0	0	0	-1,112
6062	T5 New Meida Sites	-373,198	0	0	0	0	-373,198
6099	Fit-out Windsor VIP Suite	79,000	0	0	0	0	79,000
6134	T5 Live IT ystems	-661,246	275	0	0	0	-660,971
6138	Third Party Start Up	-197,151	0	0	0	0	-197,151
6139	Connectivey and Wayfinding	0	0	0	0	0	0
6141	T5 Operational Equipment	-414,154	0	0	0	0	-414,154
6142	T5 High Voltage Network	0	0	0	0	0	0
6143	LUL Network Costs	-3,115,953	0	0	0	0	-3,115,953
6144	T5 Live Logisitcs	-237,086	0	0	0	0	-237,086
6145	T5 Live Facility Maintenance	155,451	0	0	0	0	155,451
6519	TP T5 Lan Integration Work	-970	0	0	0	0	-970
6561	T5 Automated Public Address	35,031	0	0	0	0	35,031
6858	T5 Artemis	-191	0	0	0	0	-191
6889	Roads Wayfinding	0	0	-271,743	0	0	-271,743
6892	Airside T5 Integration	-58,722	0	0	0	0	-58,722
6893	Airside Stand Allocation	-184,386	0	0	0	0	-184,386
6984	IDAHO Check In	-4,126	0	0	0	0	-4,126
7039	Guard Trac for T5	5,484	0	0	0	0	5,484
7044	Loose Op Equip facilities Mgr	-118,185	-14,407	0	0	0	-132,592
7252	T5 Firestorm	-50,000	0	0	0	0	-50,000
7256	Cargo Rz re CP20	-400	0	0	0	0	-400
7259	T5 Cellular	-1,233,109	-616,554	0	0	0	-1,849,663
7260	T5 Information Zone	-438,750	0	0	0	0	-438,750
7366	Bus & coach Display	-33,378	0	0	0	0	-33,378
7367	Onward Travel	123,528	0	0	0	0	123,528
7368	Retail Marketing Sites	-4,519	0	0	0	0	-4,519
7407	FF&E Art Work Allowance	-300,000	0	0	0	0	-300,000
7410	T5 Energy Centre Maintenance	-107,879	0	0	0	0	-107,879
7543	T5 Cleaning Start Up	-28,335	0	0	0	0	-28,335
7759	Enhancement to LTHW system	-3,923	0	0	0	0	-3,923
7810	Baggage hall digital radios	0	0	0	0	0	0
7911	Wellington Road Start-up costs	-150,042	0	0	0	0	-150,042
8133	Directly charges staff costs	-2,325,202	7,070	0	0	0	-2,318,132
8189	Locks	0	-26,268	0	0	0	-26,268
8299	OH Facility costs	2,725	0	0	0	0	2,725
8320	T5 Build Requests	343,663	0	0	0	0	343,663
8321	Staff Search	80	0	0	0	0	80
8407	Contingency planning equipment	-33,731	-22,803	-5,342	0	0	-61,876
8603	T5 Late Business Change	6,177,977	0	0	0	0	6,177,977
7541	T4 Post T5 Baggage Operation	2,059,068	1,694,942	0	0	0	3,754,010

Heathrow Airport Limited Q5 Capital Investment Programme as at CIP2010		Actuals/ Forecast Outturn (Capital as Artemis)					
BCT	Project Name	08/09	09/10	10/11	11/12	12/13	TOTAL
7541	T4 Post T5 Baggage Operation	2,059,068	1,694,942	0	0	0	3,754,010
7505	Building 139 One World	7,894,702	11,243	21,594	54,900	0	7,981,839
9355	H3S Replacement	0	911,648	-911,647	0	0	1
3798	T4 Sorter Replacement	4,572,758	3,675,831	-436	0	0	8,248,153
3286	Post T5 Road Interim Solution	43,463	-14,367	0	0	0	29,096
4131	Manual Handling Aids	-108,523	4,552	-237,780	0	0	-129,705
3758	T3 Transfer Fax Mods	1,113,562	3,629	1,704	0	0	1,118,895
3810	System Baggage Cxrefit T' - T4	3,897,530	661,626	561,087	0	0	5,120,243
7959	Terminal 4 Open Skies Baggage	4,446,885	2,510,408	177,685	0	0	7,134,978
8614	Baggage Cluster (Bldg 560)	3,425,250	-199,014	0	0	0	3,226,236
615	H3S VMD replacement prog	2,983,592	2,351,381	0	0	0	5,334,973
4083	Landside Connectivity T5/HAI	-24,126	0	0	0	0	-24,126
9397	T4 Baggage Airline Moves - T408	0	1,880,331	0	0	0	1,880,331
4984	Scada upgrade	2,096,514	9,793	1,989	354	0	2,108,630
9398	T4 Baggage Airline Moves - EBS	0	4,366,096	0	0	0	4,366,096
5390	T3 Baggage Capacity - Phase 3	31,758	24,000	0	0	0	55,758
9401	T4 Baggage Airline Moves - Main Baggage Hall	0	1,858,692	-11,473	0	0	1,847,219
9402	T4 Baggage Airline Moves - External Works	0	2,321,786	0	0	0	2,321,786
6070	T4 PCC Upgrade	-77,837	-15,867	0	0	0	-60,970
7658	Baggage Tunnel T2A - MFF	0	0	0	0	0	0
9403	T4 Baggage Airline Moves - Satellites	0	1,958,223	0	0	0	1,958,223
5224	T3 Baggage Capacity - Phase 2	392	362	0	0	0	754
9558	BAMS Baggage System Improvement	0	58,178	193,018	0	0	251,196
9519	Bldg 139 BA Fleet Change Add'l Can Make Up Stillage	0	20,902	2,127	31,034	0	54,063
Legacy		**32,698,847**	**24,624,296**	**-479,237**	**86,288**	**0**	**0**
Total prior to adjustments (P50 EAC)		**693,962,076**	**719,653,716**	**708,357,837**	**1,024,088,018**	**1,338,784,497**	**4,484,846,144**
	CPI Efficency				-16,617,520	-66,470,079	-83,087,599
	Assumed money from PSDH				-9,400,000	-37,600,000	-47,000,000
	Management Adjustment (Challenge)				-10,004,737	-40,018,949	-50,023,686
	Adjustments to Mngt reserve	-7,054,286	7,054,286				0
Adjustments		**-7,054,286**	**7,054,286**	**0**	**-36,022,257**	**-144,089,028**	**-180,111,285**
Total following adjustments (BAA: Performance Baseline)		**686,907,790**	**726,708,002**	**708,357,837**	**988,065,761**	**1,194,695,469**	**4,304,734,859**

