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East Linton Station

for Network Rail

Design and Access Statement

161777-BNU-REP-EAR-000001

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August 2020

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Report Amendment Record

This document has been amended as follows:

Revision	Date	Description	Prepared by	Checked by
01	03.08.20	Issued for planning application	HL	FJJ

Contents

Abbreviations

DfT/TS Code of Practice	DfT/ Transport Scotland Code of Practice Design Standards for Accessible Railway Stations
GRIP	Governance for Railway Investment Projects. GRIP divides a project into eight distinct stages of which GRIP 3 is single option development (RIBA concept design) and GRIP 4 is single option development (RIBA spatial coordination)
STAG	Scottish Transport Appraisal Guidance

1 Introduction

Network Rail is proposing to develop a new railway station at East Linton on the East Coast Mainline. This Design and Access Statement has been prepared by IDP Architects in support of Network Rail's planning application for the construction of the new station.

The proposals for a new station at East Linton comprise a new station car park for 128 vehicles, transport interchange (cycle facilities) new local paths, 2no. new platforms on the existing railway embankment, new access for all footbridge serving the platforms, carpark, and station entrance from the north, station furniture (shelters and seating) and operational equipment. Road access to the station is to use the existing road network through the adjacent Miller Homes Development to the south of the railway.

This document has been prepared following pre-application guidance from East Lothian Council confirming that a Design & Access Statement was to accompany the planning application. This statement follows the guidance for preparation of a Design & Access Statements under Planning Circular 3/2013: Development management procedures, "explaining the design principles and concepts that have been applied, and how issues relating to access for disabled people to the development have been dealt with.". Further this statement seeks to inform the planning decision-making process by demonstrating the "development proposals are based on a carefully considered design process and address the needs of people with disabilities in terms of access to the development and how such arrangements will be maintained"

2 Background to the New Station

The current proposal for a new station at East Linton, developed from an extended period of feasibility and assessment undertaken for a number of stakeholders including East Lothian and Scottish Borders Council, SEStrans and Transport Scotland. Further, local campaigning successfully gained political support for a new station.

For East Linton Station, the transport assessments (table 1) built on the initial 1999 feasibility and culminated in a STAG 3 assessment "Edinburgh-Dunbar-Berwick-upon-Tweed Study" completed November 2013 by MVA Consultancy for East Lothian Council, Scottish Borders Council and SEStrans. This was followed with an addendum issued in 2016 updating the business case for the stations based on the delivery costs within Network Rail's GRIP 3 option selection report. This report was delivered by Network Rail to assess the various options for a new station and recommend a preferred option.

The Network Rail Grip 3 Option Selection Report recommended the new station be developed with the platforms to the high mileage side (towards Berwick) from the existing underpass (underbridge UB ECM8/65A, 23m 07ch) This recommendation related to the constraints of existing infrastructure and the land allocated for a station car park in the local plan and platform to platform access via the existing underpass with ramps to access the platforms that would be located on the embankment. Potential issues with use of underpass ECM8/65A, were noted as significant drainage pipes located in the underpass and ownership by East Lothian Council ownership, not Network Rail.

2004 Edinburgh to Berwick Local Rail Study	*Reviewed and updated the 1999 East Lothian Study and extended the scope from East Lothian to Berwick upon Tweed. Re-opening the station at Reston is considered for the first time.* *New stopping service to East Linton, Dunbar, Reston, and Berwick upon Tweed included in Regional Transport Strategy*
2005 Edinburgh to Berwick Local Transport Study STAG 1 Report	*Extended the 1999 / 2004 studies to consider all transport modes in the corridor in a full* *STAG context – shortlisted three options (1 rail-based and 2 bus-based) to take forward to STAG Part 2 [not subsequently undertaken]*
2007 SEStrans Regional Transport Strategy	*New stopping service to East Linton, Dunbar, Reston, and Berwick upon Tweed included in Regional Transport Strategy*
2011 Feasibility Study: Enhanced Rail Services between Edinburgh and Newcastle	*Operational and financial study - determined the availability of train paths in the corridor* *and produced BCRs, revenue and patronage forecasts for an Edinburgh–Dunbar–Berwick* *service with new stations at Reston and East Linton – business case and outline technical* *feasibility established*
2013 Edinburgh – Dunbar – Berwick Study	*(i) more detailed consideration of non-rail options (broadly from STAG Part 1) and (ii) developing the business case for rail further*
GRIP Stage 3 - Option Selection Report 30th November 15	*Network Rail development and assessment of options*
2016 Business case update	*Addendum to 2013 study to reflect Network Rail Report*

