Active Neighbourhood Study:

Community Engagement Approach and Outcomes

April 2019

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Introduction:

Sustrans is working with families, communities, policy-makers and partner organisations right across the UK to make it easier for people to walk and cycle.

1. Objectives

Sustrans carried out a community engagement process on behalf of the Ham & Petersham Forum and Phil Jones Associates, as part of an Active Neighbourhood study.
The brief was to develop a process that would engage a broad swathe of the local population as well as key stakeholders. Through this engagement process, the local community and stakeholders were asked to identify challenges and consider possible solutions.
The primary area for consideration and engagement was around potential walking and cycle links from Ham/Petersham to Richmond and Kingston and then a focus around Ham Parade, including Ham Cross Junction.

2. Engagement Activity Overview:

In partnership with the Ham & Petersham Forum and Phil Jones Associates, Sustrans delivered a number of community and stakeholder engagement activities (more detail below):

- A stall at the Ham Parade Market (5th May 2018)
- A stakeholder engagement workshop & cycle/walking site visit (18th May 2018)
- An evening and daytime community engagement workshop & cycle/walking site visit (19th May 2018)
- A stall at the Ham Fair (9th June 2018)
- Individual stakeholder meetings (dates noted in document)
- A stall at Ham Parade Market (6th October 2018)

3. Overview of findings:

Throughout the community and stakeholder engagement, there was a significant level of support for improving the connectivity of Ham to Richmond and Kingston. This included many positive conversations around improving connectivity within Ham itself, particularly around calming the environment around local schools. Equally, many of the people we spoke with were enthusiastic about

opening up Ham Parade and Ham Cross Junction to those on bicycle and foot, with an ambition for greater emphasis on public realm improvements.

4. Stakeholder Engagement:

Summary of Stakeholder Engagement Workshop Findings:

A full list of stakeholders in attendance is included in the appendix, but they included officers from both Kingston and Richmond Council, local councillors from both Kingston and Richmond, staff from local schools, members of both Ham & Petersham Neighbourhood Forum and North Kingston Neighbourhood Forum and others.

Route from Ham to Richmond:

- There was a general consensus from the stakeholders that any route developed N/S through Ham should be developed as a network, taking into account the Quietway and local schools.
- There was a desire to see the Kingston cycle track extended down Dukes Avenue towards the ferry.
- It was recognised by stakeholders that it is important to accommodate different cycle users (mobility etc).
- Cycle parking was raised as an issue – at destinations and at local transport infrastructure, for example, bus stops on A307.
- A pedestrian and cycle bridge was discussed.
- Way-finding was considered to be a considerable barrier and would need to be improved for a new route.
- The lack of lighting on the towpath was raised as an issue.

Ham Parade

- The stakeholder group recognised the need for slower speeds through Ham Parade
- There was a desire from some stakeholders to see ambitious design solutions, including suggestions of trees in the carriageway and a ‘mini exhibition road scheme’.
- The subject of cycle tracks through the space was raised by some stakeholders.

- There was a desire to see more cycle parking.
- Impact of local home building was raised in the area – the importance of ensuring people are able to travel sustainably
- Pedestrians and cyclists are currently low down on the priority of users. The car dominates the space.
- The traders understand that parking isn't the most important thing for the local businesses (Traders Association)
- The area suffers from severance due to the A307 (and to a lesser extent the service roads sever the space further). The parade feels like two halves due to the busy road.
- It was felt by a number of stakeholders that local businesses rely on car parking.

Ham Cross Junction

- It was raised that the junction sits over the Richmond borough boundary, in Kingston.
- Stakeholders raised the point that audits carried out by Kingston council showed the junction to be considered 'safe', which led to a discussion around perceptions and the impact on people's travel choices.
- One stakeholder was concerned about congestion on the wider network should the junction be redesigned.
- Need to enforce speeds at the junction.

Engagement with Individual Stakeholders:

Separate engagement was carried out with the following stakeholders:

The National Trust, Ham Estate & Petersham Meadows (Meeting 12 June 2018)

Sustrans and the Ham and Petersham Neighbourhood Forum met with Megan Tanner, the National Trust Manager at Ham House, (to present the scheme, in particular, the detail around the 'Dry Route' across Petersham Meadows (for which the NT has responsibility). She was supportive in principle of but reserved judgement until she has consulted with her colleagues. National Trust have in the last few years taken on management of Petersham Meadows. The Trust have established good local relationships (and that is part of Megan's role) and this continues to be a work in progress.

Megan highlighted the fact that Ham House does not have a car park. A public car park is used which is prone to tidal flooding and people park along the road. When there are events (running races, cycling etc.) parking is also an issue. She confirmed that the NT are supporting people walking and cycling to reduce parking and to support sustainable travel. People working at Ham House have also recently been prevented from parking cars on the grounds. She said the bike parking was very well used and she personally understands the particular problems associated with the inaccessibility and reliance on the Petersham Road as she commutes from Richmond Station via the bus herself.

The Sea Scouts (meeting 2nd July 2018)

The Sea Scouts are one of the landowners on potential walking and cycling routes from Ham to Richmond avoiding the flooding towpath and the busy Petersham Road. The Ham and Petersham Neighbourhood Forum met Karin Noble and Julian Sheraton-Davis to discuss potential routes to east and west of the site. A route to the east of the site would conflict with the location for the proposed scout hut. The route to the west, parallel with the towpath and through Petersham Lodge Woods, was seen as being the more feasible of the two options. This option is also been proposed as part of Kim Wilke's landscape masterplan which is being developed by the Thames Landscape Strategy (see Thames Landscape Strategy below).

Ham Parade Market (meeting 9th June & 7th July 2018)

Ham and Petersham Neighbourhood Forum met with Cllr Andrée Frieze and Matt Georges of Ham Parade Market to review draft proposals of Ham Parade. The community-run market started in October 2017, has quickly become a much-loved event in the North Kingston/ Ham & Petersham calendar. It is intended to complement and support the businesses in Ham Parade and provide an event for the community to come together. Live music accompanies the market on the triangular grassed area at Ham Cross.

The Active Neighbourhood study proposals for Ham Parade have been designed specifically to accommodate the market and improve the parade for visitors and shoppers at all other times. The proposals include widening of the paving/ pedestrian area to the east of the parade; remodelling the paving and grassed area at Ham Cross to allow the stalls to form an enclosure for music and audience in a safer and quieter location. The green is also designed to support other seasonal events in the Ham Parade calendar. The proposals accommodate increasing the number of market stalls without requiring car parking suspensions (the cost of which is currently borne by the market). It is also proposed to extend the segregated cycle route from Kingston to improve access by cycle. The proposed layout was welcomed by the market organisers. They also have a number of ideas for the development of the market and would like to be involved in the development of the plans should they be taken forward.

Richmond Golf Course

The Richmond Golf Club is one of the landowners on potential walking and cycling routes from Ham to Richmond avoiding the flooding towpath and the busy Petersham Road. One of the options identified by the stakeholders in the public workshops was to locate a 150m path alongside the boundary of the Golf Course, creating a potential new access into Richmond Park and playground. The Golf Club's initial reaction is that this would raise health and safety concerns.

Thames Landscape Strategy (21st June 2018)

The Ham and Petersham Neighbourhood Forum (HPNF) and Cllr Andrée Frieze met Jason Debney of the Thames Landscape Strategy (TLS). Jason described the history of TLS proposals for Ham and Petersham including safeguarding and improving ecology, flood mitigation and creating dry routes for walking and cycling. They are proposing a route which roughly follows the Kim Wilke's proposals for a vista/ route between Petersham Meadows and Ham Lands, which is similar to Active Neighbourhood route option 2. It was agreed that although there may be some differences priorities of the two schemes, there were potential synergies including the opening different sources of funding for the development and construction of the route.

Cllr Ehmann, Deputy Leader of Richmond upon Thames Council and Cabinet Member for Transport, Streetscene and Air Quality and LBRuT officers from LBRuT (July 2018)

PJA, Sustrans and the Ham and Petersham Neighbourhood Forum met with the newly formed council administration and officers to present the in-progress findings and proposals of the Active Neighbourhood study.

Specific issues for Ham and Petersham including poor transport connectivity and reliance on the busy Petersham Road for all forms of transport (including buses, the only form of public transport) were described. Towpath flooding and lack of reliable, all year round routes to enable a wide range of people, including children and older people to walk and cycle comfortably and safely to local town centres and into Ham for schools, to visit Ham House/ Estate and Ham Lands was outlined.

The Ham and Petersham community engagement events and the route proposals that originated at the public events were described to LBRuT.

LBRuT advised that they support active travel as a means to improve air quality, promote good health and make the neighbourhood more liveable. They are considering how to support active travel through funding bids and the LIP.

5. Summary of Community Engagement 'Issue' Findings:

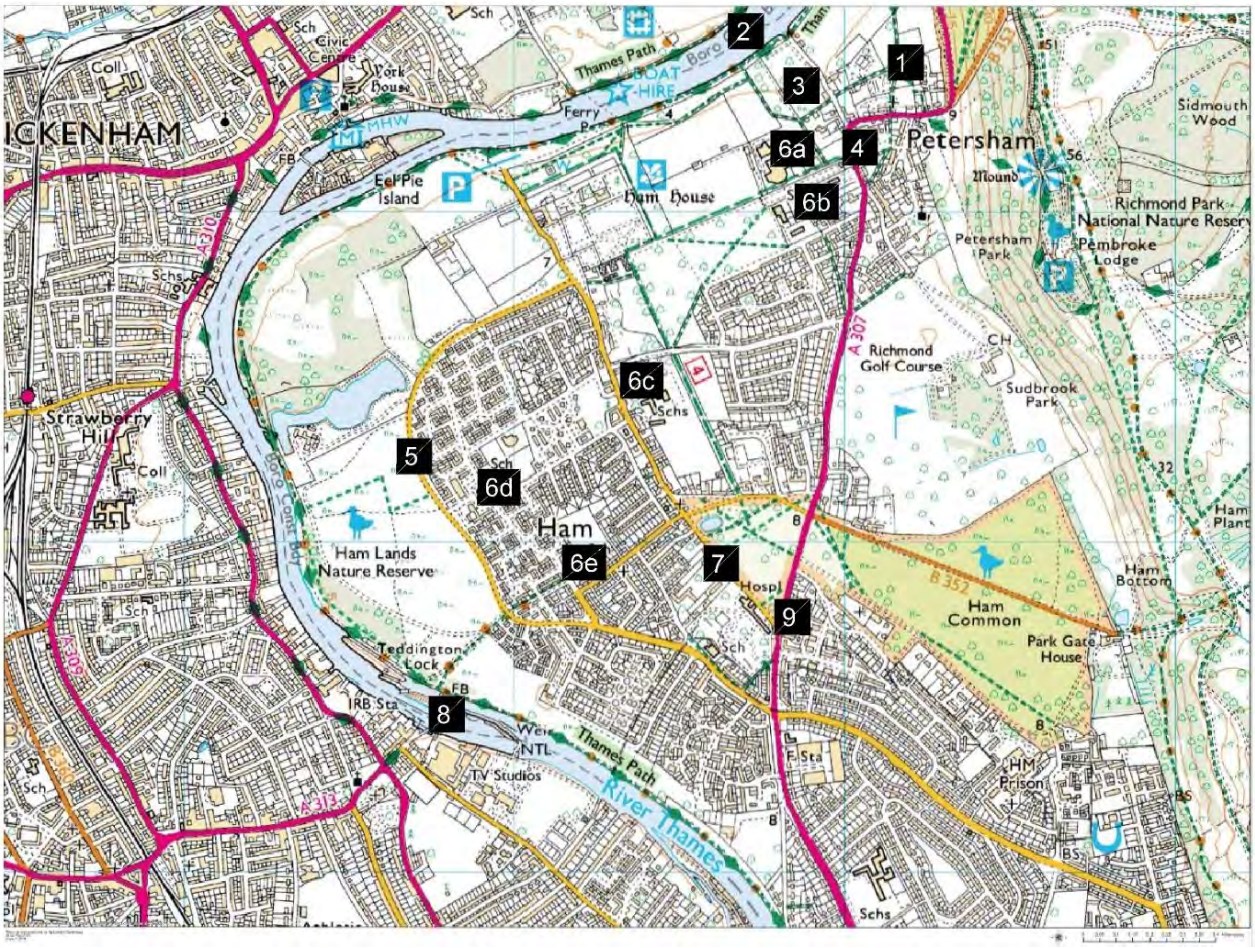
These findings are a culmination of engagement across the Ham Fair, Market and the Community workshops.

A. Route from Ham to Richmond (and wider links):

General Feedback:

There is wide community support for exploring an alignment north to Richmond that avoids the Petersham Road and the river flooding. There is consensus with the majority of community members that the Petersham Road is unsuitable for cycling (and for many, walking) and the towpath is unreliable with flooding. A significant number of people already cycle to Richmond, but it was widely felt that more people would be encouraged to do this journey if there was a reliable, safe and established route. A number of residents commented that improving the opportunities for cycling to Richmond will relieve some capacity on the number 65 bus route.

Location Specific Feedback (please reference map):



1. Petersham Meadows

- Residents raised concerns about the inaccessible barriers at the entrances to Petersham Meadows.
- The issue with lack of lighting at night.
- Some were unsure whether they were allowed to cycle across the meadows and had been asked to dismount.
- Crowded at weekends with pedestrians.
- The footpath that leads to the Meadows from Petersham is narrow.

2. <u>The River Thames Tow Path</u>

- Poor surface in parts (although many residents praised the recent resurfacing work along other stretches)
- A number of residents raised personal safety concerns at night with the isolation and lack of lighting.
- The flooding – many cyclists (and pedestrians) had stories of being caught out and having to retrace their steps.
- A number of people referenced how taking the towpath felt like 'taking the long way round', which might be a deterrent for those choosing to cycle.
- Anti-social behaviour and a perception of crime was raised by a small number of residents.
- A number of residents referenced inconsiderate behaviour from cyclists riding too quickly along the towpath.

3. <u>River Lane</u>

- There was a particular focus on River Lane with regard to the flooding.
- Residents described the issue with traffic on River Road, particularly at busy times over the weekend.

4. <u>Petersham Road (A307) at Petersham</u>

- The bend in the Petersham Road was raised time and time again as a significant and dangerous barrier – to both walking and cycling – due to the narrow road and footways.
- The Petersham Nurseries entrance, at St Peter's Church, gets very busy at the weekend.
- There were a number of comments around pedestrian crossing outside Petersham Gate (to Richmond Park) being dangerous and that more priority given to pedestrians and cyclists.
- It was highlighted during the engagement sessions that all the potential parallel routes in the immediate vicinity of this location, which would take you away from the traffic, would necessitate using very narrow footpaths.

5. <u>Dukes Avenue and Riverside Drive</u>

- The speed of vehicles using these roads was raised as an issue by the community, particularly at school drop off/pick up time.
- Lack of continuous, segregated cycle facility.
- Lack of connectivity, both physical infrastructure and signage, off it and into Ham.

6. The Schools in Ham, including The German School, Greycourt School, Russell School, St Richards and Meadlands Primary

- A number of parents and local residents expressed frustration at the number of parents driving their children to school. Issues include increased traffic in Ham, poor air quality at the school gate, an increase in road danger which discourages parents to let their children walk or cycle to school.
- The condition of the footpaths in the Ham Avenues, in the vicinity of the Russell School and The German School, results in muddy feet and bikes.
- Residents and parents referenced inconsiderate and dangerous parking in and around the schools at drop off and pick up time.

7. Ham Common, Ham Street and the Ferry

- Residents referenced the speed of traffic as it travelled up Ham Common, which made for an intimidating environment for those cycling.
- Equally, further up on Ham Street, residents referenced traffic accessing the Palm Centre and Saturday football, which included speeding, inconsiderate parking – which is exacerbated the by the lack of footways in parts.
- The Ferry at the end of Ham Street was discussed and described as a local asset, but it was also noted that it was irregular and the timings limited.

8. Teddington Lock

- A significant number of residents referenced the importance of this crossing point for both pedestrians and cyclists.
- The issue of using the link late at night/in the dark was raised. The lighting was referenced as being inadequate in the approach to the bridge on the Ham side.
- Residents commented that the bridge itself is narrow and often congested with pedestrians at peak times.

9. A307 Between Ham Common (Rd) and Ham Gate Avenue

- Residents referenced the speed of vehicles along this stretch and the intimidating environment for those on cycles.
- There were a number of comments around the difficulty for pedestrians crossing this section of road.

- Cycles often wish to turn right from the A307 onto Church Rd which can be difficult.

B. Ham Parade:

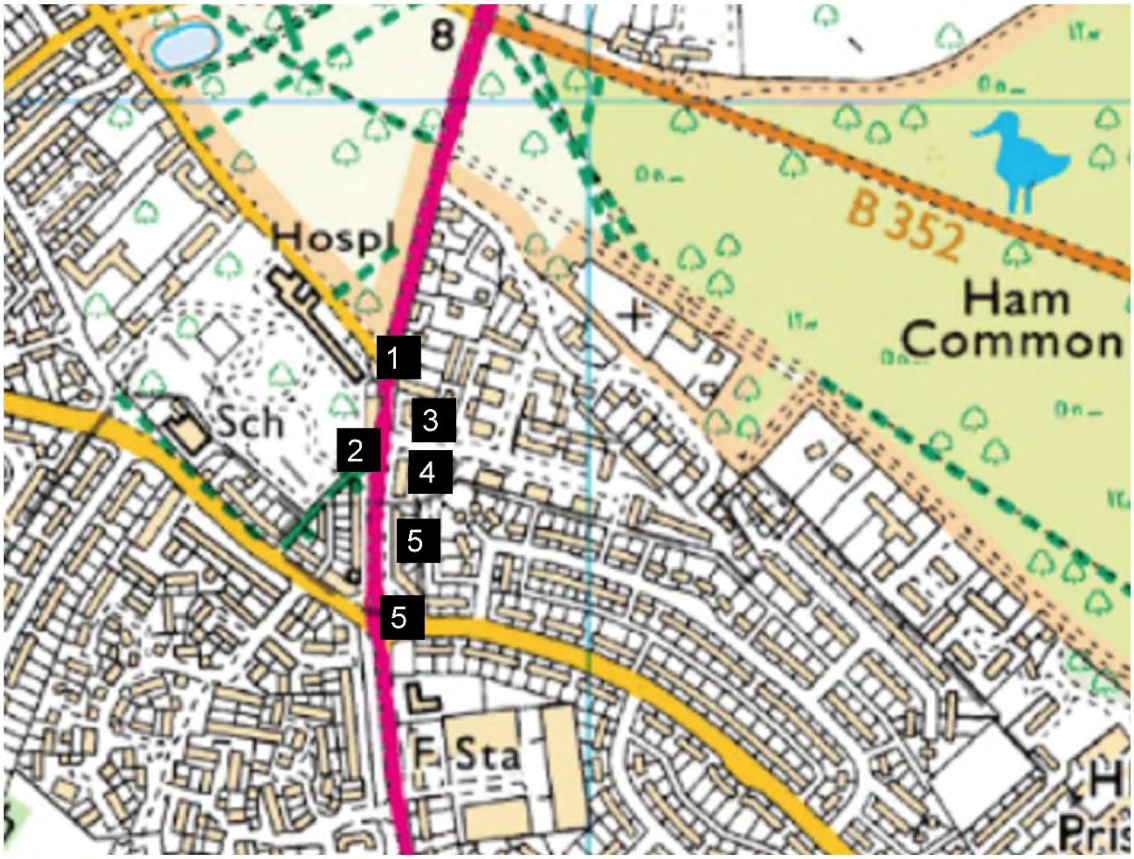
General Feedback:

There was a general community consensus around the fact that Ham Parade is an important if underused, local resource. Local residents considered the physical limits of the Parade to run from Ham Cross Junction through to the junction with Ham Common. Ham Cross junction is considered a gateway into Ham. The parade is recognised as a local hub, which is a function that could be further emphasised by the reduction in the dominance of the motor traffic (both the traffic passing through and parked).

There were general concerns about the speed of traffic on the A307 through Ham Parade, but less so about the volume. The volume of traffic is widely considered by the community 'to be a given'. As a result of the speed and volume of motor traffic, Ham Parade was considered by many to be an unwelcoming environment for cycling, with many – particularly those with children – avoiding it all together.

There were local concerns around parking and the impact on local businesses should the amount be reduced. Many felt there was adequate parking currently but that it needed 'tidying up' and organising.

Location Specific Feedback (please reference map):



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1. Junction of Ham Common and Petersham Road (A307)

   - Concerns were raised around the speed of vehicles turning off the A307 onto Ham Common
   - The width of the junction for pedestrians crossing over Ham Common
   - Lack of a pedestrian crossing over the A307, connecting Ham Common with the cricket club, café and other shops.
   - There was a desire to see more use made of the small triangle of green space/seating on the eastern side of the A307 at the junction with Ham Common.
   - The narrow pavement on the eastern side of the A307 in the direction of Ham Parade

2. Junction of A307 and Warners Lane (Outside the Sainsburys)

   - Residents raised concerns about the street clutter, in particular, the recycling bins.
   - Issues raised around the loading bay for Sainsbury's, which is often illegally parked and when occupied by an HGV, crossing is difficult.
   - Vehicles occasionally turn into Warners Lane at speed, which makes an unsafe environment for pedestrians.

- A number of residents use Warners Lane to cut the corner for accessing Duke Avenue, which they feel has a perception of being unsafe at night.
- Residents identified the junction of Warners Lane and the A307 as being an eyesore and it was felt better use could be made of the space.

3. Junction of the A307 and The Parkleys

- Residents raised concerns about the speed of vehicles turning off the A307 and into the Parkleys.
- Residents raised the issue of the difficulty in turning right out of the Parkleys on a bicycle.
- It was felt that the pedestrian island crossing over the A307 at the junction with Parkleys was unsafe. This concern was primarily raised by people with small children and older people.
- It was raised that there is often standing water at the northern (Ham Common side) dropped kerb of The Parkleys.

4. The Ham Parade Service Roads

- There were concerns about the speed of vehicles turning into and driving along the service road at the Parkleys.
- Issues raised about untidy and inconsiderate parking.
- Residents raised the frustrations about cars running their engines whilst parked.
- Parking concerns aside, a number of residents felt that the service roads were a waste of potentially interesting public space.

5. Ham Parade Bus Stop (Kingston Direction)

- A number of issues were raised around the narrow pavement for pedestrians waiting for the bus
- Difficult for pedestrians walking down Ham Parade – street clutter, including the bus stop and the line of bollards – which prevents those of foot taking a direct line to Ham Cross junction.

6. Ham Cross Junction (borough boundary with RBK)

- The Ham Cross junction is considered a significant barrier by a large percentage of the local community. This is true of all users – car drivers, pedestrians and those on bicycle.
- There were general concerns around traffic delays at the junction.
- The lack of opportunity for crossing diagonally – a strong desire line – was raised by a number of community members.
- The lack of any facility for cyclists once they come off the cycle lane coming from Kingston was raised by many local cyclists as a particular frustration.
- Speed and frequency of traffic cutting through the Texaco garage on the corner of the junction was raised by a number of residents.
- A number of residents raised how confusing the junction is for car drivers, particularly those making a turn onto or off the A307.

- The green spaces at the junction, either side of Tudor Drive, were considered a wasted opportunity.
- A number of residents raised the fact that drivers speed up on their approach to the lights to make it through on green.

6. Summary of ideas, approaches and solutions discussed during engagement

The community engagement for this project was specifically tailored around working up possible solutions, through discussion and use of the Sustrans model kit. Many of the ideas and solutions have been incorporated into the concept designs that have been developed for this study. Therefore, there is a direct correlation between an issue raised, a collaboratively worked-up solution and delivery of a design response.

A. Route from Ham to Richmond (and wider links):

General ideas, approaches and solutions:

There was a general consensus that any route from Ham to Richmond should feel safe, be well signed, accessible 24hours a day, be accessible to all users, be as direct as possible, have a hard sealed surface throughout and connect to wider routes. It is clear from the engagement that a 'dry route' from Ham to Richmond would be well used.

While the focus of this study was to look at a route into Richmond that avoided the flooding of the river and the Petersham Road, there were also wider conversations had with residents regarding access within Richmond Town Centre, including conditions in the approach to Richmond Rail Station.
Any scheme to develop an alignment from Ham to Richmond should consider the desire from local residents to feel benefit across Ham, in particular at local schools.
Where discussed, location-specific design solutions have been detailed below.

Location Specific Ideas, Approaches and Solutions (please reference designs):

1. Petersham Meadows

- Open up the barriers at Petersham Meadows to make them accessible for all users, including cargo bikes, mobility cycles and trailers.
- Widen the path across the meadow, surfacing it on a surface with a sympathetic colour for the surroundings.
- Improve the lighting at either end of the meadows.
- Make it clearer that cycles are allowed to use this stretch, but include design features to ensure considerate cycling.
- In the final engagement event (the Ham Fair), residents had access to the designs for a 'Dry Route' developed as part of the Thames Landscape Strategy. These designs were positively received by residents.

2. The River Thames Tow Path

- The vast majority of local residents would like to see the resurfacing of the towpath completed along this stretch.
- Signage was suggested to encourage considerate cycling.
- Some residents suggested demarking on the towpath a section for cyclists and a section for pedestrians. Others suggested that the mixing of pedestrians and cyclists encourages better behaviour.

3. River Lane

- Residents supported suggestions around improving accessibility at this point (raised boardwalk to access dry route as indicated in designs) and it was suggested there should be formalisation of the car parking.

4. Dukes Avenue and Riverside Drive

- Various design solutions were discussed to slow vehicles through these roads, including bus tables at junctions, narrowing of the road, removal of line marking, increasing the number of pedestrian crossing points.
- A segregated cycle facility along the length of both Dukes Avenue and Riverside Drive.

5. The Schools in Ham, including The German School, Greycourt School, Russell School, St Richards and Meadlands Primary

- A number of residents highlighted the fact that an established cycle route to Richmond from Ham could run past, or link to, all the schools in Ham.
- Design interventions to slow the speed of vehicles outside of the school were popular, prioritise children walking and cycling to school and greater enforcement of inconsiderate/dangerous parking.
- One option that was popular with both parents and local residents was the introduction of a 'School Streets' programme to limit vehicle access on the street outside the school at drop off and pick up times.

6. Ham Common, Ham Street and the Ferry

- Measures, including more vertical deflection, were discussed to slow vehicles on these roads.
- There was a discussion around the pros and cons of making the roads around Ham Common one way in each direction to allow more space for cycles.
- Making Ham Street – in the vicinity of Palm Centre – a pedestrian priority and changing the surface colour/material to emphasise priority.
- Reallocate car parking to provide more space for those walking and cycling (particularly around Ham Common and on Ham Street).
- Many residents raised the desire to see a walking and cycling bridge over the Thames at the end of Ham Street as a means of opening up connectivity between Ham and Twickenham, which would then also provide a straightforward route into Kingston for those on bicycle.

7. A307 Between Ham Common (Rd) and Ham Gate Avenue

- There was a desire to see this stretch made 20MPH
- A number of residents raised the need for segregated cycle facility along this stretch.
- There was a desire to see an additional pedestrian crossing point at Church Road.

B. Ham Parade

General ideas, approaches and solutions:

Through the engagement, the ideas for Ham Parade fell into two camps – i) a retrofitted approach to Ham Parade to slow traffic and help prioritise other users, ii) a more ambitious approach that strips the space back and starts from scratch. Many conversations around this were pragmatic and suggested that one could follow the other as funding and resource allowed.

