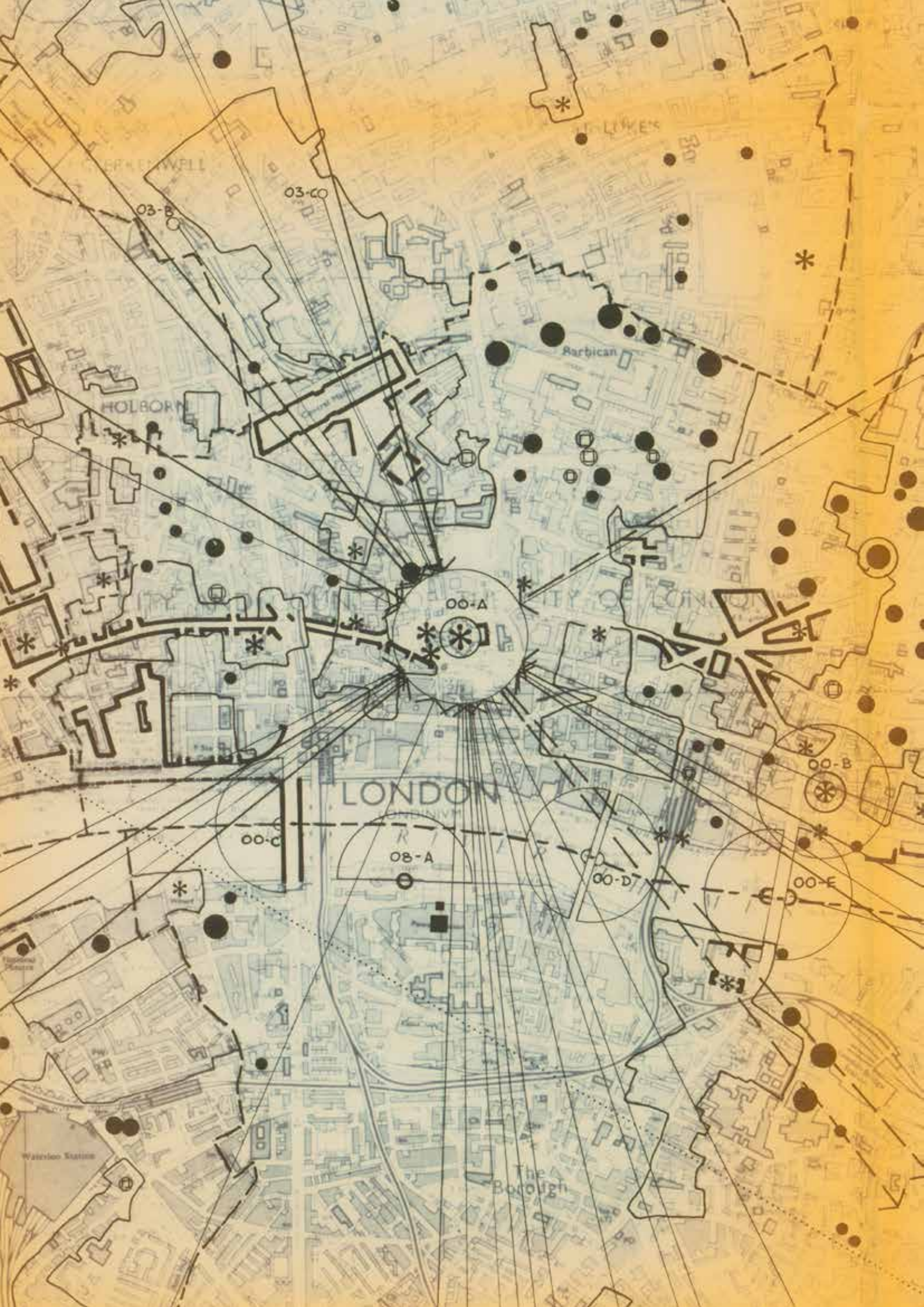
Historic England

London's Image and Identity

Revisiting London’s Cherished Views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Introduction

London's captivating blend of geology, topography and townscape, set in a natural bowl shaped by the Thames, has created many cherished, sweeping views. Generations of Londoners, tourists, writers and artists have admired, painted, engraved and penned poetic verses about the ever-changing prospects from the Thames and its banks, and the dramatic panoramas from the surrounding hills. The identity of the city, and its global brand, is wrapped up in these views and the landmark buildings that punctuate them: the Palace of Westminster, St Paul's Cathedral, the Tower of London and the Royal Hospital Greenwich. The international significance of these places is well recognised, with three of these sites inscribed on UNESCO's list of World Heritage Sites.

London's views have also been protected and shaped by building and planning controls since such regulations were first devised. Recognising the increasing and inherent public value of views, planning policies have evolved for over 80 years to ensure that the public can continue to appreciate these much-loved prospects and the insight they give to the city, its development and us as Londoners. More recently, this value has been recognised by the Secretary of State, who set height limits in parts of the capital, creating viewing corridors which are shaping the design of individual buildings and, in turn, city districts.

Responsibility for the views policy now lies with the Greater London Authority and the London Boroughs. Historic England is a consultee on many planning applications affecting views, and a key stakeholder in discussions about views because of their own extraordinary historic value, as well as their intrinsic links to some of London's most significant heritage assets.

This report considers the historical development of views policies and with a series of striking photographs illustrates recent changes to the strategic views that are managed and protected by the current strategic views planning policy in the London Plan. It also includes an analysis of the viewing locations. This is all to support the debate about how best to manage change in and around London's strategic views, and across administrative boundaries.

Historic England wants to work with others to safeguard these highly-valued views and London's remarkable sense of place, while ensuring that new development enhances rather than harms our capital's diverse and historic character. Ahead of an anticipated review of the London View Management Framework (LVMF) Supplementary Planning Guidance, we hope that the Mayor and his team, and all the other stakeholders in London's future, will use this document to better understand the views and their value. This will help us all to work together to manage them better now and in the future, for all Londoners.

Emily Gee
Planning Director, London

Contents

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Front cover: The Protected Vista from The Point, Blackheath (Assessment Point 6A.1) is focussed on the Strategically Important Landmark (SIL) of St Paul's Cathedral.
Inside front cover: Extract centred on St Paul's Cathedral. Taken from the London Planning Advisory Committee *1:10,000 map of High Buildings and Views, Central London.* January 1989.

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Key Findings

Key Findings

London's topography means expansive views have become deeply important to the identity of the city and its global brand over the past 300 years. How these views are appreciated has varied little over this period. However the audience has multiplied, with new bridges, increased public transport, leisure time and tourism encouraging people to seek out the capital's delightful panoramas and prospects.

London's strategic views are recognised for their public value by Londoners, politicians and experts. The levels of protection given to views have not always been the same, but the focus of the views on key landmark buildings, notably St Paul's Cathedral and the Palace of Westminster, has been consistent.

Historic England is committed to helping to protect London's character and its precious views while encouraging good growth. Due to the capital's geography, tall buildings in some locations can have dramatic visual impacts over great distances. Our research shows that in recent years the application of the *London View Management Framework* (LVMF) policy has not been consistent, and there are several examples of new tall buildings harming our ability to appreciate key landmark buildings in views. Despite this, Londoners and visitors alike continue to cherish these views and they remain inherently worth fighting for.

As a way forward, Historic England believes there is scope to refine the guidance in the L*ondon View Management Framewor*k *Supplementary Planning Guidance*, to better achieve the aims of the London Plan views policy. This can be done by providing clearer guidance about how the policy should be implemented, for example with the background assessment areas. We would also encourage greater efforts to enhance and celebrate views, to better reveal the historic landmark buildings that are integral to the views.

Due to the number of boroughs affected by the views, it is imperative that planning authorities cooperate closely to protect views, and that the Mayor provides oversight to ensure that borough boundaries do not lead to undesirable impacts. Given the greater impact of taller buildings, decision makers need to think of London as a whole when making planning decisions.

We observe that the current policy is creating unintended consequences in relation to urban design and architecture which merits review. With three-dimensional digital modelling tools now available, we have tools that enable us to debate and guide the desired form of the city and its skyline. Such work can increase certainty for developers and residents, while supporting local amenity and improving the quality of London's views.

And finally, our photographic research has shown that some of the viewing places require better management. Additionally, it is desirable that all of the viewing places are marked consistently. This will help the public enjoy the views and ensure that the same accurate points are used for technical assessments.

Historic England's health check of views protection in London is intended to inform future management of views protection, while reminding us of the spiritual, aesthetic and economic strength we take from London's cherished views and special character. We look forward to continued good working with all stakeholders to fulfil our duty to the future of our capital to Keep It London.

Historical Context

Development of Views Protection in London

What is a strategic view? The criteria used for designating strategic views in 1998 continue to define them today: "Views of national significance from well-known public places, cherished by both Londoners and visitors, and featuring an exceptional landscape or townscape including visually prominent historic landmarks." (LPAC 1998, paragraph 8.1)

This paper sets out how views protection in London came about and identifies, where possible, the drivers for change in policy that have evolved since the 1960s, and particularly over the past thirty years. It has been carried out in response to the recent consultation on the London Plan 2017 prepared by the Greater London Authority and due for publication in 2019.

Historical notions of 'views' and 'prospects'

The notion of the beauty of a natural view has been enshrined in British literature and art for over five hundred years. English garden design, influenced by the formality of fashionable French garden design in the seventeenth century realised at Versailles by landscape architect André Le Nôtre (1613-1700), followed suit with the introduction of formal *allées* leading the eye to focus on a landmark, such as Kingston church spire from Hampton Court Gardens. Such a device in the landscape created a visual relationship between the viewer and the object. Reaction against this formality came in the second half of the eighteenth century with the Picturesque movement led by Richard Payne Knight, William Gilpin, Humphrey Repton and Lancelot 'Capability' Brown whereby the winding rivers, clumps of vegetation and 'incident' – visual anchors – in the landscape, inspired by the paintings of Claude and Poussin, were encouraged to be recreated in country estates.

In London, during the eighteenth century, topographical depictions of views from high locations such as Richmond Hill, Greenwich Park, Hampstead and Highgate proliferated – early tourists were attracted to these locations for the view afforded by the city's bowl-shaped topography. From a relatively high position at the bowl's edge they could marvel at the status and scale of the city and its landmarks spread out before them, imbuing the viewer with an appreciation of the power of the Monarchy, the Church, the mercantile navy, the growing trading and industrial power of London, England's capital. New buildings were conceived to complement the views, such as the Queen's House begun by James I in 1613 for his wife Queen Anne of Denmark, and designed by Inigo Jones. Subsequently the former royal palace at Greenwich was partly rebuilt to the designs of John Webb between 1664 and 1672 – the King Charles block, consisting of a courtyard with one side open to the river to enable a view of the Queen's House. When Sir Christopher Wren added, from 1698 onwards, the King William block with domes and

Daniel Marot's perspective drawing for the Grand Parterre at Hampton Court facing east, 1689. Kingston Church can be seen terminating the allée on the left hand side, Kingston Avenue. © Museum Boijmans Van Beuningen, Rotterdam

colonnades he preserved the view of Queen's House from the river, beautifully depicted in the mid-eighteenth century by Italian artist Canaletto in his view of Greenwich Hospital.

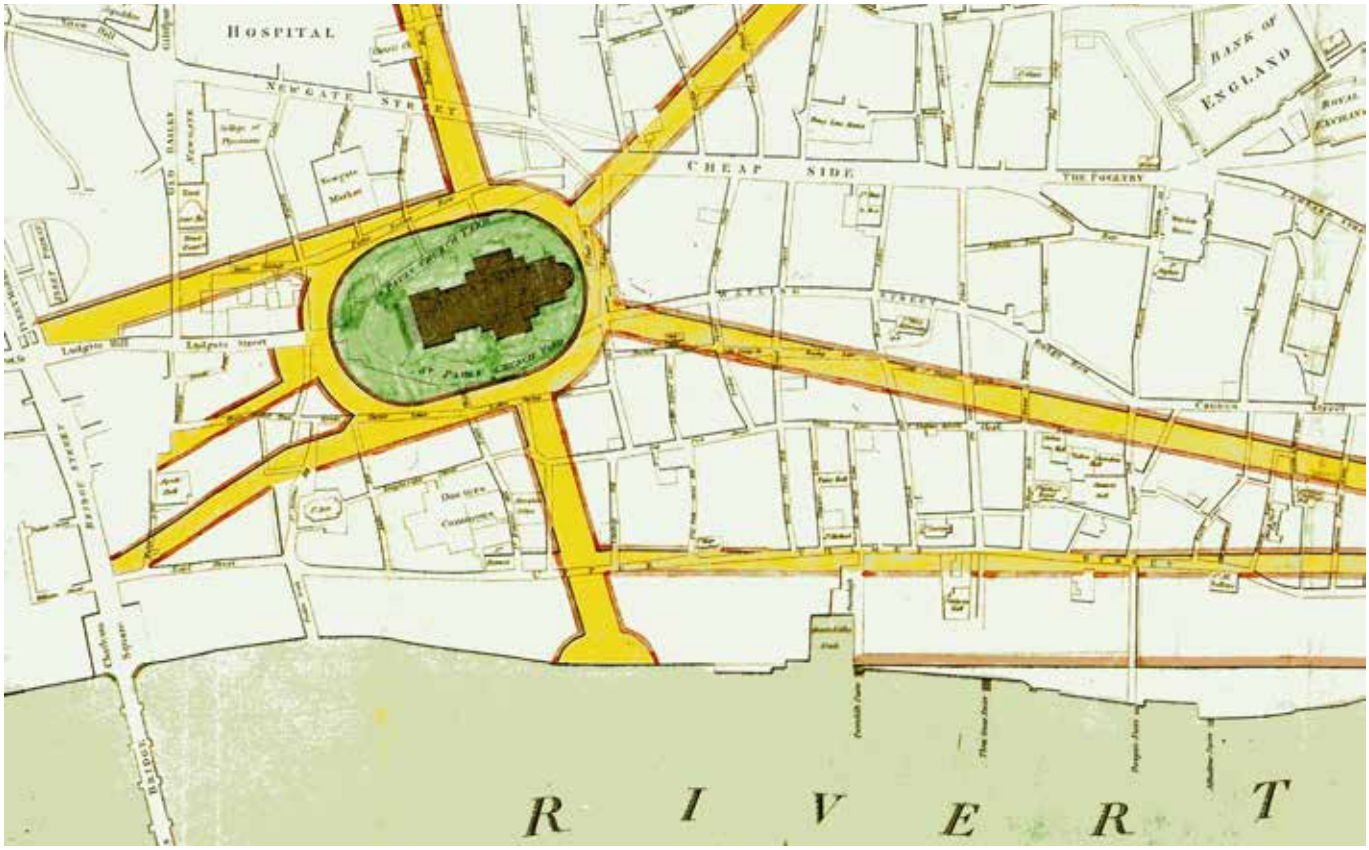
The skyline of the City of London in the mid-seventeenth century was pierced by medieval church spires dominated by the largest of them, 'Old St Paul's' Cathedral, located on a site slightly higher than the surrounding land. The medieval streets were curved, narrow and lined with tightly-packed jettied houses, which would have made it nigh on impossible to obtain 'views' and 'prospects' such as Le Notre was developing at Versailles. Following the Great Fire of London in 1666, Wren began to rebuild the Cathedral on the same site. He also gave much thought to the setting of the new cathedral, and prepared plans for wider, straighter streets radiating from St Pauls' Cathedral, with planned vistas focused on the new Cathedral and the Monument to replace the tight network of alleys and courts. The plans came to nothing. At the end of the eighteenth century the redevelopment of the riverside between London Bridge and Blackfriars Bridge came under review. The congestion of boats on the river wanting to unload and store valuable merchandise as trade expanded meant that London, Britain's main port, was inundated with vessels. A parliamentary committee was set up and the City favoured the rebuilding of the quays south of Lower Thames Street. By 1800 the Clerk of City Works, George Dance the Younger, conceived a ground plan for the improvement of the City and the Surrey (south) bank. Dance's plan proposed two new bridges to replace the decaying Old London Bridge. From these bridges, wide thoroughfares radiated on both sides of the river and extended west to St Paul's.

Greenwich Hospital from the north bank of the Thames, Antonio Canaletto *circa* 1752 © National Maritime Museum, Greenwich, London. **(BHCX1827).**

Perhaps spurred by the sense of rivalry between the City of London and Westminster, where metropolitan improvements begun in the mid-eighteenth century with the building of a bridge at Westminster, and the development of streets and squares of grand town houses to attract the aristocracy, Dance proposed street improvements around St Paul's, with the Cathedral as the centrepiece (Hunting 1988, p68). Thames Street was to be widened and straightened, and a new street created running from the south side of the Cathedral down to the river, terminating in a semi-circular open space. This was a deliberate attempt to provide an appropriately dignified view of St Paul's from the south bank. The House of Commons approved the scheme but the cost was prohibitive and it went no further.

Other attempts to beautify the City's riverside followed in the early nineteenth century but were not realised. Colonel Frederick Trench MP prepared drawings to depict his proposal for the Thames Quay - a new quay which stretched from Westminster to London Bridge. This was subsequently curtailed to terminate at St Paul's where he proposed a classical perron leading up to an avenue flanked by grand houses to form a monumental approach to the Cathedral (Hunting 1988, p73). The architect Thomas Allom similarly proposed a line of classical terraced houses en route to the Cathedral. None of these great schemes came to anything; the ageing wharfs and warehouses remained along the river front, gradually getting rebuilt piecemeal throughout the nineteenth century.

These historic schemes demonstrated the reverence in which St Paul's has been held ever since it was built, and the desire to make it a focal point of views from the south bank and from the river itself. Today we might refer to the places that were subject to these proposed enhancement schemes as part of the 'setting' of the Cathedral, rather than thinking in terms of views. Nevertheless, the intention to appreciate the building from the best possible aspect and to gain the maximum impact of its symbolic value as a major Christian icon, is broadly similar. Strategic views today allow the appreciation of historic landmarks that are some distance away, and in many cases they are viewed from a raised location. The



George Dance's unexecuted plan to improve the streets around St Paul's Cathedral (1800).

value of the views is largely in how they allow the landmark buildings to be appreciated. In this way views form an important part of the 'settings' of these buildings, which is covered by statutory protection due to their listed status.

Away from the City, eighteenth-century building of the Great Estates in London also incorporated views such as from the Portland Estate where straight streets were designed to allow views north to the hills of Hampstead and south toward Westminster. In the early nineteenth century architect John Nash attempted to align Great Portland Street north to Regent's Park, and south along Regent Street to Green Park, bringing an order to the townscape and making London attractive to tourists akin to Napoleonic Paris.

But it was generally not the local views within the growing suburbs but the river Thames and the views of the Cities of London and Westminster that drew artists and poets to gaze and muse upon the scenes towards St Paul's and Westminster, especially from Westminster Bridge: views which inspired artists from Canaletto to Monet and Whistler, and the poet William Wordsworth with his famous poem 'Composed Upon Westminster Bridge' (1803). It is these visual and verbal renditions 'Ships, towers, domes, theatres and temples lie. Open to the fields, and to the sky' and Claude Monet's Houses of Parliament series at the turn of the nineteenth century which linger in the mind of Londoners and visitors alike. It is not only the architecture which impressed artists and writers but also the symbolic value of the Palace of Westminster as an embodiment of the values of modern liberal democracy. The appreciation and understanding of these edifices was further enhanced during the nineteenth century with the increasing number of bridges over the Thames. From these, people were exposed to panoramic views in all directions; crossing a bridge today has the same effect - people stop to admire the 360' view and take photographs at the mid-way point.

St Paul's is, along with the Tower, Westminster Abbey and the Houses of Parliament, one of London's best known and most revered landmarks. The medieval Cathedral symbolized London as a world centre of Christianity, and dominated the panoramic views of London by map-maker Hollar. The post-fire and present church, built between 1675 and 1710 is one of the world's finest domed structures, with a magnificent classical west front, and is the masterpiece of Sir Christopher Wren, Britain's most famous architect. For over three hundred years it has been a symbol of London, and of the country as a whole, as a site of the most important Royal and State events. In the early twentieth century Hanslip Fletcher, in *London Passed and Passing: a Pictorial Record of Destroyed or Threatened Buildings* published in 1909 wrote about the impressiveness of St Paul's in different lights: "The huge and formless structures - hotels, warehouses, tenements - can be seen only in the mass, redeemed by the saving grace of the atmosphere…But the eye soon turns from all else to St Paul's, which from these heights is revealed in the grandeur of its dimensions. In sunlight the soft black shadows upon the dome give to it the fullness of strength, an abiding solidity, while on grey and vaporous days it looms strangely insubstantial, ghostly, islanded in mist, yet always dominant. It is fitting that the centre, to which London points, should be capable of such paradox"(Fletcher 1909, p.7).

The origins of view protection in London

The historical development of strategic view management in London begins with the capability of erecting tall buildings - structures significantly taller than their neighbours - which were able to obstruct previously open views. Following a fire in Tooley Street in 1861 in which the Chief of the Fire Brigade was killed, there was a call to limit the height of buildings to a level which could be reached by ladders and the limitations of water hoses. The next Chief, Captain Shaw, estimated this to be about 60 feet (18.2m), but no change was made. A decade later work began on a tall load-bearing brick residential building, Queen Anne's Mansions, built close to Buckingham Palace between 1873 -1889. At 130 feet (39.6m) it was the first building perceived to threaten London's skyline of chimneys and spires. Queen Victoria objected to the obstruction of her view from Buckingham Palace; occupants of the cavalry barracks adjacent also complained of the loss of light into their building. The volume of complaints and bad press led the recently-formed London County Council (LCC) to pass the London Building Act of 1894. Under this Act, the height of new buildings in London was to be restricted to 80 feet (24.4m) - the maximum height that could be reached by firemen's ladders - or the width of the street on which they were located. This Act exercised a crucial influence on the development of London until its restrictions were removed in 1956.

In the intervening years architects cleverly got around the height limitation by stepping back from the façade an extra two or three storeys, reaching a total height of 100 feet (30.5m). Anything higher required special consent granted by the LCC, as stated in the Act: 'A building - not being a church or chapel - shall not be erected of, or be subsequently increased to, a greater height of 80 feet exclusive of two storeys in the roof, and of ornamental towers turrets or other architectural features or decoration, without the consent of the Council.' By the 1930s, these extra storeys further increased the total height: Senate House, an administrative building for the University of London designed by Charles Holden and completed in 1937 reached a height of 210 feet (64m).

St Paul's Heights

W. Godfrey Allen, appointed Surveyor to St Paul's Cathedral in 1931, produced a report in 1932 in which he drew attention to the fact that "quite recently the view from Blackfriar's Bridge has been spoilt by the hideous new Telephone Exchange building in Queen Victoria Street". He continued: "The question of the height of buildings near St Paul's is a difficult one and I intend to investigate it thoroughly" (Allen 1932). He prepared a series of montages showing the effect that building to the limits allowed by the London Building Act of 1930 would have on views of the Cathedral. This series of photographs of near and far

views of St Paul's, overlaid with representations of buildings built up to the 100ft limit, were intended to indicate the impact on the Cathedral from afar and close up, particularly from the south, and from the river and its bridges.

In his notes that accompanied his survey Godfrey Allen wrote:

"At present a building may be erected to a height of 100ft to the cornice. In new Bridge Street and along Thames side, buildings carried up to the regulation height would gravely interfere with the distant views of the cathedral from the Surrey side of the river between Waterloo Bridge and Blackfriars Bridge, and practically blot out nearer views. These views are amongst the finest in London."

He continued: "It would therefore seem of urgent importance to invite the attention of the authorities concerned to the growing menace to the civic development of the City. The City authorities could do much to help and it is greatly to be hoped that they will use their special powers conferred on them by the Town and Country Planning Act of 1932 to town-plan the locality near St Paul's to endeavour to ensure that the best views of the cathedral and other buildings of beauty and historic interest in the City are preserved" (ibid).

This view found support. In 1934 the newly formed Royal Fine Arts Commission (RFAC) commented on the effects on the skyline of the Unilever House, which at 130 feet (39.6m) obstructed views of the lower part of the dome and towers of St Paul's from the centres of Waterloo Bridge and Hungerford Bridge. Faraday House near Blackfriars Bridge was also perceived to be uncomfortably close to the west front of St Paul's Cathedral. The Commissioners commented that both Unilever House and Faraday House 'disastrously blocked some of the most famous and beautiful prospects in London'. Faced with encroachment upon the distinctive silhouette of St Paul's on the London skyline, the RFAC called for more controls.

The result was the drawing up of the St Paul's Heights, a form of a 'gentlemen's agreement' to protect important vistas of the Cathedral. St Paul's Heights prescribed the maximum height for any part of any new building which lay within seven viewing cones centring on the building. It was intended to protect

W. Godfrey Allen's photomontages showing the effect that building to the maximum building height limit allowed by the London Building Act 1930 would have on views of St Paul's Cathedral from near and distant views. © The Chapter of St Paul's Cathedral

views of the Cathedral above the balustrade, and, crucially, of the dome. In 1938 this was adopted by the Dean and Chapter and the City of London as a basis for consultation for development within an area around the cathedral. The agreement was not enshrined as formal policy until 1989, but has been effective in deterring tall buildings very close to St. Paul's.

The City took a devastating hit from the bombs dropped by the Luftwaffe during the Blitz which started in September 1940 and lasted for six months. St Paul's Cathedral was hit by a bomb on 29th December 1940. The famous photograph taken by Herbert Mason of the dome encircled by fire and smoke came to symbolise the proud resistance, resilience and determination of the British people. By now the building was firmly entrenched in the citizens' memory and perception of identity.

Large areas of central London were reduced to rubble. It was this destruction which helped accelerate centralised town planning. Planning pioneer Sir Patrick Abercrombie advocated that development should be co-ordinated across the whole city, to a radius of 30 miles from the centre, and recommended decentralization and congestion control. This was the core of his County of London Plan drawn up for the LCC with J.H. Forshaw in 1943. The Plan also referred to building heights. Whilst keeping the 100ft height limit that had been set by the London Building Act of 1894, a tone of flexibility of the regulations in some cases was introduced. The LCC reserved the right to 'permit buildings in excess of the general standards where the Council is satisfied that the amenity will not be impaired thereby'. The report also stated that: 'a building which would be likely to disfigure a particular neighbourhood by reasons of its height even

St Paul's Cathedral from the roof of Northcliffe House taken by Herbert Mason, 29th December 1940. Image: Herbert Mason / Daily Mail / Solo Syndication.

though it conformed to the general maximum for that zone, could be refused'. The sense of what is best for the public good or benefit underlies the more flexible approach.

The immediate problem in 1944 was the reconstruction of the City of London. The City Engineer F.J. Forty published a Reconstruction Report in 1944. More open space was to be provided south, east and west of the cathedral, with new buildings of uniform height. Longer views were to be secured by widening Ludgate Hill and by making new vistas in line with the dome and transepts, with a number of road widening options.

The report was criticized by the RFAC and the progressive architects' mouthpiece, *The Architectural Review*. They advocated replacing height restrictions in favour of plot-ratio control (expressed by site area divided by floor area), allowing buildings to rise higher in return for leaving land clear for road-widening, traffic-free precincts and public gardens.

Plot-ratio planning, a way of calculating the bulk of a building relative to the size of the plot, was duly adopted in the City's second reconstruction plan drawn up by Dr Charles Holden and Professor William Holford in 1946-7. This was adopted in essence in the County of London Development Plan of 1953. The Cathedral was to remain the City's chief building and the spirit of the agreement St Paul's Heights agreement was honoured in providing for a formal setting for St Paul's Cathedral, with no buildings allowed to be taller than the Wren's masterpiece. A consistent height limit for new churchyard buildings was set at 110 feet with another eleven feet in a set-back storey. Between 1937 and 1978 eleven buildings were allowed to infringe The Heights in the range of 2-10ft (0.6m - 3.05m) including Sudbury House, Paternoster Square, very close to the Cathedral and which at 205ft (62.5m) had a severe impact of the view of the dome from the north, including from Parliament Hill, which had been one of the finest views outside the City.

Removal of height restrictions by the London County Council in 1956 and the impact on London's skyline

After the war, the London County Council was under pressure to push on with redevelopment elsewhere in London. High buildings were increasingly being considered by planners and architects as providing solutions that lower bulkier buildings around courtyards could not. With the plot ratio system tall buildings provided open space at ground level, good views, daylight, and freedom from fog and noise at upper levels. The LCC's Town Planning Committee published guidelines in May 1956, entitled 'High Buildings in London', in which there was clear encouragement to build tall buildings that were 'carefully sited and well designed' and could 'contribute to the picturesque interest of the London skyline.' The Council offered to grant waivers if eight questions could be answered satisfactorily. Significantly, the first was: 'Whether the building will disrupt the pattern of existing development or obtrude itself on the skyline to the detriment of any existing architectural groups and landscape'. Other questions related to location, site size, overshadowing, local character, effect on the River Thames and open space, architectural quality and the night scene. No mention of specific views or landmarks was made.

