

# Place Scrutiny Commission Agenda



**Date:** Monday, 24 July 2017

**Time:** 6.30 pm

**Venue:** The Writing Room - City Hall, College Green,  
Bristol, BS1 5TR

## **Distribution:**

**Councillors:** Jude English (Chair), Tom Brook, Tony Carey, Paul Goggin, Sultan Khan, Jon Wellington, Mark Weston, Mark Wright, Jerome Thomas, Nicola Beech and Fabian Breckels

**Copies to:** Alistair Reid (Service Director - Economy), Bill Edrich (Service Director - Energy), Peter Mann (Service Director - Transport), Zoe Willcox (Service Director - Planning), Robert Orrett (Service Director Property), Annabel Scholes (Interim Service Director Finance), Johanna Holmes (Policy Advisor - Scrutiny) and Louise Baker (DLT Support Manager Place)

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**Date:** Friday, 14 July 2017



# Agenda

## 1. Welcome, Introductions and Safety Information

## 2. Apologies for Absence and Substitutions

## 3. Declarations of Interest

To note any declarations of interest from the Councillors. They are asked to indicate the relevant agenda item, the nature of the interest and in particular whether it is a **disclosable pecuniary interest**.

Any declarations of interest made at the meeting which is not on the register of interests should be notified to the Monitoring Officer for inclusion.

## 4. Minutes of Previous Meeting and Action Sheet

To agree the minutes of the previous meeting as a correct record.

**(Pages 4 - 12)**

## 5. Chair's Business

To note any announcements from the Chair

## 6. Public Forum

Up to 30 minutes is allowed for this item

Any member of the public or Councillor may participate in Public Forum. The detailed arrangements for so doing are set out in the Public Information Sheet at the back of this agenda. Public Forum items should be emailed to [democratic.services@bristol.gov.uk](mailto:democratic.services@bristol.gov.uk) and please note that the following deadlines will apply in relation to this meeting:-

Questions - Written questions must be received 3 clear working days prior to the meeting. For this meeting, this means that your question(s) must be received in this office at the latest by 5 pm on **Tuesday 18<sup>th</sup> July 2017**

Petitions and Statements - Petitions and statements must be received on the working day prior to the meeting. For this meeting this means that your submission must be received in this office at the latest by 12.00 noon on **Friday 21<sup>st</sup> July 2017**



**7. Annual Business Report**

**(Pages 13 - 17)**

**8. Cribbs Patchway New Neighbourhood - Update & Task & Finish Group Scoping**

**(Pages 18 - 22)**

**9. Council Assets: Task & Finish Group - Scoping**

A verbal discussion for Members to agree the role and remit of the proposed Council Assets Task and Finish Group

**10. Prince Street Bridge Report**

**(Pages 23 - 40)**



## Bristol City Council Minutes of the Place Scrutiny Commission

16 March 2017 at 2.00 pm



### **Members Present:-**

**Councillors:** Jude English (Chair), Tom Brook, Tony Carey, Paul Goggin, Sultan Khan, Steve Pearce, Mhairi Threlfall, Donald Alexander, Lesley Alexander, Anthony Negus and Charlie Bolton

### **Officers in Attendance:-**

Bill Edrich (Service Director - Energy) and Claudette Campbell (Democratic Services Officer)

### **1. Welcome, Introductions and Safety Information**

The Chair welcome those present and led introductions.

### **2. Apologies for Absence and Substitutions**

The following apologies and substitutions were noted;

- Councillor Thomas substitution Councillor Bolton
- Councillor Weston substitution Councillor L Alexander
- Councillor Wellington substitution Councillor D Alexander
- Councillor Wright substitution Councillor Negus

### **3. Declarations of Interest**

None

### **4. Public Forum**

David Redgewell was invited to speak to his statement and during the course of his presentation the following was mentioned.

- a. That the car park attached to the central bus station depot was not closed because of an extension being built by the owners of the student accommodation block.  
Action: Peter Mann to be advised



## 5. Minutes of Previous Meeting

Resolved that the Minutes of the meeting of the 13<sup>th</sup> February 2017 be agreed as a correct record and signed by the Chair.

## 6. Action Sheet

Agreed to note the position of the Action Sheet.

## 7. Chair's Business

The chair on behalf of committee members acknowledged and congratulated Mark Wright on the safe arrival of his child.

- a. OSM would be facilitating a meeting on the future format of the scrutiny process. All invited to share views to the Chair. Those in attendance would include Party Group Leaders, representatives from Cabinet and the Mayor with a representative from the LGA. It was noted that Place Scrutiny would be well represented at the event.
- b. Members considered the recent announcement that there was a significant funding shortfall for the MetroWest Phase 1 project that included reopening the train line from Bristol to Portishead and asked that a statement to summarise their concerns be submitted to the Joint Transport Board at their meeting on 17<sup>th</sup> March 2017. It is attached here at appendix A.

## 8. Work Programme

- a. With the possible formatting of Place Scrutiny the work programme discussion was deferred.
- b. The agenda items for the next schedule meeting 27<sup>th</sup> April, would need to be considered as it would occur during the pre-election period with strict rules on procedure.

## 9. Climate Change and Energy Security Framework - Alex Minshull

The Members of the Commission requested and were provided with an update on the 2 grant applications for Air Quality projects.

- a. The team had successful obtain funding for the Feasibility and design for a clean Air Zone and the unsuccessful bid was for the Communication and Engagement work.



- b. Work was underway to move the project forward with the intention of identifying as many of the Council's business activities that connect with the project.
- c. Members requested a briefing on progress and for involvement in the air quality work group being led by Cabinet Members Cllr Bradshaw & Cllr Hance. **Action: Alex Minshull to provide members with details**

The discussion then returned to the report on Climate Change and Energy Security Framework.

Members were provided with a definition of a 'clean air zone': it is a district or region that has regulations to limit emissions of gasses such as nitrogen dioxide (NO<sub>2</sub>) and particulate matter. Such regulations typically target cities areas that have a high population or areas that historically had dangerously poor air quality.

The report and presentation provided members with the back ground on the Climate change and energy principles adopted by the Council with a commitment to 'put Bristol on course to be run entirely on clean energy by 2050'.

Members attention was drawn to the slides in the report that detailed:

- 2005 – 2014 Emission – Tonnes Carbon Dioxide output by Transport, Domestic and Industry and commercial against the target line
- 2005 – 2014 Emissions by Sector
- 2005 – 2050 Targets and Trends

The following was noted from the discussion:

- a. The target and trends slide detailed the projects aspiration also demonstrating that the City was on track to deliver its aspiration. All was asked to note that progressing to the end goal would become harder over the next few years. Within the time line there was no identifiable point at which that progress would get hard but those involved recognised that achieving the end goal would be hard. Difficulties exist because current systems were not geared up to support the delivery of the ambition. The hope is that future development of technology would reduce cost and ease direction of travel.
- b. Renewable energy production was impacted by the inability to switch of and store same. Therefore the volumes required to support the requirements of thriving city would be huge.
- c. Work on the Climate change framework continued with integrated work with other service areas. The principle of one Council drives all interaction and this would extend to all liaison with the West of England and Enterprise partnerships.



- d. If new houses are built to meet the current Bristol standards on carbon emissions approximately 240 tonnes would be added to the target. With many new builds underway and approximately 70% of the required target already built there would be an impact on the target.

### **Resolved to note to the report**

## **10 Energy Services - Bill Edrich**

### Energy presentation

The commission received a report and presentation from Bill Edrich, Service Director Energy and the following team members; Mareike Schmidt, Paul Barker and David White.

Bill Edrich outlined the report and presentation to the Commission.

- The team had attracted national and international recognition for the work done in this area.
- The funding obtained had ensured that the impact on city council budget was almost cost neutral
- The city council energy bill remain static in a time when energy prices continue to grow this can be credited to the work undertaken by the team together with the reduction of council owned/leased properties.
- Future improvements to the National Grid is on the way with the industry integrating digital technology into their operation that should open up infinite future possibilities.
- Since 2010 The National Grid's customer base has extend to approximately 6000 customers.

### Mareike Schmidt

The European Local Energy Assistance (ELENA) Programme technical assistance grant was signed off by the European Investment Bank in March 2012 and it is now at the end of the 4 year programme.

