

Tithebarn Link Road Phase 2a, 2b and Tithebarn Pedestrian/Cycle Bridge

Report of the Head of Planning Transportation and Environment

Please note that the following recommendations are subject to consideration and determination by the Cabinet (and confirmation under the provisions of the Council's Constitution) before taking effect.

Recommendation: It is recommended that:

- (a) the Tithebarn Link Road Phase 2b scheme and Tithebarn Pedestrian/Cycle Bridge shown respectively on drawings A11008/72 and B.M.(5064)/100-T1 be approved to proceed to construction at an estimated cost of £5.2 million. In addition, the Tithebarn Link Road Phase 2a scheme budget be increased from £2.228 million to £2.46 million to reflect increased costs due to additional drainage requirements; this gives a total scheme package cost of £7.66m;**
- (b) any Traffic Regulation Orders required be advertised and, if no objections are received, be made and sealed;**
- (c) the Head of Planning, Transportation and Environment, in consultation with the Cabinet Member for Economy, Growth and Cabinet Liaison for Exeter, be given delegated authority to make minor amendments to the scheme design, following consultation with the Local County Council Member.**

1. Summary

This report is seeking approval to complete the Tithebarn Link Road, which is needed to facilitate consented housing development at Tithebarn Green and Mosshayne in East Devon. The scheme mitigates impacts at the busy M5 Junction 29/A30 approach to the city by providing an alternative route for traffic travelling between Exeter and developments in the Growth Point area (i.e. Science Park, SkyPark and Cranbrook).

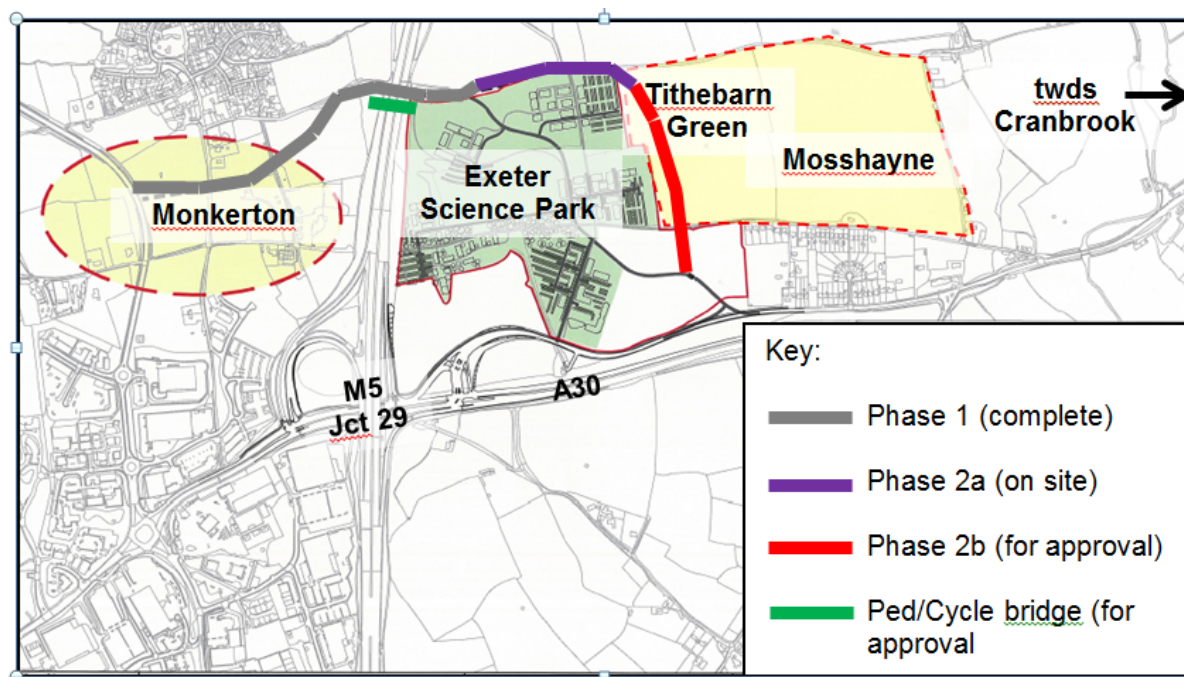
The section of road to be constructed is an extension of the scheme currently on site, having been approved by Cabinet (PTE/15/30) in May 2015 – there is a need to increase the budget in respect of this project to deliver a revised drainage solution. The scheme also includes a new pedestrian/cycle bridge over the M5 which, in combination with high quality pedestrian/cycle facilities on the proposed link road will encourage short distance/local trips to be made sustainably.