Figure 1 Schedule of Transport Studies by various stakeholders

Scottish Planning Policy (SPP) published in June 2014, sets out national planning policy. It introduced a presumption in favour of development that contributes to sustainable development. In particular, this supports delivery of infrastructure, e.g. transport and prioritises sustainable and active travel choices, such as walking, cycling and public transport. The Connected Places Policy states "The planning system should support developments that

- optimise the use of existing infrastructure;
- reduce the need to travel;
- provide safe and convenient opportunities for walking and cycling for both active travel and recreation, and facilitate travel by public transport;
- enable the integration of transport modes; and
- facilitate freight movement by rail or water."

The construction of a new station at East Linton addresses a number of these issues and are fully evaluated in the Transport Assessment.

Regionally, The South East Scotland (SES)plan 2013, establishes the planning policy direction with regard to a new station at East Linton and the East Lothian Local development plan 2018 supports a new rail station to promote improved connections to Edinburgh via further sustainable transport options. The plan safeguards the site accessed via Andrew Meikle Grove to the south of the east coast mainline for a future rail station.

2.1 Context

2.1.1 Historical Context

'Lintoun' is identified on the Roy Lowlands map of 1750 with a number of buildings along the north (east) bank of the River Tyne and an established bridge crossing the river on the main

Edinburgh to London Road. The change of name to East Linton was a direct result of the construction of the railway station on the new North British Railway between Edinburgh and Berwick, opened in 1846, following which it was necessary to distinguish the village from West Linton.
A series of buildings along the platform and the 'Station House' are evident on the early maps. Sidings to the south of mainline are also evident.

The 1890's Ordnance Survey shows a footbridge to the east of the station (at location of existing footbridge) and further east a Signal Box and goods shed with crane in the sidings. The station buildings and station house (Figure 2), now a private dwelling, are constructed in red sandstone with ashlar quoins and slate roofs. There was a large covered area which provided direct access to the platform.

Figure 2 Original East Linton Station (private dwelling)

East Linton Station closed May 1964 following the recommendations of The Beeching Report. The closest railway stations are at Drem and Dunbar.

2.1.2 Local Context

East Linton is bypassed to the south by the A1 with junctions approximately 4 miles east and west of the village. It is assumed that the existing Dunbar station will service the bulk of passengers to the east of the village with the new station potentially diverting some passengers from Haddington and west of East Linton away from Drem toward East Linton due to the better road connections via the A1.

The land immediately south west of the station site is residential with the housing immediately adjacent to the railway station site having been developed by Miller homes and comprising

villas with rendered walls and tiled roofs. Further land on Pencraig Hill is allocated for 100 houses to meet the Strategic Development Plan's Housing Requirements.

North of the station site, the land is safeguarded for Education and Community Facilities (fields) and open space (War Memorial Garden), with surrounding residential areas. The East Linton conservation boundary extends from the local centre across this open space with the railway being the southern boundary. This residential area is part of the Conservation Area with those building fronting the open space primarily part of the Victorian extension to the historic centre. This area is characterised by houses constructed of local stone with slate roofs. Some houses are built of dark, almost purple whinstone with contrasting sandstone dressings.

An area south of the railway is also included in the conservation area, this includes the original station buildings and residential area to both sides of the River Tyne.

Outside the conservation area but a key building within the local context is the category B listed Auction Mart east of the proposed station.

3 Design and Access Statement

3.1 Development of the Concept Design

The proposed station design is broadly a development of the preferred option from the Network Rail option selection process with a significant change being for the platform to platform access to be via a footbridge with lifts in lieu of the previous intent to use the underpass and ramps.