The funding of £2million provided for a programme of work across four areas:

- Set up of a municipal energy company
  - Energy saving measures on social and private housing properties
  - Energy efficiency measures on public buildings
  - Solar PV installations on social housing and public sector building
- a. The team are now viewed as Market leaders amongst local authorities finding themselves in the position of being sought after to share learning from the work done.
- b. The Programme had clear guidelines for delivery with a leverage factor of 25:1 applicable. This meant for every pound spent 25 times the investment had to be delivered.



- c. Overall learning was that in place of the procurement exercise for each of the four strands of work, a single procurement procedure to cover all four strands of work for the programme would have been a more productive way forward.
- d. The authority has been invited to make a further bid for funding which is a compliment to the team and reflect the high regard in which the team is held.

#### Warm Up Bristol – Mareike Schmidt

The domestic energy efficiency programme was established in January 2014 with funding of £7.3m obtained from the Department of Energy & Climate Change (DECC) in July 2014 leading to the launch of Warm Up Bristol in October 2014.

The Service Manager provided an overview of the situation regarding the failure of the delivery partner Climate Energy for the programme and the steps taken in mitigation.

- a. Members were advised that Warm Up Bristol programme was a different programme to that provided to social housing tenants of the City Council. The programme provided to social housing tenants is 'Warmer Homes'. Both schemes have similar names and this has given rise to confusion.
  - b. Learning is shared between the Housing Delivery service and the team.
  - c. General view that the brand 'warm up Bristol' brand would have been damaged because of past issues. It was suggested that the programme should be rebranded.
  - d. Clarity was sought on the fund of £300k available for loans to Bristol residents to support energy efficiency works. Concern that a loan fund would have limited capacity for continued support. The Energy Service has been lobbying government on making more of the funds available to the Wessex loan fund to continue the delivery of energy efficiency measures.
  - e. Community energy fund supports local work for example the Cheese project – Cold Homes Energy Efficiency Survey Experts – the project provide a services that assist residences/home owners in specific areas to identify cold spots and heat loss from their houses, with the use of thermal imagining and the visit of an expert.
  - f. **Action** list of community energy projects to be provided to members.
- Heat Networks - Paul Barker

The Programme Manager reported on the establishment of the District Heating Networks providing an outline of the different phases of the programme. Outlining progress on completion of phase 1 explained in the July 2014 Cabinet report. The programme continues working to ensure that new developments within the designated area adapt to connect to the heat networks.

- a. The team met with the BEIS the department for business energy and industrial strategy in Bristol citing Bristol as a leading authority on heat network delivery.





- b. Aspiration to make use of the waste heat being generated from Avonmouth by transferring same along a heat network.
- c. Research demonstrated the heat loss along pipe networks was a mere 1% and the aspiration would be that the pipe heat network would develop along the route where other heat networks would be installed as part of new development that would also be fed from Avonmouth heat pipe.
- d. The laying of pipes was complicated because of the number of utility companies that have cables and service pipes underground. Such areas as the Temple quay roundabout had to be navigated carefully and was also impacted because it is one of the busiest roundabout junction London.
- e. Question was asked on moving to water based energy possibly harnessing the water energy around the harbour. Conversations had been had about heating and cooling but at this time there is no move towards this form of technology.

#### Future Ambition

- f. There remains an issue surrounding the city council budget and what would be reasonable to invest into this project.
- g. Current budget
  - £8million existing in capital and in budget
  - £14million of new capital
  - £23million capital to deploy
  - £40million total capital
  - £18 million need to be attracted to complete capital programme
- h. To achieve all ambition approximately £800m to Billion should be spent to achieve 10% saving on the top of the projection.
- i. Essential to source new types of energy and to resolve the storage issue in respect of solar panel energy.
- j. Looking at the proposal for Bristol City Council owning and storing energy on a national grid scale.
- k. Gloucester has £80million investment into pipeline and only an energy service budget of £19million
- l. The project has no plans to move towards geothermal energy.
- m. Consideration is given on where the programme sits. Whilst it remains within Bristol City Council there is less flexibility and financial constraints. Moving to an independent organisation would allow for the consideration of wider risk management.
- n. There is an awareness that the use of Biomass impacts air quality. As an energy option it should be considered alongside other energy producing options.
- o. EU funding allows for the research into all viable options allowing the project to identify where it enables development and what work is undertaken by the city.
- p. Hydrogen which is a by-product from wind farms may be involved in future development.
- q. Acknowledge that Leeds University is currently ahead of the game in this area of work.

## 11 Performance Monitoring (Q3) Barra Mac Ruairi

The Scrutiny members were asked to note the report.



Meeting ended at 4.39 pm

**CHAIR** \_\_\_\_\_





**Place Scrutiny Commission Action Sheet 2016/2017**

Agenda Item	Title of Report/ Description	Action and Deadline	Responsible officer	Action taken and date completed
<b>Action Sheet – 20<sup>th</sup> September 2016</b>				
7 Page 11	Public Forum	Concern was raised about the siting of the bus stop for Megabus. Officers had been working to resolve the issue and discussions would continue. An update was required for the next meeting	Johanna Holmes/ Peter Mann	<p>Officers are investigating maintaining the Megabus, Falcon and other scheduled coach services on Bond Street. However, this would require altering the existing Metrobus stop proposed at this location. This is still a work in progress – we would however welcome feedback from Scrutiny as to the suitability of this proposal.</p> <p>Members requested this action continue until the issue is permanently resolved.</p> <p>April 2017 position statement: 'The option to incorporate the Megabus scheduled coach services, along with the Falcon,</p>

				on Bond Street with the MetroBus stop appears to be feasible. Further consultation with effected parties is presently being undertaken. Confirmation of the arrangements will be made in the next eight weeks’.
<b>Action Sheet – 13th February 2017</b>				
8.	Update December 2015 - Cultural Inquiry Day Recommendation	The Cultural Team will notify the Commission when the ‘Bristol Cultural Education Partnership’ website goes live.	Laura Pye / Johanna Holmes	The website is still currently under construction.
<b>Action Sheet – 16<sup>th</sup> March 2017</b>				
9. Page 12	Climate Change and Energy Security Framework	Members requested a briefing on progress and for involvement in the air quality work group being led by Cabinet Members.	Alex Minshull	An all member briefing is being planned for early August to report the results of the initial phase of the study and consider the options which are proposed to be taken forward for more detailed modelling. Following the adoption of Air Quality as a priority topic for the Scrutiny Work Programme officers will work with the Lead members to brief members appropriately.
10.	Energy Services – Warm Up Bristol	A list of Community Energy Projects to be sent to Members	Mareike Schmidt / Johanna Holmes	Information sent to Members 11/04/2017



# Place Scrutiny Commission

24<sup>th</sup> July 2017

**Report of:** Service Director, Legal & Democratic Services

**Title:** Place Scrutiny Commission Annual Business Report 2017/18

**Ward:** N/A

**Officer Presenting Report:** Johanna Holmes – Scrutiny Advisor  
**Contact Telephone Number:** 0117 90 36898

## Recommendation

- (1) To elect a Vice Chair for the municipal year 2017-2018
- (2) To note the Place Scrutiny Commission Terms of Reference
- (3) To confirm the next meeting date set for 2017/18.
- (4) To note the topics that were selected as priorities for Scrutiny at the OSMB workshop on 26<sup>th</sup> June 2017



## **Context and Proposal**

### **1. Terms of Reference of the Commission**

- I. **As the** Overview and Scrutiny Management Board is currently undertaking a review of the Council's scrutiny arrangements it is proposed that the current scrutiny structure is retained, pending the outcome of the scrutiny review.
- II. The recommendations from the review, including recommendations on a future scrutiny structure, **will therefore be** reported to a future Full Council meeting.
- III. In the interim and at the meeting on 23<sup>rd</sup> May 2017 Full Council established the Place Scrutiny Commission with the following terms of reference:

#### **PLACE SCRUTINY COMMISSION**

##### **Terms of Reference**

###### Overview

The role of the commission is the overview and scrutiny of matters relating to the Place Directorate including property, planning and place strategy, highways and transport management development and regeneration, and the statutory flood risk management scrutiny function.