The local community wants to see a coordinated and joined up approach to Ham Parade and Ham Cross Junction from Kingston and Richmond Council. A potential project in this space could link Kingston and Richmond Town Centres and remove a significant local barrier to active travel. Throughout the engagement, it was clear that there was wide support for taking a 'Healthy Streets' approach to Ham Parade and provide holistic solutions.

In opening up Ham Parade, there was wide support for the introduction of separated cycle facility through the space and generally tackling the dominance of motor traffic in the space – although many residents felt the volume of traffic was inevitable. There was general consensus from residents that they would like to see the parade given a more coordinated plan for trees, waste bins, cycle parking and seating.

Location Specific Feedback (please reference designs):

1. Junction of Ham Common and Petersham Road (A307)

    - Tightening of the corners of Ham Common (Rd) to slow traffic as it turns off the A307 and reduces the crossing distance for pedestrians.
    - Introduction of a zebra crossing on the A307 at this location.
    - A 'gateway' feature to emphasise to drivers that they are entering Ham Parade.

2. Junction of A307 and Warners Lane (Outside the Sainsburys)

    - Relocation of the recycling bins.
    - Camera enforcement of the loading bay.
    - Continuous (Copenhagen) crossing over Warners Lane to give priority to pedestrians.
    - Better way-marking and lighting through Warners Lane.
    - Removal of street clutter.

3. Junction of the A307 and The Parkleys

- Tightening up of the corners of The Parkleys to slow vehicles turning off the A307.
- Continuous (Copenhagen) crossing over The Parkleys to give priority to pedestrians.
- A parallel zebra to improve the pedestrian crossing facility, slow vehicles on the A307, provide better connectivity between both sides of the Parade, and facilitate cyclist turning right onto the A307 and travelling across to Warners Lane.

4. The Ham Parade Service Roads

- Reconfiguration and removal of the service roads to provide greater space for cycle facility and an improved pedestrian environment.
- Reconfiguration of parking was discussed.
- There was a desire to provide more space for the shops and cafes/restaurants outside (ie/ tables and chairs etc).
- The reallocation of space to provide more room for planting, seating and other public realm features.

5. Ham Parade Bus Stop (Kingston Direction)

- Removal of the service road would provide greater space at the bus stop and provide an uncluttered desire line for pedestrians moving through the space.

6. Ham Cross Junction (borough boundary with RBK)

- Improved pedestrian crossing times at the junction, including allowing for diagonal crossing.
- Improvements to the cycle infrastructure either side of the junction, and through the junction itself, to provide safe passage for those on cycles.
- Tightening up of the junction, to allow for bus movements, but keep vehicle speed low.
- Design features to recognise that Ham Cross is considered a 'gateway' into Ham.
- Make better use of the green spaces around the junction, incorporating them into the design of the junction and Ham Parade.

C. Summary of further observations from the engagement team:

- There is general support across the themes being discussed in the study.
- It is clear there is a demand from local people to be better connected to both Kingston and Richmond.
- The local community responded positively to tackling the street environment outside the various schools.
- There was support from the community for both short-term/more immediate improvements and also long-term, more ambitious developments.
- Ham Cross junction is also considered by many to be a 'gateway' to Ham and more could be made of this with a design.

- There is support from local people to incorporate a potential alignment to take in local schools (with the incorporation of potential measures such as 'School Streets' (timed closures, camera enforced, outside schools).
- The 'dry route' as previously explored as part of the Thames Landscape Strategy was well received by local people when discussed in more detail during the final engagement session at the Ham Fair.
- As part of this conversation, the subject of a bridge crossing the Thames was raised on a number of occasions – with a particular focus on an alignment across the river from Ham Street to Twickenham.
- There was general enthusiasm for improving cycle links to Richmond in order to relieve some capacity of the 65 bus at peak times.
- There was general enthusiasm for taking a 'Liveable Neighbourhood' style approach to Ham – to make it more connected for walking and cycling within the area and improve connections to the north and south.
- There were a number of comments regarding anti-social behaviour from some cyclists on the towpath.

D. Engagement recommendations and next steps

- Comprehensive engagement with the local businesses on Ham Parade is recommended.
- The collection of additional traffic data (speed/vol, origin and destination, school run, parking survey, retail survey etc) and the presentation of this information in an accessible way would help further inform the local community.
- Engagement activity with local residents in the London Borough of Kingston to align the needs and ambition for Ham Cross/Ham Parade and links to Kingston/Richmond.
- Closer engagement with schools (and local residents) around the possibilities presented by implementation of school streets.
- Establishment of a stakeholder management group (including some members from the stakeholder management group meeting carried out as part of this engagement process).
- Development of a Q&A document

Appendix A. Engagement Activity Details

A. A stall at the Ham Market

Location and date:

Ham Parade, Saturday 5th May 2018

Delivery Themes:

- Report back on previous engagement work carried out by the Ham & Petersham Forum.
- Advertise the upcoming community engagement workshops
- Engage the local community and gather relevant feedback on local journeys and issues

Materials:

- Flyers to advertise the community engagement workshops
- Maps of Ham & Petersham allowing people to register their concerns and observations, either through red/green dots or post-it notes.
- Maps allowing residents to map their local journeys.

Objective:

- To inform as many people from the local area about the upcoming community workshop and for them to understand why the event was relevant to them
- To build on previous engagement work and start to hone in on the specifics around journeys north to Richmond, but also to start thinking about Ham more holistically.
- The stall was delivered by volunteers by the Ham and Petersham Forum and supported by a member of Sustrans Collaborative Design Team.

B. Stakeholder Engagement Workshop

Location and Date:

Cassell Hospital in Ham, 18th May 2018

Delivery Themes:

- Drew together local strategic stakeholders (from both Richmond and Kingston councils and local schools, community groups, councillors etc) to inform them of the ambition of the project.
- It was an opportunity for the Ham and Petersham Forum to present on the neighbourhood plan.
- Sustrans presented the opportunities of Liveable Neighbourhoods and Healthy Streets to the stakeholders.
- The stakeholders were divided into two groups.
- Each group was presented with images taken from the local area to help orientate themselves during discussion. These were then supplemented by images showing exemplary approaches to design to inspire and stimulate conversation.

- Each group then had a facilitated discussion whereby stakeholders discussed potential issues and barriers to delivering a strategic route north towards Richmond (and toward Kingston) and understand challenges of delivering change to Ham Cross junction and Ham Parade.
- Stakeholders were then asked to explore how some of these issues and challenges might be approached and overcome.
- The facilitated session was then followed up by a cycle ride with stakeholders to explore options for a route north towards Richmond and a walking tour of Ham Parade and Junction.

Materials:

- Presentation on Liveable Neighbourhoods and Healthy Streets.
- Presentation on the H&P Neighbourhood Plan.
- Maps of Ham and Petersham, including potential alignments for a northern approach towards Richmond.
- Plastic jars and voting with tokens around the following question:
    - What is most important to you when choosing (or considering) a cycle route for active transport (commuting to work, school, college, shopping etc)?
- The facilitated discussions were supported by the following headings:
    - Issues identified for cycle route north towards Richmond
    - Issues identified for Ham Parade Junction
    - Issues identified for Ham Shopping Parade
    - Solutions for cycle route north towards Richmond
    - Solutions identified for Ham Parade Junction
    - Solutions identified for Ham Shopping Parade
- Images taken from the local area to orientate people
- Images of example schemes that show exemplary approaches to help inspire solutions

Objectives:

- To build awareness amongst key strategic stakeholders around the ambition for the Active Neighbourhood Study and the detail of the local area.
- To use local knowledge and experience to identify potential issues and solutions for a dry route north towards Richmond and around Ham Parade and junction.
- To develop greater collective understanding around the opportunities presented by Liveable Neighbourhoods and Healthy Streets.
- Foster greater opportunity for cross-border (Kingston and Richmond) collaboration.

The event was facilitated by Sustrans, Phil Jones Associates and members of the Ham and Petersham Forum.

C. Community Engagement Workshop

Location and Date:

Cassell Hospital in Ham, 18th (eve) and 19th May 2018

Delivery Themes:

- Drew in local residents from across the local area.
- Provided 'Dr Bike' cycle repair services to draw in local residents.
- Conducted a public ride to explore the options for the northern alignment towards Richmond and walking tour to Ham Parade and Junction.
- Presented a range of pertinent and engaging information related to Healthy Streets, which would allow local people to make an informed and constructive contribution to the discussion.
- Presented feedback collected to date from previous H&P Forum engagement and the information gathered from Ham Parade Market.
- Used the Sustrans model kit (scale model set) to explore the possibilities for Ham Parade and Ham Cross Junction – achieved through a co-design process with local residents.
- Presented a map showcasing potential alignments for a cycle route north with opportunities for comments.
- Recognising the need for a holistic/liveable neighbourhood style approach, the four local schools in Ham were picked out and presented through individual road layout plans – opportunity for local residents to comment and develop solutions.

Materials:

- Information on Healthy Streets.
- Printouts on school initiatives, including 'School Streets'
- Maps of Ham and Petersham, including potential alignments for a northern approach towards Richmond.
- Plastic jars and voting with tokens around the following question:
- What is most important to you when choosing (or considering) a cycle route for active transport (commuting to work, school, college, shopping etc)?
- Surveys for children to complete
- Base maps for local schools
- Base maps for Ham Parade and junction with Sustrans model kit
- Images taken from the local area to orientate people
- Images of example schemes that show exemplary approaches to help inspire solutions

Objectives:

- To further raise awareness amongst local people of the Active Neighbourhood Study and the opportunities presented by Liveable Neighbourhoods and Healthy Streets.

- To provide local people with the opportunity to explore, using the model kit, the opportunities for making improvements to Ham Parade and Junction, creating quality provision for those on bicycle, walking and creating interesting and appealing public realm.
- To generate conversations between residents over potential solutions and encourage local people to better understand the importance of quality approaches to design, particularly when considering multiple users.
- To explore opportunities for opening up routes north to Richmond that avoid the river at flood and the Petersham Road.
- To tap into local knowledge.
- To generate ideas and solutions to the primary objectives of the project, which would inform conceptual design solutions.

D. Ham Fair Engagement Event

Location and Date:

Ham Common, 9th June 2018

Delivery Themes:

- Report on the stakeholder and community workshops
- Continue to draw in additional comments and perspectives, using an event that draws a large percentage of the local population
- Discuss opportunities and a design for a 'dry route' across Petersham Meadows as a result of the discovery of existing plans for this space during the Community Workshop.

Materials:

- Maps of Ham & Petersham allowing people to register their concerns and observations, either through red/green dots or post-it notes.
- Maps allowing residents to map their local journeys.
- Plan of potential 'dry route' across Petersham Meadows.

Objectives:

- Increase the number of people who are familiar with the ambition of the Active Neighbourhood Study.
- Gauge public interest in the potential 'dry route' design

Appendix B. Community knowledge and ideas

The Neighbourhood Forum has been gathering the community's knowledge of the area to generate proposals to make walking and cycling safer, convenient and pleasant.

In particular, we asked for proposals for walking and cycling routes from Ham and Petersham to neighbouring town centres, local schools and shops. The routes are intended to be suitable for a wide range of users including those with buggies and mobility scooters. They should be accessible 24/7 and unaffected by flooding so people can rely on them for everyday journeys to see friends, work, school and shops.

The brief presents lots of challenges. People looked for opportunities to create safe routes which avoid the busy Petersham Road and tidal flooding on the towpath. They were aware that there may be physical and cost constraints, ecological issues and areas outside council ownership which may restrict the route. However free thinking was encouraged and the consultants subsequently recorded the proposals made during these workshops on the plans illustrated.

Since we started the Active Neighbourhood study project, we are delighted that Richmond Council have confirmed that they are making a Liveable Neighbourhood funding bid to Transport for London for our area. They are reviewing the outcomes of our study for further investigation and potential inclusion in the bid.

www.activeneighbourhoodhamandpetersham.co.uk

Appendix C. Ham and Petersham Neighbourhood Forum

HAM & PETERSHAM
Neighbourhood Forum

Update from the Chair

We were blessed with fine weather for the busier-than-ever Ham Fair, wonderfully organised by Ham Amenities Group, supported by Ham Scout Group and many local volunteers. Talking to residents on the day, we're pleased to find that most of you keep up to date on our Neighbourhood Plan through this community magazine.

Council elections and the Forum committee

Congratulations to the successful candidates in May's local elections. Ward councillors automatically sit on the Forum committee so Cllr Penny Frost will continue as a member. Newly elected Cllr Andree Frieze has served on the committee for several years so also stays, but in her new capacity, while Cllr Gareth Richards joins us, and has already attended his first meeting.

We are very grateful to former councillor Jean Loveland for her contribution since the start of the Forum, including being our first Treasurer. So we can continue to make use of her expertise and energy, we have co-opted her back on to the committee. Ex-councillor Sarah Tippet also provided vital input and I am sure she will remain active in our community.

Our committee currently has 14 members but we always welcome new people. Everyone who lives in the Ham and Petersham Neighbourhood Area is automatically a member of the Forum. If you are interested in knowing more, please contact me at brianwilman@me.com. It is a very good way of keeping up to date with what is happening locally and the minimum requirement is to attend our committee meetings which take place once a month, except August.

Plan Referendum

The draft Neighbourhood Plan is moving slowly, but steadily, through the approval process. An independent inspector checked that it satisfies the legislative requirements and asked us to clarify some queries. Members of the Drafting Team led by Chris Ruse provided quick answers and all the relevant documents are on our website.

If all goes as planned, in autumn or early winter, you will be asked to participate in a Ham and Petersham referendum. The question that will be asked is:

"Do you want Richmond council to use the neighbourhood plan for Ham and Petersham to help it decide planning applications in the neighbourhood area?"

A great place to live and work

The Forum has always put value on our area as being a "a great place to live", but we also want it to be "a great place to work". We have no medium-sized workplaces here, except for our excellent schools, but there are many people who run businesses from home or small offices, for all or part of the week. The Forum will continue to promote the facilities such businesses need including good transport links, fast internet connection and local eateries for networking. Perhaps in the future we will have our own small business support facility with meeting rooms, IT services, printing and so on.

Brian Willman

Monthly meetings 2018

The Committee meets every third Tuesday of the month, in Ham Library Community Room, 7.30-9pm. For the rest of 2018, dates are: 18 September, 9 October, 20 November and 18 December (all subject to confirmation). Please feel free to attend.

HAM & PETERSHAM Neighbourhood Forum

Keep in touch

All the latest news on the Plan, the Referendum and other news and events is on our website:

hamandpetershamforum.org do take a look.

How to contact us:

info@hamandpetershamforum.org

c/o Grey Court School, Ham Street, Ham TW10 7HN

HamPetershamNeighbourhoodForum

@OurPlanHPNF

Active Neighbourhood Feedback

Late last year, we were successful in bidding for Community (previously Village Plan) Funding for an Active Neighbourhood study in Ham and Petersham. This aims to find ways to make every day walking and cycling more accessible to a wider range of people, including younger, older and mobility impaired. During late spring, we held a number of events and workshops with transport consultants Phil Jones Associates and Sustrans, where we asked you to give us your thoughts and ideas to make this happen.

Co-design workshops

With cricket on the common and Dr Bikers in sunglasses, the atmosphere was decidedly summery at the Lawrence Hall, Cassel Hospital in May. The aim of the workshops was to propose safe, non-flooding routes, from Ham to both Richmond and Kingston, that can be relied upon for every day journeys to work, schools and local shops.

We kept in mind Transport for London's Healthy Streets objectives to *'improve air quality, reduce congestion and help make London's diverse communities greener, healthier and more attractive places to live, work, play and do business'*. Any future funding bids must meet these, so our Consultants will carry out a 'Healthy Streets Check' on the existing conditions and how they compare with the final proposals.

Ham Cross & Ham Parade

Consultants Phil Jones Associates and Sustrans produced a large scale model of Ham Parade with trees, parking spaces, pavements, cycle routes, seating and pedestrian crossings that could be moved around to see how the layout could be improved.

Making Ham Cross junction feel safer for pedestrians and cyclists by extending the cycle route from Kingston to avoid it "throwing you back into the road with fast cars, ..and buses" was a top priority. Others were providing facilities for the market, removing clutter, adding pavement and trees on the east side, making it feel calmer and cutting traffic speeds, while maintaining parking for non-local shoppers.

Ham Parade is in Richmond borough (LBRuT) but Ham Cross is in Kingston (RBK), so we were pleased that Councillors from both RBK and LBRuT, along with the North Kingston Neighbourhood Forum attended the workshop. We will be discussing outcomes with officers from both councils.

All your ideas will developed by the Consultants into a final report. This will provide both a long term strategy as well as short term improvements and potential funding streams to implement them.

Bypassing Petersham Road?

At the opposite end to Ham Parade, a safe and reliable link for walking and cycling through Petersham was looked at. Many people expressed concerns about the narrow pavements and the congested road there, making it feel unsafe for cyclists and walking with children while being inaccessible for wide buggies and mobility scooters. The towpath at Petersham Meadows is uneven and floods, particularly at River Lane, with regular commuters branding it "unreliable". One resident admitted to refusing to turn back and add an extra mile to his journey, so pedalled on through the water with bike trailer and bemused toddler floating behind him!

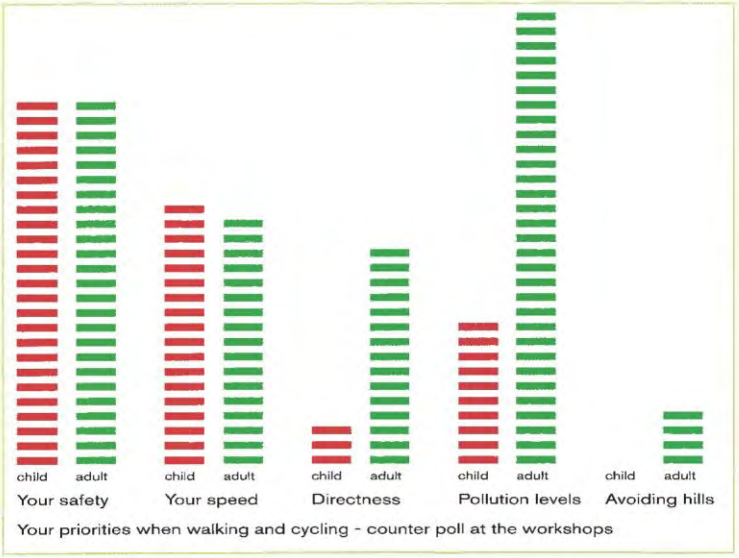
One idea raised at the workshops was a scheme designed some years ago, but not implemented, that banks up the concrete wall around Petersham Meadows to provide a dry route, while allowing flooding through culverts. Other suggestions included making a new link from Petersham Meadows through to the Avenues, building boardwalks and increasing the height of the current path above the flooding level. All these proposals need to fit with the current Thames Landscape Strategy, be assessed by the Environment Agency and have the support of the National Trust, LBRuT, landowners and other stakeholders.

Minor proposals included replacing the 'kissing gates' to Petersham Meadows as the current arrangement is difficult for cycles, buggies

and is inaccessible to adapted cycles, wheelchairs and mobility scooters. Wheels for Wellbeing who represent mobility impaired people who use standard and non-standard cycles to get around, are working with local authorities to identify many examples like this which impact on their mobility.

A completely alternative route, which had significant support at earlier consultation events, is a walking-cycling bridge from Ham Street to Twickenham and onto Richmond.

Your preferences



Your priorities when walking and cycling - counter poll at the workshops

At the workshops and at Ham Fair we asked people for their priorities when cycling. Generally, residents' views echoed Sustrans' own 'Bike Life' research which found that while both women and men would like the opportunity to cycle more, women (and we also found children) are more affected by safety fears and negative experiences of busy roads. Some people told us they were happy to cycle on the Petersham Road but they were a minority and almost all men.

Thank you to everyone who attended the workshops and came to our stalls at the Ham Parade Market and the Ham Fair. All the comments and ideas which were too numerous to include here, will be collated and included in the final report.

For more see: www.activeneighbourhoodhamandpetersham.co.uk

Reducing congestion

Many people remarked that roads are noticeably less busy during school holidays. Initiatives like 'school streets', which are timed road closures that coincide with drop off and pick up, were received with interest. They have been introduced in London, Solihull and Edinburgh, and make streets outside schools more sociable, safer and less polluted. Children who walk and cycle often continue active lifestyles in adulthood, which is a compelling case for inclusive cycle infrastructure.

HAM & PETERSHAM
Neighbourhood
Forum

Appendix D. Stakeholder list

PROJECT TEAM		
Name	**Post**	**Organisation**
Phil Jones	Director	Phil Jones Associates
John McQueen	Project Engineer	Phil Jones Associates
Ben Addy	Engagement Manager	Sustrans
Karl Brierley	Transport Planner	Sustrans
Justine Langford	AN project manager	HPNF
David Lamb	AN Steering group	HPNF
Brian Waters	AN Steering group	HPNF
Name	**Post**	**Organisation**
STAKEHOLDERS		
Council officers/ council related/ planning related		
Cllr Peter Buckwell	Cabinet member for Highways and Streetscene	LBRuT
Cllr Alexander Ehmann	Cabinet Transport & Deputy Leader of Richmond	LBRuT
Cllr Jean Loveland	Cycle champion	LBRuT
Carole Crankshaw	Cycle officer	LBRuT
Lindi Louvw	School Travel Planner	LBRuT
David Tidley	Transport Strategy	LBRuT
Nick O'Donnell	AD Environment	LBRuT
Tasha Hunter	Ecology	LBRuT
Jason Debney		Thames Landscape Strategy
Matt Roles	LBRuT Borough Engineer	LBRuT
Leigh Gravenor	Sustainable Transport Officer	RBK
Diane Watling	Sustainable travel	NKNF
Marilyn Mason	Environment	NKNF
Local councillors		
Cllr Penny Frost	Local Cllr Ham and Petersham riverside/ HPNF	Liberal Democrat party
Cllr Gareth Richards	Local Cllr Ham and Petersham riverside/ HPNF	Liberal Democrat party
Andrée Frieze	Local Cllr Ham and Petersham riverside/ HPNF	Green Party
Jean Loveland	HPNF	
Cllr David Cunningham	Local Cllr. North Kingston	Conservative party
Cllr Maria Netley	Local Cllr. North Kingston	Conservative party
Cllr Katrina Lidbetter	Local Cllr. North Kingston	Liberal democrat party
Specialist advocacy groups		
Tim Lennon	Borough Coordinator	Richmond Cycling Campaign
Jon Fray Roger Mace	Borough Coordinator	Kingston Cycling Campaign
Safer Neighbourhood Team		
PC Smudge Smith	Police constable – Ham and Petersham	MET police
PCSC Alex Molnar	Police Community Support Officer – Ham and Petersham	MET police
Local School leadership teams		
Maggie Bailey	Head	Grey Court
Madeleine Thomas	Director of Development	Grey Court
Sophie McGeogh	Head	Meadlands

Alexandra Colclough	Deputy Head	Meadlands
Carmen Palmer	Head	St Richard's
Sian Murphy	Deputy Head	St Richard's
Samantha Leir	Head	Russell School
Nick Cutting	Chair of Governors	Russell School
Christian Nitschke	Head of School	The German School
Katja Nock	Deputy Head	The German School
Adam Scott	Head	Fern Hill Primary
Robert Waiting	Assistant Head	Fern Hill Primary
PC Smudge Smith	Police constable – Ham and Petersham	MET police
PCSC Alex Molnar	Police Community Support Officer – Ham and Petersham	MET police
Local Businesses		
Stan Shaw	Director	Mervyn Smith
Petra Braun	Owner	Hansel and Pretzel
Local organisations- land owners or tenants on potential routes		
Adam Tucker & Tracy Elliot	Project Director, Ham Close	RHP
Sarah Burr	Assistant Director - consultancy	National Trust
Karin Noble & Jon Kirkup		Petersham and Ham Sea Scouts
Local organisations		
Jill Lamb		Ham United Group (HUG)
Geoff Bond	Also HPNF	Ham and Petersham Association (HPA)
David Williams	Also HPNF	Ham Amenities Group (HAG)
Ben Skelton		Ham Youth Centre in Ham Close
Ken Bailey		Ham Scout Group
Katherine Goss		Ham and Petersham SOS
Richard James	Chief Executive Officer YMCA London South West & YMCA East London	YMCA Hawker Centre
Sarah Sinclair	Club secretary	Ham Polo Club
		Thames Young Mariners
		Kew and Ham Sports Association
Julia Bosch		Friends of Ham Green
Sarah Pennell		Petersham Horticultural Society
Geoff Bond		H&P Cricket Club
Martin Adams		Tennis club
David Lamb		Friends of Ham Library
Julian Bradley		Golf Club
Howard Davis		Ham Polo Club
Chas Warlow		Ham Hydrol
Mike Frain		Tudor resident
Residents Associations		
Colin Goodger	Chair	Ham Riverside Lands Ltd. (Wates estate)

Margaret Leevy		Tudor Residents Association (TARAK)
		Ham Close
		Beaufort Cresent
Ham and Petersham Neighbourhood Forum		
Brian Willman	Chairperson	HPNF
Chris Ruse	Committee member/ St Andrew's churchwarden	HPNF
Andree Frieze	Committee member/ green party candidate	HPNF
Justine Glynn	Committee member/ Flood risk engagement office Environment Agency	HPNF
Stan Shaw	Committee member/ manager Mervyn Smith estate agency	HPNF
Annemarie Lewis	Committee member	HPNF
David Williams	Committee member	HPNF
Geoff Bond	Committee member	HPNF
John Goddard	Treasurer	HPNF
Siriol Davies	Coordinator	HPNF
David Lamb	Committee member and AN steering group	HPNF
Brian Waters	Committee member and AN steering group	HPNF
North Kingston Neighbourhood Forum		
Diane Watling	Sustainable travel committee member	NKNF
Marilyn Mason	Environment committee member	NKNF
Churches		
Mandy Karlsen	Churchwarden	St Richard's
Linda Banchini	Churchwarden	St Richard's
Canon Tim Marwood	Priest in charge	St Peter's
Kate Burdock	Churchwarden	St Peter's
Brian Willman	Churchwarden	St Peter's
Chris Ruse	Churchwarden	St Andrew's
Conservation/ open spaces		
		South West London Environment Network

Contact Details

Head Office
Sustrans
2 Cathedral Square
College Green
Bristol
BS1 5DD

Tel: 0117 926 8893
Email: info@sustrans.org.uk

Key

Low Risk | Medium Risk | High Risk

Richmond to Kingston
Strategic Cycle Route Alignment Op 1

Existing cycling and walking path

Existing walking route

Quietway 21

Proposed Local cycling and walking link

Borough Boundary

Proposed Junction / Crossing / Access Control Improvement

Bridge Street
(Due to limited space on bridge, segregated cycling is unlikely to be feasible)

Existing Warren Path
(already illuminated)

Existing Thames Path

Petersham Nurseries

Proposed Bridge
(outside of protected view)

Existing Thames Path

German School

Existing Bridleway

Russell Primary School

Ham House

Existing Bridleway

Grey Court School

Existing Bridleway

St Richards Court

St Richards Primary School

QW21

QW21

QW21

Meadlands
Primary School

Existing
Shared-use Path

QW21

QW21

Proposed Segregated
Cycle Track - Dukes Avenue

Ham Parade

Existing Thames Path

Proposed Ham Cross
Junction Improvement

Proposed Segregated
Cycle Track - Richmond Road

PHIL JONES ASSOCIATES
transport planning consultants

Title: Proposed Cycling & Walking Network
Richmond to Kingston
Route Alignment Option 1

Client: HPNF

Designed: JMQ 06/18 | Checked | Scale: NTS

Project: Active Neighbourhood

Drawing No.: 03373-F-01 | Revision

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Key

Low Risk | Medium Risk | High Risk

Richmond to Kingston
Strategic Cycle Route Alignment Op 2

Existing cycling and walking path

Existing walking route

Quietway 21

Proposed Local cycling and walking link

Borough Boundary

Proposed Junction / Crossing / Access Control Improvement

Section of path prone to flooding (alternative route using Petersham Road)

Unknown private land

Petersham Nuseries

H&P Sea Scout Hut
(Private land)

German School

Russell Primary School

Ham House

Existing Thames Path

Existing Bridleway

Grey Court School

St Richards Court

St Richards Primary School

Meadlands
Primary School

Existing
Shared-use Path

QW21

Proposed Segregated
Cycle Track - Dukes Avenue

Ham Parade

Proposed Ham Cross
Junction Improvement

Proposed Segregated
Cycle Track - Richmond Road

PHIL JONES ASSOCIATES
transport planning consultants

Proposed Cycling & Walking Network
Richmond to Kingston
Route Alignment Option 2

Client: HPNF

Designed: JMQ 06/18 | Checked | Scale: NTS

Project: Active Neighbourhood

Drawing No.: 03373-F-02A | Revision

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Key

Low Risk (Infrastructure existing) | Medium Risk (Less Complex) | High Risk (Very Complex)

Richmond to Kingston
Strategic Cycle Route Alignment Op 3

Existing cycling and walking path

Existing walking route

Quietway 21

Proposed Local cycling and walking link

Borough Boundary

Proposed Junction / Crossing / Access Control Improvement

Section of path prone to flooding (alternative route using Petersham Road)

Existing Thames Path

Petersham Nuseries

Russell Primary School

Existing Bridleway

Ham House

Existing Thames Path

Existing Bridleway

Existing Bridleway

Grey Court School

Golf Course (Private Land)

St Richards Court

St Richards Primary School

QW21

Meadlands Primary School

QW21

QW21

QW21

Existing Shared-use Path

Proposed Segregated Cycle Track - Dukes Avenue

Ham Parade

Proposed Ham Cross Junction Improvement

Existing Thames Path

Proposed Segregated Cycle Track - Richmond Road

PHIL JONES ASSOCIATES
transport planning consultants

Client: HPNF

Project: Active Neighbourhood

Title: Proposed Cycling & Walking Network
Richmond to Kingston
Route Alignment Option 3

Designed: JMQ | Checked | Scale: NTS

Drawing No.: 03373-F-02A | Revision

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Technical Note

Project: Ham & Petersham Cycling Access Study

Subject: Cycle Route Selection and Appraisal

Client:	Ham & Petersham Neighbourhood Forum	**Version:**	2
Project No:	03373	**Author:**	Andrew Saffrey
Date:	20-Sep-2018	**Approved:**	John McQueen

1 Summary

1.1.1 This technical note sets out an appraisal of three potential cycle routes in Ham & Petersham, using the Department for Transport's (DfT) Route Selection Tool (RST). The RST is presented as part of the DfT's process guidance for developing Local Cycling and Walking Infrastructure Plans (LCWIPs). The RST is intended to assist planners to determine the best initial option to fulfil a particular cycling corridor.

