8.3.9 Amendment to Public Rights of Way

The Phase 1 scheme interacts with 5 Public Right of Ways (PRoWS), these are shown in Figure 08-22

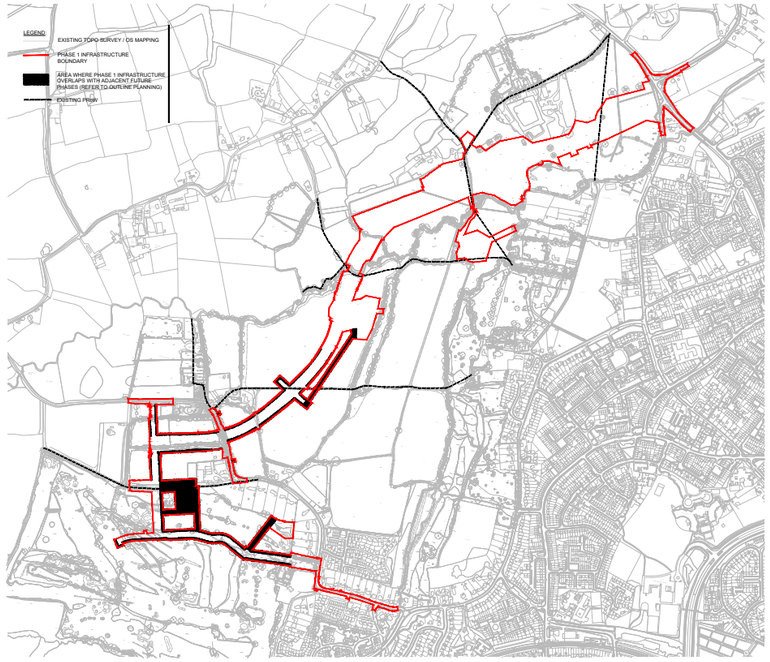

Figure 08-22: Phase 1 Red Line Boundary and PRoWS

The two most northern PRoWS will utilise uncontrolled crossing points on the CWMMC to provide continuity of the routes with some localised alterations to the routes to direct users to the crossings as indicated in the below Figure 08-23, 08-24

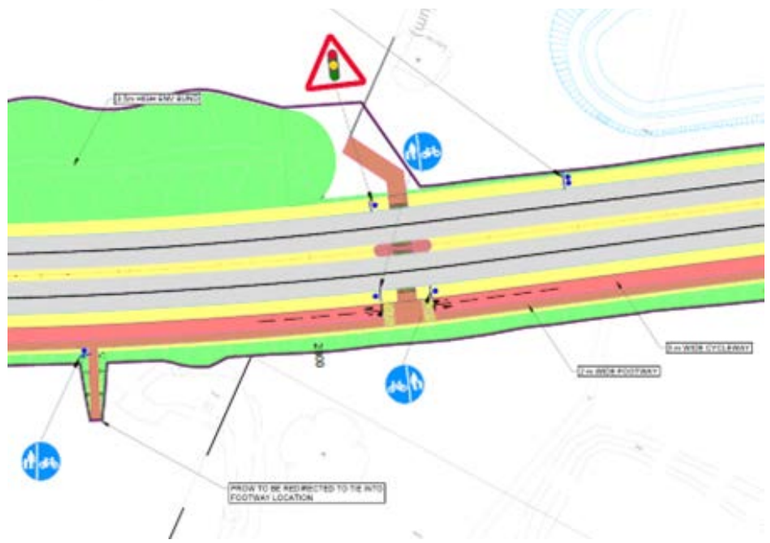

Figure 08-23: Uncontrolled crossing point on CWMMC

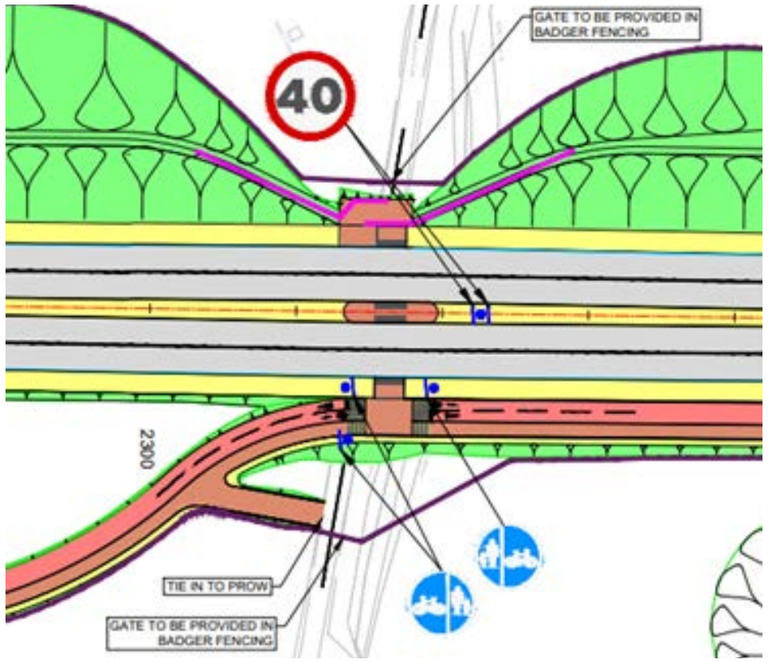

Figure 08-24: Uncontrolled crossing point on CWMMC

The PRoW located in the central section of the CWMMC which runs adjacent to the River Mole will be unaffected by the scheme, where the route will be beneath the River Mole Bridge structure and a tie in location provided to allow users of the PRoW access the CWMMC as indicated in the Figure 08-25

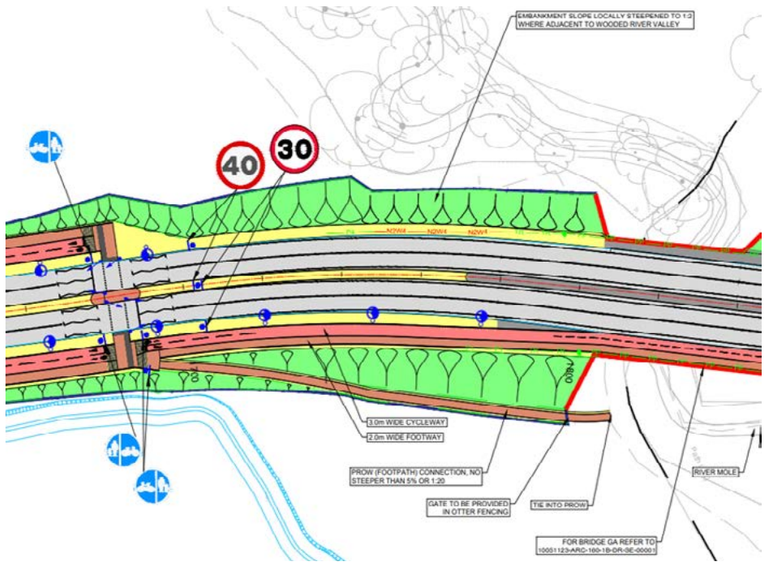

Figure 08-25: PRoW at River Mole Bridge

The further two PRoWS will utilise crossing points in the proposed scheme to continue along the route, in the instance on the CWMMC this will be achieved by crossing the 4 arm junction via the signalised controlled crossing points provided and within the Primary Street this will be achieved by crossing the uncontrolled crossing point located on the street in close proximity to the existing route.

8.4 Site Clearance and Enabling Works

The Phase 1 development plan for the CWMMC and Primary Street includes several critical preparatory and construction activities designed to balance the needs of infrastructure development with environmental stewardship and efficient resource management.

Site Clearance and Vegetation Management

Site clearance will be executed with a focus on minimizing environmental impact, with vegetation removal limited strictly to areas necessary for the construction of the CWMMC and Primary Street. The approach to vegetation management includes the preservation of as much existing vegetation and mature trees as possible, with careful planning to retain and protect these natural features throughout the construction process. This strategy not only helps to maintain the local ecosystem and biodiversity but also enhances the aesthetic value and ecological resilience of the development.

Utility Diversions and Protection

While the Phase 1 scheme does not interfere with any strategic utility networks, several existing utilities will require careful planning for diversions and protection. These include UK Power Networks (UKPN) electricity lines, Openreach and other telecommunications infrastructure, Southern Water potable water mains, and Thames Water sewerage systems. The utility works will be conducted in close coordination with the installation of new utility supplies necessary for the Phase 1 development. This coordinated approach ensures that the enabling works are efficiently integrated into the overall development timeline, minimizing disruptions to existing services and supporting the long-term utility needs of the new community.

Optimized Earthworks and Flood Risk Mitigation

The design of Phase 1 has been optimized to reduce the scope of earthworks and the need for soil export, which is both environmentally and economically beneficial. However, specific areas of the CWMMC, particularly the eastern section, require elevation above existing ground levels to address flood risks associated with the Ifield Brook flood zone. Additionally, ground levels will be raised near the River Mole crossing to further mitigate potential flood impacts. These elevation adjustments are crucial for ensuring the long-term resilience of the infrastructure against flood events, protecting both the roadway and the surrounding areas from water-related damage.