The delivery of these schemes has been made possible by successfully securing £4.037 million of grant from Highways England's Growth and Housing Fund programme, which will complement developer contributions.

2. Background/Introduction

The transport strategy for the Exeter and East Devon Growth Point has seen significant transport infrastructure delivered over the past 5 years, which has contributed to rapid housing delivery. This has included the Clyst Honiton Bypass, Junction 29 improvements, Cranbrook Rail Station and the 1st phase of Tithebarn Link Road between Cumberland Way and Anning Drive (northern access to Exeter Science Park). This most recent scheme opened in Summer 2015.

In May 2015 Cabinet approved the full scheme to construct Phase 2a of the Tithebarn link road, which extended east of the Science Park northern Anning Drive junction to the first residential access point for the consented Tithebarn Green (East Devon side) development. This short section of link road began on site in August 2016 and will be complete in March 2017. At the time developer funding had only been secured to enable this first section of road to proceed and it enabled early access to the consented Tithebarn Green development (East Devon side), which could see housebuilders on site from Spring 2017.



Planning and grant funding to match developer contributions has now been secured through Highways England's Growth and Housing Fund, which will complete the final section of the route and deliver a new pedestrian/cycle bridge to achieve the following:

- Provide direct access to new housing development sites at Tithebarn Green (East Devon side) and Mosshayne.
- Improve access to new employment sites, unlocking a significant number of jobs.
- Remove local car trips to ease congestion and improve network resilience on the strategic road network on the A30 corridor and at Junction 29.
- Enable a primary bus route that will connect Cranbrook, Skypark, Science Park and Monkerton with the city centre.
- Enable Anning Drive to revert to a private road, in line with the Exeter Science Park masterplan.

3. Proposal

The Phase 2b link road (see drawing A11008/72) will be 6.5m wide and will be designed in accordance with the Design and Access Statement for the consented Tithebarn Green planning application. It will serve a strategic purpose in terms of relieving traffic impacts on the Strategic Road Network but will incorporate segregated walking and cycling provision and higher quality public realm features (raised tables, trees, benches, block paving), particularly where the scheme passes through the planned neighbourhood centre. It will therefore provide an important multi-modal link for housing, jobs and leisure opportunities. The design minimises cut and fill and land agreements are in place (as set out in the development-related Section 106). The access junctions serving the new development will

be priority junctions with ghost islands; however with scope for future upgrade to signals with increased traffic demand.

New pedestrian and cycle crossings are located on desire lines and offer attractive and convenient links to key destinations. The route will also offer the potential for a primary bus corridor between Cranbrook and the city centre. The scheme will allow Blackhorse Lane west of the last house to become pedestrian/cycle only, with a turning head provided. Affected businesses and residents have been consulted and are satisfied with the proposals. It will eliminate rat running on narrow country lanes and create a largely traffic free route to strengthen sustainable access between Cranbrook, Science Park, Skypark and Exeter City Centre. Where the Blackhorse Lane crosses the link road, a tiger crossing will be provided to enable convenient and direct access for pedestrians and cyclists travelling to or from the Redhayes bridge/Exeter Science Park.

As part of plans for a district heat network serving the area, the link road will also make provision for installation of heat pipes to allow future connection to the development areas. As with the phase currently on site, EOn will be responsible for funding and installing the pipes.

The existing Tithebarn Lane bridge is not wide enough to accommodate a 6.5m road and provide sufficient width for safe pedestrian and cycle access across the motorway. The new pedestrian/cycle bridge (see drawing B.M.(5064)/100-T1) will ensure that high quality, safe and convenient links are created across the motorway, which would otherwise present a major barrier.

In respect of the Phase 2a scheme currently on site, the requested budget increase is due to the need to design a new drainage solution from the scheme that the developers had put forward as part of the outline consent for the Tithebarn Green development. Groundwater levels were higher than expected, which led to extensive discussions with the housebuilder regarding the masterplan for the development and resulted in an enlarged attenuation pond in a new location, with associated pipework and chambers. This also required taking to planning for approval, which incurred additional costs and delay to the project.