Appendix I: Tracker

All costs in 07/08 Comparative Prices

Heathrow Airport Limited															
	CIP at Settlement			CIP2010				CIP 2011							
CIP ID	BCT no.	Project Name (as at Q5 Settlement)	TOTAL	BCT no.	Project Name (as at CIP10)	Delivery Programme at CIP10	TOTAL	BCT no.	Project Name (as at CIP11)	Delivery Programme at CIP11	PDS Sheet	TOTAL	Comparison CIP11 v CIP10	Comparison CIP11 v Settlement	Significant scope changes CIP11 compared with Q5 Settlement (Out-turn prices are in current prices)
		HEATHROW TOTAL	4542				4735					4482	-254	-60	
		BAA IT	112				121					123	2	11	£22m transferred *from Capital* for IT Major Projects, Telecoms (BCT3636) and some minor other movements in July 2009. £9m transferred *to Capital* (management efficiency line) at IERM.
		BAA BAU	151				157					157	-1	5	Separation and clarification of Crossrail and Airtrack spend patterns. Some movement of cost within individual projects. 4 Enhancement (Connect 4 trains per hour) project developed
		HAL Capital Projects	3615				3821					4006	185	386	
		Thames Water	25											13	Settlement reached with TW. WAIT for COMMENTS
		PSDH	049				037					101	-470	-479	£3.5m transferred *to Capital* for early design works Eastern Apron/ Baggage/ T2C Interfaces.
		Adjustments										16	16	16	Adjustment to accord with Regulatory Accounts
Airline Moves															
H.T5.25a	7714	Airline Moves CIP 2007 Budget	93	7714	Airline Moves CIP 2007 Budget			7714	Airline Moves CIP 2007 Budget	Airline Moves				-93	Programme broken out into delivery projects noted below
H.T5.25	6137	Airline Moves	18	6137	Airline Moves			6137	Airline Moves	Airline Moves				-18	Programme broken out into delivery projects noted below
				7966	Operational Readiness	Airline Relocations	9	7966	Operational Readiness	Airline Moves		6	-3	6	Specific project derived from BCT 7714/6137
				6457	Wayfinding	Airline Relocations	7	6457	Wayfinding	Airline Moves		0	-7	0	Specific project derived from BCT 7714/6137. Subsequent transfer of scope to LP11 - Indoor (BCT 9106) to provide additional capacity for the T4 MSCP and savings in BAC
				7540	T3 Office Refurbishment Airline Moves	Western T3	7	7540	T3 Office Refurbishment Airline Moves	Terminal 3		7	0	7	Specific project derived from BCT 7714/6137
				7888	T3 CIP New Airline Moves	Western T3	7	7888	T3 CIP New Airline Moves	Terminal 3		7	0	7	Specific project derived from BCT 7714/6137
	6608	T4 Airline Relocation		6608	T4 Airline Relocation	Western T4	13	6608	T4 Airline Relocation	Terminal 4		12	0	12	Project originally derived from Airline Moves CIP provision. CIP Lounge scopes subsequently transferred from this BCT line to BCT 2003.
				7505	Building 139 One World	Baggage	8	7505	Building 139 One World	Legacy		8	0	8	Specific project derived from BCT 7714/6137
				7541	T4 Post T5 Baggage Operation	Baggage	4	7541	T4 Post T5 Baggage Operation	Legacy		4	-1	4	Specific project derived from BCT 7714/6137
				6020	Tug charging & storage	Infrastructure	1	6020	Tug charging & storage	Airfield		1	0	1	Specific project derived from BCT 7714/6137
				7702	Relocation of Airlines IT Operations	Airline Relocations	20	7702	Relocation of Airlines IT Operations	IT	4	12	-8	12	Specific project derived from BCT 7714/6137
				7738	Airline Relocations - Cat B Fit out - CIP (Arrivals)	T2B, T4 & VP	3	7738	Airline Relocations - Cat B Fit out - CIP (Arrivals)	Landside, T1 & VP		3		3	Specific project derived from BCT 7714/6137
Eastern Campus Total															
Interim Terminal 1															
				4630	T1 Star Parent Project	T2B, T4 & VP	-7	4630	T1 Star Parent Project	Landside, T1 & VP		-7	0	-7	Scope transferred to other Eastern Campus Projects below:
H.T1.15	3887	T1 Integrated Lounge Security Search		3887	T1 Integrated Lounge Security Search	T2B, T4 & VP	0	3887	T1 Integrated Lounge Security Search	Landside, T1 & VP		0	0	0	Scope transferred to Plant Segregation (BCT 3884) and T1 Parent Project (BCT 4390)
H.T1.47	6944	T1 Displacements	6	6944	T1 Displacements	T2B, T4 & VP	12	6944	T1 Displacements	Landside, T1 & VP		11	-1	5	
H.T1.19	3923	T1 HBS & Transfer Baggage System	10	3923	T1 HBS & Transfer Baggage System	T2B, T4 & VP	11	3923	T1 HBS & Transfer Baggage System	Landside, T1 & VP		11	0	1	
H.T1.17	3822	T1 FCC & Immigration	4	3822	T1 FCC & Immigration	T2B, T4 & VP	7	3822	T1 FCC & Immigration	Landside, T1 & VP		7	0	2	
H.T1.29	4075	T1 Arrivals & Departures Refurbishment	32	4075	T1 Arrivals & Departures Refurbishment	T2B, T4 & VP	54	4075	T1 Arrivals & Departures Refurbishment	Landside, T1 & VP		32	-1	0	Transfer of scope to Arrivals Forecourt (BCT 8216), Logistics (BCT 7194), T1 Additional Works (BCT 9181)
				8216	T1 Arrivals Forecourt	T2B, T4 & VP	1	8216	T1 Arrivals Forecourt	Landside, T1 & VP		1		1	Scope drawn from BCT4075, BCT3823 and BCT3212
				9101	Bvlt CIP Lounge Fit Out (cont)	T2B, T4 & VP	1	9101	Bvlt CIP Lounge Fit Out (cont)	Landside, T1 & VP		1		1	
				9129	T1 Zone K Security Standardisation	T2B, T4 & VP	4	9129	T1 Zone K Security Standardisation	Landside, T1 & VP		4	0	4	Scope transferred from Infrastructure Programme
				9181	T1 Additional Works		12	9181	T1 Additional Works	Landside, T1 & VP		10	-2	10	New portfolio of projects established at IERM to deliver additional scope of works required in T1 prior to T2A opening. Savings in Zone K, Gate 5 & Environ and Gate 3 Domestic work packages; also minor scope transfers to other projects

Heathrow Airport Limited

CIP st. Settlement				CIP 2010			CIP 2011							
CIP ID	BCT no.	Project Name (as at Q5 Settlement)	TOTAL	BCT no.	Project Name (as at CIP10)	Delivery Programme at CIP10	TOTAL	BCT no.	Project Name (as at CIP11)	Delivery Programme at CIP11	PDS Sheet	TOTAL	Comparison CIP11 v CIP10	Comparison CIP11 v Settlement	Significant scope changes CIP11 compared with Q5 Settlement (£M outturn prices)
Eastern Plan & Apron															
H.T1.26	3884	T1 Pier 4 Segregation	1	3884	T1 Pier 4 Segregation	T2B, T1 & VP	2	3884	T1 Pier 4 Segregation	Landside, T1 & VP		2		1	
H.T1.26a	7612	T1 Pier 4A Segregation	2	7612	T1 Pier 4A Segregation	T2B, T1 & VP	2	7612	T1 Pier 4A Segregation	Landside, T1 & VP		2		0	
H.T1.49	6646	T1 Remote Coaching	3	6646	T1 Remote Coaching	T2B, T1 & VP	3	6646	T1 Remote Coaching	Landside, T1 & VP		3		1	
H.T1.48	6495	Relocation of 10cm Radar	1	6495	Relocation of 10cm Radar	T2B, T1 & VP	1	6495	Relocation of 10cm Radar	T2B Building & Associated Projects		1	0	0	
H.ASS.12	3212	North East Taxiways	2	3212	North East Taxiways	EC Airfield	0	3212	North East Taxiways	EC Airfield		0		-1	
H.ASS.55	7207	EAD Mid Stands & Taxilanes	13	7207	EAD Mid Stands & Taxilanes	EC Airfield	0	7207	EAD Mid Stands & Taxilanes	Airfield		0		-13	Scope transfer to other airfield projects for delivery
H.T1.06b	7205	MIP NW Stands & Taxilanes	30	7205	T2B NW Stands & Taxilanes	T2B, T1 & VP	35	7205	T2B NW Stands & Taxilanes	Airfield		31	0	-1	Project created from T4 Remote JK Stands (BCT 3842)
H.T1.06c	7208	MIP NE Stands & Taxilanes	11	7208	T2B NE Stands & Taxilanes	Infrastructure	14	7208	T2B NE Stands & Taxilanes	Airfield		14	0	3	
H.ASS.05	3017	South East Taxiways	60	3017	South East Taxiways	Infrastructure	57	3017	South East Taxiways	Airfield		53	-4	-10	Scope transferred to Eastern Campus Airfield Taxiways and Road (BCT 4202). Reductions due to final account negotiations
H.ASS.30	4202	EA Airside Rd & Taxilane Upass	58	4202	EA Airside Rd & Taxilane Upass	EC Airfield	53	4202	EA Airside Rd & Taxilane Upass	Airfield	Y	51	-2	-8	Transfer of scope for Sub station 260 to T2B NW Stands (BCT 7205)
H.T1.36a	7209	MIP SE Stands & Taxilane	46	7209	T2B SE Stands & Taxilanes	T2B, T1 & VP	56	7209	Eastern Campus Apron	Airfield	Y	59	4	13	Project deferred due to T2B Basement and Option 6 Baggage. Scope for airside work to Eastern Campus Ancillary buildings transferred from Eastern Campus Accommodation (BCT 9729). Transfer of scope to divert, or decommission, known underground services prior to the construction of the T2B Phase 2 Stands to Eastern Campus Apron (BCT 7205)
H.T1.36b	7210	MIP SW Stands & Taxilanes	24	7210	T2B SW Stands & Taxilanes	T2B, T1 & VP	0	7210	T2B SW Stands & Taxilanes	Airfield		0		-24	Entire scope transferred to MIP SE Stands & Taxilanes (BCT 7209)
H.T1.50a	7718	Eastern Maint Base Redev	38	7718	Eastern Maint Base Redev	Infrastructure	31	7718	Eastern Maint Base Redev	Landside Infrastructure	Y	30	-2	-8	Scope transfer to BAA IT programme for provision for Technical solution for CAA/2 bouncary around the Eastern Maintenance Base
H.T1.06d	6716	Pier 3 Demolition	2	6716	Pier 3 Demolition	T2B, T1 & VP	0	6716	Pier 3 Demolition	T2B Building & Associated Projects		0	0	-2	Scope transferred to T2B Phase 2 for delivery (BCT 4201)
H.ASS.54	7211	Rtl Ph2 Stands	5	7211	Rtl Ph2 Stands			7211	Rtl Ph2 Stands	Eastern Campus Development Ph2				-5	Project deferred to Q6
	7212	Relocation of Substation 56	3	7212	Relocation of Substation 56	T2B, T1 & VP	3	7212	Relocation of Substation 56	T2B Building & Associated Projects		3	0	1	Scope transferred from BCT 7717
	6759	Wks to Feltham Balancing Pond	3	6759	Wks to Feltham Balancing Pond	Infrastructure	16	6759	Wks to Feltham Balancing Pond	Landside Infrastructure	Y	16	0	14	Scope increased at IBR6 to include Airfield Storm Water Catchment requirements
				4119	Reconfiguration of stand 240/242	EC Airfield	1	4119	Reconfiguration of stand 240/242	EC Airfield		1	0	1	
				7158	T1 Sta Welfare & Sta Office facilities	T2B, T1 & VP	2	7158	T1 Sta Welfare & Sta Office facilities	Landside, T1 & VP		2		2	
H.T1.06c	4527	T1 Terminal Pier	6	4527	T1 Terminal Pier			4527	T1 Terminal Pier	Eastern Campus Development Ph2				-6	Project is in Q6; subject to Q6 CIF negotiation
				9351	T1 Programme	Baggage	19	9351	T1 Baggage Prolongation Programme	T1 Baggage Programme	Y	51	32	51	New requirement captured at IBR6 for works to T1 baggage system to prolong its life until introduction of T2A baggage system. Consolidation of projects to improve delivery with scope transferred from 185 Replacement (BCT 9755) & T2A Baggage (BCT 9853)
				8902	T1 Airfield Remediate Pier 3		2	8902	T1 Airfield Remediate Pier 3	Airfield		1	0	1	
HIET (T2A)															
H.ET.01	6100	HET Phase 1	1000	6100	T2A Early Stage Cost		0	6100	T2A Early Stage Cost	T2A Phase 1 & Associated Projects		0		-1080	Scope transferred into T2A delivery projects noted below
				7758	T2A LIS Early Services Relocation	T2B, T1 & VP	19	7758	T2A LIS Early Services Relocation	Landside, T1 & VP		19	0	19	Specific project derived from HET 6100
				7757	T2A Scheme Design Stage	T2A Phase 1 & Associated Projects	18	7757	T2A Scheme Design Stage	T2A Phase 1 & Associated Projects		18	0	18	Specific project derived from HET 6100