The Council also proposed that each case be considered on its merits. The RFAC agreed, and in 1956 the 100ft height restrictions were removed. This led to a policy of encouraging tall buildings at nodal points, or on the river, or adjoining parks, along the picturesque principals envisaged by Forshaw and Abercrombie.

With the removal of height restrictions the LCC undertook to review every application to build a high building on its own merits. In spite of the fact that the Shell Centre at 351ft (107m) on the South Bank provoked almost universal condemnation, the LCC granted planning permission. In 1957 when the

application to build the Hilton Hotel in Park Lane was lodged with the RFAC as statutory consultees, the Commission warned that approval for such schemes set a precedent for ruining the 'pastoral character' of London's parks. The plans were slightly modified and then approved by the LCC. Much taller buildings could now be erected and transformation of the London skyline began. As researchers employed by the GLC John Parker and Tim Catchpole wrote about this period in 1984:

"A new generation of architects, inspired by the Modern Movement, the technical challenge, municipal pride and developers' patronage were determined to build a new Jerusalem on London's blitzed and decaying land. The vested economic and housing interests were powerful, and architects regarded themselves as heroic figures in the environment. Conservation and public involvement were virtually unknown concepts."

Progressive architects and developers took advantage of the new system, and the greater heights that were achievable through the plot ratio system. This mechanism allowed architects to build high by offering set-backs or open space at ground level in return for extra floors. Among the early towers were: Thorn House, St Martin's Lane (1957-59); Castrol House, Marylebone Road (1955-60); Eastbourne Terrace (1958-62) and New Zealand House, Haymarket (1957-63, listed grade II). Some proposals attracted criticism from the RFAC. Comments on the proposal for Castrol House led to the reduction in height of the tower so that it did not dominate Marylebone Town Hall opposite.

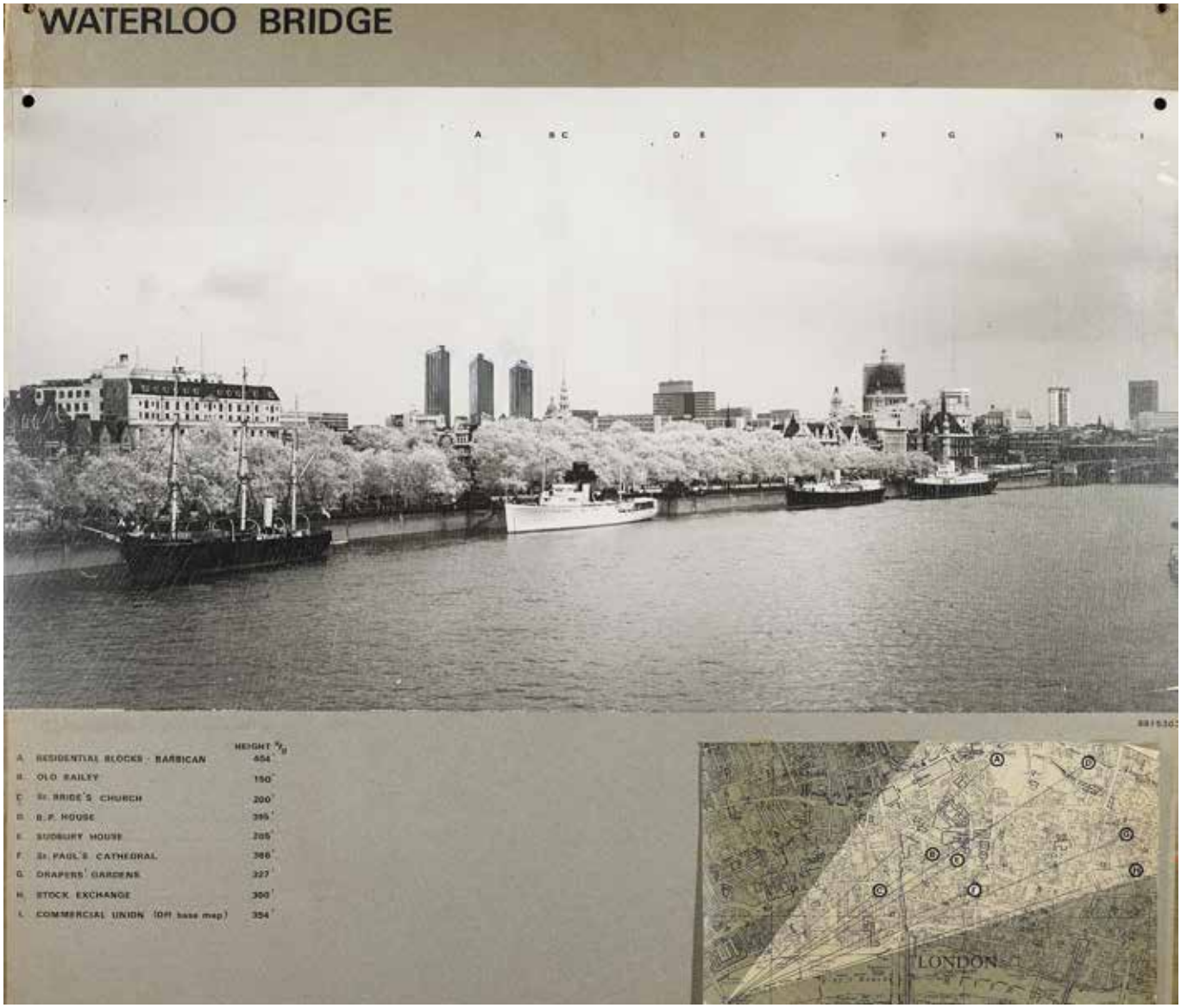
The Hilton Hotel (1960-63) was criticised for having a harmful impact on the Royal Parks, and Millbank Tower (listed grade II), at 387ft (118m) and taller than the Shell Centre, also caused complaint of intruding upon cherished views. Buildings such as St Thomas's Hospital across the river from the Houses of Parliament led to calls for greater discrimination, selection and control from those who determined planning applications. In an article published in 1977 in Country Life, Patrick Cormack, Conservative MP for Staffordshire South West, argued that London's skyline had suffered as a result of the abolition of building height restrictions of 1956, and that "if views and prospects are to survive then surely special steps must be taken to preserve them. For it is sadly true that the battle for the skyline has been paved with good intentions" (p1083).

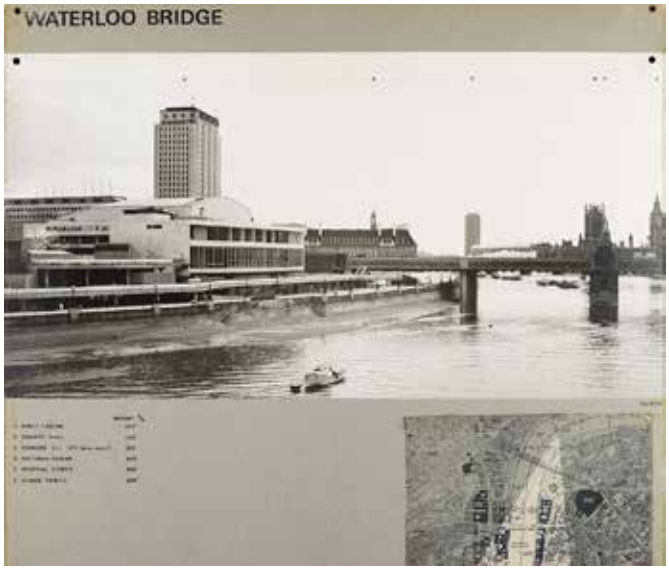
No change in direction came as a result of these protests. The County of London Development Plan (LCC 1960) retained the philosophy of the 1956 report.

The Greater London Council

In 1962 the LCC determined principles for the evaluation of tall building proposals. These included the consideration of density, transport implications, functional suitability and aesthetic quality. It also considered the impact that the tall building would have on the skyline, and certain views from London squares, Royal Parks and the River Thames. In 1965 the Greater London Council (GLC) replaced the LCC following the passing of the London Government of 1963. The GLC controlled a wider area including the whole of Middlesex and parts of Hertfordshire, Essex, Kent, Surrey, along with Croydon, West Ham and East Ham. These areas now comprised 32 London boroughs and the City of London Corporation. The 1963 Act gave the GLC its strategic planning prerogative: proposals for building in excess of 150ft (45.7m) in central London or over 125ft (38.1m) elsewhere had to be submitted by the relevant borough council to the GLC for approval. The Council's remit was the effect of the proposal on the skyline, not its use or appearance.

In 1969 the GLC carried out a study of the *laissez-faire* policy of the 1950s and looked at the impact of the Shell Centre, at 351ft (107m) and 26 storeys high, the one tall building that had been part of Leslie





GLC Report of Studies 1969. This report reviewed the impact of recent (late 1950s/early 1960s) or proposed tall buildings on historic London views from a variety of viewing points north and south of the river.
a) View from Waterloo Bridge looking east to St Paul's Cathedral. The residential towers of the Barbican development are painted on as they had not yet been built.
b) View from Waterloo Bridge looking west, showing the Shell Centre and Vickers Tower (now Millbank Tower) in relation to the Palace of Westminster.
c) View from Greenwich Observatory in Greenwich Park looking north-west. This view is in stark contrast to the view today since the building of Canary Wharf from the late 1980s.

Martin's original plan for the South Bank. It was published as a Report of Studies. The report identified 'Areas of Special Character' including central area precincts, major open spaces, Thames-side towns and villages. It also identified important views and classified them as 'panoramas', 'visual cones' and 'visual corridors.' The report highlighted 'areas of sensitivity' where tall buildings would be inappropriate and areas where their visual impact was not considered as great. This was the beginning of a strategic views policy as we would recognise it today, with a special regard to 'protect famous and pleasant views from the City but also from Hampstead Heath, Greenwich and Richmond, and the impact of tall buildings on well-known skylines, landmarks and buildings of architectural and historic interest.'

The Report of Studies was the basis the publication of a High Buildings Policy published in 1970 by the GLC as part of its proposed Greater London Development Plan. Ten detailed maps showed the sensitive areas, and included a list of protected views and skylines such as Buckingham Palace from the Mall, Kensington Palace from Kensington Gardens, and the towers of Westminster Abbey from the Serpentine Lake in Hyde Park. The Layfield Committee report in 1973 recommended that statutory high building maps and policies should be part of all development and structure plans. These recommendations did not become policy immediately but when the Greater London Development Plan was approved by the Secretary of State in 1976 it did include a High Buildings policy but with a single Urban Landscape Diagram in place of a number of separate maps.

However, the accompanying Urban Landscape Diagram was perceived to be too vague, and therefore weak when tested by developers. Patrick Cormack MP continued to be a vocal critic on the subject of the detrimental impact of tall buildings on well-known London views. In an article in Country Life published in 1977 he questioned the robustness of the policy:

"Areas are classified as 'sensitive' and inappropriate for high buildings but nowhere do the words 'permitted' or 'forbidden' occur. Some famous views are named as being protected, as in the 1970 plan, and aesthetic criteria for evaluating high buildings proposals are listed: they must not mar the skyline or intrude to the detriment of a famous or pleasant view; they must be carefully related to the surroundings and be of 'outstanding architectural quality".

Cormack suggested that these principles did not go far enough, and cited the case of St Paul's Cathedral: "As long ago as 1938 the City of London laid down regulations to protect certain views of the Dome from the Thames and in 1965 views from Parliament Hill were similarly protected. Now the cathedral is hemmed in on almost every side" (*ibid*). Cormack pointed out that although technically recent tall buildings (which he defined as over 150ft or 45.7m, around 18 storeys) fulfilled the requirements of the protective regulations, such buildings continued to block views of St Paul's from other viewpoints – a consistent weakness of the limitation of a protected view. Cormack observed that the problem was not confined to the City of London: views of churches and cathedrals around the country were being blighted by the insensitive location of tall buildings obscuring once-open views. His arguments reflect the confusion over what was actually meant by a 'protected view', and that policy was not the same as statute.

Patrick Cormack presented a Private Members' Bill, the Skyline Protection Bill, in 1977. Cormack's case was that although particular buildings and areas were protected through listing and conservation, no legislation protected urban landscape, nor the skyline and views; he sought an extension of the conservation area concept to these matters. The Bill was given a second reading and committed to standing committee, then died because a general election intervened.

Around this time there were, however a few ministerial decisions made involving the obstruction of views by proposed tall buildings that were more favourable towards controls. A public inquiry into a development at Liverpool Street was held in 1976. At the inquiry the GLC produced photomontages that showed that a 205ft (62.5m) high development would obstruct the silhouette of St Paul's from King Henry VIII's Mound in Richmond Park. Historian James Batten made a compelling case for the protection of the "outstanding vista from the Mound to St Paul's …an inspiring visit unique in England and indeed the world" (2002). The Secretary of State for the Environment stated that the view ought to be protected and not intruded into by the new development. British Rail, the developer, subsequently reduced the height to a level agreed with the GLC.

In another case, the 'Green Giant' inquiry held in 1979, the Greater London Council assembled views of the tall development at Vauxhall from nine different vantage points in London. Secretary of State for the Environment Michael Heseltine threw out the proposal and agreed with the GLC and the London Borough of Lambeth that the maximum height of development should be pegged to 300ft (91.5m). He subsequently rejected a 390ft (119m) tower in the Hays Wharf development close to London Bridge.

In the early 1980s ministerial decisions swung towards the developer. In his last decision before leaving office, Heseltine approved the height of the tower for the Coin Street proposed by Greycoat Commercial Estates. While the GLC seemed to have a more relaxed attitude to views affected by tall buildings, there was a fear that with abolition of the Council in 1986 controls on buildings heights would not be forthcoming (Parker and Catchpole 1984). The first 'City Cluster' was forming at this time in the area around the Natwest Tower. Notable among the proposals was No 1 Poultry, a 20-storey tower designed by Mies Van der Rohe proposed by developer Peter Palumbo, which would intrude into areas where no high buildings had been allowed thus far. What invited criticism was the inconsistency in the determination of tall developments that intruded into outstanding views. That this was due to an unclear policy was the conclusion of Tim Catchpole in his report *London Skylines: a study of high buildings in views* published by the London Research Centre in 1987 in order to inform government strategic guidance on the subject.

Strategic view management: RPG3A & RPG3B

After abolition of the GLC in April 1986, there was no longer a central body to oversee management of outstanding views and a new mechanism was required to make the boroughs work together. The interim body advising the Government on planning matters in London was the London Planning Advisory Committee (LPAC). LPAC published a report entitled *London's Skylines and High Buildings* in March 1989, prepared by the London Research Centre for LPAC, the Department of the Environment and English Heritage. In the study the consultants re-visited 80 strategic viewpoints which had been identified in the original skylines study undertaken for the Greater London Development Plan (GLDP) Report of Studies 1967-68, and plotted on maps the tall buildings (over 46m, i.e. the recommended limit) in central London and over 38m (the recommended limit) in the rest of London. They also mapped conservation areas and, with the assistance of English Heritage, historic 'set pieces'. These were defined as 'major groups and sequences of buildings, open spaces, processional ways, streets and monuments; they make a major contribution to the image of London as a capital city.' (LPAC 1989, p9, paragraph 2.3.10) These areas would be particularly sensitive to the impact of high buildings. The historic set pieces included the Royal Palaces, the Inns of Court, the national museum precincts, London squares and formal street layouts such as Regent Street and Kingsway. They also mapped ridges, some of which had already been identified in the 1967-8 study, as they provided the context for viewpoints and the focuses of view lines, essential in reviewing any tall buildings policy.

Appendix 3 of the LPAC report recommended just 34 major strategic viewpoints and views for protection. These were defined as "well known public places commanding views of national or London-wide significance cherished by Londoners and visitors, and featuring an exceptional landscape or townscape including visually prominent historic landmarks" (LPAC 1989). Of these, ten ultimately received statutory status in November 1991, when the Secretary of State published *Regional Planning Guidance Note 3: Supplementary Guidance for London on the Protection of Strategic Views Annex A (RPG3A)*. The implementation was to be secured through statutory 'Directions'. Ten strategic views were identified, each crossing more than one borough, from eight viewing places. Eight focused on St Paul's Cathedral, and two on the Palace of Westminster, clearly because of not only the high architectural, historical, religious and cultural values attached to these buildings but also their importance as current functional, working structures.

The ten views were:

1. **Primrose Hill to St Paul's Cathedral** (Assessment Point 4A.1)
2. **Primrose Hill to the Palace of Westminster** (Assessment Point 4A.2)
3. **Parliament Hill to the Palace of Westminster** (Assessment Point 2A.2)
4. **Parliament Hill to St Paul's Cathedral** (Assessment Point 2A.1)
5. **Kenwood to St Paul's Cathedral** (Assessment Point 3A.1)
6. **Alexandra Palace to St Paul's Cathedral** (Assessment Point 1A.1, 1A.2)
7. **Richmond Park: King Henry VIII's Mound to St Paul's Cathedral** (Assessment Point 9A.1)
8. **Greenwich Park to St Paul's Cathedral** (Assessment Point 5A.2)
9. **Blackheath Point to St Paul's Cathedral** (Assessment Point 6A.1)
10. **Westminster Pier to St Paul's Cathedral** (Assessment Point 8A.1)

Locations are shown on page 28.

The objective was to safeguard each view and its backdrop from inappropriate development that would impact on the view by limiting building heights. Each view was to be managed by 'geometric definition' through diagrams which define view points, viewing corridors, wider setting consultation areas and background consultation areas. The Guidance required the local planning authority in whose area a development was proposed to consult with any other borough involved in protecting that view, to incorporate them onto their planning maps, to develop policies to protect the views and to create and maintain a photographic record of the strategic views appropriate to their borough. All development proposals within strategic viewing cones had to be sent out to consultees: the relevant local planning authorities, English Heritage, the Royal Fine Arts Commission and a London-wide planning authority.

For example, one of the views, the 'St Paul's Vista', provided an uninterrupted view from King Henry VIII's Mound in Richmond Park eastwards across 10 miles of built-up London to the dome of St Paul's Cathedral. The Borough of Richmond upon Thames, along with the other boroughs crossed by the protected view (Wandsworth, Hammersmith and Fulham, Kensington and Chelsea, Westminster, Lambeth Southwark, Hackney, Tower Hamlets and the City of London) was statutorily bound to protect each section of the St Paul's Vista in its respective Unitary Development Plan (UDP). The Strategic Guidance in RPG 3 Annex A defined and set down the dimensions and OS co-ordinates of the views. For the St Paul's Vista the guidance described the wedge-shaped viewing cone in horizontal terms from the vantage point of Henry VIII's mound to an expanding viewing corridor about 300m wide at St Paul's. The vista extended about 3.5 km beyond the Cathedral to protect the skyline backdrop, thereby maintaining the silhouette of the dome above the level of the Stone Gallery. A Development Plane threshold height at 52.1m was also established in the guidance (DoE 1991, Appendix 1). The Direction came into force on 22 May 1992. It was a triumph for conservationists, particularly James Batten who had discovered this 'lost' vista in 1976 and

had campaigned to have it protected. As a result activity was undertaken to enhance the view: vegetation cleared and steps, terraces and an arbour restored.

As a consequence of the increase in proposals for tall buildings along the riverside during the 1990s, capitalising on the Thames as a focus for London and on the associated land values, Strategic Planning Guidance for the River Thames (RPG 3B) was issued by the Secretary of State in February 1997. This guidance from the Government asked local planning authorities to designate a Thames Policy Area to identify it on the Unitary Development Plan Proposals map, to prepare detailed appraisals of their stretches of the River Thames within this area and to include development plan policies consistent with RPG 3B. The aim was the inverse of the tall buildings policies hitherto: to identify areas appropriate for high buildings and landmark buildings, instead of areas that were inappropriate for tall structures. The guidance acknowledged that the closer to the landmark historic buildings the sites were, the less appropriate they were for skyscrapers: "Between Vauxhall Bridge and Tower Bridge more opportunities for high buildings may exist, particularly in areas with existing clusters of high buildings such as part of the City of London. But this area is also constrained by the need to protect and enhance the views and settings of many of London's most important landmarks such as the Palace of Westminster, St Paul's Cathedral and the Tower of London" (LPAC 1999, section 8 p21). Building tall, the advice continued, might be suitable around the existing clusters around Canary Wharf but less suitable as the banks of the Thames then take an open, estuarine character as the river flows towards the North Sea.

London Planning Advisory Committee Report

Pressure of large-scale development, for example at Broadgate and Canary Wharf, was a factor in the relatively quick review of the 1992 statutory guidance. The LPAC report of 1998 was an attempt to consolidate and boost Strategic View protection in London. The report introduced the idea of a second tier of views, 'Metropolitan Views', for designation, and of more vigilance in protecting views of the river along the Thames (as enshrined in the RPG 3B Thames Guidance), which at the time were being impacted upon by high rise, high density development. Thresholds of consultation based on height were also proposed.

As cited in the introduction, Section 8 of the report defined 'Strategic Views' as follows:

"There are a number of Strategic Views of St Paul's Cathedral and the Palace of Westminster which are uniquely important to the character of London. These are designated as Strategic Views under the following criteria:

Views of national significance from well-known public places, cherished by both Londoners and visitors, and featuring exceptional landscape or townscape including visually prominent historic landmarks" (*ibid*).

The definition still provides the basis for view definition today (2018). Then, as now, the aim was to safeguard each view and its backdrop from inappropriate development. The LPAC report proposed strategically important panoramas in order to identify them on Borough Development Plans with appropriate policies. The report set out the roles and responsibilities of the boroughs to incorporate Strategic Views on their Borough Development Plans and to produce policies to protect the views in line with the 1991 directions. The Advice also suggested 28 possible new views. It advised the creation and maintenance of a photographic record of the strategic views and to consult on development proposals within the viewing corridor with the relevant local planning authority, English Heritage, Royal Fine Art Commission and LPAC.

Strategic Planning Advice on High Buildings and Strategic Views in London

Building on the report of 1998, LPAC issued an advice note the following year Strategic Planning Advice on High Buildings and Strategic Views in London which stated that Strategic Views and Important Local Views, Prospects and Panoramas should be identified and adopted in Unitary Development Plans (UDPs) to maintain the open aspect of the river. Examples included views from the Isle of Dogs to Greenwich Hospital, and from St James's Park to Whitehall and Horse Guards Parade. The three World Heritage Sites (Palace of Westminster and Abbey, Tower of London and Maritime Greenwich) were also identified as requiring particular consideration with regard to their settings and backdrops. The guidance also recommended that developers prepare design statements to accompany applications for tall buildings and to take into account the effects that such buildings located on the banks of the Thames could have. Such effects were: hydrological effects, wind effects, shadowing effects and transport effects.

Views to be identified in UDPs were primarily linked to issues of conservation, buildings of civic importance, local heritage and, where applicable, the protection of views out to geographic ridge lines. The City of London UDP, for example, included 'Supplementary Guidance on St Paul's and Monument Views.' The St Paul's Heights Guide was intended to protect local views of St Paul's from the South Bank, City bridges over the Thames, and certain points in the north, west and east. First introduced in 1938, the policy was given statutory status in 1989. The Monument Views policy was designed to protect views from the Monument gallery.

The LPAC Strategic Planning Advice of 1999 was submitted to Secretary of State for the Environment, Nicholas Raynsford. In a statement Raynsford "welcomed this advice which will provide an important input to the development of the Mayor for London's Spatial Development Strategy, under the proposed new arrangements for strategic planning in the capital." His statement continued:

"The government note LPAC's advice that the existing arrangements for protecting designated views across the capital are generally considered to have operated successfully. It therefore re-affirms the existing guidance to local planning authorities to protect and enhance these views, and agrees that boroughs should also adopt policies to identify and protect important local views, prospects and panoramas. The Government intend to transfer responsibilities for protecting strategic views to the Mayor under the new planning arrangements to apply in the capital…The Government believes that LPAC's advice represents a balanced and pragmatic approach to the issue of high buildings in the capital and (the advice) should assist planning authorities and developers alike in ensuring that any new high buildings are directed to the most appropriate location and are of the highest possible design quality" (Hansard 1999, p29).

The Greater London Authority's role in relation to Strategic Views

The London Planning Advisory Committee was subsumed into the new Greater London Authority (GLA) on 31 March 2000, and its role effectively passed on to the GLA Planning Committee. In October 2001 the GLA published *Interim strategic planning guidance on tall buildings, strategic views and the skyline in London*. In the Introduction the report noted the protected status of the ten strategic views set out and adopted in 1991, and the detailed technical Directions for each view which had been issued under the Town and Country Planning General Development Order 1988. It stated clearly that whilst only the Secretary of State had the ultimate power to alter, remove or add strategic views, the GLA Act transferred the responsibility for existing policies on views to the GLA, which was then able to make recommendations to the Secretary of State to alter, remove or add to these views.

What distinguished this guidance from earlier versions is the questioning of the desirability of such strict protection, drawing attention to the constraints placed upon development of tall buildings within the strategic views:

"Within the protected cones, no buildings may be erected that would obstruct the view of St Paul's Cathedral or the Palace of Westminster, or obscure the wider setting or backdrop. As most of the viewpoints are elevated, proposals for tall buildings are particularly at risk from the protected strategic views. Amongst the strategic locations affected that might otherwise be appropriate for tall buildings are the environs of Euston, King's Cross and London Bridge Stations. In the City of London large areas with development potential are unavailable for tall buildings, and this restricts the City's ability to take full advantage of its location. The value of these strategic views needs to be tested" (GLA 2001, p17 paragraph 3.7).

The 2001 document questioned how much notice visitors at the viewpoints took of the views, even if they could see the asset in the view through the haze of atmosphere and pollution. It questioned the value of focusing on historic buildings to the exclusion of modern landmarks, and suggested: "It is possible that medium-range views of London's great buildings, both modern and historic, should be accorded greater importance" (*ibid*, p17). The document raised the issue of the difficulty of defining the harmful impact of a tall building: "As a general rule, a new tall building will not damage the setting of an historic building within an important view if clear sky remains on either side to retain the sense of an uncluttered backdrop. London's changing character, and its need to grow and compete is such that taller buildings will inevitably crowd around historic buildings". Reference was made to the number of buildings around the Royal Exchange being built at the time, which when seen from Waterloo Bridge, "already affect the clear view of St Paul's…The setting of St Paul's has already been compromised, and this is true of many other historic buildings".

The document ends with a proclamation that the new Mayor intended to engage consultants to: "evaluate existing policies, and produce guidelines for other potential views. Borough councils should continue to identify important local views, panoramas and prospects, and should when doing so clearly show the viewing point, object, and extent and role of the view" (*ibid*, p.19, 3.8).

London's Skyline, Views and High Buildings Review

In August 2002 planning consultants DEGW produced a report for the GLA entitled *London's Skyline, Views and High Buildings*. The report reviewed the Strategic Views Policy PPG 3, as it was known at the time, and the Local Views policy. In an evaluation of the policies, the criticism was made that the policies were not co-ordinated but were separate. Another criticism was that the views policies operated a two-dimensional mapping tool which attempted to control complex three- dimensional city form; for example, the geometric form of a cone-shaped corridor ignored what is already built on the ground – a variety of physical features, street patterns, a winding river etc. Looking at specific cases, the report noted that the policies failed to regulate the 'setting' of the asset, often clashed with other planning policies, and failed to make clear exactly why certain restrictions were in place. This, the report suggested, was leading to a large number of public inquiries where assumptions about the importance of particular views was tested - mostly successfully, from the developers' point of view. The report concluded that "The London Plan should provide a framework for an informed, co-ordinated and implementable policy for the development of high buildings in London" (DEGW 2002, p51 paragraph 5.1.4).

London Plan Policy 4B.15 and the London Views Management Plan

Policy 4B.15 of the London Plan drafted in 2004 was the response to some of the points raised in the DEGW report. While continuing to promote the Mayor of London's commitment to identify and manage strategically important views it also provided Supplementary Planning Guidance (SPG) on the existing London View Management Plan (LVMP, later London View Management Framework). As the London Plan could not go into detail on specific sites, the SPG assessed each specified view and provided precise details on the location of viewing places and the extent of viewing corridors, backdrops and front and middle ground assessment areas. Use was made of detailed photography and the latest surveying and imaging technology.