4. Consultations/Representations/Technical Data

The Tithebarn Link Road scheme, including pedestrian/cycle bridge were both included in the infrastructure delivery plan, linked to the East Devon Local Plan. The infrastructure requirements to support the planned growth were scrutinised through the Examination in Public process.

The full Tithebarn link road scheme has been subject to a formal consultation process through the planning process. Statutory consultees and members of the public were able to express their views and the plans gained approval as part of the outline planning permission for the Tithebarn Green development (12/1291/MOUT). Local residents and businesses affected by the prohibition of motor vehicles on Blackhorse Lane are satisfied with the proposals. The scheme gained reserved matters approval in June 2016, following a formal consultation process.

5. Financial and Resource Considerations

The Tithebarn Link Road Phase 2a current approved budget is largely funded by developer contributions but will now predominantly be funded by the Growth and Housing Fund grant that has recently been allocated. This means that the majority of the developer funds can now be applied to the Phase 2b Link Road scheme, with this spend largely taking place during 2017/18.

The revised funding package is now as follows but there will be some flexibility across the three schemes:-

| Scheme | Prior Years (LTP/ grant) £million | Growth & Housing Fund Grant £million | Developer contributions £million | Total £million |
|----------------------------|---|--|--|-------------------|
| Phase 2a | 0.061 | 1.932 | 0.467 | 2.460 |
| Phase 2b | 0 | 1.336 | 2.264 | 3.600 |
| Pedestrian/cycle Bridge | 0.088 | 0.769 | 0.743 | 1.600 |
| Total | 0.149 | 4.037 | 3.474 | 7.660 |

The three schemes are primarily being funded by a combination of Highways England's Growth and Housing Fund and forward-funded developer contributions. The two major developments contributing to the schemes are Tithebarn Green and Cranbrook. In previous years (i.e. 2015/16 or earlier), design work for the Phase 2a scheme and bridge was funded using a combination of Local Transport Plan and other Government grant funding.

6. Sustainability and Equality Considerations

Where relevant to the decision, the Equality Act 2010 Public Sector Equality Duty requires decision makers to give due regard to the need to eliminate discrimination, harassment, victimisation and any other prohibited conduct; advance equality by encouraging participation, removing disadvantage, taking account of disabilities and meeting people's needs; and foster good relations between people by tackling prejudice and promoting understanding.

Taking account of age, disability, race/ethnicity (includes Gypsies and Travellers), gender and gender identity, religion and belief, sexual orientation, pregnant women/new and breastfeeding mothers, marriage/civil partnership status in coming to a decision, a decision maker may also consider other relevant factors such as caring responsibilities, rural isolation or socio-economic disadvantage.

An Impact Assessment has been prepared for the proposals which has been circulated separately to Cabinet Members and also is available on the Council's website at: <https://new.devon.gov.uk/impact/tithebarnphase2/>, which Members will need to consider for the purposes of this item.

Measures have been taken to include facilities for vulnerable road users including people with disabilities or reduced mobility so that they can cross the link road safely. In particular, this has included consideration of routes to school and accessibility for all to the neighbourhood centre. Pedestrians and cyclists have been segregated to try and minimise conflicts.

7. Carbon and Economic Impact Considerations

The completion of phase 2 of the link road is expected to reduce queuing and journey times on the busy A30 Honiton Road corridor, with an improved flow of traffic. This may see slight improvements in carbon emissions.

The link road will directly serve 580 dwellings at Tithebarn Green and 900 dwellings at Mosshayne. It also enables Cranbrook to expand beyond 3500 dwellings, thereby significantly boosting economic development in the Growth Point area.

8. Legal Considerations

Any traffic regulation orders will be advertised in accordance with the Local Authorities' Traffic Orders (Procedure) (England and Wales) Regulations 1996.

9. Risk Management Considerations

The key risks for such infrastructure projects relate to land acquisition, environmental impact, planning and funding. There are no land issues relating to either scheme as there are agreements in place to enable construction. Planning permission has been secured for the link road; and environmental mitigation measures have also been agreed, with planting and flood risk interventions being implemented as part of the scheme currently on site.

The funding gap on the project has been resolved; however, it will require forward funding of Section 106 funds as the triggers for payment are yet to be reached. These payments will be forthcoming as developers are currently on site at Tithebarn Green on the Exeter side of the motorway and housebuilders are preparing their reserved matters applications for the East Devon side. The Cranbrook development continues to grow at a steady rate of construction.