Heathrow Airport Limited CIP at Settlement				CIP2010				CIP 2011						
CIP ID	BCT no.	Project Name (as at Q5 Settlement)	TOTAL	BCT no.	Project Name (as at CIP10)	Delivery Programme at CIP10	TOTAL	BCT no.	Project Name (as at CIP11)	Delivery Programme at CIP11	PDS Sheet	TOTAL	Comparison CIP11 v CIP10	Comparison CIP11 v Settlement	Significant scope changes CIP11 compared with Q5 Settlement (Excess refs are to custom price)
				RRP	T2A Building	T2A Phase 1 & Associated Projects	927	RRP	T2A Building	T2A Phase 1 & Associated Projects		875	-52	875	Specific project derived from BCT 6103. Subsequent transfer of Baggage scope with net result that T1 Baggage transition scope will be delivered via a new project (BCT 10010); remaining T2A baggage scope is in this project. ICS scope transferred to new project (BCT 9805) and amalgamated with ICS scope from T2B Phase 2 to improve delivery. EIS scope received from separate project (BCT 9826) to improve co-ordination. Reductions following ICS Constructor Decision and procurement savings on substructure and frame. Scope increase resulting from adoption of Programme D: including change to air displacement unit height and frequency of DMT's; relocation of bridges & VCCs to western facade; addition of 8th baggage reclaim belt; additional escalator requirements; minor changes to facility plans; completion of wayfinding design; revision to schedule dates
				0008	T2A ICS			0008	T2A ICS	T2A Phase 1 & Associated Projects					Project created at IBR4, subsequently re-incorporated into BCT 9802.
				9805	T2A Baggage	T2A Phase 1 & Associated Projects	0	9805	T2A Baggage	T2A Phase 1 & Associated Projects		0		0	Project created at IBR4, subsequently re-incorporated into BCT 9802.
				9759	Q5 & T2 Demolition	T2A Phase 1 & Associated Projects	26	9759	Q5 & T2 Demolition	T2A Phase 1 & Associated Projects		25	-1	25	Specific project derived from BCT 6103. Subsequent transfer of demolition of ground floor slab to T2A Building (BCT 10010)
				RRM	T2 Demolition	T2A Phase 1 & Associated Projects		RRM	T2 Demolition	T2A Phase 1 & Associated Projects					Specific project derived from BCT 6103
				9810	Other CTA Enabling Works	T2A Phase 1 & Associated Projects	0	9810	Other CTA Enabling Works	T2A Phase 1 & Associated Projects			0		Specific project derived from BCT 9810
				9807	T2A Phase 1 Stands	T2A Phase 1 & Associated Projects	28	9807	T2A Phase 1 Stands	T2A Phase 1 & Associated Projects		1	-27	1	Specific project derived from BCT 6103. Construction works transferred to T2A Building (BCT 0002)
				9826	Eastern Campus EIS	EC Leadership, Logistics & Enabling	36	9826	Eastern Campus EIS	EC Leadership, Logistics & Enabling		4	-32	4	Specific project originally derived from BCT 6100. Remaining scope transferred to T2A Building (BCT 9802) in November 2010
				9758	Eastern Campus Leadership Team	EC Leadership, Logistics & Enabling	79	9758	Eastern Campus Leadership Team	Leadership & Logistics		46	-33	46	Specific project derived from BCT 6103. Reduction to schedule resulting in Q5 to Q6 movement; transfer of capital charges & insurances to other Eastern Campus projects (BCTs 9739, 9802 & 9826); transfer of business risk from T2A Building (BCT 9802)
				9759	Eastern Campus Logistics	EC Leadership, Logistics & Enabling	47	9759	Eastern Campus Logistics	Leadership & Logistics		51	8	51	Specific project derived from BCT 6103. Reduction to schedule resulting in minor movement Q5 to Q6. Transfer of Capital Charges, insurances and utilities charges from EC Leadership (BCT 9758)
				9729	Eastern Campus Accommodation		37	9729	Eastern Campus Accommodation	Landside, T1 & VP	Y	26	-10	26	Specific project derived from BCT 6101. Airside scope of Eastern Campus and lay buildings transferred to Eastern Campus Apron (BCT 7205)
				9869	Control Tower Demolition	EC Landside	30	9869	Control Tower Demolition	Landside, T1 & VP	Y	29	-1	29	Specific project derived from BCT 6100
HLR05	3814	New Build MSCP - East	50	3814	New Build MSCP - East	EC Landside	95	3814	New Build MSCP - East	Landside, T1 & VP	Y	82	-14	31	Scope added from Landside CTA Development (BCT 3814) for roads work and T2A Building (BCT 9802) for forecourt works. Procurement savings through LUU process; transfer of secant piling and basement structure for LU connector tunnel to T2A Building (BCT 9802)
HLR05a	8457	Control Tower Site Purchase for MSCP East	42	8457	Control Tower Site Purchase for MSCP East	EC Landside	44	8457	Control Tower Site Purchase for MSCP East	Landside, T1 & VP		44		2	
HLE1.01a	7720	NET Phase 2: T2A Phase 2	50	7720	T2A Phase 2	EC Dev Ph 2	29	7720	T2A Phase 2	Eastern Campus Development Ph2	Y	28	-1	-22	Part deferral of scope to Q6