The draft SPG was intended to supersede RPG 3A and was subject to consultation with key stakeholders in 2004, followed up with a formal public consultation in July 2005. Its purpose was to explain how policy 4B.15 was to be put into practice and ultimately replace the guidance set out in RPG 3A. In addition to the ten protected views identified in RPG 3A, the Plan identified 52 cross-London views which were to be managed by a methodology, 'Qualitative Visual Assessment' (QVA). In addition, 23 of these views would also be managed by 'geometric definition'. 26 management plans were to be drawn up in consultation with key stakeholders, including the boroughs and English Heritage, each relating to the view or asset managed. The views were also to be grouped into Panoramas, River Prospects and Linear and Townscape Views.

In response to the revised draft of the LVMP English Heritage noted that the draft retained the principle of 52 views all to be managed by QVA; however, the number of views to be managed by geometric definition had been reduced from 23 to 11. These corresponded with the original ten views plus the view of the Tower of London from the Queen's Walk on the South Bank. The response noted that the new Directions would only apply to the 11 protected views to be managed by geometric definition, leaving management of the remaining 41 views to the discretion of local planning authorities taking into account guidance set out in the LVMP. The guidance was not considered to be sufficiently clear and robust to assess the impact of development proposals on the views, especially when what was important to the views was poorly defined.

Another significant change in the proposed new guidance was the narrowing of the corridor protected by the view, effectively reducing the protection. There was a lack of clarity on the height of the threshold plane and its protection beyond the Strategically Important Landmark (SIL), in terms of whether the baseline remained constant, or was raised or lowered. Of concern was the proposal to raise the threshold plane at the Palace of Westminster from 43.5 metres AOD to 51.3 metres AOD. This had implications for the level at which the consultation trigger and policy comes in to play for developments around the Palace. All this was further complicated by the emerging management plans for the Palace of Westminster as a World Heritage Site (WHS) in 2007. Faced with the GLA's intention to withdraw RPG 3A and replace it with the London Views Management Plan, English Heritage produced Qualitative Visual Assessments (QVAs) for the most important cross-London views. The aim was to provide a more scientific evidence base for defining, analysing and consequently protecting a view.

The final document, re-named the London Views Management Framework (LVMF) was launched in July 2007. In the introduction then Mayor of London, Ken Livingstone, wrote: 'Having considered the guidance carefully, the Secretary of State for Communities and Local Government (DCLG) has decided to rescind the previous guidance on Strategic Views RPG 3A, and for this framework to be adopted in its place. With the publication of this SPG the policies in the London Plan on View Protection now comes in to full effect'. Appendix B of the LVMF listed the three Strategically Important Landmarks (SILs): St Paul's

Cathedral, the Palace of Westminster and the Tower of London and included the ten original protected views. In addition 29 new landmarks were added that would enjoy some protection as they were within or close to the viewing corridor that protected the view of the SILs. A River Prospect from Golden Jubilee footbridge with 3 assessments points were included; a townscape view of St James Park and a townscape view from City Hall to the Tower of London were also included. The Tower of London as a World Heritage Site had limited heights for the threshold plane. The recommended methodology, Qualitative Visual Assessment, was intended to be used to assess the impact of development proposals for tall or bulky buildings on the SILs.

Seeing the History in the View and the Westminster World Heritage Site Management Plan

In 2008 Land Use Consultants produced, on behalf of English Heritage, a guidance document entitled *Seeing History in the View*: *A Method for Assessing Heritage Significance within Views*. The aim was to assess historical significance of views 'systematically and consistently', and to evaluate the notions of 'impact' and 'harm' that a development proposal may have on a designated view listed in the London Plan. The methodology was to provide a 'consistent and transparent approach' which could determine impact and harm 'more objectively'. It sought to provide 'a consistent baseline for assessment of impact on heritage significance within views and reducing scope for differing judgements on the nature and scale of impact' (English Heritage 2008, p6 paragraph 2.16). Twelve pilot QVAs were produced for the most important cross-London views. They focused on the setting of the Tower of London and Westminster World Heritage Sites, both under pressure from surrounding developments.

The method proposed a baseline analysis that defined and analysed the heritage significance in the view; and an assessment of the potential impact of a specific development proposals on the heritage significance within the view. The recommendation was that the significance assessment should be carried out by developers and linked to an Environmental Impact Assessment as a heritage impact assessment which "should be objective and quantifiable as far as possible" (*ibid,* paragraph 6.12). The risk here was that the onus was upon the developer to assess the impact. In the interest of the scheme going ahead, the developer would minimise the impact of the proposal on the view, or argue that the part of the view in which the development would intrude was not of great significance, or both. The conclusion was that eventually each would be decided on a 'case-by-case basis'. *Seeing the History in the View* was subsequently absorbed into Historic England's *Advice Note on Tall Buildings* (2015).

As a result of the *Westminster World Heritage Site Management Plan*, published in May 2007, protection for views of the Palace of Westminster was strengthened. In the foreword to this Management Plan, David Lammy MP asserted that "it is as the pre-eminent symbol of democratic government and for its continuing spiritual significance that Westminster has exerted its greatest influence, contributing to the development of parliamentary ideals across the globe and serving as a reminder of ideas which are of prime importance to mankind." Fourteen pages were given over to a detailed evaluation of the World Heritage Site and its status as being 'of Outstanding Universal Value', and how its history, architecture and symbolic value met the rigorous criteria for designation as a World Heritage Site. Such a detailed analysis has helped underpin the importance of the protected views to and from the site and informed the next draft of the GLA's Strategic Views guidance.

The London View Management Framework

A draft LVMF SPG was consulted upon between July and October 2011, with a further consultation on one of the views, view 27 'Parliament Square to the Palace of Westminster' in January 2012. The final LVMF SPG was published in March 2012, and formed Policy 7.11 of the London Plan. Then Mayor of

London, Boris Johnson, set out the list of designated strategic views that he committed to keep under review. The revision represented an update to the pre-existing LVMF rather than a change in philosophy. The policy stated: "These views are seen from places that are publicly accessible and well used. They include significant buildings or urban landscapes that help to define London at a strategic level. These views represent at least one of the following categories: panoramas across substantial parts of London; views from an urban space of a building or group of buildings within a townscape setting (including narrow and linear view to a defined object); or broad prospects along the River Thames. Development will be assessed for its impact on the designated view if it falls within the foreground, middle ground or background of that view" (GLA 2012).

Within the designated views, the landmarks were identified that made aesthetic, cultural or other contributions to the view and which assist the viewer's understanding and enjoyment of the view. For example, the LVMF introduced a number of assessment points as River Prospects, with important views towards St Paul's Cathedral and Westminster from the riverside and the Thames bridges, with an additional viewpoint from the Millennium Bridge.

Strategic views in the Draft London Plan 2017

In the revised *Draft London Plan* (2017), due to be adopted in 2019, Policy D8 on tall buildings is largely unchanged in relation to views. Policy HC3 Strategic and Local Views of the London Plan encapsulates and consolidates all the thinking and protection that has been given to strategic and local views hitherto: views of buildings or landscapes "seen from places that are publicly-accessible and well-used" (GLA 2017, section 7.3.0). There is a commitment to protect the composition and character of these views through Policy HC4: London View Management Framework which again sets out the importance of protecting Strategically Important Landmarks (SILs) through effective management of Protected Vistas (7.4.1).

The importance of views

At the moment there is no prescribed height limit in London, no legally binding city-wide land use plan in which floor area ratios and building heights are fixed. In the absence of defined height limits enshrined in law, discussion of the merits or harm caused by tall or bulky structures within sensitive historic locations are subject to negotiation between applicants, local planning authorities and Historic England, as the Government's adviser on the historic environment.

However, the definition of a strategic view is now widely accepted and used as a planning tool which has shaped the city and the skyline. In particular, The St Paul's Heights policy in protecting views centred on St Paul's Cathedral has been broadly regarded as successful. However, although it may seem a measure of success that the south slope of the 122 Leadenhall Street (the 'Cheese-grater') defers to the silhouette of St Paul's, other tall buildings close to the Thames such as the 20 Fenchurch Street (the 'Walkie-Talkie') have had a dramatic impact on the panoramic views of the riverside.

The future success of the protection of Strategic Views relies on the continuation of the public value placed of the historic landmarks which provide the focus of the view. An early definition of 'visually prominent historic landmarks' and the importance of being able to see them was provided by academic and architecture critic Jules Lubbock. When a public inquiry into the proposed City of London Local Plan was held in 1987, part of which promised to protect certain views without giving precise locations, Lubbock made a number of pertinent points. Firstly he expressed the aesthetic importance of the view:

"The hemispherical shape of domes was intended as an imitation of the dome of the heavens, appropriate to places of worship. The majestic size of the great landmark buildings signified the power of the city, its command over natural resources, the skill of its citizens and the ingenuity of its architects" (Lubbock 1987).

He stressed to the symbolic importance of a monument against the skyline:

"In focussing more upon the symbolic aspect of the skyline we need to apprehend the strict meaning of the word 'monument'. A monument is a structure designed to warn, to instruct or to commemorate. The word derives from the Latin 'monere' - to remind or to advise. Not all monuments, of course, are architectural, and certainly not all architecture is monumental. Just as street façades can act as monuments to a family, a firm or some other public institution, so the skyline can be regarded as the collective monument of a city, and in the case of a capital city, of the country as a whole. The Acropolis at Athens, St Peter's in Rome, the Kremlin in Moscow, the Eiffel Tower in Paris, midtown Manhattan in New York and both St Paul's and Big Ben in London are, or were, some of the greatest examples" (*ibid* Introduction paragraph 2.02).

Jules Lubbock suggested that these protected views and viewpoints were selected because they were considered a public good or benefit, an experience which helps Londoners and visitors know where they are both geographically and historically, as part of a great World City with a unique history and identity. Lubbock wrote: "The skyline does not merely represent the people of a city or a nation, it is inherent

View towards the Southbank from the Golden Jubilee/Hungerford Footbridges (Assessment Point 17B.2).

in their very own sense of their own identity, given force in their major architectural monuments, and preserved by the spirit of their laws. This is why St Paul's Cathedral became so important during the years when Britain stood alone against the forces of Nazi-controlled Europe" '(*ibid*, paragraph 3.10).

These are not values that just British citizens hold dear but visitors too. From an earlier period, with reference to Westminster, Percy Fitzgerald wrote in *Picturesque London*, published in 1890:

"We are so familiar with the great Westminster group of buildings: the Houses of Parliament, Westminster Hall and Westminster Abbey that we scarcely appreciate the imposing magnificence of the site and disposition. But foreigners are often struck with astonishment and admiration at the vast elaborate workmanship and detail. The irregularity and angularity of the treatment of the two towers, the flèche etc is worthy of all praise" (p22).

The Westminster protected views aim to preserve the distant view of the grouping and massing of the historic buildings, the comprehension of the setting in the middle distance, and the close-up view of the architectural details. To be able to follow the view of the monument or building from a distance, through the middle distance, and then come close to it without the silhouette being masked by something behind it, is a remarkable visual and aesthetic experience. The many people gathered at St Stephen's Tower or 'Big Ben' in August 2017 to hear the chimes before a four-year silence for restoration, demonstrated the powerful hold the Clock Tower has as the quintessential symbol of London. Likewise, the public chose 31 May to be the first ever London History Day date as it is the date that Big Ben started keeping time in 1859.

London's remarkable views are of international aesthetic and symbolic importance. Widely accessible, they are shared and treasured by Londoners and visitors from around the world. Our ability to protect them, so as to pass them on to future generations to enjoy, is why the Strategic Views planning policies and guidance continue to be a special and key part of the sustainable development of London.

Passers-by enjoying the view of Greenwich Hospital and the London skyline, looking north west from the hill in Greenwich Park. 1945-1965.

London Views Revisited

Methodology

For this photographic study Chris Redgrave and Sharon Soutar from Historic England's Imaging Team revisited the 27 Viewing Locations (comprising 61 different assessment points) that are included in the London Plan, and its associated supplementary planning guidance The London View Management Framework (LVMF March 2012), in 2017-8.

All 61 views recorded in 2012 have been re-recorded. Throughout this report the 2012 LVMF view is shown directly above the re-recorded view. This has been done for the purposes of comparison; to illustrate the extent and type of changes that have taken place in the views themselves and to monitor the impacts of development on some of London's most important heritage assets. Some noteworthy changes to the views are highlighted visually within this document using extracts from our more recent photography.

The Survey Data section of this document reviews the quality and accuracy of the Assessment Point Details (Appendix B of the LVMF) and the ability to replicate the views for the purpose of assessing impacts and managing change from a technical perspective.

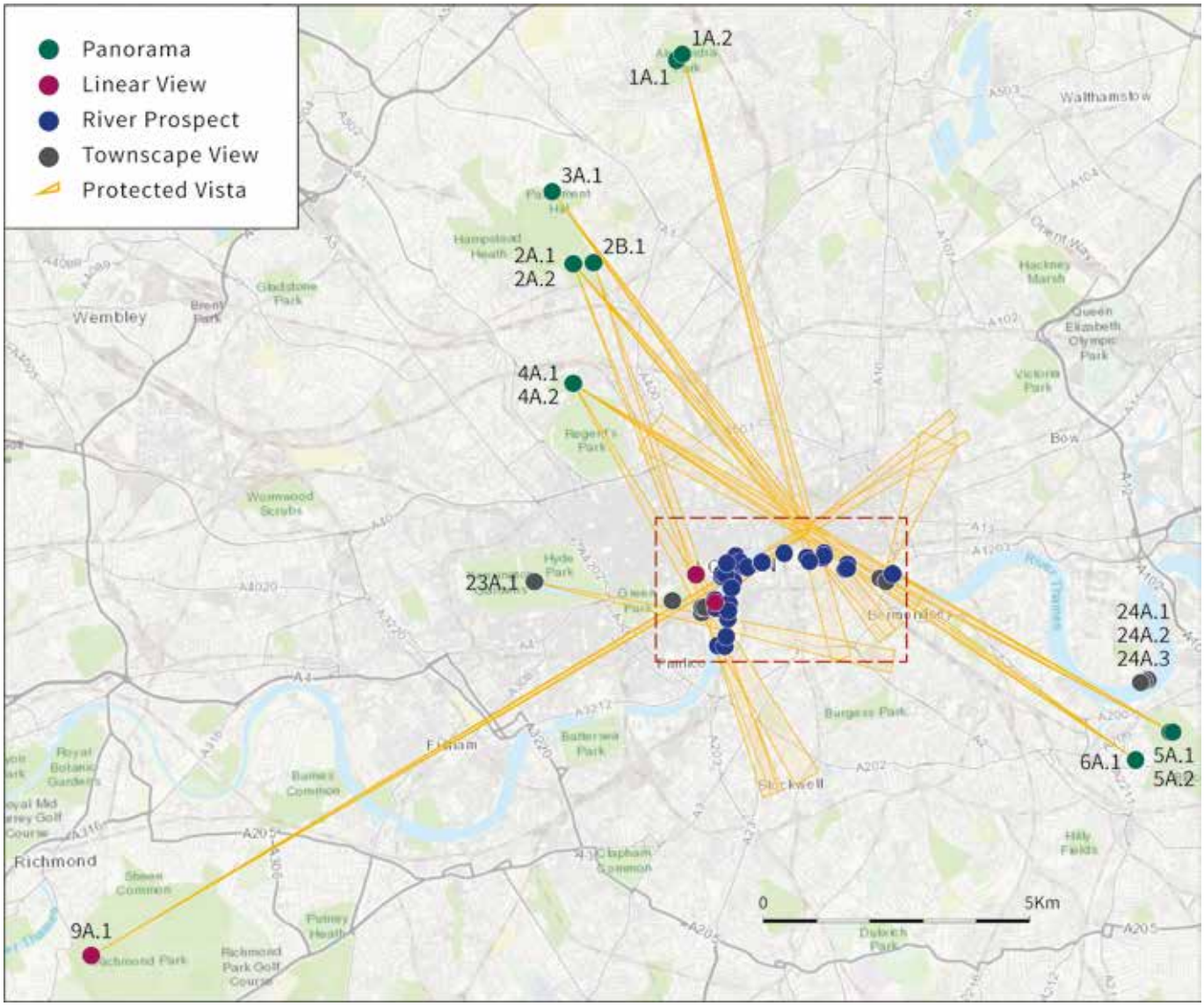
Assessment Point Details

Protected Vistas are highlighted in orange.

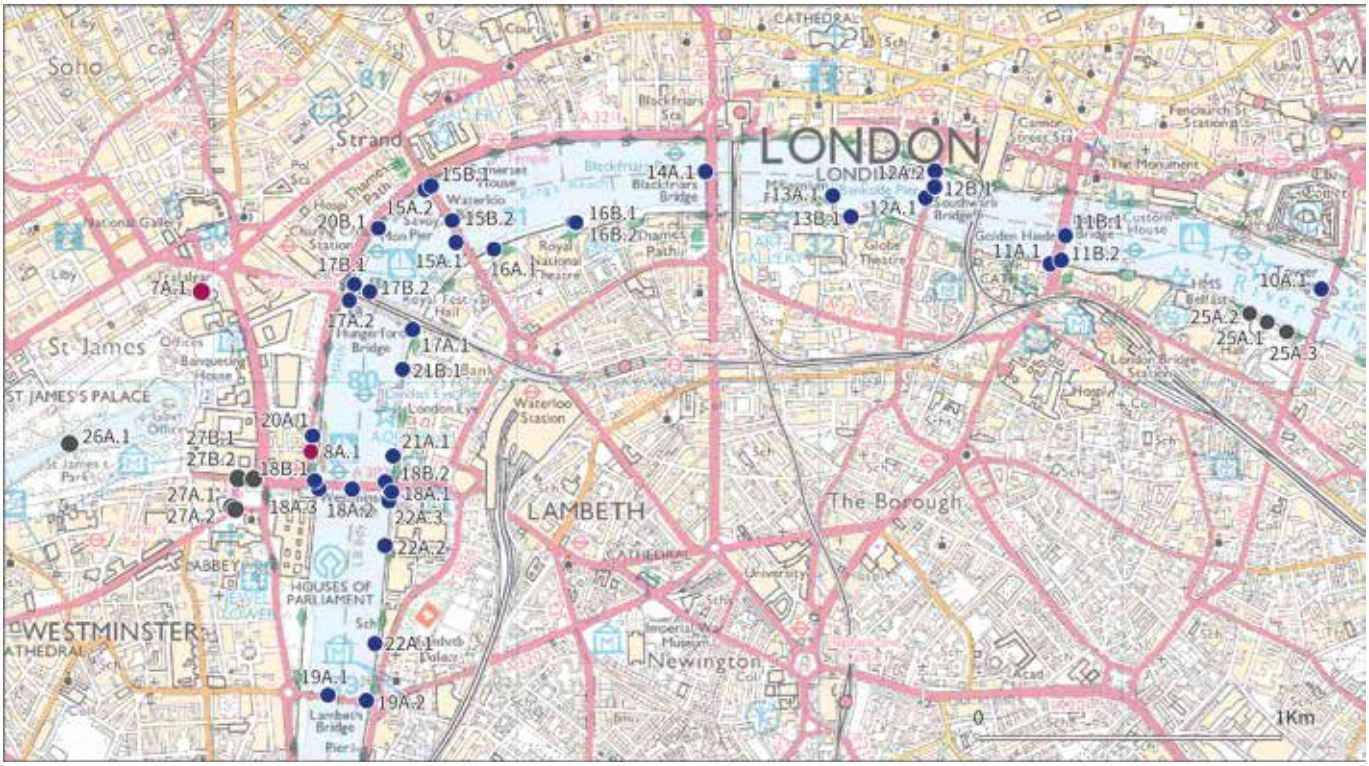
Key to assessment points: Panorama Linear view River prospect Townscape view

Assessment Point	Viewing Location
1A.1	Alexandra Palace: the viewing terrace
1A.2	Alexandra Palace: the viewing terrace
2A.1	Parliament Hill: the Summit
2A.2	Parliament Hill: the Summit
2B.1	Parliament Hill: east of the summit
3A.1	Kenwood: the viewing gazebo
4A.1	Primrose Hill: the summit
4A.2	Primrose Hill: the summit
5A.1	Greenwich Park: the General Wolfe statue
5A.2	Greenwich Park: the General Wolfe statue
6A.1	Blackheath: the Point
7A.1	The Mall: at Admiralty Arch
8A.1	Westminster Pier: the orientation plaque
9A.1	King Henry VIII's Mound, Richmond Park
10A.1	Tower Bridge: upstream
11A.1	London Bridge: upstream
11B.1	London Bridge: downstream
11B.2	London Bridge: downstream
12A.1	Southwark Bridge: upstream

12A.2	Southwark Bridge: upstream
12B.1	Southwark Bridge: downstream
13A.1	Millennium Bridge
13B.1	Thames side at Tate Modern
14A.1	Blackfriars Bridge: upstream
15A.1	Waterloo Bridge: upstream
15A.2	Waterloo Bridge: upstream
15B.1	Waterloo Bridge: downstream
15B.2	Waterloo Bridge: downstream
16A.1	The South Bank: outside Royal National Theatre
16B.1	The South Bank: Gabriel's Wharf viewing platform
16B.2	The South Bank: Gabriel's Wharf viewing platform
17A.1	Golden Jubilee/Hungerford Footbridges: upstream
17A.2	Golden Jubilee/Hungerford Footbridges: upstream
17B.1	Golden Jubilee/Hungerford Footbridges: downstream
17B.2	Golden Jubilee/Hungerford Footbridges: downstream
18A.1	Westminster Bridge: upstream
18A.2	Westminster Bridge: upstream
18A.3	Westminster Bridge: upstream
18B.1	Westminster Bridge: downstream
18B.2	Westminster Bridge: downstream
19A.1	Lambeth Bridge: downstream
19A.2	Lambeth Bridge: downstream
20A.1	Victoria Embankment: between Westminster and Hungerford Bridges
20B.1	Victoria Embankment: between Waterloo and Hungerford Bridges
21A.1	Thames side in front of County Hall
21B.1	Jubilee Gardens
22A.1	Albert Embankment: opposite the Palace of Westminster
22A.2	Albert Embankment: opposite the Palace of Westminster
22A.3	Albert Embankment: opposite the Palace of Westminster
23A.1	Serpentine Bridge
24A.1	Island Gardens: opposite the Royal Naval College
24A.2	Island Gardens: opposite the Royal Naval College
24A.3	Island Gardens: opposite the Royal Naval College
25A.1	The Queens Walk at City Hall
25A.2	The Queens Walk at City Hall
25A.3	The Queens Walk at City Hall
26A.1	St James' Park Bridge
27A.1	Parliament Square: south-west
27A.2	Parliament Square: south-west
27B.1	Parliament Square: north pavement
27B.2	Parliament Square: north pavement



Background map sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, © OpenStreetMap contributors, and the GIS User Community.



Background map: © Crown Copyright and database right 2018. All rights reserved. Ordnance Survey Licence number 100024900.

Alexandra Palace: the viewing terrace

– south-western section (near the viewing telescope).

Looking towards: St Paul's Cathedral (Central axis of the dome, at the base of the drum).

1A.1

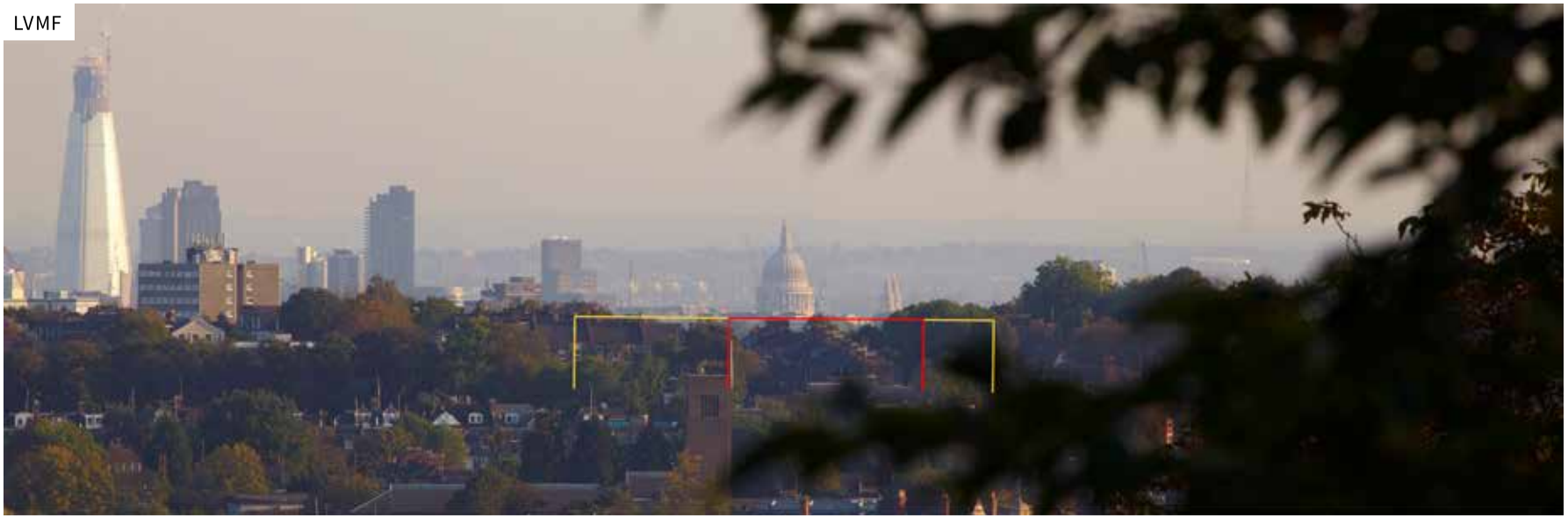

Historic England

Alexandra Palace: the viewing terrace

– approaching from the north eastern car park (approx 90m north-east of viewing telescope).
Looking towards: St Paul's Cathedral (Central axis of the dome, at the base of the drum).

1A.2

LVMF



Historic England

2A.1

Parliament Hill: the Summit

– at the orientation board.

Looking towards: St Paul's Cathedral (Central axis of the dome, at the base of the drum).

Historic England

LVMF

Historic England

2A.2

Parliament Hill: the Summit

– at the orientation board.

Looking towards: Palace of Westminster (The Central Tower, above the lobby crossing).

Historic England

LVMF

Historic England

Parliament Hill - east of the summit

– at the prominent oak tree

Looking towards: Palace of Westminster (The Central Tower, above the lobby crossing).

2B.1

LVMF

Historic England

Kenwood: the viewing gazebo

– in front of the orientation board (Centre line of the gazebo).

Looking towards: St Paul's Cathedral (Central axis of the dome, at the basis of the drum).

3A.1

LVMF

Historic England

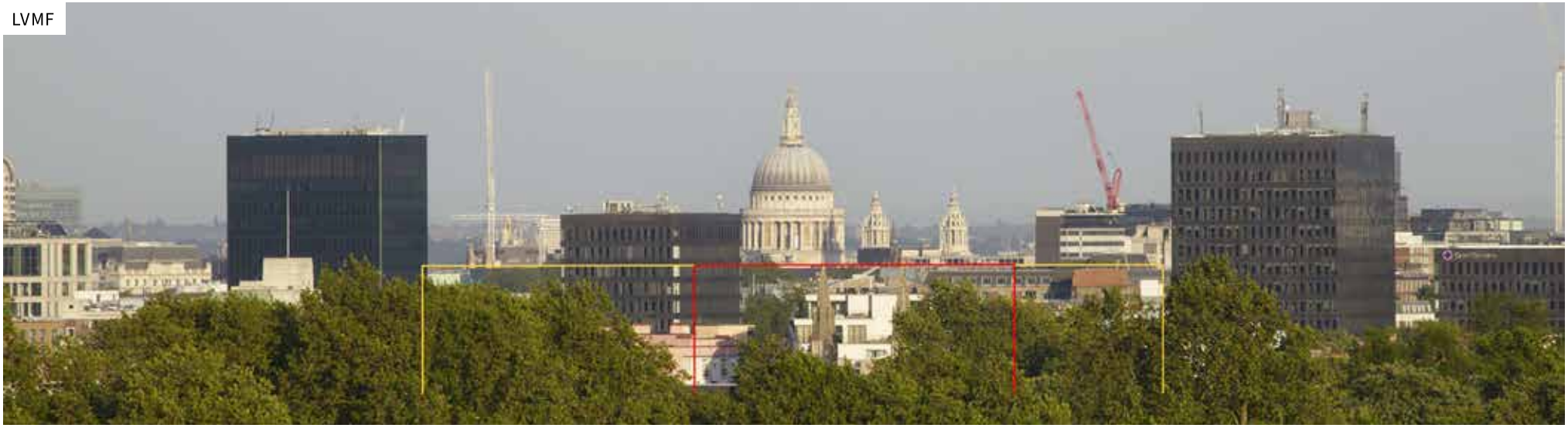
Primrose Hill: the summit

– at the orientation board.

Looking towards: St Paul's Cathedral (Central axis of the dome, at the base of the drum).