###### Functions

- I. To ensure that overview and scrutiny directly responds to corporate and public priorities, is used to drive service improvement, provides a focus for policy development and engages members of the public, key stakeholders and partner agencies.
- II. To develop an annual work programme within the total of ten meetings per year allocated to the Commission which concentrates on limited areas for in depth review (including the use of time limited task and finish groups to facilitate this e.g. Select Committees, Working Groups, Inquiry Days) using the following framework:
  - (a) Scrutiny of corporate plans and other major plan priorities with particular reference to those areas where targets are not being met or progress is slow;
  - (b) Input to significant policy developments or service reviews;
  - (c) Review and scrutiny of decisions made, or other action taken in connection with the discharge of any functions which are the responsibility of the Mayor/Executive, functions which are not the responsibility of the Executive, and functions which are the responsibility of any other bodies the Council is authorised to scrutinise.
- III. To make reports and recommendations to Full Council, the Mayor/Executive and/or any other body on matters within their remit and on matters which affect the authority's area or the

inhabitants of that area and to monitor the response, implementation and impact of recommendations.

- IV. To work in collaboration with the Mayor/relevant Executive Member and receive updates from that member on key policy developments, decisions taken or to be taken and progress against corporate priorities.
- V. To report on a quarterly basis to the Overview and Scrutiny Board on progress against the work programme and on any recommendations it makes.

***The Commission is asked to note its terms of reference as agreed by Full Council Recommendation 2)***

2. Confirm the date of the next meeting as: 3:30 pm - 5:30 pm 28th September 2017

***The commission is asked to confirm its next meeting date in 2017/18 (Recommendation 3)***

3. The Commission is asked to note the following topics that were selected as priorities for Scrutiny at the OSMB workshop on 26<sup>th</sup> June 2017. The next steps are for these to be scoped out to enable decisions to be made as to methodology, timescale and resource allocation.

- Parks (becoming cost neutral) – Lead by Cllr Charlie Bolton, Jude English and Gill Kirk
- Council Commissioning and Contracts (to include Social Value) – Lead by Cllrs Graham Morris, Don Alexander, Tom Brook.
- Reducing Demand on Social Services (adults & children’s) - lead by Cllr Brenda Massey and Gill Kirk.
- Council Assets (including strategy, community asset transfer and an acknowledged link to libraries and children centres) – Lead by Cllrs Jude English, Anthony Negus and Brenda Massey, Graham Morris
- Cribbs Patchway New Neighbourhood - lead by Cllrs Tom Brook, Brenda Massey and Geoff Gollop
- Air Quality & Pollution – Lead by Cllrs Gill Kirk, Charlie Bolton and Tom Brook, Jude English
- Children’s Centres – lead by Cllrs Anna Keen and Brenda Massey
- Libraries – lead by Cllrs Anthony Negus, Brenda Massey, Geoff Gollop and Charlie Bolton
- Tower Block Fire Safety – lead by Cllr Charlie Bolton
- MTFP – Lead by Cllr Geoff Gollop, Graham Morris & Don Alexander
- Youth Council – Cllrs Anna Keen and Tom Brook to speak to Youth Council and establish if and how Scrutiny can support them

***The Commission is asked to note the topics that were selected as priorities for Scrutiny at the OSMB workshop on 26<sup>th</sup> June 2017 (Recommendation 4)***

**Policy**

1. N/A

**Consultation**

2. **Internal**  
N/A

3. **External**  
N/A

4. **Other Options Considered**  
  
N/A

5. **Risk Assessment**  
  
N/A

6 **Legal and Resource Implications**  
  
N/A

7. **Public Sector Equality Duties**

Before making a decision, section 149 Equality Act 2010 requires that each decision-maker considers the need to promote equality for persons with the following “protected characteristics”: age, disability, gender reassignment, pregnancy and maternity, race, religion or belief, sex, sexual orientation. Each decision-maker must, therefore, have due regard to the need to:

- i) Eliminate discrimination, harassment, victimisation and any other conduct prohibited under the Equality Act 2010.
- ii) Advance equality of opportunity between persons who share a relevant protected characteristic and those who do not share it. This involves having due regard, in particular, to the need to --
  - remove or minimise disadvantage suffered by persons who share a relevant protected characteristic;
  - take steps to meet the needs of persons who share a relevant protected characteristic that are different from the needs of people who do not share it (in relation to disabled people, this includes, in particular, steps to take account of disabled persons' disabilities);



- encourage persons who share a protected characteristic to participate in public life or in any other activity in which participation by such persons is disproportionately low.
- iii) Foster good relations between persons who share a relevant protected characteristic and those who do not share it. This involves having due regard, in particular, to the need to –
  - tackle prejudice; and
  - promote understanding.

**Appendices:**

None

**LOCAL GOVERNMENT (ACCESS TO INFORMATION) ACT 1985**

**Background Papers:**

None.

## Place Scrutiny Commission

24<sup>th</sup> July 2017



**Report of:** Peter Mann, Service Director - Transport

**Title:** Cribbs Patchway New Neighbourhood Update

**Ward:** Henbury & Brentry, Southmead, Horfield, Henleaze & Westbury –on-Trym, Stoke Bishop (directly), Citywide (indirectly)

**Officer Presenting Report:** Adam Crowther

**Contact Telephone Number:** 0117 9036854

### Recommendations:

This item is to update Members on the progress of Cribbs Patchway New Neighbourhood within South Gloucestershire and the proposed measures for mitigating the impacts on Bristol's transport network.

Recommendation is for Members to discuss what they would like to be updated on going forward.



**Context:**

Cribbs Patchway New Neighbourhood (CPNN) consists of the following principal sites:

Fishpool Hill

Land west of the A4018 (known as Haw Wood)

Filton Airfield

In total, the CPNN will contain around 5,700 new dwellings, local centres, schools, surgeries and employment space (50ha). All sites are located within South Gloucestershire, however there will be significant impact on Bristol's transport network from the increased population, particularly on the A4018 corridor that leads from Cribbs Causeway through Henbury, Westbury and into Bristol's city centre.

South Gloucestershire Council (SGC) have adopted (March 2014) a supplementary planning document (SPD) for the area that sets out the development principals, and required infrastructure, to create the new neighbourhood. In accordance with their Core Strategy policy CS26, SGC require the developments to be comprehensively planned and delivered. To that end, SGC are requiring the landowners to sign up to an overarching landowner's agreement.

In preparing the landowner's agreement, SGC have calculated the required infrastructure and set a contribution per dwelling that each development will be required to make. The timing of payments will be determined in the agreed phasing for each development, but the 'per dwelling' contribution has been set at £5,800. Included in the calculation was the provision of mitigation measures in Bristol on the A4018 and A38/B4056 corridors. Bristol City Council (BCC) and South Gloucestershire Council (SGC) will need to sign a legal agreement to set out the timings of when these monies will be released to BCC.

There are outline planning consents for the principal sites (subject to a planning agreement), however no S106 planning agreements can be signed until the landowner's agreement is complete. The Filton Airfield site changed ownership (sold by BAE Systems to YTL) after outline permission (subject to a planning agreement) had been granted. The new owners are revising the masterplan for the site with a view to submitting a new outline planning application. Officers understand that until this new application has been determined the landowner's agreement will not be signed.

Bristol City Council and SGC have agreed that £4.74m of section 106 contribution will be paid to Bristol for the A4018 corridor mitigations. However in order to provide mitigation measures prior to the development being occupied, BCC are applying to the LEP for funding of £1.875m to design the corridor improvements and construct the first phases. It is critical that corridor improvements are delivered in advance of the CPNN development in order to embed sustainable travel patterns from the outset and contribute to mitigating the increased demand on the transport network that the development will bring.

**Timeline of activity:**

2015: SGC drafted a public transport strategy for CPNN, upon which BCC commented; however no updates have been received since this draft.

2016: BCC's transport development management team received an update from SGC that the Airfield site had changed hands of ownership and the new owners have been working on a new masterplan for this site. The changes proposed include intensifying housing density around proposed transport hubs.

2016: BCC and SGC jointly commissioned a transport study and transport model to be designed for the A4018 corridor.

February 2017: Beginning the process for preparing to bid to the LEP for funding mitigation measures of the development. This will involve taking the proposal to bid for funding up the decision pathway, then submitting a bid to the LEP. We have negotiated with the LEP to bring forward some funding, subject to a full bid being submitted for delivery, to begin the design of the corridor mitigation measures, allowing for extensive engagement with residents and local stakeholders.