10. Public Health Impacts

Both the schemes will enhance walking and cycling opportunities in the area, strengthening the East-West cycle route between Cranbrook and the city centre but also creating safer, attractive routes for short distance trips, including links to the neighbourhood centre and Exeter Science Park, which boasts a high quality environment. There may also be fewer accidents at Moor Lane roundabout due to the reduction in traffic using this busy corridor.

The road is also expected to have a slight positive impact upon air quality as it will better distribute traffic between the Heavitree Road and Pinhoe Road corridors into the city centre.

11. Options/Alternatives

Do Nothing

A decision not to build phase 2b of the link road would firstly limit the level of development that could be delivered at Tithebarn Green (East Devon side) / Mosshayne and would also mean the continued use of Science Park drive for all public traffic. Use of Anning Drive was only intended to be on an interim basis and was agreed with Science Park as a way of allowing strategic developments to progress, including the MET Office Supercomputer on Science Park itself. Longer term, there were concerns that increasing traffic using the Science Park campus would reduce its attractiveness for potential investors. For these reasons, doing nothing is not considered an option.

Alternative alignments

Several alignment options were considered; however, the current design is the most deliverable, as it minimises cut and fill and only involves one landowner.

12. Reason for Recommendation/Conclusion

The link road scheme importantly helps unlock housing development at Tithebarn Green and Mosshayne and will help address future issues of traffic queuing back from Moor Lane roundabout, which are expected to impact on the operation of Junction 29. It will therefore

provide greater resilience on the local and strategic road network, which is consistent with the aims of the Local Transport Plan; it will also serve as a potential bus corridor, benefitting existing and new residents and workers in the area. The link road, by restricting motorised vehicular access on Blackhorse Lane, will create a stronger, high quality strategic cycle corridor connecting strategic housing and job sites in Exeter with, Exeter Science Park, SkyPark and Cranbrook. The new pedestrian/cycle bridge alongside the segregated footway and cycleways will create a better environment for pedestrians and cyclists.

Dave Black
Head of Planning, Transportation and Environment

Electoral Divisions: Broadclyst and Whimble

Cabinet Member for Economy, Growth and Cabinet Liaison for Exeter: Councillor Andrew Leadbetter

Chief Officer for Communities, Public Health, Environment and Prosperity: Dr Virginia Pearson

