



Summary Public Realm Assessment and Strategy		Public Realm Implementation Options / Measures		
Key Factors	Opportunities and Design Approach	Within Tram project scope	CEC complementary short-term scope	CEC overall longer-term scope
01.01 Character / identity / quality / development plans / potential / opportunities				
Reasonable quality 3/ 4 and 4/ 5-storey 19C terraces + some 20C infill on north side, somewhat run-down; mixed quality 20/ 21C office developments + 19C listed Station and PH buildings on south side; all in need of regeneration and refurbishment. Terrace provides reasonably well-defined street-space and enclosure except opposite station car-park area, but Haymarket space dominated/ severed by traffic, lighting, signage, barriers and street furniture.	Potential for recreation of Haymarket as significant city-scale, pedestrian-friendly, usable space; as gateway to historic New Town and to newly-regenerated areas to north and south (Fountainbridge), with links/ views also between Haymarket and Shandwick Place/ Princes Street. Opportunities from introduction of Tram and new developments of Station Interchange (HISAM) and Tunnel (Tiger) sites as leverage for positive change.	Incorporation of safeguarding structures to enable medium to long-term development of HISAM site with Tram-stop as fully integrated interchange. Subject to availability of short-term CEC funding, Tramway/ Tram-stop/ pedestrian/ vehicle access/ servicing paved surfaces to match ESFS standards, or LFL.	Sponsoring/ co-ordination of fully integrated design of public realm for Haymarket area. Subject to availability of short-term CEC funding, existing footways paving from building faces to kerb-lines as LFL or upgrade to ESFS standards.	Complete footways upgrade as necessary.
01.02 Historic / heritage / conservation influences				
Adjacent to New Town Conservation Area/ World Heritage Site.	Opportunity to make appropriate transition from historic adjacent quality to 21C functions and context.	Restore historic quality of context and surfaces; preserve/ restore historic views.	Complementary provision as appropriate.	Complementary provision as appropriate.
01.03 Topography				
Generally level with slow falls east/west & north/south	No design issues.			
01.04 Views – long / cross / through				
Important long views along West Maitland Street to east and west - western gateway into New Town. Potential views to/ from Fountainbridge area.	Preserve and reinforce long views, but need to consider visual impact of OLE catenary, in combination with street infrastructure.	Careful design of OLE/ lighting and combined street infrastructure to minimise visual impact.	Co-ordination of planning policy for tall/ landmark buildings. Co-ordination of street infrastructure provision.	Complementary provision as appropriate.
01.05 Frontages / spaces / links – quality / types / usage				
19C listed Station/ PH buildings + 3/ 4 & 4/ 5-storey 18/19C reasonable but run-down terrace buildings + mixed quality 20/ 21C infill; mixed commercial/ residential uses; few active frontages. Link routes between Haymarket/ Princes Street/ Fountainbridge.	Tram and redevelopment plans provide opportunity to develop new active frontages and related usable public realm spaces. Also to develop important links positively and legibly, to east and west and to south and north.	Tram design to anticipate/ safeguard future fully integrated interchange Tram-stop and wider signage and way-finding.	Co-ordination with integrated design of public realm generally. Co-ordination of complementary signage and way-finding as appropriate.	Complementary provision as appropriate.
01.06 Hard landscape / trees / soft landscape / monuments / civic statuary				
Currently no trees or soft landscape within public realm. Existing War Memorial will require re-location.	War Memorial to be re-located in pedestrian-accessible/ usable area within Haymarket space.	Design of central space to be co-ordinated with HISAM/ Tiger designs.	Co-ordination with integrated design of public realm generally.	
01.07 Public art				
Currently no public art provision.	Strategies for Public Art/ Street Dressing to help define street spaces and mitigate Tram infrastructure.	Make provision for Public Art/ Street Dressing on Tram infrastructure.	Complementary provision within CEC Public Art/ Street Dressing Strategies	Development, maintenance and management regimes for Public Art etc strategies.
01.08 Pedestrian accessibility /flows / usability / priority / severance				
Pedestrian accessibility significantly obstructed by bus-shelters, lighting poles, signage, barriers; routes generally tortuous. Traffic volumes cause severance.	Optimise footways usability and minimise street clutter, with easily accessible crossings on desire-lines, without barriers.	Maximise footways, optimise crossings, remove existing barriers.	Consider 20mph speed limit to improve pedestrian accessibility, usability and safety.	
01.09 Footways capacity / condition				

