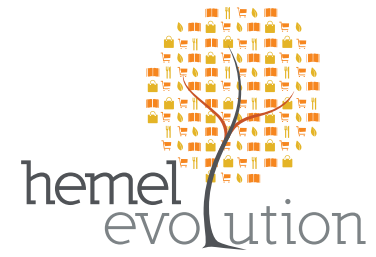


APPENDIX 2

BUS INTERCHANGE FINAL DESIGN - MEMBERS PRESENTATION



BroadwayMalyan^{BM}

Architecture Urbanism Design

BUS INTERCHANGE DETAILED DESIGN - PRESENTATION TO MEMBERS



Allan Cox - Broadway Malyan

Director of Landscape Architecture



Danny Crump - Broadway Malyan

**Associate Director of Landscape
Architecture**



Labieba February - Mott MacDonald

Highways Engineer

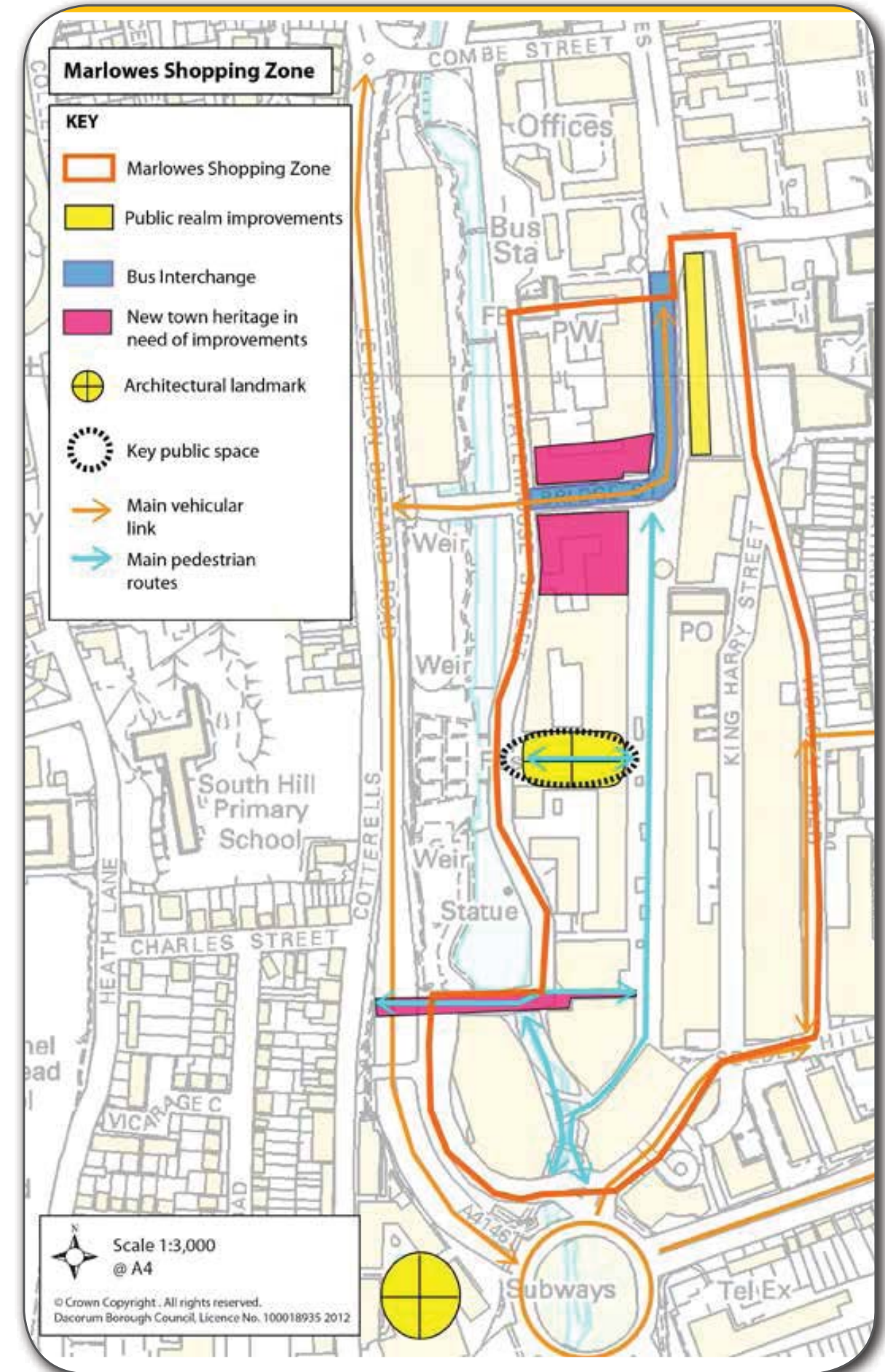
Detailed Design - Presentation

- Introduction - Context
- Stakeholder Consultation
- Key Design Drivers and Considerations
- Scheme Development
- Schematic Layout
- Public Realm Proposals
- Roundhouse Proposals
- Waterhouse Street Parking Strategy
- Costings and Maintenance
- Procurement Route and Timeline



Introduction - Context

- Bus Interchange Proposals part of the Hemel Hempstead Town Centre Masterplan (adopted as a SPD in 2013)
- The proposals include:
 - Relocation of the existing bus station to part of the Marlowes and Bridge Street
 - Relocation of the existing taxi rank to Waterhouse Street.
- Opportunity for the creation of a new integrated modern Bus Interchange facility close to the heart of the town centre and at the same time release a town centre development opportunity on the current Bus Station site and adjacent Market Square.



Recap of Project Objectives

Objective 1.

A **modern integrated bus interchange facility** and **improved public realm** incorporating passenger transport best practice and technology in the Town Centre as an early phase of wider regeneration scheme.

Objective 2.

Relocate the taxi rank into a location(s) convenient for users of taxi services

Objective 3.

The bus interchange and taxi rank facilities to fully **meet Equalities Act** requirements.

Objective 4.

Along Waterhouse Street as part of bus movement and taxi rank options to consider **opportunities for blue badge holder** and increased on-street car parking spaces and **general pedestrian / cycling users** requirements.

Objective 5.

Design and fit out of a shop unit (to be identified) to provide a modern attractive bus passenger waiting room incorporating a café (to be sub-leased), **bus ticketing, multi-purpose information point** (including tourist information) and public toilets

Objective 6.

A design concept that delivers the objectives of the Town Centre Masterplan; takes into account and **complements design** work for the **Marlowes Shopping Zone** Improvement Project and other programme phases as far as possible; **ties together** and defines the **bus interchange, bus user facilities** and **public realm** contributing to the uniqueness and attraction of the town centre as a whole; is **durable** both in use and time; **minimises** on-going **maintenance** requirements; takes account of special events such as Christmas lights and key existing street furniture such as litter bins; CCTV and cycle parking; and draws on **best practice to minimise crime**, increase potential for crime detection and **contributes positively** to users **safety** both in real terms and perception.

Objective 7.

Provides bus user facilities, information and ambience to **encourage bus** and **taxi use** and encourage a modal shift in the town centre away from the private car.