4A.1

LVMF



Historic England

Primrose Hill - the summit

– at the orientation board.

Looking towards: Palace of Westminster (The Central Tower, above the lobby crossing).

4A.2

LVMF

Historic England

Greenwich Park: the General Wolfe statue

- edge of paved area.

Looking towards: The axial arrangement between Greenwich Palace and the Queen's House; Greenwich Reach and the Isle of Dogs.

5A.1

LVMF

Historic England

5A.2

Greenwich Park: the General Wolfe statue

– north-east of the statue (Eastern edge of paved area (approx 20m off axis) between top of steps and stone bollard).

Looking towards: St Paul's Cathedral (Central axis of the dome, at the base of the drum).

LVMF

Historic England

Historic England

6A.1

Blackheath: the Point

– near the orientation board (West of the orientation board, close to the railings).

Looking towards: St Paul's Cathedral (Central axis of the dome, at the base of the drum).

Historic England

LVMF

Historic England

The Mall at Admiralty Arch

Linear view: The Mall to Buckingham Palace

7A.1

8A.1

Westminster Pier: the orientation plaque

- at the orientation board).

Looking towards: St Paul's Cathedral (Central axis of the dome, at the base of the drum).

LVMF

Historic England

Historic England

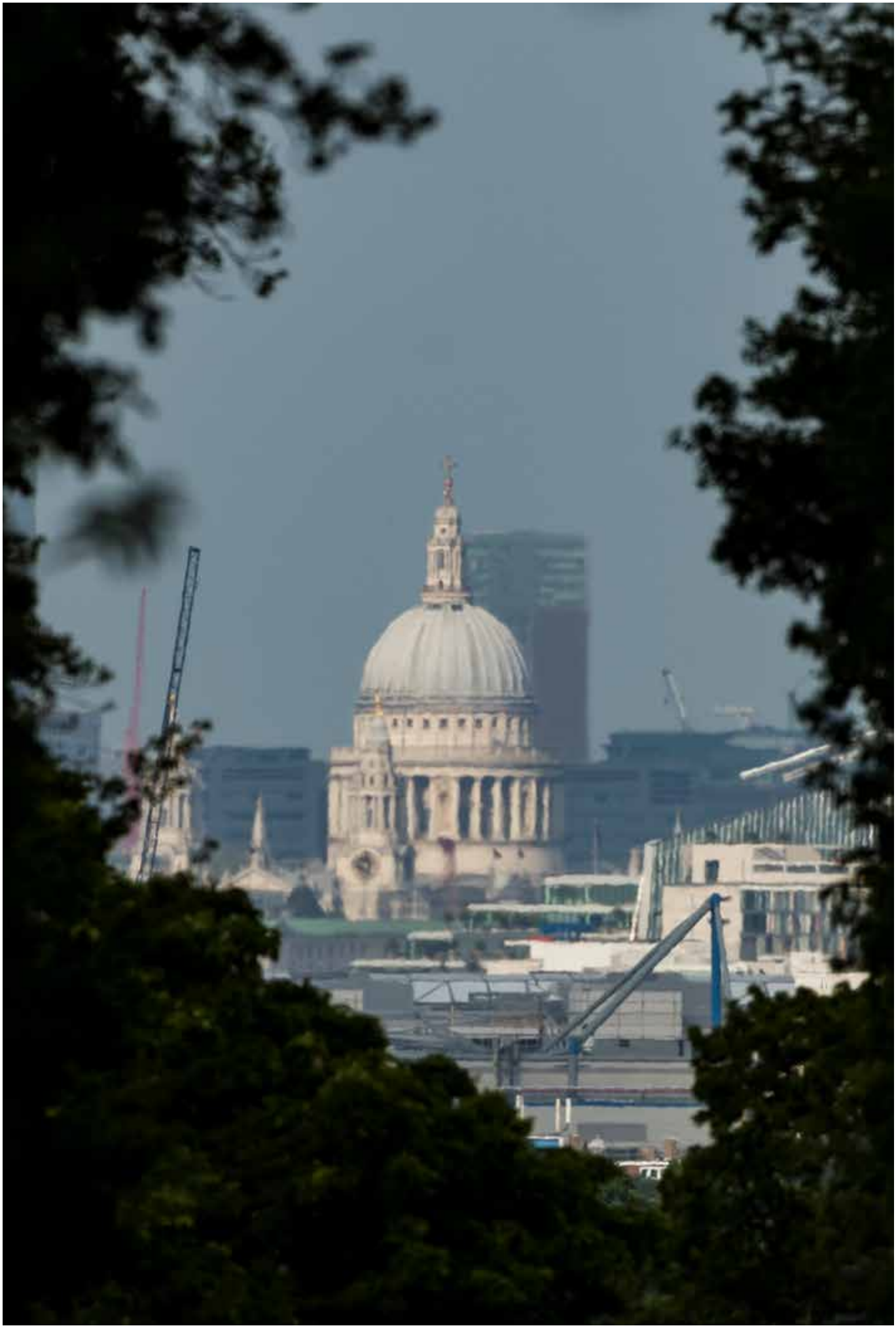
9A.1

King Henry VIII's Mound, Richmond Park

– the viewing point (Looking through the gap in the hedge).
Looking towards: St Paul's Cathedral (Central axis of the dome, at the base of the drum).