Local Government Act 1972: List of Background Papers

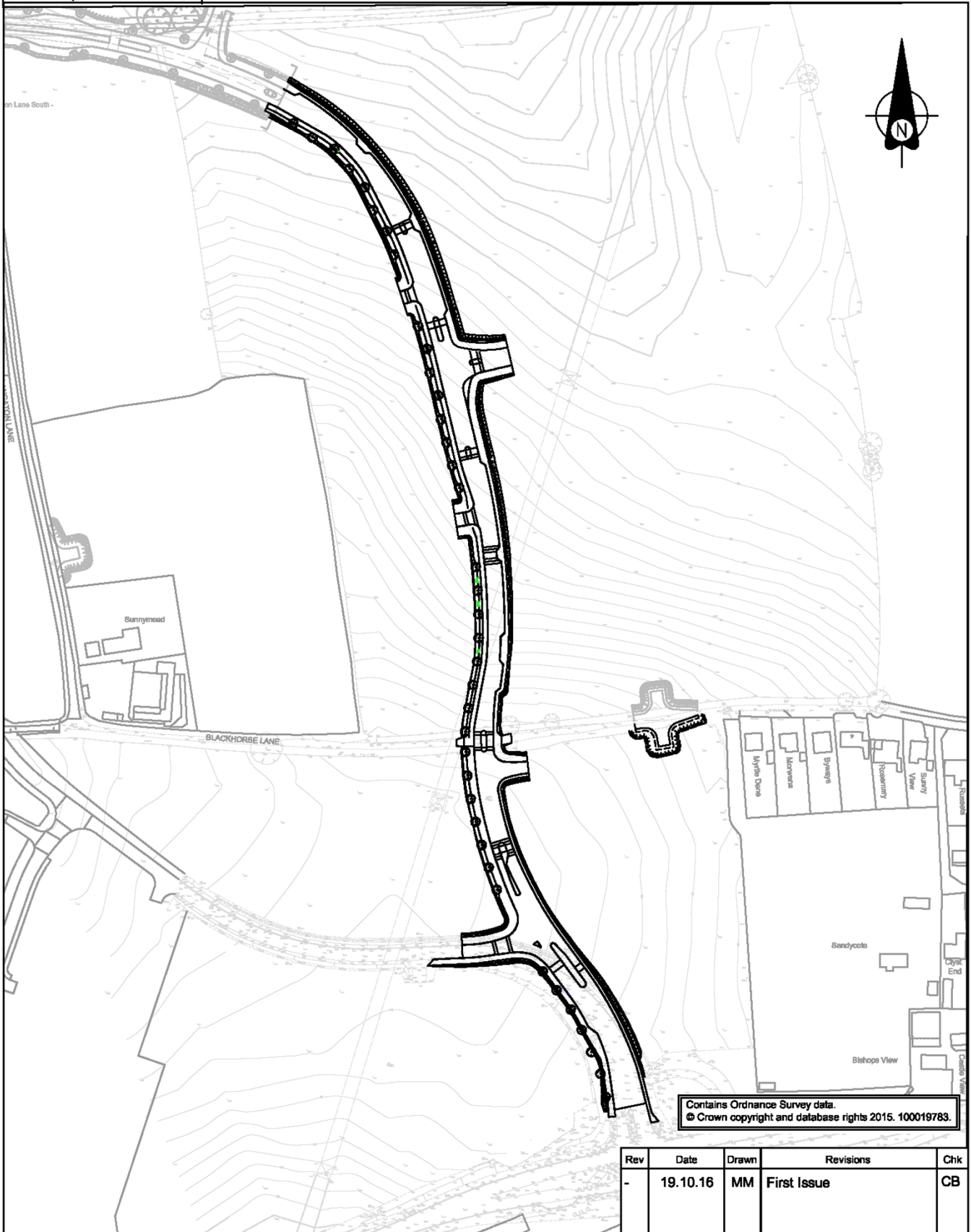
Contact for enquiries: Jamie Hulland

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Tel No: (01392) 383234

| Background Paper | Date | File Reference |
|----------------------|--------------|---|
| 1. Impact Assessment | January 2017 | https://new.devon.gov.uk/impact/tithebarnphase2/ |

jh190117cab Tithebarn Link Road Phase 2a, 2b and Tithebarn Pedestrian/Cycle Bridge
hk 06 310117



| Rev | Date | Drawn | Revisions | Chk |
|-----|----------|-------|-------------|-----|
| - | 19.10.16 | MM | First Issue | CB |