- Officers / TCM and Management and Maintenance : Ongoing meetings and workshops
- Herts County Council: Ongoing meetings and workshops
- Neighbours: Landlords / Retailers / Taxis / Operators / Cycle group / County Officers : Invited event with recorded comments - deadline 16.12.13
- Families, Public and Children (TCP / NA Group / Immediate Residents): 2 x Early Public Event with recorded comments : Paper and Web based - August / September - Responses mainly around service delivery



Key Design Issues/Considerations

- Improved pedestrian experience :

Pedestrian friendly and focused
Psychological Traffic Calming Techniques



Key Design Issues/Considerations

- Improved pedestrian experience
- Working within site constraints:

Site width influences tracking - Impact on 'Public Realm'

Services in footway - especially to the West of the site

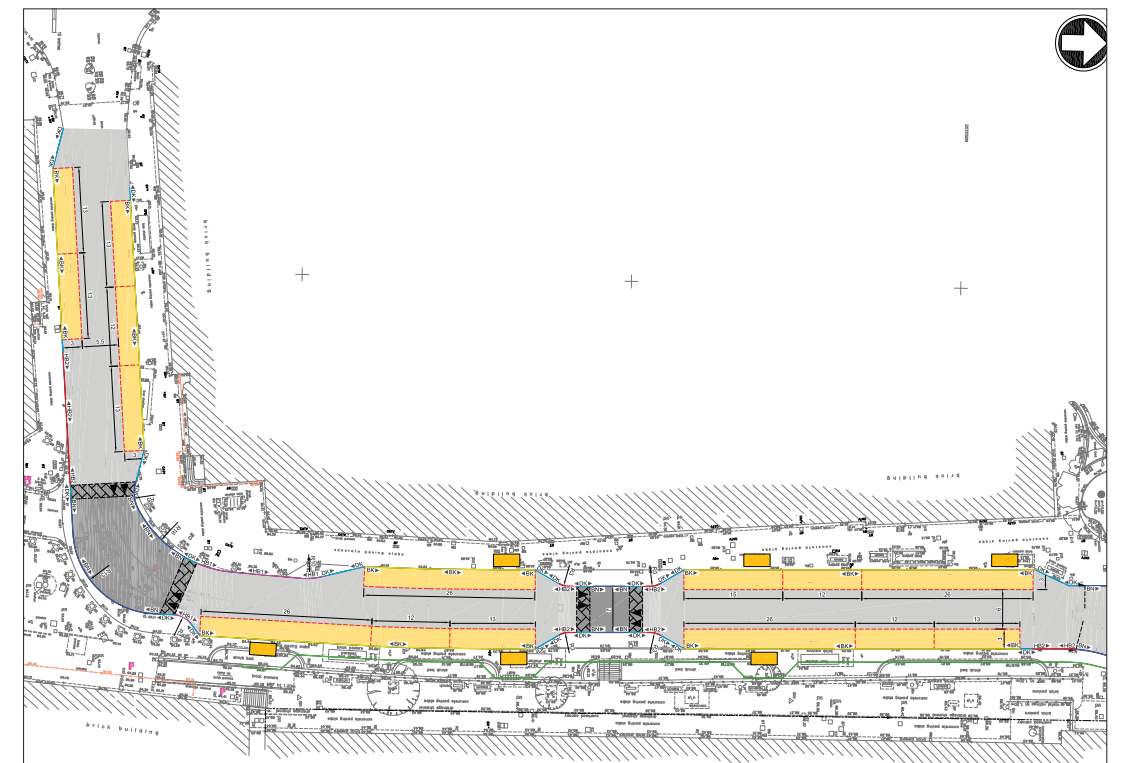
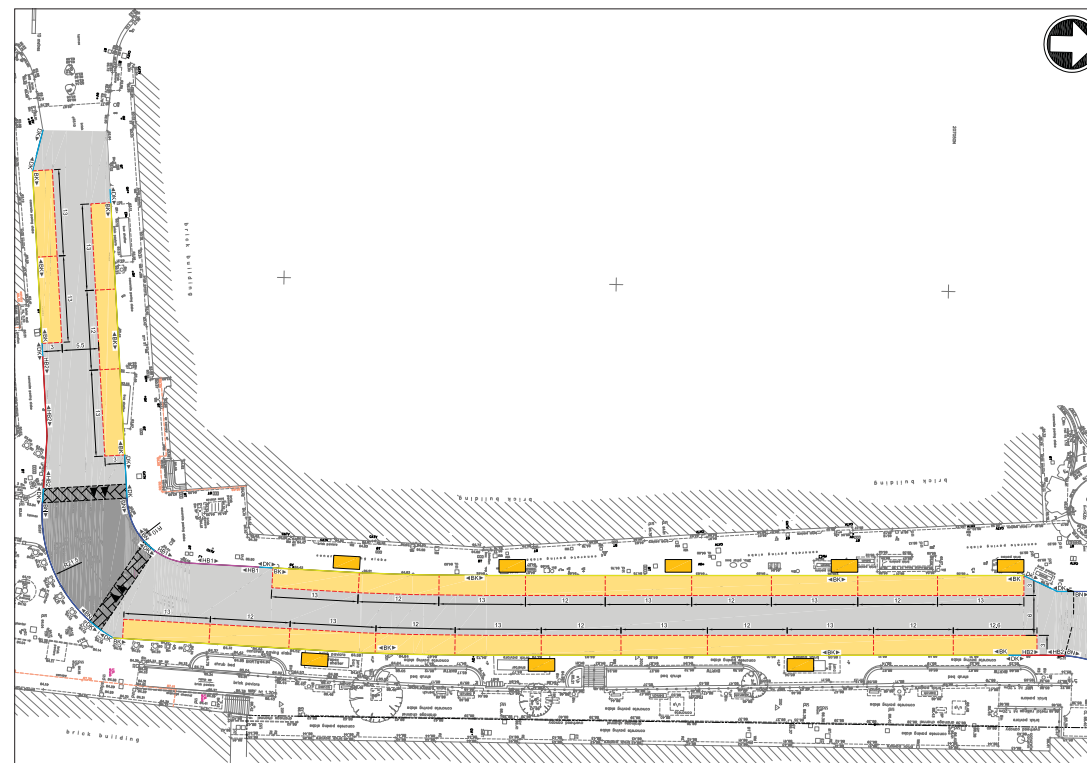
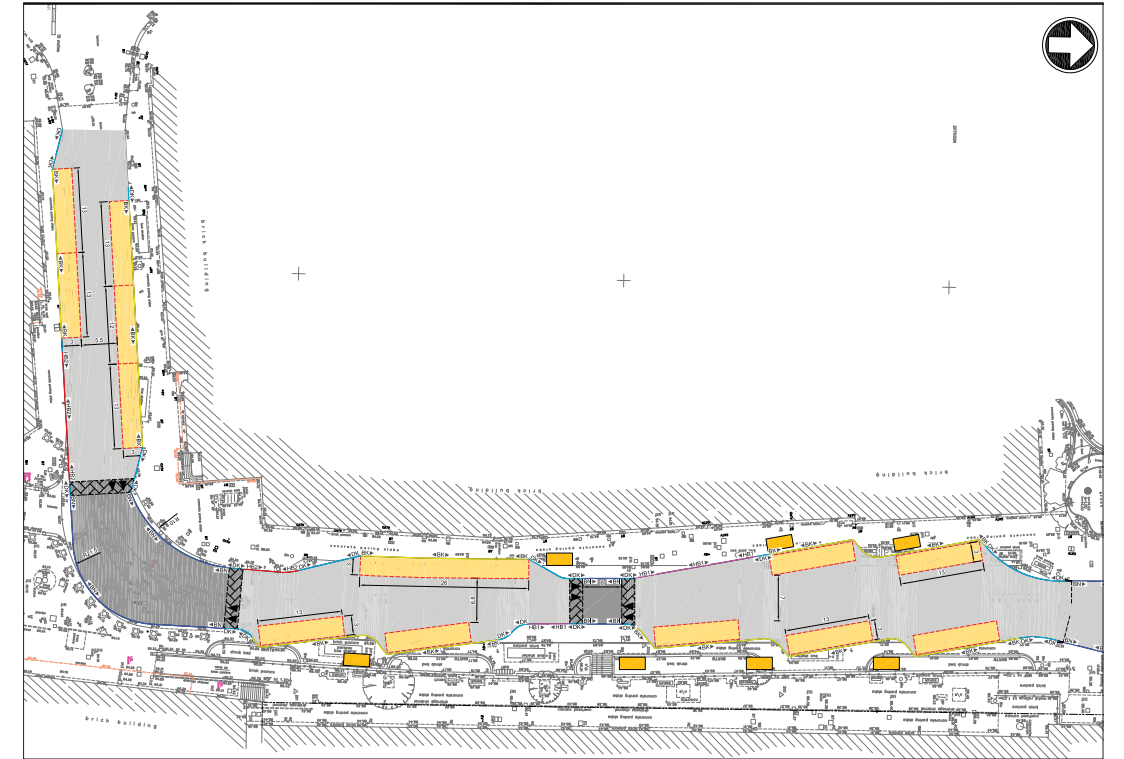
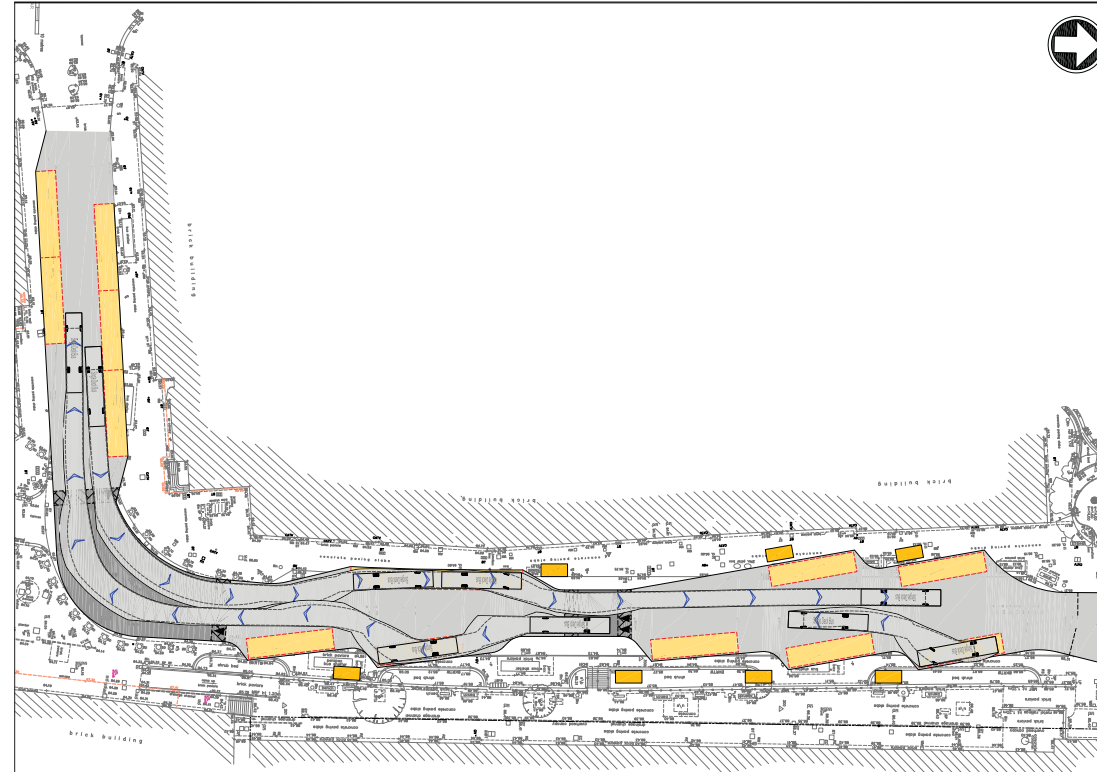