Heathrow Airport Limited

CIP10	PCT no.	Project Name (as at CIP5 Settlement)	TOTAL	PCT no.	Project Name (as at CIP10)	Delivery Programme CIP10	TOTAL	PCT no.	Project Name (as at CIP11)	Delivery Programme CIP11	PPK Sheet	TOTAL	Comparison CIP11 v CIP10	Comparison CIP11 v Settlement	Significant scope changes CIP11 compared with Q5 Settlement (Quoted risk are to current price)
NET (T2/3) Vacant Possessions															
H.LF.02	6654	NET VP - HMRC Decants	0	6654	T2A VP - HMRC Decants	T2B, T5 & VP	2	6654	T2A VP - HMRC Decants	Landside, T1 & VP		2	0	2	
H.LF.03	6917	NET VP - BMI Relocation	3	6917	T2A VP - BMI Relocation	T2B, T5 & VP	2	6917	T2A VP - BMI Relocation	Landside, T1 & VP		2	0	0	
H.LF.03a	7231	NET VP - Prop decant: risk/opp	3	7231	T2A VP - Capital Contributions	T2B, T5 & VP	1	7231	T2A VP - Capital Contributions	Landside, T1 & VP			-1	-3	Transfer of decommissioning and strip out of tenants fit out areas to Q8 Cancellation (BCT 6799) and reductions in ways
H.ASS.32a	4882	Sub Fire Stn Relocation Ph 2	1	4882	Sub Fire Stn Relocation Ph 2	Infrastructure	1	4882	Sub Fire Stn Relocation Ph 2	Airfield		1	0	0	
	7226	ID Centre Relocation	0	7226	ID Centre Relocation	T2B, T5 & VP	2	7226	ID Centre Relocation	Landside, T1 & VP		1	0	1	
	7227	NET VP Airside Sec decant	0	7227	T2A VP Airside Sec decant	T2B, T5 & VP	4	7227	T2A VP Airside Sec decant	Landside, T1 & VP		4	0	3	Specific project defined from BCT 7710/6797
				7230	P22948 - Q8 Staff Rest Decant	T2B, T5 & VP	4	7230	P22948 - Q8 Staff Rest Decant	Landside, T1 & VP		3	-1	3	
				7239	D'Albiac Tenant Fit Out	T2B, T5 & VP	2	7239	D'Albiac Tenant Fit Out	Landside, T1 & VP		2	0	2	
				7386	P22940 - T2A VP - Specialist Sys Decant	T2B, T5 & VP	1	7386	P22940 - T2A VP - Specialist Sys Decant	Landside, T1 & VP		1	0	1	
				7469	T2A VP - D'Albiac Occ Health	T2B, T5 & VP	1	7469	T2A VP - D'Albiac Occ Health	Landside, T1 & VP		1	0	1	
				7623	T2A VP - T3 Existing refit		2	7623	T2A VP - T3 Existing refit	Landside, T1 & VP		2	0	2	
	6919	VAA Crew Clearance	2	6919	VAA Crew Clearance	T2B, T5 & VP	1	6919	VAA Crew Clearance	Landside, T1 & VP		1	0	2	
				8016	P23389 - T2A VP - Customs Clearance	T2B, T5 & VP	2	8016	P23389 - T2A VP - Customs Clearance	Landside, T1 & VP		1	0	1	
				8017	P23389 - T2A VP - Q8 Bussing decant	T2B, T5 & VP	1	8017	P23389 - T2A VP - Q8 Bussing decant	Landside, T1 & VP		1	0	1	
				8491	T2A VP - Rent & Staff Costs		3	8491	T2A VP - Rent & Staff Costs	Landside, T1 & VP		3		3	
				8542	NET VP - T2A Spec Sys Decant	T2B, T5 & VP	1	8542	NET VP - T2A Spec Sys Decant	Landside, T1 & VP		1	0	1	
				9256	T2 HAL C&B		2	9256	T2 HAL C&B	Landside, T1 & VP		2	0	2	
Midfield Pier (T2B/Outer Pier (T2C)															
H.T1.07a	4599	Midfield Pier North	96	4599	T2B Phase 1	T2B, T5 & VP	96	4599	T2B Phase 1	T2B Building & Associated Projects		97	1	1	
H.T1.50	7717	Eastern Apron Outer Pier North	95	7717	Eastern Apron Outer Pier North	EC Dev Ph 2		7717	Eastern Apron Outer Pier North	Eastern Campus Development Ph 2				-95	Deferred to Q5 - replaced with T2B South investment in Q5
H.T1.38	4201	Buffer Centre, Stnds & Rwy Connectivity	190	4201	T2B Phase 2	T2B, T5 & VP	392	4201	T2B Phase 2	T2B Building & Associated Projects	4	523	131	334	Incorporation of T2B South scope plus baggage basement associated with revised Eastern Campus Baggage masterplan. Scope transfers in from PSDH relating to TTS funding (excludes from CIP 2010) and design & construction of baggage, Passenger service & TTS tunnels under Lima & Kilo taxiways. Scope transfer out relating to ICS (to BCT 5895). Significant EAC reduction at Construction Decision. Others smaller savings and cash flow profile amendments affecting Q5 versus Q6 EACs.
H.T1.38	4199	Midfield Pier South	5	4199	Midfield Pier South			4199	Midfield Pier South	T2B Building & Associated Projects				-5	Project merged with T2B Phase 2 (BCT 4201) in Aug 08
Airfield															
Western Campus Total															
Terminal 3															
H.T3.39	7150	T3 Zone A Virgin Contribution		7150	T3 Zone A Virgin Contribution		1	7150	T3 Zone A Virgin Contribution	Terminal 3		1		1	
H.T3.18	3666	T3 Forecourt Redevelopment		3666	T3 Forecourt Redevelopment		2	3666	T3 Forecourt Redevelopment	Terminal 3		2	0	2	
	6476	T3 Kerbside check in		6476	T3 Kerbside check in		-1	6476	T3 Kerbside check in	Terminal 3		-1		-1	
H.T3.22a	7593	T3 Zone B-G Upgrade	4	7593	T3 Zone B-G Upgrade	Western T3	14	7593	T3 Zone B-G Upgrade	Terminal 3		14	0	10	Scope transferred from T3 Refurbishments (BCT 6710)

Heathrow Airport Limited CIP at Settlement				CIP2010				CIP 2011						
CIP ID	BCT Ref	Project Name (as at Q5 Settlement)	TOTAL	BCT Ref	Project Name (as at CIP10)	Delivery Programme at CIP10	TOTAL	BCT Ref	Project Name (as at CIP11)	Delivery Programme at CIP11	PDS Sheet	TOTAL	Comparison CIP11 v CIP10	Comparison CIP11 v Settlement	Significant scope changes CIP11 compared with Q5 Settlement (Where it refers to authorisation)
H.T3.22	6714	T3 Refurbishments	48	6714	T3 Refurbishments	Western: T3	0	6714	T3 Refurbishments	Terminal 3		0	0	-48	Scope transferred to discrete projects for delivery of refurbishment scope (BCTs: 7593, 8405, 8510, 8511, 8563, 8569)
				8858	Immigration Hall Refurb	Western: T3	18	8858	Immigration Hall Refurb	Terminal 3		19	1	19	Scope transferred from T3 Refurbishments line in CIP 2008 (BCT 6714). Further scope transferred from Infrastructure associated with SoF Service Border Control (from BCT 4242) and revisions to BAA internal costs, IT systems & Insurance
				9559	T3 Baggage Hall Refit	Western: T3		9559	T3 Baggage Hall Refit	Terminal 3					Project created at IERM, subsequently re-incorporated into Immigration Hall project (BCT 8858)
H.T5.15	3825	T5 Dept/Cl Development Ph2	0	3825	T5 Dept/Cl Development Ph2		1	3825	T5 Dept/Cl Development Ph2	Terminal 5		1	0	1	
H.T3.41	9222	T3 Additional Departures Security Lanes - SQR	2	9222	T3 CSA	Western: T3	16	9222	T3 CSA	Terminal 3		13	-3	11	Scope transferred from T3 Refurbishments line in CIP 2008 (BCT 6714). Subsequent procurement efficiencies and re-evaluation of risks
H.T3.42	9223	T3 Additional Transfer Security Lanes - SQR	2	9223	T3 Connections Security SQR	Western: T3	13	9223	T3 Connections Security SQR	Terminal 3		8	-5	-13	Procurement efficiencies since CIP 2010 due to combining the project with the Central Search Area and Landside Departures plus savings against project specific allowances included in the CIB tender
	8406	Pier 7 Connector Refurb		8406	Pier 7 Connector Refurb	Western: T3	11	8406	Pier 7 Connector Refurb	Terminal 3		11	0	11	Scope transferred from T3 Refurbishments line in CIP 2008 (BCT 6714)
				8510	Landside Departures 1st Floor	Western: T3	5	8510	Landside Departures 1st Floor	Terminal 3		4	-1	4	Scope transferred from T3 Refurbishments line in CIP 2008 (BCT 6714)
				8484	Pier 5 Gatecom Enclosures	Western: T3	3	8484	Pier 5 Gatecom Enclosures	Terminal 3		2	0	2	New scope requirement approved 2009
				9269	T3 Transformation Scope Gap 09		4	9269	T3 Transformation Scope Gap 09	Terminal 3		3	0	3	
H.T3.39	6091	Pier 5 Departures Walkway	6	6091	Pier 5 Departures Walkway	Western: T3	5	6091	Pier 5 Departures Walkway	Terminal 3		5	-1	-1	Scope transferred from T3 Refurbishments line in CIP 2008 (BCT 6714)
H.T3.19	3829	MARSing stnd 324 - 330 & CTA S	18	3829	MARSing stnd 324 - 330 & CTA S	Western: T3		3829	MARSing stnd 324 - 330 & CTA S	Terminal 3				-18	Deferred to Q5
H.T3.31	4214	Pier 7 Redevelopment to Stands	5	4214	Pier 7 Redevelopment to Stands	Western: T3	2	4214	Pier 7 Redevelopment to Stands	Terminal 3		2	0	-3	
	8002	Pier 7 stands works		8002	Pier 7 stands works	Western: T3	3	8002	Pier 7 stands works	Terminal 3		3	0	3	New scope identified at IERM.
H.A55.37	9401	15 Remote JX Stands (A380)		9401	15 Remote JX Stands (A380)	Infrastructure Airfield	0	9401	15 Remote JX Stands (A380)	Infrastructure Airfield		0	0	0	Scope deleted in re-prioritisation.
H.T3.36	4243	T1 PBA West Dem & 4 nm JS Stn	8	4243	T1 PBA West Dem & 4 nm JS Stn	EC Airfield	3	4243	T1 PBA West Dem & 4 nm JS Stn	EC Airfield		3	0	-5	
				9310	T3 Additional Jetty Provision		3	9310	T3 Additional Jetty Provision	Terminal 3		3	0	3	
				9508	Pier 5 A380 Stands	Western: T3	5	9508	Pier 5 A380 Stands	Terminal 3	✓	5	0	5	Ref HT3.19, 38.5m retained to deliver this scope end of Q5.
				9379	T3 VAT Reclaim Desk		1	9379	T3 VAT Reclaim Desk	Terminal 3		1	0	1	
				9468	IKEA Watch House		2	9468	IKEA Watch House	Terminal 3		2	0	2	
				9655	T3 IDI		3	9655	T3 IDI	Terminal 3		4	0	4	
				9654	Enable Airlines to Enhanced CUSS Offer		2	9654	Enable Airlines to Enhanced CUSS Offer	Terminal 3		2	0	2	
								10005	Stand 365 Works	Terminal 3		0	0	0	
Terminal 5															
H.T5.14	6136	Piccix Station Works	18	9382	Piccix Station Works - LUL	Infrastructure FJ	21	9382	Piccix Station Works - LUL	Landside Infrastructure		20	0	2	
TSC															
H.T5.28	5221	TSC Q5 Expenditure	280	5221	Heathrow Terminal TSC	Western: T5	321	5221	Heathrow Terminal TSC	Terminal 5		325	4	65	Scope of TSC Dock Weathering transferred from BCT 9657 and Wayfinding from BCT 9656
	0705	T5 Phase 2 Airfield works		0705	T5 Phase 2 Airfield Works	Western: T5	26	0705	T5 Phase 2 Airfield Works	Airfield	✓	26	0	26	Scope transferred from TSC (BCT 5221) for delivery of airfield and stands works by pavement team.
H.T5.28a		TSC Extension 10 -12 Pier Served Stands	25		TSC Extension 10 -12 Pier Served Stands				TSC Extension 10 -12 Pier Served Stands					-25	Q5 scope transferred to TSC project (BCT 5221) for delivery.