Medium/ narrow footways already inadequate for current peak flows in some areas, due to obstruction; predicted future capacity will need to be assessed. Grey pcc paving in generally poor condition.	Essential to maximise all footways capacity, to provide for predicted increased future flows. New paving to be to conservation quality or upgraded to development areas' standards within their scope.	Optimise footway provision for assessed future demand. Subject to availability of CEC short-term funding, paving to be to conservation area standards or LFL.	Subject to availability of CEC short-term funding, existing paving from frontage to kerb as LFL or upgraded to conservation standards.	Complete footways upgrade as necessary.
01.10 Traffic types / flows / restrictions / priorities				
High-density two-way general traffic including some bus lanes; limited access/ no parking on-street.	Tram-way segregated on south-side Haymarket Terrace, shared running through Haymarket central space and at crossings. Consider 20mph speed limit.	Minimise road, TRO and Tram signage/ equipment; maximise/ optimise combinations with other street furniture.	Complementary co-ordination/ provision as appropriate. Consider 20mph speed limit to optimise traffic flows.	Complementary provision as appropriate.



01 – HAYMARKET TERRACE, HAYMARKET INTERCHANGE TRAM-STOP and HAYMARKET [DRAFT as at 11 February 2008]

Summary Public Realm Assessment and Strategy		Public Realm Implementation Options / Measures		
Key Factors	Opportunities and Design Approach	Within Tram project scope	CEC complementary short-term scope	CEC overall longer-term scope
01.11 Vehicle access / servicing / deliveries				
Both terrace frontages short-stay time-restricted servicing/ no car parking; no other servicing/ parking.	North side terraces servicing to be further restricted; all other frontages no servicing/ car parking.	Terraces to be serviced from rear. No frontage short-stay servicing/ car parking.	Servicing/ car parking provision to be co-ordinated within overall city regulation.	
01.12 Carriageways capacity				
Generally adequate for current flows, but congested at peak periods. Reconfiguration with introduction of Tram requires significant general traffic redirection.	Minimise carriageway widths to maximise pedestrian footway widths; consider opportunity for 20mph local speed limit.	Optimise carriageway/ footway widths.	Consider 20mph speed limit.	
01.13 Utilities locations / alignments / re-alignments / MUDFA surfacing				
[Pre / post Tram data needed] MUDFA surface re-instatements to be temporary only	Assess utilities locations/ alignments for impacts. If necessary, suggest alternative locations/ alignments. Tram/ CEC to provide permanent surface finishes.	[Subject to assessment of data] Tram project to provide permanent surface finishes to MUDFA scope within LoDs.	[Subject to assessment of data] CEC to provide permanent surface finishes to MUDFA scope outside LoDs.	[Subject to assessment of data] Complete permanent surfacing to MUDFA scope as necessary.
Street furniture types / impacts				
01.14 Street clutter / integration				
[Pre / post Tram audit / data needed] Limited data available on locations of existing elements; on proposals to minimise obstruction and to co-ordinate/ combine elements to minimise clutter.	[Subject to data] Assess current Tram proposals for location/ co-ordination/ combination of street furniture elements. If necessary, suggest alternatives/ opportunities.	Fully audit/ co-ordinate/ integrate existing street furniture and tram provision; deliver/ safeguard key combinations.	[Subject to assessment of audit data] Extend principles established by Tram proposals to minimise street clutter generally – or initiate audit etc process.	[Subject to assessment of audit data] Complete process of minimising clutter as City-wide typology.
01.15 Street lighting / footway lighting / feature lighting / traffic lights / CCTV / PIDS				
[Pre / post Tram audit / data needed] Street lighting/ traffic lights/ signing on separate standard poles; visually intrusive and obstructive to footways.	[Subject to data] Rationalise street lighting/ traffic lights/ signage long-term to reduce clutter. Central Haymarket space requires co-ordinated overall lighting design.	[Subject to assessment of data] Existing street lighting partially affected by Tram/ partially to be replaced/ combined, including co-ordinated design.	[Subject to assessment of data] Subject to CEC short-term funding, fix street lighting to buildings; minimise signage etc within overall public realm design.	[Subject to assessment of data] Complete process of rationalising/ minimising clutter.
01.16 Shelters / seating / bins / cabinets / signage / displays				
[Pre/ post Tram audit/ data needed] Bus shelters/ stop signs/ refuse bins/ wheelies/ TRO and traffic signage visually intrusive, partly obstructing footways.	[Subject to data] Some elements to become redundant and removed; all to be rationalised and minimised, including shelters.	[Subject to assessment of data] Rationalise relocated/ replacement infrastructure to set new typology and minimise clutter.	[Subject to assessment of data] Complementary provision as appropriate, within overall public realm design.	[Subject to assessment of data] Complete process of rationalising/ minimising clutter as City-wide typology.
01.17 Tramway – alignment / segregated / unsegregated				