Scheme Options

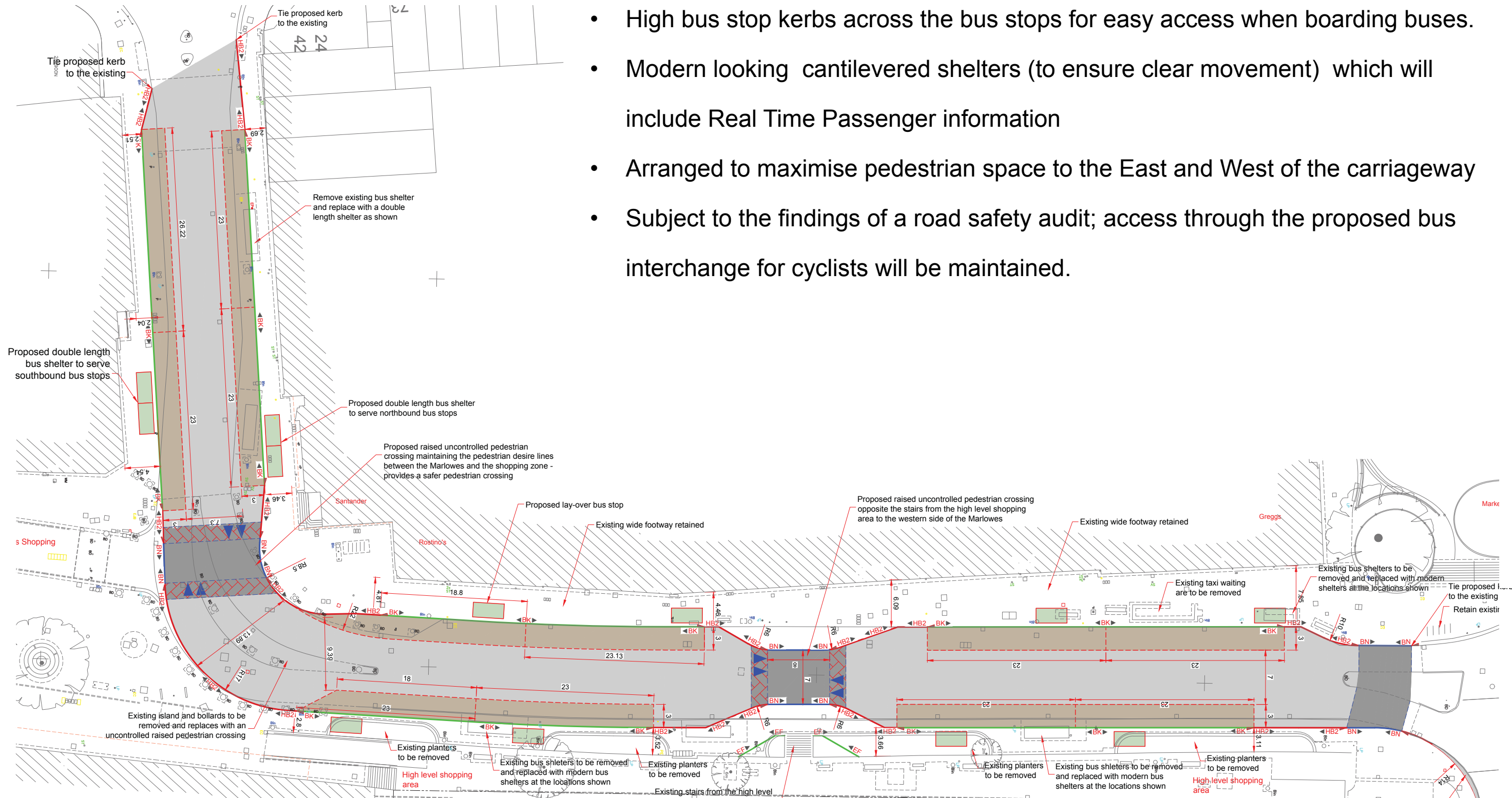
- Linear and Sawtooth

Linear Preferred:

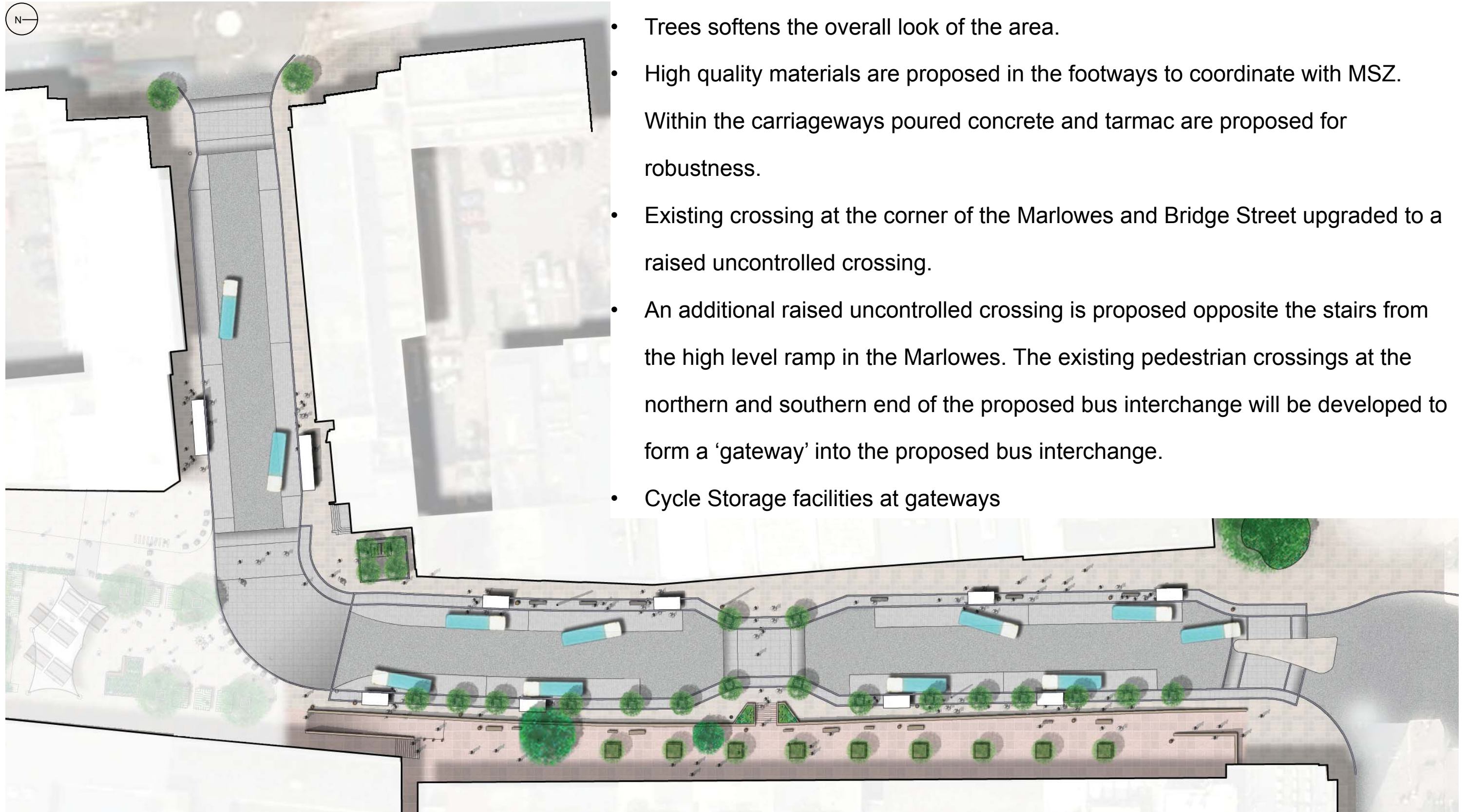
- Accommodates stop numbers required
- Maximises public realm
- Future proofs scheme in terms of flexibility/ increasing bus lengths.



- Twelve stops are proposed:
 - 8 Stops: The Marlowes – local Hemel Hempstead bus services (12m length)
 - 4 Stops: Bridge Street – Long distance National Express and Green Line coaches (15m length)
- High bus stop kerbs across the bus stops for easy access when boarding buses.
- Modern looking cantilevered shelters (to ensure clear movement) which will include Real Time Passenger information
- Arranged to maximise pedestrian space to the East and West of the carriageway
- Subject to the findings of a road safety audit; access through the proposed bus interchange for cyclists will be maintained.