1.1.2 A set of three potential cycle routes connecting Ham and Petersham to Richmond and Kingston have been developed by PJA working with and on behalf of the Ham & Petersham Neighbourhood Forum (HPNF).

2 Route Selection Tool principles

2.1.1 The Route Selection Tool (RST) allows existing and potential cycling conditions along a corridor to be assessed by scoring against six criteria:

1 Directness
2 Gradient
3 Safety
4 Connectivity
5 Comfort
6 Junction safety

2.1.2 The first five of these are scored out of 5, whereas Junction safety is a totting up list. Criteria 1-5 are based on the key design principles in LTN 2/08, but with attractiveness replaced by gradient

to reflect the sensitivity that hilliness may play in a cyclist preferring one route over another with all other factors being equal.

2.1.3 The RST does not present outputs as an aggregate or average score, as each criterion should be regarded as important. Thus scoring 80% overall by scores of 4-4-4-4-4 should be regarded as generally better than a route that scores 5-5-5-5-0, particularly if that zero score is for safety. However, one might still consider the average score if there is otherwise little to discern between options. It may be prudent to double-weight the safety score if taking an average.

2.1.4 Junction safety should ideally reach a situation where no unsafe or "critical junctions" are present, however route choice may inherently influence the number of junctions for which safety concerns may arise. A residual number of critical junctions on a preferred route should ideally be treated in the subsequent design process.

3 Assumptions

3.1 Baseline

3.1.1 RST requires comparison against a baseline reference route. This is normally the shortest on-road route. The shortest on-road route is taken as a default reference because of the sensitivity to cycling of deviation from the desire line. This is not the only parameter that influences the suitability of a cycling route, but as the LCWIP process relies on identifying short trips as being those most likely to cycle, the LCWIP process also encourages routes to be as short as feasible.

3.1.2 As we further iterate the RST audit, we will be able to score the alternative parallel routes identified – both in terms of their existing conditions (as currently on the ground) and as per the improvements that have been identified by PJA and HPNF. At the end of the process, the RST should be able to helpfully identify the positive impact each route can deliver relative to existing conditions and provide evidence which supports the selection of one as a preferred option albeit likely in the context of other relevant factors such as deliverability.

3.2 Extents

3.2.1 RST relies on picking an "origin" and "destination" point to compare directness between different routes serving the same corridor. For the purposes of argument, we've taken the start/end point of the planned route as being the origin and destination, as this is the end of the scheme as identified by HPNF. This isn't necessarily the most helpful measure of directness, as a route along Petersham Road will serve people living in Petersham better than a route the other

side of the river, but we are making a necessary simplification to reflect the coarse nature of the tool. Any outputs should be judged on local context.

3.2.2 At the southern end, the limit of the route is the junction of Richmond Road and Lower Ham Road, which is the southern extents of the design work already undertaken. From there, the route is expected to continue to Kingston town centre via Lower Ham Road, an existing informal cycle route with low volumes of through traffic, and two sections of traffic-free path to connect into Kingston town centre, where significant cycling improvements are being delivered as part of the Kingston Mini-Holland.

3.2.3 The northern end of the route is taken to be the Rail Station via Water Lane (Friar lane access is limited during tidal flooding), The Green and Clarence Street. This route also provides the greatest scope for access into Richmond town centre without the need to negotiate most of the gyratory system, which presents an intimidating environment for cyclists. In all options, it is assumed that cycling contraflows are provided on The Green, King Street and Clarence Street to facilitate access to/from this end point.

3.3 Improvements

3.3.1 Some design and feasibility work has already identified potential improvements, or determined where improvement works are unlikely to take place. However, where this information is missing, some assumptions have been made.

3.3.2 Segregation has determined to not be feasible over Richmond Bridge due to the constrained width of the bridge deck (carriageway approximately 6m). Therefore, in order to provide an improvement to the cycling environment, a traffic calming solution has been assumed. Likewise, the existing 30mph streets in Richmond town centre are assumed to become 20mph as a means of delivering an improved environment for pedestrians and cyclists.

4 Options

4.1.1 Three broad route options are being tested. Common to all options is a link to Kingston town centre from Ham via Lower Ham Road as it requires little modification to make it a high-quality route, RBK are currently undertaking a cycle lane/track feasibility study for Richmond Road however for the purpose of this study we are only considering Lower Ham Road as the route into Kingston. As this is considered the primary route choice along this particular corridor, it is discounted from the RST analysis. It should be noted that Lower Ham Road is already likely to be the most direct route to Kingston town centre, or at least not significantly longer than the equivalent traffic route, the A307 Richmond Road.

4.2 Option 1

4.2.1 Option 1 leaves the A307 corridor at the junction of Richmond Road, Dukes Avenue, Ham Parade and Tudor Drive. This junction is commonly called 'Ham Cross' so for the purposes of simplicity, this report adopts this name. Option 1 then follows Dukes Avenue north-westwards and continues as Riverside Drive to Ham Street. It then turns north towards the River Thames, which it crosses by means of a proposed bridge. The route then follows the northern embankment along an existing traffic-free path, to Richmond Bridge. It then crosses back to the south bank and into Richmond town centre. It is assumed that a contraflow is provided on King Street, The Green and Clarence Street so that the cycle route can function as a two-way route.

4.3 Option 2

4.3.1 Option 2 follows broadly the same alignment as Option 1, except that it doesn't cross the Thames by means of a new bridge. Instead, it follows the south bank using a combination of proposed and existing paths to provide flood-free access, entering Richmond town centre via Water Lane; thence King Street and Clarence Street as above.

4.4 Option 3

4.4.1 Option 3 significantly differs from Options 1 and 2 by following more closely the A307 corridor. It thus provides a much closer facility to residents in the Petersham area. The route avoids the constrained central area of Petersham village – where traffic volumes are high and space for segregation is absent – by taking a diversion via Richmond Park (between Hazel Lane and Petersham Gate). It then follows Petersham Path northwards, and then a section of new path to join the riverside path at Buccleugh Gardens. It then follows the same alignment into Richmond town centre as Option 2.

4.4.2 The extents of the designed proposals at Ham Common show a shared use footway running north, it is assumed that this path would become a segregated cycle track with separate footpath where road space becomes available between 281 Petersham road and Sandy Lane.

4.5 Sub-options

4.5.1 The RST is intended to be used to identify potential route options, but considerable design development has already been undertaken along Ham Parade and the immediately adjacent sections of the A307. This has considered two broad approaches: a two-way track on one side of the highway (referred to herein as Sub-Option 1), or a pair of with-flow cycle tracks each side of the carriageway (referred to herein as Sub-Option 2). The emergences of two design

principles sets up a pair of sub-options for each of the overall route options being tested by the RST. Therefore, for each overall option being tested – Option 1, Option 2, Option 3 – there will be two sub-options, i.e. 6 options in total.

4.5.2 In the results, "01-Op1" will mean "Option 1, sub-Option 1", and so on.

5 Route Selection Tool outputs

5.1 Baseline

5.1.1 The baseline score assumes cyclists use existing infrastructure, where available, but following the shortest on-road route within the extents of the corridor under investigation.

5.1.2 The baseline directness score will generally always be 5, as it is by definition the most direct route, and this is no exception. The baseline route is in fact shorter than the driving route because a short corner is cut between Petersham Gate and Rose of York PH by using Petersham Path instead of the main road.

5.1.3 Gradient and connectivity also score well in the baseline option – the A307 generally follows the river valley (albeit with one section of significant incline); and as an urban area, there are numerous places to leave and join the highway.

5.1.4 The baseline route scores poorly for safety and comfort, both as a result of sharing with significant volumes of traffic.

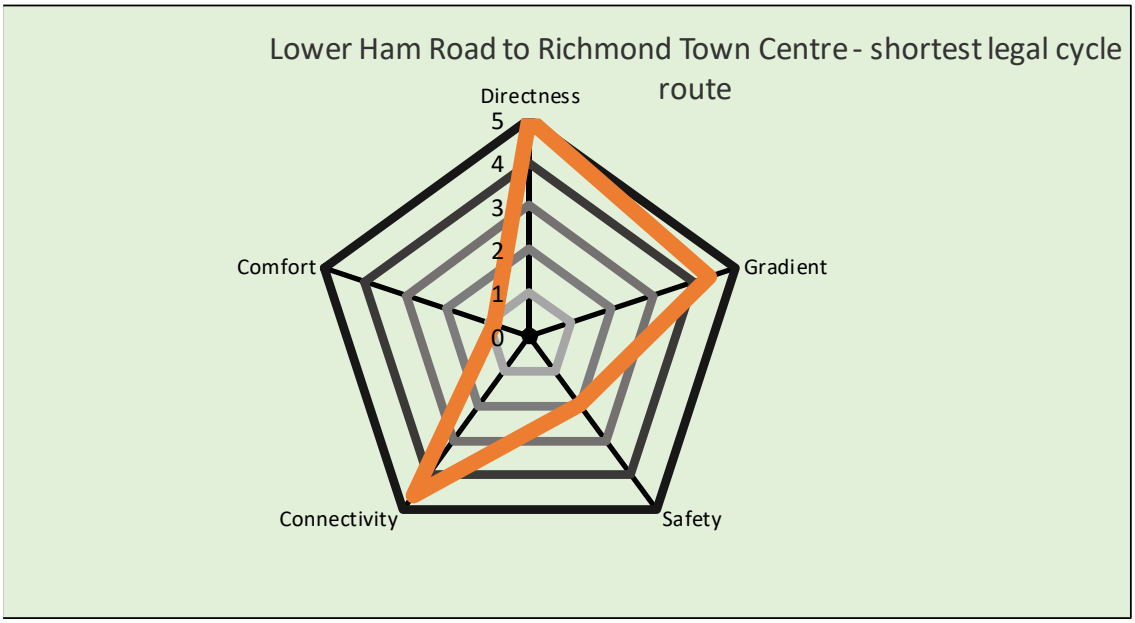
5.1.5 The baseline route has 11 critical junctions:

1 Ham Cross – wide junction radii
2 South of Parkleys – approach to junction via a pinch point
3 Upper Ham Road / Ham Gate Avenue – approach to junction via pinch point
4 Petersham Road, between service road and Sandy Lane – pinch point
5 Petersham Road / Sandy Lane – roundabout with volumes over 8000 vehicles per day (vpd)
6 Petersham Road / Star & Garter Hill – crossing two lanes to emerge from Petersham Path
7 Petersham Road near Rose of York PH – crossing two lanes to turn into Petersham Path
8 Petersham Road / Hill Rise – wide junction radii
9 Hill Street / Bridge Street – roundabout with volumes over 8000 vpd
10 Hill Street / Red Lion Street – pinch point at junction
11 George Street / King Street – pinch point at junction

Figure 1: Baseline RST assessment

Route Name	Lower Ham Road to Richmond Town Centre - shortest legal cycle route
Overall Length	4.8km
Name of Assessor(s)	Andrew Saffrey
Date of Assessment	30th August 2018

	Performance Scores	
Criterion	**Existing**	**Potential**
Directness	5.00	0.00
Gradient	4.36	To Be Determined
Safety	1.99	0.00
Connectivity	4.57	0.00
Comfort	0.86	To Be Determined



Number of Existing Critical Junctions/Crossings	11

5.1.6 For infrastructure investment to be worthwhile, it should ideally score better against the baseline above, particularly in the areas in which the baseline route scores poorest, i.e. safety and comfort. It may be necessary to compromise on directness, gradient and connectivity to do so, however.

5.2 Option 1

5.2.1 As noted in section 4, each option has two sub-options as two potential design solutions have been identified along the A307 between Lower Ham Road and Ham Common. Therefore, the RST assessment has been undertaken for each option twice to reflect these. However, these have not had a material impact on the overall scoring. Therefore, the score for Option 01-Op1 is valid for the alternative sub-option, Option 01-Op2.

5.2.2 In addition to having two sub-options, Option 1 has a "do nothing" scenario, which is taken as being the existing infrastructure without any improvements. As there is no bridge at present, this assumes that people use the Hammerton's Ferry to cross the river. The RST does not have a suitable scoring mechanism for ferry crossings, so the "do nothing" score should not be regarded as a realistic assessment of the existing cycle route, as the ferry only runs part-time and is seasonal (for example not during the morning peak), and is susceptible to variations due to weather, tide and flooding.

5.2.3 Ordinarily, the "do nothing" scenario would be a benchmark to consider if the Option, without any other improvements, is better than the baseline shortest route.

5.2.4 Option 1 is significantly less direct than the baseline route, as it is 6.3km long (without new bridge) or 5.8km (with new bridge). It therefore scores relatively poorly on directness. However, directness should be contextualised against the route's integration within the local environment. Option 1 creates connections that are otherwise not possible currently, particularly a link to Twickenham town centre (including Rail station with fast train to central London) and St Margaret's. We would advise that directness is regarded as the least significant criterion in the decision-making process in this particular context given the obvious need to address the poor environment locally for cycling in terms of comfort and safety (see baseline RST score above).

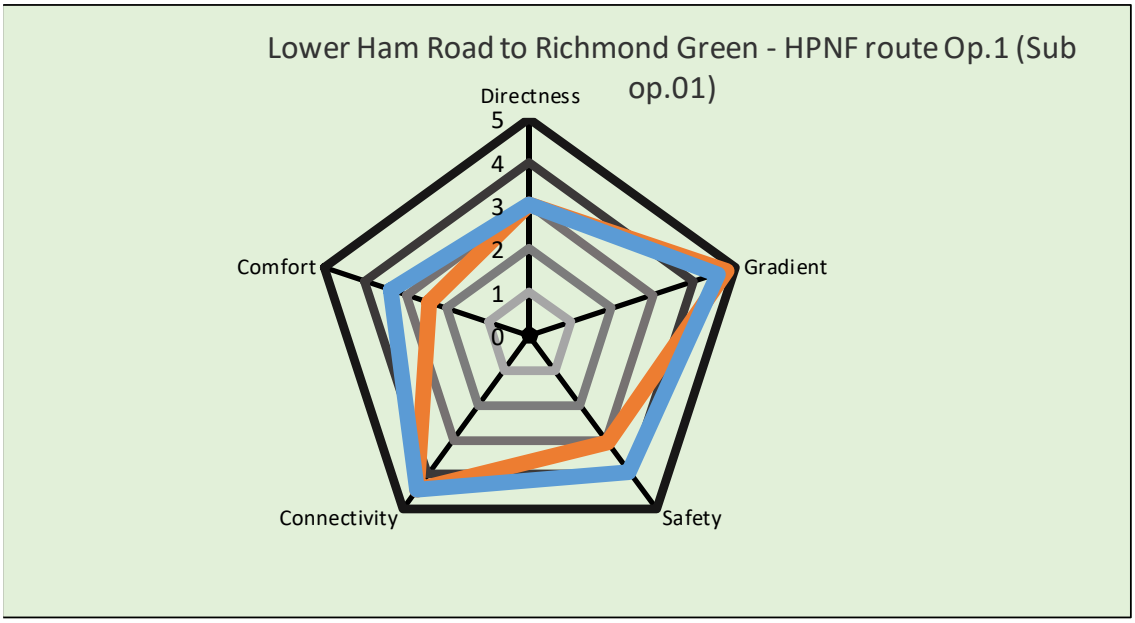
5.2.5 The "do nothing" scenario in Option 1 has ten critical junctions, which is one fewer than the baseline. However, the proposed interventions would reduce this to four critical junctions, unless further measures are considered to tackle these critical junctions. It is recommended that the scope of the study is extended to Richmond town centre to address these locations.

5.2.6 The overall scores and the locations of critical junctions are set out in the figure and table below.

Figure 2: Option 1 "do nothing" and "with improvements" (both sub-options)

Route Name	Lower Ham Road to Richmond Green - HPNF route Op.1 (Sub op.01)
Overall Length	5.8 km (with improvements)
Name of Assessor(s)	Andrew Saffrey
Date of Assessment	30th August 2018

	Performance Scores	
Criterion	**Existing**	**Potential**
Directness	3.00	3.00
Gradient	4.78	4.58
Safety	3.08	3.91
Connectivity	4.43	4.43
Comfort	2.45	3.37



Number of Existing Critical Junctions/Crossings	10
Number of Potential Critical Junctions/Crossings	4

5.2.7 The gradient score is decreased slightly by the need to climb up and over the new bridge.

5.2.8 The safety score is increased by the longer lengths of segregated cycleway.

5.2.9 The comfort score is increased by the wide path associated with the new bridge, and the reduced extents where cycles share with vehicles.

Table 1: Option 1 critical junctions, "do nothing" and "with improvements"

Location	"Do Nothing" Critical Junction	"With Improvements" Critical Junction – *(treated junctions)*
Ham Cross	Wide junction radii	*(Protected junction removes critical condition)*
Dukes Avenue, south of Dysart Avenue	Pinch point	*(Cycle track by-passes pinch point)*
Dukes Avenue, north of Craig Road	Pinch point	*(Cycle track by-passes pinch point)*
Dukes Avenue, south of Lawrence Road	Pinch point	*(Cycle track by-passes pinch point)*
Dukes Avenue, west of Beaufort Road	Pinch point	*(Cycle track by-passes pinch point)*
Riverside Drive / Ashburnham Road	Crossing two lanes to join cycle path	*(Cycle path extension avoids need to transition from carriageway at the junction)*
Richmond Road / Cambridge Gardens	Crossing two lanes to turn right into Richmond Road from Cambridge Gardens	Crossing two lanes to turn right into Richmond Road from Cambridge Gardens
Hill Street / Bridge Street	Roundabout with more than 8000 vpd	Roundabout with more than 8000 vpd
Hill Street / Red Lion Street	Pinch point	Pinch point
George Street / King Street	Pinch point	Pinch point

5.3 Option 2

5.3.1 By not crossing the River Thames, Option 2 avoids the awkward turn onto Richmond Bridge from the Cambridge Gardens riverside path, and also avoids the roundabout at the eastern end of Richmond Bridge. It therefore has two fewer critical junction in both its "do nothing" and "with improvements" scenarios.

Table 2: Option 2 critical junctions, "do nothing" and "with improvements"

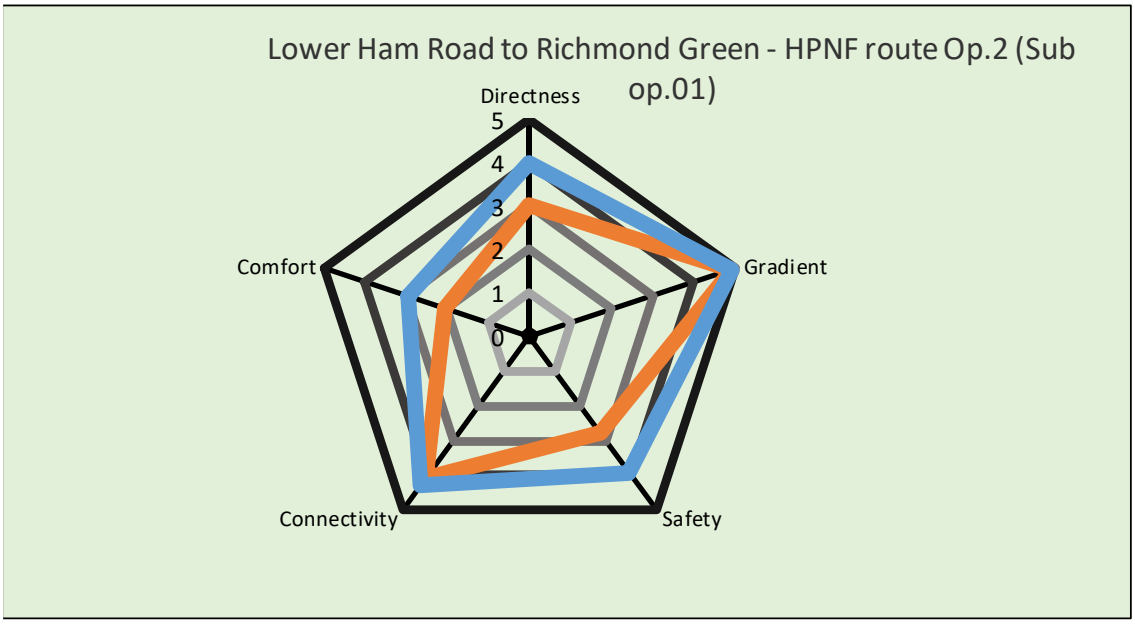
Location	"Do Nothing" Critical Junction	"With Improvements" Critical Junction – *(treated junctions)*
Ham Cross	Wide junction radii	*(Protected junction removes critical condition)*
Dukes Avenue, south of Dysart Avenue	Pinch point	*(Cycle track by-passes pinch point)*
Dukes Avenue, north of Craig Road	Pinch point	*(Cycle track by-passes pinch point)*
Dukes Avenue, south of Lawrence Road	Pinch point	*(Cycle track by-passes pinch point)*
Dukes Avenue, west of Beaufort Road	Pinch point	*(Cycle track by-passes pinch point)*
Riverside Drive / Ashburnham Road	Crossing two lanes to join cycle path	*(Cycle path extension avoids need to transition from carriageway at the junction)*
Hill Street / Red Lion Street	Pinch point	Pinch point
George Street / King Street	Pinch point	Pinch point

5.3.2 Option 2 is more direct than Option 1, as not crossing the river twice saves on distance. The safety score is essentially the same as Option 1, despite the southern riverside path being unlit. Option 2 is slightly more isolated than Option 1, so scores less on connectivity, but not significantly. Option 2 is the flattest of all the proposed routes.

Figure 3: Option 1 "do nothing" and "with improvements" (both sub-options)

Route Name	Lower Ham Road to Richmond Green - HPNF route Op.2 (Sub op.01)
Overall Length	5.5km (with improvements)
Name of Assessor(s)	Andrew Saffrey
Date of Assessment	30th August 2018

	Performance Scores	
Criterion	**Existing**	**Potential**
Directness	3.00	4.00
Gradient	4.93	4.92
Safety	2.78	3.90
Connectivity	4.10	4.26
Comfort	2.06	2.96



Number of Existing Critical Junctions/Crossings	8
Number of Potential Critical Junctions/Crossings	2

5.4 Option 1 and Option 2

5.4.1 Option 1 and Option 2 both provide an all-round improvement when compared against baseline conditions. While Option 2 is slightly less comfortable than Option 1, it appears that overall there is little advantage gained by crossing the river by a new bridge in the context of reaching

Richmond, unless social safety is a significant concern as lighting through Petersham Meadows may prove difficult.

5.5 Option 3

5.5.1 Option 3 is the most direct of all the proposals; while it is mostly traffic-free, the extent of the route via Richmond Park and the riverside path means points are lost for passive safety and lack of illumination. Like Option 2, it has critical junctions within Richmond town centre which are assumed to be outside the scope of this study.

Table 3: Option 3 critical junctions, "do nothing" and "with improvements"

Location	"Do Nothing" Critical Junction	"With Improvements" Critical Junction – *(treated junctions)*
Ham Cross	Wide junction radii	*(Protected junction removes critical condition)*
South of Park Leys	Approach to junction via a pinch point	*(Cycle track by-passes pinch point)*
Upper Ham Road / Ham Gate Avenue	Approach to junction via pinch point	*(Protected junction removes critical condition)*
Petersham Road, between service road and Sandy Lane	Pinch point	*(Cycle route via service road)*
Petersham Road / Sandy Lane	Roundabout with volumes over 8000 vpd	*(Cycle route crosses at signals)*
Petersham Road / Star & Garter Hill	Crossing two lanes to emerge from Petersham Path	*(Assume a crossing is provided as part of proposals – refuge or linked to signals)*
Petersham Road near Rose of York PH	Crossing two lanes to turn into Petersham Path	*(New cycle link to riverside path avoids this location)*
Petersham Road / Hill Rise	Wide junction radii	*(Riverside path by-passes junction)*
Hill Street / Bridge Street	Roundabout with volumes over 8000 vpd	*(Riverside path by-passes junction)*
Hill Street / Red Lion Street	Pinch point at junction	Pinch point at junction
George Street / King Street	Pinch point at junction	Pinch point at junction

5.6 Comparison

Table 4: Comparison of Baseline, Do Nothing (Existing) and Proposed (Op.1/Op.2) RST scores

Criteria	Baseline	Option 1			Option 2			Option 3		
		01-Existing	01-Op.1	01-Op.2	02-Existing	02-Op.1	02-Op.2	03-Existing	03-Op.1	03-Op.2
Directness	5.00	3.00	3.00	3.00	3.00	4.00	4.00	5.00	5.00	5.00
Gradient	4.36	4.78	4.58	4.58	4.93	4.92	4.92	4.36	4.43	4.43
Safety	1.99	3.08	3.91	3.91	2.78	3.90	3.90	1.99	3.83	3.83
Connectivity	4.57	4.43	4.43	4.43	4.10	4.26	4.26	4.57	4.30	4.30
Comfort	0.86	2.45	3.37	3.37	2.06	2.96	2.96	0.86	2.74	2.74
Junctions	11	10	4	4	8	2	2	11	2	2
Length	4.80	6.30	5.80	5.80	6.23	5.50	5.55	4.80	4.43	4.43

5.6.1 The spread of scores in the above table suggests there is little to distinguish between the three proposals, as they all provide a comparable level of safety, particularly relative to existing on-street conditions.