Tram alignment segregated on south-side Haymarket Terrace; shared with general traffic in central space and at crossings.	Segregated Tram alignment to be fully integrated with public realm.	Segregated Tramway/ Tram-stop to be fully integrated with footways and public realm within interchange area.	Wider public realm design to co-ordinate and optimise opportunities between Tram, interchange and third party developments.		
01.18 Tram-stop – type / interchange / people-place generator / integration					
Haymarket Tram-stop intended to be fully integrated interchange type.	Opportunity to fully integrate Tram-stop within contiguous/ over-sailing HISAM Interchange development.	Design short-term Tram-stop and sub-structures to safeguard future fully integrated option.	Brief for Interchange design and for wider public realm design to co-ordinate and optimise opportunities.		
01.19 Tram-stop shelters / furniture / equipment – types / kit-of-parts					
Potential for Tram-stop shelters and equipment to be fully integrated with future HISAM development in medium to longer-term.	Integrated design to be considered from outset; short-term provision to anticipate longer-term opportunities.	Tram-stop equipment etc integrated for minimal street clutter/ safeguarded for future integration/ conservation standards.	Bus-stop shelters and other street infrastructure to be re-configured within Tram-compatible typology.	Complete process of integration of street infrastructure/ minimising clutter.	
01.20 Tram OLE – types / impacts					
Combination of OLE building fixings, side poles and span wires along Haymarket Terrace and through Haymarket junction.	Minimise impact of OLE poles and catenary on significant views; combine where possible with street lighting and other infrastructure.	Optimise combined OLE/ lighting poles/ catenary to limit impact on views along street; safeguard future opportunities for building fixings to replace poles.	Brief for Interchange design and for wider public realm design to co-ordinate and optimise opportunities.		
01.21 Track-side infrastructure – types / impacts					
[Data on design typologies and locations needed]	[Subject to data] Assess current proposals/ designs/ potential for combination of functions. if necessary, suggest alternatives/ opportunities.	[Subject to assessment of data]	[Subject to assessment of data]	[Subject to assessment of data]	

Comments arising from meetings with the HISAM team on 29 September and with the HISAM and Tiger Development teams on 3 October 2007. This note is not intended to provide solutions nor a locus for these, but to identify issues which it is considered need to be addressed to achieve an appropriate public realm for the location.

1. These observations are made principally in the context of introduction of the Tram and consequential changes to infrastructure and traffic in the area, as well as from the standpoint of the wider public realm in the spaces and routes affected. They are also made in reference to the HISAM Stage 3 Report (July 2007) and the Tiger development planning application drawings and documents (August 2007). For these purposes, these current technical and design solutions for the Tram, traffic, Interchange and developments are taken as given; however, it should be noted that all these factors may well have been further developed, suggesting somewhat different solutions may need to be considered.

2. Key factors and opportunities for the central space appear to be those of:

- Place; identity; perceptions; historic and future context
- Frontages and frontage activities
- Public usable space; usability; flexibility; change over time
- Pedestrian circulation; space; flows; desirelines
- Linkages and interchanges
- Traffic flows

3. Sense of place and context

The descriptions in proposals for both the Interchange and the Tiger development recognise all the key factors outlined above and suggest that they address these satisfactorily. However, whilst both proposals provide technical solutions which may (and probably do) work in their own terms, neither appears to define an identity, distinctive character or function for the central area, nor do they appear to combine for the public realm, to form a whole greater than the sum of the parts.

The historic context of the central space and routes is as the Western entrance / exit / gateway to the New Town and to the World Heritage Site. The opportunity is to reflect and signal both the once and future context with a legible, distinctive sequence of spaces, routes and links and associated street uses. In this sense, both sets of proposals appear internalised, rather than integrated with their surroundings.

In terms of location and wayfinding, views and landmarks are key factors. However, from the East, the over-sailing roof of the Interchange proposals appears to overpower both the existing Haymarket Station and Ryrie’s buildings and to diminish the significance of the landmark chimney to the West, without appearing to provide a significant or legible alternative. The Tiger development proposals include a multi-storey hotel building, fronting onto the central space, but it is not clear, from the data available, whether or not this will provide an appropriate new landmark for the location. See also comments in para 4 below.