Development Focused on Ifield Golf Course and Temporary Construction Access

The Phase 1 development is largely centered around the existing Ifield Golf Course, with the current junction onto Rusper Road designated for temporary construction access. This access point is strategically chosen to facilitate the movement of materials and equipment while minimizing the impact on local traffic and residents. The phased demolition of the Ifield Golf Club buildings and hardstanding areas will be carefully managed to ensure safety and minimize disruption. This phased approach allows for a controlled and organized progression of the works, reducing the potential for environmental and community impact while paving the way for the next stages of development.

In summary, the construction and preparatory activities for Phase 1 are guided by principles of environmental sensitivity, efficient resource use, and strategic planning. By carefully managing site clearance, utility diversions, earthworks, and construction access, the development is set to proceed in a manner that aligns with sustainability goals, minimizes disruption, and prepares the groundwork for a resilient and well-integrated community infrastructure.

8.5 Highways, Access and Movement

8.5.1 Layout overview

The proposed CWMMC links Charlwood Road and the surrounding area to the proposed development and is approximately 2.5km in length of which is subject to three speed limits. The northern section of the corridor will be subject to a 40mph speed limit, the central section 30mph speed limit and southern section 20mph speed limit as indicated in the Figure 08-26. There is a 4 arm signalised junction located along the corridor south of the River Mole and is intended as a future access point for the future development.

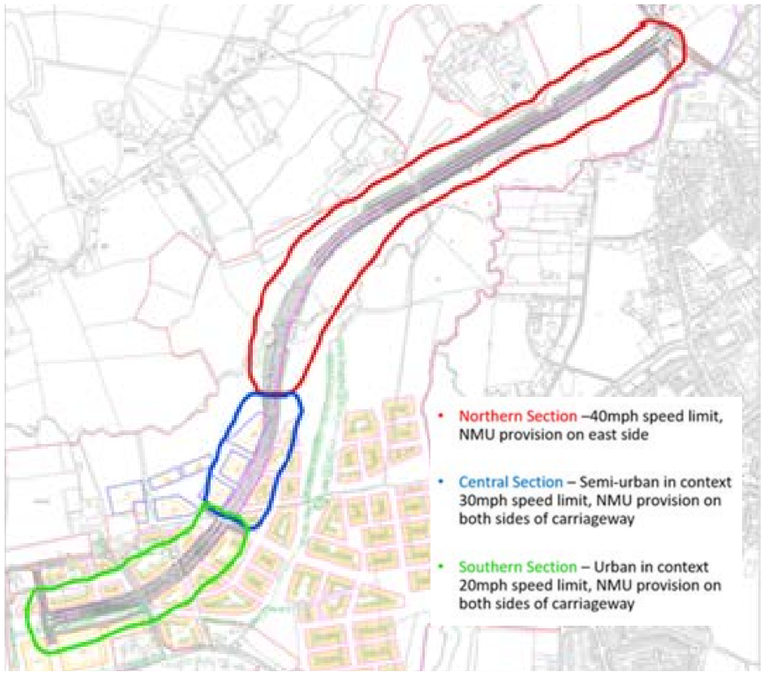

Figure 08-26: Proposed Speed Limits

There is a 3 arm signalised junction proposed at the southern end of the corridor where it connects with the Phase 1 Primary Road and the existing Rusper Road.

Charlwood Road, Ifield Avenue and Ifield Green will be adjusted locally to form a new 4 arm signalised junction. Bonnetts Lane alignment has been amended to tie into Charlwood Road further west in order to provide sufficient queuing capacity at the Charlwood Road Junction.

Rusper Road is proposed to be stopped up either side where the corridor intersects with it and turning heads provided to allow movements for vehicles.

The Phase 1 highway network has been planned to support the ongoing development of the CWMMC, ensuring connectivity and efficient traffic flow within the area. This network features two key roadways—a Primary Street, approximately 850 meters in length, and a Secondary Street, approximately 150 meters in length. Both streets are designed as single carriageway roads with a design speed limit of 20 mph, prioritizing safety and accessibility for all users.

Primary and Secondary Streets

The Phase 1 highway network is anchored by the Primary Street, stretching approximately 850 meters, and the Secondary Street, measuring around 150 meters. These roads are designed as single carriageways with a speed limit of 20 mph, ensuring a safe and controlled environment for vehicular traffic. The Primary Street serves as the main artery, facilitating movement through the development, while the Secondary Street provides crucial connectivity to adjacent areas.

The proposed Primary Street initiates at Rusper Road to the east, where it connects via a proposed 3-arm priority junction, strategically positioned near the current entrance to the main car park of Ifield Golf Club. From this point, the street extends westward for approximately 550 meters before veering northward at a signalized 3-arm junction with the proposed Secondary Street. This junction is a critical node in the network, facilitating movement between the two main thoroughfares. The Primary Street then continues northward for an additional 300 meters, culminating in another signalized junction with the proposed Phase 1 CWMCC, further integrating the new development with the wider transportation infrastructure.

Alignment and Environmental Considerations

The alignment of both the Primary and Secondary Streets has been carefully planned in accordance with the proposed Indicative Masterplan (ref. P12061-00-001-GIL- 0105 Illustrative Landscape Masterplan) for the surrounding areas. A key focus of the design process has been to minimize the impact on the existing natural environment, particularly the preservation of mature trees and hedgerows. To achieve this, the Primary Street features an “S-Bend” arrangement roughly midway along its length, intentionally designed to bypass several mature trees, thereby reducing the ecological footprint of the development.

Priority Access Junction

In addition to the main intersections, several priority access junctions are planned along both the Primary and Secondary Streets. These junctions are designed to provide direct access to adjacent future development parcels, ensuring that the new infrastructure is adaptable and capable of supporting future growth. This forward-thinking approach ensures that the network will remain functional and efficient as the area continues to develop. This comprehensive design of the Phase 1 highway network not only supports immediate transportation needs but also aligns with the long-term vision for the area, integrating environmental preservation with infrastructural development.

8.5.2 Pedestrian Access

Pedestrian Access

Pedestrian access within the landscape design is thoughtfully planned to ensure safety, convenience, and comfort for all users. The segregated footways are designed with a generous width of 2.50 meters, providing ample space for pedestrians to move freely and safely. This width accommodates multiple users simultaneously, reducing congestion and enhancing the overall walking experience. In addition to the segregated footways, shared foot/cycleways are incorporated into the design, typically measuring 5.50 meters in width. These shared pathways are intentionally broader to safely accommodate both pedestrians and cyclists, promoting a harmonious coexistence between different modes of travel. The wider design of the shared foot/cycleways ensures that both pedestrians and cyclists have sufficient space to navigate without conflict, encouraging active transportation and contributing to a more sustainable and accessible environment.

This careful consideration of pedestrian access not only improves the functionality of the landscape but also enhances the safety, efficiency, and overall user experience within the space.

1. Segregated pedestrian footways are provided along the full length of the CWMMC.

2. Controlled signalised crossings (Toucan) are proposed at the locations as indicated in Figure 08-27 shown by the red star at Charlwood Road Junction, South of the River Mole Bridge, 4 arm junction, the stopped up Rusper Road, in between Rusper Road and 3 arm junction and at the 3 arm junction connecting the Phase 1 Primary Road to CWMMC. Uncontrolled crossing points are proposed at the locations as indicated by the blue star to provide continuation of the Public Right of Ways across the carriageway

3. From the signalised crossing located south of the River Mole Bridge up to the Charlwood Road Junction there is a provision of a 2m wide segregated foot way adjacent to the cycleway running on the south side of the carriageway. Part of this is separated further away from the carriageway for approximately 200m to keep with the country park character of the area.

4. From the signalised crossing south of the River Mole Bridge running south, there is a provision of a 2.6m wide segregated footway adjacent to the cycleway on both sided of the carriageway.

5. At the point where the CWMMC intersects Rusper Road to the 3 arm junction the 2.6m wide segregated foot way is only on the north side with a shared use footway/cycleway located away from the carriageway on the south side in order to minimise the impact on a number of trees.

6. Shared footway cycleways are provided from the 3 arm junction up to the connection to the existing Rusper Road. These are also provided at Charlwood Junction where the provision ties in to the existing arrangements currently provided along Charlwood Road, Ifield Avenue and Ifield Green.