5.6.2 Option 1 is the clear winner in terms of comfort, because of the quality of infrastructure and route that can be provided, but more work is needed to determine a satisfactory route through the remaining critical junctions.

5.6.3 Option 3 is the clear winner in terms of directness but is the least comfortable as the width of path that can be provided is constrained by restricted highway availability.

5.6.4 While it is not necessarily and objective measure to average or aggregate scores, in situations where overall performance is largely comparable, doing so can help provide some clarity.

5.6.5 In doing so, Option 3 has the highest average score, but only marginally against either of the other options. If safety is double-weighted (i.e. scored out of 10 rather than 5), the ranking is still the same, suggesting that the safety score is not an overriding factor in this case.

Table 5: Comparison scores include average and safety-weighted average

Criteria	Baseline	Option 1			Option 2			Option 3		
		01-Existing	01-Op.1	01-Op.2	02-Existing	02-Op.1	02-Op.2	03-Existing	03-Op.1	03-Op.2
Directness	5.00	3.00	3.00	3.00	3.00	4.00	4.00	5.00	5.00	5.00
Gradient	4.36	4.78	4.58	4.58	4.93	4.92	4.92	4.36	4.43	4.43
Safety	1.99	3.08	3.91	3.91	2.78	3.90	3.90	1.99	3.83	3.83
Connectivity	4.57	4.43	4.43	4.43	4.10	4.26	4.26	4.57	4.30	4.30
Comfort	0.86	2.45	3.37	3.37	2.06	2.96	2.96	0.86	2.74	2.74
Junctions	11	10	4	4	8	2	2	11	2	2
Length	4.80	6.30	5.80	5.80	6.23	5.50	5.55	4.80	4.43	4.43
Avg score	3.36	3.55	3.86	3.86	3.37	4.01	4.01	3.36	4.06	4.06
Safety-wtd	3.13	3.47	3.87	3.87	3.28	3.99	3.99	3.13	4.02	4.02

6 Recommendations

6.1 Route selection

6.1.1 The Route Selection Tool process appears to validate the original design and route selection process, as all the options presented result in a demonstrable improvement to cycling conditions and facilities in the Kingston-Ham-Petersham-Richmond corridor, and all the routes appear to be of high quality.

6.1.2 As all the proposed routes are of comparable quality, it is suggested that determination of the recommended route is based on external factors such as land assembly and cost.

6.2 New bridge

6.2.1 There appears to be little merit in providing a new bridge to facilitate Option 1, as it does not score significantly better than either of the other options. However, this is only in the context of a cycle route along the Kingston-Richmond axis. A cycle and pedestrian link to Twickenham and St Margaret's does still appear to have considerable merits, therefore, the findings of this RST process should not be taken as a determining factor against a bridge per se, just that a new bridge does not appear critical to providing an attractive cycle route between Ham and Richmond specifically.

6.2.2 A further demand study could determine how many users would make use of such a new bridge, particularly as there may be significant transport congestion on routes between Twickenham and Kingston town centres such that a 20-minute cycle between the two via a new bridge may well represent a far more attractive proposition.

LBRuT has recently commissioned a feasibility report into potential cycling and walking bridge connections, it can be accessed using the below link.

https://www.richmond.gov.uk/media/16407/thames_bridge_feasibility_study.pdf

LBRuT 2018 – 2019 Twickenham and Ham Bridge consultation

https://haveyoursay.citizenspace.com/richmondecs/thames-bridge/consult_view/

6.3 Other factors

6.3.1 The findings of the RST should be discussed with local stakeholders, as assumptions about routes being overlooked or feeling socially unsafe may warrant greater importance than the scoring system necessarily allows.

6.3.2 The scope of the study should be extended to Richmond town centre to better determine how cyclists would access the destinations therein from the routes provided, particularly in light of the complex traffic system and critical conflict points identified in this audit.

Poor pedestrian & cycle provision

Existing traffic signal junction

Existing roundabout -
Poor pedestrian & cycle provision

Public greenspace

Project boundary

Bus route

Perception of inappropriate (fast) traffic speed

Busy through road -
Neighbourhood severance issues

Unsafe cycling conditions

Lack of bicycle parking

Car parking issues

Existing traffic calming not effective or is dangerous for cycling

Access control not inclusive

No lighting along towpath

River Thames Flood zone 3

River Thames Flood zone 2

N

Towpath - poor surface quality (unbound loose gravel)

Towpath - Area prone to daily flooding that restricts access

A307 - 2017 Average Annual Daily Flow
Total vehicles - 13,781
Buses - 206
HGV's - 339
Pedal cycles - 195

Teddington Lock - 2017
Average Annual Daily Flow
Total - 4141
Pedestrians - 3118
Pedal cycles - 1023

Conflict between people cycling and walking on bridge and ramps. Cycling is not permitted due to narrow bridge deck

PHIL JONES ASSOCIATES
transport planning consultants

Title: Ham and Petersham
Barriers to Cycling & Walking
Overview

Client: HPNF

Designed: JMQ

Checked:

Scale: NTS

Project: Active Neighbourhood

Drawing No.: 03373-F-01

Revision:

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KEY

- Borough boundary
- Existing cycle and pedestrian path
- Existing pedestrian path
- Proposed 'Dry Route' for cycling & walking
- Proposed low traffic route
- Proposed route (cycle lanes + centre line removal)
- Proposed route with segregated cycling
- Quietway 21
- School (trip generator)
- Playground (trip generator)
- Proposed improvements to area with local amenities (trip generator)
- Proposed modal filter or bus gate or traffic management alteration
- Proposed major junction treatment (eg. signals)
- Proposed minor junction treatment (eg. tight junction geometry, change priorities, traffic calming)
- Proposed inclusive access control
- Proposed side street treatment (eg. continuous footway)
- Proposed cycle access at existing modal filter
- Proposed pedestrian crossing
- Proposed cycle parking
- Proposed cycle and pedestrian crossing

Inset map - Richmond Town centre / station access

Minor junction modification to improve cycling & walking access
Richmond Station
Richmond Green
Minor junction modification to improve cycling & walking access
Minor junction modification to improve cycling & walking access
Minor junction modification to improve cycling & walking access
Contra-flow cycling & traffic calming
Alternative route during flooding
Bridge Street
Existing shared-use path
Inclusive access control
New path behind Petersham Meadow Wall / Bund
Existing Thames Path
Raised hump with culvert
Inclusive access control
Improve surface for walking and cycling
Raised earthen bank with suitable surface material suitable for utility cycling
Boardwalk
Ham Dry Route developed by Thames Landscape Strategy (New cycling and walking connection, ecology enhancements, floodplain improvements)
Potential bridge connection
Existing pedestrian path
Scout hut
Existing pedestrian path
Inclusive access control
Side street treatment to improve access to park and playground
Inclusive access control
German School
New pedestrian crossing across Petersham Road & inclusive access control
Minor junction modification to improve cycling & walking access
The Russell Primary
Side street treatment to improve access to nearby pedestrian crossing
Existing Thames Path
Existing Bridleway
New path
Ham House
School street - Reconfigure traffic management to encourage sustainable trips to school
Richmond Park
Minor junction modification to improve cycling & walking access
Remove centre line & introduce advisory cycle lanes. Treat side streets with continuous footways
New shared-use path
Change mini roundabout to priority junction with traffic calming to improve cycling & walking access
Minor junction modification to improve cycling & walking access
Existing Bridleway
Provide cycle by-pass at priority-give-way traffic calming & install parallel crossing
Grey Court Secondary
School street - possible location for modal filter with bus gate
Existing Bridleway
Golf Course
Community hub (urban realm improvements, pedestrian & cycle access, tree planting, seating, cycle parking, SuDS)
New shared-use footway
St Richard's Primary
Minor junction modification to improve cycling & walking access
QW21
QW21
QW21
Minor junction modification to improve cycling & walking access
Cycle friendly traffic claming, positive parking bay layouts (car door buffrer) & side street treatments
Meadlands Primary
Ham Common
Existing shared-use path
QW21
New shared-use footway
Ham Parade
Modal filter
New two-way cycle track with junction and side street treatments
Teddington Lock
Existing Thames Path
Major junction modification to improve cycling & walking access
Community hub - (urban realm improvements, street market, pedestrian & cycle access, tree planting, seating, cycle parking, SuDS)
New path
New two-way cycle track with junction and side street treatments

PJA

Client: HPNF

Project: Active Neighbourhood

Title: Neighbourhood Plan
Emerging Cycling & Walking Network

Designed: JMQ | Checked: JL | Scale: NTS

Drawing No.: 03373-F-02 | Revision:

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BUS STOP
BUS STOP
BUS STOP
Posts
Posts
Dryden Court
Cramer Court

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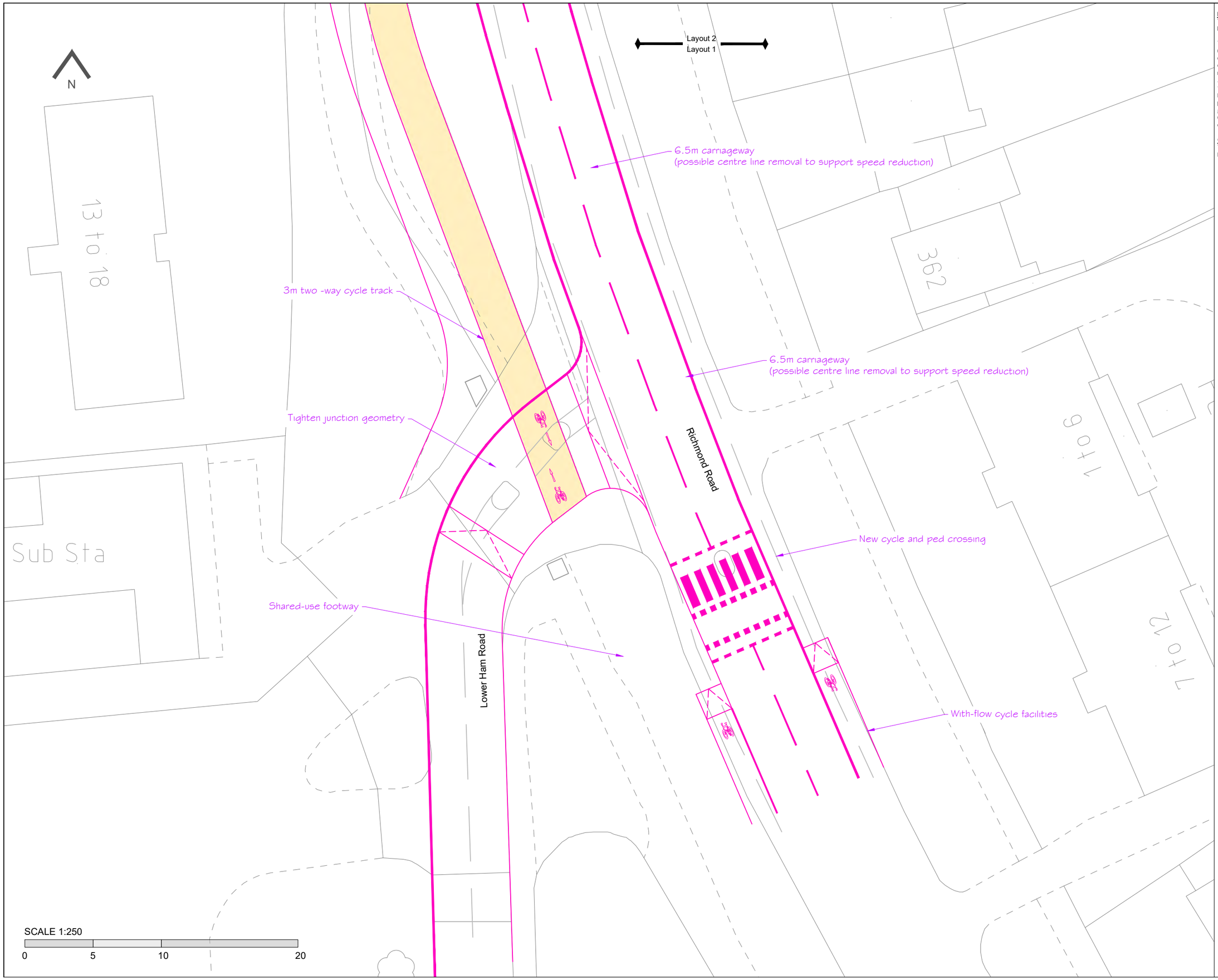

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Client Duties:
The client is directed to Regulation 4 of the CDM 2015 Regulations: Client duties in relation to managing projects

Notes:

1. All measurements in metres unless otherwise stated
2.

Rev / Date	Description	Drn	Chck'd

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Client
HPNF

Project
Ham & Petersham
Active Neighbourhood

Drawing
Concept Sketch
Richmond Road /
Lower Ham Road

Drawn by: JMQ 03/07/2018	Scale: 1:250 @ A3
Checked by: PJ 04/07/2018	

Drawing No. HPAN-C-01-01
Revision -

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N

Layout 3
Layout 2

3m two -way cycle track
set back from main road

Horsley Drive

Richmond Road

Continuous footway

Upgrade crossing

3m two -way cycle track

6.5m carriageway
(possible centre line removal to support speed reduction)

7 to 12

374

Layout 2
Layout 1

SCALE 1:250

0 5 10 20

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Client
HPNF

Project
Ham & Petersham
Active Neighbourhood

Drawing
Concept Sketch
Richmond Road /
Horsley Drive

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Drawing No. HPAN-C-02-01	Revision -

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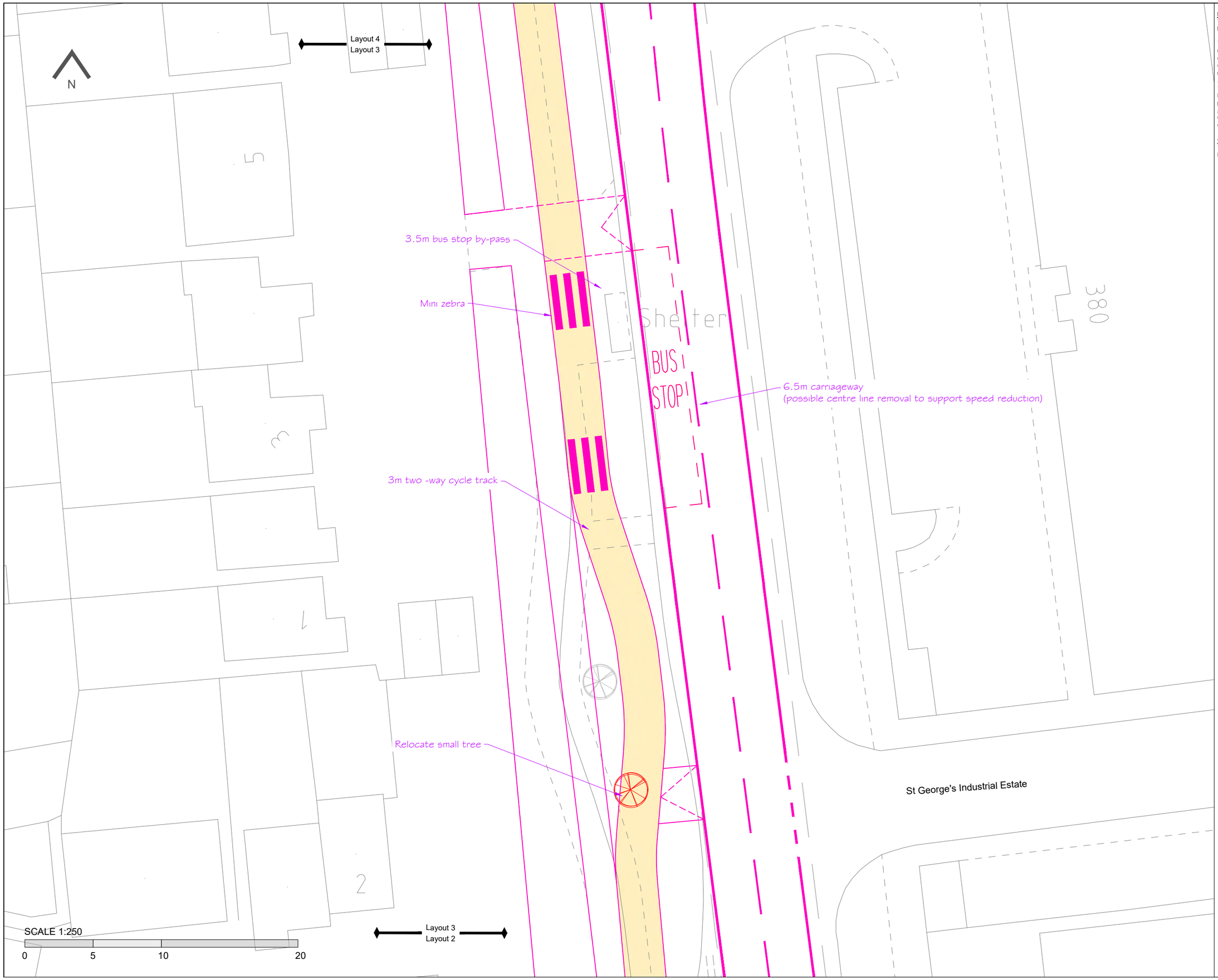

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Rev / Date	Description	Drn	Chck'd

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Client
HPNF

Project
Ham & Petersham
Active Neighbourhood

Drawing
Concept Sketch
Richmond Road /
St George's Industrial Estate

Drawn by: JMQ 03/07/2018	Scale: 1:250 @ A3
Checked by: PJ 04/07/2018	
Drawing No. HPAN-C-03-01	Revision -

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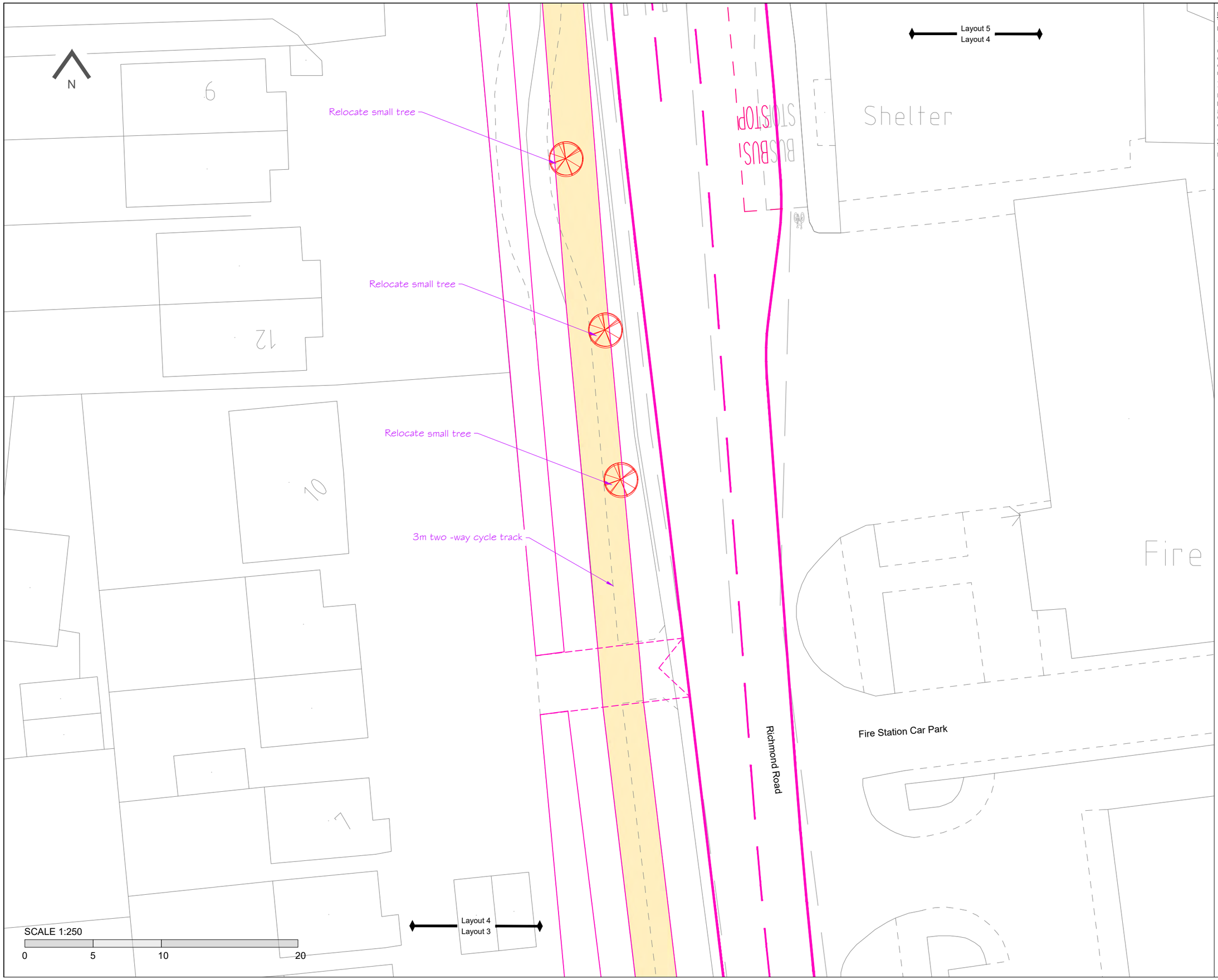

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Notes:

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2.

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www.philjonesassociates.co.uk

Client
HPNF

Project
Ham & Petersham
Active Neighbourhood

Drawing
Concept Sketch
Richmond Road /
Fire Station

Drawn by: JMQ 03/07/2018	Scale: 1:250 @ A3
Checked by: PJ 04/07/2018	
Drawing No. HPAN-C-04-01	Revision -

File: C:\Users\JohnMcQueen\Documents\03 Projects\45 Ham & Petersham\06 Design\01 Concept\02 Working\03373-HPAN-C-op01.dwg

Layout 6
Layout 5

N

Reduce two lane approach to single lane

Richmond Road

Toucan crossing on all arms

Cycle transition back to carriageway after bus stop (ideally using a dedicated cycle track and bus stop by-pass

Dukes Avenue

Two -way cycle track with 0.5m buffer

Tudor Drive

NO ENTRY

Wide shared-use footway

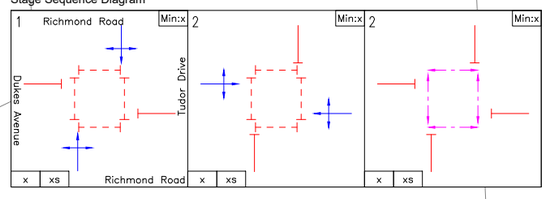
Richmond Road

Cycle transition to toucan crossings

3m two -way cycle track

13 to 21

Stage Sequence Diagram



SCALE 1:250

0 5 10 20

Layout 5
Layout 4

Drawing Status:
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Client
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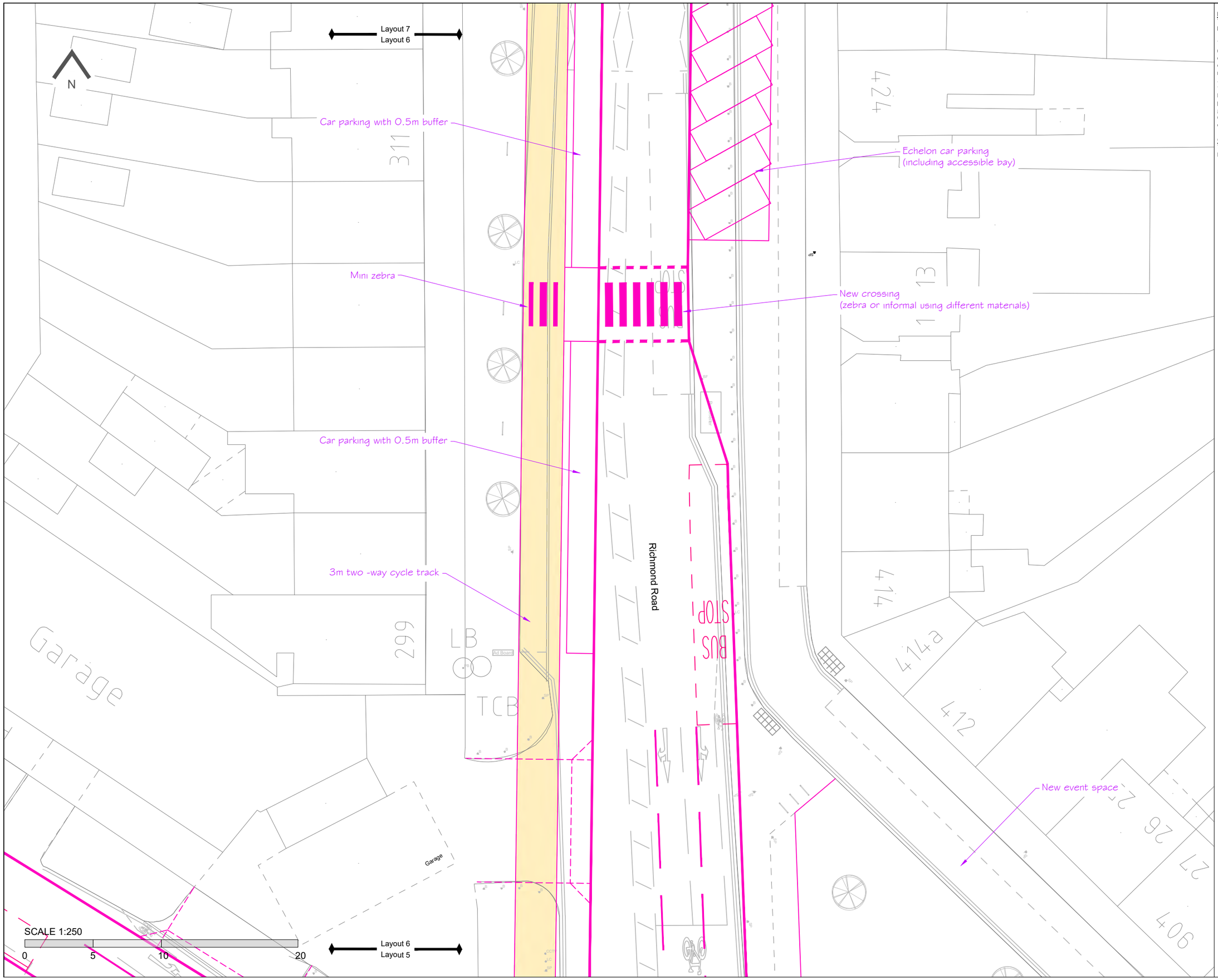
Project
Ham & Petersham
Active Neighbourhood