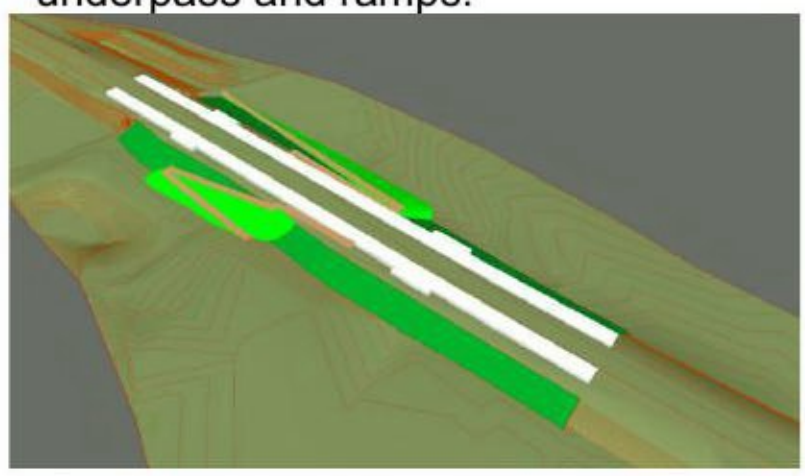

Figure 3 GRIP 3 concept: ramps and underpass

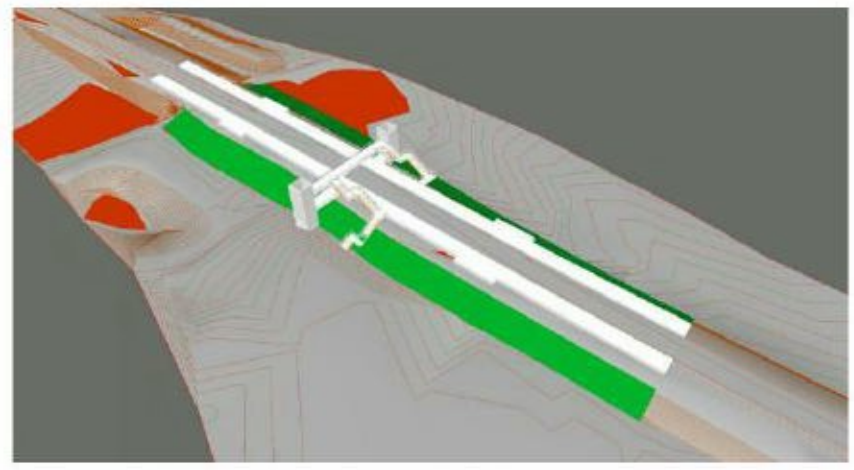

Figure 4 GRIP4 feasibility: lifts and footbridge

Consultation regarding this change comprised a meeting of Transport Scotland, Network Rail, BAM Nuttall and Arup in December 2019 at which a feasibility study of three options for platform to platform access was presented. These were: ramps and underpass, lifts and existing underpass, lifts and bridge. A further option issued in January 2020 assessed lifts and a new underpass. The lift and bridge option was selected for development.

In particular this option addresses the potential negative impacts for those older and disabled persons identified within Network Rail's Diversity Impact Assessment for the project. The footbridge provides the shortest trail route between the car park and platforms and between platforms and reflects a wider programme within the industry to provide footbridges with lifts to ensure better inclusivity at stations. This reflected the requirements of BS8300 and referenced in the DfT/ Transport Scotland Code of Practice, to limit the rise of ramp flights to no more than 2 metres i.e. any greater change in vertical height should be by lifts. This option also addressed key issues with minimal width and clearance of underpass width, drainage, ownership and maintenance responsibility of the underpass and the route through the underpass which is a core route.

3.2 Location

Following from the Network Rail Option Selection report and Local Development Plan the proposed location of the station is determined by land safeguarded for the station. The station site (Figure 5) is within 400m of the local centre with existing connections to the local road network for pedestrians, cyclists and drivers.