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CIP ID	BCT No	Project Name (as at Q5 Settlement)	TOTAL	BCT No	Project Name (as at CIP10)	Delivery Programme at CIP10	TOTAL	BCT No	Project Name (as at CIP11)	Delivery Programme at CIP11	PDS Sheet	TOTAL	Comparison CIP11 v CIP10	Comparison CIP11 v Settlement	Significant scope changes CIP11 compared with Q5 Settlement (£m out-turn prices)
					CIP 2010				CIP 2011						
H.ASS.53	7663	TSC Additional Stands	5	7663	TSC Additional Stands			7663	TSC Additional Stands	Terminal 5				-5	CIS scope transferred to TSC project (BCT 8221) for delivery.
				8335	T5 Phase 2 Early Stands	Western: T5	8	8335	T5 Phase 2 Early Stands	Airfield		7	-1	7	Scope transferred from TSC (BCT 8221) for delivery of airfield and stands works by Pavement team. Reductions since CIP 2010 due to final account negotiations
				9575	T5 Transfers Add Security Lanes	Infor. Security	3	9575	T5 Transfers Add Security Lanes	Security	4	3	0	3	Additional scope identified at IBR5
				9655	TSC Transfers	Western: T5	2	9655	TSC Transfers	Terminal 5			-2		Additional scope identified at IBR5. Scope of complete project for wayfinding subsequently transferred to BCT 8221
				9566	T5 Baggage Maintenance Area	Western: T5	0	9566	T5 Baggage Maintenance Area	Terminal 5			0		Additional scope identified at IBR5
				9657	Weather Proof BA Baggage Docks	Western: T5	3	9657	Weather Proof BA Baggage Docks	Terminal 5		0	-3	0	Additional scope identified at IBR5. Scope of complete project subsequently transferred to BCT 8221
Terminal 4															
H.T4.01	9991	T4 Check-In Capacity	40	9991	T4 Check-In Capacity	Western: T4	90	9991	T4 Check-In Capacity	Terminal 4		88	-2	-42	Scope transfers from T4 Refurbishment (Check-in refurb); Prolongation costs associated with airline move sequence delays post T5 opening. Reduction in BAC following final account negotiations
H.T4.06a	2304	Arrivals Enhancements/A380	5	2304	Arrivals Enhancements/A380			2304	Arrivals Enhancements/A380	Terminal 4				-5	Scope transferred to T4 Refurbishment project (BCT 6693) for delivery
H.T4.01a	7649	Terminal 4 Check In Ph2	6	7649	Terminal 4 Check In Ph2			7649	Terminal 4 Check In Ph2	Terminal 4				-6	Scope transferred to T4 Check-in Extension (BCT 7691)
H.T4.09	6693	Terminal 4 Refurbishment	42	6693	Terminal 4 Refurbishment	Western: T4	72	6693	Terminal 4 Refurbishment	Terminal 4		11	-1	-31	Elements of scope and budget transferred to T4 Check-in project (BCT 9991); Induces check-in refurb scope and budgets associated with IDL and baggage reclaim refurb. Scope transfers to Transfers Security project to deliver T4 arrivals and immigration refurb scope of works. Reduction in BAC following final account negotiations
H.T4.15	3	T4 Additional Departures Security Lanes - SQR	6											-6	Scope transferred to BCT 9028
H.T4.16	6009	T4 Open Skies Landside Offices	1	6009	T4 Open Skies Landside Offices	Western: T4	0	6009	T4 Open Skies Landside Offices	Terminal 4		0		-1	
H.T4.08b	3843	T4 Arrivals Reclaim (A380 ph2)		3843	T4 Arrivals Reclaim (A380 ph2)			3843	T4 Arrivals Reclaim (A380 ph2)						
H.T4.17	9029	T4 Additional Transfer Security Lanes - SQR	4	9028	T4 Additional Transfer Security Lanes	Western: T4	7	9029	T4 Additional Transfer Security Lanes	Terminal 4		7	0	3	
				9276	T4 Victor Pier Refurbishment	Western: T4	0	9276	T4 Victor Pier Refurbishment	Terminal 4		0		0	
				8274	Western Campus Terminal 4 T4 Terminal 8274 : T4	Western: T4	1	8274	Western Campus Terminal 4 T4 Terminal 8274 : T4	Terminal 4		1		1	
				9278	T4 Transformation Scope Gap 09		1	9278	T4 Transformation Scope Gap 09	Terminal 4		0	-1	0	
H.T4.08	2308	T4 A380 Stand/Gate Provision	9	2308	T4 A380 Stand/Gate Provision	Western: T4	23	2308	T4 A380 Stand/Gate Provision	Terminal 4		22	-1	13	Scope transferred in from Airline Relocations (BCT 6614) for new CIP Lounge provision
H.T4.12	3042	T4 Remote Jet Stands	3	3042	T4 Remote Jet Stands	Infrs.Airfield		3042	T4 Remote Jet Stands	Airfield				-3	Project scope merged with BCT 3041
H.T4.11	3041	T4 Jet Stands Phase 2	2	3041	T4 Jet Stands Phase 2	Infrs.Airfield	5	3041	T4 Jet Stands Phase 2	Airfield	4	5		3	Scope from BCT 3042 transferred
				9643	T4 Landside Mezzanine Corridor	Western: T4	8	9643	T4 Landside Mezzanine Corridor	Terminal 4		6	-2	6	New scope as dec at IBR5. Scope reduction since CIP 2010 due to the deletion of the mezzanine corridor scope of works
				9644	T4 Departures Phase 2	Western: T4	21	9644	T4 Departures Phase 2	Terminal 4	4	19	-2	19	New scope as dec at IBR5. Scope reduction since CIP 2010 in specification of the works to ceilings and lighting in the IDL
				9645	T4 Baggage Reclaim Hall Refurb	Western: T4	5	9645	T4 Baggage Reclaim Hall Refurb	Terminal 4		3	-2	3	Scope added at IBR5 following CIP reprioritisation. Transfer of complete project, T4 Baggage Belts A380 (BCT 9647) to this project followed by transfer of scope to Baggage Programme for delivery of construction phase of the fit out of the T4 Baggage Reclaim Hall
				9647	T4 Baggage Belts A380	Western: T4	9	9647	T4 Baggage Belts A380	Terminal 4			-9		Scope added at IBR5 following CIP reprioritisation. Scope of complete project subsequently transferred to T4 Baggage Reclaim Hall Refurbishment (BCT 9645)
								6715	T4 Transfer General User Desks	Terminal 4					
								2308	Arrivals Enhancements/A380	Terminal 4					
								3	T4 Additional Departures Security Lanes - SQR	Terminal 4					