Drawing
Concept Sketch
Ham Cross

Drawn by: JMQ 03/07/2018	Scale: 1:250 @ A3
Checked by: PJ 04/07/2018	
Drawing No. HPAN-C-05-01	Revision -

File: C:\Users\JohnMcQueen\Documents\03 Projects\45 Ham & Petersham\06 Design\01 Concept\02 Working\03373-HPAN-C-op01.dwg



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Client
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Project
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Active Neighbourhood

Drawing
Concept Sketch
Ham Parade

Drawn by: JMQ 03/07/2018	Scale: 1:250 @ A3
Checked by: PJ 04/07/2018	

Drawing No. HPAN-C-06-01
Revision -

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Layout 8
Layout 7

N

Warners Lane

4.5m bus stop by-pass

Sainsbury's

BUS STOP

BUS STOP

Parkleys Parade

Echelon car parking

6.5m carriageway
(possible centre line removal to support speed reduction)

New 12m loading bay
to replace small bay
in Warner Lane

LOADING

Upper Ham Road

Trees & street furniture
to restrict access to
footway

Continuous footway

NO ENTRY

Carnmer Court

Trees & street furniture
to restrict access to
footway

Existing crossing
(zebra or informal using different materials)

Mini zebra

Echelon car parking
(including accessible bay)

Car parking with 0.5m buffer

Bank

Stone

Bank

SCALE 1:250

0 5 10 20

Layout 7
Layout 6

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Client
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Active Neighbourhood

Drawing
Concept Sketch
Ham Parade /
Parkleys Parade

Drawn by: JMQ 03/07/2018	Scale:
Checked by: PJ 04/07/2018	1:250 @ A3

Drawing No. HPAN-C-07-01
Revision -

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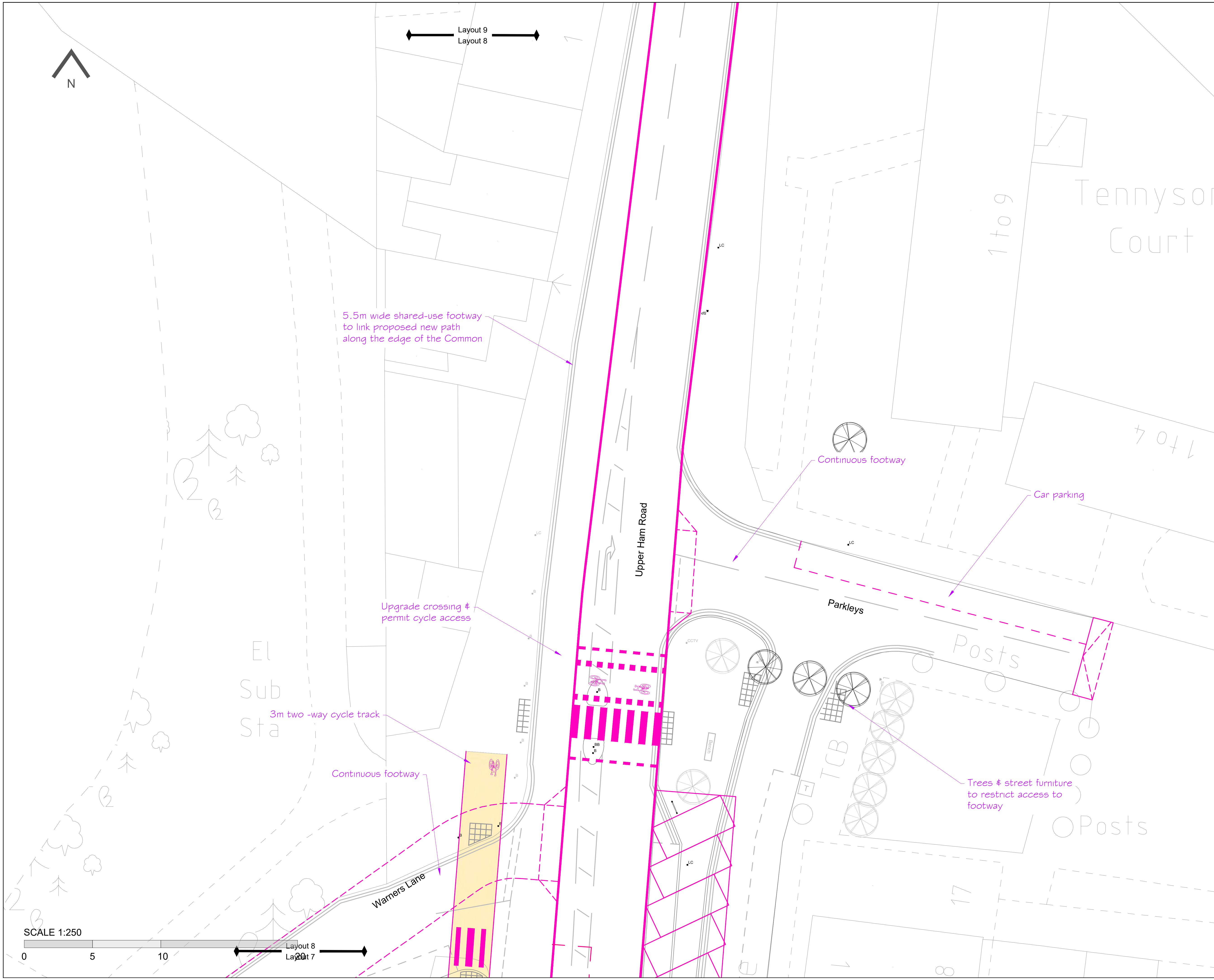

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Client
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Project
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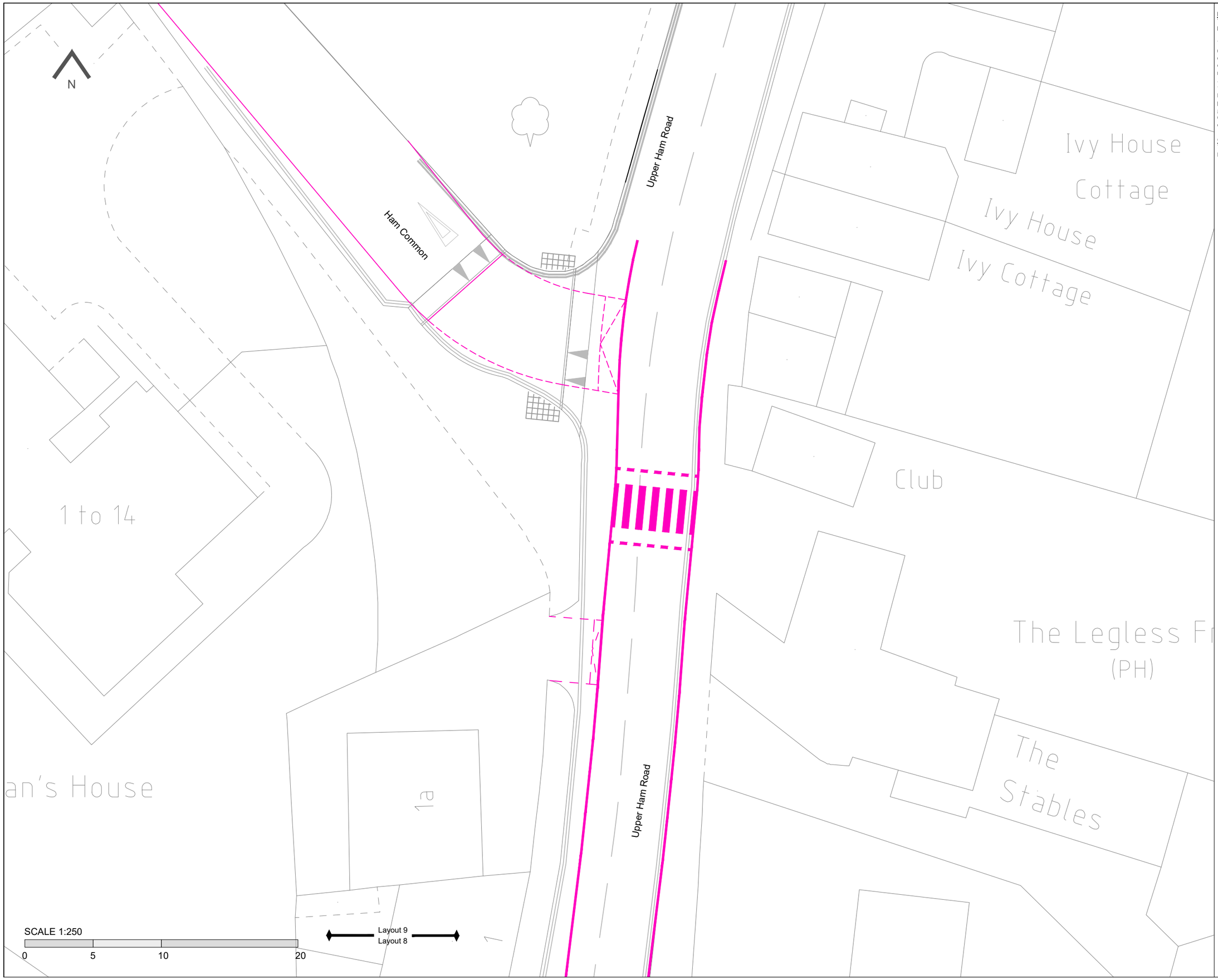
Active Neighbourhood

Drawing
Concept Sketch
Upper Ham Road /
Parkleys

Drawn by: JMQ 03/07/2018
Checked by: PJ 04/07/2018
Scale: 1:250 @ A3

Drawing No. HPAN-C-08-01
Revision -

File: C:\Users\JohnMcQueen\Documents\03 Projects\45 Ham & Petersham\06 Design\01 Concept\02 Working\03373-HPAN-C-op01.dwg



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Client
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Project
Ham & Petersham
Active Neighbourhood

Drawing
Concept Sketch
Upper Ham Road /
Ham Common

Drawn by: JMQ 03/07/2018	Scale: 1:250 @ A3
Checked by: PJ 04/07/2018	
Drawing No. HPAN-C-09-01	Revision -

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N

Layout 2
Layout 1

New cycle and ped crossing
providing access to Lower Ham Road
(placed away from driveways and placed on
raised table)

Section of
3m two -way cycle track

6.5m carriageway
(possible centre line removal to support speed reduction)

Tighten junction geometry

Richmond Road

Lower Ham Road

Northbound 2m cycle track
(stepped or lightly segregated)

Southbound 2m cycle track
(stepped or lightly segregated)

13 to 18

Sub Sta

362

9 to 1

10

21 to 1

SCALE 1:250

0 5 10 20

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Client
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Project
Ham & Petersham
Active Neighbourhood

Drawing
Concept Sketch
Richmond Road /
Lower Ham Road

Drawn by: JMQ 03/07/2018	Scale: 1:250 @ A3
Checked by: PJ 04/07/2018	

Drawing No. HPAN-C-01-02
Revision -

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N

Layout 3
Layout 2

Horsley Drive

Richmond Road

Southbound 2m segregated cycle track

Retain driveway access

Continuous footway

Relocate crossing point to nearby bus stop

6.5m carriageway
(possible centre line removal to support speed reduction)

Southbound 2m cycle track
(stepped or lightly segregated)

Northbound 2m segregated cycle track

7 to 12

3

Layout 2
Layout 1

SCALE 1:250

0 5 10 20

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Client
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Project
Ham & Petersham
Active Neighbourhood

Drawing
Concept Sketch
Richmond Road /
Horsley Drive

Drawn by: JMQ 03/07/2018	Scale: 1:250 @ A3
Checked by: PJ 04/07/2018	
Drawing No. HPAN-C-02-02	Revision -

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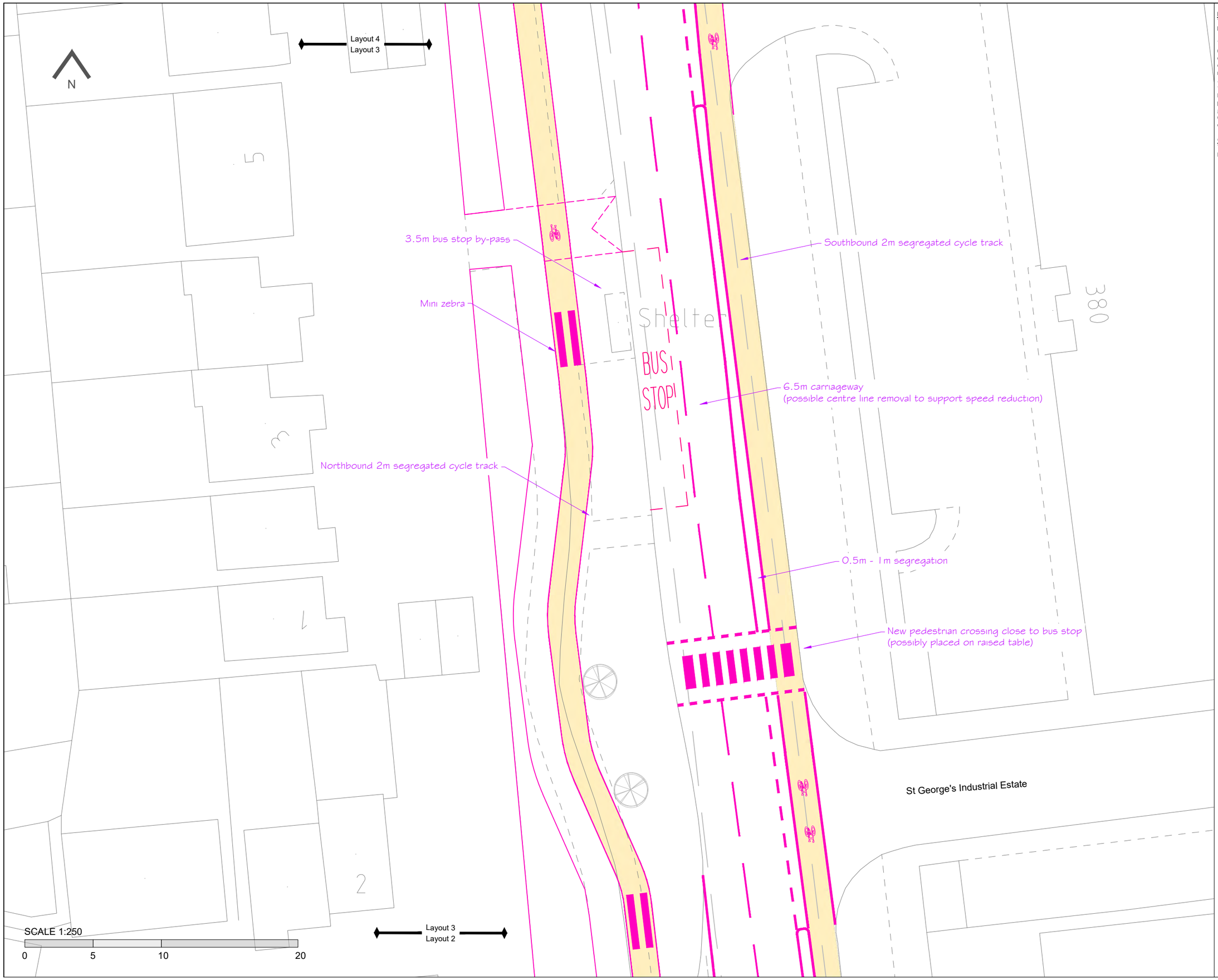

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Client
HPNF

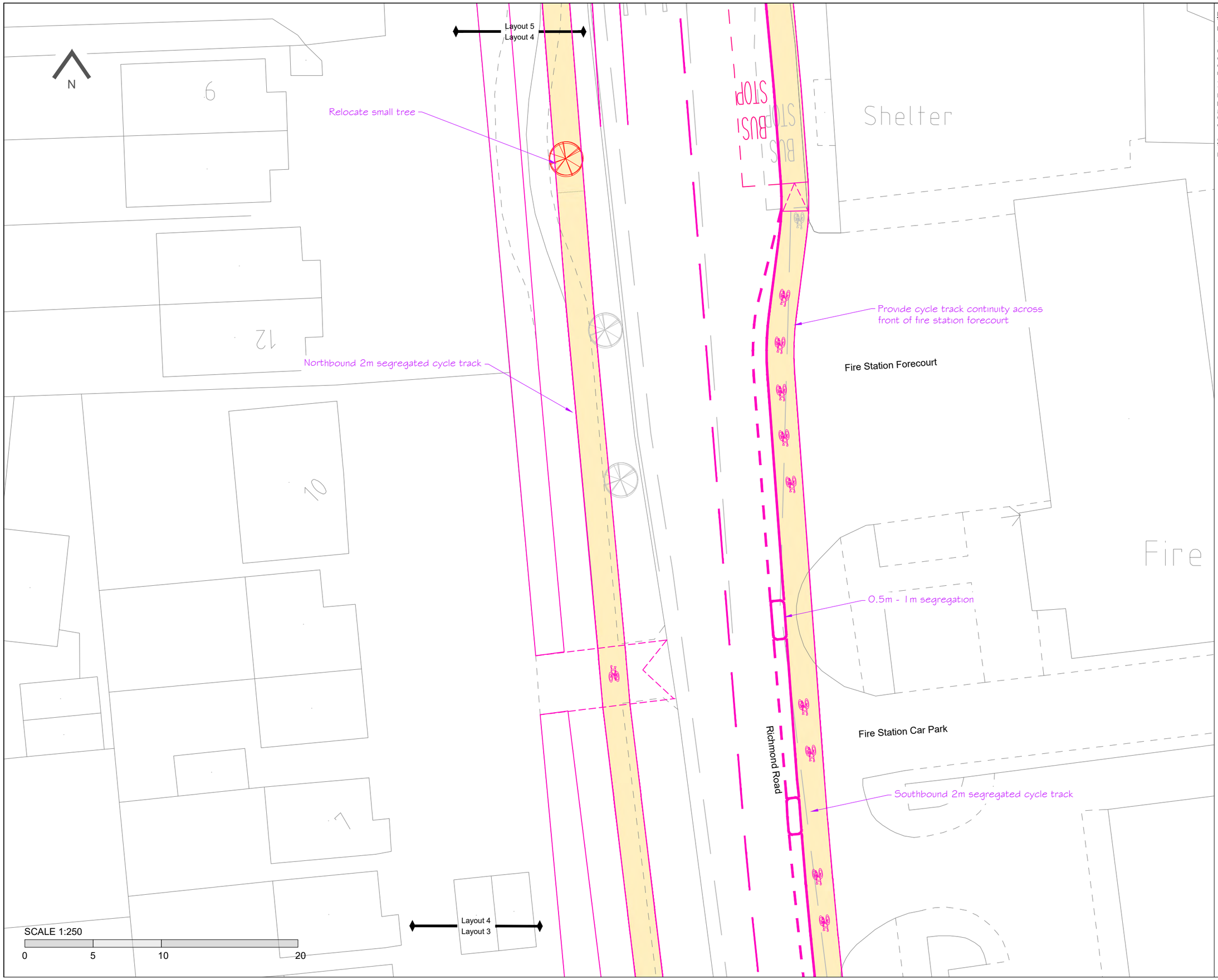
Project
Ham & Petersham
Active Neighbourhood

Drawing
Concept Sketch
Richmond Road /
St George's Industrial Estate

Drawn by: JMQ 03/07/2018	Scale: 1:250 @ A3
Checked by: PJ 04/07/2018	

Drawing No. HPAN-C-03-02 | Revision -

File: C:\Users\JohnMcQueen\Documents\03 Projects\45 Ham & Petersham\06 Design\01 Concept\02 Working\03373-HPAN-C-gp02.dwg



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Ham & Petersham
Active Neighbourhood

Drawing
Concept Sketch
Richmond Road /
Fire Station

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Drawing No.	Revision
HPAN-C-04-02	-

File: C:\Users\JohnMcQueen\Documents\03 Projects\45 Ham & Petersham\06 Design\01 Concept\02 Working\03373-HPAN-C-op02.dwg

Layout 6
Layout 5

N

Dukes Avenue

Richmond Road

Tudor Drive

Toucan crossing on all arms

Cycle transition back to carriageway after bus stop
(ideally using a dedicated cycle track and bus stop by-pass

Reduce two lane approach
to single lane

Mini zebra

Protected corner junction based on LCDS

Cycle movements run at same time
as pedestrian signal phase

Reduce to single lane approach

Cycle stop line

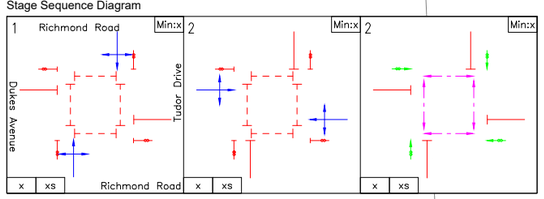
Southbound 2m cycle track

Northbound 2m segregated cycle track

Bus stop boarder
or bus stop by-pass

13 to 21

Stage Sequence Diagram



SCALE 1:250

0 5 10 20

Layout 5
Layout 4

Concept sketch for a junction redesign involving island protection

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Client
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Active Neighbourhood

Drawing
Concept Sketch
Ham Cross

Drawn by: JMQ 03/07/2018	Scale: 1:250 @ A3
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Drawing No. HPAN-C-05-02

Revision -

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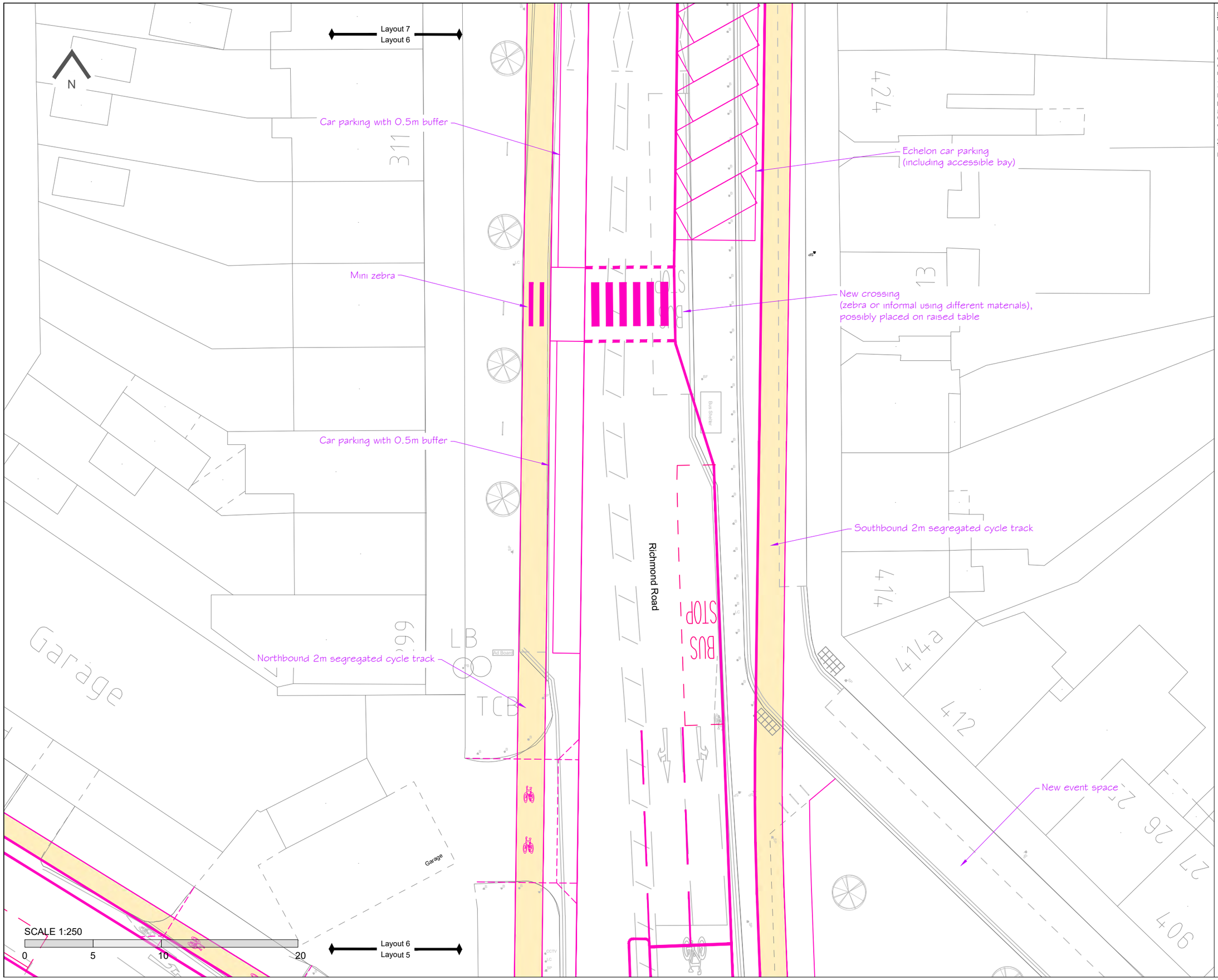

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Client
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Project
Ham & Petersham
Active Neighbourhood

Drawing
Concept Sketch
Ham Parade

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Drawing No. HPAN-C-06-02 | Revision -

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Client
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Project
Ham & Petersham
Active Neighbourhood

Drawing
Concept Sketch
Ham Parade /
Parkleys Parade

Drawn by: JMQ 03/07/2018	Scale: 1:250 @ A3
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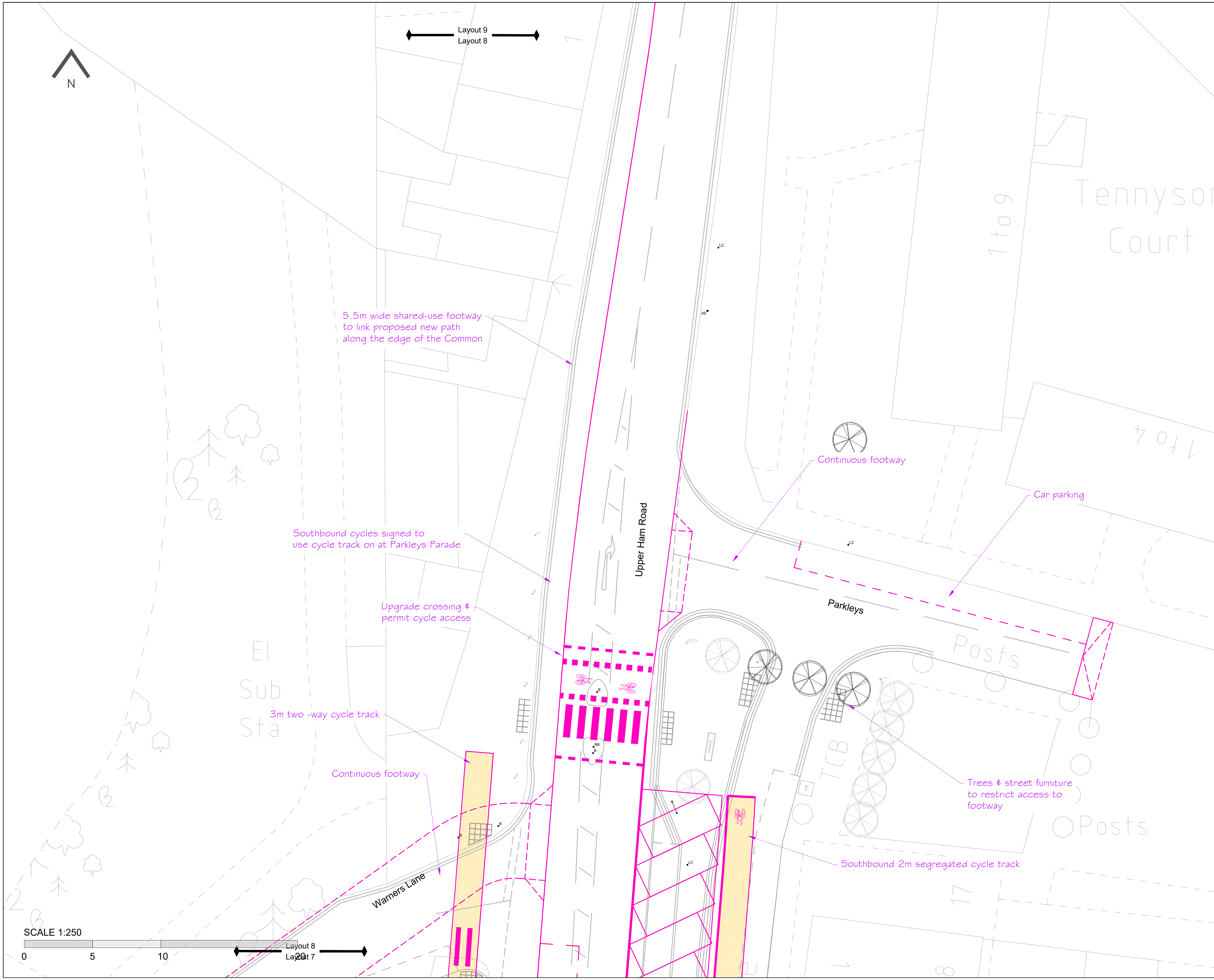

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Client
HPNF

Project
Ham & Petersham Active Neighbourhood

Drawing
Concept Sketch
Upper Ham Road / Parkleys

Drawn by: JMQ 03/07/2018
Checked by: PJ 04/07/2018
Scale: 1:250 @ A3

Drawing No. HPAN-C-08-02
Revision -

File: C:\Users\JohnMcQueen\Documents\03 Projects\45 Ham & Petersham\06 Design\01 Concept\02 Working\03373-HPAN-C-op02.dwg

N

Layout 10
Layout 9

Ham Common

Upper Ham Road

Ivy House
Cottage

Ivy House

Ivy Cottage

Club

New ped crossing

1 to 14

The Legless Fr
(PH)

3.6m shared-use footway
to link proposed new path
along the edge of the Common

n's House

The
Stables

Upper Ham Road

SCALE 1:250

0 5 10 20

Layout 9
Layout 8

Drawing Status:
These drawings have been produced with reference to the CDM Regulations 2015; Regulation 9.