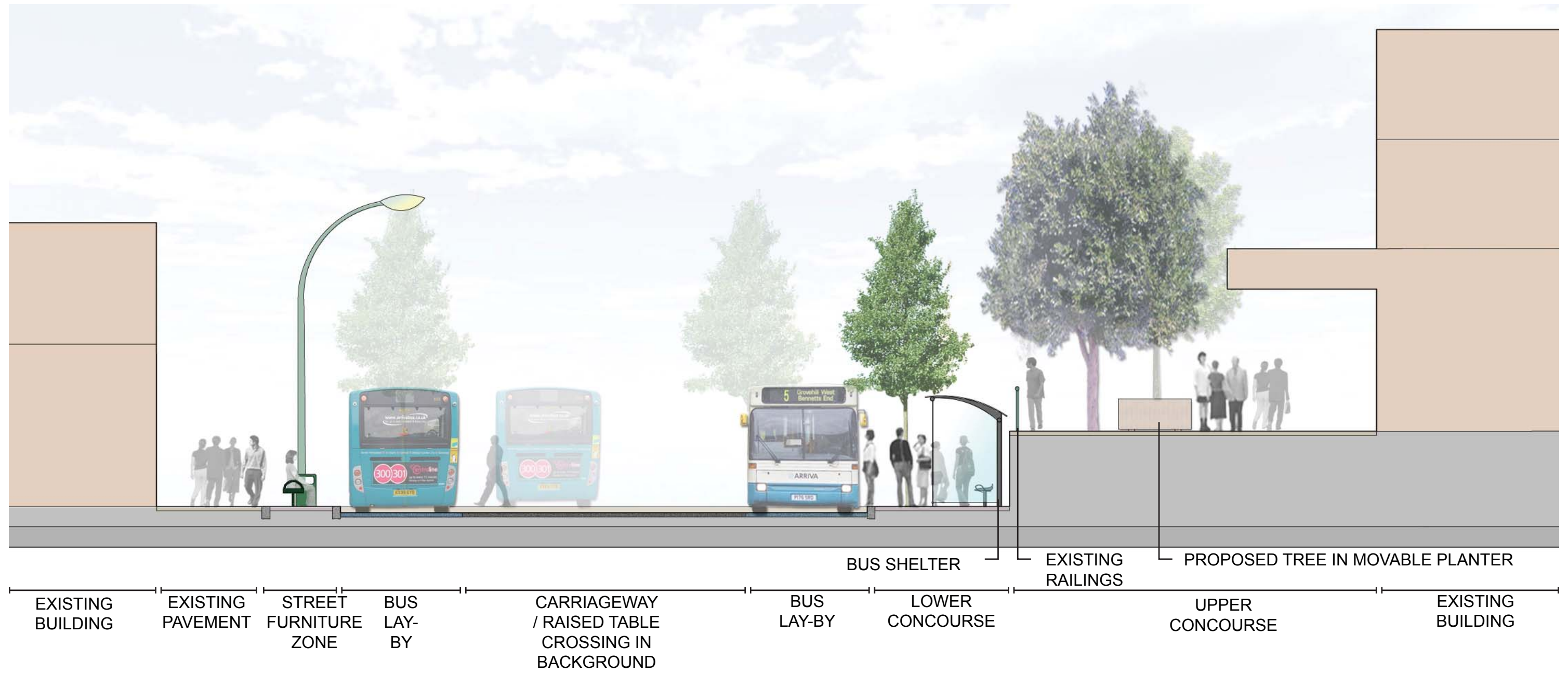


- Traffic Calmed: Narrow Carriageway, Chicane layout, Gateways, Crossing points
- Minimum 2m wide footways are proposed, routes are clear with zones for street furniture.
- Trees softens the overall look of the area.
- High quality materials are proposed in the footways to coordinate with MSZ. Within the carriageways poured concrete and tarmac are proposed for robustness.
- Existing crossing at the corner of the Marlowes and Bridge Street upgraded to a raised uncontrolled crossing.
- An additional raised uncontrolled crossing is proposed opposite the stairs from the high level ramp in the Marlowes. The existing pedestrian crossings at the northern and southern end of the proposed bus interchange will be developed to form a 'gateway' into the proposed bus interchange.
- Cycle Storage facilities at gateways

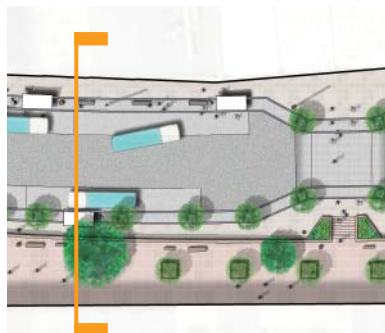


Illustrative Cross Section

Bus Interchange | Section



SECTION A,A



Location plan to show section A,A

Tree Species

Liriodendron tulipifera 'Fastigiatum'

Qualities:

- Impressive, conical medium sized tree with stiffly upright branches.
- Moderately fast growing.
- Tolerates all soil types.
- Not as many flowers as the species selected for the MSZ
- Good autumn colour.