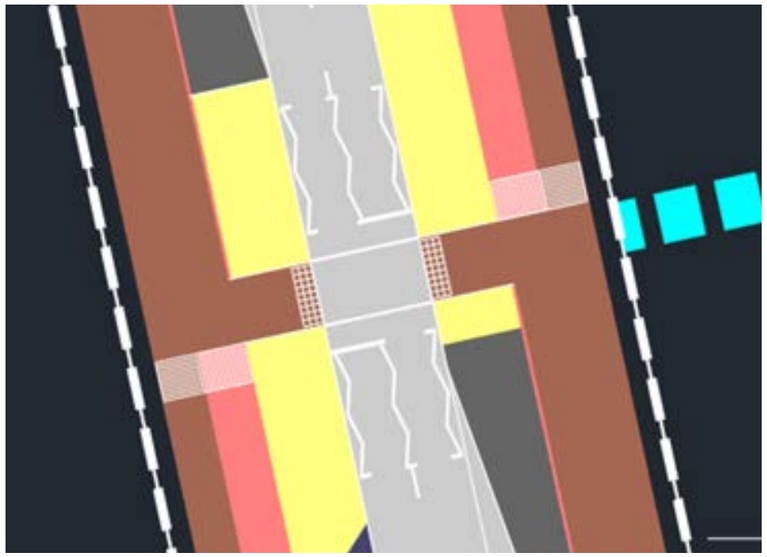

Figure 08-27: *Proposed Toucan Crossing on Primary Street*

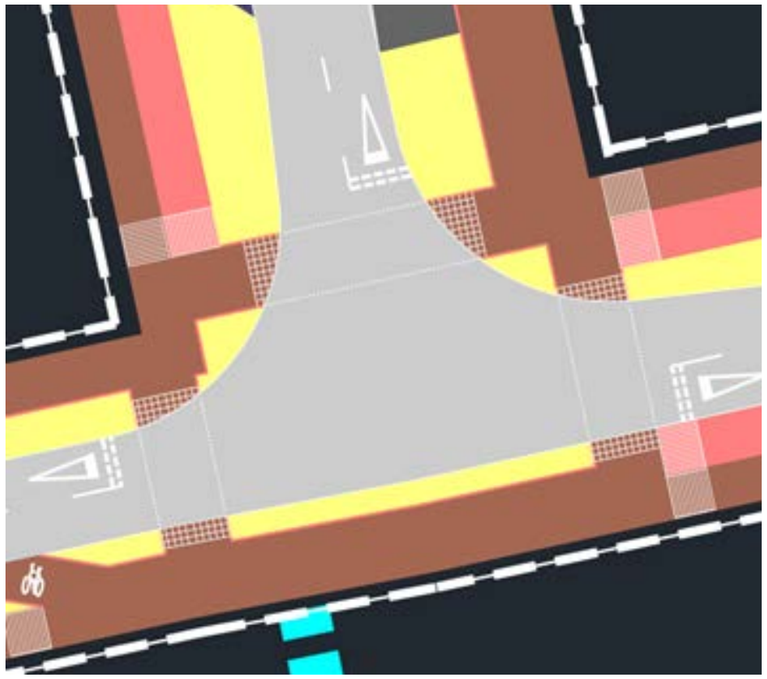

Figure 08-28: *Proposed Toucan Crossing at 3-Arm Primary-Secondary Street Junction*

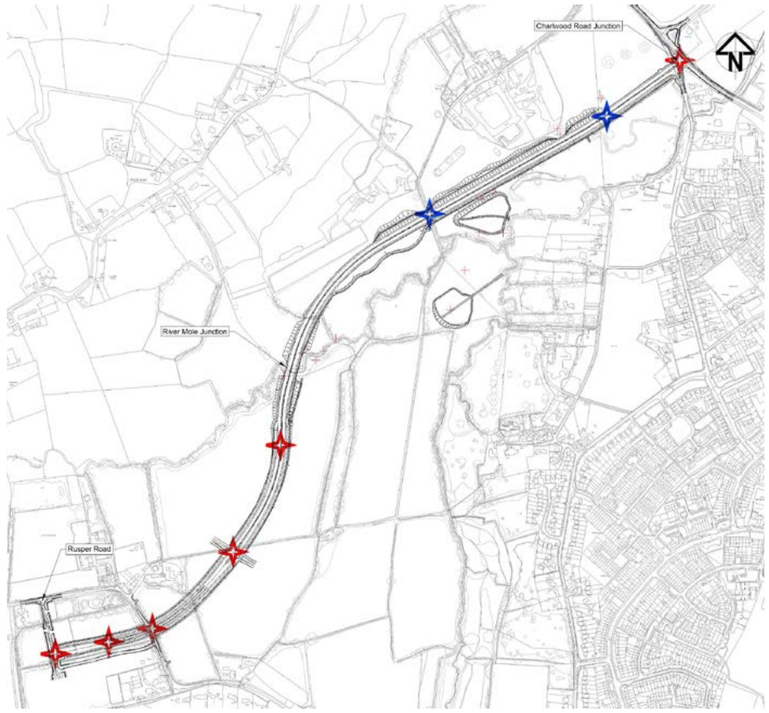

Figure 08-29: *Controlled and uncontrolled crossing locations*

8.5.3 Vehicular Access – Street Design

Charlwood Road

Crawley Western Multi – Modal Corridor

The section between the Charlwood Road Junction and the signalised crossing south of the River Mole Bridge typically has a superelevation applied with a 3.65m carriageway in both direction separated by a central median 2.5m wide, with a dedicated bus lane in both directions 3.65m wide. A segregated footway cycleway 5m wide is provided on one side of the carriageway. A SuDS/Planting corridor is provided on both sides of the carriageway with one side separating the footway cycleway to the carriageway as indicated in Figure 08-30. For a length of this section there is a proposed environmental bund which can be seen in the General Arrangement Plans.

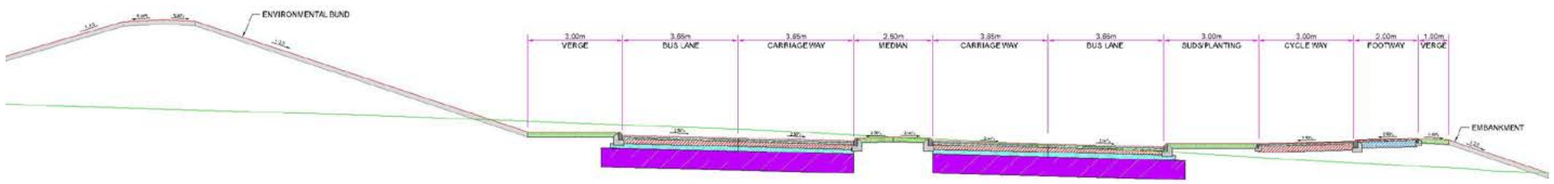

Figure 08-30: Crawley Western Multi – Modal Corridor Typical Cross-Section (North of the River Mole Bridge)

The section between the signalised crossing south of the River Mole Bridge and the 4 arm junction typically has a superelevation applied with a 3.65m carriageway in both direction separated by a central median 2.5m wide, with a dedicated bus lane in both directions 3.65m wide. A segregated footway cycleway 6.6m wide is provided on both sides of the carriageway. A SuDS/Planting corridor is provided on both sides of the carriageway with separating the footway cycleway to the carriageway as indicated in Figure 08-31

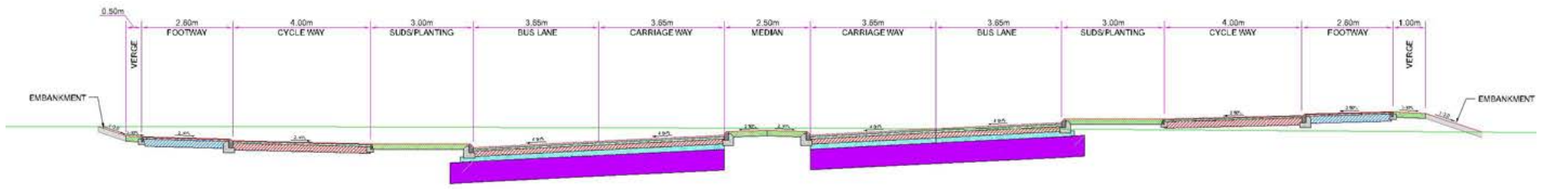

Figure 08-31: Crawley Western Multi – Modal Corridor Typical Cross-Section (Between 4 arm junction and South of the River Mole Bridge)

The section between the 4 arm junction and the 3 arm junction typically has a 3.00m carriageway in both direction, with a segregated bus lane in both directions 3.20m wide, the segregation is 1.00m wide of setts or similar to be determined in the detailed design. A segregated footway cycleway 6.6m wide is provided on both sides of the carriageway. A SuDS/ Planting corridor is provided on both sides of the carriageway separating the footway cycleway to the carriageway as indicated in Figure 08-32

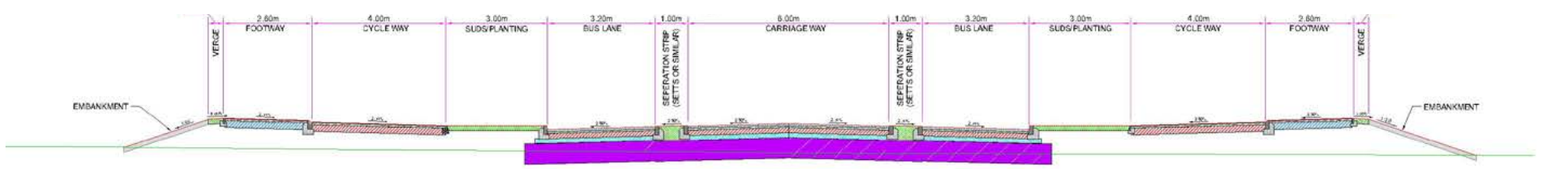

Figure 08-32: Crawley Western Multi – Modal Corridor Typical Cross-Section (Between 4 arm junction and 3 arm junction

Primary Street

The main carriageway along the Phase 1 Primary Street is typically 6.75m wide and is to have a 20mph speed limit along its full length.