LVMF

Historic England



Tower Bridge: upstream

- the North Bastion

River prospect: Upstream

10A.1

London Bridge: upstream

- the Upstream Pavement

River prospect: Upstream

11A.1

London Bridge: downstream

- the downstream pavement

River prospect: downstream

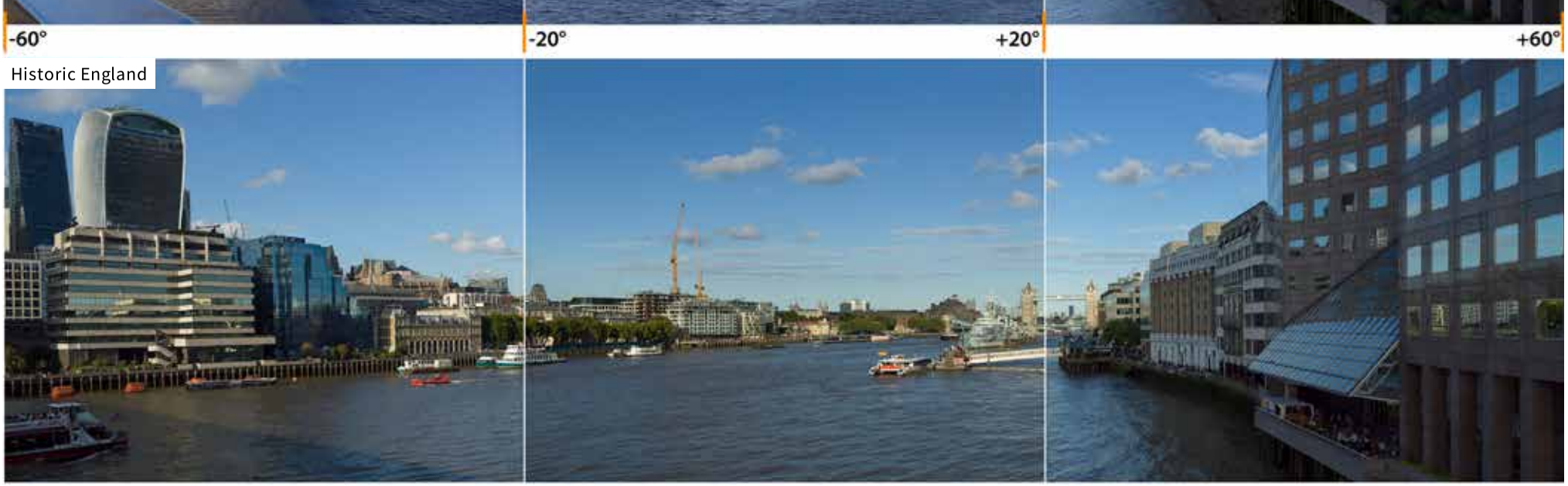
11B.1

London Bridge: downstream

- the Downstream Pavement

River prospect: Downstream

11B.2

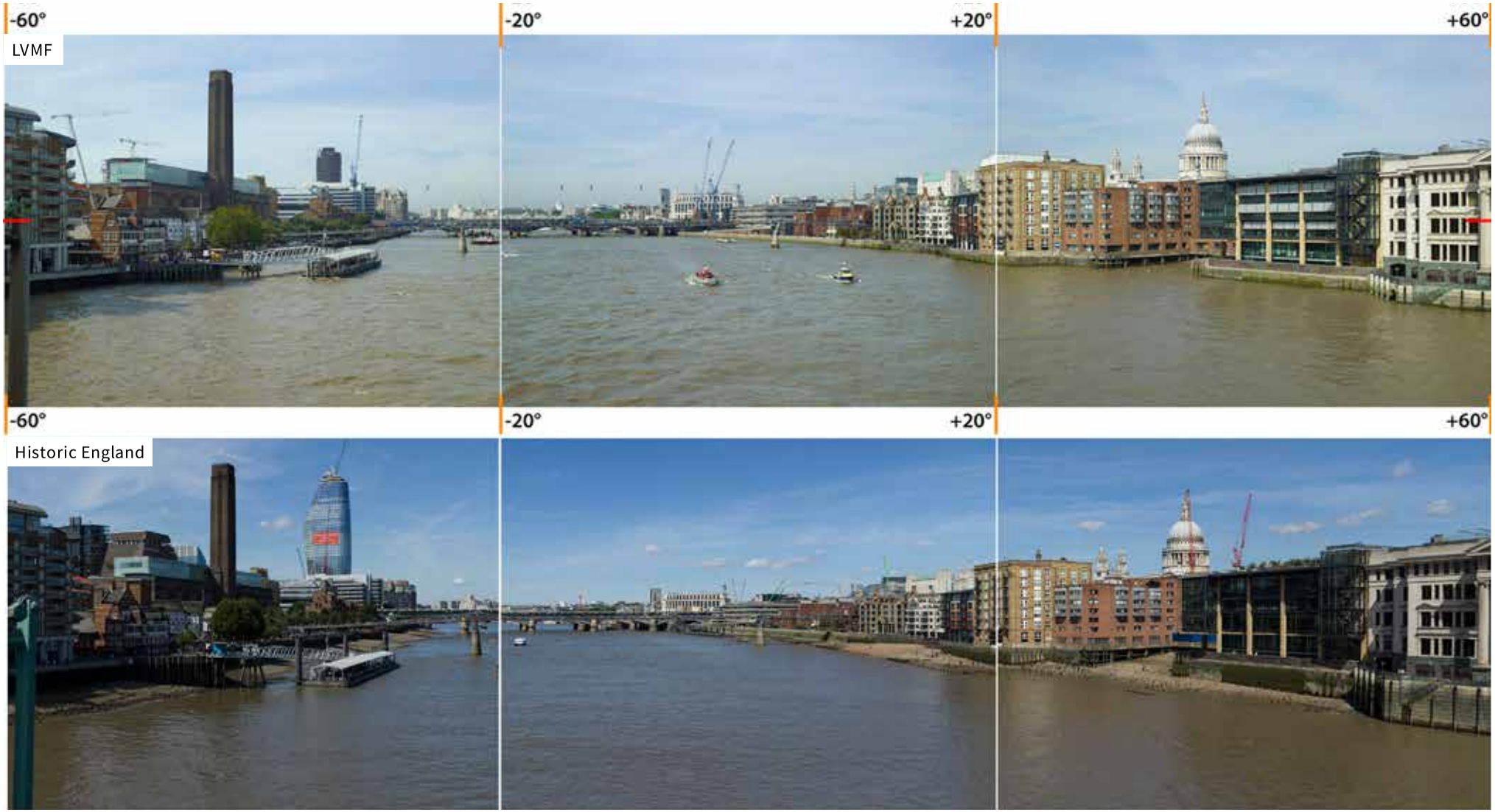


Southwark Bridge: upstream

- the upstream pavement

River prospect: upstream

12A.1



Southwark Bridge: upstream

- the upstream pavement

River prospect: upstream

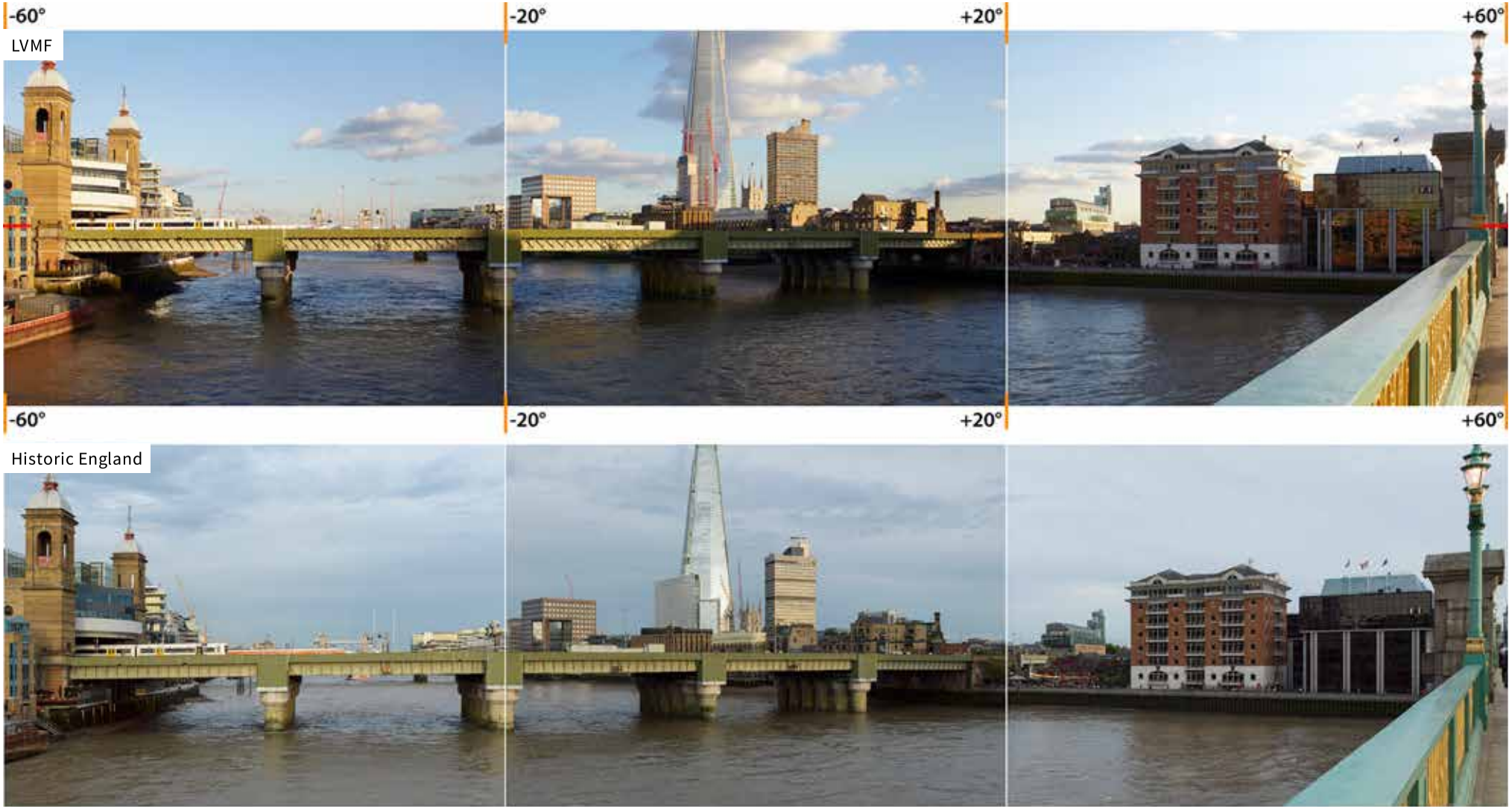
12A.2

Southwark Bridge: downstream

- the downstream pavement

River prospect: Downstream

12B.1



Millennium Bridge

- Millennium Bridge

River prospect: St Paul's Cathedral

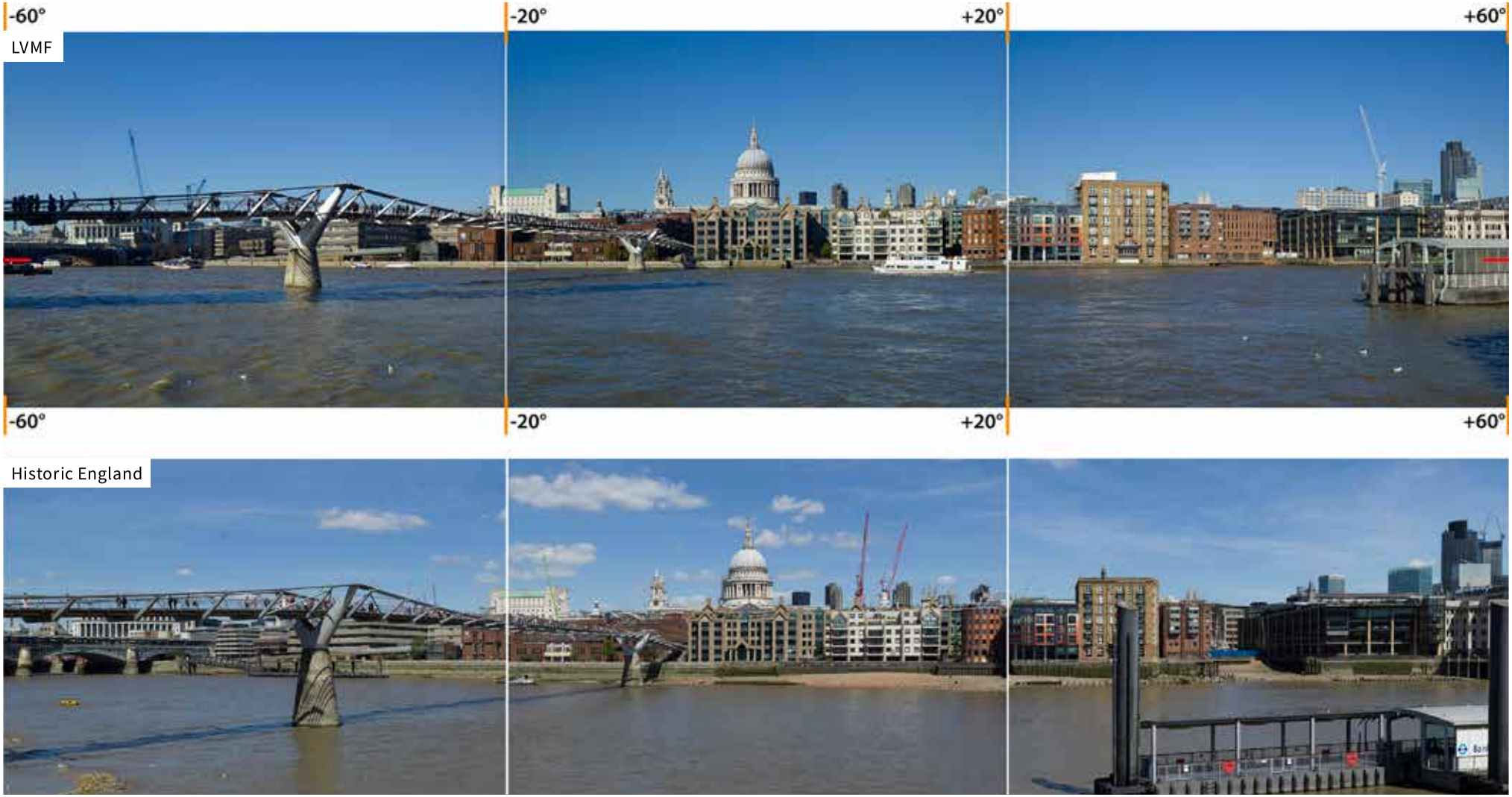
13A.1

Thames side at Tate Modern

- Thames side at Tate Modern

River prospect: St Paul's Cathedral

13B.1

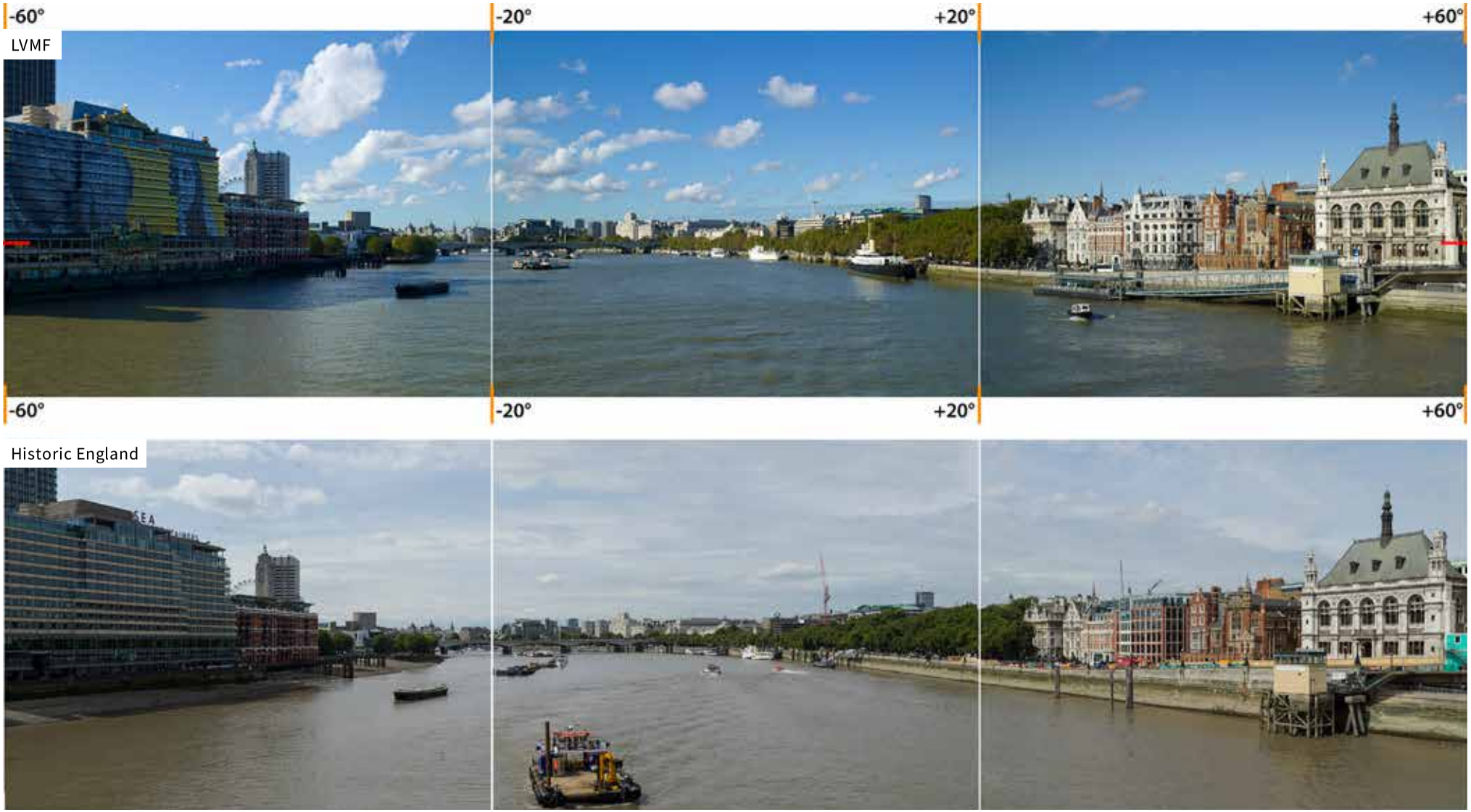


Blackfriars Bridge: upstream

- the upstream pavement

River prospect: upstream

14A.1



Waterloo Bridge: upstream

- the upstream pavement

River prospect: upstream

15A.1

Waterloo Bridge: upstream

- the upstream pavement

River prospect: upstream

15A.2

Waterloo Bridge: downstream

The Downstream Pavement

River prospect: Downstream

15B.1

Waterloo Bridge: downstream

The Downstream Pavement

River prospect: Downstream

15B.2

LVMF

Historic England

The South Bank: outside the National Theatre

River prospect: Somerset House and Waterloo Bridge

16A.1

The South Bank: Gabriel's Wharf viewing platform

River prospect: St Paul's Cathedral

16B.1

The South Bank: Gabriel's Wharf viewing platform

River prospect: St Paul's Cathedral

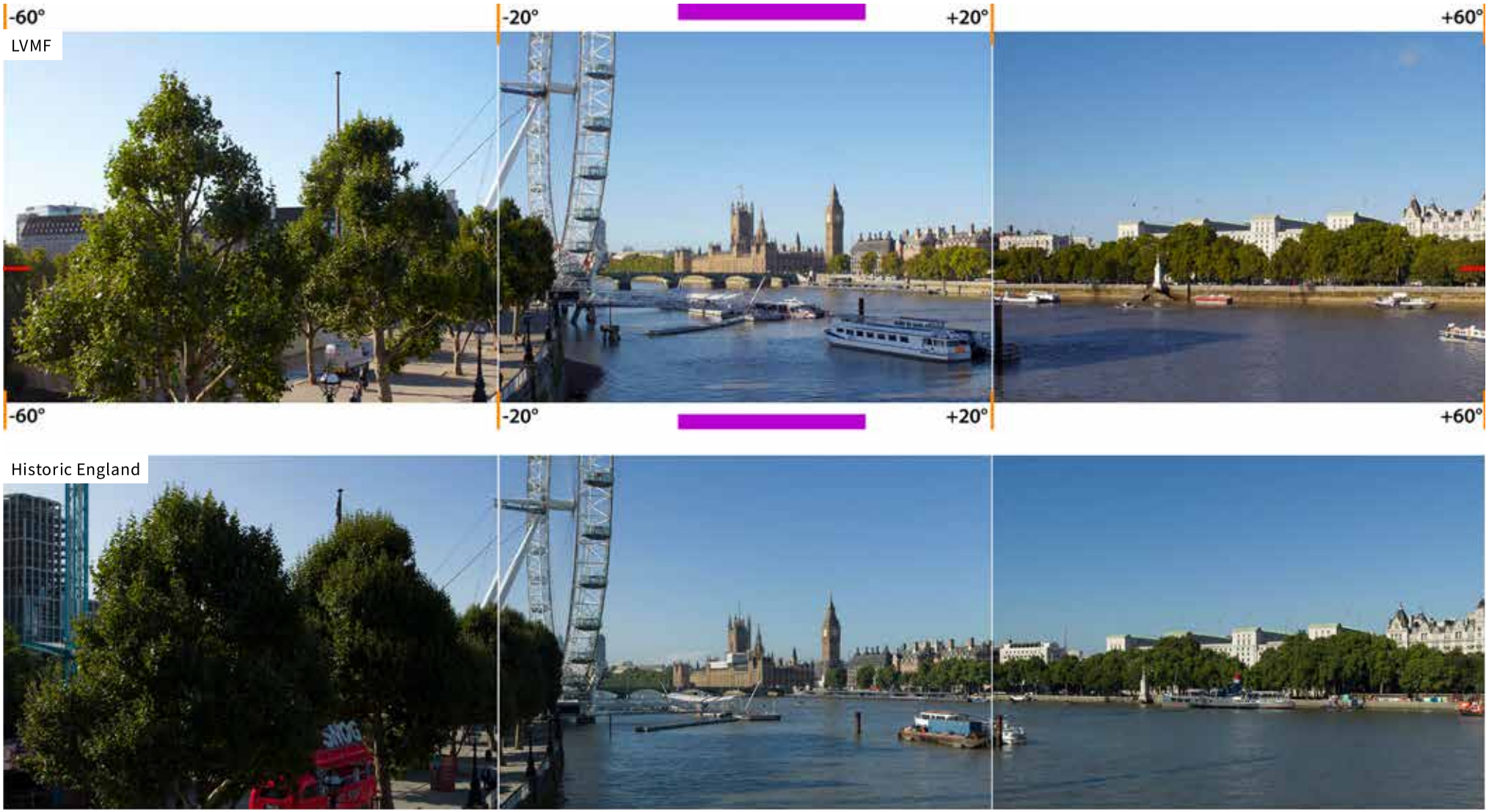
16B.2

Golden Jubilee/Hungerford Footbridges

- the upstream pavement

River prospect: upstream

17A.1

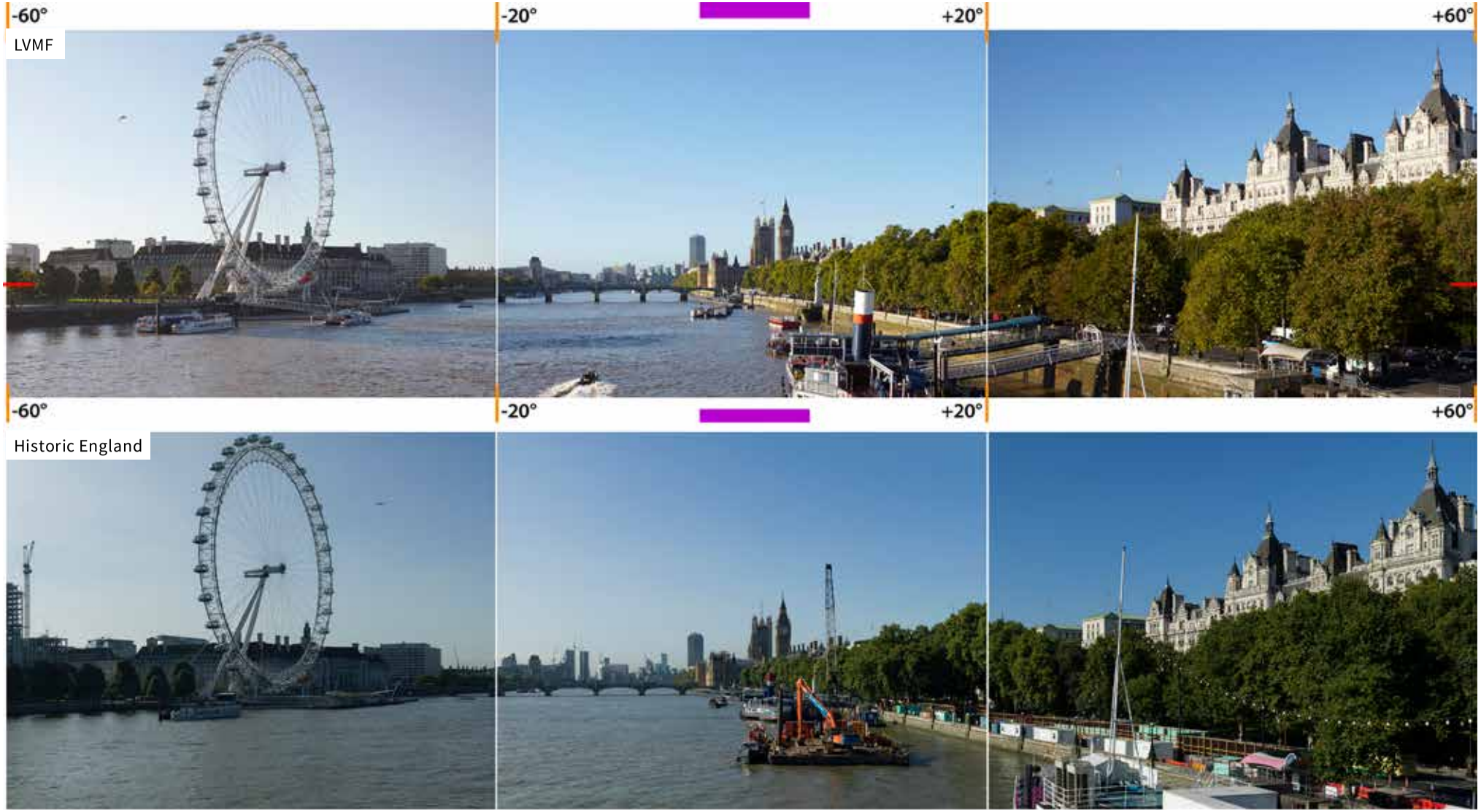


Golden Jubilee/Hungerford Footbridges

- the upstream pavement

River prospect: upstream

17A.2



Historic England

Golden Jubilee/Hungerford Footbridges

- the downstream pavement

River prospect: downstream

17B.1

Golden Jubilee/Hungerford Footbridges

- the downstream pavement

River prospect: downstream

17B.2

Westminster Bridge: upstream

- the upstream pavement

River prospect: upstream - The Palace of Westminster

18A.1

Westminster Bridge: upstream

-the upstream pavement

River prospect: upstream - The Palace of Westminster

18A.2

Westminster Bridge: upstream

- the upstream pavement

River prospect: upstream

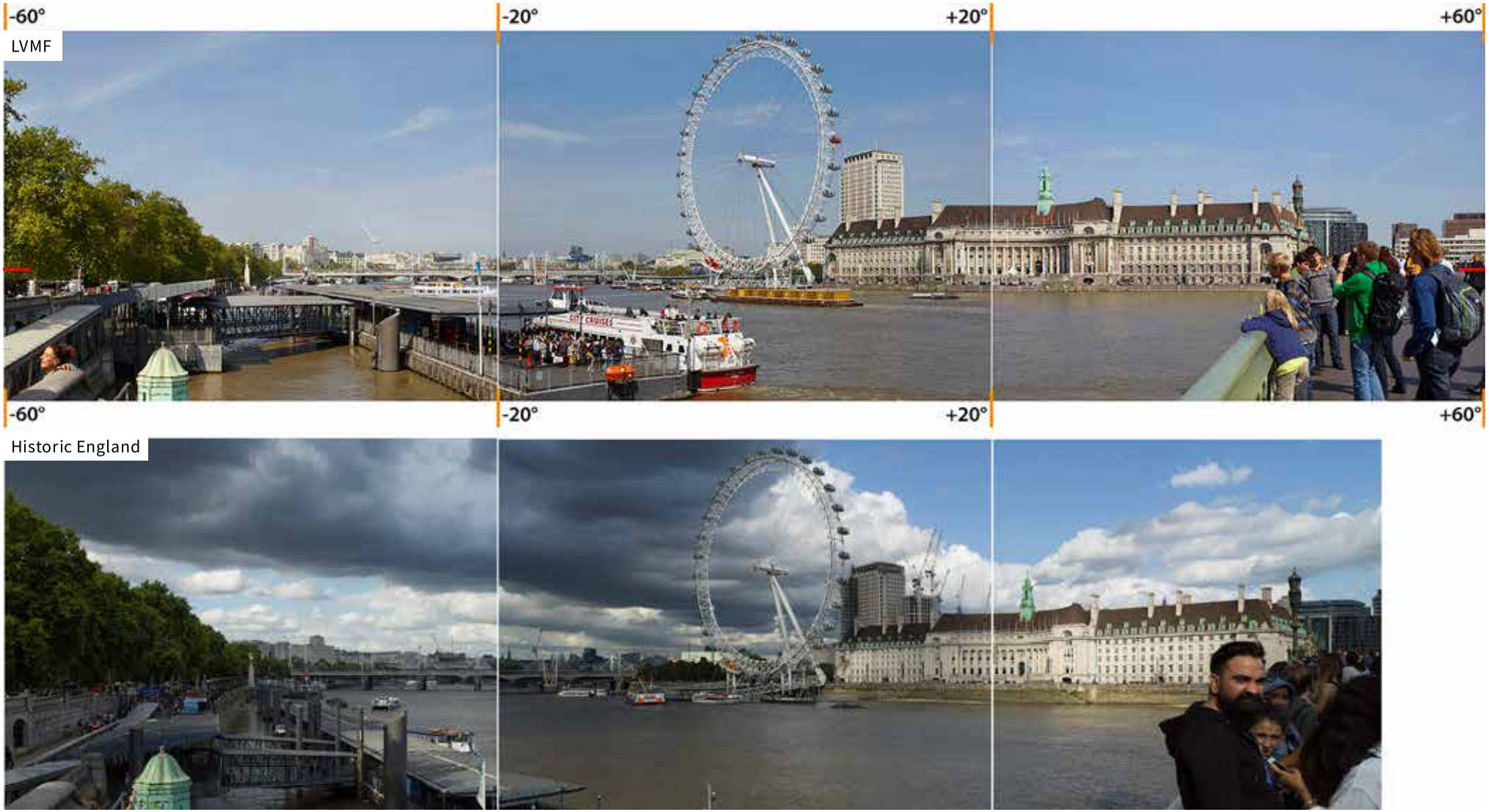
18A.3

Westminster Bridge: downstream

- the downstream pavement

River prospect: downstream - The London Eye

18B.1



Westminster Bridge: downstream

- the downstream pavement

River prospect: downstream

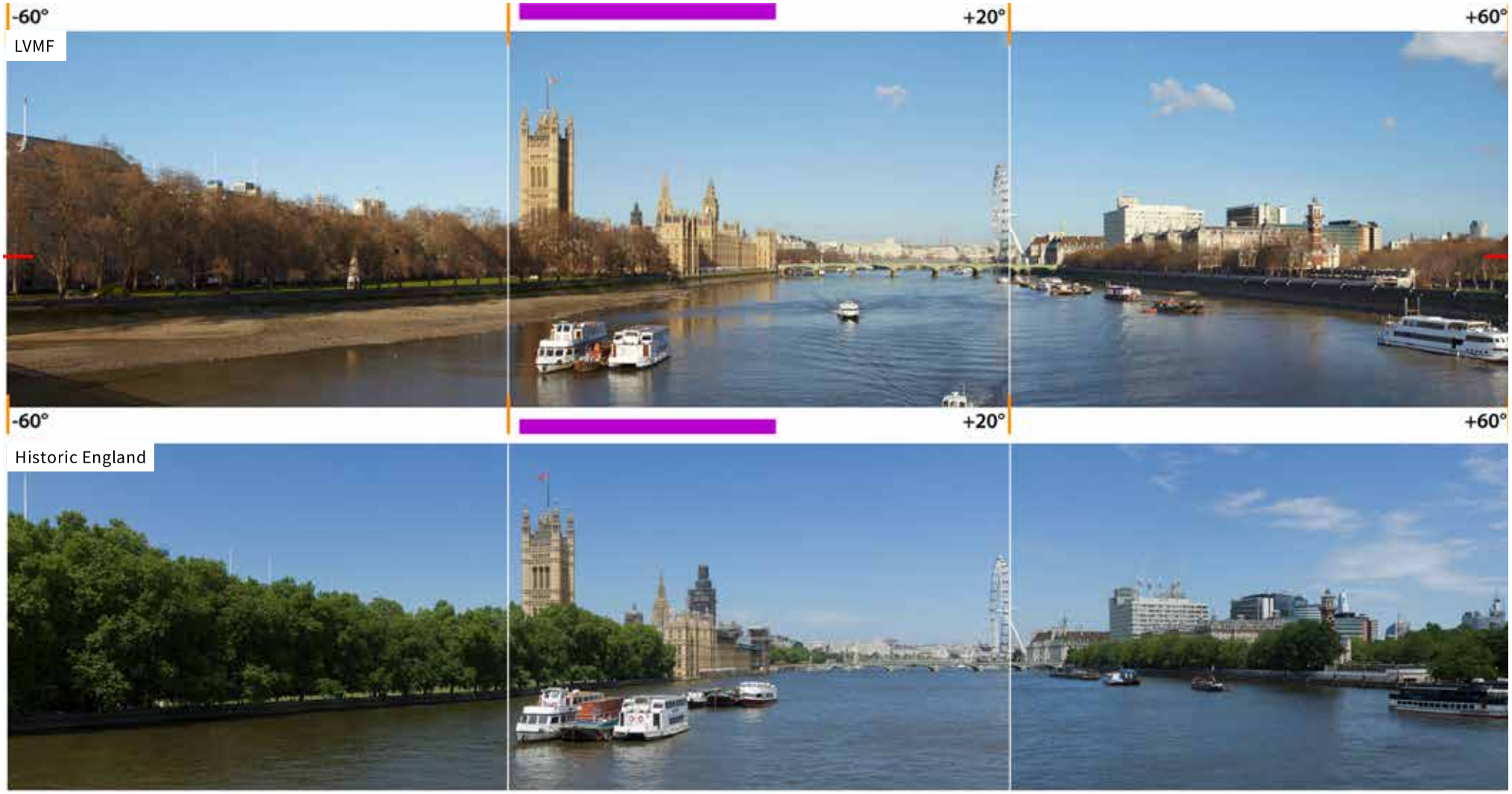
18B.2

Lambeth Bridge: downstream

- the downstream pavement

River prospect: downstream - The Palace of Westminster

19A.1



Lambeth Bridge: downstream

- the downstream pavement

River prospect: downstream - The Palace of Westminster

19A.2

Victoria Embankment: between Westminster and Hungerford Bridges

- opposite County Hall

River prospect: County Hall

20A.1

Victoria Embankment: between Westminster and Hungerford Bridges

- at Cleopatra's Needle

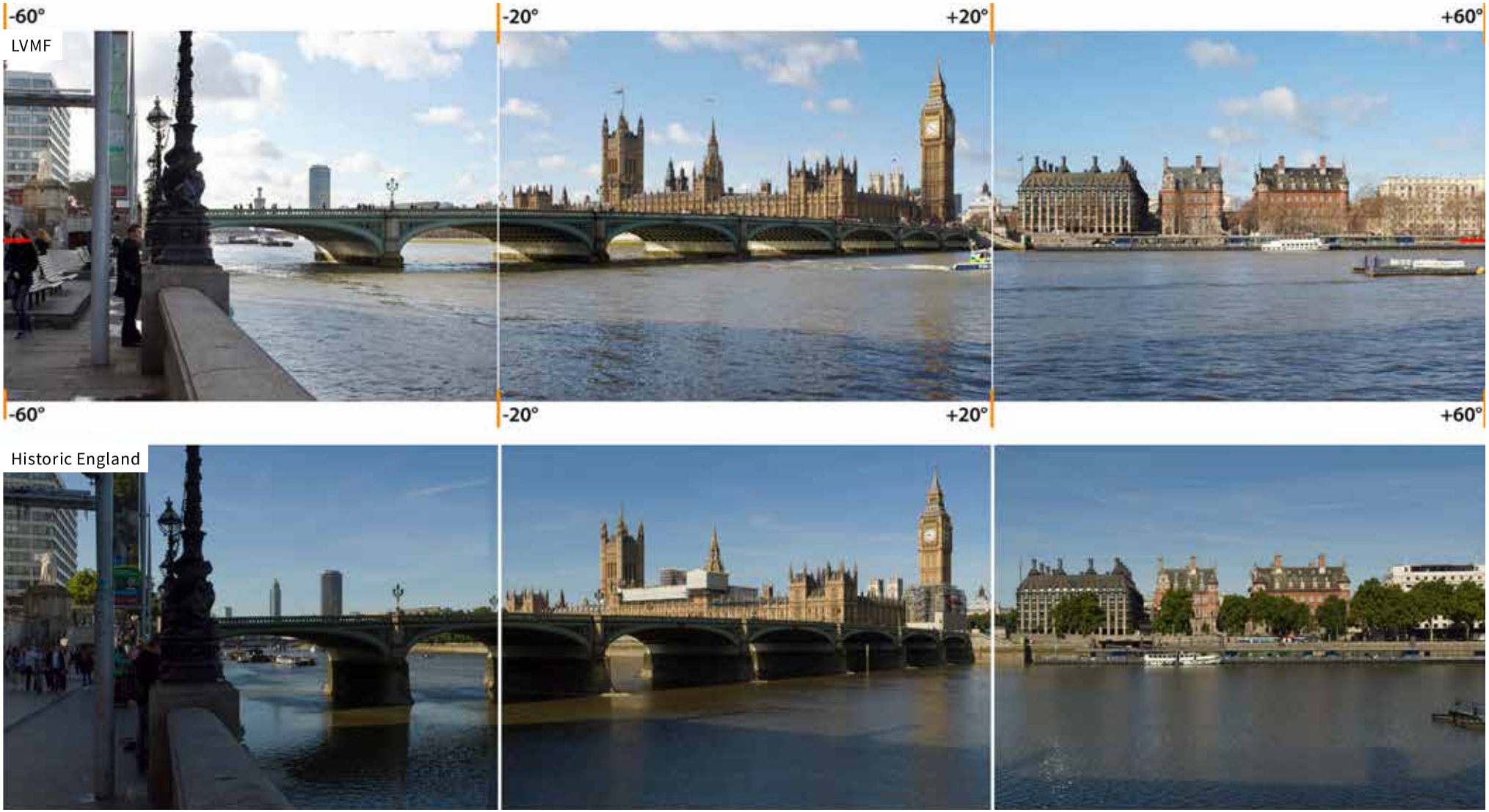
River prospect: County Hall

20B.1

Thames side in front of County Hall

River prospect: The Palace of Westminster and Westminster Bridge

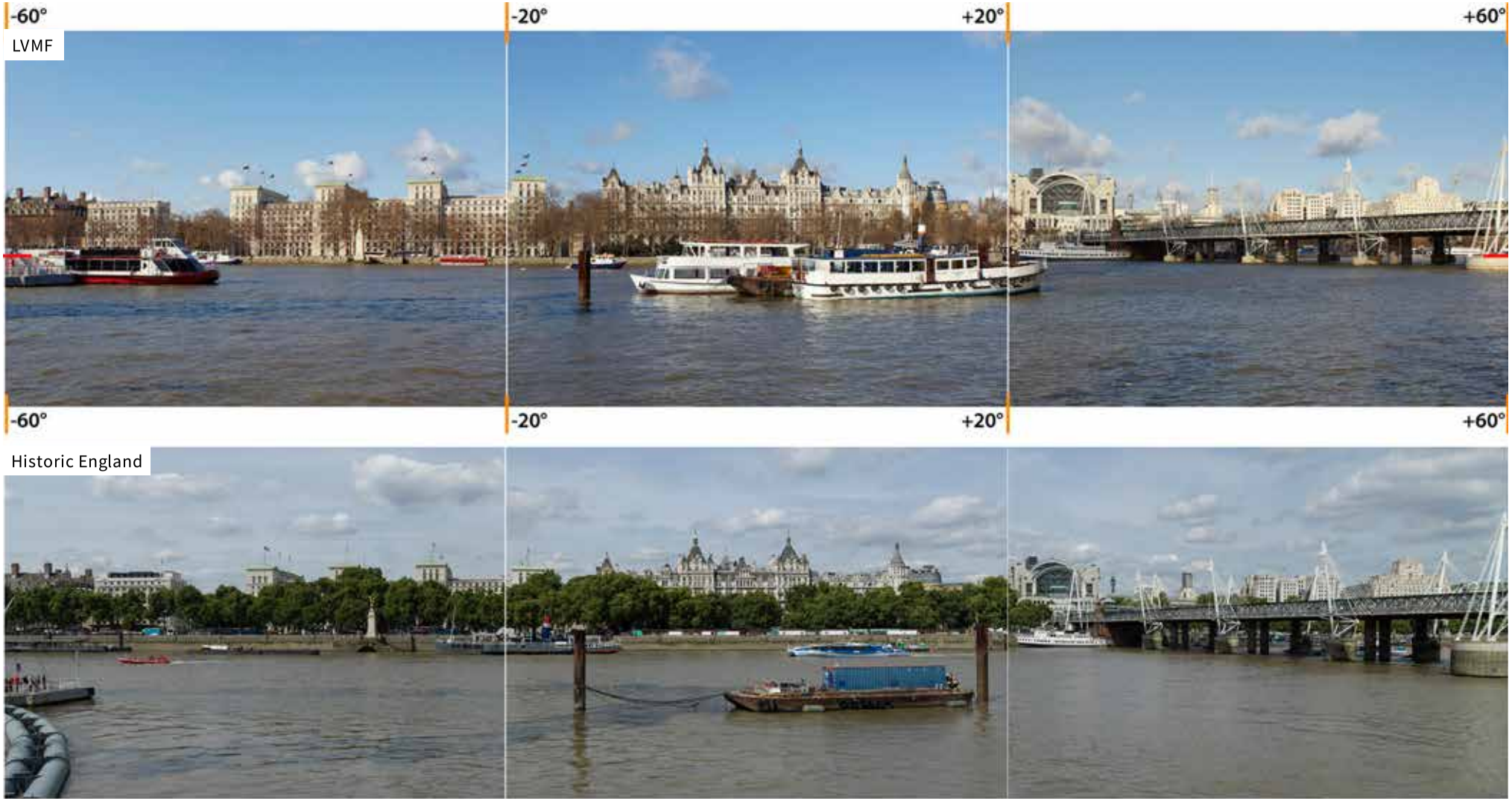
21A.1



Jubilee Gardens

River prospect: Whitehall Court and the Victoria Embankment

21B.1



Albert Embankment: between Westminster and Lambeth Bridges

River prospect: The Palace of Westminster

22A.1

Albert Embankment: between Westminster and Lambeth Bridges

River prospect: The Palace of Westminster

22A.2

Albert Embankment: between Westminster and Lambeth Bridges

River prospect: The Palace of Westminster

22A.3

Serpentine Bridge

– at the centre of the bridge (Centre of Eastern side of bridge).

Looking towards: Palace of Westminster (The Central Tower, above the lobby crossing).

23A.1

LVMF

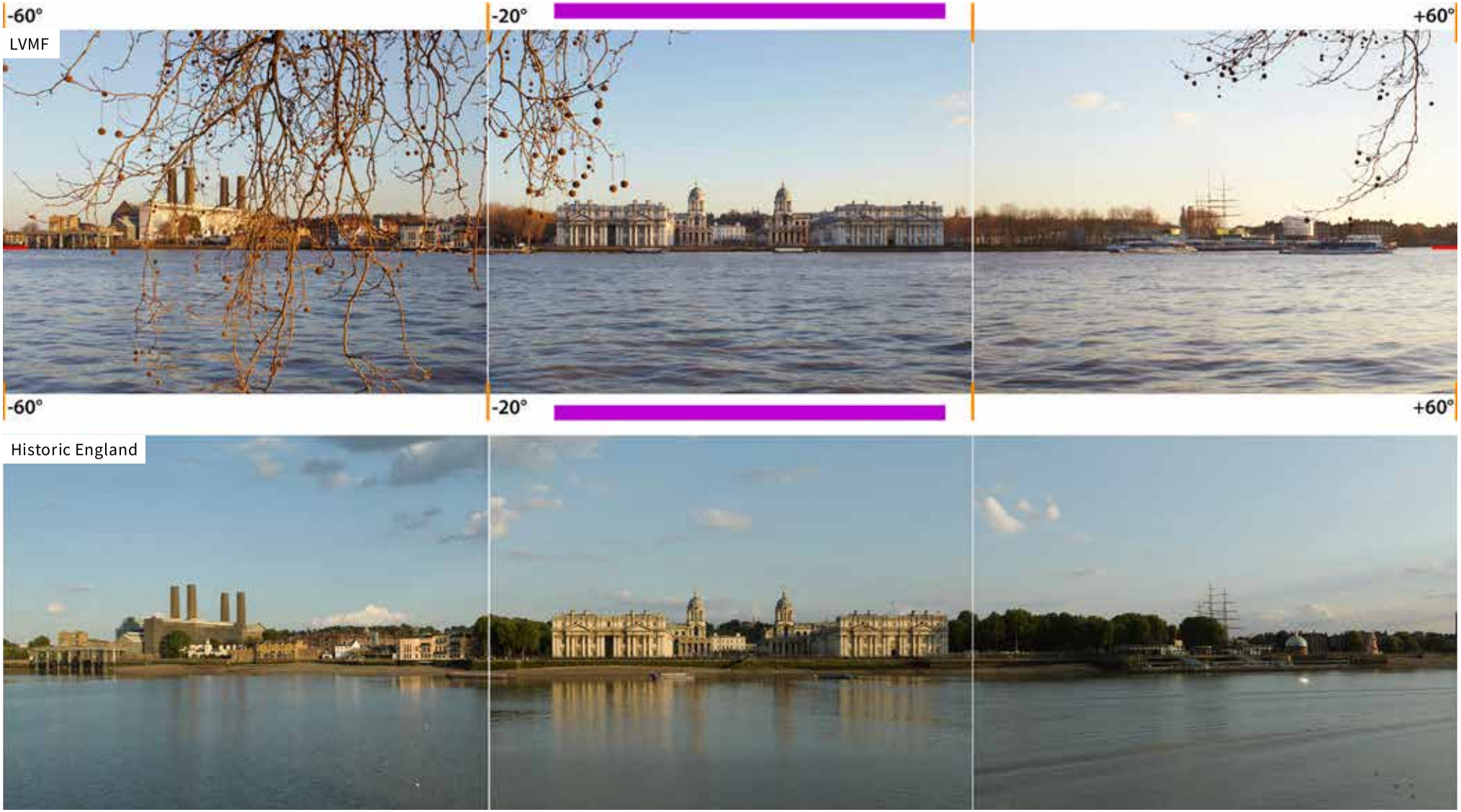
Historic England

Island Gardens, Isle of Dogs

- opposite the Royal Naval Hospital

Townscape view: Greenwich Maritime World Heritage Site - Royal Naval College and Greenwick Park

24A.1

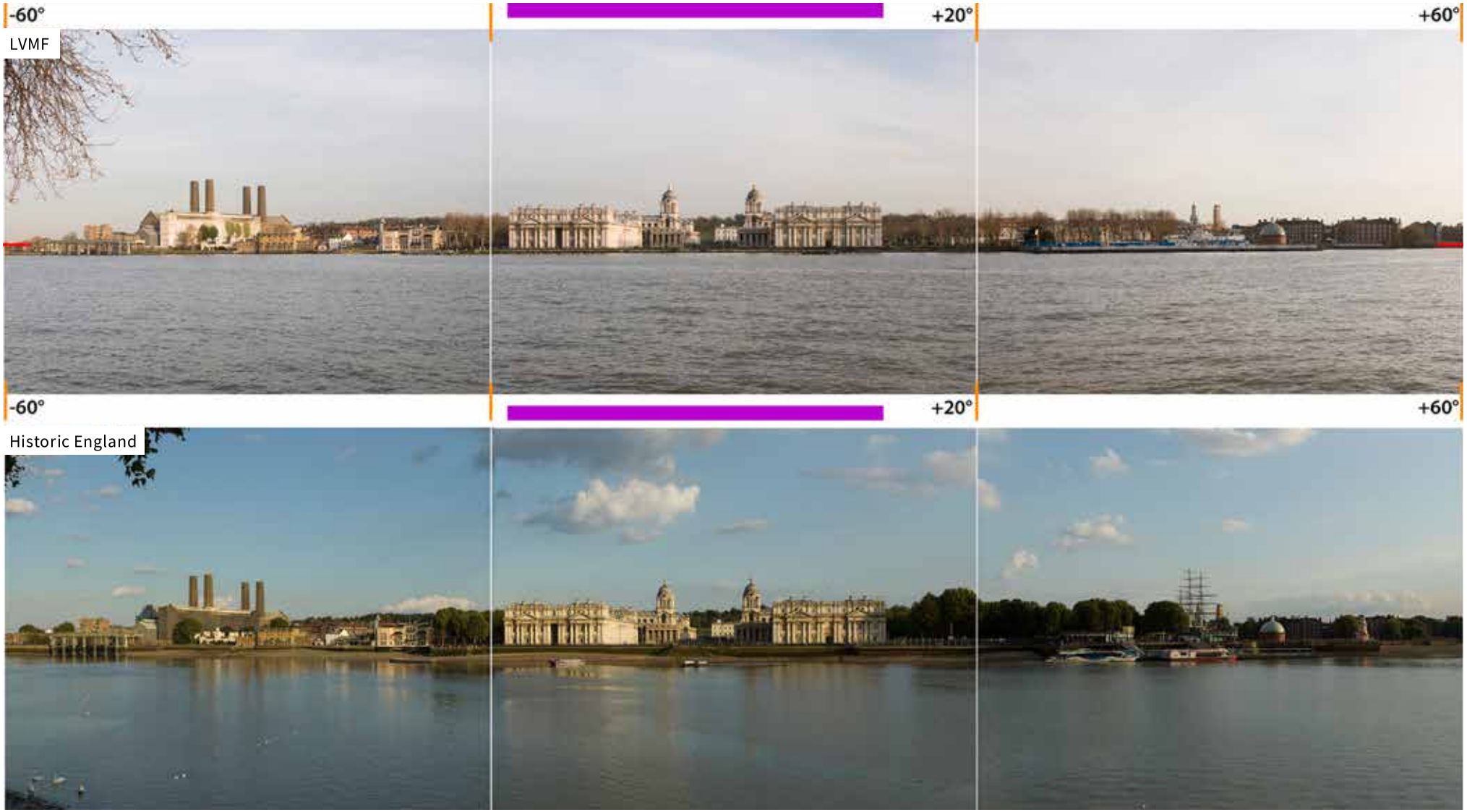


Island Gardens, Isle of Dogs

- opposite the Royal Naval Hospital

Townscape view: Greenwich Maritime World Heritage Site - Royal Naval College and Greenwick Park

24A.2



Island Gardens, Isle of Dogs

- opposite the Royal Naval Hospital

Townscape view: Greenwich Maritime World Heritage Site - Royal Naval College and Greenwick Park

24A.3

25A.1

The Queens Walk at City Hall

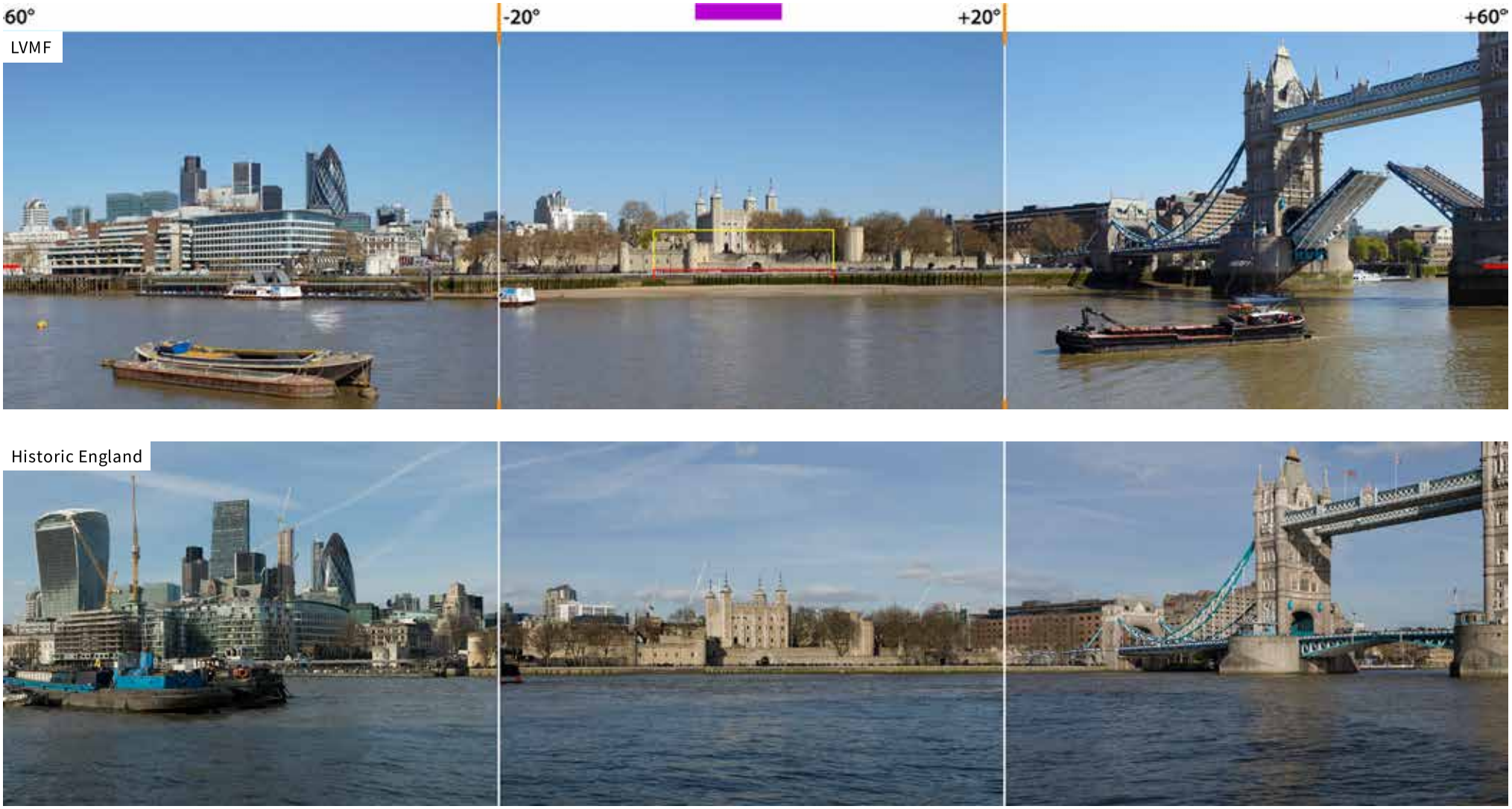
- foot of pathway from Potter's Fields (On line running through eastern edge of City Hall).