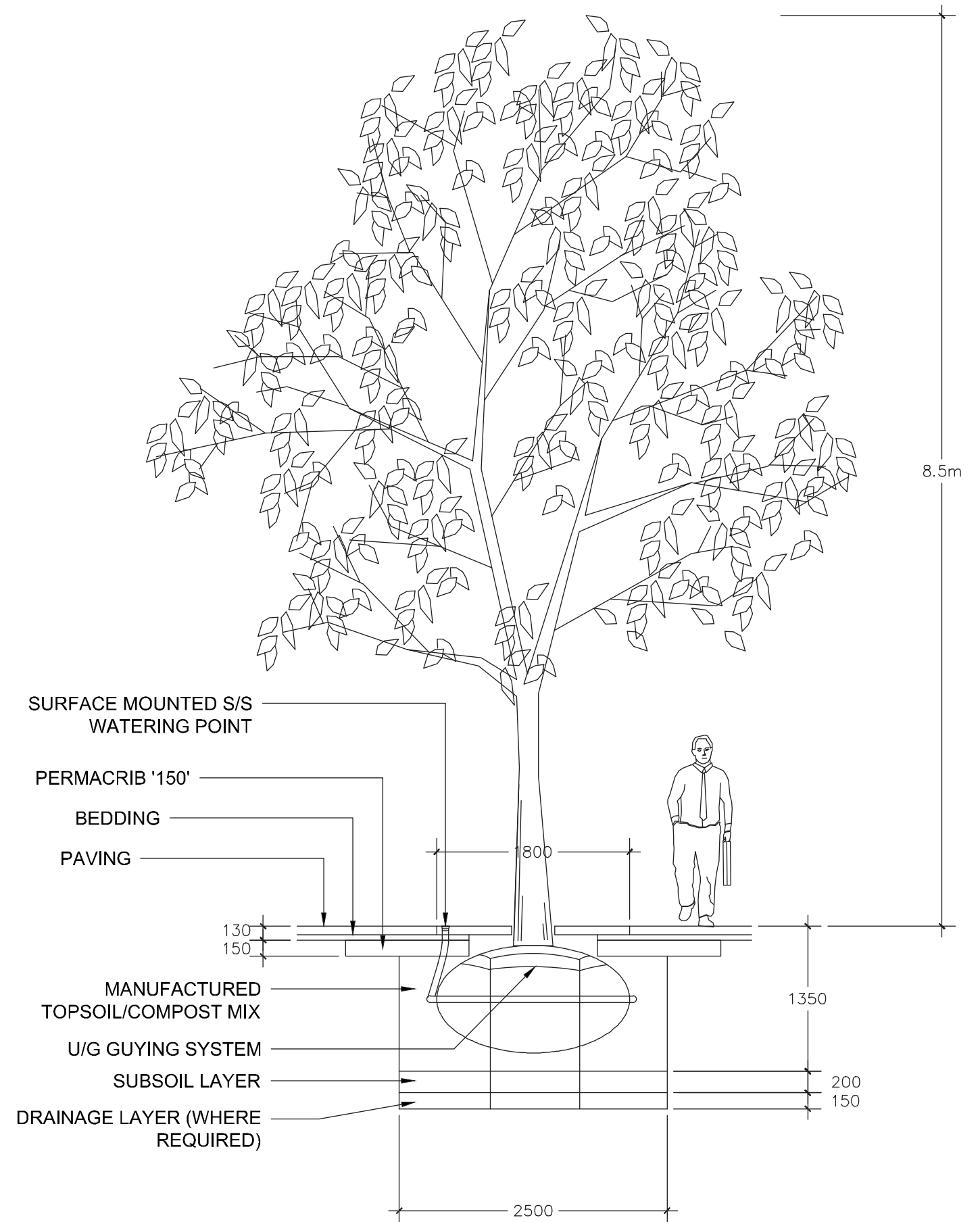
Aligns with Species selected for MSZ



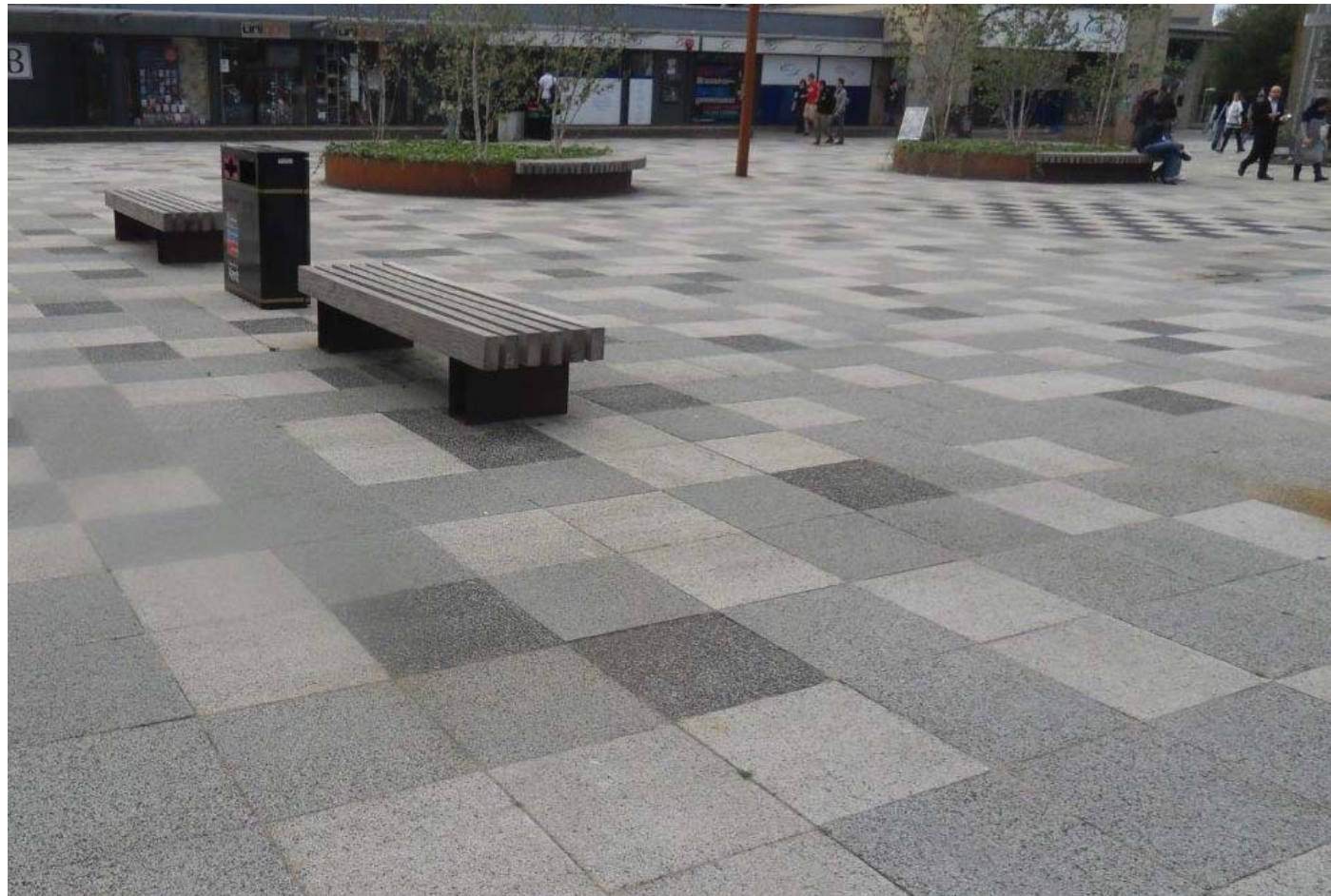
Tree Pit Construction

Full urban tree pit construction and irrigation system to include the following:

- Permavoid Raft (reinforcement below paving for trafficable areas)
- Linked irrigation system
- Underground guying system
- Top soil (Growing Medium : 5 -10m³)
- Subsoil
- Root barrier
- Arbour resin infill



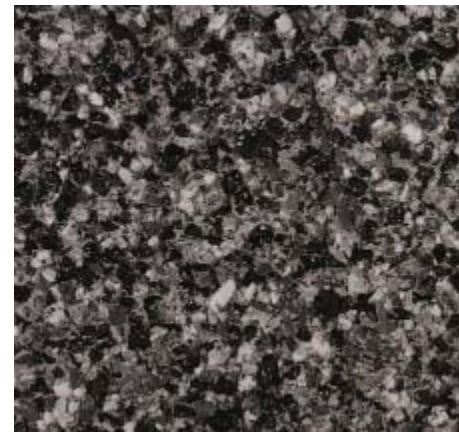
Proposed Concrete Paving: Footpaths



Bus Interchange | Paving



Tagenta B



Tagenta C



Tagenta E



Marlowes Shopping Zone Paving

Kellen Breccia Tagenta

Product name: Kellen Bracia Tagenta

Blend colours: Tagenta B (50%), Tagenta C (20%), Tagenta E (30%)

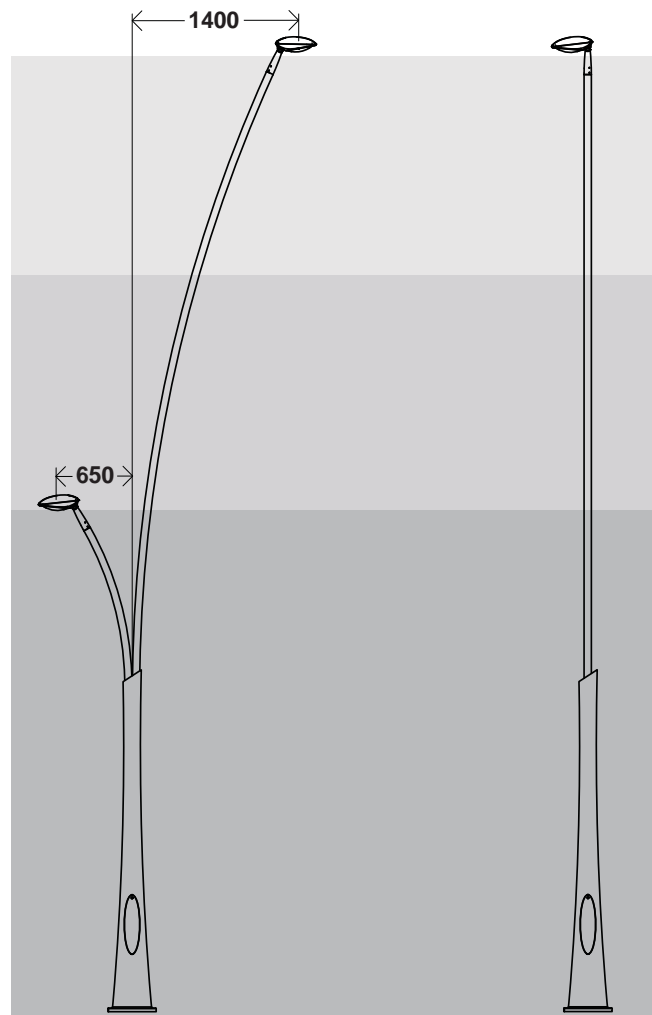
Block size: 400x400x80mm

Proposed Concrete Paving: Carriageway and Crossing Points



Lighting Columns

- Suitable to meet requirements of highways authority
- Contemporary columns in a variety of aesthetic configurations
Suitable to meet requirements of highways authority
- Layout similar to the existing with 10 – 12m high columns on both sides of the road.
- Columns to be staggered (as existing), approximately 30m between staggered columns.
- The area will be lit to 20 lux (standard lighting requirements for a bus interchange).
- Elegant and Simple
- CCTV - New Proposed Cameras