March 2017: Results of the transport study were due this month, however following consideration by both South Gloucestershire and Bristol City Councils more scenario testing is required to ensure we have considered all options to improve the capacity of the Crow Lane junction. We need to ensure we have all possible information to work from, as opposed to having limited data in a quicker timeframe. There is no obvious road based solution to the Crow Lane junction due to limited space and the various traffic movements that occur at the roundabout, therefore we must consider all options to best mitigate the impact of the development. The development is not yet beginning on site anyway so we have time to make sure we consider all the options.

May 2017: Cabinet meeting approved the request to submit the bid for mitigation measures along the A4018 corridor, following extensive engagement and consultation that will occur over the summer/autumn of 2017.

Still to come...

July 2017: Begin engagement and consultation with stakeholders and the community to develop measures.

January 2018: Following extensive engagement and design work, the full business case will be submitted to the LEP for funding to deliver the first phases of mitigation along the A4018 corridor.

**Initial thoughts for mitigation:**

The A4018 corridor is congested many times throughout the day, particularly the section from the SGC boundary to the Crow Lane roundabout. The Crow Lane roundabout acts as a pinch point with traffic moving in all directions, not just north to south. The development at CPNN will increase the demand on this corridor significantly.

Consideration must therefore be given to how to most efficiently move increasingly larger numbers of people from the new development and the Cribbs area to Bristol through an area that is already congested, and will face further demand in the future.

Buses carry more people than cars, therefore in order to be able to allow people to move from CPNN to Bristol along this corridor it is clear that priority must be considered for buses. If buses are stuck in the same congestion as cars, there will be no efficient, reliable way of travelling (apart from cycling) along this corridor into Bristol. Opportunities for large numbers of people to travel out of the development without getting stuck in traffic and adding to the congestion, can be ensured by providing priority for buses.

A park and ride site has been identified in the Joint Transport Study to the north of the corridor within South Gloucestershire, which could intercept many car journeys and convert them to bus passengers along the busy corridor. This option would require more consultation with

South Gloucestershire Council and land owners.

The additional scenario tests that are currently being carried out will look at various scenarios both with the provision of bus priority measures along the corridor and without to help make informed decisions on how best to mitigate the impact of CPNN.

### **Next Steps:**

- Consult with Members, stakeholders and the community on the design of mitigation measures to enable movement along the A4018 corridor;
- If successful, receive pinch point funding from the LEP to fully design and implement the first phases of mitigation measures at the Crow Lane roundabout pinch point.
- Deliver the first phases of mitigation measures for the A4018 corridor using pinch point funding ahead of housing delivery;
- Once S106 funds are released following the delivery of housing, more mitigation measures will be implemented along the A4018 corridor.

### **Financial Implications**

- The S106 agreements are yet to be signed, as is the legal agreement with SGC that releases the funding to BCC for mitigation measures.
- The process of gaining approval to submit a bid to the LEP's pinch point fund for £1.875m to mitigate the CPNN developments impact A4018 corridor, particularly at the Crow Lane roundabout, has been started. This is in addition to the S106 funding and will be available prior to any housing delivery, allowing sustainable transport measures to be embedded before travel patterns of new residents are established.

### **Legal Implications**

- The S106 agreements and legal agreements between SGC and BCC are yet to be signed that confirms the proportion and timings of the S106 contribution payments.

### **Public Sector Equality Duties**

5a) Before making a decision, section 149 Equality Act 2010 requires that each decision-maker considers the need to promote equality for persons with the following "protected characteristics": age, disability, gender reassignment, pregnancy and maternity, race, religion or belief, sex, sexual orientation. Each decision-maker must, therefore, have due regard to the need to:

- i) Eliminate discrimination, harassment, victimisation and any other conduct prohibited under the Equality Act 2010.
- ii) Advance equality of opportunity between persons who share a relevant protected characteristic and those who do not share it. This involves having due regard, in particular, to the need to -
  - remove or minimise disadvantage suffered by persons who share a relevant protected characteristic;
  - take steps to meet the needs of persons who share a relevant protected characteristic that are different from the needs of people who do not share it (in relation to disabled people, this includes, in particular, steps to take account of disabled persons' disabilities);

- encourage persons who share a protected characteristic to participate in public life or in any other activity in which participation by such persons is disproportionately low.

iii) Foster good relations between persons who share a relevant protected characteristic and those who do not share it. This involves having due regard, in particular, to the need to –

- tackle prejudice; and

- promote understanding.

- Elderly and disabled, particularly those with impaired mobility, rely on PT more so will benefit from PT priority
- Elderly and disabled, are at more disadvantage from the lack of safe, convenient crossing points of busy roads such as the A4018.

Full equalities impact assessment to be undertaken during the development of designs and at approval of detailed design

## **LOCAL GOVERNMENT (ACCESS TO INFORMATION) ACT 1985**

**Background Papers:** None



# Place Scrutiny Commission

24/07/2017

**Report of:** Peter Mann - Service Director Transport

**Title:** Prince Street Swing Bridge

**Officer Presenting Report:** Adam Crowther – Head of Strategic City Transport

**Contact Telephone Number:** 0117 903 6854

## 1.0 Purpose of Paper/Decision Required

Based on original TMT Report (submitted 19<sup>th</sup> May 2015), and subsequently further requested Risk Matrix Assessment Report (submitted 8<sup>th</sup> June 2015), the decision was made to proceed with Option 1, i.e. Not to undertake any further additional in depth detailed Structural Assessments of the bridge and to commence immediately (with the extent of condition information available), with the structural repair works based on the recommendations of CH2M Consultant's 2014 Principal Inspection Report. The scope of the proposed refurbishment works was to put the bridge back to a "competent structural condition" to enable current existing traffic usage and maritime traffic "operational" usage.

Early specialist Contactor procurement (using existing BCC Contracts), and early commencement of work with suitable "judged" allowances to cover the "potential unknowns" contingencies in terms of increased cost and potential programme prolongation had already been considered and were risk assessed to enable a reduction to the original risk assessment (RAM), from High to Medium. A brief summary of the history of site refurbishment works is listed as follows below:

- Road closed to vehicular traffic on Prince Street on 17<sup>th</sup> August 2015.
  - Temporary Scaffolding Footbridge construction commenced on 18<sup>th</sup> August 2015.
  - Temporary Footbridge opened to the public on 2<sup>nd</sup> October – 7 weeks construction period.
  - Bridge "Swung off" and Landed on quayside on 5<sup>th</sup> October. – Commence programme of Work.
  - Proposed 6 months Construction Programme – Estimated completion end of March 2016.
  - Cabinet Report – March 2016, tabled a revised a revised completion date of September 2016 with a subsequent revised outturn cost of 1.20million, due to the increase in the extent and scope of work.
  - Works Programme revised further in April 2016 with a revised completion date of December 2016.
  - Works Programme revised further again in July 2016, revised completion date of February 2017.
  - Projected Works Programme Completion date end of April 2017.
- 
- Bridge was opened to pedestrians and cyclists on: 28<sup>th</sup> April 2017.
  - Bridge was re-swung for maritime boat traffic use on: 22<sup>nd</sup> May 2017.
  - Actual Substantial Completion of Structural Works was on: 29<sup>th</sup> June 2017
  - Bridge was re-opened to vehicular traffic (Southbound only), on: 10<sup>th</sup> July 2017.

The bridge was finally reopened to vehicular traffic on Monday 10<sup>th</sup> July, rather than after structural works completion. This was deliberate, from a transport perspective a decision was made to accelerate the highway improvements works programme of the adjoining Public Realm Works under the Cycling Ambition Fund (CAF) Scheme. The original intention under the CAF programme was to complete their works under separate consecutive weekend road closures (TTRO's). This would have undoubtedly caused further additional disruption and congestion to the Network plus reputational damage attracting further media criticism and press exposure onto the Council.

## 2.0 Cabinet Report - March 2016

As advised in report (March 2016), after removal of the solid timber decking and the kentledge “pig iron” ingots, the condition of the hidden internal structural elements of the bridge would be fully known and could therefore be assessed further. Remaining options and estimated costs were considered at this juncture within the Report and these are briefly summarised as follows:

- |   |                           |
|---|---------------------------|
| • Continue with existing Refurbishment Works to full extent     | <b>1.20million (Est).</b> |
| • New Operational Swing Bridge for vehicular/pedestrian traffic | 5.50 million.             |
| • New Operational pedestrian/cyclist footbridge                 | 2.50 million              |
| • “Replica Style” Bridge operational bridge replacement         | 6.50 million              |

## 3.0 Historic England (HE) Considerations

Ongoing informal discussions with (HE) on the matter of replacement of the existing bridge with a new bridge had indicated that a very strong and robust case would need to be demonstrated by the Council and would require full Listed Approval to allow removal of this bridge. (HE) will have a vested interest to ensure that the original integrity of the existing structure (as far as is practicable possible) is retained and would not be in favour of replacement. With the level of works now required on the bridge as being substantial, BCC would also need to apply for Listed Consent to undertake the required refurbishment works as required.