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Client Duties:
The client is directed to Regulation 4 of the CDM 2015 Regulations: Client duties in relation to managing projects

Notes:

1. All measurements in metres unless otherwise stated
2.

Rev / Date	Description	Drn	Chck'd

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Project
Ham & Petersham
Active Neighbourhood

Drawing
Concept Sketch
Upper Ham Road /
Ham Common

Drawn by: JMQ 03/07/2018	Scale: 1:250 @ A3
Checked by: PJ 04/07/2018	
Drawing No. HPAN-C-09-02	Revision -

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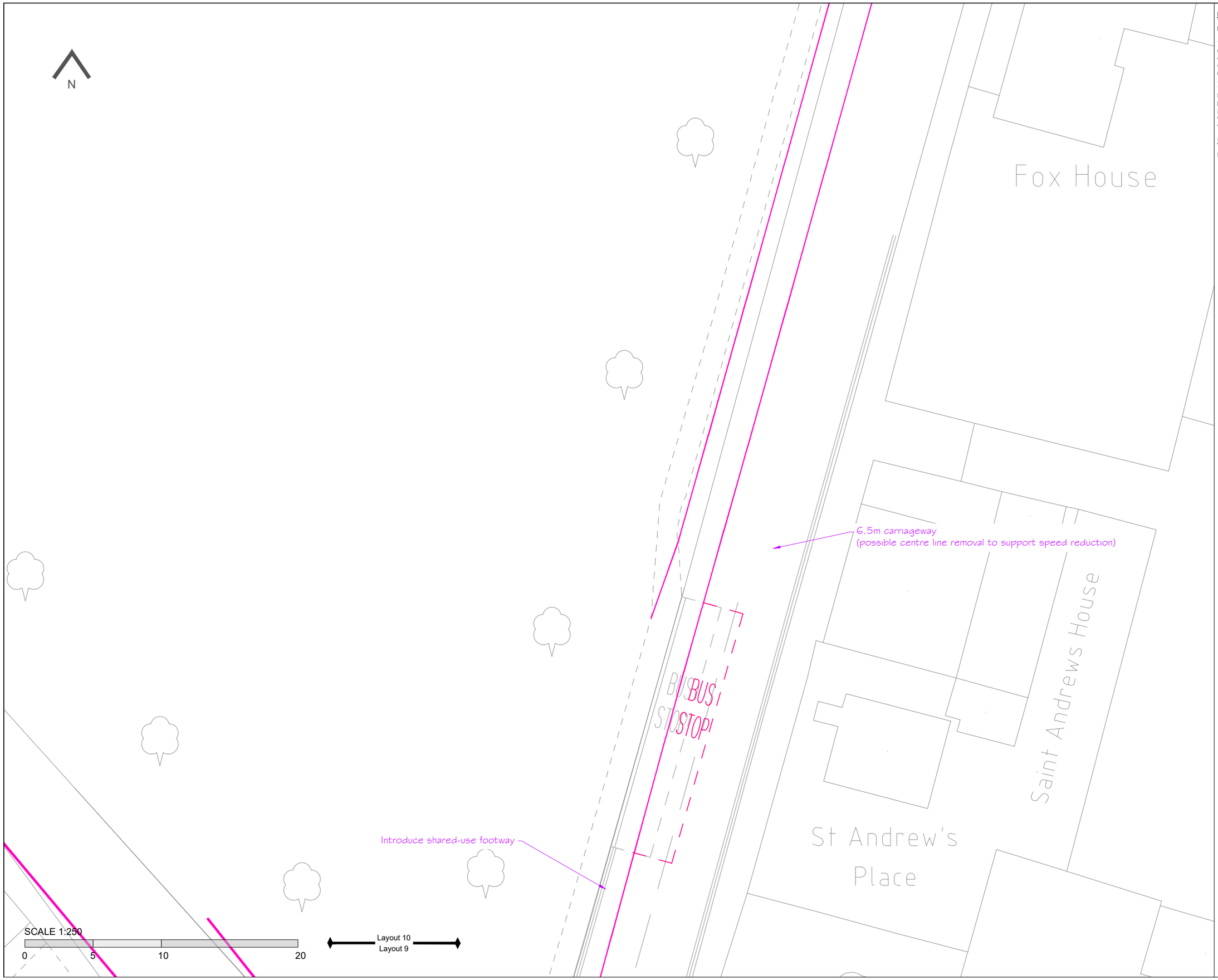

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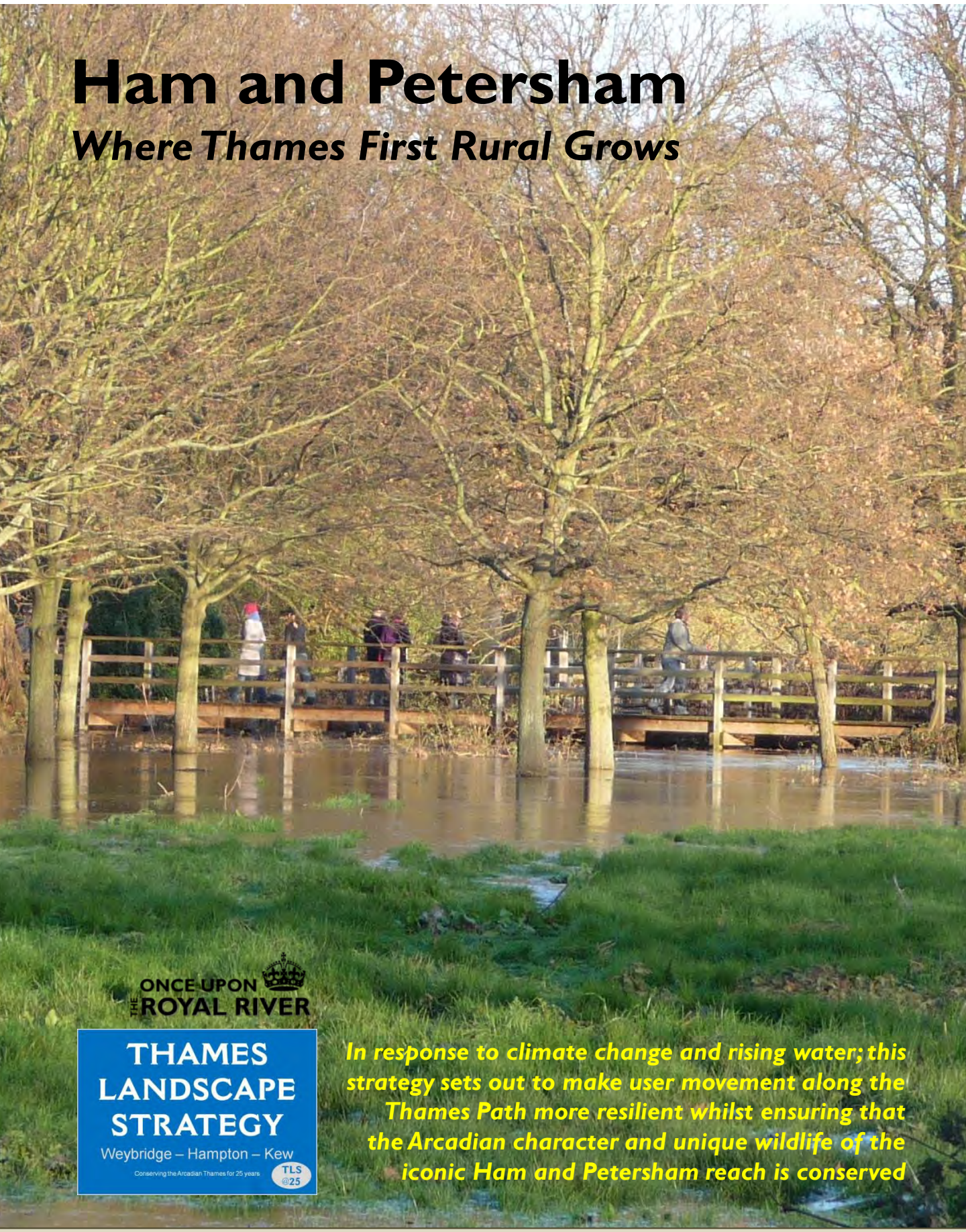
Ham and Petersham

Where Thames First Rural Grows



ONCE UPON THE ROYAL RIVER

THAMES LANDSCAPE STRATEGY
Weybridge – Hampton – Kew
Conserving the Arcadian Thames for 25 years
TLS @25

In response to climate change and rising water; this strategy sets out to make user movement along the Thames Path more resilient whilst ensuring that the Arcadian character and unique wildlife of the iconic Ham and Petersham reach is conserved

1 SUMMARY

Ham and Petersham Where Thames First Rural Grows offers a way forward to manage the next phase in the evolution of the Ham riverside taking onto account changing priorities and new flood risk data that has emerged over the past decade during the TE2100 scheme. The aspirations of the Thames Landscape Strategy (TLS) for Ham are set out in the 2012 TLS report, the Restoration of the Natural Floodplain, Ham Backwaters Scheme (2014) and in the 'Once Upon The Royal River' initiative that sets out a series of inter-connected improvements to the floodplain at a landscape scale so that benefits can be maximised across adjacent sites.

This report has been prepared in response to the Ham Neighbourhood Forum's proposals to improve walking and cycling connections for both commuters and recreational use from Richmond and Kingston to Ham. ***Ham and Petersham Where Thames First Rural Grows*** identifies the way that established movement patterns are being altered by rising waters, particularly on Ham's low lying towpath and adjacent riverside parks, putting the long-term viability of sustainable transport, management regimes and visitor initiatives at risk.

It is important therefore that any works to enhance the cycle and footpath network are planned in a way that take into account the predicted rise in flood events. It is also important that measures respect the important habitats along the river whilst conserving the character of the world famous landscape that sweeps below Richmond Hill. Sustainable transport proposals must be considered as part of a holistic plan that proposes the wider conservation of the Natural Floodplain and its multi-functional use whilst ensuring the conservation of the 'countryside in the city' character that makes the Arcadian Thames so special.

2 BACKGROUND

The Arcadian river landscape, below Richmond Hill in Ham and Petersham is cherished throughout London, particularly at weekends when visitors come from all over the UK to visit. As well as being a popular tourist destination, Ham and Petersham is also home to a thriving community, situated midway between Richmond and Kingston town centres.

This is a landscape that is loved and enjoyed by many different people in many different ways. There is a proud sense of ownership of the Ham floodplain by the local community on both sides of the river, who use or look into the place on a daily basis. It is a landscape with multiple benefits and of many functions. The historic landscape is home to diverse mosaic of habitats that support a range of species, whilst the riverside parks and gardens are a recreational resource un-rivalled in many European capital cities. A network of paths and cycle routes criss cross the landscape linking the settlements with the river. The landscape provides health benefits, is a functioning floodplain, its trees capture carbon and the cultural associations of the eighteenth English Landscape Movement that was founded below Richmond Hill (the only view in the UK to be protected by Act of Parliament) quite literally changed the appearance of Europe. Ham's Arcadian bowers are quite rightly regarded as one of the most significent historic landscapes in the UK. Above all, Ham is a place to escape from the hustle and bustle of urban life; a secluded backwater of rurality where the visitor can feel at one with the natural world. This is made even more remarkable when it is considered that the leafy walks and avenues are only 10 miles from the centre of Europe's largest metropolis.

In such a special landscape decisions about how the land should be managed understandably and justifiably raise strong emotions. Open space within a city has a special and complex value and although Ham is considered one of the UK's most significent historic landscapes, it is at its heart a living landscape that is constantly evolving. The priorities of how to manage evolution need regular reassessment taking account of emerging priorities such as increasing flood risk and the need for more sustainable transport links.

3 Aims of the Project

The Thames Landscape Strategy (published in 1994) sets out to reveal the layers of the landscape, setting out how the open spaces that characterise the river have evolved to shape their character. A series of strategic and local priorities emerged, that in 2012 were updated to account for new priorities - both strategic considerations and the concerns of local people. At Ham And Petersham this included the need to account for increasing flood risk and greater human use of the landscape. Importantly a greater awareness of the cultural attachments of the open spaces by river users had been gained that were weaved into the proposals (based on several decades of stakeholder consultation). In this way, local people's long cherished aspirations as to how the landscape should evolve could be accounted for. A series of measures to conserve and enhance the inter-connected mosaic of different habitat types between Petersham Meadows and Ham Lands with multiple benefits for water, people and wildlife was proposed including new dry routes to maintain recreational use during inundation. These measures were informed by the TLS's Restoration of the Lost Floodplain Report that provided a plan to implement the emerging TE2100 strategic guidance on how flood risk patterns for the reach may evolve.

Ham and Petersham Where Thames First Rural Grows is the next stage in this sequence of TLS involvement in the area. Above all, the aim of the project is to ensure that the Arcadian character of the landscape is conserved in light of new proposals to improve the footpath and cycle network by the Ham Neighbourhood Forum. The TLS supports these measures provided the essential character is maintained.

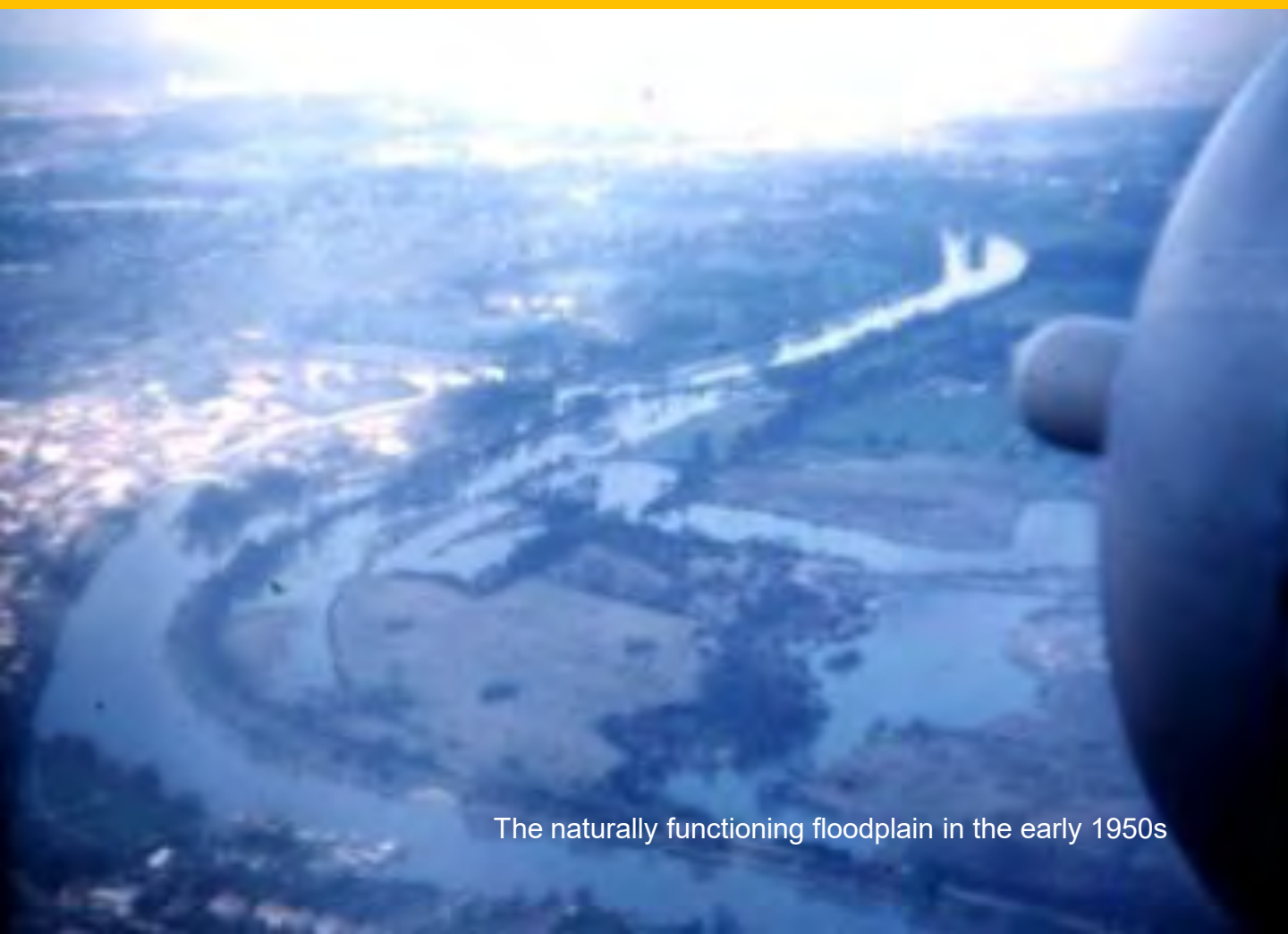
A Place for Water: By restoring the natural functions of the floodplain, spaces can be made for wildlife that needs wet areas to flourish whilst allowing water to be stored during floods and released in a managed and controlled way. This could be achieved by modifying some of the floodplain features to places that already flood including the enhancement and connection of existing wetland features and the re-creation of new wet features such as scrapes and backwaters. There is very little scope for this type of project in London – almost uniquely Ham provides spaces that can be directly linked to the main channel of the river itself. This proposal does not however propose the creation of large areas of new floodplain storage rather the sensitive modification to those areas that already are inundated on the high tides and during floods.

A Place for Wildlife: Through the creation of new backwater habitats in those places that already flood emerging habitats for species that need wet conditions can be enhanced. This can only happen once the ecology and hydrology of the area is fully understood – the landscape has changed considerably over the past decade with new wetter habitats emerging although little is known to their ecology or how individual sites are connected. Historic landscape features that define this short reach of the Thames can be restored or recreated including tidally fed creeks, ponds, avenues, wet woodland, wet meadows, scrub, and native hedges.

A Place for People: Enhancements to the cycle and walking paths and the creation of discreet dry routes will allow existing recreational activity and commuting routes to be enhanced and maintained. Elements of the lost historic landscape can be re-created whilst the sense of enclosure that the Ham landscape provides strengthened.

The TLS is not encouraging the creation of new routes, rather the subtle modification of the existing network with the Thames Path remaining the principle connection. In light of increasing flood risk however, measures will need to account for periods of inundation to ensure that people can move about and understand their landscape. The discreet dry routes, whilst being paths in their own right would allow users of the Thames Path to navigate the landscape as water rises without the need to create new paths or install lots of new signage.

Above all the project will ensure that the rural character of Ham's Arcadian walks are maintained and enhanced.



The naturally functioning floodplain in the early 1950s

4 A PLACE FOR WATER; The Ham and Petersham Floodplain

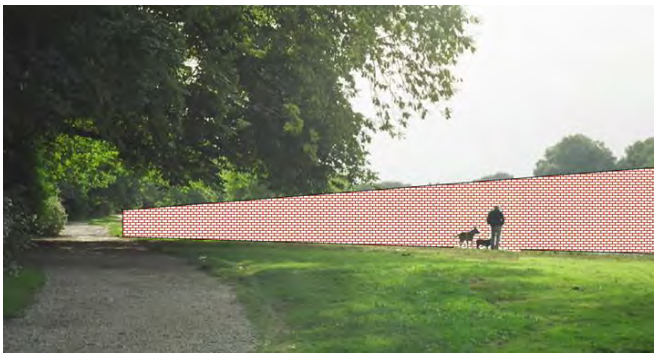
The main sources of flooding in the Ham area are from tidal and / or fluvial flood events, a combination of both and from local drainage. There are no fluvial flood defences but existing tidal defences provide some protection against tidal flooding although these follow a contour line set well back from the river. As such, there are large areas of open space located between the river and the tidal defences that predictions indicate will be inundated more often in the future. TE2100 anticipates that over the next decade it will be important to plan and put in place a series of measures for managing flood risk including changes in the way that riverside open space is managed. The River Thames Scheme Datchet to Teddington has predicted that peak fluvial flood flows could increase by 40% over the coming 50 years. Ground water flooding may also be a problem in some locations.

The riverbank was raised up in the 1930s and again in the 1950s to allow walkers to use the footpath during high tides. The natural riverbank was replaced with stone revetments that over time have softened with much tree growth. Further inland, gravel extraction and subsequent in-filling has raised some areas up to 6m above its natural height. Despite being raised, long sections of the towpath remain low lying and as such are regularly inundated by the in-coming tide, (at Petersham even on neap tides). During these events, water pours across or underneath the Thames Path and into the backwaters. Current legislation does not allow for the paths to be raised further. At Ham, the afternoon high spring tides always occur between 3 – 7 pm, water inundating the path twice a day for approximately 6 days each month. The timing of the high spring tides is particularly unfortunate in that it occurs during the school run and at major commuter times. High tides take place each month of the year but vary in height. This inundation scours large holes and effectively halts use of the (flooded) Thames Path and the opportunity for the route to be used for commuter and recreational activity. Once the tidal water has receded, the towpath is left muddy and wet, littered with flotsam and jetsam. Inland, some wet areas are being naturally created - water being unable to flow back to the river at low tide. In these backwaters pockets of wet habitat have started to emerge whilst in other locations 'dry' habitats are declining. Little is known about the ecology of this emerging wet habitat or how water is moving about the landscape.

Flood Risk at Ham. The darker blue indicates the 1 in a 100 flood event with the dashed lines showing the land protected from a tidal flood by the Thames Barrier. Inside the dashed purple line there is no statutory flood protection although at present the Thames Barrier can be used to protect against a fluvial flood event but it is anticipated that this operation will decline over the coming decades

As flood risk increases, together with unavoidable changes in the way that the Thames Barrier is operated, it is commonly agreed that the much cherished parks and gardens (that are located between the flood defence and the river) in the Ham floodplain will be increasingly affected. The construction of new defences along the river edge (to protect these open spaces) is not an option as this would see considerable loss in natural and historic character and would be contrary to the proposals set out in the TE2100 report. Inundation will therefore be far more common particularly along the low lying Ham reach. At present these open spaces are managed largely as a 'dry' landscape and are not ready for increased inundation.

Public understanding regarding flood risk and potential measures to mange this risk is relatively high in the Ham area following the 2004 Floodscape initiative and through shared everyday experiences of simply walking or playing along the often flooded riverbanks. Local people can see that increased inundation has an impact on their use of the towpath and that water is increasingly making its way into Ham's parks and gardens. The area is incorporated into TE2100, The River Thames Scheme Datchet to Teddington and the relevant catchment management plans for the tidal and freshwater Thames and the issue forms a key consideration in the emerging Ham Neighbourhood Plan.



The construction of flood walls is not an option in Ham

Although the Thames Path at Ham and Petersham is only inundated with water at the top of the high tides approximately 12 times a month, it is unfortunate that due to the hydrology of the Upper Tideway this takes place during periods of potential greatest use. It is known that flooding and its effects are a big factor in why potential users do not to use the towpath for commuting or during the winter months.

TE2100

The Ham area is located in the Environment Agency TE2100 Richmond Policy Area that recommends flood risk management policy P3, *to continue with existing or alternative actions to manage flood risk at the current level (accepting that flood risk will increase over time from this baseline), working with communities on local measures for key assets and infrastructure*. The Environment Agency recognises that the benefits of improving defences are limited and due to the nature of the environment any improvements should enhance the existing character of the landscape.

5 A PLACE FOR WILDLIFE; Habitat Creation, Floodplain Naturalisation and Historic Landscape Restoration

Ham & Petersham offer one of the few locations in London with the potential to re-connect the main river channel of the Thames with a series of inter-linked wetland habitats. This could be achieved without any major modification to the existing topography of the floodplain. The Thames Landscape Strategy Review of 2012 recommends that in the short term it is important to enhance those spaces that are already being inundated set within a longer term vision for the remainder of the reach.

At Petersham Lodge Woods and Petersham Sea Scouts, emerging wet woodland is an important habitat. Measures to enhance this rare and fragile habitat should be undertaken. At Queen Elizabeth's Field, emerging wet meadowland is significent running alongside the tidally fed creek. Measures to enhance this habitat linked to the creation of areas of standing water should be explored. Scrub will need to be controlled if this habitat is not to be lost. The meadow is currently leased for horse grazing. Between Hunter's Pond and Ham Street is an important backwater channel fed by the tide. Whilst many riparian species have emerged much more could be done to encourage a greeter diversity of grassland species suitable for a damp location. Ways to link this area with adjoining sites at Petersham and Ham Lands are proposed although at present little is known of the hydrology or existing ecological implications. On Ham Lands itself a fascinating area of wet habitat has emerged over the past 20 years between the closely cropped grass on King George's Playing Field and the towpath. This area could be enhanced by finding ways to control the flow of water from the river through a series of sluices between Ham Lands and the river. In this way, those areas that are already wet can be managed with a progression of different habitat types to dry grassland in those parts of the meadows that do not flood. A series of shallow creeks and tidally fed ponds could provide important backwater habitat that would be particularly beneficial during periods of high water flow in the main channel. A network of native hedges could also be planted.

Hunter's Pond with simple sluice and paddle to control water

Along the towpath itself, recent management practices have seen a sharp decline in the diversity of native riparian flowering species. Purple loosestrife , angelica, water dropwort and water mint were once common but are now confined to the riverbank itself whilst the vegetation zone between the towpath and the riverbank is largely given over to dock. Measures to implement the TLS Towpath Management Plan should be explored to see the return of the diverse riverbank.