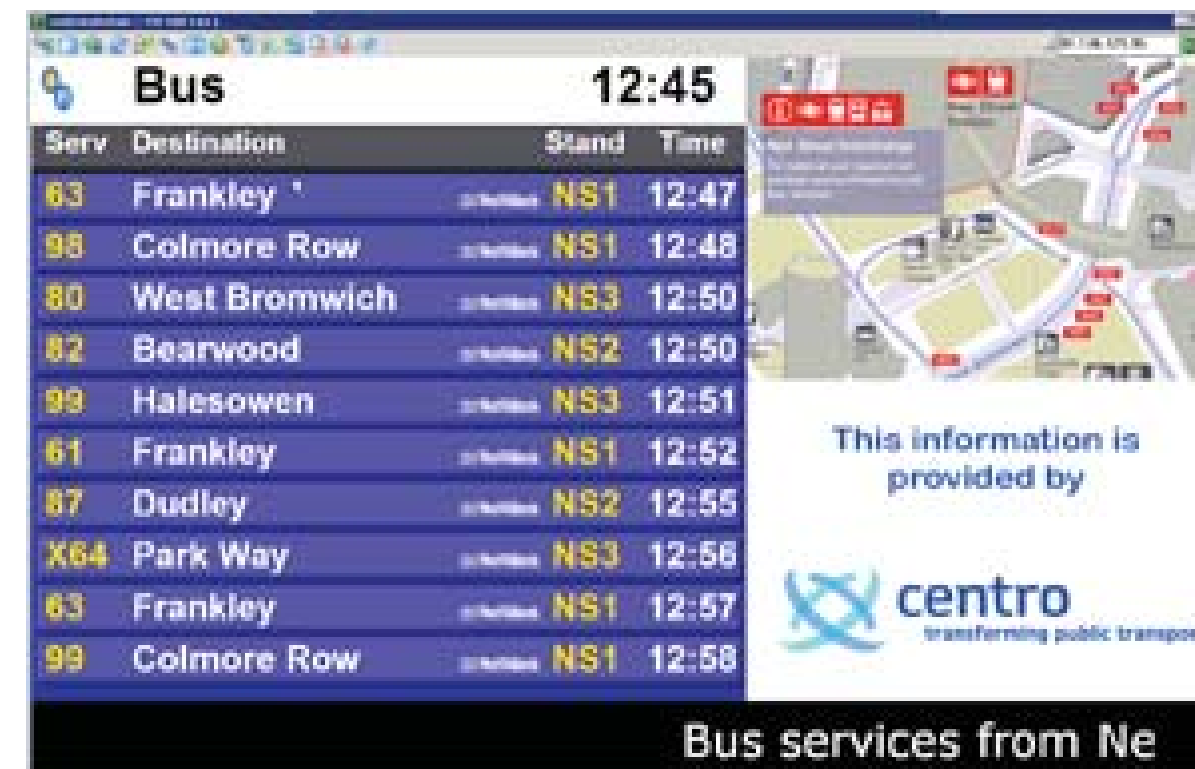


Urbis - Noctis Uplighter for Bus Shelters/Rear Retaining Wall

- LED Fitting
- Stainless steel ring
- Frosted glass to diffuse light - white light







Three located at gateways to the scheme;