1. The length of the Primary Street that runs generally east-west from Rusper Road to the 3-Arm signalised junction adjacent to the proposed secondary school typically has a 3m wide SuDS corridor, 3.0m cycleway, and 2.50m footway on both sides of the road, as shown in Figure 08-34. The SuDS corridor will intermittently be replaced by car parking lay-bys, servicing lay-bys, pedestrian crossings, and bus stops, as shown on the General Arrangement drawings.

2. As Figure 08-35 shows, an additional 1.50m privacy planting strip is proposed behind the footway on either side of the road, although this would not be provided until the adjacent development parcels are built out. In the interim, temporary grassed embankments will be laid to make up any difference in levels to the existing ground adjacent.

3. The length of the Primary Street that runs generally north-south from the junction with the CWMMC to the 3-Arm signalised junction adjacent to the proposed secondary school typically has a 5m wide SuDS corridor, 3.0m cycleway, and 2.50m footway on both sides of the road, as shown in Figure 08-28. Again, the SuDS corridor will intermittently be replaced by car parking lay-bys, servicing lay-bys, pedestrian crossings, and bus stops, as shown on the General Arrangement drawings.

4. The proposed development aims to achieve a consistent visual quality that enhances the general urban environment and provides a clear identity. Typical road construction materials will be used throughout the proposed Primary Street, specified in accordance with the Design Manual for Roads and Bridges, and supplementary West Sussex County Council design standards. Further details of the visual appearance of the Primary Street corridor can be found in the Landscaping Section of this document

5. Surface Water runoff from the carriageway and the footways and cycleways will generally drain to the adjacent SuDS corridors indicated on the typical cross-sections above, utilising either short sections of dropped kerbs to provide “over the edge” drainage, or weir kerb units.

6. The Phase 1 Primary Street will serve as a key utility supply corridor for the wider Masterplan development (the outline element of the application), with indicative utility supply infrastructure shown on drawing 10051123-ARC-051-1A-DR-CE-00001 in Appendix.

Secondary Street

1. The main carriageway along the proposed Secondary Street to the south of the proposed Secondary School, which also forms part of the Phase 1 works, is typically 6.0m wide and is to have a 20mph speed limit along its full length. This secondary street typically has a 3.0m wide SuDS corridor and 2.50m wide footway on both sides of the road, as shown in Figure 08-34

2. Access bellmouths to future secondary streets as defined in the supporting documents for the outline elements of the application have been designed based on the geometry shown on the typical cross-section.

3. As with the Phase 1 Primary Street, typical road construction materials will be used throughout the proposed Secondary Street, specified in accordance with the Design Manual for Roads and Bridges, and supplementary West Sussex County Council design standards.

4. As with the Phase 1 Primary Street, surface water runoff from the carriageway and the footways and cycleways will generally drain to the adjacent SuDS corridors indicated on the typical cross-sections above, utilising either short sections of dropped kerbs to provide “over the edge” drainage, or weir kerb units.

Tertiary Street

Access bellmouths to future tertiary streets as defined in the West of Ifield Design Code document have been designed based on these typically being 5.0m wide shared surface streets. Full details of the geometry, construction materials, and drainage to these future tertiary streets will be determined at relevant Reserved Matters stage

Figure 08-33: *Primary Street example (indicative image)*

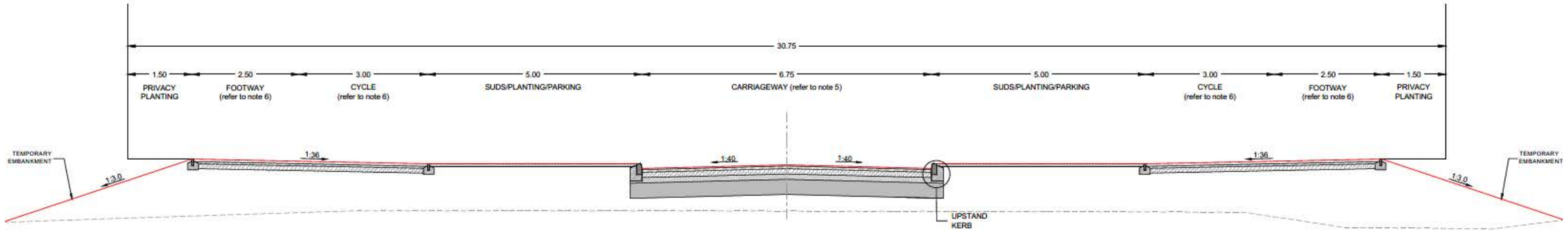

Figure 08-34: Phase 1 Primary Street- Typical Cross section (East - West Section of Street)

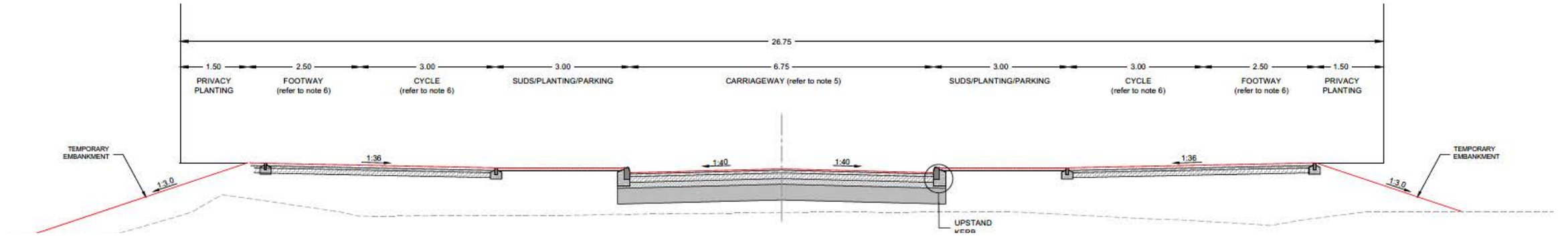

Figure 08-35: Phase 1 Primary Street- Typical Cross section (North-South Section of Street)

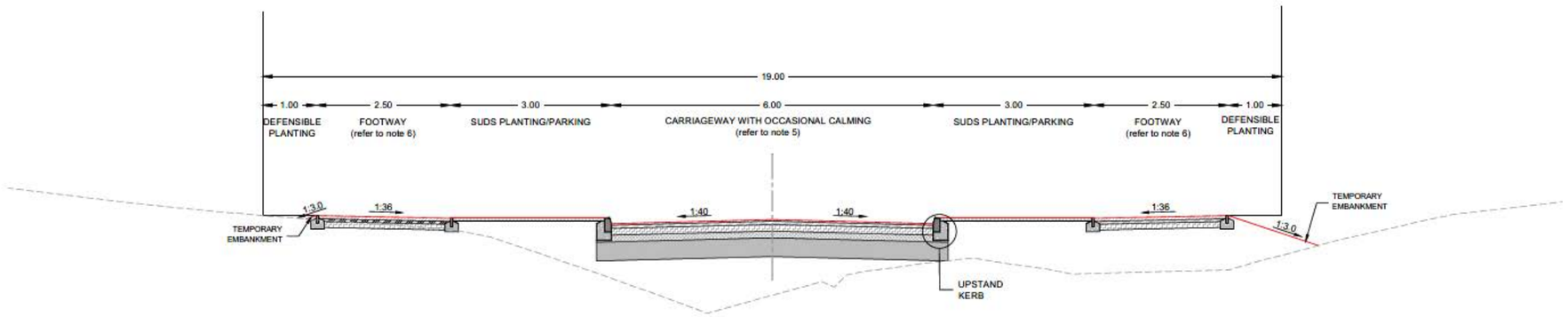

Figure 08-36: Phase 1 Secondary Street- Typical Cross section

8.5.4 Cycle Access

The design of the Primary Street corridors within the Phase 1 highway network has been developed to prioritize safe and efficient cycling infrastructure, aligning with modern standards for sustainable urban mobility. The cycling provisions within this network are primarily accommodated through segregated cycleways, with additional shared foot/cycleway arrangements around key crossing points and proposed Mobility Hubs. These design choices reflect a commitment to creating a connected, accessible, and cyclist-friendly environment that integrates with the existing and planned transportation infrastructure.