Heathrow Airport Limited CIP at Settlement				CIP2010				CIP 2011							
CIP ID	BCT Ref	Project Name (as at Q5 Settlement)	TOTAL	BCT Ref	Project Name (as at CIP10)	Delivery Programme at CIP10	TOTAL	BCT Ref	Project Name (as at CIP11)	Delivery Programme at CIP11	PDS Sheet	TOTAL	Comparison CIP11 v CIP10	Comparison CIP11 v Settlement	Significant scope changes CIP11 compared with Q5 Settlement (Different refs are to earlier prices)
								9686	T4 Cat B Accommodation	Terminal 4		1	1	1	New scope identified for Cat B office accommodation for Air India move from T3 to T4
								9844	T4 Airbridge Replacement	Terminal 4	✓	5	5	5	New scope identified since CIP 2C10 for the replacement of 10 No. airbridges at T4.
								9999	T4 WSLM Works	Terminal 4					
								9940	T4 Gulf Air CIP Lounge	Terminal 4		0	0	0	
								9946	T4 Off Pier Coaching	Terminal 4		1	1	1	
								9965	T4 Transit Process	Terminal 4					
								9961	T4 Interim VP suite	Terminal 4		1	1	1	
								10009	MSPW Western Campus	Terminal 4					
Baggage & Connections Total															
Baggage															
H.E7.01c	7658	Baggage Tunnel HET - MPF T2A to MPF	2	7658	Baggage Tunnel HET - MPF T2A to MPF	Baggage		7658	Baggage Tunnel HET - MPF T2A to MPF	Legacy				-2	
H.E7.01d	7660	Baggage Tunnel Fit Out HET-MPF T2A to MPF		7660	Baggage Tunnel Fit Out HET-MPF T2A to MPF			7660	Baggage Tunnel Fit Out HET-MPF T2A to MPF						
H.E7.01b	7664	HET Ph2 Baggage System T2A Phase 2 Baggage	23	7664	T2A Ph2 Baggage System	Baggage	3	7664	T2A Ph2 Baggage System	D&D Baggage	✓	3	0	-20	Expenditure deferred to Q5
H.T3.12	3801	T3 Integrated Baggage System	231	3801	T3 Integrated Baggage System	Baggage	210	3801	T3 Integrated Baggage System	T3 Baggage	✓	231	20	0	Project was stopped during 2010 for a review of cost and options. Following a 3 month review a reduced option was agreed (November 2010), which has a higher BAC impacting both Q5 and Q6. Airlines have agreed to fund this Q5 increase from PSDH but this transfer is pending CAA approval as at CIP 2011 publication. This HBS scope was transferred to a new project (BCT 10064) in order to meet the delivery timescales for standard II HBS (September 2012)
H.CX.13b	3759	T4 Sorter Replacemt	6	3759	T4 Sorter Replacement	Baggage	8	3759	T4 Sorter Replacement	Legacy		8	0	2	
H.CX.2*	4981	Scada upgrade	0	4981	Scada upgrade	Baggage	2	4981	Scada upgrade	Legacy		2	0	2	
H.CX.0*	615	HBS MVD replacement prog	48	615	HBS MVD replacement prog	Baggage	0	615	HBS MVD replacement prog	Legacy		5	0	-43	Scope transferred for delivery to T1 Baggage project (BCT 9355) and T4 Baggage (BCT 9516)
H.CX.18	4191	Manual Handling Aids	36	4191	Manual Handling Aids	Baggage	3	4191	Manual Handling Aids	Legacy		0	-3	-36	Scope transfers for automation trials and scope of works in T5 (BCT 9807). Remaining scope transferred to new T1 Transitions project (BCT 10060) via 2C10 to simplify delivery of the works
H.CX.07	1851	Post T5 Transfer Baggage Syst	233	1851	Post T5 Transfer Baggage System	Baggage	232	1851	Post T5 Transfer Baggage System	T5 Baggage	✓	232	0	-1	Early Evolution development
H.CX.08	9811	Syst Baggage Cr mfit T1 - T4	16	9810	System Baggage Cr mfit T1 - T4	Baggage	9	9811	System Baggage Cr mfit T1 - T4	Legacy		5	-4	-11	Scope of works reduced from replacement to refurbishment. Transfer of future scope, as at November 2011, to new T1 Transitions project (BCT 10060) via 2C10 to simplify delivery of the remaining works in line with Eastern Campus Baggage strategy
H.NSU.15	4442	Self Service Border Clearance	1*	4442	Self service Border Control	Infrastructure	7	4442	Self Service Border Control	Security		8	1	-3	
H.CX.08	9797	Baggage Hall Refurbishment	4	9797	Baggage Hall Refurbishment			9797	Baggage Hall Refurbishment	Legacy				-4	
H.CX.03b	3871	Baggage Combined Control Cntrs	6	3871	Baggage Combined Control Centres	Baggage	0	3871	Baggage Combined Control Centres	D&D Baggage		0	0	-5	Project descoped from Q5, scope agreed at IBR spanning Q5 and Q6.
H.CX.11b	3873	Performance Management	2	3873	Performance Management	Baggage		3873	Performance Management	Legacy				-2	Project descoped from Q5 under CIP replotrisation at IBR6
H.CX.04	3286	Post T5 Road Interim Solution	0	3286	Post T5 Road Interim Solution	Baggage	0	3286	Post T5 Road Interim Solution	Legacy		0		0	
H.CX.22	7959	Terminal 4 Oper Skies Baggage	1*	7959	Terminal 4 Open Skies Baggage	Baggage	7	7959	Terminal 4 Open Skies Baggage	Legacy		7	0	-5	
				9614	Baggage Cbgry Cildg 560	Baggage	3	9614	Baggage Cbgry Cildg 560	Legacy		3	0	3	New project created post Switch * to provide a contingency facility for airlines to process bags in the event of a facility failure.

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CIP ID	Project Name (as at Q5 Settlement)	TOTAL	CIP2010				CIP 2011							Significant scope changes CIP11 compared with Q5 Settlement (Allocations are to authorities)
			BCT Ref	Project Name (as at CIP10)	Delivery Programme at CIP10	TOTAL	BCT Ref	Project Name (as at CIP11)	Delivery Programme at CIP11	PDS Sheet	TOTAL	Comparison CIP11 v CIP10	Comparison CIP11 v Settlement	
			8747	Baggage Integration	Baggage	3	8747	Baggage Integration	Legacy			-3		New requirement included in 2008 based on experience from T5 opening. Scope transferred to PT5 TBS (BCT 1851) to achieve final integration with T5 Baggage Handling System and other terminal baggage handling systems across Heathrow. Remaining project scope transferred to T2A Baggage project (BCT 9953)
			9919	Baggage Product Improvements	Baggage	10	9919	Baggage Product Improvements	D&D Baggage	✓	8	-2	-2	Allowance for Baggage product improvement projects agreed as part of CIP reprioritisation. Minor scope transfers to individual projects mainly for specific design of baggage product improvements and implementation (BCT 9527, 10094, 9801 etc.)
			9022	Automation Prove Out	Baggage	3	9022	Automation Prove Out	T2A Phase 1 & Associated Projects		3	0	3	Project undertaken to identify the benefits of automation funded from Manual Handling (BCT 4191)
			9355	T1 Arrivals & Transfer Baggage System	Baggage	22	9355	T1 Arrivals & Transfer Baggage System	Legacy		0	-22	0	New requirement captured at IBR6 for works required to T1 arrivals and transfer baggage system. Included scope from 615. Scope of entire project subsequently transferred to T1 Baggage Prolongation Programme project (BCT 9951)
			9347	T4 Baggage Airline Moves - T4U8	Baggage	2	9347	T4 Baggage Airline Moves - T4U8	Legacy		2	0	2	New requirements agreed in 2009 to facilitate Airline Moves
			9348	T4 Baggage Airline Moves - FBS	Baggage	4	9348	T4 Baggage Airline Moves - FBS	Legacy		4		4	New requirements agreed in 2009 to facilitate Airline Moves
			9349	T4 Baggage Airline Moves - T4U7	Baggage	5	9349	T4 Baggage Airline Moves - T4U7	Terminal 4		5	-1	5	New requirements agreed in 2009 to facilitate Airline Moves
			9401	T4 Baggage Airline Moves - Main Baggage Hall	Baggage	2	9401	T4 Baggage Airline Moves - Main Baggage Hall	Legacy		2	0	2	New requirements agreed in 2009 to facilitate Airline Moves
			9402	T4 Baggage Airline Moves - External Works	Baggage	2	9402	T4 Baggage Airline Moves - External Works	Legacy		2	0	2	New requirements agreed in 2009 to facilitate Airline Moves
			9403	T4 Baggage Airline Moves - Satellites	Baggage	2	9403	T4 Baggage Airline Moves - Satellites	Legacy		2	0	2	New requirements agreed in 2009 to facilitate Airline Moves
			9516	T4 Baggage Works, Steps 9 & 9A	Baggage	50	9516	T4 Baggage Works, Steps 9 & 9A	Terminal 4	✓	57	7	57	New requirements agreed in IBR6 to facilitate Airline Moves. Included scope from 615. Reclaim 1-7 fit out scope transferred from T4 Baggage Reclaim Hall Refurbishment (BCT 9645). AIF Phase 2 scope transferred to T4 Baggage. Transfer of scope and budget from Baggage Product Improvement (BCT 9919) for the design of the Arrival Baggage Tag Scanners solution
			9519	Bldg 159 BA Med Change Add'l Can Make Up Sillage		0	9519	Bldg 159 BA Med Change Add'l Can Make Up Sillage	Legacy		0	0	0	
			9520	T5 ABB Dock Weathering		0	9520	T5 ABB Dock Weathering	T5 Baggage		0	0	0	
			9527	T5 Minor Baggage Works		0	9527	T5 Minor Baggage Works	T5 Baggage		1	1	1	
							9805	Eastern Campus ICS	Eastern Campus ICS	✓	68	68	68	Specific project created for the provision of ICS scope induced in T2A Building (BCT 8802) & T2B Phase 2 (BCT 4201). Scope transferred includes all ICS work except BCMS, lighting controls, fire alarms, PAVA, cabling and end devices
							9953	T2A Baggage	T1 Baggage Programme		14	14	14	New project with scope originally derived from T2A Building (BCT 8802) and some scope subsequently transferred back to BU UU2 T1 Baggage Prolongation Programme (BCT 9951) & T1 Transitions (BCT 10308). The remaining scope is for integration, learning management and on-costs
							10308	T1 Transitions	T1 Baggage Programme	✓	45	45	45	New project created to deliver scope associated with integrating T2A and T1 baggage systems ready for T2A opening. Scope transferred from BCT 9855
							10098	T3 HBS Replacement	T3 Baggage	✓	17	17	17	Specific project derived from "T3 Integrated Baggage project (BCT 3801) to deliver Standard II HBS for T3 in time for September 2012 DfT deadline
							8021	Sillage	Airfield					