The habitat restoration could be carried out in association with a series of measures to restore the historic landscape particularly a section of the great River Avenue between the raised wooded section and Ham Street across the King George's Playing Field. The route would follow the lost line of the avenue, continuing along the existing woodland ride towards Radnor Gardens (as a grassed woodland ride), Measures to restore the Great River Avenue in front of Ham House (on National Trust land) could be explored. Works being considered in the next phase of the Restoration of the Lost Floodplain could include:

•Hydrological survey work to understand how water enters and subsequently moves about the Ham backwaters
•Ecological survey of the towpath and Ham Backwaters to inform any subsequent proposals
• Connection and enhancement of the various wet habitats between Petersham Meadow and Ham Lands to create an interlinked aquatic habitat
•Re-connection of the Ham backwater network with the main channel of the river through the use of sluices, weirs and creeks to ensure that the backwaters are connected to the main river channel.

•To manage a gradual transition of habitats from the towpath up to dry ground to increase habitat complexity and connectivity. In this way a succession of different riparian habitats can be managed to improve the resilience of natural systems to give a greater likelihood of surviving random events such as a flood or low flows that result in poor water quality.
•To consider the potential for the scheme to filter out any run-off pollution (before it enters the Thames) through the creation of reedbed habitat that could also have the additional benefit of carbon capture
•To put in place a series of measures to enhance the Thames Path footpath and discreet dry routes for use in periods of flood that are designed in a way that interlink directly with any habitat enhancements.
•To restore the Great River Avenue between the woodland ride across Ham Lands and Ham Street
•To extend the area of wet woodland and associated scrub. It is important that the Petersham wet woodland is sustained by the brackish water that inundates the landscape at high tide – this rare habitat would not be effected by summer droughts
•To create scrapes and some pockets of standing water
•To plant native hedges
•Continuation of [illegible] agreement

Wet woodland at Petersham

1 **Petersham Meadows:** Create additional scrapes. Potential landscaping of concrete bund.

2 **Petersham Lodge Woods and Sea Scout wet woodland:** Connect wet woodland habitat with wider /backwater habitat. Survey to inform any habitat improvements.

3 **Petersham Towpath:** Survey to inform the way that water is carried in/out of backwaters across the towpath to connect the backwaters with the main river channel. Re-instatement of the TLS Towpath Management Plan.

4 **Queen Elizabeth Meadow:** Survey work. Enhancements to wetland habitat including management of scrub and creation of scrapes and possible areas of standing water. Enhance backwater channel.

5 **Hammerton's ferry & Hunter's Pond** Consider ways that Hammerton's Sluice is linked to wider movement of water. Connect Hunter's Pond to adjacent wetland areas.

6 **Ham House Meadow:** Connect wet habitat to wider wetland/backwater habitat through backwater channels. Survey and habitat enhancements to wet areas.

7 **Ham Towpath:** Tree works and scrub management. Restore the TLS management regime.

8 **Ham Street Car Park:** Install interpretation. Repair car park bollards. Surface enhancements.

9 **Ham Towpath:** Enhancement of the low lying locations where water overtops the towpath connecting/regulating the ways that the backwaters are connected to the main channel.

10 **Ham Towpath** Scrub and suckling elm management. Introduction of ash, elder, willow and hazel.

11 **Ham Lands Backwaters:** Enhancement of emerging backwater habitats and creation of channel to connect these to each other. Survey work.

12 **Ham Lands:** Create stock proof edges to woodland and existing fields margins through native hedge planting. Potential for new creeks, backwaters and scrapes.

13 **Ham Lands:** Creation of wetlands linked to the Thames Young Mariners lagoon.

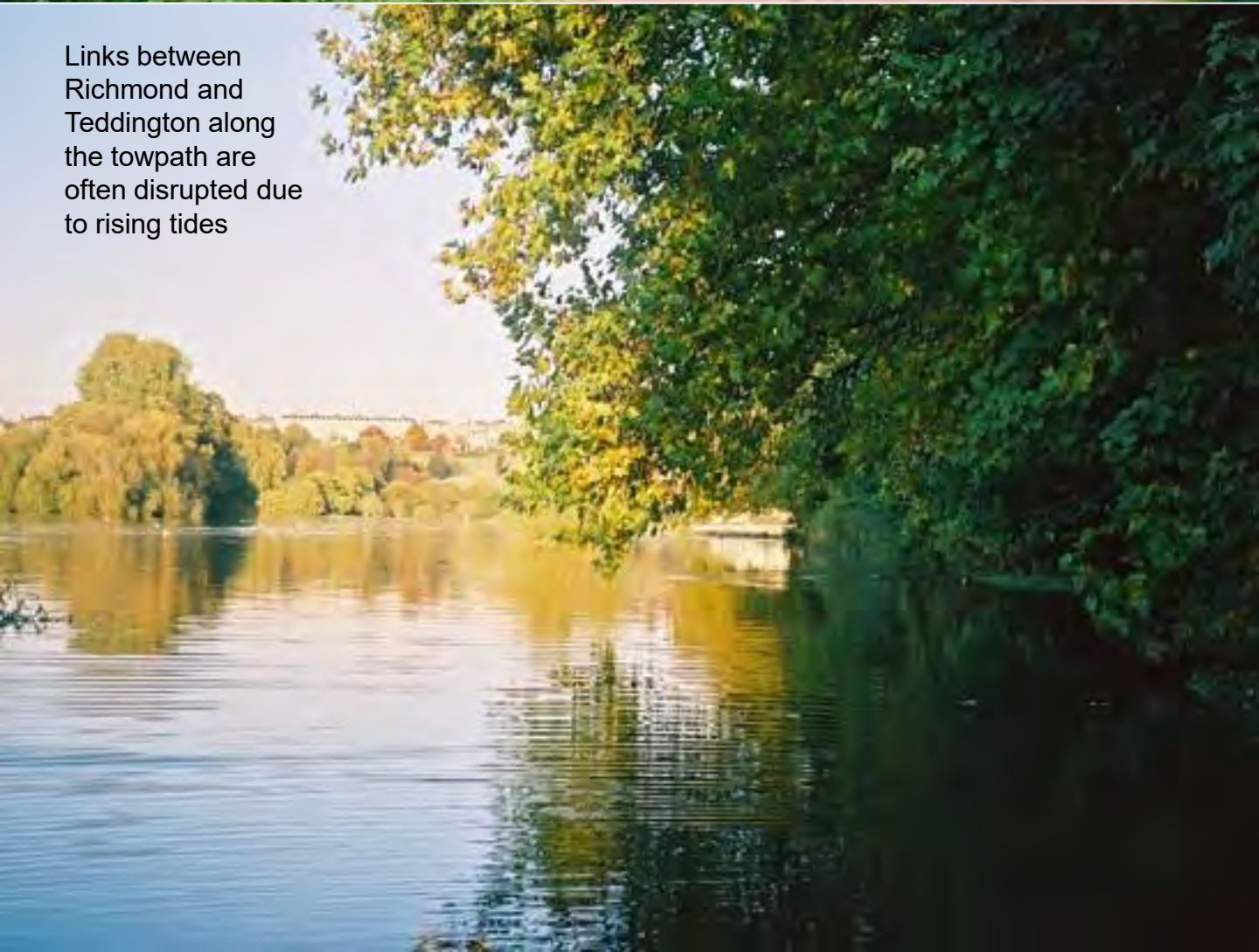
14 **Ham Lands Great River Avenue woodland ride:** Coppice trees on ride and manage as grassland through a woodland ride. Retain narrow vista to Radnor Gardens and Star and Garter Home.

15 **Ham Lands Great River Avenue King George's Playing Field:** Plant a new avenue based on the agreed line in the Kim Wilkie report to the edge of King George's Playing Field between Woodland Ride and Ham Street.

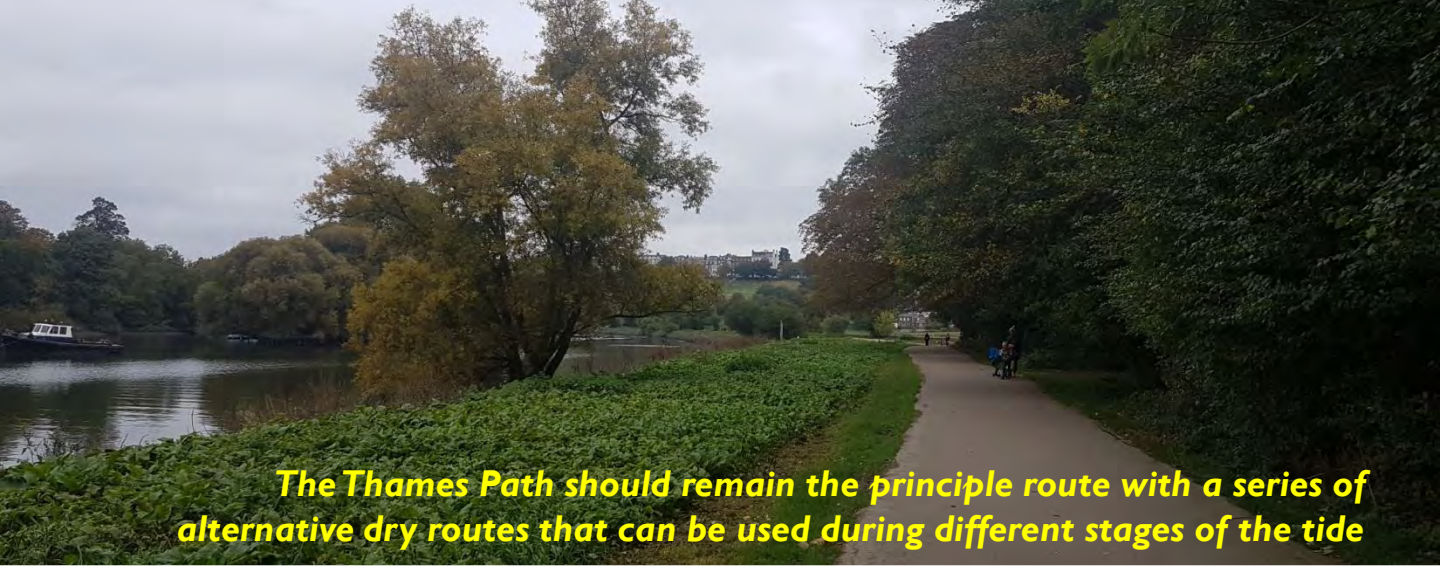
16 **16 Great River Avenue:** National Trust land – work with NT to ensure that any replanting of the Great River Avenue is along the line proposed in the Kim Wilkie report.

17 **Network of existing cycle paths** Continue to manage

18 **Ham Avenues:** Continue existing management to historic avenues



Links between Richmond and Teddington along the towpath are often disrupted due to rising tides



The Thames Path should remain the principle route with a series of alternative dry routes that can be used during different stages of the tide

6 A PLACE FOR PEOPLE; Connections

Established movement patterns are being altered by rising waters, particularly on the low lying towpath and in the adjacent riverside parks, putting the long-term viability of sustainable transport, management regimes and visitor initiatives at risk. It is important that any works to enhance the diversity of the backwaters is designed to link directly with measures that ensure that humans can move about and understand the landscape at all periods of the tide. Proposals for improvements to the network of cycle and walking paths must therefore be considered as part of a holistic plan. The towpath at Petersham is the lowest undefended section of Thames Path in Greater London. The towpath between Petersham and Teddington was recently re-surfaced.

The TLS has championed the creation of a series of discreet dry routes linked to subtle enhancements of the Thames Path towpath itself. In this way users will be able to navigate the landscape at all times using a series of movement options created to blend into the rural landscape. It is important that the Thames Path remains the principle route as (with the exception of the Petersham reach), it is accessible for most of the time and provides a good off-road connection between Richmond and Kingston that avoids the busy and dangerous Petersham Road. Problems with use only arise during the high spring tides or during a fluvuial flood.

A network of alternative 'smart' dry routes only need to provide an option for the times that the Thames Path is inundated (as an average; twice a day, for six days each month) and can be designed so that different routes can be used during different levels of inundation. The dry routes need to be accessible and suitable for both walkers and cyclists but do not have to be constructed to the same standard as the Thames Path itself. It is important that the integrity of the backwater landscape is maintained. A hierarchy of dry routes that mostly follow existing paths is proposed as different tides cut off different options.

Junction of Douglas Meadow and Thames Path

6.1 Enhancements to the Thames Path

The Thames Path is being upgraded with a new surface. This has been designed to fit in with the rural character whilst providing an accessible surface. Any further enhancements or widening of the path need to be carefully considered if the rustic character of the towpath is to be maintained.

The Thames Path is fit for purpose on all but the top of the tides when inundation does prove to be a barrier to use (see earlier section). At these times the use of an alternative dry route would be needed. Between River Lane and Teddington Lock, five locations have been identified as particularly low lying however being inundated regularly - water rushing over the surface of the un-defended towpath filling the backwaters as the tide ebbs and flows. This forms a barrier to use during and after the top of the tide and washes the surface of the towpath away leaving large craters that have to be regularly repaired and are a known barrier to use. These places are located on the map opposite. At present, repair is carried out by simply filling the hole with large amounts of concrete. This solution simply shifts the scouring a few metres upstream or downstream where a new hole soon emerges and the problem continues.

To allow movement to take place along the Thames Path during the periods when these low lying places are inundated, the TLS recommends that three discreet wooden bridges or boardwalks (along the line of the towpath and designed to fit into the rural character) are constructed so that the user can continue on their way whilst the water moves between the backwaters and the river under the structure. Water levels in the backwaters could therefore be controlled through a series of simple sluices, paddles and weirs whilst usage of the Thames Path could continue on all but at the top of the exceptional spring tides when an alternative drier route would be needed. In all but the high spring tides users of the towpath would therefore be able to continue to use the Thames Path as normal, travelling along the higher, dry sections either side of the new bridges (estimated to be a minimum of 2.5m wide and 5 m long).

Example of a TLS dry route (upper image shows the site before works were carried out)

Due to the unique historic landscape and the nationally important habitat for nocturnal wildlife no lighting should be installed at any point along the Ham towpath of backwater dry routes. Signage should be kept to an absolute minimum.

On the highest spring tides however (that always take place between 3 – 7.00 pm so therefore considerably affecting commuter usage) even these measures would not sustain use between The Thames Young Mariners lagoon and Ham Street Car Park. At these times measures will need to adopted that direct users to safely navigate an alternative drier route. The line of the Great River Avenue and Riverside Drive form a perfectly acceptable higher dry route, returning to the towpath and Ham Avenues at Ham Street. With simple modifications to the user network the Thames Path could be made safe and wider proposals to link Ham with its adjoining towns of Kingston and Richmond through additional improvements to cycle and walking routes could be maximised without effecting the rural character. The structures would need to be designed so that future maintenance considerations are accounted for. In the long term the possibility of a new bridge across the river to Twickenham from Ham is being explored.

The Thames Path between River Lane and the Sea Scouts in Petersham is also particularly low and is inundated even on the neap tides if fluvial flow is high. There is little that could be done to improve this section without the construction of lengthy boardwalks along the edge of the towpath so an alternative dry route is proposed.

At the junction between the Douglas Meadow Footpath and the Thames Path there is a particular concern. At this location water flows into the backwaters some time before the top of the tide and continues to flow back out again long after the rest of the towpath is free from inundation. This is a considerable barrier to use with much erosion to the footpath. The resulting repairs have resulted in an unnecessarily wide expanse of concrete that **will** wash away in the near future. A channel could be created and strengthened (potentially using stone gabions in-filled with native vegetation) to focus the flow of the of the water (this would necessitate a hydrological survey beforehand). This would reduce the potential for longer stretches of the revetments to be washed away. A simple sluice and paddle could control the movement of water. Above this structure, a simple boardwalk or bridge would take the user of the Thames Path across during normal flow regimes.

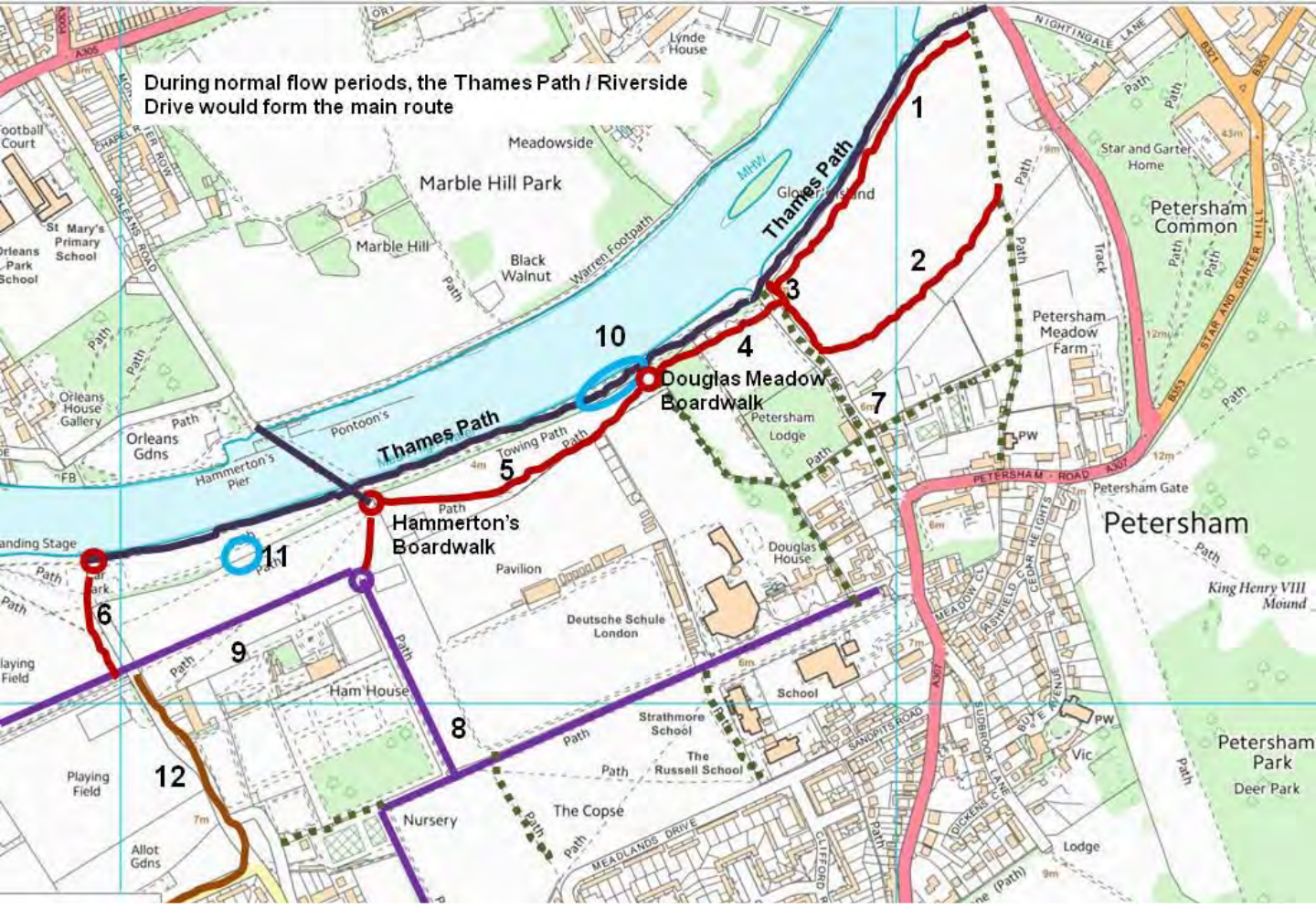
High tides form a considerable barrier to use on the Petersham Towpath

6.2 Dry Routes

In those locations that are inundated during the spring tides a series of dry routes could be created that allow the user of the Thames Path to continue on their way between Kingston and Richmond and to the Ham hinterland from the river. The Thames Path should always remain the dominant route, the dry routes providing an alternative connection to be used at the top of the high tides. The network of dry routes should follow the line of existing or proposed footpaths – their primary function being rustic walks through the backwaters.

1 Petersham Meadows

The Thames alongside Petersham meadows between Chitty Hole and River Lane is in the ownership of the London Borough of Richmond upon Thames and provides a wonderful route immediately below Richmond Hill. It is where the Thames first enters the Arcadian fields of Ham from the bustle of Richmond's iconic riverside. It is however a particularly low lying reach being positioned on the river side of a low concrete wall that was installed to stop Petersham Meadows from flooding on the high tides. This wall is not a flood defence however – this being located as a contour line towards the rear of the Meadow.



Petersham Dry Route Network

1 Dry route along Petersham Meadow wall / bund
2 Drier route to the rear of Petersham Meadow
3 Raised hump (with culvert underneath across River Lane
4 Boardwalk through Petersham Lodge Wood and Sea Scouts forming dry route
5 Raised earthen bank with path along Queen Elizabeth's Meadow
6 New raised boardwalk linking car park with route of Great River Avenue
7 Existing footpath network to be used in dry route network
8 Ham Avenues – dry route for exceptional high tides
9 Great River Avenue dry route for high tides
10 Boardwalk along towpath along low stretch
11 Stepping stones
12 Continuation of Kingston to Richmond route along Riverside Drive

The Thames Path at this location is therefore regularly under water and a dry route is required. This should be considered in the longer term as part of a wider scheme in partnership with the National Trust to reduce the visual impact of the concrete wall and provide an appropriate barrier to the meadow through a raised bund and ha-ha. There is scope for some limited habitat creation to restore aspects of Petersham Meadow as wetlands through simple scrapes. In the short term the existing dry routes to the rear of the wall can be used.

The Thames Path at Petersham Meadows is extremely well used. Several recent schemes have attempted to re-surface the route using different sizes of gravel – all have quickly broken up through the action of the tide. A case can be made for this section to be rebuilt using a sealed gravel surface.

3 River Lane Petersham

A dry route linking Petersham Meadows would necessitate crossing River Lane that regularly floods some considerable way from the river. To ensure that the user would not need to divert some considerable distance up River Lane to avoid a flood, it is proposed that a low concrete bund could be installed on the lane. This could act as a dry route linking the meadow with Petersham Lodge Wood. To conform with Environment Agency legislation it would be necessary to include ways that flood water could still move to the landside of this structure and mitigation to compensate for loss of flood capacity may be needed elsewhere.

4 Petersham Lodge Woods and The Sea Scouts

The Thames Path between River Lane and the Douglas Meadows footpath is low lying and measures to enhance this feature have been proposed elsewhere in this report. An alternative dry route is needed. The only viable place for this would be through Petersham Lodge Woods and the wet woodland belonging to the Sea Scout base. This could take the form of a boardwalk that runs behind the line of trees between the woodland and the towpath(roughly following the line of a route proposed by the London Borough of Richmond through Petersham Lodge Woods) .

A boardwalk constructed through the wet woodland connecting Douglas Meadows Footpath with River Lane could form a strong barrier between the publicly accessible riverside and the Sea Scouts land. It would also provide a wonderful new amenity (when not being used as a dry route at high tides) for users to experience one of the most unique habitats in London – wet woodland,. Measures to enhance the diversity of the woodland should be proposed.

5 Queen Elizabeth Field

A dry route to be used on the high spring tides would be needed between The Douglas Meadow Footbridge and Hammertons Boardwalk to avoid bridging over long lengths of the Thames Path. An alternative drier route could be used on exceptional flood inundation via the Petersham Avenue however for the majority of spring tides an improved route through Queen Elizabeth's Field would be sufficient.

At present an unbound trail weaves through the paddock. If this route was moved to the rear of the field and positioned on a small gently rising mound raised above the height of the spring tides an unbound path could follow facilitating access. This approach would be sufficient for the periods of dry use anticipated whilst providing a new path through the emerging wet habitat. Scrub needs to managed in the field and measures taken to separate the horses from the path put in place.

Hammertons Boardwalk

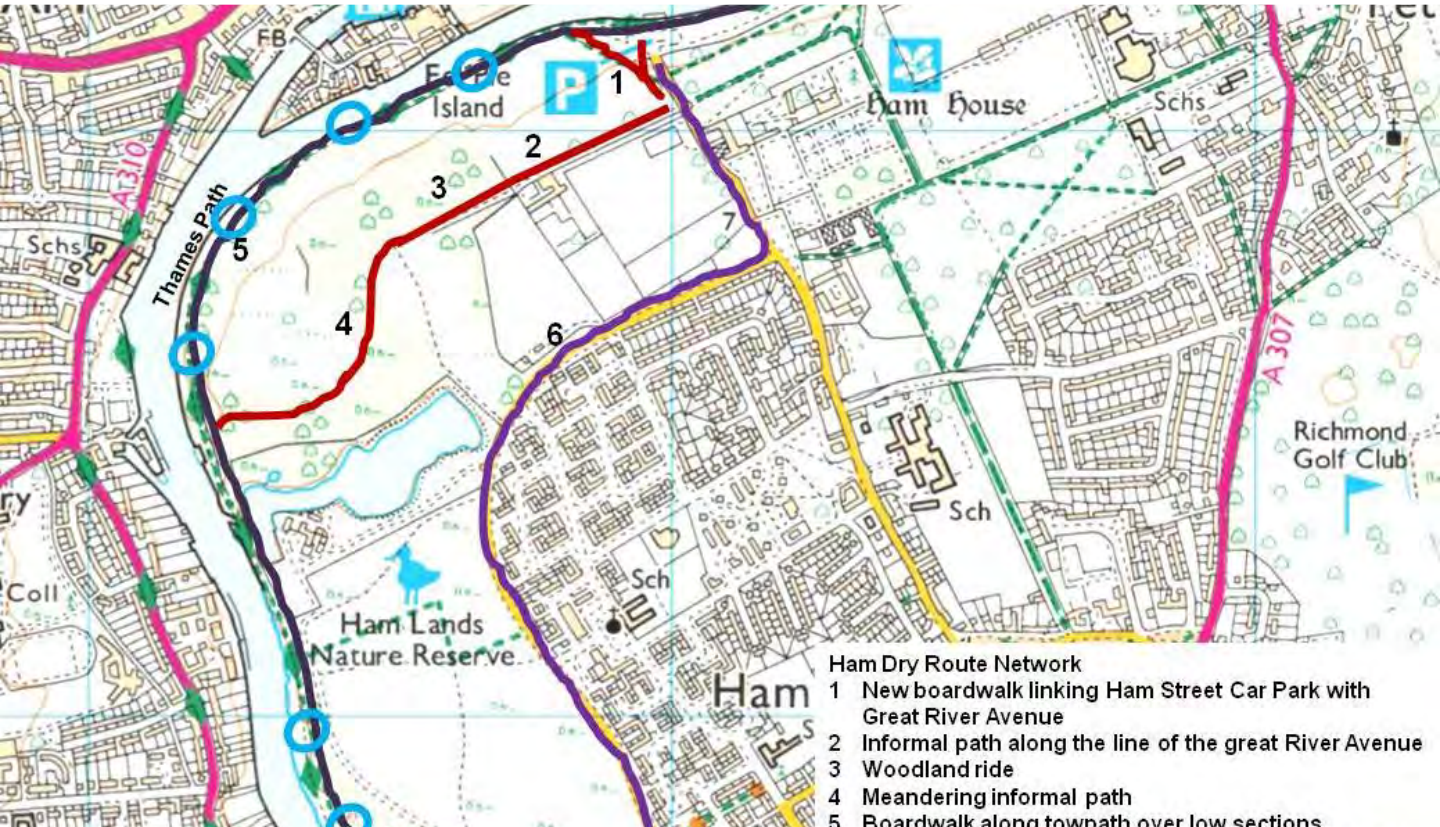
Hammerton's Boardwalk is a key strategic connection and one that was considerably enhanced in 2006 during the London's Arcadia initiative. At Hammertons, the Thames Path on the Twickenham and Ham banks of the river is linked by a foot ferry. It is the place where the SUSTRANS strategic cycle route spur from Richmond Park meets the Thames via the Ham Avenues and through these links, a dry route on the Thames Path (between Richmond and Kingston) can be followed via the Great River Avenue and Riverside Drive (figure 9 and 12 on the map).