Looking towards: Tower of London (Centre of south façade; base of merlons).

LVMF

Historic England

Historic England


60°
-20°
+20°
+60°
LVMF
Historic England

The Queens Walk at City Hall

- the Public Terraces at City Hall

Townscape view: The Tower of London

25A.2

The Queens Walk at City Hall

– the Public Terraces at City Hall

Townscape view: The Tower of London

25A.3

St James' Park Bridge

– the footbridge across the lake

Townscape view: Horse Guards Parade

26A.1

27A.1

Parliament Square: south-west corner

– outside UK Supreme Court

Townscape view: Parliament Square and the Palace of Westminster

LVMF

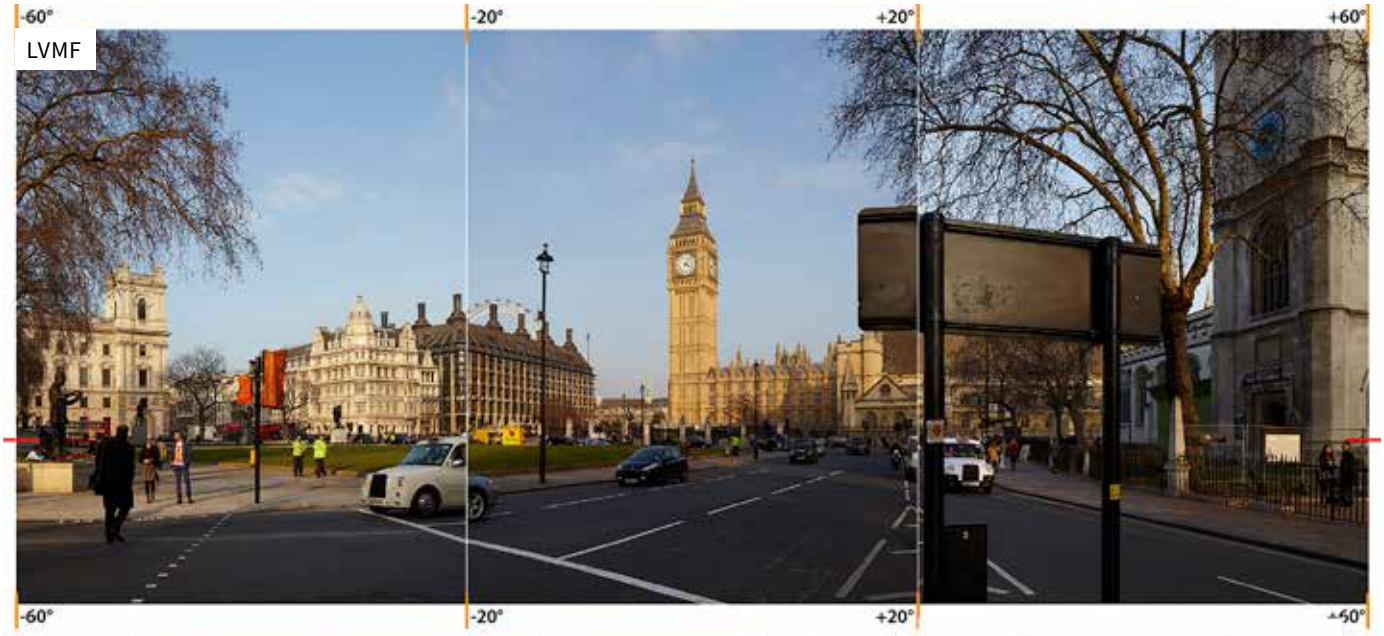
Historic England

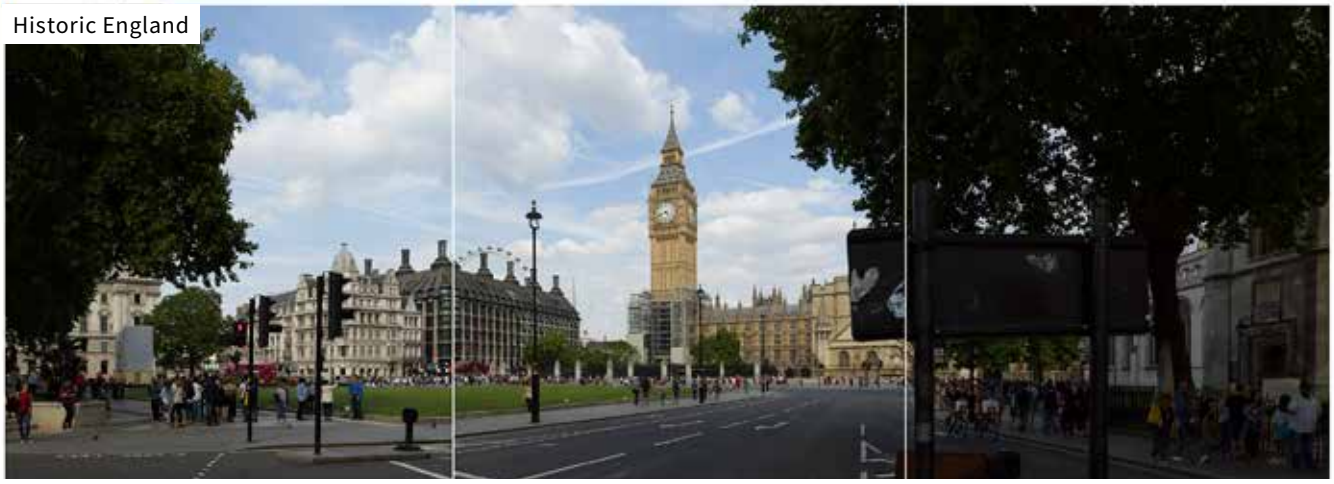
27A.2

Parliament Square: south-west corner

- outside UK Supreme Court

Townscape view: Parliament Square and the Palace of Westminster





27B.1

Parliament Square: north pavement

Townscape view: Westminster World Heritage Site - The Palace of Westminster and Westminster Abbey

27B.2

Parliament Square: North Pavement

Townscape view: Westminster World Heritage Site - The Palace of Westminster and Westminster Abbey

Survey Data

Survey

The 61 assessment points were located using a Trimble Geo7X handheld Global Navigation Satellite Systems [GNSS] receiver and the views photographed in concordance with the methodology set out in the *London Views Management Framework* (Appendix B, para 461, 2012). Phase 1 of the photographic survey focussed on the Protected Vistas and Phase 2 on capturing the remaining views.

Using internet acccess to the Trimble VRS Now™ service and Satellite Based Augmentation Systems [SBAS] gives the Geo7X a potential horizontal accuracy of 0.1m (10cm) although due to the volume of interference in London, such as large buildings and overhanging trees obscuring parts of the sky, we often only achieved horizontal accuracies of around 0.5m (50cm).

The camera height was approximately 1.6m directly over each assessment point and levelled with both manual and digital spirit levels. The most suitable weather and light conditions, for clarity and definition of the buildings, were chosen and every attempt was made to match the conditions in which the 2011/2 images were taken. Historic England did not have access to the list of camera equipment used in the LVMF survey. It was not always possible to match the weather and the colour of the light for consistency.

The significant amount of haze and pollution in central London, between the camera and the buildings in the Protected Vista, sometimes degraded the optical quality. A low ISO sensitivity was chosen where possible to minimize 'noise' levels of the image. The images were processed in a standard 'raw' conversion in Adobe Bridge and were not changed beyond standard contrast and light adjustment.

The following pages detail our observations regarding the location and condition of the assessment points from carrying out the survey, followed by a gazetteer of the assessment points, including how to locate them and comments noted during the survey about the accuracy of marked survey locations. This should allow the survey to be easily repeated in the future without the need for high-level survey equipment.

Observations

Combining the use of the Geo7X GNSS receiver and high-specification photographic equipment (see list below) has enabled us to re-record the Protected Vistas of the LVMF (2012) as closely as possible. Concerns relating to the survey points themselves are expressed in a simple 'traffic light' system overleaf: green – no issue; amber – minor or potential issues; red – significant issues.

Location

Using the Geo7X GNSS reciever helped navigate to and identify the assessment points for the Protected Vistas with a high level of accuracy and allow the following observations to be made:

- Five of the Protected Vista assessment points have significant issues in terms of location. Through work to enhance the viewing terraces on the summits of Parliament and Primrose Hills the marked assessment points have been lost. In both cases the new terrace **excludes** the assessment point. At Alexander Palace a tree in the foreground obscures the view from the marked point but this is nearly 2m away from the coordinates quoted for the assessment point in Appendix B of the LVMF.

- Two Protected Vista assessment points, highlighted in amber, have queries over the accurate location of the assessment point.

- Only 6 (just under half) of the Protected Vista assessment points were found without difficulty in their correct positions.

- Most of the other assessment points are marked, although seven have no markers or are marked incorrectly. For example, Assessment Point 19A.1 was marked at a location several metres away from the quoted coordinates and 12B.1 was incorrectly labelled as 13B.1.

These discrepancies suggest that more needs to be done to manage the assessment points, and to clearly mark and signpost them to ensure that the public are able to access and enjoy them. Although Appendix E of the LVMF provides detailed instructions relating to the curvature of the earth, over the relatively short distances of the Protected Vistas the local topography has a far more significant impact. The increased use of 3D models of London could also be used to gauge the impact of development on the Protected Vistas and other views across London.

Assessment Point Locations

Protected Vistas are highlighted in orange.

Key: No issue Minor/potential issue Major issue

Assessment Point	Viewing Location	Location (at time of our survey)
1A.1	Alexandra Palace: the viewing terrace	
1A.2	Alexandra Palace: the viewing terrace	
2A.1	Parliament Hill: the Summit	
2A.2	Parliament Hill: the Summit	
2B.1	Parliament Hill: east of the summit	
3A.1	Kenwood: the viewing gazebo	
4A.1	Primrose Hill: the summit	
4A.2	Primrose Hill: the summit	
5A.1	Greenwich Park: the General Wolfe statue	
5A.2	Greenwich Park: the General Wolfe statue	
6A.1	Blackheath: the Point	
7A.1	The Mall: at Admiralty Arch	
8A.1	Westminster Pier: the orientation plaque	
9A.1	King Henry VIII's Mound, Richmond Park	
10A.1	Tower Bridge: upstream	
11A.1	London Bridge: upstream	
11B.1	London Bridge: downstream	
11B.2	London Bridge: downstream	
12A.1	Southwark Bridge: upstream	
12A.2	Southwark Bridge: upstream	
12B.1	Southwark Bridge: downstream	

13A.1	Millennium Bridge	
13B.1	Thames side at Tate Modern	
14A.1	Blackfriars Bridge: upstream	
15A.1	Waterloo Bridge: upstream	
15A.2	Waterloo Bridge: upstream	
15B.1	Waterloo Bridge: downstream	
15B.2	Waterloo Bridge: downstream	
16A.1	The South Bank: outside Royal National Theatre	
16B.1	The South Bank: Gabriel's Wharf viewing platform	
16B.2	The South Bank: Gabriel's Wharf viewing platform	
17A.1	Golden Jubilee/Hungerford Footbridges: upstream	
17A.2	Golden Jubilee/Hungerford Footbridges: upstream	
17B.1	Golden Jubilee/Hungerford Footbridges: downstream	
17B.2	Golden Jubilee/Hungerford Footbridges: downstream	
18A.1	Westminster Bridge: upstream	
18A.2	Westminster Bridge: upstream	
18A.3	Westminster Bridge: upstream	
18B.1	Westminster Bridge: downstream	
18B.2	Westminster Bridge: downstream	
19A.1	Lambeth Bridge: downstream	
19A.2	Lambeth Bridge: downstream	
20A.1	Victoria Embankment: between Westminster and Hungerford Bridges	
20B.1	Victoria Embankment: between Waterloo and Hungerford Bridges	
21A.1	Thames side in front of County Hall	
21B.1	Jubilee Gardens	
22A.1	Albert Embankment: opposite the Palace of Westminster	

22A.2	Albert Embankment: opposite the Palace of Westminster	
22A.3	Albert Embankment: opposite the Palace of Westminster	
23A.1	Serpentine Bridge	
24A.1	Island Gardens: opposite the Royal Naval College	
24A.2	Island Gardens: opposite the Royal Naval College	
24A.3	Island Gardens: opposite the Royal Naval College	
25A.1	The Queens Walk at City Hall	
25A.2	The Queens Walk at City Hall	
25A.3	The Queens Walk at City Hall	
26A.1	St James' Park Bridge	
27A.1	Parliament Square: south-west	
27A.2	Parliament Square: south-west	
27B.1	Parliament Square: north pavement	
27B.2	Parliament Square: north pavement	

Appendix B

The grid references quoted in the LVMF Appendix B are rounded to only one decimal place or 10cm. On their own these are not sufficient to find the assessment points. Visual aids such as maps and an image showing how the assessment point is actually marked on the ground are needed. It is far easier to find the assessment points once you know exactly what you're looking for.

Image resolution

Even using the 'print' quality .pdfs, the photographs used in the LVMF 2012 are very small and pixelate rapidly, which makes direct comparison difficult. Our photography, using a Hasselblad H6D camera with a 100 megapixel digital sensor, provides much higher resolution images which will be deposited with the Historic England Archive. They will be publically accessible and available for direct comparison in the next review of the LVMF.

Key to assessment points: Panorama Linear view River prospect Townscape view

1A.1

Alexandra Palace: the viewing terrace

– south-western section (near the viewing telescope).
Looking towards: St Paul's Cathedral (Central axis of the dome, at the base of the drum).

NGR: 529611.2, 189963.7
Camera height: 93m

Notes: Assessment point 1A.1 is clearly marked by survey paint and a nail in the wall. The large building of Alexandra Palace behind impeded satellite signals and reduced acuracy on the Geo7X.

Surveyed location: 17/03/2017 10:34:00
NGR: 529611.23 189961.6
Accuracy: 0.37m Horizontal Dilution of Precision [HDOP] 1.8

1A.2

Alexandra Palace: the viewing terrace

– approaching from the north eastern car park (approx 90m north-east of viewing telescope).
Looking towards: St Paul's Cathedral (Central axis of the dome, at the base of the drum).

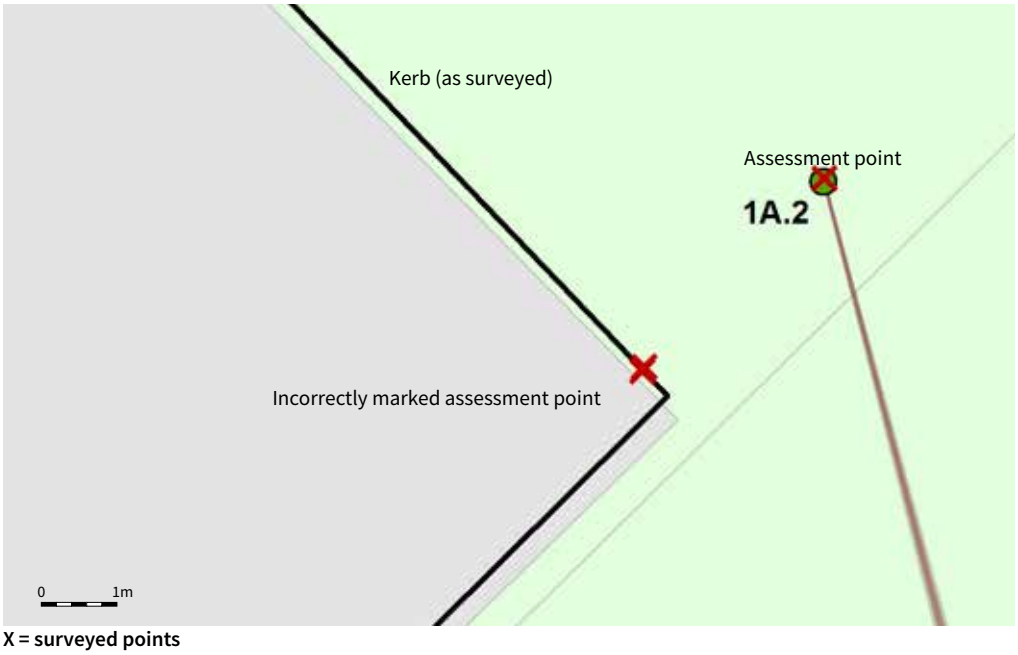
NGR: 529710.30, 190072.20
Camera height: 94m
Bearing: 165.3°
Distance: 9.2km

Notes: This assessment point is incorrectly marked: Ordnance Survey Mastermap shows the assessment point to be several metres northeast of the end of the hard-surface terrace, however, the kerb defining the terrace has been marked as assessment point 1A.2 and is clearly the point used for the photography used in the LVMF (2012). Unfortunately, from that marked point and as observed in paragraphs 83 and 91 of the LVMF, trees in the foreground impact on the view; at a camera height of 1.6m above that marked point **the nearest tree obscures the view to St Paul's Cathedral**.

Marked point surveyed: 17/03/2017 08:59:50
NGR: 529709.13 190070.98
Accuracy: 0.1m (10cm) Horizontal Dilution of Precision [HDOP] 1.4

We therefore used the handheld GNSS to try and establish a more correct assessment point, although it is not marked in the grass.

Surveyed location: 17/03/2017 09:17:38
NGR: 529710.31 190072.22 Height: 92.298m
Accuracy: 0.1m (10cm) Horizontal Dilution of Precision [HDOP] 0.9



X = surveyed points
Protected Vista (Panorama) assessment point, from which Viewing Corridors radiate.

2A.1

Parliament Hill: the Summit

– at the orientation board.

Looking towards: St Paul's Cathedral (Central axis of the dome, at the base of the drum).

NGR: 527665.40, 186131.50
Camera height: 98.1m

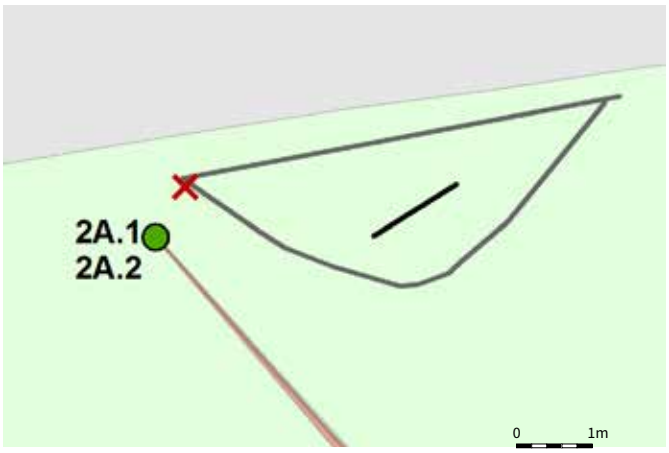
Bearing: 138.7°
Distance: 6.6km

Notes: The assessment point has been removed. The information/orientation panel has been replaced since the photograph used in the LVMF 2012 was taken, in heed of the recommendation in paragraph 104 of the LVMF 2012. A new viewing platform has been created and the new information/ orientation panel is located several metres to the east of the original. As the new panel states that it was donated in July 2016 we can date this work to the summer of 2016.

To facilitate repeat survey, we adopted the survey nail at the western point of the viewing platform rather than a non-defined spot in the dirt. This places the point used within 0.7metres of the coordinates given in the LVMF.

Surveyed location: 17/03/2017 13:49:57
NGR: 527665.80 186132.16 Height: 96.733m
Accuracy: 0.1m (10cm) Horizontal Dilution of Precision [HDOP]: 0.9

Adopted survey nail used as assessment point 2A.1 and 2A.2



X = surveyed point; thick grey line = surveyed outline of new viewing platform; thick black line = new orientation/information panel

Protected Vista (Panorama) assessment point, from which Viewing Corridors radiate.

2A.2

Parliament Hill: the Summit

– at the orientation board.

Looking towards: Palace of Westminster (The Central Tower, above the lobby crossing).

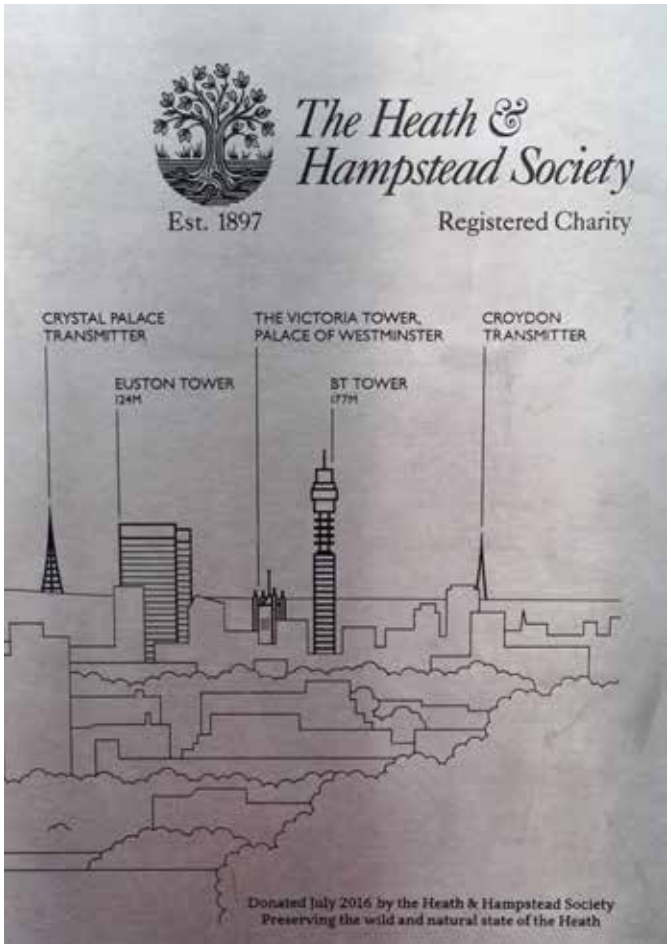
NGR: 527665.40, 186131.50
Camera height: 98.1m

Bearing: 158.6°
Distance: 7.1km

Notes: The assessment point has been removed. The information/orientation panel has been replaced since the photograph used in the LVMF 2012 was taken, in heed of the recommendation in paragraph 104 of the LVMF 2012. A new viewing platform has been created and the new information/ orientation panel is located several metres to the east of the original. As the new panel states that it was donated in July 2016 we can date this work to the summer of 2016.

To facilitate repeat survey, we adopted the survey nail at the western point of the viewing platform rather than a non-defined spot in the dirt. This places the point used within 0.7metres of the coordinates given in the LVMF.

Surveyed location: 17/03/2017 13:49:57
NGR: 527665.80 186132.16 Height: 96.733m
Accuracy: 0.1m (10cm) Horizontal Dilution of Precision [HDOP]: 0.9



2B.1

Parliament Hill - east of the summit

– at the prominent oak tree

Looking towards: Palace of Westminster (The Central Tower, above the lobby crossing).

NGR: 528043.10, 186154.50
Camera height: 71.61m

Bearing: 161.6°
Distance: 7km

Notes: The prominent Oak tree itself blocks some satellite signals and accuracy fell to about 0.5metres, however, the assessment point is clearly marked towards the northern side of the path.

Surveyed location: 17/03/2017 15:26:17
NGR 528042.91 186155.96 Height: 72.577m
Accuracy: 0.45m Horizontal Dilution of Precision [HDOP]: 0.6

3A.1

Kenwood: the viewing gazebo

– in front of the orientation board (Centre line of the gazebo).

Looking towards: St Paul's Cathedral (Central axis of the dome, at the basis of the drum).