4. Frontages and frontage activities

The Interchange proposals have to deal with a complex and disparate set of buildings, frontages and uses, which are not easily reconciled. The frontages onto Dalry Road and Distillery Lane appear to be successfully addressed. However, the Haymarket Terrace frontage, including the interface with the Tram-stop, appears somewhat less successful –see also para 7 below –and the treatment of the spaces between the buildings adjacent to the station and which turn the corner between Haymarket Terrace and Dalry Road also appears much less convincing. The frontages themselves do not appear to be logically linked, neither forming a cohesive Western end to the main space, nor convincingly turning the corner between the streets. The development at ground level protrudes between the existing buildings, appearing further to fragment the composition of the whole. The oversailing glazed roof structure appears to dominate both the listed station and the Ryrie’s buildings, compromising their quality and identity without providing containment to the wider space. The principles adopted, both of development and the overall roof structure, appear logical and valid in themselves, but it would be interesting to explore whether or not they could provide more interactive solutions, say by forming a more strongly defined backdrop both to the existing buildings and enclosure to the main space and by stepping back behind the existing frontages to provide a draw into the centre of the Interchange and space for activities to extend outwards from it. The frontage activities adjacent to the Ryrie building appear in isolation.

The Tiger development’s 5-star hotel proposals appear, in public realm terms, to have been concentrated more on turning the corner between Dalry Road and Morrison Street than on developing an active frontage to the central space to the North. The effect is that the frontage is largely blank and convex, closed to the central space. It would be interesting to explore whether or not a more “concave” or open frontage, at least on its lower levels, together with active uses, could engage with and add to the central space. An internal “street” is proposed behind the hotel and between it and the office building. This street is described as having active frontages on both sides but, equally, the space appears largely to be occupied by car parking and not much usable for other purposes. Moreover, if the street is also to be used, as proposed, for significant pedestrian flows, these and the parking will occupy most of the usable space. In any event, the “street” and its frontages being behind the hotel, these appear to have no interaction with, nor add anything to the central space.

5. Public usable space, flexibility and change

The available public space within the central area is largely determined by the configuration of roads and Tramway. This makes it all the more important that the surrounding existing and proposed uses are examined for what they can add to the space and its uses both now and in the future.

The Interchange proposals include significant public use areas within its own central concourse circulation, together with commercial / retail / franchise operations. As suggested above, if these uses and areas could be linked both visually and by circulation to the central space, this in effect would make the one an extension of the other. The proposals also suggest development of a promontory of space adjacent to the Ryrie’s building, which could be used for relocation of the War Memorial. However, this proposed space would be somewhat isolated by traffic to the East and by Ryrie’s itself to the West and not easy for the general public to use –indeed it is not entirely clear for what else it could be used, except as an external extension of Ryrie’s –and, as the proposals also suggest, this would require in effect a reversal of Ryrie’s active frontages, which may or may not

be feasible.

The Tiger development’s hotel proposals appear to maintain the configuration and dimensions of the existing footways on the South side, but offer no additional space or use to the central area. However, this does not appear to take account of the greatly increased future pedestrian flows currently predicted. Again as suggested above, if a part of the lower floor(s) of the hotel building were to be set back or opened up to the central space, this might provide wider links between the central area, the development and its uses and the Interchange.

On the North side of the central area, Haymarket House is currently a blight on the area and is a prime candidate for redevelopment. To a lesser degree, the three-storey terrace houses, currently fronted by “gardens”/ paved areas, could also be redeveloped or at least refurbished for public space-related uses. With a South-facing aspect, all of these have potential to relate well to the central space with links to the Tiger and Inter-change developments.

Usability of the central space might be possible to increase by treating its whole area as a single-level shared surface, possibly with introduction of, say, a 20 mph local zone speed limit to assist pedestrian priority.

6. Pedestrian circulation and desire-lines

Principal pedestrian flows are currently between the Haymarket Station and Princes Street and the established employment areas to the East, with significant flows already developing towards the new business districts to the South and South-east. In addition to flows to the West, pedestrian usage is predicted to increase several-fold. This requires that pedestrian footway space may need to be increased and certainly not reduced. Similarly, pedestrian routes need to be simplified or rationalised. It would make sense if this process could be combined with identification and development of publicly usable space within the central area, aiming to achieve a synergy of uses.

The Interchange proposals provide for principal flows both to the North and to the South of the central area, also linking these to the East. The Tiger development proposals provide for principal flows to the South and South-east. In themselves these provisions are unexceptionable, but they become constrained by the configuration of general traffic and the Tram, particularly in West Maitland Street.

7. Linkages and interchanges

Generally, interchanges between transport modes appear to be optimised within the constraints of road and rail footprints, with the possible exception of taxi facilities. However, the detail of integration of the Tram-stop in Haymarket Terrace and its interchange relationships may need clarification and further development.

The northern (east-bound) Tram-stop side platform is shown as replacing or coinciding with the existing south-side footway in Haymarket Terrace, as well as functioning as a west-bound bus-stop platform. To perform all three functions, the platform will need to be located at, say, about 160 mm above carriageway level, to service low-floor boarding buses, with the Tram-tracks at about 140 mm below carriageway level through the stop. These levels will then need to be blended, as appropriate, into the existing carriageway and footway levels to the east and west of the Tram-stop. Presumably, the southern (west-bound) Tram-stop platform will need to be located in a similar relationship to the concourse levels of the Interchange. It is not clear whether this configuration of Tram-stop platforms and their functions also as bus interchange and through footways will have sufficient capacity to service future pedestrian flows.