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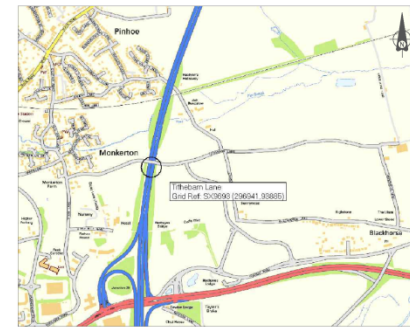
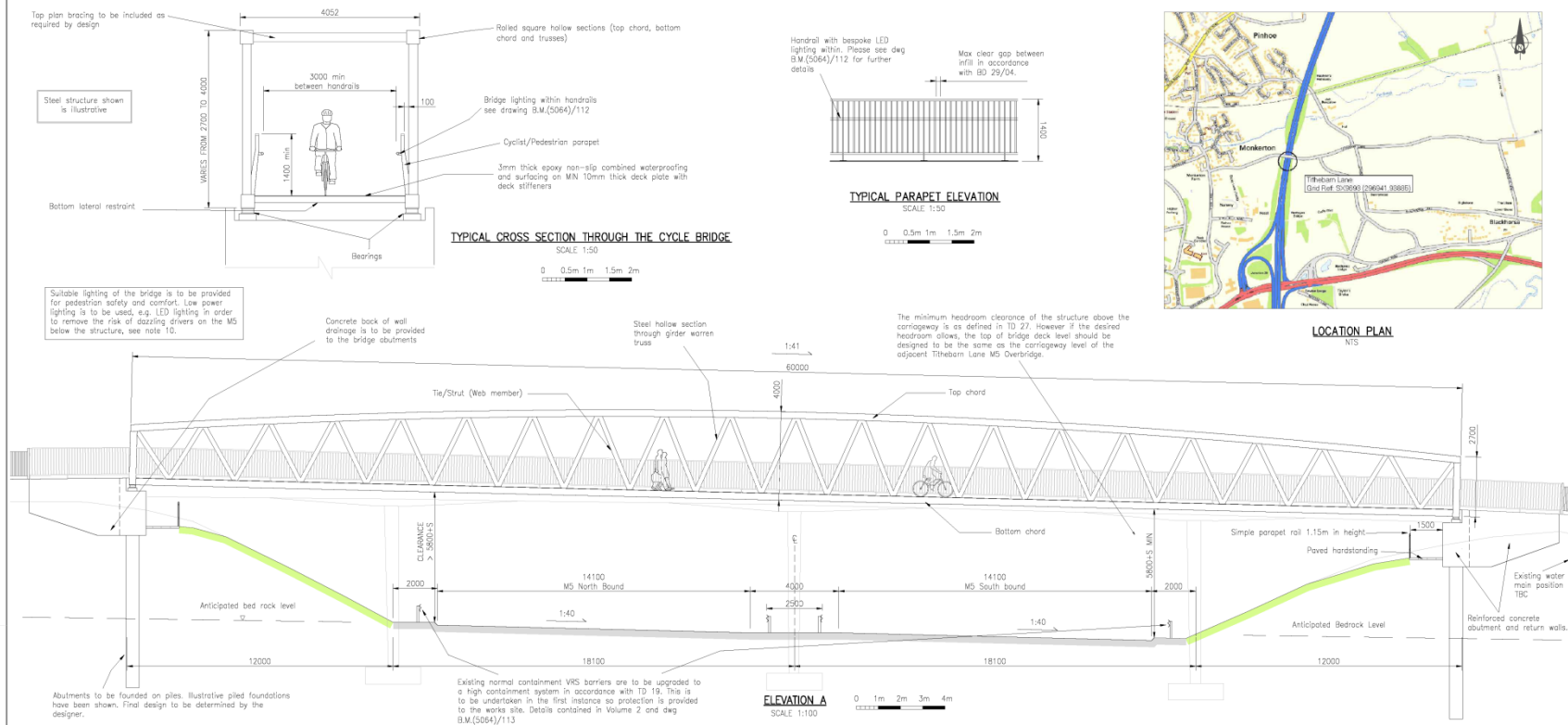
TITLE

Blackhorse Lane
Link Road
Exeter
Southern Phase

Cabinet Report- Blackhorse Link Road Phase 2b

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|----------------|-----------|----------|
| drawing number | A11008/72 | Revision |
| scale(s) | 1:2500 | size |
| | | A4 |

LOCATION PLAN
NTS

Do not scale from this drawing in either hard or electronic format. No responsibility is accepted where this drawing is used in circumstances other than that for which it was originally prepared and issued.

NOTES

- The Structural Form of the bridge shall be a Warren Girder truss unless agreed otherwise with FM.
- The information is included in Specification Appendix 1/17 IV & Mainway Penetration and 18/7 Structural Steelwork.
- All Leads in metres and to total datum.
- All Dimensions are Indicative and in millimetres unless stated otherwise.
- The Design and Check of the bridge superstructure and infrastructure shall be in accordance with the Highway England document - TM65 (Design Manual for Roads and Bridges) 802/12 - Technical Approval of Highway Structures.
The bridge will be category 3.
Devon County Council will provide A.L.P. Approval in Principle based on European design. Design calculations will be required to be submitted for TMA approval.
Design and Check certificates will be required and signatories shall be Chartered Civil or Structural Engineers, who possess experience of steel bridge design to Eurocodes and appropriate engineering qualifications (see Clause 2.4.1 of the manual mentioned above).
The bridge and its approaches should be designed in accordance with BS5400.
- Beatings shall be designed to meet requirements and shall be agreed by the FM. App 21/1 Details and Properties to be supplied at tender stage.
- Steelwork:
Steel Sections to be in accordance with BS EN 10210 grade S355 J2 R unless agreed with the FM.
Steel Plate to be in accordance with BS EN 10210 grade S355 J2 R unless agreed with the FM.
Through thickness properties shall be in accordance with BS EN 22553.
Reference temperature for steelwork is as stated in Appendix 18/7 by contractor and agreed with the FM.
Steel Symbols to be in accordance with BS EN 22553.
- Protective Treatment shall be in accordance with App 18/1. Colour Blue (BS4800 25 C 33) apart from elements which are grey (BS4800 00 A 03).
- Combined Watermarking and Surfacing shall be designed to requirements given in App 22/2. Systems shall be agreed through a departure to the HE as detailed in the A.P. Details and Properties to be supplied at tender stage.
- Lighting see A.P. document for the structure & dwg B.M.(5064)/112.
- Bridge deck separation joint shall be designed to meet requirements and shall be agreed by the FM. App 23/1 Details and Properties to be supplied at tender stage.
- Structural Concrete is to be designed and specified as stated in Appendix 17 and as agreed in the A.P. See design to be agreed with FM.
- Bridge Lift:
The position of the crane to lift the structure into position and the temporary works required to do so shall not be agreed and approved with the FM and Highways England.
The bridge is to be lifted in during an overnight closure of the M5 as detailed on drawings B.M.(5064)/102 & B.M.(5064)/105.
If the structure is applied via both, then cover plates are to be utilised in the final works to connect connection.