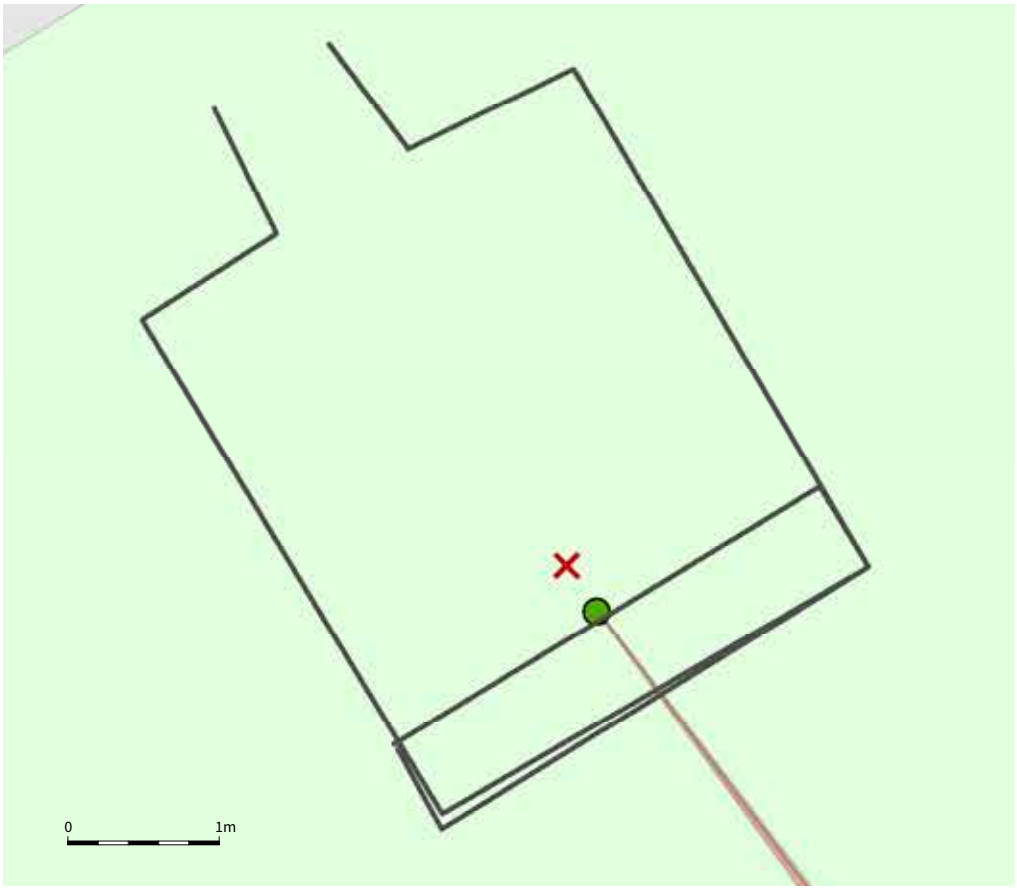
NGR: 527270.10, 187486.20
Camera height: 114.51m

Bearing: 143°
Distance: 7.9km

Notes: The gazebo has been removed although the distinctive paving that lay beneath it does not appear to have been disturbed and the assessment point is clearly marked, however, the co-ordinates for the assessment point are circa 0.35m southsoutheast of the marked point.
The orientation board has also been replaced; by English Heritage in 2016.

Surveyed location: 06/04/2017 17:17:28
NGR 527269.9 187486.5 Height: 112.642m
Accuracy: 0.1 m Horizontal Dilution of Precision [HDOP]: 1.2

Assessment point 3A.1 is marked by a survey nail c 0.35m NNW of the quoted NGR



X = surveyed point; thick black line = surveyed outline of paved area and new orientation/information panel
= Protected Vista (Panorama) assessment point, from which Viewing Corridor radiates.

4A.1

Primrose Hill: the summit

– at the orientation board.

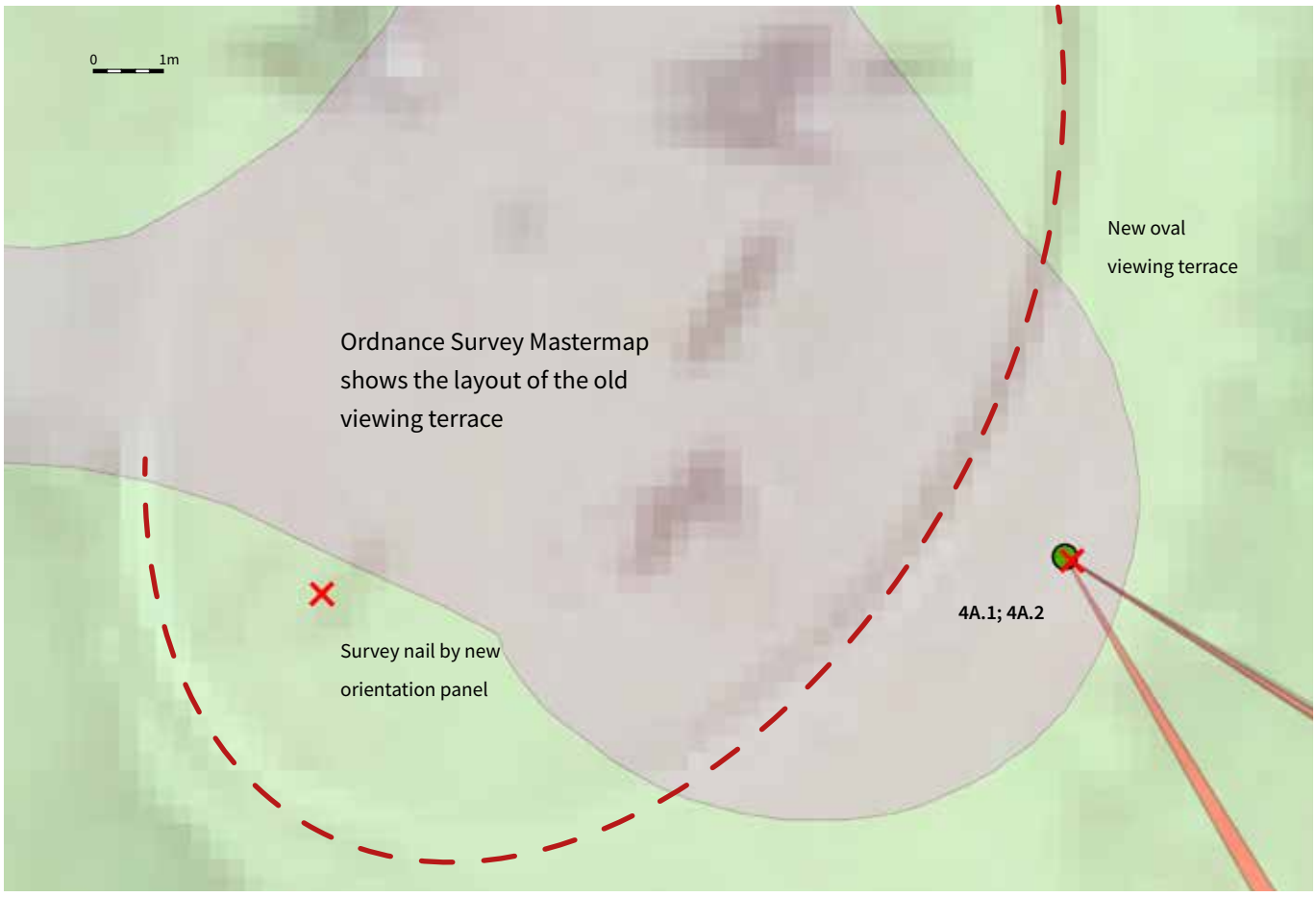
Looking towards: St Paul's Cathedral (Central axis of the dome, at the base of the drum).

NGR: 527657.30, 183893.00
Camera height: 68.29m

Bearing: 122°
Distance: 5.2km

Notes: The assessment point has been removed. The orientation panel has been moved/replaced since the photograph used in the LVMF 2012 was taken. As shown in the map image below, an oval viewing terrace now sits on Primrose Hill, with the information panel towards the western end. The Protected Vista assessment point [green circle] is just off the platform to the south-east; when surveyed the point had recently been re-turfed to meet the back of the new kerb, raising the height of the ground.

Surveyed location: 2/3/2017 17:39
NGR: 527657.415 183892.942 Height: 70.312m
Accuracy: 0.35m Horizontal Dilution of Precision [HDOP]: 0.6



X = our surveyed points

● Protected Vista (Panorama) assessment point, from which Viewing Corridors radiate.

4A.2

Primrose Hill - the summit

– at the orientation board.

Looking towards: Palace of Westminster (The Central Tower, above the lobby crossing).

NGR: 527657.30, 183893.00
Camera height: 68.29m

Bearing: 149.4°
Distance: 5.1km

Notes: The assessment point has been removed. The orientation panel has been moved/replaced since the photograph used in the LVMF 2012 was taken. As shown in the map image below, an oval viewing terrace now sits on Primrose Hill, with the information panel [bottom image] towards the western end. The Protected Vista assessment point [orange circle] is just off the platform to the south-east; when surveyed the point had recently been re-turfed to meet the back of the new kerb, raising the height of the ground.

Surveyed location: 2/3/2017 17:39
NGR: 527657.415 183892.942 Height: 70.312m
Accuracy: 0.35m Horizontal Dilution of Precision [HDOP]: 0.6

The survey nail near the new orientation panel (right) is about 10.5m away from the real assessment point in the new turf (left).

5A.1

Greenwich Park: the General Wolfe statue

- edge of paved area.

Looking towards: The axial arrangement between Greenwich Palace and the Queen's House; Greenwich Reach and the Isle of Dogs.

NGR: 538922.5, 177335.20
Camera height: 48.8m

Bearing: 299°
Distance: 7.9km

Notes: Assessment point 5A.1 by the orientation panel at the General Wolfe statue is marked by survey paint on the wall at the front of the terrace.

Surveyed location: 02/03/2017 09:47
NGR: 538922.792 177335.983 Height: 48.627m
Accuracy 0.51m Horizontal Dilution of Precision [HDOP]: 0.8

5A.2

Greenwich Park: the General Wolfe statue

– north-east of the statue (Eastern edge of paved area (approx 20m off axis) between top of steps and stone bollard).
Looking towards: St Paul's Cathedral (Central axis of the dome, at the base of the drum).

NGR: 538936.10, 177334.50
Camera height: 48.8m

Bearing: 299°
Distance: 7.9km

Notes: Assessment point 5A.2 is only marked by survey nails, no painted number. There is a single survey nail in the pavement nearby that could confuse.

Surveyed location: 02/03/2017 10:50:00
NGR 538936.815 177334.553 Height: 48.395 m
Accuracy: 0.63 m Horizontal Dilution of Precision [HDOP]: 0.7

Two survey nails in the paving mark assessment point 5A.2

6A.1

Blackheath: the Point

– near the orientation board (West of the orientation board, close to the railings).
Looking towards: St Paul's Cathedral (Central axis of the dome, at the base of the drum).

NGR: 538238.20, 176823.10
Camera height: 47.61m
Bearing: 304.9°
Distance: 7.5km

Notes: Although the assessment point used for the photography in the LVMF (2012) is clearly marked on the railings, the NGR coordinates for the origin of the Viewing Corridor differ [538245.6, 176826.4]; they are 8.1m further to the eastnortheast, where the orientation panel stands.

Surveyed location: 02/03/2017 11:42:00
NGR: 538237.995 176824.612 Height: 47.0m
Accuracy: 0.52m Horizontal Dilution of Precision [HDOP]: 0.7

Assessment point 6A.1 is clearly marked on the railings

And by a survey stake in the gravel

7A.1

The Mall at Admiralty Arch

Linear view: The Mall to Buckingham Palace

NGR: 529964.3, 180301.8

Notes: Arch obscures sky limiting the number of available satelites and reducing accuracy. There are two marks roughly 20cm apart; use the one labelled with the assessment point number.

Surveyed: 25/04/2017 14:01
Location: 529963.186, 180301.359 **Ground level:** 9.511m
Accuracy: 5.34m **Horizontal Dilution of Precision [HDOP]:** 1.7

8A.1

Westminster Pier: the orientation plaque

- at the orientation board).

Looking towards: St Paul's Cathedral (Central axis of the dome, at the base of the drum).

NGR: 530329.90, 179773.90
Camera height: 8.4m

Bearing: 51.6°
Distance: 2.2km

Notes: Assessment point 8A.1 is clearly marked on the pavement but the wall and nearby large buildings impeded satellite signals and reduced acuracy on the Geo7X. The orientation panel is vandalised; it is covered with graffiti and stickers.

Surveyed location: 01/03/2017 17:33
NGR: 530327.016 179774.41 Height: 7.05m
Accuracy: 2.57m Horizontal Dilution of Precision [HDOP]: 0.8

9A.1

King Henry VIII's Mound, Richmond Park

– the viewing point (Looking through the gap in the hedge).

Looking towards: St Paul's Cathedral (Central axis of the dome, at the base of the drum).

NGR: 518605.80, 173150.40
Camera height: 59.09m

Bearing: 59.3°
Distance: 15.6km

Notes: Assessment point 9A.1 is clearly marked on the plaque but the evergreen holly hedge surrounding the top of the mound impeded satellite signals and reduced acuracy on the Geo7X.

Surveyed location: 01/03/2017 11:21:00
NGR: 518605.809 173150.446 Height: 58.54m
Accuracy: 0.72m Horizontal Dilution of Precision [HDOP]: 1

10A.1

Tower Bridge: upstream

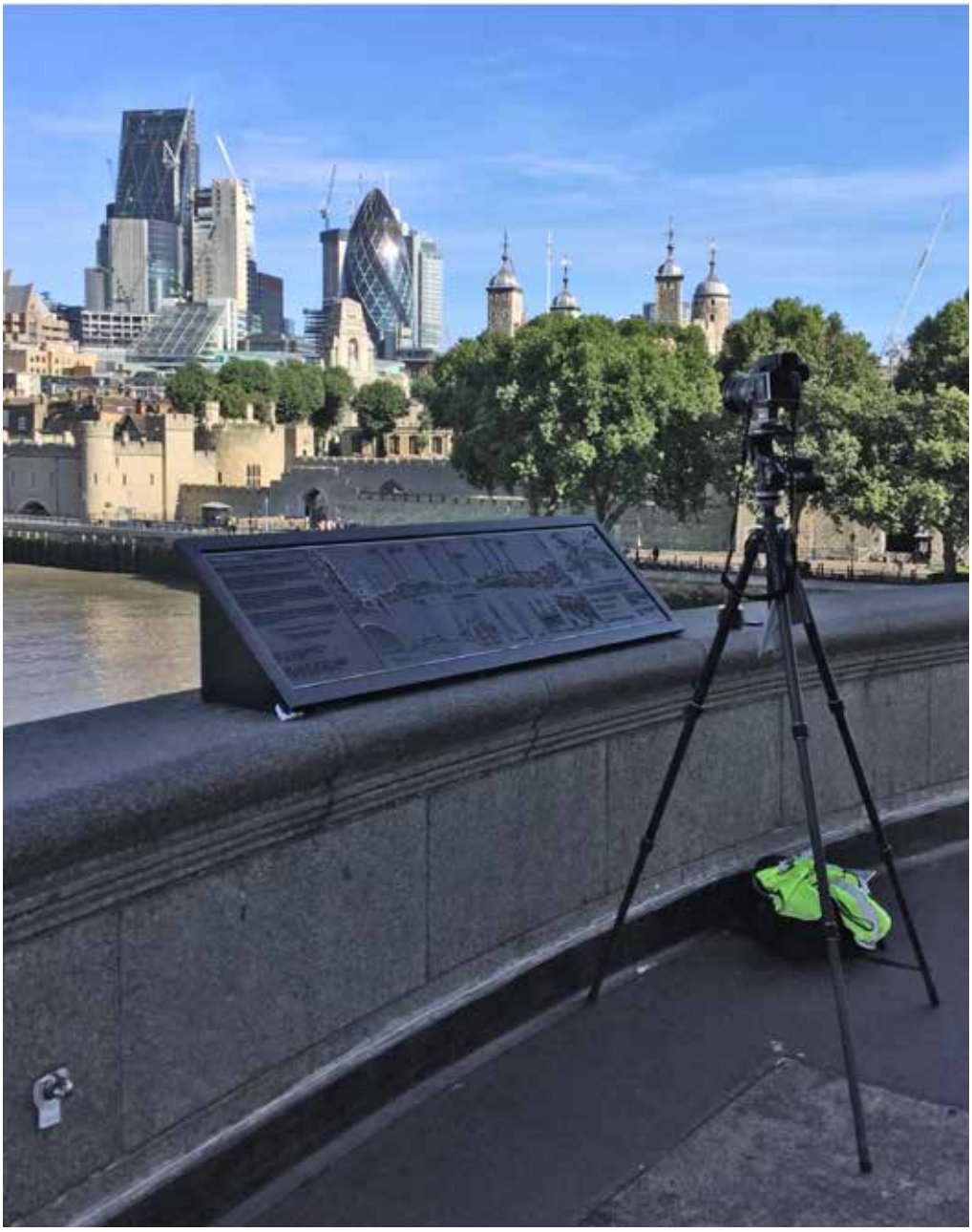
- the North Bastion

River prospect: Upstream

NGR: 533665, 180311.4

Notes: Very faintly marked in red on north-west corner of manhole; tower obscures sky to east, hence high HDOP; very busy location next to entrance to Tower Bridge Exhibition.

Surveyed: 04/08/2017 12:51
Location: 533665.489, 180311.378 **Ground level:** 12.353m
Accuracy: 0.13m **Horizontal Dilution of Precision [HDOP]:** 4.7



11A.1

London Bridge: upstream

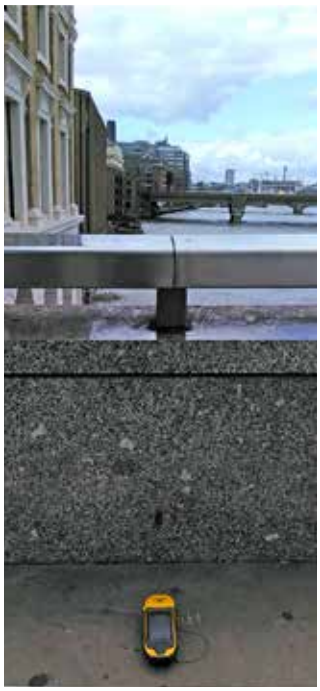
- the Upstream Pavement

River prospect: Upstream

NGR: 532769.2, 180394.3

Notes: Nail at centre of yellow cross on paving; red line on wall.

Surveyed: 04/08/2017 12:16
Location: 532769.245, 180394.301 **Ground level:** 12.011m
Accuracy: 0.1m **Horizontal Dilution of Precision [HDOP]:** 1



11B.1

London Bridge: downstream

- the downstream pavement

River prospect: downstream

NGR: 532819.2, 180487.5

Notes: Marked in yellow on paving; yellow and red down arrows on wall.

Surveyed: 04/08/2017 12:21
Location: 532818.983, 180487.824 **Ground level:** 14.188m
Accuracy: 0.1m **Horizontal Dilution of Precision [HDOP]:** 0.8

11B.2

London Bridge: downstream

- the Downstream Pavement

River prospect: Downstream

NGR: 532803.4, 180406.2

Notes: Marked with yellow down arrows on wall; yellow cross on paving.

Surveyed: 04/08/2017 12:25
Location: 532803.378, 180406.245 **Ground level:** 12.552m
Accuracy: 0.1m **Horizontal Dilution of Precision [HDOP]:** 2.7

12A.1

Southwark Bridge: upstream

- the upstream pavement
River prospect: upstream

NGR: 532357.5, 180612.7

Notes: Yellow cross on paving; yellow down arrow on balustrade.

Surveyed: 04/08/2017 11:49
Location: 532357.951, 180612.452 **Ground level:** 12.601m
Accuracy: 0.92m **Horizontal Dilution of Precision [HDOP]:** 0.9

12A.2

Southwark Bridge: upstream

- the upstream pavement

River prospect: upstream

NGR: 532387, 180700.6

Notes: Yellow cross on paving; yellow down arrow on balustrade.

Surveyed: 04/08/2017 11:52
Location: 532387.354, 180701.02 **Ground level:** 11.278m
Accuracy: 0.73m **Horizontal Dilution of Precision [HDOP]:** 0.8

12B.1

Southwark Bridge: downstream

- the downstream pavement

River prospect: downstream

NGR: 532386.3, 180647.1

Notes: Very faint star on paving at correct location. **DO NOT USE** the more clearly marked spot further north (which is incorrectly labelled as 13A.1)

Surveyed: 04/08/2017 11:55
Location: 532386.184, 180647.156 **Ground level:** 11.235m
Accuracy: 0.1m **Horizontal Dilution of Precision [HDOP]:** 1.1

13A.1

Millennium Bridge

- Millennium Bridge

River prospect: St Paul's Cathedral

NGR: 532051.5, 180619.3

Notes: Yellow cross at join in footway.

Surveyed: 04/08/2017 11:34
Location: 532051.28, 180618.558 **Ground level:** 12.115m
Accuracy: 0.62m **Horizontal Dilution of Precision [HDOP]:** 1.1

13B.1

Thames side at Tate Modern

- Thames side at Tate Modern

River prospect: St Paul's Cathedral

NGR: 532110.6, 180548.6

Notes: Survey nail at centre of yellow cross on ground; yellow and red down arrows on wall.

Surveyed: 04/08/2017 11:40
Location: 532110.717, 180548.627 **Ground level:** 4.162m
Accuracy: 0.1m **Horizontal Dilution of Precision [HDOP]:** 1.5

14A.1

Blackfriars Bridge: upstream

- the upstream pavement

River prospect: upstream

NGR: 531629, 180698.4

Notes: Very faint cross on paving; white down arrows on balustrade.

Surveyed: 04/08/2017 11:19
Location: 531629.094, 180698.446 **Ground level:** 11.67m
Accuracy: 0.1m **Horizontal Dilution of Precision [HDOP]:** 3.5

15A.1

Waterloo Bridge: upstream

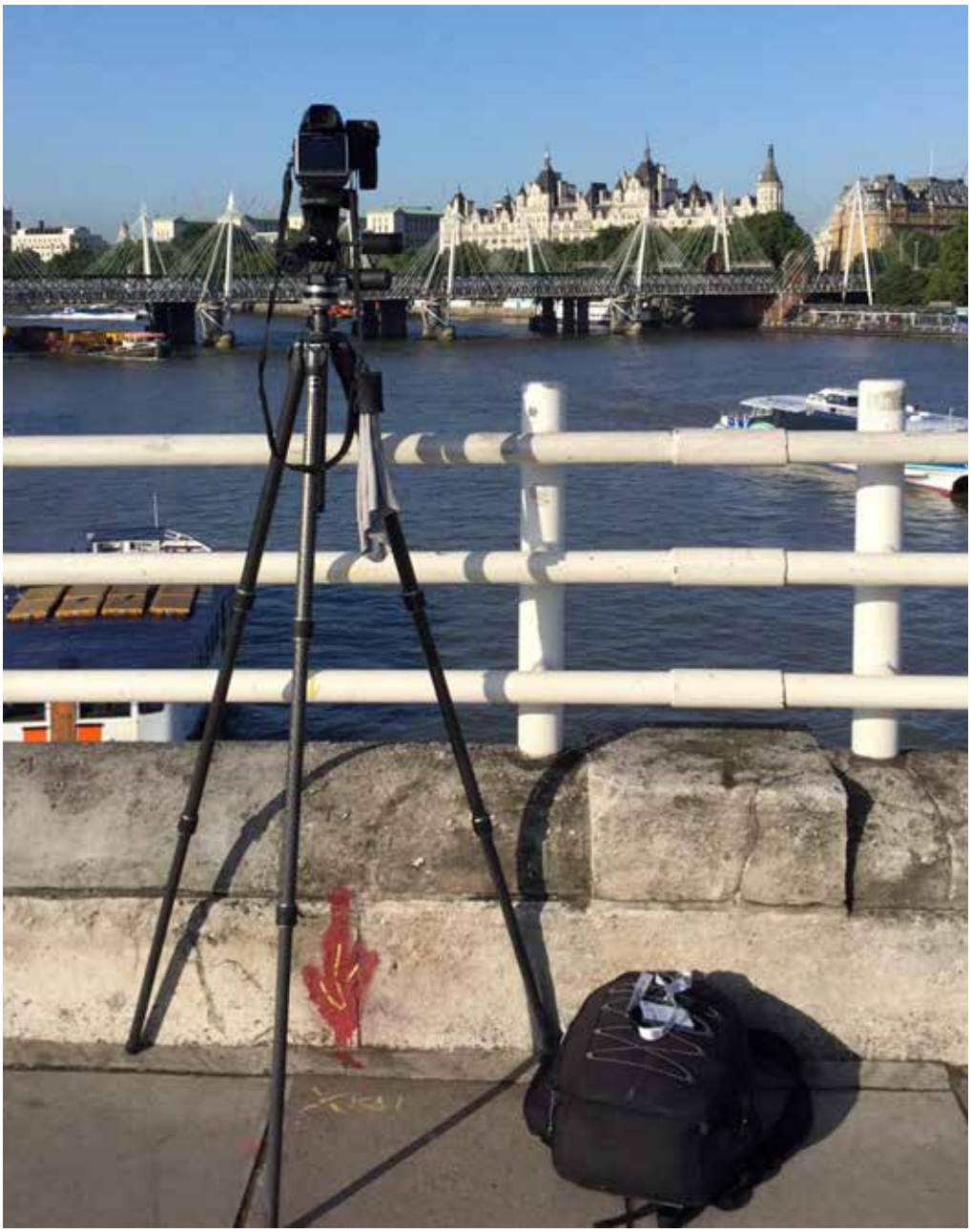
- the upstream pavement

River prospect: upstream

NGR: 530806, 180465.1

Notes: No nail, only a yellow cross on the pavement; red down arrow painted on stonework and small yellow down arrows on railings.

Surveyed: 25/04/2017 15:24
Location: 530805.879, 180465.185 **Ground level:** 16.248m
Accuracy: 0.82m **Horizontal Dilution of Precision [HDOP]:** 0.7



15A.2

Waterloo Bridge: upstream

- the upstream pavement

River prospect: upstream

NGR: 530703.3, 180638.4

Notes: Assessment point is incorrectly marked: use the nail north of the slighter cross markings; **do not** use the nails between the paving slabs near the big red down arrow.

Surveyed: 25/04/2017 14:57
Location: 530703.677, 180638.13 **Ground level:** 16.664m
Accuracy: 0.8m **Horizontal Dilution of Precision [HDOP]:** 0.8

15B.1

Waterloo Bridge: downstream

The Downstream Pavement

River prospect: Downstream

NGR: 530723.6, 180651.2

Notes: Marked by faded red spray paint, no nail; faint number in yellow on the pavement.

Surveyed: 25/04/2017 15:08
Location: 530723.604, 180650.8 **Ground level:** 16.318m
Accuracy: 0.81m **Horizontal Dilution of Precision [HDOP]:** 0.8

15B.2

Waterloo Bridge: downstream

The Downstream Pavement

River prospect: Downstream

NGR: 530792.2, 180535.6

Notes: Nail within faded cross on pavement; red down arrow on stonework.

Surveyed: 25/04/2017 15:15
Location: 530792.013, 180535.327 **Ground level:** 15.382m
Accuracy: 0.29m **Horizontal Dilution of Precision [HDOP]:** 7.2

16A.1

The South Bank:
outside the National Theatre

River prospect: Somerset House and Waterloo Bridge

NGR: 530931, 180441.6

Notes: Nail in between paving; small amount of red paint on railings; red down arrow on kerb.

Surveyed: 25/04/2017 15:36
Location: 530930.615, 180440.765 **Ground level:** 10.168m
Accuracy: 0.1m **Horizontal Dilution of Precision [HDOP]:** 1.2

16B.1

The South Bank:

Gabriel's Wharf viewing platform

River prospect: St Paul's Cathedral

NGR: 531193.8, 180530.4

Notes: Yellow cross on paving; yellow down arrows on balustrade.

Surveyed: 04/08/2017 11:00
Location: 531193.354, 180530.659 **Ground level:** 3.539m
Accuracy: 0.52m **Horizontal Dilution of Precision [HDOP]:** 3.5

16B.2

The South Bank:
Gabriel's Wharf viewing platform

River prospect: St Paul's Cathedral

NGR: 531202.7, 180528.7

Notes: Yellow cross on paving; yellow down arrows on balustrade.

Surveyed: 04/08/2017 11:03
Location: 531202.761, 180528.701 **Ground level:** 4.471m
Accuracy: 0.13m **Horizontal Dilution of Precision [HDOP]:** 1.3

17A.1

Golden Jubilee/Hungerford Footbridges

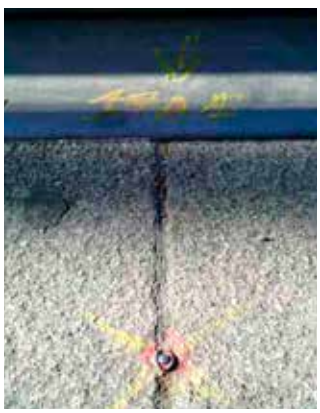
- the upstream pavement

River prospect: upstream

NGR: 530662.9, 180177.2

Notes: Survey nail at centre of yellow cross marked on the paving; yellow down arrow and assessment point number on bridge metalwork.