Cycling Provisions within Primary Street Corridors

The Primary Street corridors feature extensive cycling infrastructure designed to ensure safety and comfort for cyclists. Predominantly, cycling is facilitated through 3.00-meter wide segregated cycleways, which provide a dedicated space for cyclists, separate from vehicular traffic and pedestrian pathways. This segregation enhances safety and reduces potential conflicts between different modes of transport. However, in areas around key crossing locations and the proposed Mobility Hubs, shared foot/cycleways are implemented, typically measuring 5.50 meters in width. These shared spaces are designed to accommodate both cyclists and pedestrians, particularly where space is constrained or where multi-modal interactions are expected. To further enhance safety, formal crossing provisions, such as Toucan crossings, are strategically located at key points along the route, ensuring secure and efficient crossings for cyclists and pedestrians alike.

Transition at the Eastern End of the Primary Street

At the eastern terminus of the Primary Street, where the new alignment integrates with the existing highway network on Rusper Road, careful consideration has been given to the transition for cyclists. Here, flush kerbing is provided to facilitate a smooth transition from on-carriageway cycling on Rusper Road to the segregated cycleways of the Primary Street corridor. This design ensures that cyclists can move between different cycling environments without disruption, maintaining a continuous and safe cycling route.

Continuation at the Northern End of the Primary Street

At the northern end of the Primary Street, the cycling infrastructure continues to support onward travel. Cyclists can transition from the Primary Street to a shared Non-Motorized User (NMU) corridor that runs parallel to the southern edge of the main carriageway of the CWMMC. This extension of the cycling network provides a clear, direct route for cyclists traveling northwest, further integrating the cycling infrastructure with the broader transportation network.

Cyclist Priority at Tertiary Street Accesses

Along the Primary Street, where bellmouths provide access to future tertiary streets, the design prioritizes cyclist safety and continuity. A “Partial Setback” arrangement is implemented in accordance with the standards set out in Local Transport Note (LTN) 1/20. This arrangement includes marked priority for cyclists and continuity of levels through the use of raised tables, ensuring that cyclists can maintain their momentum and right of way when crossing these minor accesses. This approach not only prioritises cyclist safety but also reinforces the visibility of cyclists to drivers entering or exiting tertiary streets.

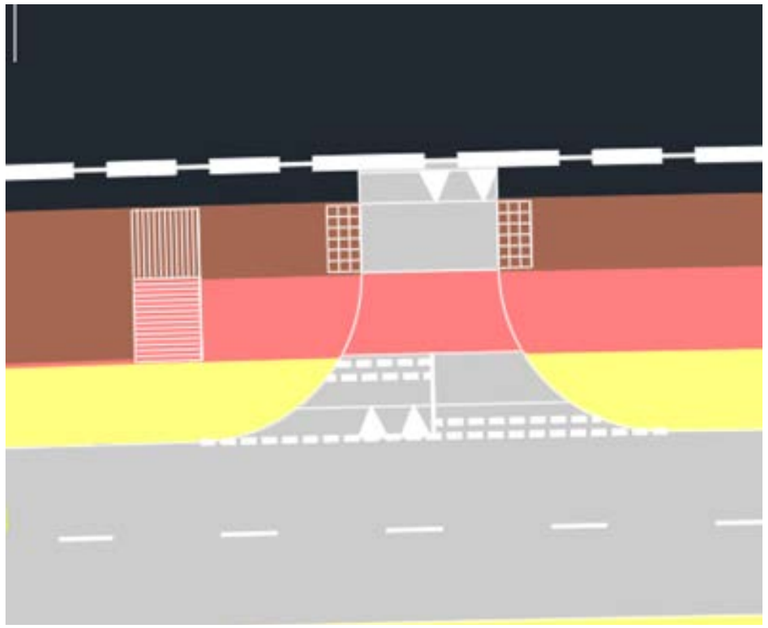

Figure 08-37: Proposed Side Road Access with Raised Table and marked Priority to Cyclists

Junctions with Secondary Streets and High-Traffic Access Points

In contrast, the design approach at junctions with future secondary streets and certain high-traffic access points differs due to the anticipated higher volumes of vehicular traffic. At these locations, the priority is given to vehicular traffic on the main carriageways over cyclists. This approach is also applied to the access points on either side of Parcel H2, as indicated in the Indicative Masterplan (ref. P12061-00-001-GIL- 0105 Illustrative Landscape Masterplan). These access points are expected to serve as HGV routes for deliveries to a proposed food store and potentially other commercial premises, necessitating a design that prioritizes the safe and efficient movement of large vehicles, while still accommodating cyclists within the overall network.

This comprehensive approach to cycling infrastructure within the Primary Street corridors reflects a balanced consideration of safety, functionality, and integration with broader transportation objectives. The design not only promotes cycling as a viable and attractive mode of transport but also ensures that cyclists are accommodated safely and efficiently within the evolving urban landscape.

8.5.5 Public Transport and Mobility Hubs

The design of the Phase 1 Primary Street is integral to the transportation framework of the West of Ifield development, serving as a key artery for public transit and multimodal connectivity. This thoroughfare is planned to accommodate high-frequency bus routes, ensuring efficient and reliable public transportation for the new community. The incorporation of dedicated bus infrastructure, along with strategically located Mobility Hubs, reflects a forward-thinking approach to urban design, prioritizing accessibility, sustainability, and the integration of various modes of transport.

Bus Route Integration and Connectivity

The Phase 1 Primary Street is specifically designed to function as a primary bus route, crucial for connecting the West of Ifield development to the broader regional transport network. It is anticipated that three new bus routes, operated by Fastway, will utilize this street, offering high-frequency services that link the development to key destinations in the surrounding area. These bus routes will enter the Primary Street from Rusper Road at its eastern end, traversing westward before turning north along the street. From here, the routes will continue northeastward, merging with the CWMMC, thereby integrating the new community into the wider transport system and ensuring residents have convenient access to public transit options.

Design Specifications for Bus Access

To accommodate the frequent bus traffic, the Primary Street is designed with a 6.75-meter-wide carriageway, which provides sufficient space for safe two-way bus movements. This width ensures that buses can pass each other comfortably, even in areas where road space is shared with other vehicles. At the eastern access point from Rusper Road, a bus gate is proposed to control entry onto the Primary Street. The enforcement mechanism for this bus gate will be determined during the detailed design stage, following further consultations with West Sussex County Council. This bus gate will play a critical role in prioritizing bus movements and preventing unauthorized vehicular access, thereby enhancing the efficiency of public transit services along this corridor.

Mobility Hubs for Multimodal Integration

Two Mobility Hubs are strategically located along the Primary Street, designed to serve as key nodes for multimodal transportation. Each Mobility Hub will be equipped with bus stops, car club parking bays, cycle parking facilities, and additional seating areas, facilitating easy transitions between different modes of transport and encouraging sustainable travel behaviors.

First Mobility Hub: Neighbourhood Centre

The first Mobility Hub is situated in the heart of the proposed Neighbourhood Centre, adjacent to the planned Secondary School. This hub features bus stops located in lay-bys on either side of the Primary Street, with the northbound and southbound stops staggered around a proposed Toucan Crossing. This arrangement not only facilitates safe pedestrian and cyclist crossings but also optimizes bus stop placement for convenient access. Opposite the southbound bus stop, car club parking bays will be provided, offering residents and visitors an alternative to private car ownership. Extended paved areas around both bus stops will be allocated for cycle parking and seating, enhancing the hub's functionality and making it a welcoming space for transit users. The exact layout of these facilities will be refined during the detailed design stage to ensure they meet user needs and site-specific conditions.

Second Mobility Hub: Eastern End of Primary Street

The second Mobility Hub is located towards the eastern end of the Primary Street, approximately 175 meters west of the junction with Rusper Road. Here, bus stops are positioned directly on the main carriageway, as opposed to in lay-bys, given the anticipated lower traffic volumes in this area due to its proximity to the proposed bus gate. This design choice allows for a more straightforward bus operation and minimizes the need for buses to re-enter traffic flow from lay-bys. The eastbound and westbound bus stops are staggered around an uncontrolled crossing, providing safe crossing opportunities for pedestrians. Similar to the first hub, car club parking bays are positioned opposite the eastbound bus stop, and the surrounding paved areas will be extended to accommodate cycle parking and seating. The detailed design of these facilities will be finalized in later stages, ensuring they are optimally integrated into the overall street design and meet the community's needs.

In summary, the Phase 1 Primary Street is designed to support an efficient and accessible public transit network, with dedicated infrastructure for buses and multimodal transportation options. The inclusion of Mobility Hubs underscores the commitment to creating a sustainable and connected urban environment, where residents and visitors can switch between various modes of transport, thereby reducing reliance on private vehicles and enhancing overall mobility within the development.

8.6 Landscaping

8.6.1 Existing Landscape – Retained and Removed Trees and Vegetation

Existing Landscape

The Phase 1 comprises predominately agricultural land in the northern and central areas, with Ifield Golf Course in the south. This consists of large areas of modified grassland, interspersed with scattered trees, tree lines, hedgerows and woodland, along with occasional areas of dense scrub and long sward neutral grassland habitat. A number of drainage ditches run across the phase 1. In addition, The River Mole flows from west to east through the northern part of phase 1.