The connection between the boardwalk with the Queen Elizabeth Field, Melencolony Walk and the Great River Avenue needs to be enhanced and made fully accessible (figure 8 on the map). This may necessitate the construction of earthen bunds to bring the path above the flood level although any path could use breden gravel in a similar way to the Ham Avenues. This would complete the connections proposed by the Ham Neighbourhood Forum to link the area with Richmond and Kingston.

7 Other Proposals

Improvements to the footpath and cycling network proposed by the Thames Landscape Strategy 2012 Report for the reach between Ham Street Car Park and Teddington Lock are not detailed in this report as the Ham Neighbourhood Forum is proposing the use of Riverside Drive as the dry route. The following provides a brief summary only. It is not anticipated that they will be brought forward as part of the Ham Neighbourhood Forum proposals. Measures to take walkers and cyclists around Ham Street Car Park would be needed at high tides. This could be achieved by a simple raised grassy bund but it is important to link this feature with a new footbridge across the wetland area that floods between Ham Meadows and King Georges Field and links to the Ham Avenues (figure 1 on the map below).

The Thames Path between Ham Street and Teddington Lock would require some repair using a material that blended with the rural environment. The path along this section is higher than at Petersham and floods only in short stretches on the high tides. At these places short wooden bridges could be constructed to allow access at all times whilst allowing water to move in and out of the Ham Lands Backwaters to sustain the wet environment (number 5 on the map below). An alternative route between Petersham and Teddington could be used on the highest tides along an unbound Great River Avenue or Riverside Drive. The TLS aspirations for the great River Avenue are set out in a separate paper. These include the reinstatement of a formal avenue to the south of King George's Playing Fields leading to a woodland ride through the raised tree'd section maintained at 4m width to facilitate the view between the Star and Garter and the River. This proposal therefore a series of options that the user can take to navigate between Richmond and Teddington. This would form a legible and safer method without the need for large new routes to be constructed to the detriment of the historic character of the Arcadian landscape. The improvements at Ham and Petersham would be continued along the Thames Path towards Kingston. This would include tree and scrub management and enhancements to the towpath at Lower Ham Road and Canbury Gardens currently being explored with the North Kingston Neighbourhood Forum and set out in the new Canbury Gardens SPD.



8 Landscape Management

Associated with the proposed landscape restoration works is an ambitious plan to integrate (between different agencies and landowners) the day-to-day land management regime for the reach to include the re-introduction of heavy horses to cut vegetation between Petersham Meadows and the Thames Young Mariners lagoon. Many of these aspects to integrated landscape management have already been trailed by the TLS and are set out in the TLS Towpath Management Plan.

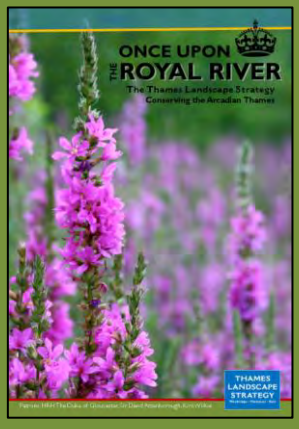
The plan makes considerable reference to the use of volunteers. The TLS has a good track record of engaging with local people on this reach including young people from local schools and venerable young adults. During the London's Arcadia scheme volunteers were used to complete tasks ranging from scrub management to fence making.

ONCE UPON THE ROYAL RIVER

The Arcadian Thames has provided the setting for some of the most significent events in the English story; the river meandering through a particularly sovereign landscape of grand gardens, royal palaces, aristocratic villas and wild deer parks. Be this the crowning of the Saxon kings at Kingston, the signing of the Magna Carter at Runneymede or the making of the Reformation at Hampton Court. Later on, the Georgian estates at Richmond were the inspiration for a revolution in garden design, whilst the opening up of Kew for the public to enjoy in the Victorian era ushered in a new recreational model for public access to parks and gardens that was copied across the world.

It is a landscape that collectively embodies a special sense of identity for London that has helped shape our national identity. Although being the product of centuries of aristocratic and royal control what is most special about this un-rivalled stretch of the river today is that it forms one of the largest accessible open spaces in any capital city in Europe that provides a connected haven for wildlife and a playground for people to enjoy. One by one the treasures of the Royal Thames were opened up and democratised for the people to enjoy; forming one of the great liner urban landscape s that links the city with the countryside and people with the natural world.

Throughout this history, the Thames floodplain has been modified by successive generations of people to serve their particular needs. The river itself has been tamed and narrowed, the meadows and woodland formalised into grand gardens and artificial new rivers created to provide water to feed the palace complexes. More recent changes have taken place to facilitate access or for flood defence that have continued the modification of the floodplain. Changing climate and environmental priorities however have altered the balance and a new approach in managing the floodplain is needed.



Once Upon The Royal River aims to reveal the layers of the river landscape in order to understand how humans have modified the Arcadian Thames floodplain to inform a wide programme of works. The proposals are wide reaching and are mostly geographically based. **Ham and Petersham: Where Thames First Rural Grows** is one such project, a multi-benefit series of local measures taken from the Thames Landscape Strategy's Restoration of the Lost Floodplain report and the Ham Backwaters Proposal in response to the HAM Neighbourhood Forum's aspirations for the area. Above all Once Upon The Royal River is a mechanism to ensure that the evolution of the remarkable Arcadian Thames is carried out in a way that can meet the challenges of the twenty first century whilst ensuring that riparian landscape remains a place where wildlife, humans and water co-exist within the confines of the city.

Thames Landscape Strategy Holly Lodge, Richmond Park, Richmond TW10 5HS 020 8940 0654
www.thames-landscape-strategy.org.uk www.facebook.com/ThamesLandscapeStrategy

	Metrics (Click on ⓘ for more guidance on scoring or open the '*Scoring guidance tab* ')	Scoring system 3	2	1	0	Enter score here: Existing layout	Proposed layout	Notes	How each metric contributes to the Healthy Streets Indicators' scores: Pedestrians from all walks of life	Easy to cross	Shade and shelter	Places to stop and rest	Not too noisy	People choose to walk, cycle and use PT	People feel safe	Things to see and do	People feel relaxed	Clean Air
1	**Total volume of two way motorised traffic** ⓘ	There are fewer than 500 vehicles per hour at peak.	There are 500 to 1000 vehicles per hour at peak.	There are more than 1000 vehicles per hour at peak, where people cycling are separated from motorised traffic.	There are more than 1000 vehicles per hour at peak, where people cycling are mixed with motorised traffic.	1	1	data from Petersham Rd south of Sandy L	✓	✓	–	–	–	✓	✓	–	✓	–
2	**Interaction between large vehicles and people cycling** ⓘ	There will be no large vehicles using the street, or cycle traffic is separated from motorised traffic.	The proportion of large vehicles is less than 2% of motorised traffic, 7am to 7pm.	The proportion of large vehicles is 2% to 5% of motorised traffic, 7am to 7pm. **or** The proportion of large vehicles is greater than 5% of motorised traffic, 7am to 7pm, and people are cycling either: - in a nearside general traffic lane or bus lane at least 4.5m wide, or - in a cycle lane where the combined width of the cycle lane and the next general traffic lane is at least 4.5m.	The proportion of large vehicles is greater than 5% of motorised traffic, 7am to 7pm, and people are cycling either: - in a nearside general traffic lane or bus lane less than 4.5m wide, or - in a cycle lane where the combined width of the cycle lane and the next general traffic lane is less than 4.5m.	0	3	11% HGV	✓	–	–	–	–	✓	✓	–	✓	–
3	**Speed of motorised traffic** ⓘ	85th percentile speed is less than 20mph. **or** Existing 85th percentile speed is 20 to 25 mph, but there are some proposals to reduce speed further. **or** Existing 85th percentile speed is over 25 mph but a complete redesign of the street environment should reduce this to below 20mph.	85th percentile speed is 20 to 25mph. **or** Existing 85th percentile speed is 25 to 30 mph, but there are some proposals to reduce speed further.	85th percentile speed is 25 to 30mph. **or** Existing 85th percentile speed is greater than 30 mph, but there are some proposals to reduce speed further.	85th percentile speed is greater than 30mph. **or** Existing 85th percentile speed is greater than 30 mph, and there are no proposals to reduce this speed.	1	3	28mph - north of Ham Parade. Narrow ca	✓	✓	–	–	–	✓	✓	–	✓	–
4	**Traffic noise based on peak hour motorised traffic volumes** ⓘ	There are fewer than 55 vehicles per hour (c. <58 DB).	There are 55 to 450 vehicles per hour (c. 58-70 DB).	There are more than 450 vehicles per hour (c. >70 DB).	–	2	2		✓	–	–	–	✓	✓	–	–	✓	–
5	**Noise from large vehicles** ⓘ	The proportion of large vehicles is less than 5% (c. +0 to +3DB).	The proportion of large vehicles is 5 to 10% (c. +3 to +5 DB).	The proportion of large vehicles is greater than 10% (c. +5 DB and over).	–	1	1		✓	–	–	–	✓	✓	–	–	✓	–
6	**NO2 concentration** (from London Atmospheric Emission Inventory) ⓘ	**If assessing existing:** The NO2 concentration is less than 32µg/m3. **If assessing proposal:** The existing NO2 concentration is less than 32µg/m3 **or** the existing concentration is 32 to 40µg/m3 with local traffic volume reduction measures proposed.	**If assessing existing:** The NO2 concentration is 32 to 40µg/m3. **If assessing proposal:** The existing NO2 concentration is 32 to 40µg/m3 with no proposal to reduce local traffic volume **or** the existing NO2 concentration is greater than 40µg/m3 with local traffic volume reduction measures proposed.	**If assessing existing:** The NO2 concentration is greater than 40µg/m3 (legal limit value). **If assessing proposal:** The existing NO2 concentration is greater than 40µg/m3 with no proposal to reduce local traffic volume.	–	1	2		✓	–	–	–	–	✓	–	–	–	✓
7	**Reducing private car use** ⓘ	There is no through-movement for motorised traffic, with access limited to local residents, deliveries and public service vehicles.	There are some time or movement restrictions for motorised traffic.	There are no access restrictions for motorised traffic.	–	1	2		✓	✓	–	–	✓	✓	✓	–	✓	✓
8	**Comfort of crossing side roads for people walking** ⓘ	Side roads are closed to motor traffic. **or** Side roads are one-way out for motor vehicles and have features to encourage drivers to turn cautiously.	Side roads are two-way or one-way in for motor vehicles, and have features to encourage drivers to turn cautiously.	Side roads have dropped kerbs only.	Side roads have no dropped kerbs.	1	3		✓	✓	–	–	–	✓	✓	–	✓	–
9	**Mid-link crossings, to meet desire lines** ⓘ	Main desire lines across links are met by crossings suitable for all users at all times.	Main desire lines across links are met by crossings that are suitable some of the time but that do not meet demand all of the time.	Main desire lines across links are not met by pedestrian crossings.	–	1	3		✓	✓	–	–	–	✓	✓	–	✓	–
10	**Opportunity to cross the street away from junctions** ⓘ	Crossing is uncontrolled, with conflicting traffic volume less than 200 vehicles per hour. **or** A zebra or parallel crossing is provided. **or** Crossing is signalised so that people crossing the main carriageway have priority, while traffic on the main carriageway has on-demand green.	Crossing is uncontrolled, with conflicting traffic volume between 200 and 1000 vehicles per hour. **or** Crossing is signalised and straight-across where the distance to cross is less than 15m or greater than 15m in a 20mph speed limit. **or** Crossing is signalised and staggered where the distance to cross is greater than 15m in a 30mph+ speed limit.	Crossing is uncontrolled, with conflicting traffic volume greater than 1000 vehicles per hour. **or** Crossing is signalised and straight-across where the distance to cross is greater than 15m in a 30mph+ speed limit.	–	2	3		✓	✓	–	–	–	✓	✓	–	✓	–

11	**Technology to optimise efficiency of movement** (pedestrians, cyclists, buses and general motor traffic)	All appropriate detection and optimisation technology has been applied to traffic signals.	Some detection and optimisation technology has been applied to traffic signals.	No detection and optimisation technology applied to traffic signals.		1	2		✓	✓	–	–	–	✓	✓	–	–	–
12	**Level of support for people using controlled crossings**	Many measures are in place to support controlled crossing.	Some measures are in place to support controlled crossing.	No measures are in place to support controlled crossing.	–	2	3	tactile paving in place, no raised tables	✓	✓	–	–	–	✓	✓	–	✓	–
13	**Width of clear continuous walking space**	There is 2.5m or more clear width for walking in busy locations. **or** There is 2m or more in moderately busy locations. **or** There is 1.5m or more in quiet locations.	There is 2m to 2.5m clear width for walking in busy locations. **or** There is 1.5m to 2m width in moderately busy locations.	There is 1.5m to 2m clear width for walking in busy locations.	There is less than 1.5m clear width for walking.	1	3	footway at SB bus stop below 1.5m effect	✓	–	–	✓	–	✓	✓	–	✓	–
14	**Sharing of footway with people cycling**	No part of the footway is designated as shared use for walking and cycling.	Part or all of a footway wider than 3m with fewer than 200 pedestrians per hour is designated as shared use.	Part or all of a footway used by more than 200 pedestrians per hour is designated as shared use **or** Part or all of a footway less than 3m wide is designated as shared use.	–	3	2		✓	✓	–	–	–	✓	✓	–	✓	–
15	**Collision risk between people cycling and turning motor vehicles**	Side roads are closed to motorised traffic, or turning movements by motor vehicles are minimised **and** At signal-controlled junctions, all conflicting movements between cycle traffic and turning motor traffic are separated.	Some measures are in place to reduce turning movements by motor vehicles at priority junctions. **and** At signal-controlled junctions, cycle movements are not separated and fewer than 5% of turning vehicle movements are made by larger vehicles but mitigation measures are in place.	There are no restrictions on turning movements by motor vehicles at side roads and other uncontrolled accesses. **and** At signal-controlled junctions, cycle movements are not separated and more than 5% of turning vehicle movements are made by larger vehicles but mitigation measures are in place	At signal-controlled junctions, cycle movements are not separated, more than 5% of turning vehicle movements are made by larger vehicles and there are no mitigation measures in place.	1	3		✓	–	–	–	–	✓	✓	–	✓	–
16	**Effective width for cycling**	**Where cycles are separated from other traffic,** the width of the lane or track is 2.2m or more (one-way) or 3.5m or more (two-way). **Otherwise:** Width of the nearside general traffic lane (where there is no cycle lane) or width of the cycle lane plus adjacent general traffic lane is 4.5m or more.	**Where cycles are separated from other traffic,** the width of the lane or track is 1.5m to 2.2m (one-way) or 2.5m to 3.5m (two-way). **Otherwise:** Width of the nearside general traffic lane (where there is no cycle lane) or width of the cycle lane plus adjacent general traffic lane is between 4m and 4.5m.	**Where cycles are separated from other traffic,** the width of the lane or track is less than 1.5m (one-way) or less than 2.5m (two-way). **Otherwise:** Width of the nearside general traffic lane (where there is no cycle lane) or width of the cycle lane plus adjacent general traffic lane is less than 3.2m.	Width of the nearside general traffic lane (where there is no cycle lane) or width of the cycle lane plus adjacent general traffic lane is between 3.2m and 3.9m.	0	2	2m cycle tracks proposed	✓	–	–	–	–	✓	✓	–	✓	–
17	**Impact of parking and loading on cycling**	There is no kerbside activity. **or** People cycling are physically separated from parking or loading facilities.	There is occasional kerbside activity, and people cycling can keep at least 1.0m clearance to vehicles parked or loading.	There is frequent or continuous kerbside activity, and people cycling can keep at least 1.0m clearance to vehicles parked or loading.	People cycling cannot maintain at least 1.0m clearance from vehicles parked or loading.	1	3		✓	–	–	–	–	✓	✓	–	✓	–
18	**Quality of cycling surface**	The surface for cycling is even and smooth, with sufficient skid resistance. **or** There are defects but resurfacing of the whole cycling surface is proposed.	There are a few minor defects in the surface for cycling.	There are many minor defects in the surface for cycling.	There are major defects in the surface for cycling.	2	3		✓	–	–	–	–	✓	✓	–	✓	–
19	**Quality of walking surface**	There is an even and smooth surface for walking. **or** There are defects but resurfacing of the whole walking surface is proposed.	There are a few minor defects in the surface for walking.	There are many minor defects in the surface for walking.	There are major defects in the surface for walking.	2	3		✓	✓	–	–	–	✓	✓	–	✓	–
20	**Surveillance of public spaces**	There is constant surveillance – because mixed use buildings overlook the street or space, or because there are many people using the space or walking through.	There is intermittent surveillance – because surrounding buildings are single-use or do not completely overlook the street, or because there are few people using the space or walking through.	There is poor surveillance – because few buildings overlook the street or space, there is little activity.	–	3	3		✓	–	–	✓	–	✓	✓	–	✓	–
21	**Lighting**	Street lighting meets the British Standard 5489:2003 and the European Standard CEN/TR 13201. **and** Lighting of off-carriageway facilities for walking or cycling meets the same standards.	Street lighting meets the British Standard 5489:2003 and the European Standard CEN/TR 13201 but lighting of off-carriageway spaces for walking or cycling does not.	Street lighting does not meet the British Standard 5489:2003 and the European Standard CEN/TR 13201.	–	3	3	columns currently too tall, not suitable fo	✓	–	–	–	–	✓	✓	–	✓	–
22	**Provision of cycle parking**	Cycle parking exceeds existing demand and is accessible by all.	Cycle parking meets existing demand but is not accessible by all.	Cycle parking does not meet existing demand.	–	2	3	cycle stands currenlty placed at inapprop	✓	–	–	–	–	✓	✓	–	✓	–

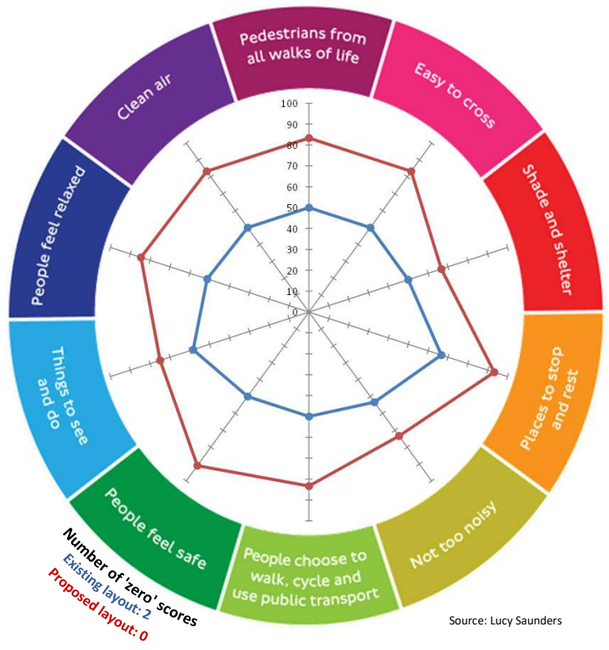
23	**Street trees**	**If assessing existing:** There are multiple trees, with canopies spaced less than 15m apart on average. **If assessing proposal:** The street is already tree-lined with less than 15m between tree canopies and there are no proposed changes. **or** All existing trees are to be retained, with substantial planting of new trees.	**If assessing existing:** There are multiple trees, with canopies spaced more than 15m apart on average. **If assessing proposal:** Most existing trees are to be retained, with the overall number of trees maintained or increased.	**If assessing existing:** There are no trees, or only one tree. **If assessing proposal:** There are no trees. **or** The number of trees has been reduced.	_	**2**	**3**		✓	_	✓	✓	✓	✓	✓	✓	✓	✓
24	**Planting at footway-level** (excluding trees)	**If assessing existing:** There is substantial planting in good condition designed to create or improve social space and/or act as a connection between other green spaces (eg pocket park, rain garden, community garden area). **If assessing proposal:** Existing greenery is to be retained or enhanced and new greenery is proposed.	**If assessing existing:** There is some planting, eg shrubs, verges, hedges, ornamental flower beds, or adaptation for some animal species. **If assessing proposal:** Existing standalone greenery is to be retained or enhanced.	**If assessing existing:** There is no planting. **If assessing proposal:** No green infrastructure is proposed, or the size of existing greenery is to be reduced.	_	**2**	**3**		✓	_	_	✓	✓	✓	✓	✓	✓	✓
25	**Walking distance between resting points** (benches and other informal seating)	There is less than 50m between resting points.	There is between 50m and 150m between resting points.	There is more than 150m between resting points.	_	**2**	**2**	benches only located along NB footway	✓	_	_	✓	_	✓	_	✓	✓	_
26	**Walking distance between sheltered areas protecting from rain.** Including fixed awning or other shelter provided by buildings/infrastructure	There is less than 50m between sheltered areas.	There is between 50m and 150m between sheltered areas.	There is more than 150m between sheltered areas.	_	**1**	**1**		✓	_	✓	_	_	✓	_	✓	✓	_
				Are there any bus services running on this street? (Y/N) **If not, do not complete metrics 29-30**		**Y**	**Y**	**<<< please select Y or N**	**<<<<Please enter Y or N for both existing and proposed.**									
27	**Factors influencing bus passenger journey time**	There are positive influences on bus journey time, eg bus lane, exemptions for buses from movement bans for general traffic.	Buses are mixed with traffic but not significantly delayed.	There are negative influences on bus journey time, eg unclear markings, narrow lane width, parking/loading issues, short cage length, mixing with congested traffic.	_	**2**	**2**		✓	_	_	_	_	✓	_	_	✓	_
28	**Bus stop accessibility**	Bus stop is wheelchair accessible, there is clear space for boarding and alighting and there is a clearway in place at the bus stop.	Bus stop is wheelchair accessible but either there is limited clear space around the bus stop for boarding and alighting or, for borough roads, there is no clearway in place.	Bus stop is not wheelchair accessible, ie the kerb height is less than 100mm.	_	**1**	**3**		✓	_	_	_	_	✓	✓	_	✓	_
				Are there any rail/underground/bus station accessible from this street? (Y/N) **If not, do not complete metrics 31-33**		**N**	**N**	**<<< please select Y or N**	**<<<<Please enter Y or N for both existing and proposed.**									
29	**Bus stop connectivity with other public transport services**	The bus stop is within sight of another service – less than 50m away.	The bus stop is between 50m and 150m away from another service.	The bus stop is more than 150m away from another service.	_				✓	_	_	_	_	✓	_	✓	✓	_
30	**Street-to-station step-free access**	All entry points to the station are step-free.	The main entry point to the station is not step-free but step-free alternatives are provided.	There is no step-free access to the station.	_				✓	_	_	_	_	✓	_	✓	✓	_
31	**Support for interchange between cycling and underground/rail**	Secure cycle parking is provided close to station access points, and exceeding existing demand.	Cycle parking is available close to station access points that meets existing demand.	There is insufficient cycle parking to meet demand, or cycle parking is poorly located for station access points.	_				✓	_	_	_	_	✓	_	_	✓	_

The Healthy Streets Check score does not show whether a street is healthy or not but indicates the strengths and weaknesses of a scheme/street.

It is not possible to achieve an overall score of 100%. To score well against some metrics, compromise will be needed with other metrics. This reflects the compromises inherent in any street.

Should the assessment reveal one or more '0' scores the design should be reviewed to consider whether the score can be improved. In some cases this will not be possible, if so justify your decision in the box to the right.

Healthy Streets Check scores



Source: Lucy Saunders

Healthy Streets Indicators' scores (%)

(Results will only display once all metrics have been

	Existing layout	Proposed layout
Pedestrians from all walks of life	50	83
Easy to cross	50	83
Shade and shelter	50	67
Places to stop and rest	67	93
Not too noisy	53	73
People choose to walk, cycle and use public transport	50	83
People feel safe	50	91
Things to see and do	58	75
People feel relaxed	51	85
Clean Air	50	83
Overall Healthy Streets Check score	51	84
Number of 'zero' scores	2	0

If known road danger issues (i.e. '0' scores) are unavoidable, please explain why here:

How to interpret the results

The Check will produce a percentage score against each of the 10 Healthy Streets Indicators. These percentage scores give a general picture of how a design, in the round, is delivering against the 10 Healthy Streets Indicators. Designers should seek to incease the Healthy Streets Indicators scores.

An overall percentage score is also presented. This is not an average of the scores for each Indicator as each metrics contribute to multiple Indicators scores.

It is not possible to score a perfect 100% in any one design because compromises and trade-offs inevitably need to be made. The overall percentage score is less important than eliminating critical issues and delivering a rounded design.

The objective therefore is to get as high a score as possible, for this to be as evenly distributed across the 10 Indicators as possible and for '0' scores to be eliminated. A proposed scheme should also aim to deliver a score increase from baseline for all Healthy Streets Indicators' scores.

If any metrics have scored '0' these will be flagged up in the summary graph above and if they cannot be reconciled a justification for the decision to leave them in the design should be written in the text box below the scoring table.

There is no threshold score for a Healthy Street. Streets are not either 'healthy' or 'unhealthy' - some designs will perform better than others against the 10 Healthy Streets Indicators which may reflect physical, financial or political constraints on the project.

What the numbers mean

The Healthy Streets Check is not a scientific assessment of how healthy a street is. It is not the case that a street with a 10% increase in Healthy Streets Check score confers 10% greater health benefit to people who use it. It is also not the case that a 10% increase in Healthy Streets Check score will deliver a 10% uplift in active travel.

The metrics included in the Healthy Streets Check are the best available quantifiable and evidence based standards that are within the gift of the traffic engineer or urban designer to influence through the design of the street. As a result some of the Healthy Streets Indicators are linked to only a few metrics e.g. shade & shelter while others are linked to all 31 metrics e.g. pedestrians from all walks of life, because all the metrics contribute to the whole environment in the round and therefore affect the Indicator.

The numbers must therefore not be given any undue weight in the interpretation of the results. The objective is to get as high a score as possible for a given project, for this to be as evenly distributed across the 10 Indicators as possible and for '0' scores to be eliminated.

What '0' scores mean

Ten of the metrics can be scored '0'. All of these metrics are known high risk road danger issues. TfL is pursuing a Vision Zero target of zero deaths and serious injuries on the streets by 2041 which means that close consideration must be paid to ensure every opportunity to redesign our streets seeks to eliminate these known hazards.

Metrics scored '0' will be flagged in the final results if they have not been addressed . It is not always possible to improve '0' scores but it is important that these are identified through applying the Check and every effort has been made to find a design solution that can remove them.

Why you cannot get a perfect score

In a complex street environment a balanced approach must be taken; freeing up space for cycling or extending crossing times for pedestrians may produce delays for buses. Likewise removing a pinch point for cyclists or buses may mean removing an island refuge for pedestrians or from the reverse perspective installing an island refuge may introduce a pinch point for buses and cyclists. To be transparent and promote the best possible outcome in the round, recognising the difficult decisions designers must weigh up the Check aims to highlight these decisions so that stakeholders are informed as to what compromises have been made.