The existing railway is on an embankment approximately 3-3.5m above the adjacent land (fields/ park) in the area of the proposed station. Review of 'streetview' images of the railway from East Linton Primary and those local roads connecting to the War Memorial Gardens to the north of the railway indicates the existing OLE masts are clearly visible against the skyline illustrating the proposed station structures, in particular the footbridge, will have significant visual impact from these locations. However, the close views and density of buildings along the main street of the historic centre do not allow for views to the existing railway and the character of this street will not be affected by the proposals. The landscape and visual assessment to support the planning submission will include graphics to illustrate the station from key viewpoints as agreed with the Local Authority during consultation.

In assessing the impact of the station from the wider context, the council have highlighted views from Pencraig Hill and Drylaw Wood as requiring illustration. In reviewing the approach from Pencraig Hill, with its high elevation above the village, it is clear that the new footbridge although visible (as existing OLE gantries are visible) will not affect the skyline nor obscure the view toward the church spire or auction mart. Similarly, the views from Drylaw Hill are from an elevated position and while the upper part of the footbridge will be visible, the structure will not obscure the views of the spire or the open countryside beyond the settlement.

Figure 5 View of station site from core path

3.3 Access Road and Carpark

The station road access is via the existing spur constructed for the railway site from the Miller Homes development on Andrew Meikle Way (Figure 6). All vehicular traffic will be from the B1049 via Orchardfield and Andrew Meikle way.

The detail related to the access is in the drawings supporting the submission and Transport Assessment Report 161777-BNU-REP-ECV-000003. The station car park will be a one-way road system with access for fire tenders. The car park is designed to maximise the available car parking within the safeguarded site area. This has created a total of 128 spaces including provision of 6 accessible spaces and a further 2 maintenance vehicle parking spaces. This seeks to mitigate the potential for nuisance parking in nearby residential roads. The station car park is designed to rail standards but is intended for adoption and maintenance by the local authority. Vehicle charging point provision has been increased from the original brief following consultation with the local authority and further to new Transport Scotland guidance and will be provided to 15% of spaces. The Local Authority has made specific request the EVC spaces are located furthest from the access to the platforms. Open 'soft' areas within car park are to be planted with low shrubs. The boundary of the car park is to be fenced with a low timber rail fence.

Pedestrian access to the station is on new footpaths connected to the existing road and path network. To minimise walking routes, it is necessary to provide crossing points within the car park. Following consultation with the local authority, the proposal further provides a new access path between the War Memorial Gardens and playing fields. This new path will facilitate pedestrian access from the local centre to the station. This path will link directly to vertical circulation routes to the platform. All paths to the station are reasonably level and provide inclusive routes to the station.

Figure 6 Spur from Andrew Meikle Way

The car park is designed with a SUDS system to attenuate the surface water drainage prior to this entering the existing Scottish Water network with discharge to the adjacent SUDS pond. This significantly contributes to the sustainability of the station. Where there is a requirement to relocate existing young trees to accommodate the drainage proposals it is intended these are replanted to the east of the station car park.

The car park design is in accordance with the DFT Code of Practice for accessible car parking spaces with 5% allocation of blue badge spaces. These spaces are located as close as possible to the step free route to the platform to minimise the walking distance for persons of reduced mobility.

There is a drop off space provided at the station for private vehicles and capacity to accommodate a long wheel base vans for local bus services. Interchange to regular bus services is via existing bus stops on the main street within 400m of the station to the north and on B1407 to the south. The residential area through which the station car park is accessed would be adversely affected by a regular bus route served by large buses through the area. The existing public transport provision appears to provide a two-hourly service between Dunbar and North Berwick (via local centre) and an hourly Dunbar – Haddington service from the B1407. The new rail service will significantly improve public transport connections from East Linton to the immediate region and beyond.

A waiting shelter will be provided within the car park. This will be a similar structure to the platform shelters, highly glazed with robust, stainless steel finishes and seating.

There is to be provision for cycle storage (19no spaces) in sheltered racks within the station car park. In the absence of any local guidelines and following consultation with the Local

Authority (14 May 2020), this provision is based on Cycling by Design standard of 5 spaces per hundred peak hour passengers. The cycle storage area is located to avoid the crossover of routes of cyclists arriving at the station and for those passengers moving between the accessible parking spaces and the footbridge lift. The racks and shelter structures will be galvanised steel structures with 'glazed' canopies.