The works associated with the Proposed Development would result in a change to landscape elements and features within phase 1 including impacting upon some existing tree planting(including mature trees), hedgerows, grassland habitat, the golf course and agricultural fields

An Arboricultural impact assessment was undertaken in April 2023 by Tim Moya Associates and updated in March 2025 (230265-PD-11I). This survey recorded the condition of a total of 625no. Arboricultural items within the study area. This survey formed the basis of highways and landscape design of the CWMMC.

Retained and removed vegetation

Existing vegetation including trees, woodland and hedgerows are retained wherever possible. Careful consideration and planning were necessary to minimise the impact on biodiversity and the overall landscape quality and character of the site. Existing vegetation to be removed and to be retained is highlighted in drawings 10051123-ARC-300-1A-DR-LA-00001, 10051123-ARC-300-1B-DR-LA-00001 and 10051123-ARC-300-1B-DR-LA-00002. The retained mature trees, woodlands and hedgerows will add character and a sense of history to the site, creating a more harmonious integration of the built environment with nature and the local landscape character.

Veteran Trees

Veteran trees are ancient trees that have unique ecological and cultural importance due to their age and size. These trees provide essential habitats for a wide range of wildlife and play a significant role in maintaining biodiversity. Protecting veteran trees is crucial to ensure their longevity and continued ecological benefits.

The retention of veteran trees (of up to National Level importance and considered to be irreplaceable) was a significant consideration in the alignment of the CWMMC. The mitigation hierarchy as per NPPF paragraph 193c to avoid significant harm to biodiversity was applied.

The removal of one veteran tree (T368 as presented in the Arboriculture Report 230265-PD-11I) is unavoidable to facilitate construction of the CWMMC and this tree will be removed. It is located south of the Ifield Court Hotel (Figure 08-38).

The scheme for Phase 1 contains extensive tree and woodland parcel planting in proximity to T368 as compensation, which can be managed to become veteran trees in the future and provide new habitats. Habitat restoration and the maintenance of the surrounding habitat of veteran trees supports wildlife and enhances their ecological value. Newly create habitats that mimic the conditions provided by veteran trees support the species that rely on them.

Collected seeds or cuttings from veteran trees to propagate new trees, would ensure their genetic legacy continues even if the original tree is lost and should be carried out before the removal of T368.

Replacement trees of the same species (Quercus robur - Pendunculate Oak) should be planted as close as possible to the location of T368 and managed accordingly so they can become veteran trees in the future.

It is recommended to put up screening barriers to protect the remaining veteran trees from dust and pollution during construction of adjacent development. Buffers would be implemented during construction to protect veteran trees, woodland habitat, and other landscape features. Refer to 8.7.2 Ecological Mitigation.

By implementing regular monitoring, the health and condition of the remaining veteran trees within the site in the future helps to identify any issues early on and take necessary actions to protect these trees.

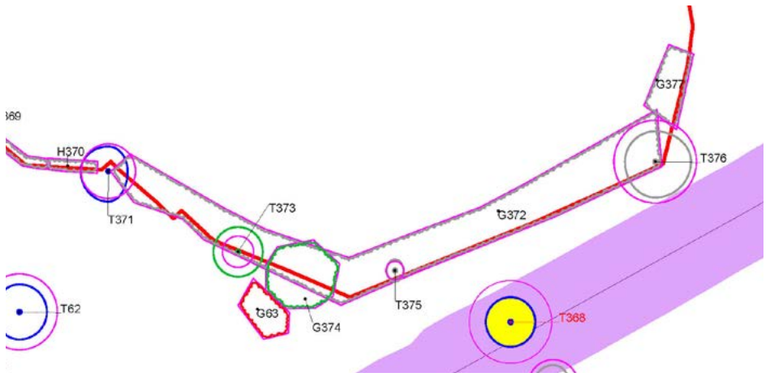

Figure 08-38: Veteran Tree Location - Extract from drawing 230265-P-11.01

The alignment has been based on a number of factors and constraints which has led to T368 to be unavoidable to retain. Firstly, the alignment is required to be within the CWMMC safeguarding route and allow for the potential future extension, whilst minimising impact into Flood Zones 2 and 3 to the south. Secondly, localised alignment changes were considered in order to avoid impacting on T368, however as it can be seen in Figure 8.39 below moving the alignment southwards would then impact on veteran trees T394, T365 and T326. Moving the alignment north would impact on veteran tree T376, the scheduled monument and ancient woodland W333.

The terrain of the land in this area falls from north to south, altering the horizontal alignment to include a localised curvature in the road, moving the alignment in a southern direction to avoid T368 would result in the need to introduce superelevation which in turn would raise the edge of the carriageway and therefore further impact on T365, T366 and G364 (which are currently remaining) increasing habitat loss, overall earthwork volumes and amount of overall net carbon. This would further increase the impact on the flood zones and increase the sizes of flood compensation areas and therefore the alignment chosen has resulted in removing T368 however it reduces impact on veteran trees, ancient woodland and other constraints in the area as a whole

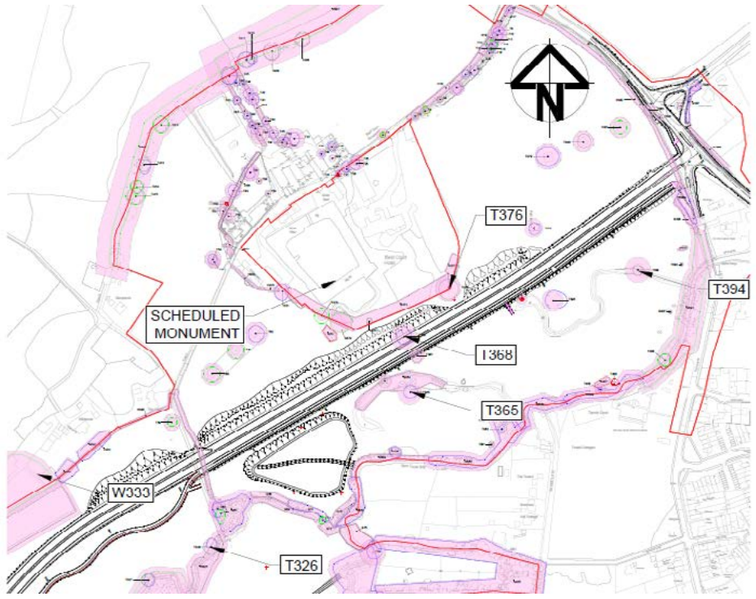

Figure 08-39: Veteran Tree Locations

8.6.2 Proposed Hard Landscaping

The hard surfacing material palette will be to adoptable standards for new highways that are to be adopted by the Local Authority. The details of the design and construction will follow those standards. This will include the carriageway, footways and cycle tracks, parking bays and bus lay-bys.

8.6.3 Proposed Soft Landscaping

The softscape forms a key element in sustainable end enjoyable public realm. Plants were carefully selected to enhance biodiversity, provide shade, improve air quality, and create settings that promote health and wellbeing. Strategically placed trees along the CWMMC and Primary and Secondary Streets will soften the future buildings and roads, as well as add greenery and colour to otherwise hard surface dominated spaces and streets.

Following the ambitions of the Design Code for the overall development, raingardens were placed in road verges alongside boulevard style tree planting. By incorporating raingardens along roads, stormwater can be effectively managed, water quality improved, urban heat island effects mitigated, biodiversity supported, and the overall urban environment enhanced in a sustainable and aesthetically pleasing manner. Three Landscape Character areas within Phase 1 were identified

Three character zones of planting respond to the character areas of the Phase 1 road network.

1. Natural and Semi natural Green Space & Historic Park
2. Neighbourhood Corridor
3. Primary Streets

The selection of planting is reflected in the change from native natural planting (Natural and Semi natural Green Space & Historic Park) to more formal rain gardens containing wildflowers and ornamental planting (Neighbourhood Corridor and Primary Streets)

For planting plans and schedules refer to chapter 8.6.5.