Heathrow Airport Limited CIP at Settlement				CIP2010			CIP 2011							
CIP ID	BCT no.	Project Name (as at Q5 Settlement)	TOTAL	BCT no.	Project Name (as at CIP10)	Delivery Programme at CIP10	TOTAL	BCT no.	Project Name (as at CIP11)	Delivery Programme at CIP11	PDS Sheet	TOTAL	Comparison CIP11 v CIP10	Comparison CIP11 v Settlement	Significant scope changes CIP11 compared with Q5 Settlement (Net costs/refs are to constant price)
Infrastructure Total															
Plan and Initiation/CDM Total															
H.NBU.06	4369	Landside CTA Redevt Strategy	23	4369	Landside CTA Redevt Strategy	Infrastructure		4369	Landside CTA Redevt Strategy	Landside Infrastructure				-23	Scope transferred to Eastern Campus MSCP2 (BCT 3810)
H.LO.10	7050	N1 Car Parking Decking Project	9	7050	N1 Car Parking Decking Project	Infrastructure	0	7050	N1 Car Parking Decking Project	Landside Infrastructure		0		-9	Project deleted (scope no longer required)
				9640	Refurbishment and Relife MSCP4	Infrastructure	8	9640	Refurbishment and Relife MSCP4	Terminal 4	Y	6	-1	6	New requirement added at IR16; agreed through CIP reprioritisation
				9301	Infra Safety Critical Projects	Infrastructure	23	9301	Infra Safety Critical Projects	Landside Infrastructure	Y	22	-1	22	New requirement added at IR16; agreed through CIP reprioritisation
Airfield Total (excl BA, WA and S9)															
H.ASS.43	3358	ADS/ADB	3	3358	ADS/ADB	IT		3358	ADS/ADB	Airfield				-3	Scope moved to BAA IT programme 2006.
H.ASS.44	3356	ADAM	3	3356	ADAM	IT		3356	ADAM	Airfield				-3	Scope moved to BAA IT programme 2006.
H.ASS.46	4165	Cargo Area NZ Road (T5-T4 Rout	7	4165	Cargo Area NZ Road (T5-T4 Rout	Infrastructure Security	8	4165	Cargo Area NZ Road (T5-T4 Rout	Security	Y	8	0	1	
H.ASS.52	7656	Additional Jetty Provisior	10	7656	Additional Jetty provision	Infrastructure Airfield	2	7656	Additional Jetty provision	Airfield			-2	-10	Scope transferred to delivery projects (T5, T4, T5C and T2 ASB). Further scope for additional jetties transferred to individual projects (BCT 4201, 8902 & 9844)
H.ASS.08	1835	Taxiway/Cul-de-sac rebuilds	15	1835	Taxiway/Cul-de-sac rebuilds			1835	Taxiway/Cul-de-sac rebuilds	Airfield				-15	Q5 Scope transferred to a new project for delivery (BCT 8857)
H.ASS.08h	2809	A380 Taxiways around Pier 1	7	2809	A380 Taxiways around Pier 1	Infrastructure Airfield	7	2809	A380 Taxiways around Pier 1	Airfield		7	0	0	
H.ASS.36	3353	Major Fire Appliance Replaceme	5	3353	Major Fire Appliance Replacement	Infrastructure Airfield	4	3353	Major Fire Appliance Repacement	Airfield	Y	3	0	-2	Scope predominantly deferred to Q6
H.ASS.39	3809	Overlay Runways	1	3809	Overlay Runways	Infrastructure Airfield	1	3809	Overlay Runways	Airfield		1		0	Project scope deleted as part of re-prioritisation
H.ASS.20	1832	Cargo Tunnel Refurbishment	3	1832	Cargo Tunnel Refurbishment	Infrastructure Airfield		1832	Cargo Tunnel Refurbishment	Airfield				-3	Scope transferred to BCT 2001 (Infrastructure Safety Critical projects) under IR16 reprioritisation
H.ASS.08k	3050	TTT - Northern Taxiways		3050	TTT - Northern Taxiways		0	3050	TTT - Northern Taxiways	Airfield		0		0	Project merged with Taxiway Cul de Sac (BCT 8857)
	6296	AGL substation enhancements		6296	AGL substation enhancements		0	6296	AGL substation enhancements	Airfield		0	0	0	
	4791	Runway radar FOD detection	2	4791	Runway radar FOD detection	Infrastructure Airfield	3	4791	Runway radar FOD detection	Airfield		3	0	1	
H.ASS.09n	4225	TTT - Northern Runway accesses	3	4225	TTT - Northern Runway accesses			4225	TTT - Northern Runway accesses	Airfield				-3	Entire scope transferred to Taxiway / CDS Rebuilds (Q5) (BCT 8857)
				7779	P23223 - T2A A/S Early Services Relocation	EC Airfield	5	7779	P23223 - T2A A/S Early Services Relocation	Airfield		4	-1	4	Specific project derived from BCT 7766
				8018	Stretch 454-456	Infrastructure Airfield	0	8018	Stretch 454-456	Airfield		0	0	0	
				8547	T4 A380 stands	Infrastructure Airfield	3	8547	T4 A380 stands	Airfield		3	0	3	Specific project derived from airfield scope of works transferred from A380 Stand/Gate Provision (BCT 2309)
				8857	Taxiway / CDS Rebuilds (Q5)	Infrastructure Airfield	17	8857	Taxiway / CDS Rebuilds (Q5)	Airfield	Y	19	2	19	Scope transferred for the runway declutterisation project from 2010 LPW Works (BCT 9738) & HAL Minor Projects (BCT 9522)
				8810	Link 35	Infrastructure Airfield	0	8810	Link 35	Airfield		0		0	
				9501	Heathrow Resilience		1	9501	Heathrow Resilience	Airfield	Y	38	38	38	Transfer of HSAR funds for additional airfield infrastructure to provide Rapid Exit Taxiways (RET's) and Rapid Access Taxiways (RAT's) and associated works.
								4986	Concrete Batcher Infra	Airfield		0	0	0	
								9459	VIP Suites	Landside Infrastructure					
								6136	Rocket Station Works	Landside Infrastructure	Y				
Utilities															
H.UO1	3429	CO2 Strategy	4	3429	CO2 Strategy	Infrastructure	3	3429	CO2 Strategy	Minor (OMD)		3	0	-1	
H.UO6	7666	Energy Infrastructure	25	7666	Energy Infrastructure	Infrastructure Utilities	59	7666	Energy Infrastructure	Landside Infrastructure	Y	42	-16	17	Scope transfer from Eastern Campus (BCT 8828) for delivery of Eastern Campus Energy Centre scope as well as wider energy infrastructure requirements. Project rebaselined following Construction Decision in May 2010. Other minor scope transfers.

Heathrow Airport Limited
CIP at Settlement

CIP ID	BCT no.	Project Name (as at Q5 Settlement)	TOTAL	BCT no.	Project Name (as at CIP10)	Delivery Programme at CIP10	TOTAL	BCT no.	Project Name (as at CIP11)	Delivery Programme at CIP11	PDS Sheet	TOTAL	Comparison CIP11 v CIP10	Comparison CIP11 v Settlement	Significant scope changes CIP11 compared with Q5 Settlement (base cost refs are to outturn price)
IT															
H.NBU.12	4241	IT Major Projects	12	4241	IT Major Projects	IT		4241	IT Major Projects					12	Scope transferred to IAA IT programme at CP 2009
H.NBU.10	3606	Telecoms Programme	1	3606	Telecoms Programme	IT		3606	Telecoms Programme					-1	Scope transferred to IAA IT programme at CP 2009
Property															
Retail															
H.R.08	7049	JCD Media Sites	3	7049	JCD Media Sites	Infrac Retail	4	7049	JCD Media Sites	Landside Infrastructure		3	-1	0	
H.R.09	7047	HEX Media Site	0	7047	HEX Media Sites	Infrac Retail	0	7047	HEX Media Sites	Landside Infrastructure		0	0	-1	
	5385	Staff CP Swipe System	2	5385	Staff CP Swipe System	Infrac P.J		5385	Staff CP Swipe System	Landside Infrastructure				-2	Scope deleted under CIP reprioritisation BR6
				3275	Car Rental Consolidation		0	3275	Car Rental Consolidation	Landside Infrastructure		0		0	
				9778	Retail 2010 (CWF) Concessions	Infrac P.J	2	9778	Retail 2010 (CWF) Concessions	Minor (CWF)		1	-1	1	Scope developed at BR6
				9788	Retail 2010 (CWF) Services	Infrac P.J	0	9788	Retail 2010 (CWF) Services	Minor (CWF)		0	0	0	Scope developed at BR8
Security															
H.NBU.14	4199	Managed Compliance Sec Projects	12	4199	Managed Compliance Sec Projects			4199	Managed Compliance Sec Projects	Security				-14	Scope transferred to BCTs 9106, 9109 and 9213 for delivery or specific scope requirements
H.NBU.13	4182	MC - Enhanced Sec Prog Impl	10	4182	MC - Enhanced Sec Prog Impl			4182	MC - Enhanced Sec Prog Impl	Security				-10	Budget transferred to BCT 9213
H.NBU.18	5056	Physical Perimeter Security	6	5056	Physical Perimeter Security	Infrac Security	4	5056	Physical Perimeter Security	Security		4	0	-2	
	5076	ID Centre Futures	1	5076	ID Centre Futures	Infrac Security		5076	ID Centre Futures	Security				-1	Scope deleted under CIP reprioritisation BR6
H.NBU.19	8451	Remote Goods Screening	5	8451	Remote Goods Screening			8451	Remote Goods Screening	Security				-5	Scope deleted under CIP reprioritisation BR6
H.NBU.20	8452	Control Post Programme	28	8452	Control Post Programme	Infrac Security	24	8452	Control Post Programme	Security	√	28	4	0	Scope transferred from T2B Phase 2 (BCT 4200) for the construction of two temporary control posts to ease congestion
				8409	P23697 - Security Standardisation			8409	P23697 - Security Standardisation	Security		0	0	0	
				6801	CP5	Infrac Security	6	6801	CP5	Security		6	0	6	New project; scope transferred from Site Welfare & Site Office Facilities (Logistics) (BCT 7184) for delivery of works required at CP5
				9105	Rail Automation Autoway System	Infrac Security	5	9105	Rail Automation Autoway System	Security	√	5	0	5	Scope transferred from BCT 4183
				9100	Road POST Reduction	Infrac Security	2	9100	Road POST Reduction	Security		2	0	2	Scope transferred from BCT 4100
				9213	Security Projects	Infrac Security	16	9213	Security Projects	Security	√	11	-6	11	Budget transferred from BCTs 4182, 4199 and 8451. Scope transferred to Low Cost Security Projects (BCT 9843) for delivery by the Local Projects Teams in line with the Security Strategy
				9717	Security Body Scanners	Infrac Security	2	9717	Security Body Scanners				-2		New requirement introduced following Dec 26th 2009 Nigerian Diff requirement. Scope transferred to 9843
								9843	Low Cost Security Projects	Security	√	7	7	7	Scope transferred to BCT 9213 from the Security Projects Programme to Low Cost Security Projects for delivery by the Local Projects
HAL Minor Projects															
	6527	CWT (Incl. Retail & Property) HAL Minor Projects	137	6527	HAL Minor Projects (Incl Retail & Property)	Infrac CWF	77	6527	HAL Minor Projects (Incl Retail & Property)	Minor (CWF)	√	33	-44	-103	2009 scope transferred to delivery projects (BCTs 9106, 9107, 9108); 2010 scope transferred to BCT 9738 and 10232. In 2011, transfer of scope to new 2011 - 2012 Minor project (BCT 10232); 2010 LM Works (BCT 9710) to enable the rephasing of the minor works portfolio and delivery of scope remaining in Q5. Transfer of scope for the Datahalls project to Taxiway / CDS Rebuilds (BCT 9857)
	cwf	Clean, working, friendly	13	cwf	Clean, working, friendly			cwf	Clean, working, friendly					-13	Scope transferred to delivery projects (BCTs 9106, 9107, 9108); 2010 scope transferred to BCT 9738
				6291	T1 Re-Flooring	Infrac CWF	1	6291	T1 Re-Flooring	Minor (CWF)		1	0	1	
				7701	T3 FR10 AHU Replace PID	Infrac CWF	1	7701	T3 FR10 AHU Replace PID	Minor (CWF)		1	0	1	
				6547	T3 Services Subway Refurb		1	6547	T3 Services Subway Refurb	Minor (CWF)		0	-1	0	
				8376	Northern Perimeter Congestion		1	8376	Northern Perimeter Congestion	Minor (CWF)		1	0	1	
				8581	T3 Escalator replacement	Infrac CWF	1	8581	T3 Escalator replacement	Minor (CWF)		1	0	1	
				9106	LM1 - Inviron	Infrac CWF	12	9106	LM1 - Inviron	Minor (CWF)		8	-3	8	2009 scope of works transferred from BCT 6527 and Scope transfers to LM Projects (BCT 9106, 9107, 9108) and HAL Minor Projects (BCT 6527)
				9107	LM2 - Kier	Infrac CWF	11	9107	LM2 - Kier	Minor (CWF)		10	0	10	2009 scope of works transferred from BCT 6527