As an important focus of mode interchange, the Tram-stop could with advantage be made more visible and more a part of the wider central space. It would be interesting to explore whether this might be better achieved by a larger scale, more “open” enclosure of the Tram-stop by the surrounding Interchange buildings.

8. Traffic flows

As noted above, for the purposes of this commentary, current technical solutions are taken as given. However, development of the central space as public realm will need also to take account of possible future changes to traffic modes, volumes, speeds and routeing. In this context, public realm proposals need to have the flexibility to change. Again, as noted in para 5 above, this may suggest consideration of a single-surface shared-use treatment of the central space, helping to draw together the emerging frontages and their active uses.

Illustrative sketches of this commentary are attached.

Concerning the H&S consultant’s reported view of buildability of the Interchange structure post-Tram, there are four comments/ queries:

1.

First, we are not convinced that there will be sufficient working space in practice to realise the sketch you drew. Accepting that it was a very rough and approximate sketch, for example:

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The building line along Haymarket Terrace south-side runs directly through the approximate longitudinal centre-line of the north h Tram platform area –we assume that any supporting structure could **not** be located along this line on Tram operational and pedestrian/passenger movement grounds? Nor would it be possible to construct post-hoc without closing down Tram operations, ie not within normal 4-or 5-hour nightly possessions periods.

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Even if it were acceptable on the platform surface, the structure would appear then to intrude into the service and sub-station working areas beneath the Tram-stop, which, from what SDS said today, again we assume would not be acceptable technically or operationally and would not be possible to construct similarly?

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If the structure (and building face) were located outside (to the north of) the north platform area, it would be in the area of the current footway/ future footway and bus-stops. Even if the structure stood clear of the building face it was supporting (which could then remain aligned along the building line), we assume that this would be unacceptable on planning, historic/ heritage and highways, not to mention public realm grounds? Even if there was sufficient space actually to carry out construction in this area and if this could be done without affecting Tram operations, this would involve closure of the footway and temporary relocation of the bus-stops and of at least one, probably two traffic lanes, for a considerable period.
2.

Secondly, if the supporting structure were located behind/ within the building line, the structure would have to be located along the centre-line of the Tram-tracks, or to the south of the south Tram platform area. Then:

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In either case, this would be necessary to incorporate within the Tram “viaduct” structural grid, since otherwise it would be unacceptable on technical/ operational grounds as above, ie at least the main supporting structure would have to be carried out as part of Tram construction –again, it would not be possible within normal possessions periods.

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Depending on the dimensions of the structure, this might also require widening of the space between the Tram-tracks, which may not be possible spatially but, if feasible, needs to be carried out now.

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In any event, SDS have said that that this is emphatically not a part of the Tram scheme and will not be designed in unless CEC so instructs and pays for (presumably both in design and construction terms), which will also have an effect on programme.