Surveyed: 25/04/2017 09:32
Location: 530664.607, 180178.537 **Ground level:** 10.106m
Accuracy: 0.1m **Horizontal Dilution of Precision [HDOP]:** 1.1



17A.2

Golden Jubilee/Hungerford Footbridges

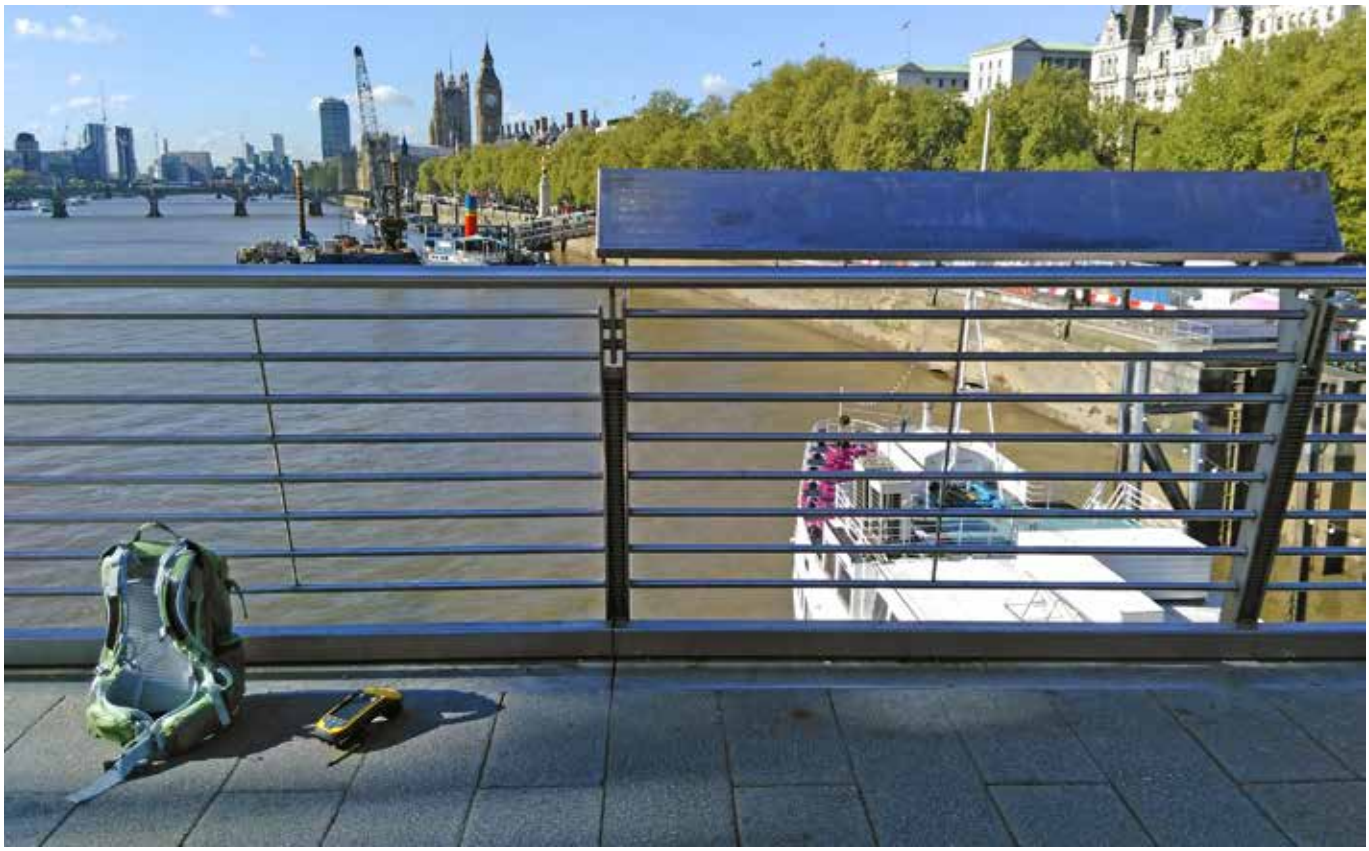
- the upstream pavement

River prospect: upstream

NGR: 530454.6, 180274.1

Notes: Survey nail at centre of yellow cross on the paving; yellow down arrow and assessment point number on bridge metalwork.

Surveyed: 25/04/2017 14:21
Location: 530455.007, 180275.086 **Ground level:** 11.763m
Accuracy: 0.1m **Horizontal Dilution of Precision [HDOP]:** 1.3



17B.1

Golden Jubilee/Hungerford Footbridges
- the downstream pavement

River prospect: downstream

NGR: 530470.6, 180325.7

Notes: Red and yellow cross marked on the paving; red and yellow down arrow and assessment point number on bridge metalwork.

Surveyed: 25/04/2017 14:30
Location: 530470.836, 180325.782 **Ground level:** 11.836m
Accuracy: 0.1m **Horizontal Dilution of Precision [HDOP]:** 1.1

17B.2

Golden Jubilee/Hungerford Footbridges
- the downstream pavement

River prospect: downstream

NGR: 530521.7, 180301.9

Notes: Yellow cross marked on the paving; yellow down arrow and assessment point number on bridge metalwork.

Surveyed: 25/04/2017 14:33
Location: 530521.81, 180301.867 **Ground level:** 12.155m
Accuracy: 0.1m **Horizontal Dilution of Precision [HDOP]:** 1.3

18A.1

Westminster Bridge: upstream

-the upstream pavement

River prospect: upstream - The Palace of Westminster

NGR: 530591.9, 179640.8

Notes: Near top of steps, therefore extremely busy. Two survey nails in paving; red and yellow down arrows on wall.

Surveyed: 25/04/2017 10:37
Location: 530592.188, 179640.858 **Ground level:** 9.659m
Accuracy: 0.83m **Horizontal Dilution of Precision [HDOP]:** 0.9

18A.2

Westminster Bridge: upstream

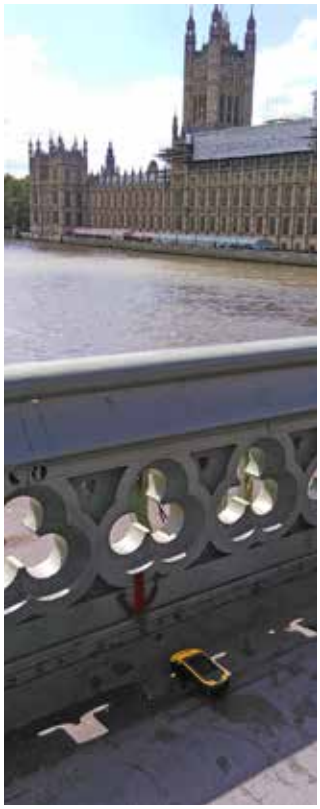
-the upstream pavement

River prospect: upstream - The Palace of Westminster

.
NGR: 530463, 179650.1

Notes: Nail in gutter; red down arrow on bridge balustrade

Surveyed: 25/04/2017 12:53
Location: 530462.39, 179651.678 **Ground level:** 11.6m
Accuracy: 0.58m **Horizontal Dilution of Precision [HDOP]:** 4.7



18A.3

Westminster Bridge: upstream

- the upstream pavement

River prospect: upstream

NGR: 530352, 179652.5

Notes: Nail and washer in gutter; red down arrow on bridge balustrade.

Surveyed: 25/04/2017 12:47
Location: 530352.024, 179652.541 **Ground level:** 9.06m
Accuracy: 0.1m **Horizontal Dilution of Precision [HDOP]:** 18

18B.1

Westminster Bridge: downstream

- the downstream pavement

River prospect: downstream - The London Eye

NGR: 530339, 179677.9

Notes: Not marked on pavement; only a yellow down arrow on the stone balustrade of the bridge. Use the corner of the metal paving plate.

Surveyed: 25/04/2017 13:02
Location: 530339.088, 179678.221 **Ground level:** 8.85m
Accuracy: 0.1m **Horizontal Dilution of Precision [HDOP]:** 1

18B.2

Westminster Bridge: downstream

- the downstream pavement

River prospect: downstream

NGR: 530573.2, 179673.1

Notes: No permanent marker; used yellow survey crayon at foot of balustrade below join in top rail.

Surveyed: 25/04/2017 10:23
Location: 530573.233, 179673.349 **Ground level:** 9.123m
Accuracy: 0.1m **Horizontal Dilution of Precision [HDOP]:** 1.4

19A.1

Lambeth Bridge: downstream

- the downstream pavement

River prospect: downstream - The Palace of Westminster

NGR: 530382.3, 178970.2

Notes: No nail; only a white down arrow on the bridge ironwork and a faint white number on paving; **DO NOT USE** the more clearly marked spot further east.

Surveyed: 25/04/2017 11:19
Location: 530382.417, 178970.357 **Ground level:** 11.616m
Accuracy: 0.1m **Horizontal Dilution of Precision [HDOP]:** 1

19A.2

Lambeth Bridge: downstream

- the downstream pavement

River prospect: downstream - The Palace of Westminster

NGR: 530508.9, 178952.1

Notes: No nail; red dot at centre of yellow cross marked on the paving; big red down arrow and smaller yellow down arrows on the bridge balustrade.

Surveyed: 25/04/2017 11:12
Location: 530509.747, 178951.426 **Ground level:** 9.9m
Accuracy: 0.82m **Horizontal Dilution of Precision [HDOP]:** 0.9

20A.1

Victoria Embankment: between Westminster and Hungerford Bridges

- opposite County Hall

River prospect: County Hall

NGR: 530332.4, 179824.7

Notes: Shallow circular depression in paving slab; assessment point number and cross in faint red and yellow paint

Surveyed: 25/04/2017 13:12
Location: 530332.729, 179825.363 **Ground level:** 6.665m
Accuracy: 0.31m **Horizontal Dilution of Precision [HDOP]:** 3.6

20B.1

Victoria Embankment: between Westminster and Hungerford Bridges

- at Cleopatra's Needle

River prospect: County Hall

NGR: 530548.3, 180509.9

Notes: Liable to flooding! Dot and three radiating lines marked on the paving; two small yellow down arrows on the wall

Surveyed: 25/04/2017 14:45
Location: 530548.401, 180509.995 **Ground level:** 3.997m
Accuracy: 0.1m **Horizontal Dilution of Precision [HDOP]:** 1

21A.1

Thames side in front of County Hall

River prospect: The Palace of Westminster and Westminster Bridge

NGR: 530597.8, 179758.1

Notes: No permanent marker; used yellow survey crayon but paving to the south has already been replaced and is slightly higher.

Surveyed: 25/04/2017 10:12
Location: 530597.734, 179758.107 **Ground level:** 5.009m
Accuracy: 0.1m **Horizontal Dilution of Precision [HDOP]:** 1.6

21B.1

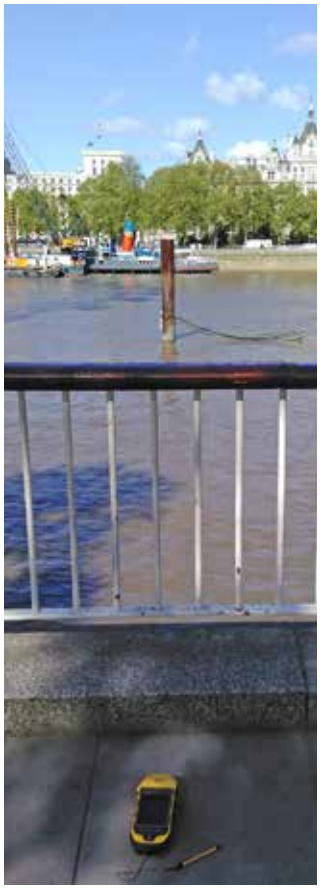
Jubilee Gardens

River prospect: Whitehall Court and the Victoria Embankment

NGR: 530630.5, 180044.5

Notes: Very faint dot and three radiating lines on paving; no nail or markings on railings.

Surveyed: 25/04/2017 09:58
Location: 530630.679, 180044.384 **Ground level:** 5.955m
Accuracy: 0.19m **Horizontal Dilution of Precision [HDOP]:** 2.3



22A.1

Albert Embankment: between Westminster and Lambeth Bridges

River prospect: The Palace of Westminster

NGR: 530538.5, 179140.7

Notes: No nail; only painted red dot at centre of yellow cross and assessment point number on paving; yellow and red down arrows on wall; metal stubbs on top of wall indicate removed orientation panel.

Surveyed: 25/04/2017 11:03
Location: 530539.163, 179141.424 **Ground level:** 7.325m
Accuracy: 0.84m **Horizontal Dilution of Precision [HDOP]:** 0.8

22A.2

Albert Embankment: between Westminster and Lambeth Bridges

River prospect: The Palace of Westminster

NGR: 530570, 179463.7

Notes: Overhanging trees mean low accuracy; cross on paving; red and yellow down arrows on wall.

Surveyed: 25/04/2017 10:52
Location: 530568.971, 179461.898 **Ground level:** 8.895m
Accuracy: 3.13m **Horizontal Dilution of Precision [HDOP]:** 1.4

22A.3

Albert Embankment: between Westminster and Lambeth Bridges

River prospect: The Palace of Westminster

NGR: 530584.1, 179609.7

Notes: Survey nail and washer at centre of very faint red cross in paving; not quite in line with yellow down arrow on wall; between heads up panel and wall.

Surveyed: 25/04/2017 10:42
Location: 530583.994, 179609.369 **Ground level:** 6.944m
Accuracy: 0.73m **Horizontal Dilution of Precision [HDOP]:** 3.6

23A.1

Serpentine Bridge

– at the centre of the bridge (Centre of Eastern side of bridge).

Looking towards: Palace of Westminster (The Central Tower, above the lobby crossing).

NGR: 526927.20, 180167.20
Camera height: 22m

Bearing: 101.4°
Distance: 3.4km

Notes: Assessment point 23A.1 is clearly marked by a survey nail on the bridge and spray paint on the nearest pillar.

Surveyed location: 01/03/2017 15:46:00
NGR: 526927.789 180167.393 Height: 22.55m
[Accuracy: 0.42m Horizontal Dilution of Precision [HDOP]: 0.6

24A.1

Island Gardens, Isle of Dogs

- opposite the Royal Naval Hospital

Townscape view: Greenwich Maritime World Heritage Site - Royal Naval College and Greenwick Park

NGR: 538392.1, 178295.2

Notes: Overhanging trees mean low accuracy; survey nail in the tarmac; red and yellow down arrows on stonework.

Surveyed: 04/08/2017 14:13
Location: 538392.859, 178295.424 **Ground level:** 6.005m
Accuracy: 1m **Horizontal Dilution of Precision [HDOP]:** 1.2

24A.2

Island Gardens, Isle of Dogs
- opposite the Royal Naval Hospital

Townscape view: Greenwich Maritime World Heritage Site - Royal Naval College and Greenwick Park

NGR: 538331, 178272.7

Notes: Overhanging trees mean low accuracy; survey nail at edge of paving; red down arrow on stonework.

Surveyed: 04/08/2017 14:06
Location: 538330.694, 178273.088 **Ground level:** 14.947m
Accuracy: 1.72m **Horizontal Dilution of Precision [HDOP]:** 0.9

24A.3

Island Gardens, Isle of Dogs

- opposite the Royal Naval Hospital

Townscape view: Greenwich Maritime World Heritage Site - Royal Naval College and Greenwick Park

NGR: 538456.3, 178324.9

Notes: Overhanging trees mean low accuracy; marked with red line on top rail and red and yellow down arrows on stonework.

Surveyed: 04/08/2017 14:16
Location: 538457.063, 178327.078 **Ground level:** 4.886m
Accuracy: 1.31m **Horizontal Dilution of Precision [HDOP]:** 0.8

25A.1

The Queens Walk at City Hall

- foot of pathway from Potter's Fields (On line running through eastern edge of City Hall).

Looking towards: Tower of London (Centre of south façade; base of merlons).

NGR: 533485.60, 180201.20
Camera height: 6.08m

Bearing: 21.4°
Distance: 0.4km

Notes: clearly marked by by yellow marker on the wall and red marker on the paving. The wall and City Hall building impeded satellite signals and reduced acuracy on the Geo7X.

Surveyed location: 02/03/2017 14:21:00
NGR: 533484.282 180200.042 Height: 7.34m
Accuracy: 0.8m Horizontal Dilution of Precision [HDOP]: 0.8

25A.2

The Queens Walk at City Hall
- the Public Terraces at City Hall

Townscape view: The Tower of London

NGR: 533428.1, 180230.1

Notes: Marked with yellow dot on paving and yellow down arrow at foot of wall.

Surveyed: 04/08/2017 12:38
Location: 533428.17, 180230.086 **Ground level**: 3.967m
Accuracy: 0.1 m **Horizontal Dilution of Precision [HDOP]:** 1.1

25A.3

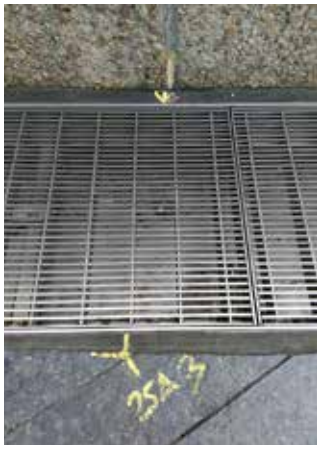
The Queens Walk at City Hall
- the Public Terraces at City Hall

Townscape view: The Tower of London

NGR: 533550, 180168.1

Notes: Marked with yellow down arrow on edge of metal grill at foot of wall.

Surveyed: 04/08/2017 12:43
Location: 533550.115, 180167.945 **Ground level:** 3.391m
Accuracy: 0.1m **Horizontal Dilution of Precision [HDOP]:** 1.1



26A.1

St James' Park Bridge
- the footbridge across the lake

Townscape view: Horse Guards Parade

NGR: 529529.4, 179798.8

Notes: Marked on railings with red and yellow paint.

Surveyed: 25/04/2017 13:44
Location: 529529.614, 179798.86 **Ground level:** 3.127m
Accuracy: 0.1m **Horizontal Dilution of Precision [HDOP]:** 1.5

27A.1

Parliament Square: south-west corner
- outside UK Supreme Court

Townscape view: Parliament Square and the Palace of Westminster

NGR: 530066.5, 179590.7

Notes: Use the pink and blue marker; it's less well marked but nearer to the LVMF coordinates than the clearer red marking with the yellow assessment number.

Surveyed: 25/04/2017 11:48
Location: 530066.747, 179590.002 **Ground level:** 5.278m
Accuracy: 0.31m **Horizontal Dilution of Precision [HDOP]:** 4

27A.2

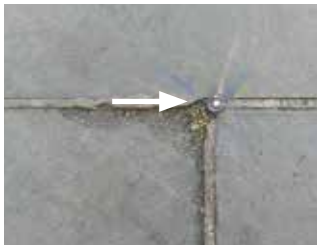
Parliament Square: south-west corner
- outside UK Supreme Court

Townscape view: Parliament Square and the Palace of Westminster

NGR: 530076.3, 179582.4

Notes: Survey nail and washer in paving; very faint painted survey marks in yellow, pink and blue

Surveyed: 25/04/2017 11:43
Location: 530074.588, 179582.049 **Ground level:** 6.13m
Accuracy: 0.85m **Horizontal Dilution of Precision [HDOP]:** 0.7



27B.1

Parliament Square: north pavement

Townscape view: Westminster World Heritage Site - The Palace of Westminster and Westminster Abbey

NGR: 530087, 179686.5

Notes: Busy pavement! Faint red cross sprayed on paving; beware of other survey nails in paving nearby

Surveyed: 25/04/2017 12:02
Location: 530086.893, 179686.451 **Ground level:** 5.141m
Accuracy: 0.46m **Horizontal Dilution of Precision [HDOP]:** 3

27B.2

Parliament Square: North Pavement

Townscape view: Westminster World Heritage Site - The Palace of Westminster and Westminster Abbey

NGR: 530137.4, 179683.9

Notes: Very busy pavement! Survey nail with pink radiating lines near kerb.

Surveyed: 25/04/2017 12:07
Location: 530137.448, 179684.024 **Ground level:** 5.199m
Accuracy: 0.1m **Horizontal Dilution of Precision [HDOP]:** 3.8

Glossary

DSM: Digital Surface Model – a digital elevation model of the land surface, including buildings and vegetation.

DTM: Digital Terrain Model – a digital elevation model of the bare earth topography, without buildings or vegetation

GNSS: Global Navigation Satellite System – the generic term for satellite navigation systems, including the American [GPS], the Russian [GLONASS] and European [Galileo] constellations.

HDOP: Horizontal Dilution of Precision – a computed value that indicates the two-dimensional positional accuracy of each GNSS point.

Dilution of Precision [DOP] value	Rating	Description
< 1	Ideal	Highest possible confidence level to be used for applications demanding the highest possible precision at all times.
1-2	Excellent	At this confidence level, positional measurements are considered accurate enough to meet all but the most sensitive applications.

ISO or light sensitivity rating – an algorithmic value that indicates the film's or the image sensor's specific sensitivity to light.

Photographic Equipment

Nikon D800 36 megapixel full frame (35 mm) digital sensor
Nikon Sigma 70-300mm telephoto zoom lens
Nikon 24mm perspective control lens
Hasselblad H5D 40 megapixel digital sensor
Hasselblad H6D 100 megapixel digital sensor
Hasselblad 80mm standard lens
Hasselblad 35mm wide-angle lens
Hasselblad 210mm telephoto lens

Other

Gitzo and Manfrotto tripods
Spirit levels, manual and digital

View towards Elephant and Castle illustrating the rapid scale of changes to London's skyline in the past decade with clusters of new tall buildings being built in highly accessible locations.

References

References

Abercrombie, Patrick and Forshaw, J.H., 1943, *County of London Plan 1943.* HMSO, London

Abercrombie, Patrick, 1945, *Greater London Plan 1944.* HMSO, London

Allen, W. Godfrey, 1932, *St Paul's Cathedral: a survey of views shewing the potential results of the extensive reconstruction of buildings near the cathedral to the height authorised by the London Building Act of 1930*, City of London Guildhall Library, Society of Antiquaries, RIBA Library

Atkins Consultants, with Barry Stow, 2007, *The Palace of Westminster and Westminster Abbey including St Margaret's Church World Heritage Site Management Plan,* London, May 2007

Batten, James, 2002, 'The Vista of St Paul's Cathedral: celebrating the first decade of its protection' in *The Richmond Park Magazine*

Catchpole, Tim, 1987, *London Skylines: a study of high buildings and views,* London Research Centre Reviews and Studies Series, London

City of London, 1987, *City of London's response to representations on the City of London Local Plan submitted to the Public Local Inquiry commencing 12th May 1987,* City of London, June 1987

Cormack, Patrick, 1977, 'Skyline Protection Bill' In *Country Life* Vol 181, 28 April 1977, pp1082-1084

DEGW, 2002, *London Skyline, Views and High Buildings,* For the Greater London Authority, August 2002

DoE, 1991, *Direction for protecting the Strategic View of St Paul's Cathedral from Richmond Park (King Henry's VIII's Mound)*

English Heritage, 2008, *Seeing the History in the View: a Method for Assessing Heritage Significance within Views,* Report prepared by Land Use Consultants, April 2008

Fitzgerald, Percy, 1890, *Picturesque London,* London

Fletcher, H., 1909, *London Passed and Passing: a Pictorial Record of Destroyed or Threatened Buildings*

Greater London Council, 1969, *Greater London Development Plan: Report of Studies*, London

Greater London Consultants and the London Research Centre, 1989, *London's Skylines and High Buildings,* London, March 1989

Greater London Authority, 2001, *Interim strategic planning guidance on tall buildings, strategic views and the skyline in London,* GLA, October 2001

Greater London Authority, 2005, *The London Plan, London View Management Framework draft Supplementary Planning Guidance SPG 2005,* GLA, April 2005

Greater London Authority, *London Plan / London View Management Framework,* 2007, 2012

Greater London Authority, 2017, *London Plan: The Spatial Development Strategy for Greater London: Draft for Public Consultation (Chapter 7 Heritage and Culture, Policies HC3 'Strategic and Local Views' and HC4 'London View Management Framework'),* GLA, December 2017

Jones, Edward and Woodward, Christopher, 2000, *A Guide to the Architecture of London,* 3rd Edition, London

Hunting, Penelope, 1988, *St Paul's Vista: A History Commissioned by Lep Group PLC to mark the redevelopment of the Sunlight Wharf site,* London

Knowles, C.C., and Pitt, P.H., 1972, *The History of Building Regulations in London 1189-1972,* London

London Planning Advisory Committee, 1998, *High Buildings and Strategic Views: A Guide to Draft Strategic Planning Advice,* London, March 1998

London Planning Advisory Committee, 1999, *Strategic Planning Advice on High Buildings and Strategic Views in London,* London, November 1999

Lubbock, Jules, 1987, *Proof of Evidence at the City of London Local Plan Inquiry,* May 1987

Parker, John and Catchpole, Tim, 'High Level Debate' In *Country Life*, 8 November 1984, Vol 186, pp1418-1422

Royal Fine Art Commission, 'High Buildings' in *Town Planning Review* Vol 16, No 2, Dec 1934, pp126-128

Acknowledgements

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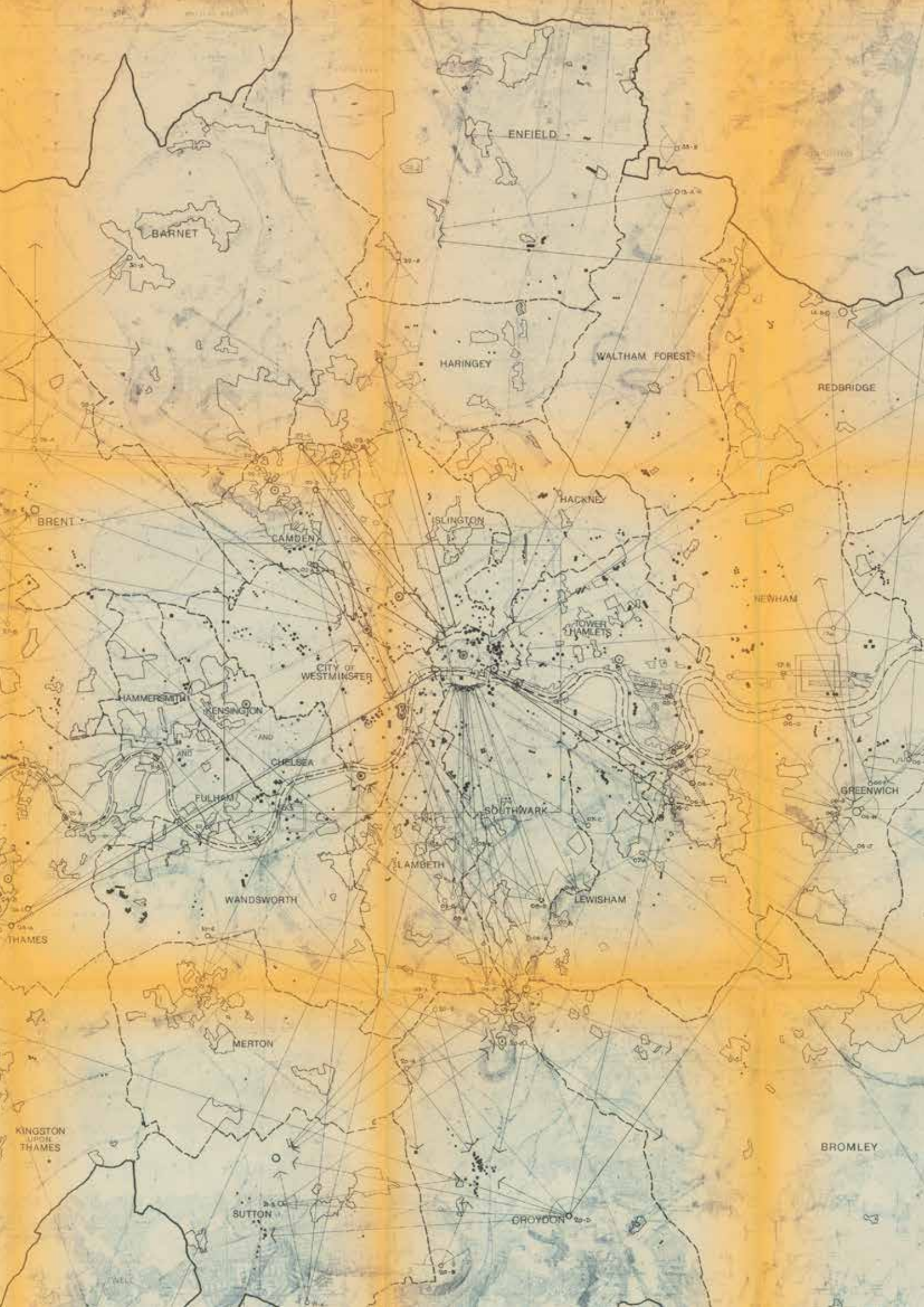
Page 3: General view looking west over rooftops towards St Paul's. 1930-1939 © Historic England Archive
Below: View of the Greenwich Hospital and Canary Wharf from the terrace in front of General Wolfe's statue (Assessment Point 5A.1).
Inside back cover: Extract centred on St Paul's Cathedral. Taken from the London Planning Advisory Committee *1:50,000 map of High Buildings and Views, Greater London*. January 1989.
Back cover: View of St Paul's dome and the Monument from the north bastion of Tower Bridge (Assessment Point 10A.1).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