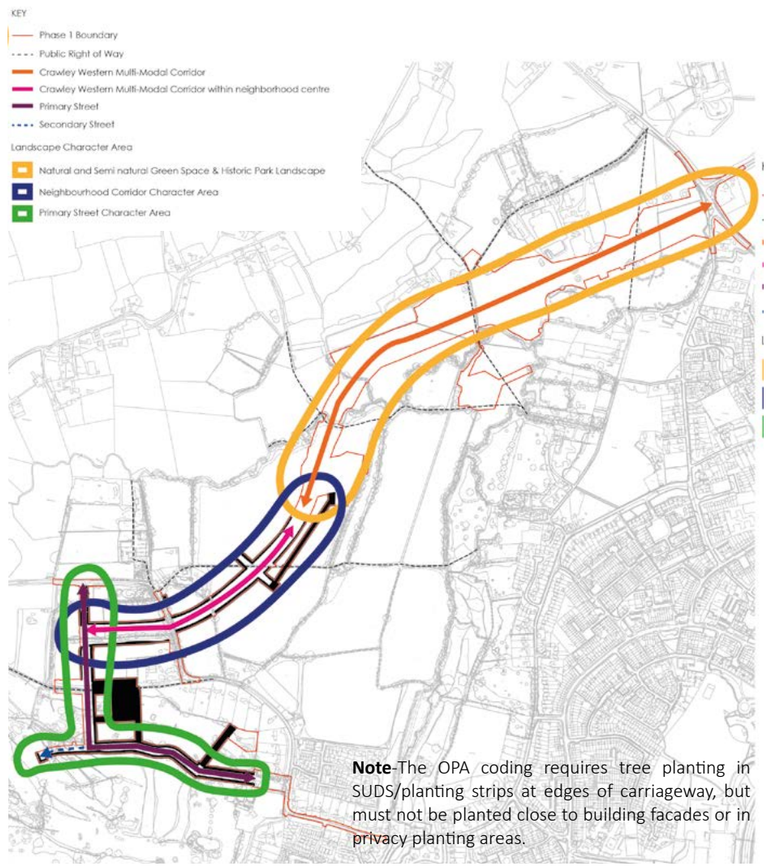

Figure 08-40: Proposed Phase 1 Landscape Character Areas

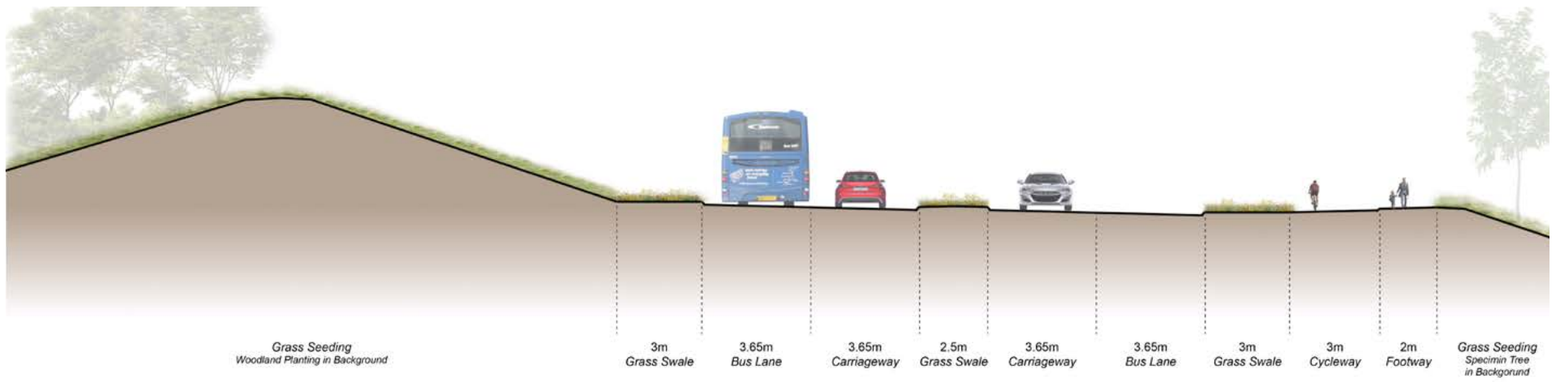

Figure 08-41: Landscape cross section through noise bund

Figure 08-42: Street Design - Crawley Western Multi-Modal Corridor (West of Ifield Design Code extract)

Crawley Western Multi-Modal Corridor

Proposals relating to the detailed planting and seeding across the site are described in the following paragraphs and are illustrated on drawings 10051123-ARC-300-1A-DR-LA-00001 and 10051123-ARC-300-1A-DR-LA-00002

The planting will comprise:

- Woodland Plantings
- Wildflower and Grass meadows.
- Hedgerows.
- Grass Verge
- Rain Gardens
- Grass Swale and Attenuation Pond

Woodland Plantings

The small woodland planting parcels will feature an assortment of native woodland tree and shrub species, strategically selected and planted to complement existing vegetation and improve the habitat for local wildlife. These parcels will be designed using a variety of species mixes tailored to the specific ecological and environmental requirements of the area. This approach ensures that the planting parcels will effectively integrate into the landscape and support the successful long-term development of robust woodland blocks. By enhancing biodiversity and creating a more resilient ecosystem, these woodland planting belts will contribute significantly to the overall health and sustainability of the local environment

The planting design will incorporate layers of vegetation, including canopy trees, understory trees, shrubs, and groundcovers, to mimic natural woodland structure. This stratification will create diverse microhabitats, supporting a wide range of fauna and flora. Additionally, consideration will be given to seasonal variations in flowering and fruiting times to ensure year-round availability of resources for wildlife.

The woodland planting parcels soften the appearance of the noise bunding to the north of the CWMMC and integrate this feature into the wider landscape while also providing visual screening of the corridor from receptors in the wider landscape.

Lowland Mixed Decidious Woodland

The edge of existing woodland W334 will be extended into Phase 1 area and planted with a high scrub species makeup to mimic W334. This will provide a suitable woodland edge gradient to the existing woodland block.

Wildflower and Grass meadows

A seed mix (80% grass : 20% wildflower) designed for a larger range of soil types will be used to maximise the opportunity for wildflower establishment. However, should the wildflower fail to establish in the long-term, the grass species within the mix will produce a sward that will provide suitable taller groundcover than amenity species, and will protect the soils from erosion.

The meadow grassland will require less frequent cutting, and will provide good habitat for insects, small mammals, birds, amphibians and reptiles, providing nesting sites during spring, food during summer and autumn, and shelter during winter.

Around existing trees and in shaded areas, a shade tolerant woodland and hedge fringe seed mix will be sown to ensure establishment and provide a naturalised appearance.

The longer growing grasses of the meadow grassland and woodland and hedge fringe mixes to path routes and edges of highways, providing a contrasting sward height and creating a 'country park' like appearance. A species-rich amenity mix will be used for highway verges to increase biodiversity. Amenity grass areas will be cut on a more regular basis.

Grass Verge

Grass verges provide a natural transition between different landscape elements, such as pathways, roadways, gardens, and open spaces. The grass verges are instrumental in supporting local biodiversity. A seed mix (80% grass : 20% wildflower) with tussock grass content will offer habitats for various insects, birds, and small animals, promoting a healthy ecosystem.

Grass verges are instrumental in supporting local biodiversity. They offer habitats for various insects, birds, and small animals, promoting a healthy ecosystem. Native grass species, in particular, are beneficial as they are well adapted to the local climate and soil conditions, requiring less maintenance and resources. Additionally, grass verges can act as buffer zones, reducing the impact of pollutants and providing corridors for wildlife movement.

Figure 08-43: Wildflower Meadow Example (indicative image)

Other Neutral Grassland

Existing retained modified grassland is proposed to be be enhanced to other neutral grassland through overseeding and modified management.

Ditches

New and existing ditches will be seeded with a suitable grass and wildlfower mix that promotes biodiversity along those linear landscape features and provides habitats for amphibians and other animals.

Hedgerows

Hedgerows play a minor role in the landscape strategy and are proposed where more effective visual screening is essential. Despite hedgerows being currently present in the wider landscape and their general significance in promoting biodiversity, an approach of an open landscape without hedgerows has been chosen to support the existing parkland character specifically along the CWMMC. A new long hedgerow forms part of creating habitats for bats through its elongated nature.

Where Phase 1 straddles future buildings, hedgerows have been kept to a minimum to encourage active frontages and enable flexibility with facade design.

- Acer campestre (Field maple)
- Crataegus monogyna (Hawthorn)
- Prunus spinosa (Blackthorn)
- Fagus sylvatica (Beech)
- Ilex aquifolium (Holly)

Primary Streets

Proposals relating to the detailed planting and seeding across the site are described in the following paragraphs and are illustrated on drawing 10051123-ARC-300-1B-DR-LA-00002

The planting will comprise:

- Street Tree Planting
- Meadow Rain Garden
- Transitional Rain Garden
- Ornamental Rain Garden
- Grass Swale and Attenuation Pond

Street Tree Planting

Figure 08-44: Street Design - Primary Streets (West of Ifield Design Code extract)

Street trees will play a key role in the Primary Streets, enhancing the green character and sustainability of the development.

Tree Planting: Single-stem trees will be planted at regular intervals, chosen for their suitability to the local climate and urban conditions. This uniform spacing will create a visually appealing streetscape, offering shade, improving air quality, and supporting biodiversity.

Tree planting will comprise native and non-native ornamental species that will offer biodiversity benefits to the scheme and accentuate certain areas, providing further visual interest.

Semi-ornamental pollinator or fruit producing trees may also be planted on the site to increase diversity and visual interest. The exact species to be used will be determined by the location, proximity to roads and buildings and the site conditions.