The car park lighting is to be LED fitments on 8m high galvanised steel, fixed lighting columns. These fittings are based on East Lothian Roads Department requirements. The impact of this and the platform lighting is assessed in Light Impact Assessment 161777-BNU-REP-EDS-000001.

Signage will be provided at the station in accordance with Transport Scotland's Identity Guidelines for stations. This will include a Totem Sign with the British Rail Double Arrow symbol and station name at the entrance to the station and other signage as required for operational and wayfinding purposes.

3.4 Platform Design

The new platforms will be constructed on top of the existing railway embankment, temporarily extended on the south embankment for construction access, using precast concrete cross wall construction with solid concrete slabs and block paving surfacing. The location of the platforms along the track and relative to the station entrance and car park is determined by permanent way and operational restrictions. In particular, the location of Markle crossing and the track curvature has determined the platform location on the existing straight. Platform lengths are designed for 8 car sets. The platforms are to be 4m wide to allow for a 1m zone for platform furniture and equipment ensuring these are at least the minimum distance clear of platform edge as required by railway safety and accessibility standards. The platforms will be widened locally for the platform shelters, station access stair and footbridge structure. The shelters will be highly glazed robust structures similar to those used elsewhere on the rail network with stainless steel structure and infill panels.

The platforms will have a 1500mm high galvanised steel fence barrier to the rear fixed to a continuous 200mm high concrete upstand. This upstand will be locally widened at lighting column bases. The platform lighting columns will be 5m high galvanised steel base hinged columns with LED fitments.

Seating will be provided on the platforms. This will be consistent with other seating used on the rail network with highly durable finishes and with the seating in the shelters will provide a variety of seating types in compliance with Design Standards for Accessible Stations.

Emergency egress is provided from the platforms in accordance with Network Rail Station Capacity Planning Guidance & Managed Stations Design Guidance and BS 9992:2020 Fire safety in the design, management and use of rail infrastructure — Code of practice. The application of these standards requires the construction of escape stairs within 20m all both of the platform ends which will connect to a footpath at the foot of the embankments. The stair flights to the east end of the platforms will also be the station access stairs. All platform exits are to be 2.4m wide to meet evacuation requirements. The escape stairs are to be lit with handrail LED lighting with LED heads on lighting columns to the paths. Emergency lighting is to be provided throughout the station (platforms, footbridge, and escape routes) with anti-panic lighting provided to platforms and associated shelters.

The design of the platforms and equipment are to railway standards and required for the safe operation of the station. The elevation of the platforms above the existing embankment is not assessed as visually significant, these being low structures. The extent of the necessary fencing to the rear of the platforms will be visually significant but the galvanised finish is highly

durable ensuring the appearance is maintained over time and being dull rather than polished will limit reflectivity that could increase visual impact.

3.5 Access to and between Platforms

The platform access stairs and footbridge are located to coordinate with railway operational equipment and will give access to the eastern end of the platforms. This locates the footbridge approximately a third of the way along the platform as far to the west as possible while maintaining direct connection to the station car park.

Access to platform 1 from the car park is via a structural steel stair above the embankment. This stair is designed to railway and accessible standards with double height handrails with recessed LED fitments in the handrails. Step free access is via the lift serving the station footbridge. This footbridge design is based on the new standard Network Rail 'Ribbon (Open)' footbridge taking account of local site conditions.

The concept proposal of the 'ribbon bridge', developed by Arup and Knight Architects is one of the new standard footbridge designs for stations promoted by Network Rail. The Ribbon bridge design has been developed in response to Network Rail's desire to improve both the passenger experience and the aesthetic quality of new station footbridges applying Network Rail's 'Principles of good design' in particular inclusivity while developing a clear identity of 'railway architecture' that responds to local context and heritage. This is achieved by establishing a standard design with a preferred geometry / principle of the spatial design while allowing for response to local character and heritage by establishing a palette for possible finishes It is intended there is seamless continuation of the station environment when crossing the tracks with the lifts and stairs are orientated to reduce the pedestrian travel distance, creating a very inclusive passenger experience. The overall form is intended as organic without emphasis on individual elements of the structure.