## 4.0 Cabinet Report Decision

The decision from the Cabinet was that there was little choice other than to proceed with the original reported recommendations and to continue with the Refurbishment works, with a new revised completion date of September 2016 and subsequent revised outturn cost estimate of 1.20million. In late December the “teardown work” was finally completed and it was then assessed that approximately **30%** of the original bridge would now not be considered structurally competent and would require full and total replacement. A subsequent new revised Special Structural Inspection was completed by another outside Consultants and the recommendation of this report would be that further existing structural components of the bridge would additionally require replacement and further structural strengthening.

## 5.0 Scrutiny Report - Revised estimated additional reported costs – As of November 2016

The original works programme (based on the CH2M Consultants 2014 Inspection Report), had anticipated the replacement of up to 17 No. cross beams and some other additional associated web and main girder repairs, with estimated costs at 290K. The remainder of refurbishment costs, including full painting, new decking and ancillary masonry repairs etc. brought the overall project cost to fully refurbish the bridge to 400K, with a proposed programme of 6 months construction period, bringing the bridge brought back in full operation by the end of March 2016.

As the work progressed, the proposed programme duration increased significantly. This was because the revised projected estimated structural replacement/repairs have risen significantly due to major additional



requirements to replace large plated web sections of all the main girders, the extent of which had not been visible or accessible during The CH2M Principal Inspection in 2014.

On exposure and grit blasting of paint and corrosion of all these exposed structural elements, the overall condition of the bridge was far worse than originally anticipated or reported and consequently well beyond any additional estimated projected “judged” contingency that could have originally been factored in by BCC.

As a consequence of the extremely poor structural condition of the bridge (once fully exposed), it became necessary to structurally re assess the overall structural capacity of the bridge again in terms of capacity to ensure the loads the bridge is required to deal with and also its “operational” function as an intact and structurally competent swing bridge.

The outcome of this new structural reassessment undertaken indicated that the bridge would not be able to take the required current traffic loadings and in its original pre-contract condition and was in fact being structurally “overloaded” which had resulted in the bridge slightly “buckling” and distorting of the main beams at the narrow slender front nose end during normal trafficking.

The consequences of this main beam distortion are that the bridge required further new additional designed in “strengthening” stability measures, along with the other new additional beam and component replacement (due to major corrosion loss) of structural members, all of which were well beyond the original scope of the original intended refurbishment works. These additional new “strengthening measures” were quickly redesigned by Craddy Consultants, and were reprogrammed in with the main works and were undertaken by the Principal Contractor. This increase in the extent and scope of the “strengthening” work created the consequential negative impact on the prolongation of the Works programme and the overall outturn cost of the complete works. Final projected Construction Programme assessed completion of the works in late April 2017.

## 6.0 Scrutiny Report(s) Financial Summary Estimates

TMT Report:	May 2015	Estimated Costs to Project	400k
Cabinet Report:	March 2016	Revised Estimated Costs	
	1.200m		
Scrutiny Report July 2017		Final anticipated Completion Costs	<b>1.332m</b>

## 7.0 Maintenance History of Structure:

From the maintenance records unearthed it would appear that the bridge had never had a full and comprehensive structural refurbishment since its original construction circa, (1879). Some of the original transverse beams at the counterbalance section were replaced in 1954 and similarly again in 1980’s with various miscellaneous “accessible” minor girder repairs completed on a regular basis throughout the working years for this structure.

The original design and construction of this grade II listed structure results in it being impossible to gain access to the hidden counterbalance area which is totally enclosed and covered with tightly fitted large “timber baulk” planking decking covered over with a boarded road surfacing system. This counterbalance area therefore acted like a “sponge” for moisture and 100% of all the cross beams in this area were required to be replaced, similarly about 40% of the main beam steelwork was either replaced or over plated and bracketed with various different “bespoke” repair assemblies setups. The new working design life of these refurbishment structural works is expected to be in the region of **30 years**, before major Capital replacement investment works would be again required.

The newly “evolving refurbishment design” as part of this refurbishment works involved total replacement of the timber planking decking and surfacing with a much lighter (by 30%) GRP (Glass Reinforced Plastic), “bespoke” planking which, (after extensive lobbying), and submission for Listed Consent requirements was finally approved for use by Historic England (HE).

The benefit of this new material (GRP), is that firstly it is at least a third lighter than the timber decking of same size and thus will reduce the overall dead weight of the bridge with a loss of about 20 tonnes of static counterweight “pig iron” ingots. This reduces the overall working loads on the mechanical operational components associated with the bridge movement during operation.

Secondly, these GRP planks were installed with a 6-10mm wide “air gap” which will allow the water to drain straight through and out of the structure and will also allow for air circulation throughout the internal counterbalance area which will significantly reduce the normal corrosion cycle to the bridge.

Thirdly, the bespoke design of these GRP planks will allow these planks to be mechanically secured and thus removed at timely maintenance intervals to allow BCC to inspect fully the internal components throughout the bridge and maintain the bridge comprehensively, thereby increasing the overall longevity of the structure.

With the new structural components, which have all been galvanised, plus the additional strengthening measures, the bridge will now no longer be structurally “overstressed” by the traffic loadings which was discovered when the bridge was reassessed in early 2016. Again these protection measures such as the galvanisation of all new components as well as a complete repainting system will increase the overall working life of this structure, with the additional benefit to being able to gain access to inspect, maintain and replace components without major removal works and at a much reduced ongoing site expense.

The refurbishment works on the operational components of the bridge will also increase the operational reliability of the bridge structure during swing operations. BCC have also undertaken facilitation and improvements works to the abutments which will hopefully remove the ongoing problem of the bridge “jamming” in operation during times of increased temperatures during very hot weather..

As this bridge’s central location means that it may always be under transport review usage, the flexibility of the new designed GRP decking and footways are such that it will be reasonably straightforward and relatively cheap to adjust and retrofit for the appropriate trafficking use, as and when this is required.

## 8.0 Summary of Full Structural Works

- The final outturn costs of the works to the bridge is expected to be **1.332 million.**
- The final construction programme is now 20 months, with full completion on **10<sup>th</sup> July 2017\***

The original overall considered repair/replacement options that were available:

- |   |                |
|---|----------------|
| 1. Full Refurbishment of bridge and Strengthening and GRP Decking (Option 1). | 1.332 million. |
| 2. New Operational Swing Bridge for vehicular/pedestrian traffic              | 5.500 million. |
| 3. New Operational pedestrian/cyclist footbridge                              | 2.500 million. |
| 4. Replica Style” Bridge operational bridge replacement                       | 6.500 million. |

Option 1. Is the therefore still the cheapest and most appropriate technical option and has now resulted in the Council having a fully strengthened and refurbished and fully operational Grade II Listed Heritage swing bridge structure, capable of taking the intended traffic loadings anticipated.

The bridge was finally reopened to vehicular traffic on the 10<sup>th</sup> July\*, rather than after structural completion. This was deliberate decision, as from a transport perspective it was decided that it was more appropriate to accelerate the Cycling Ambition Fund (CAF), works programme of the adjoining highway/cycleway improvement Works. The original intention under the CAF works programme was to complete their works under separate weekend bridge and road closures. This would have resulted in further additional disruption to the Network and reputational damage to the Council.

The decision was therefore taken to delay the reopening of Prince Street Bridge to vehicular traffic and to complete all the surrounding CAF highway works on both Prince Street and Wapping Road, which was substantially achieved on Monday 10<sup>th</sup> July.