Certain tree species are specifically incorporated to enhance Sustainable Urban Drainage Systems (SUDs). These trees are selected based on their unique characteristics that contribute significantly to the effectiveness of SUDs.

Individual tree species could include:

- Acer campestre (Field Maple)
- Acer campestre ‘William Caldwell’ (Field Maple)
- Acer x freemanii (Freeman Maple)
- Alnus cordata (Italian Alder)
- Alnus incana ‘Aurea’ (Golden Alder)
- Alnus x spaethii (Spaeth’s Alder)
- Amelanchier arborea ‘Robin Hill’ (Serviceberry)
- Betula albosinensis ‘Fascination’ (Chinese Birch / Paper Bark)
- Betula nigra (River Birch)
- Betula pendula (Birch)
- Carpinus betulus ‘Fastigiata’ (Hornbeam)
- Carpinus betulus (Hornbeam)

- Corylus avellana (Hazel)
- Corylus colurna (Turkish Hazel)
- Ginkgo biloba (Maidenhair Tree)
- Hamamelis intermedia (Witch Hazel)
- Ilex aquifolium (Holly)
- Liquidambar styraciflua (Sweet Gum)
- Liriodendron tulipifera (Tulip Tree)
- Pinus nigra ‘Austriaca’ (Austrian Pine)
- Pinus sylvestris (Scots Pine)
- Populus tremula (Aspen)
- Prunus avium (Wild Cherry)
- Prunus avium ‘Plena’ (Wild Cherry)
- Prunus Padus (Bird Cherry)
- Prunus spinosa (Blackthorn)
- Quercus frainetto (Hungarian Oak)
- Quercus robur (Penduculate Oak)

Figure 08-45: *Street trees and SUDs Planting Example (indicative image)*

- Sorbus aucuparia (Rowan)
- Sorbus torminalis (Wild Service Tree)
- Tilia cordata ‘Greenspire’ (Small Leaved Lime)
- Ulmus ‘New Horizon’ (Elm)

Trees outside rain gardens will be planted with irrigation pipes, a drainage layer, protection guards and 1.5m diameter bark mulch ring (at a minimum 75mm depth). A linear root barrier should be installed along service corridors where deemed necessary.

Rain Gardens

The Rain Gardens are a special landscape feature to manage stormwater runoff from impervious surfaces of the primary streets. They combine the principles of sustainable urban drainage systems (SUDs) with the aesthetic and ecological benefits of a meadow-like environment.

Key characteristics include:

- Stormwater Management
- Biodiversity
- Aesthetic Appeal
- Low Maintenance

By integrating these elements, the Rain Gardens support our urban greening goal, improve green infrastructure, and contribute to the overall ecological health and visual appeal of Phase 1. Urban greening initiatives, improves green infrastructure, and contributes to the overall ecological health and visual appeal of urban areas.

Figure 08-46: *SuDS features - Bioswale Example (indicative image)*

Grass Swale and Attenuation Pond

Seasonally wet soils, such as the wetland scrapes and the banks of swale and ponds will be seeded with a wildflower meadow mixture targeted for wetlands. This will include the banks of attenuation ponds and highway swales that may flood for short periods in winter but will usually be well drained in summer.

Within the bases of swale and the attenuation basins, a fast-growing amenity seed will be needed to minimise surface erosion during the grass establishment period. Such seeding will likely be on a topsoil substrate to encourage quick growth.

Figure 08-47: *Ornamental Rain Garden Example (indicative image)*

Figure 08-48: *Wildflower Attenuation Pond Example (indicative image)*

Figure 08-49: Street Design - Secondary Streets (West of Ifield Design Code extract)

Secondary Street

The Secondary Streets within the CWMMC development are strategically designed to connect residential plots to the Primary Roads and the CWMMC, ensuring integration within the overall transportation network. These streets serve as vital arteries within the development, facilitating efficient movement while prioritizing safety, environmental sustainability, and aesthetic appeal.

Green Character and Sustainable Design Features

A defining feature of the Secondary Streets is their emphasis on a green, pedestrian-friendly environment. The design prioritizes reduced vehicle speeds, creating a safer and more enjoyable experience for pedestrians and cyclists. By incorporating sustainable urban drainage systems (SuDS) and extensive greenery, the streets are not only functional but also contribute to the overall environmental quality of the development.

Planting Strips

Alongside the carriageways, generous planting strips ranging from 2.4 to 5 meters in width will be established between the carriageway and footway.

These strips will feature a balanced mix of sustainable urban drainage systems (SuDS) and neutral grassland, with 50% of the area dedicated to SuDS. This combination not only enhances the visual appeal but also contributes to stormwater management, improving water infiltration and reducing runoff.

Street Trees and Planting

Street trees will be a prominent feature of the Secondary Streets, contributing to the green character and environmental sustainability of the development

Tree Planting: The design includes single-stem trees planted at regular intervals along the streets. These trees will be carefully selected for their suitability to the local climate and their ability to thrive in an urban environment. The regular spacing ensures a uniform and visually pleasing streetscape, while also providing shade, improving air quality, and supporting local biodiversity.

The design of the Secondary Streets within the CWMMC is a testament to the project's commitment to creating a connected, sustainable, and visually appealing urban environment. By prioritizing green infrastructure, reducing vehicle speeds, and integrating thoughtful landscaping and parking solutions, these streets will not only enhance connectivity between residential plots and primary roads but also contribute to the overall quality of life for residents. The careful balance of functionality, safety, and aesthetic appeal in the street design ensures that the Secondary Streets will be a key feature of the development, fostering a sense of community and environmental stewardship.

Figure 08-50: Secondary Streets Example (indicative image)

Figure 08-51: Street Design Example (indicative image)

Figure 08-52: SuDS features Example (indicative image)

8.6.4 Street Furnitures

Street furniture strategy

The street furniture strategy follows the three local landscape character areas identified in Figure 08-53.

It is envisaged that the Natural and Semi natural Green Space & Historic Park Character Area includes seating at key locations to welcome walkers and cyclists as a resting point. Single or picnic benches could be considered at PROW crossing points and along the meandering cycle track / footpath away from the road.

Single seating benches are proposed along Primary Streets e.g. Mobility Hubs should include cycle parking, bus shelters and seating.

The precedent images give an indication of the style of street furniture and its settings in the three character areas.

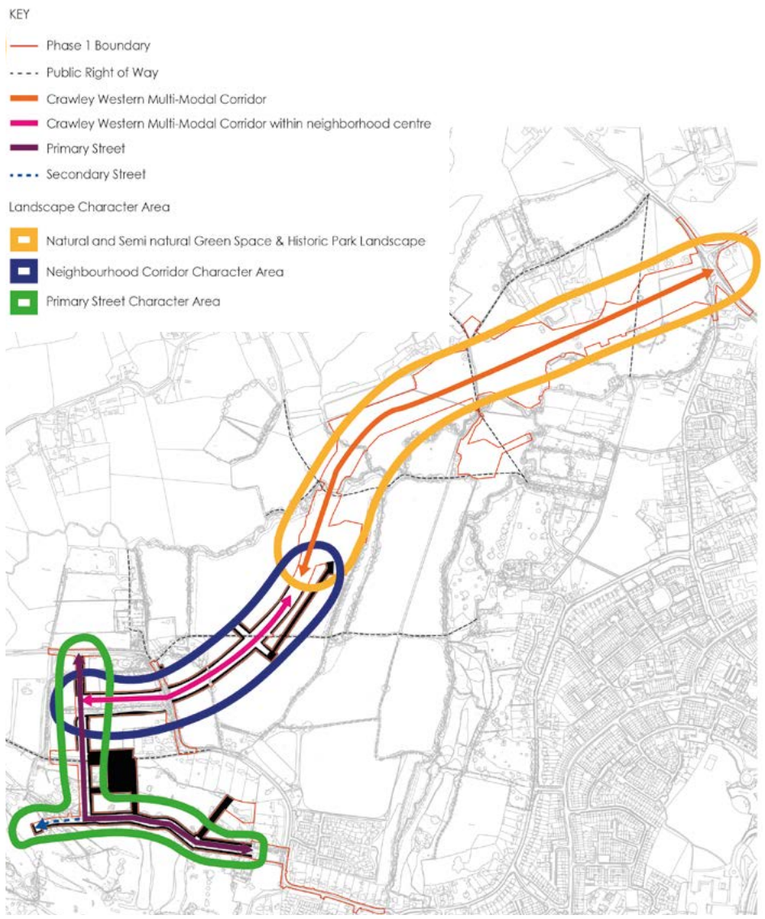

Figure 08-53: *Local Landscape Character Areas*

Figure 08-54: *Picnic table in rural setting example (indicative image)*

Figure 08-55: *Bench seating with softscape example (indicative image)*

Figure 08-56: *Cycle parking with softscape example (indicative image)*

Figure 08-57: *Informal seating with rain gardens example (indicative image)*

Figure 08-58: *Informal seating with rain gardens example (indicative image)*