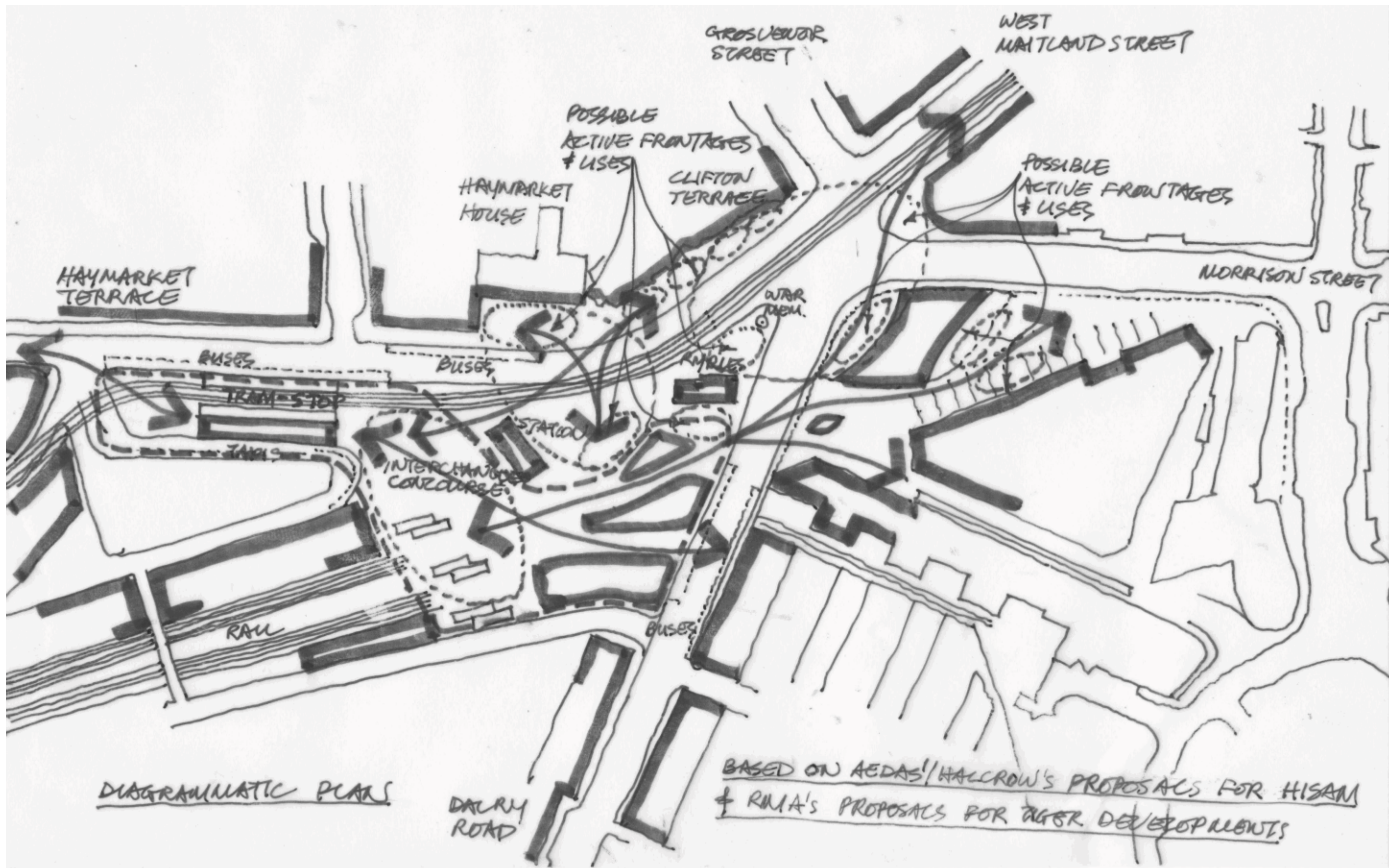
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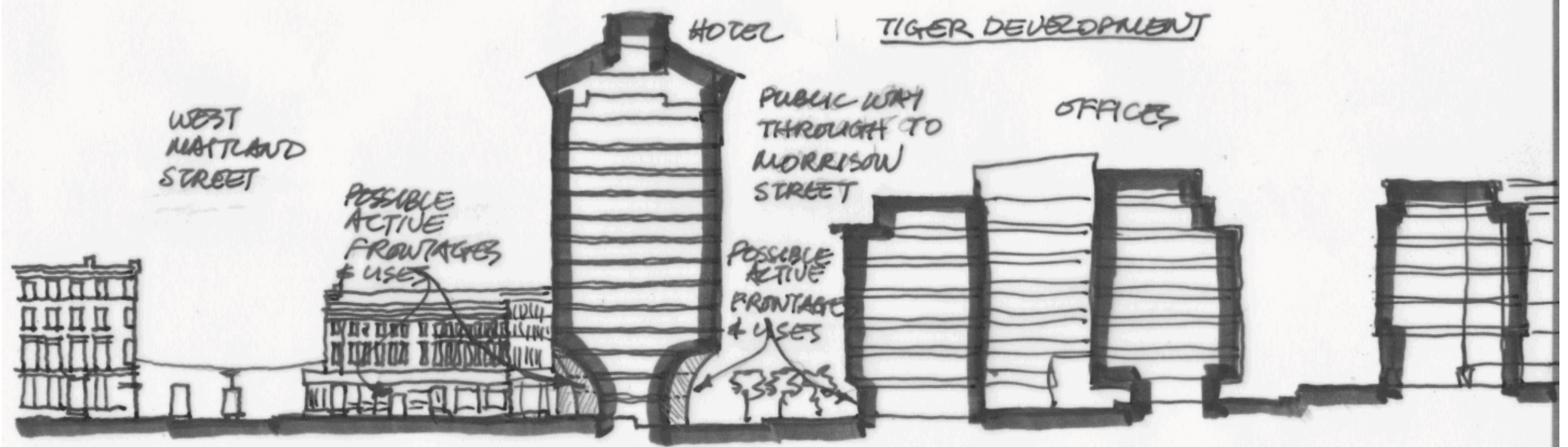
Any such set-back structure would also involve cantilevering of superstructure out to the building line. Whilst this may be technically/ structurally feasible, it might prove to be at such expense as to be uneconomic/ commercially non-viable in terms of the future development.
3.