Heathrow Airport Limited

CIP at Settlement				CIP10				CIP11						
CIP ID	BCT no.	Project Name (as at Q5 Settlement)	TOTAL	BCT no.	Project Name (as at CIP10)	Delivery Programme at CIP10	TOTAL	BCT no.	Project Name (as at CIP11)	Delivery Programme at CIP11	PDK Sheet	TOTAL	Comparison CIP11 v CIP10	Comparison CIP11 v Settlement	Significant scope changes CIP11 compared with Q5 Settlement (Quoted mrk are to outturn price)
				9108	LHR - RDK	Infrastructure	11	9108	LHR - RDK	Minor (CAV)		10	-2	10	2010 scope of works transfered from BCT 8527 and further scope transfered to Minor Projects (BCT 8527) & 2011 - 2012 Minor Projects (BCT 10232)
				9720	2010 LH Works	Infrastructure	22	9720	2010 LH Works	Minor (CAV)		24	2	24	2010 scope of works transfered from BCT 8527. Transfer of scope for the runway delatulkation project to Taxiway / CDS Rebuilds (BCT 8857). See also comments for HAL Minor Projects (BCT 8527)
				9720	Remove Fowles Yard		2	9720	Remove Fowles Yard	Landside Infrastructure		2	0	2	
				9721	Landside Road Safety Compliance		3	9721	Landside Road Safety Compliance	Landside Infrastructure		2	0	2	
								10232	2011 - 2012 Minor Projects	Minor (CAV)		39	39	39	See comments for HAL Minor Projects (BCT 8527)
Management adjustments															
				9999	Management Reserve	Support, adjustments & Provisions	15	9999	Management Reserve	Management Reserve		15		15	Reserve held for central costs prior to allocation to individual projects
				XXXX	*iCIP09 Inflation Challenge*	Support, adjustments & Provisions			CPI Efficiency			-75	-75	-75	Inflation re-calculated at 09/10 on latest assessment, negates challenge included at CIP09
					CPI Efficiency	Support, adjustments & Provisions	-108		Assumed money from PSDH			-42	65	-42	CPI established at 09/10 to generate cost efficiencies within projects.
					Management Adjustment (challenge)	Support, adjustments & Provisions	-142		Management Adjustment (challenge)			-45	97	-45	Management challenge established at 09/10 to constrain overall expenditure. Recognises £9m transfered from IT reducing challenge.
					Correction for Artemis to Oracle Year End	Support, adjustments & Provisions			Adjustments to Mngt reserve						Whilst 4201 includes assumed scope from PSDH funding was still in PSDH budget at 09/10 hence deducted here to avoid double counting.

Heathrow Triggers

March-11

	Campus and Projects	Trigger Date	Trigger Forecast or Actual Finish Date	Milestone Forecast If Q6	CAA Endorsed as Complete	Trigger Rebate in Q5 (07/08 Prices)			Rebate to date (07/08 Prices)	
						Monthly Trigger Rebate (£'m)	Delay (months)	Total Trigger Rebate (£'m)	Delay (months)	Total Trigger Rebate (£'m)
Baggage System										
1	T4 - Completion of Baggage Sorter (Replacement)	31-Jan-09	10-Jul-09		Y	0.10	6	0.60	6	0.6
2	Completion Confirmation (Baggage Connectivity - Transfer Tunnel T5-T3)	30-Nov-11	16-Mar-12			0.79	4	3.16		
3	T3 - Completion of the T3 Integrated Baggage System	31-Mar-12	31-Mar-13	01-Oct-13		1.19	12	14.28		
4	Completion Confirmation (Baggage Connectivity - Transfer Tunnel T3-T1)	30-Jun-12	31-Mar-13			0.41	9	3.69		
Total Baggage System									**6**	**0.60**
Eastern Campus										
5	Landside - MSCP East Ph1 Constr'n Sufficiently Progressed for Op Trials to Commence	31-Mar-13	31-Mar-13	30-Aug-13		0.48	-	-		
6	T1 - Completion of BMI Nose Building Facility	31-Jan-09	31-Oct-08		Y	0.10				
7	T2A - Ph1 T2 Demolition Complete & T2A Substructure Complete	31-Mar-11	31-Mar-11			2.78				
8	T2A - Ph1 Building Weather-tight	29-Feb-12	30-Jan-12			3.03				
9	T2A - Sufficiently Progressed for Operational Trials to Commence	30-Nov-12	31-Mar-13	30-Aug-13		1.22	4	4.88		
10	Completion of T2B Ph1 Stage 1 for OR	31-Jan-10	27-Nov-09		Y	0.50				
11	Completion of T2B(Midfield Pier) Centre	30-Nov-12	31-Mar-13	29-Nov-13		0.67	4	2.68		
12	Completion of Passenger Connectivity to T2B (Midfield Pier)	30-Nov-12	31-Mar-13	29-Nov-13		0.31	4	1.24		
13	Completion of T2C (Outer Pier) North	31-Jan-12	31-Mar-13			0.49	14	6.86		
Total Eastern Campus									**-**	**-**
Infrastructure										
14	Landside - Maint Area Enabling Wks - Completion of Diversion of East Church Road	31-Mar-10	31-Mar-13	28-Jun-13		0.17	36	6.12	12	**2.04**
Total Infrastructure Campus									**12**	**2.04**
Western Campus										
15	T3 - Completion of Pier 5 Refurbishment	31-Jul-09	08-May-09		Y	0.10				
16	T3 - Pier 7 Refurbishment Complete	31-Aug-09	22-Oct-09		Y	0.10	2	0.20	2	**0.20**
17	T3 - Completion of Immigration, Landside Departures & Baggage Hall Refurb	31-Mar-11	14-Apr-11			0.16	1	0.16		
18	T3 - Completion of Check-in & Security Search Refurbishment	31-Mar-10	02-Jun-11			0.10	16	1.60	12	**1.20**
19	T4 - New CIP (stand 407) Lounge Access for Fit-out	28-Feb-09	01-Dec-08		Y	0.10				
20	Completion of T4-T1 Baggage Tunnel Refurbishment	31-Jan-09	27-Mar-09		Y	0.10	2	0.20	2	**0.20**
21	Completion of 3rd Jetties on each 2 A380 stands	31-May-09	09-Apr-09		Y	0.10				
22	T4 Check in Phase Completion of South West Bank of Check-in Desks	30-Jun-09	31-Aug-09		Y	0.10	2	0.20	2	**0.20**
23	T4 - Completion of North East Bank of Check-in Desks	31-Jan-10	01-Oct-09		Y	0.10				
24	T5C Completion of Satellite	31-May-11	31-May-11			1.47	-	-		
Total Western Campus									**18**	**1.80**
								Total	**36 mths**	**£4.44m**