Additionally the following benefits as a consequence to the refurbishment works to Prince Street Bridge have added the following improvements to the resilience of the whole Transport network within this city centre transport corridor:

- The structural refurbishment and structural works will give the structure a further 30 years design life
- The GRP Decking makes the bridge lighter, reduce deadweight and improve operational capacity.
- The GRP Decking will allow full access to all internal components of bridge for inspection and works.
- The Bridge will now be free draining and thus will reduce corrosion propagation significantly.
- The bridge decking system allows the bridge configuration to be changed relatively easily.
- BCC will have managed to fully retain for future use an historic Grade 2 Listed Structure
- The operational function of the bridge will have been greatly improved due to the reduction in weight and the flexibility and adaptability of the GRP decking.
- The operational opening and closing time of the swing bridge has reduced due to the improvements on the operational components, which will reduce traffic congestion during bridge swings.
- The refurbishment works to the masonry abutments will remove the problem of the bridge jamming during times of hot weather due to thermal expansion of the bridge.

#### **9.0 Operational Usage of Bridge and the effects on the Network**

The maintenance works to the bridge necessitated full closure to vehicular traffic with pedestrian and cycle facilities retained through the introduction of a bespoke scaffold structure. Prior to closing the bridge carried total two way peak hour flows of around 600 vehicles. While the inbound movement in the morning peak and the outbound movement in the evening peak are heaviest the outbound movement is heaviest across the whole day.

The overall capacity was restricted by the use of traffic signals that enabled shuttle working on one side of the bridge with the other side of the bridge reallocated to pedestrians and cyclists. Prince St Bridge is a busy pedestrian and cycling route linking a number of key cycle routes, pedestrian routes and tourist attractions.

The original closure required vehicles to find alternative routes across the river and resulted in occasional severe congestion on Prince St and the Grove during the evening peak. Congestion from Temple Way and Temple Circus leads to queues on Redcliff Way which restricts capacity at Redcliff roundabout. The queue wraps around the roundabout and prevents traffic and buses from exiting Redcliff Bridge.

This is in part due to network wide congestion but the situation is exacerbated by the closure of Prince St Bridge. Traffic that previously moved from Redcliff Way and Redcliff St to Redcliff Bridge (towards Prince St) interrupted the heavy flow from Redcliff Hill towards Temple Circus.

With these traffic movements removed, Redcliff Hill dominates and prevents egress from Redcliff Bridge. The effect is so severe that despite the low volume of traffic using this route delays of between 45 minutes and 1 hour were regularly experienced during busy congested periods around the Christmas period in 2015.

While there has been some additional congestion in the morning peak inbound on Redcliff Hill and Commercial Rd, severe issues have not been experienced. On a normal day traffic issues are not severely worse during either peak although the effect is noticeable

### **10.0 Additional Operational Considerations:**

During the life of the refurbishment works on this structure, a number of other transport related works have been in place across the city all of which have contributed to traffic diversions and occasional severe congestion incidents. These works made it impossible to accurately assess the individual impact of closing Prince St Bridge to the Network:

- City Centre works – major remodelling work with associated congestion and traffic diversions
- Cattlemarket Rd closure in both directions
- Metrobus works across the city centre, notably Temple Way bus lane and Colston Avenue.
- Various minor works and schemes – Coronation Rd traffic signal replacement, Clarence Rd, utilities works etc
- Easton Rd, Whitby Rd bridge replacements – some distance away but diversionary effects spread across the city

A number of these works are either completed or due to be completed prior to the end date for the refurbishment works, however other major transport schemes have begun, most notably the remodelling of Temple Circus and Bath Bridges. Capacity on the main routes will be retained as far as possible throughout the Temple Circus and Bath Bridges works but there will inevitably be some impact on congestion and diversionary movements.

The finished Temple Circus scheme will deliver similar capacity to the current layout across the area but some routes will benefit from reduced delays and others will experience additional delays. Traffic flows are likely to adjust over the first few months until settled routes are established. Bus journeys through the junctions are likely to see significant benefits as are pedestrian and cycle movements. The main benefit to traffic will be the simplification of the network enabling better control of the various movements and reducing the likelihood of the roundabout locking up and reducing capacity across the area. This will enable the traffic control centre to better manage the operation of traffic through the area and queues to prevent some of the issues currently experienced at Redcliff Roundabout.

In addition to these works the Cycle Ambition Fund will be delivering a new segregated cycle route on Prince St and Wapping Road either side of Prince St Bridge, starting in mid April.

Cycling and walking facilities across the bridge were improved in 2009 when one side of the bridge was reallocated to cycling and walking. The success of the scheme plus other improvements to cycling and walking across the area, new attractions such as M Shed and developments such as Wapping Wharf have led to increasing numbers of people walking and cycling across the bridge.

The scaffold bridge has been welcomed and, while cyclists have to dismount, safety is improved through segregation from traffic both across the bridge and on either side.

When operational the main issues are conflict between pedestrians and cyclists on the bridge and southbound cyclists having to swing across oncoming traffic to access the pedestrian/cycle only half of the bridge.

### **11.0 Future Usage:**

The factors detailed above necessitate careful consideration of what to do when the bridge is reopened. The Prince St cycle route and the major works at Temple Circus will put additional strain on the local road network and the city centre network as a whole. Certain sections of the Prince St cycle scheme also require one direction of traffic to be prohibited to enable the works to be completed.

The bridge will therefore open initially in the southbound direction only and the northbound movement will be temporarily prohibited. This will enable safe and efficient construction of the Prince St cycle scheme and assist

with reducing congestion during the works required at Temple Circus. Making the bridge one way only will enable additional capacity for traffic exiting the central area which is generally subjected to the heaviest congestion. This will both remove the issue detailed above that caused delays to buses during the full closure and also assist with releasing additional congestion pressure caused by the Temple Circus works.

The Temple Circus works are likely to last at least 12 months. The one way temporary prohibition for northbound traffic will remain on place for the duration of the Temple Circus works and will then be reviewed following completion of those works.

## **Appendix A**

Condition Photo's supplied in a spate document

**Appendix B**

Drawings supplied in a separate document



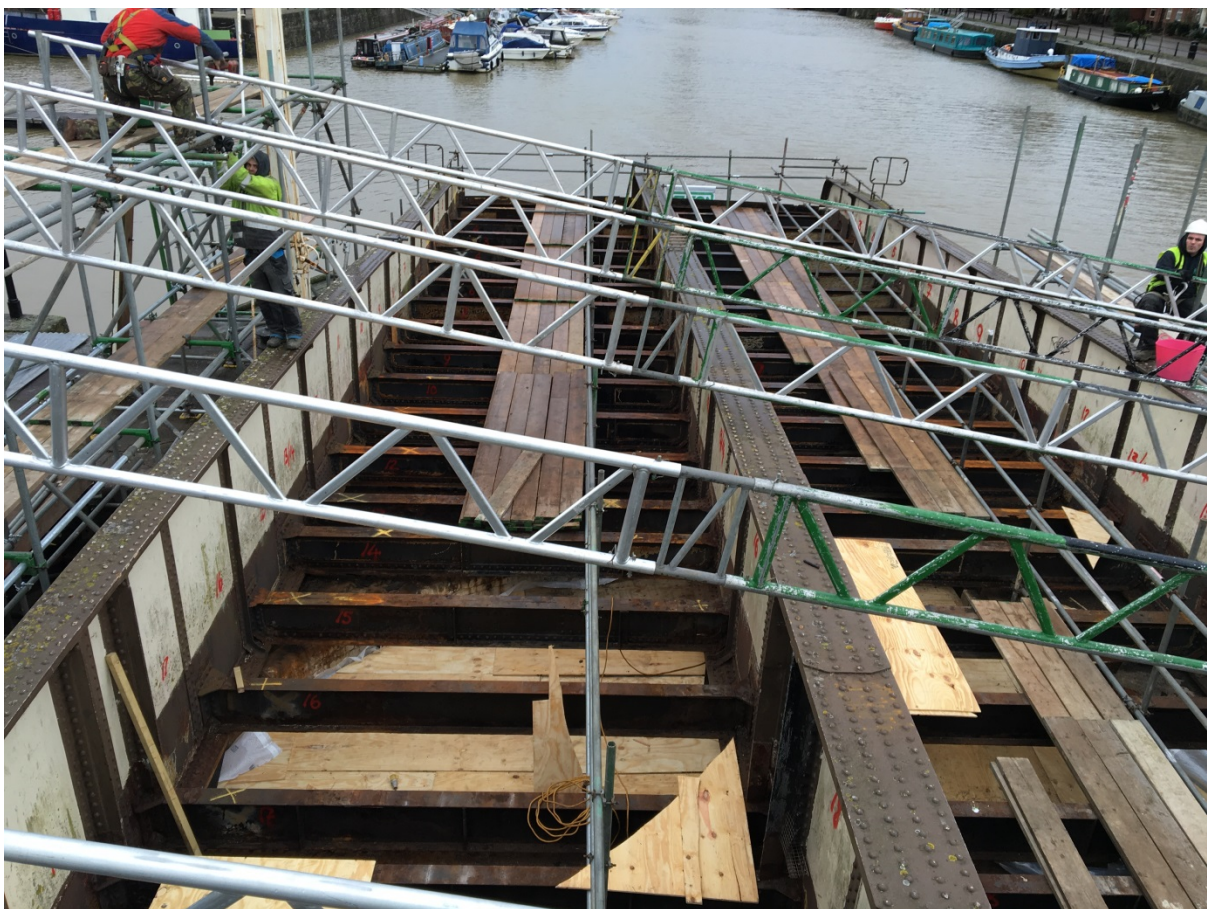
Prince Street Bridge Condition of Timber Plank Decking after removal of surfacing boards