| Rev | Date | Drawn | Revisions | Chk |
|-----|------------|-------|---------------------|-----|
| T0 | JAN 16 | RM | Creation of drawing | RM |
| T1 | 09.01.2017 | CA | Tender Issue | MC |



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JOBS

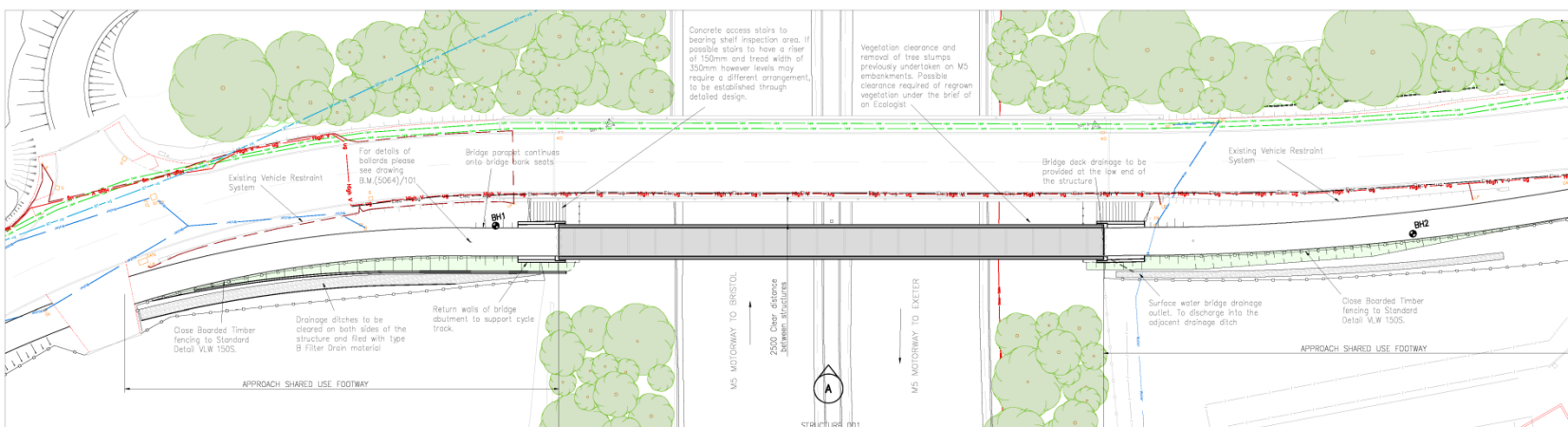
TITHEBARN LANE CYCLE
BRIDGE

DRAWING TITLE

EMPLOYERS
REQUIREMENTS

GENERAL ARRANGEMENT

| | | | |
|----------------|----------------|----------|----|
| Drawing number | B.M.(5064)/100 | Revision | T1 |
| Scale | AS SHOWN | Size | A1 |



THIS DRAWING IS IN COLOUR



1. WORKING ADJACENT TO LIVE ROAD/CARRYWAY



2. TEMPORARY WORKS FOR THE CONSTRUCTION AND TO BE REMOVED



3. BURIED SERVICES



4. WORKING ADJACENT TO LIVE MOTORWAY



5. ERECTION OF STRUCTURE



6. CALLS FROM HEIGHT FROM THE NEW STRUCTURE



7. TEMPORARY DRAINAGE TO NOT IMPACT M5

TENDER
ISSUE