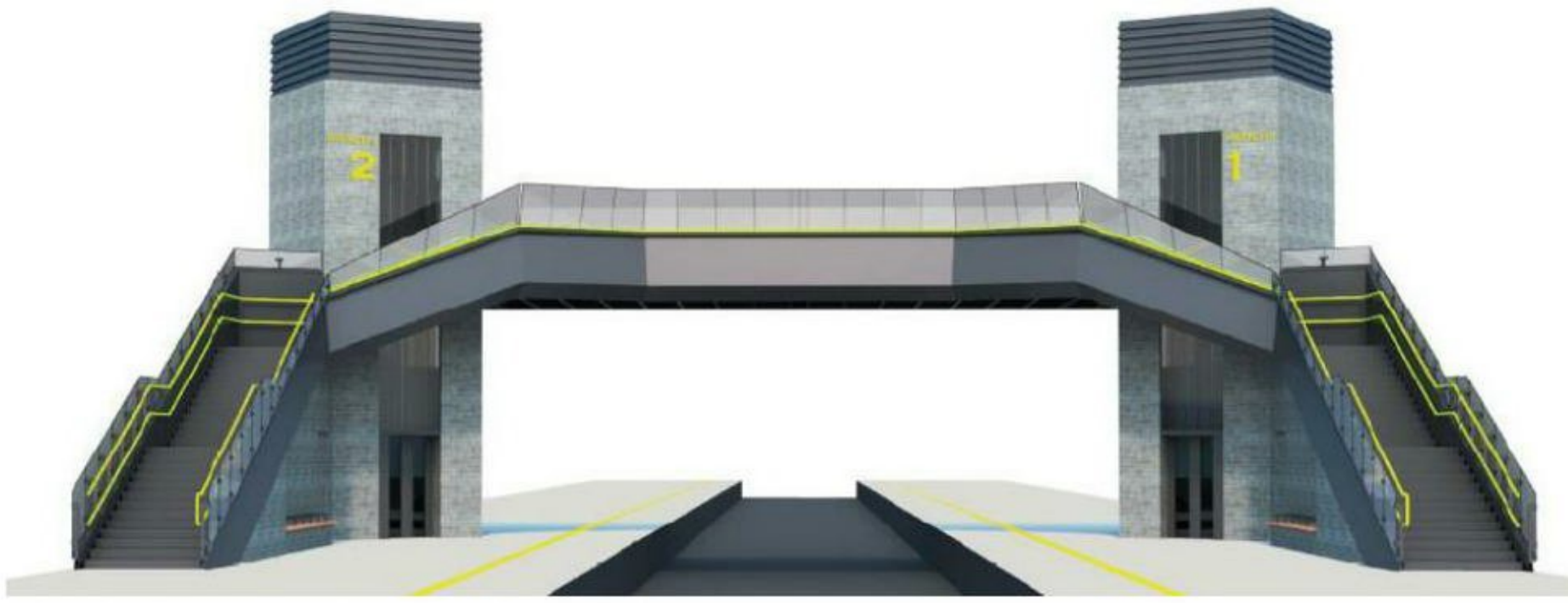

Figure 7 Standard Open Ribbon Bridge Concept

The proposed platform to platform access at East Linton has been developed using the concept of the open ribbon bridge design. This was initially proposed in the Feasibility Presentation regarding lifts in lieu of ramps to Transport Scotland in December 2019.

The existing constraints of the station site however, require variation to the standard bridge concept. In particular, the location of the station platforms on the embankment above the adjacent station car park requires that the platform 2 lift serves the levels of the car park,

platform and bridge deck. Although the footbridge stair and lift was originally conceived as the standard design on platform 1, consultation with the local authority has led to the lift mirroring platform 2 design, to allow for step free entrance and access to the platforms from the north of the station. There will be high levels of pedestrians accessing the station from the north and the limitations of the existing underpass and extended trail route required to use the underpass for step free access motivated the provision of both a lift and stair providing station access from the new access paths across War Memorial Park.