Deteriorated water sodden condition of Timber planking in and around the kentledge end of bridge



Typical example of decayed timber planking underneath the road surfacing boards



View of Bridge with Timber Decking Removed, exposing cross beams





Floating Pontoon scaffolding underneath cantilevered unsupported end of bridge.



Pig Iron Counterweights exposed at Kentledge end of Bridge before removal



Pig Iron Ingots being labelled and removed to safe storage



Cross beam (Marked with X) to be removed and replaced with new fabricated bespoke beams



Further marked cross beams due for removal and replacement



Typical Condition of total cored through cross



Typical example of loss of main beam web section of main girders



Further example of lost of web section to main girder beams



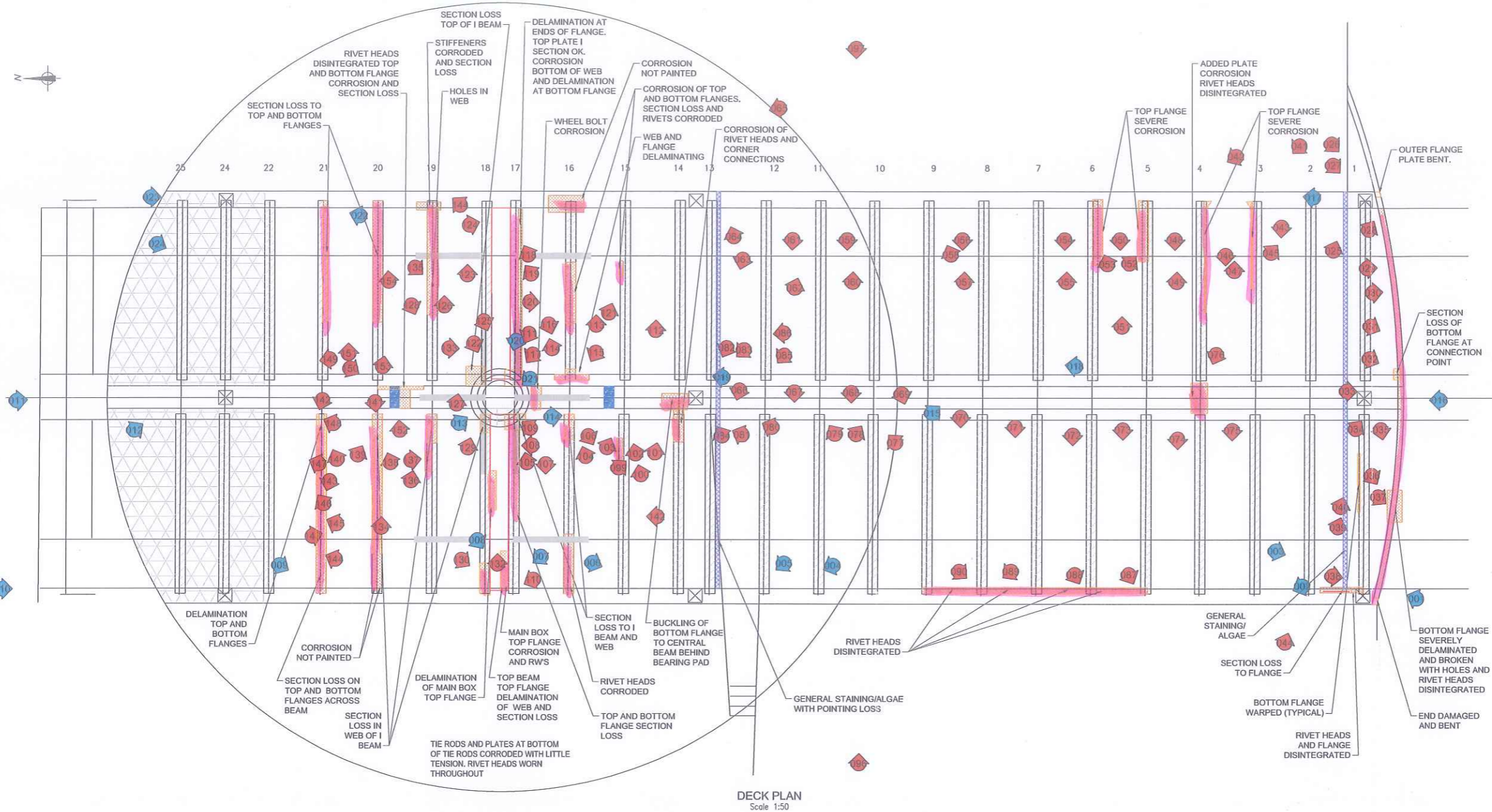
Condition of the main two cross beam at central support pivot area – now replaced



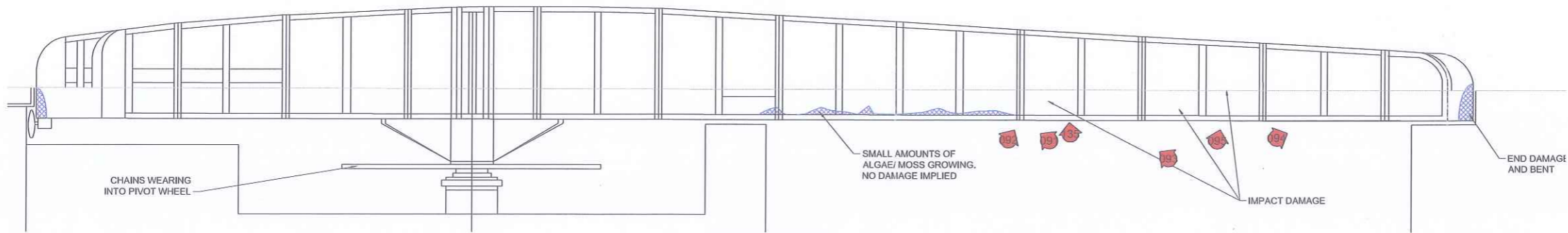
Condition of front curved nose end beam – now replaced



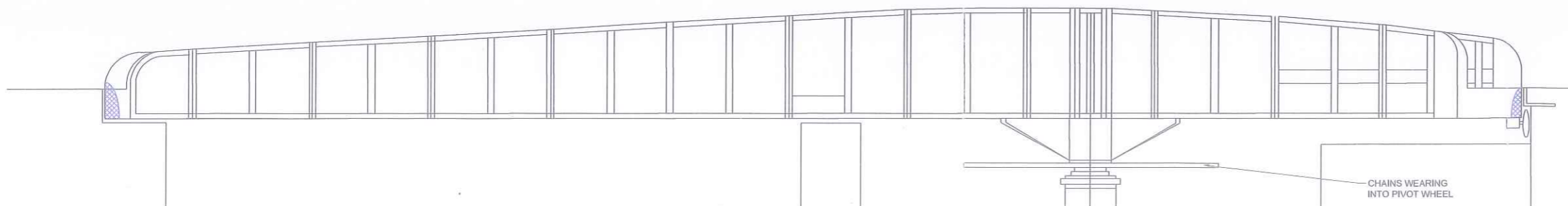
Condition of South Abutment Shelf and bearing Pads, currently being refurbished