A transport interchange development, of the sort envisaged here, with the Tram and Tram-stop fully integrated, as they should be, with the surrounding development, activities and public realm, is likely to be fully successful only if designed as a whole with all its component elements. Whilst this may not be possible fully to achieve in these circumstances, in our view it is important to be certain of what is feasible and to safeguard what will give most opportunity for full eventual success.
4.

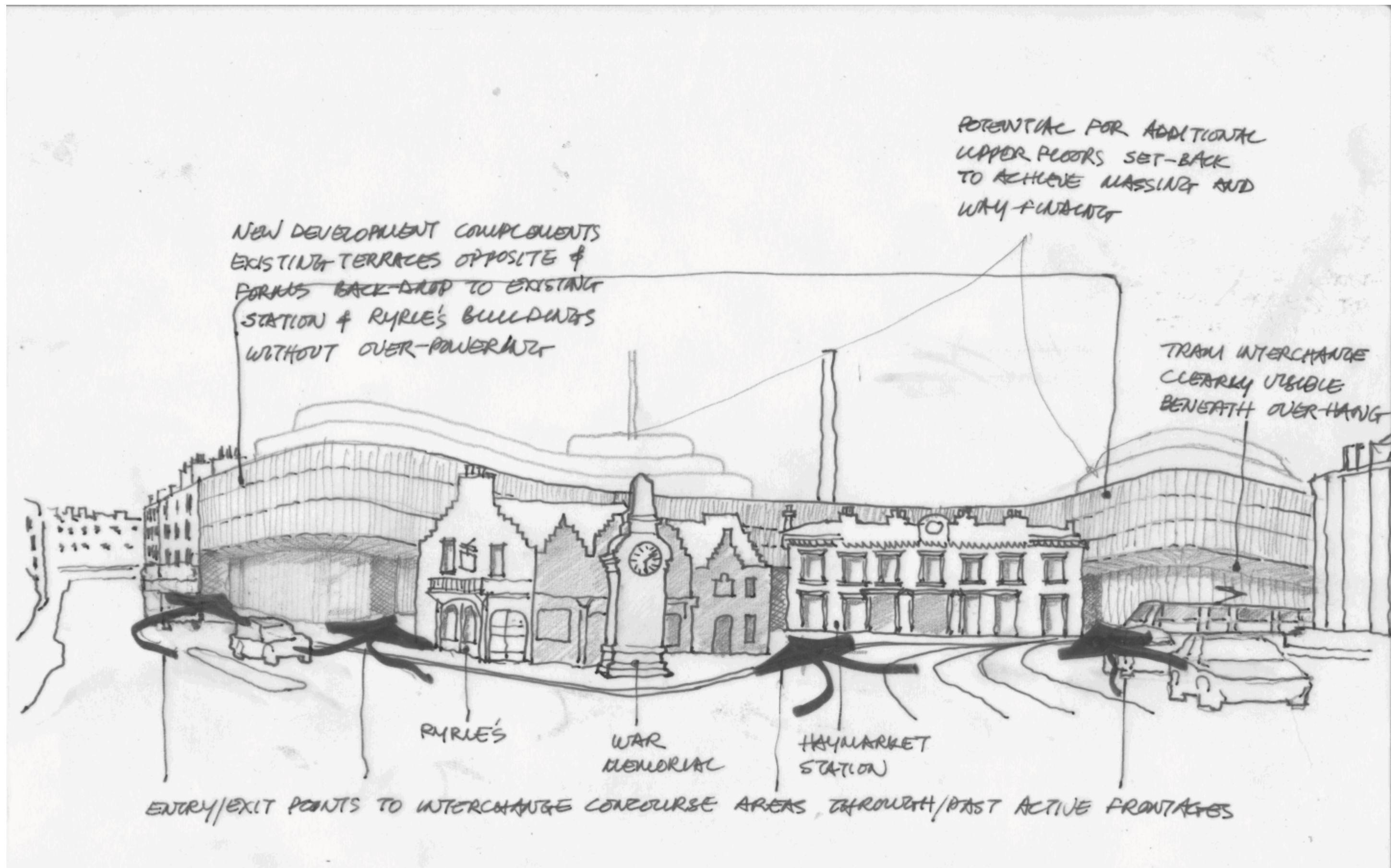
Should not CEC take further, more detailed technical advice on these issues, in consultation at an appropriate stage with Tie/ SDS, to consider the possibility that to provide a safeguarding structure now, within and as part of the Tram scheme only, might well prove to be more cost-effective/ commercially viable and certainly less disruptive (with consequent further economic costs) than to leave decisions until there is more certainty concerning the Interchange building as a whole. It seems to us that there is a real risk that such “certainty” may prove to be illusory if technical solutions assumed now to be feasible, in practice may prove not to be.