Further, the limitations of constructing this structure on the East Coast Mainline with limited periods for possession and therefore construction periods and the constraint of the existing embankment has determined that the lifts are to be located beyond the existing railway embankment such that there is no requirement for retaining the existing embankment. Consideration was given during design development to the alternative of partially bringing the lift location into the embankment, retaining the 'rotated' shaft and locating the stairs further from the back of platform. However, when assessed against the safety constraints above and realising that this would require a non-feasible three entrance lift to still achieve the conceptual wayfinding route geometry this was discounted. The bridge deck between lift shafts will be extended and a second bridge deck will connect the lifts to the platforms. At platform level the bridge links will require to be narrowed to accommodate the structural supports to the deck above but will still maintain clear widths in accordance with relevant accessibility standards. The orientation of the lift shaft is changed to align with the bridge deck as the reasoned argument in the standard design for a rotated shaft to enhance wayfinding and visibility is not valid for this arrangement and accessibility is best achieved with through and through lift entrances. The footbridge stairs will rise from the widened platform and are elevated steel structures supported on columns. This is an open structure compared to the standard design.

The changes to the layout and geometry of the footbridge do impact the desired legibility and wayfinding of the ribbon bridge concept but are deemed necessary to address the significant topographic and constructability constraints of this station while ensuring the bridge provides inclusive access. The design proposals support those passengers with protected characteristics of age, disability, pregnancy/maternity under the Equality Act to achieve inclusive access at the station and ensure they are not disadvantaged with more physically demanding access routes.

The standard design for the bridge parapet is for an inclined structural glass panel above a solid, structural parapet. The glazed element of the parapet ensures views for all passengers crossing the bridge, promoting inclusivity. and is important in reducing the overall impact compared to that a full height solid parapet. Similarly, the stair has a partially glazed parapet.

To accommodate the platform to platform cable routes required at East Linton, there is a service zone to the inside face of the structural bridge parapet. The zone is to be faced with demountable pre-finished, fire rated composite boards surmounted by a feature LED light below a sill flashing projecting from the steel parapet. The sill flashing will be detailed as part of the wayfinding strip of the standard design.

The ribbon bridge design concept allows for the finishes of the lift shaft and motor room to be determined from a pallet of finishes with the selected finish chosen to suit local conditions. This has supported the use of the Argeton ceramic tile cladding system to the walls of the lift shaft and lift motor rooms. The tile is a high-quality, durable material, sympathetic to, but not attempting to replicate the natural sandstone and whinstone of local buildings in the conservation area. It is proposed the colour of Argeton tile is 'red-brown' being closest to the 'purple' whinstone of the area.

Argeton Ceramic Tile cladding (colour Red Brown illustrated; to be confirmed on site) supplied by Taylor Maxwell

Other finishes proposed for the ribbon footbridge are selected recognising both Network Rail Design guidance for the Ribbon bridge and Transport Scotland's Scotrail Identity Guidelines for Stations as:

Dark grey (RAL 7024) for the internal parapet cladding and steelwork to bridge deck and stair

Light grey/ Telegrey 4 (RAL 7047) as per Scotrail identity to provide good colour contrast to the bridge structure and brick tile cladding for the wayfinding band and feature text.

Dark grey (match to RAL 7024) for the high-level louvres and roofing to the lift shaft

Light grey aggregate in polyurethane modified epoxy resin base to bridge deck. This will have visual contrast to the bridge parapet and assist with lighting levels along the bridge deck

It is proposed the handrails are proprietary stainless steel to provide a robust finish, accommodate the proposed recessed lighting and maintain continuity with the handrails on the access and escape stairs

The dark, matt colour of the steelwork and roofing, the natural finish of the brick tile all contribute to reducing the visual impact of what is unavoidably a large structure required to achieve inclusive access between platforms.

4 Conclusion

The proposals for a new station at East Linton, have been developed ensuring the station is inclusive and accessible to all passengers with a strong design identity for the station acknowledging the local context and proximity to the Conservation Area. The development of East Linton Station will bring a range of benefits to the community and is strongly supported by national, regional and local transport strategies and planning policies.