- End of Bridge St
- End of Marlowes
- MSZ - Edge of Foodcourt

- Real Time Passenger information



Contemporary Design

High Quality robust materials - consistent with shopping zone



Benches

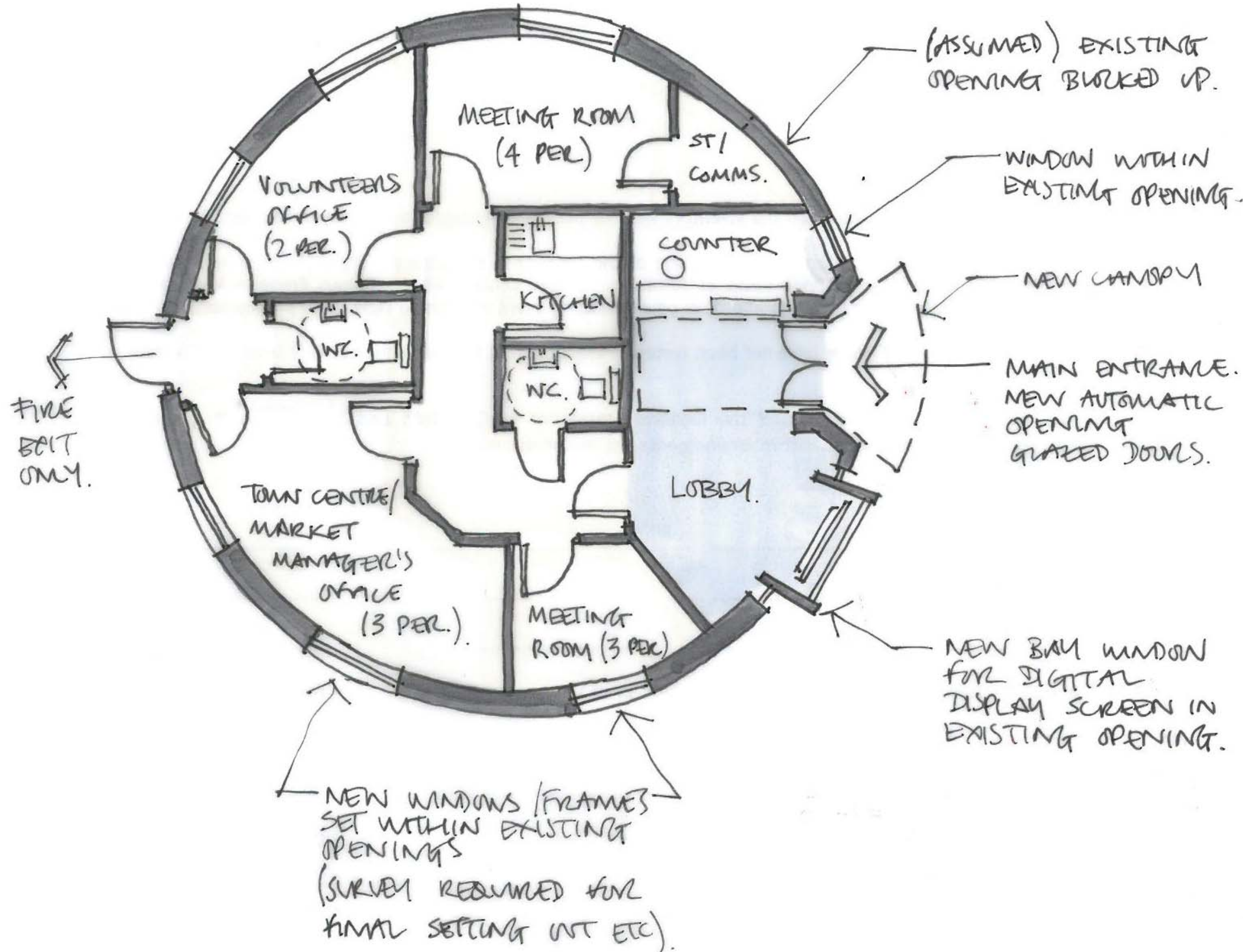
Contemporary Design

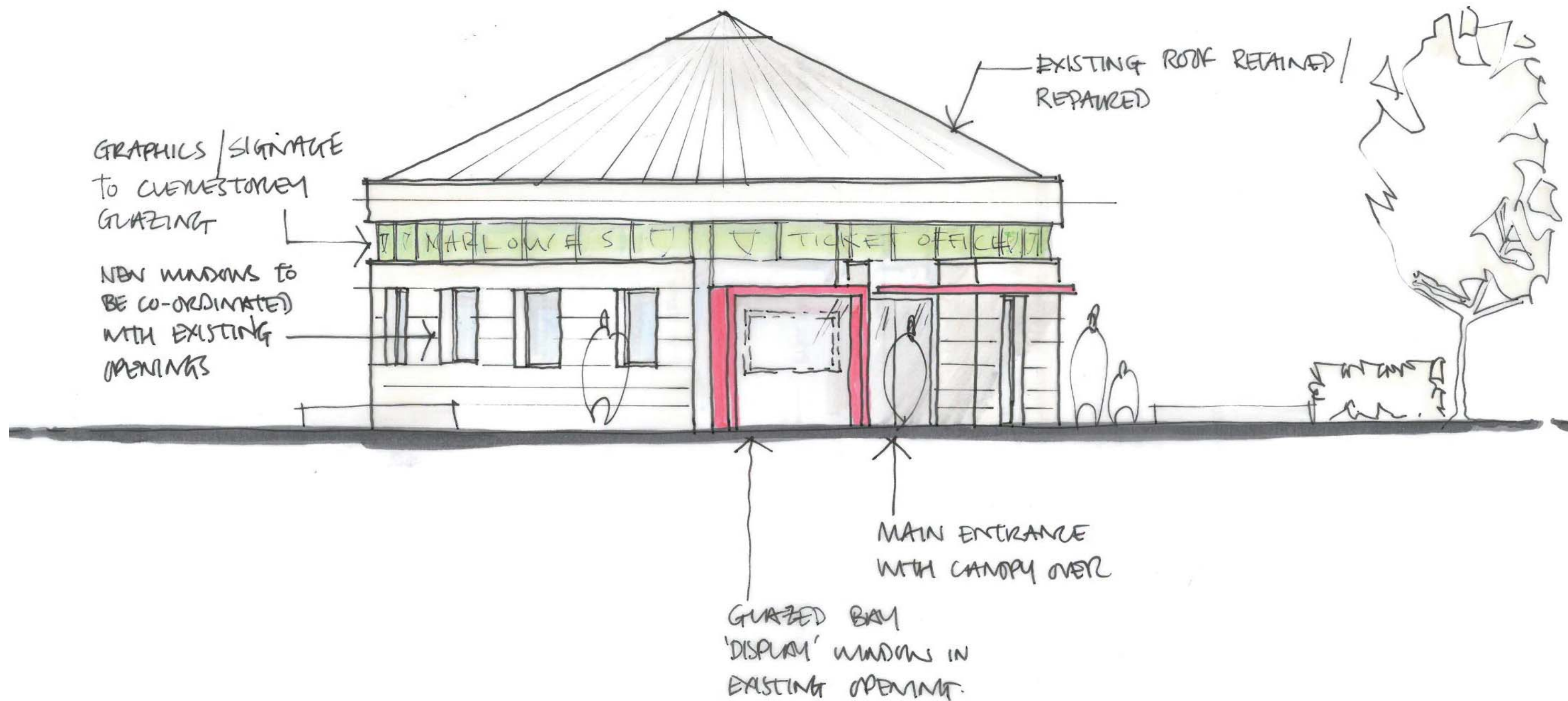
High Quality robust materials - consistent with shopping zone



Bins

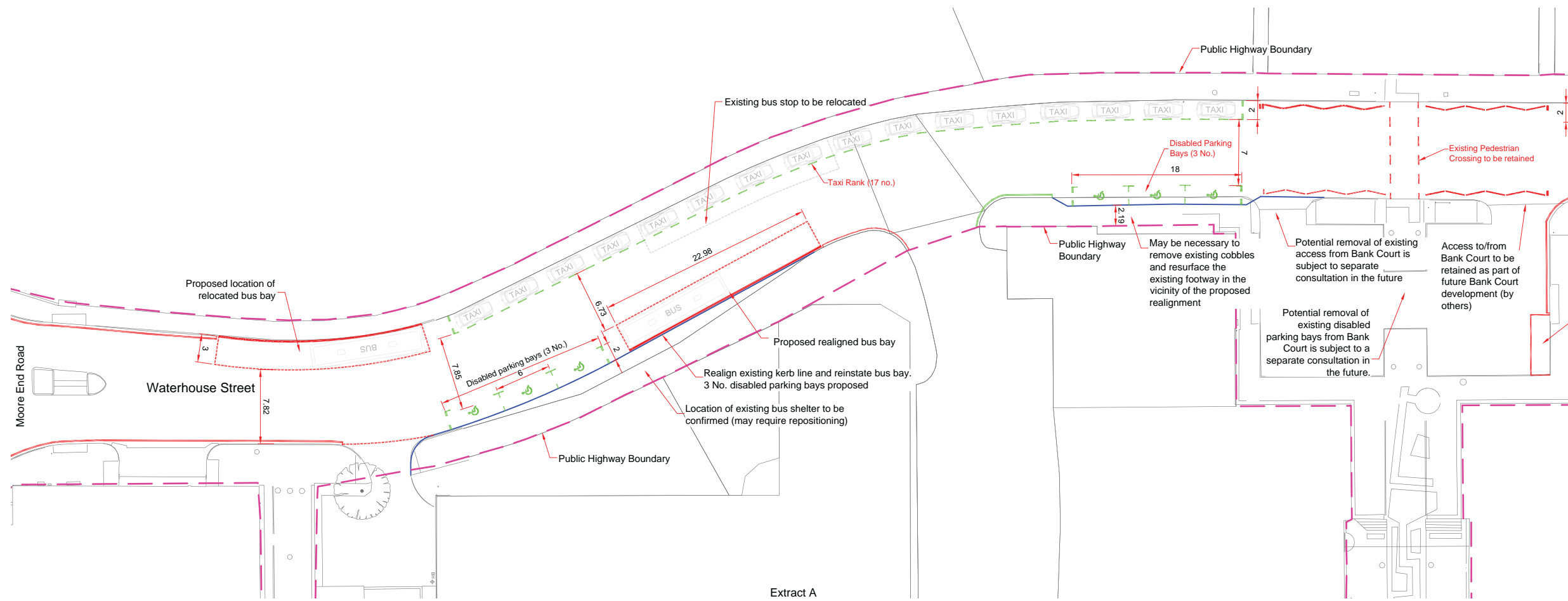
Bus Ticketing and Multi purpose information point





Waterhouse Street Proposals

Bus Interchange | Waterhouse St



- An on-street taxi rank is proposed to replace the existing 21 spaces located in the Marlowes (Plus 3 outside Bank Court and 2 to Waterhouse Street South) to provide 37 taxi spaces in Waterhouse Street, an increase of 11 spaces. Head of Line at Bridge St end
- Night-time taxi rank provision will be identified through the design development of the Market Square Redevelopment. Until this time, the Council are exploring the opportunities to use the bus station as a night-time taxi rank (as existing).
- The strategy includes the provision of twelve (12) blue badge holder parking bays within Waterhouse Street .
- Two short stay parking bays are proposed near bridge street.
- The existing controlled pedestrian crossing linking Bank Court to the Water Gardens will be retained within this scheme.

Questions.....