Concerning future-proofing of the OLE system in the area in front of Haymarket Station, we think SDS’ re-assurance today is probably acceptable, for the time being. However, it would be necessary to ensure that the Interchange building and structure was designed to accommodate OLE fixings and loadings accordingly. Similarly with any possible future redevelopment of Haymarket House opposite.





DIAGRAMMATIC SECTION NORTH-SOUTH, BASED ON RMA'S PROPOSALS FOR TIGER DEUTS



HAYMARKET INTERCHANGE: PUBLIC REALMAGENDA

Elements of Space and Movement

- **Scope** – Haymarket Terrace to West Maitland Street
- **Streets and Side Streets** – Haymarket Terrace/ Distillery Lane/ Dalry Road/ Dalry Lane/ Morrison Street/ West Maitland Street/ Grosvenor Street/ Rosebery Crescent
- **Principal Intersections** – Haymarket Terrace – Morrison Street/ Dalry Road – West Maitland Street
- **Central Space** – Haymarket Place
- **Related Spaces** – Proposed Haymarket Station Interchange Concourse area and Tiger development plaza areas; Potential north-side plaza areas
- **Topography/ Levels/ Slopes**

Identity and Place

- **Perceptions** – Western Gateway to New Town; World Heritage Site; Princes Street and employment areas to East; Northern Gateway to new employment areas to South (Fountainbridge)
- **Historic/ Cultural Functions and Context** – Listed Station and Ryrie’s Buildings; some good quality terrace buildings; historic market place (?)
- **New Developments/ Redevelopment Functions and Context** – Planned multi-use Tiger development of National Rail site; Potential multi-use Station Interchange site development; Potential commercial/ residential-use redevelopment of Haymarket House site and of Clifton Terrace
- **Statuary** – Heart of Midlothian War Memorial – to be re-located
- **Public Art/ Display/ Street Dressing** – currently none/ opportunities to help define spaces and activities
- **Future Opportunities/ Changes** – safeguarding of potential for integrated design of Tram-stop/ Interchange within north side of Station Interchange

Views and Wayfinding

- **Long Views and Closure** – along West Maitland Street and landmarks towards east; from West Maitland Street towards chimney to west of Station – closure by Station and new (sub-dominant) Interchange buildings; along Haymarket Terrace towards west and towards east into Haymarket Place and towards possible landmark building within Tiger development
- **Cross/ Through Views** – through Tiger development towards Fountainbridge

- **Landmarks/ Features/ Visual Impacts** –

Hard and Soft Landscaping

- **Trees** –
- **Soft Landscaping and Planting** –
- **Hard Landscaping and Paved areas** –
- **Water Features** –

Frontages and Activities

- **Enclosure of Space** –
- **Attraction of Activities** –
- **Private Usable Space** –
- **Public Usable Space** –
- **Usability** –
- **Flexibility** –
- **Changes and Safeguarding** –

Pedestrian Spaces and Usage

- **Routes** –
- **Capacities** –
- **Flows** –
- **Desirelines** –

Linkages and Interchanges

- **Cultural/ Social/ Linkages** –
- **Visitor/ Leisure/ Retail Linkages** –
- **JTW Linkages** –
- **Transport Linkages** –
- **Rail Station/ Location/ catchment** –
- **Tram-stop/ Location/ catchment** –
- **Bus-stops/ Locations/ catchments** –
- **Taxi-stands/ Location(s)** –
- **Servicing/ Loading/ Car parking bays** –
- **Interchange within Modes** –

- **Interchange between Modes –**
 - **Changes and Safeguarding –**
- Traffic Spaces and Usage**
- **Routes –**
 - **Capacities –**
 - **Modes –**
 - **Priorities and Safety –**
 - **Flows/ Speed Limits –**
 - **Changes and Safeguarding –**
- Street Infrastructure and Furniture**
- **Tram OLE/ Tram-stop Shelters and Kit-of-parts/ Trackside equipment –**
 - **Bus-stop Shelters and Kit-of-parts –**
 - **Street and Footway Lighting –**
 - **Traffic Lights/ Speed Cameras/ CCTV –**
 - **Road, TRO and Tram Signage –**
 - **Equipment cabinets/ Kiosks –**
 - **Barriers/ Railings/ Bollards –**
 - **Bins/ Seating/ Information Panels/ Displays –**
 - **Audit of current and future needs/ provision –**
 - **Opportunities to reduce street clutter, including combinations of elements**