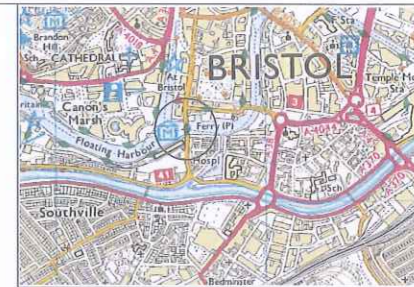
DECK PLAN  
Scale 1:50



SOUTH ELEVATION  
Scale 1:50




NORTH ELEVATION  
Scale 1:50






Notes:

- All dimensions in mm unless stated otherwise.
- Do not scale directly from drawing. Some defects have been enlarged for visibility.
- General widespread defects not individually marked are as follows:
  - Corrosion of all visible steel beams.
  - Widespread corrosion of top and bottom flanges and rivet heads in main span over harbor.
- Centre beam elevation not shown

 = ORIGINAL 2014 REPORTED REPAIRS

Key:

-  Staining, debris, algae, graffiti, etc.
-  Crack
-  Corrosion
-  Stonework repair
-  Section loss
-  Bearing
-  Pivot bracing plate
-  Photographs underneath deck
-  Photographs on top of deck

Rev	By	Chkd	Apprd	Date	Description



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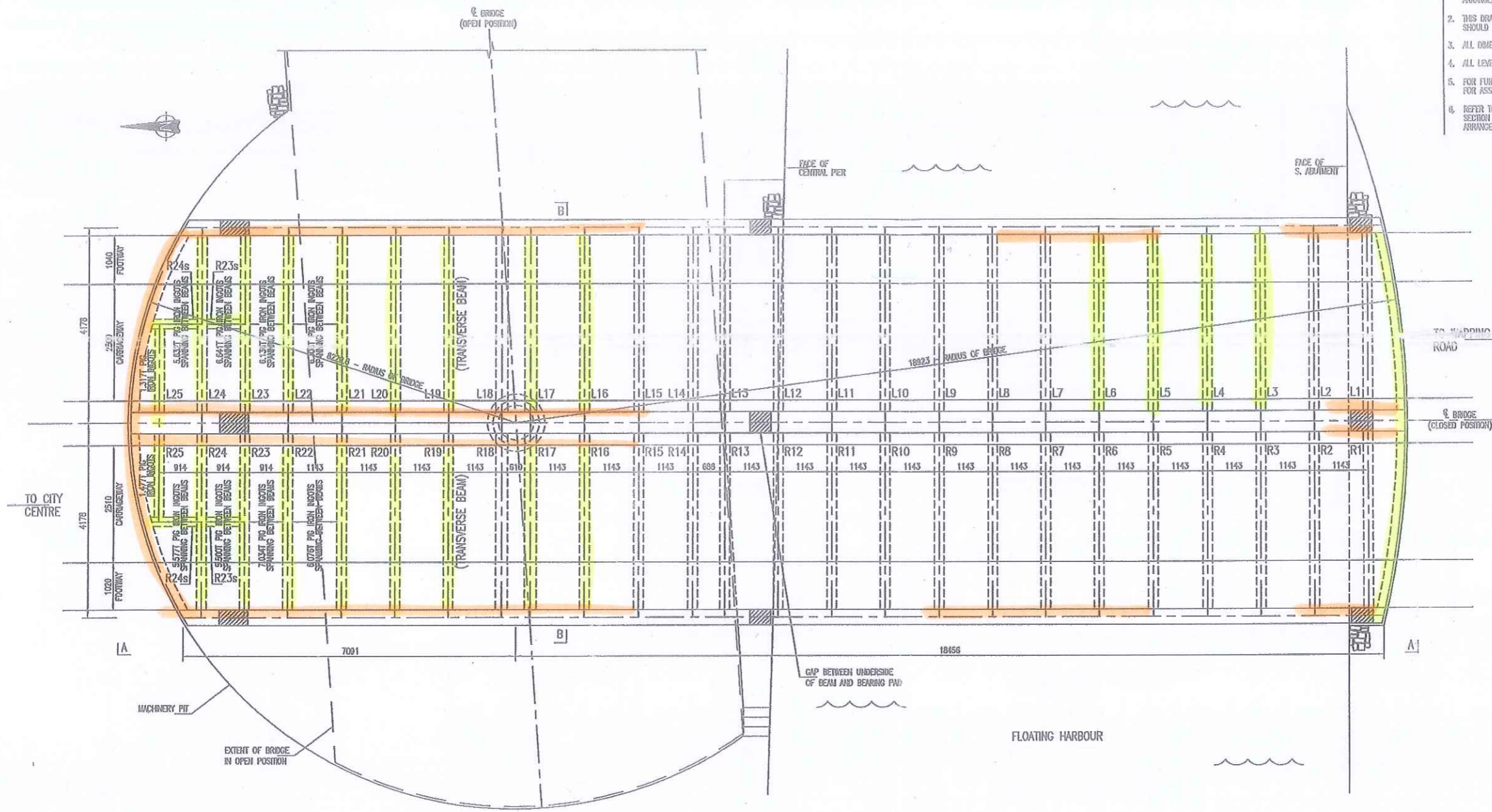
Project  
**BRIDGE INSPECTIONS**

Drawing  
**PRINCE STREET BRIDGE  
 PRINCIPAL INSPECTION  
 DEFECT & PHOTO PLAN**

Drawn by: LB	Date: 29/04/15
Checked by: JH	Date: 18/05/15
Approved by: KP	Date: 18/05/15
Drawing No.	Revision
203742.BY.00.49.011	P-00

Drawing Scale: NOT TO SCALE

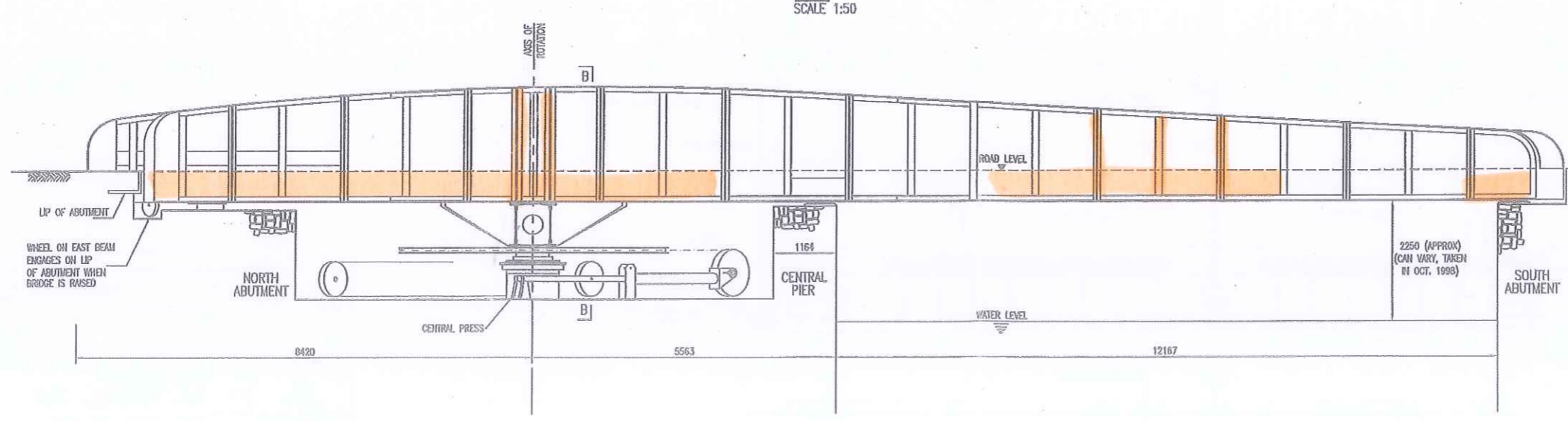
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- NOTES**
1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH DRAWING No. 21261/02101/02 & 03 - GENERAL ARRANGEMENT (SHEET 2 of 3 & 3 of 3) AND ALL RELEVANT ENGINEERS DRAWINGS.
  2. THIS DRAWING MUST NOT BE SCALED AND ONLY WRITTEN DIMENSIONS USED. ANY DISCREPANCIES SHOULD BE BROUGHT TO THE ATTENTION OF THE ENGINEER WITHOUT DELAY.
  3. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
  4. ALL LEVELS ARE IN METRES ABOVE ORDNANCE DATUM (HIGNLYN) UNLESS NOTED OTHERWISE.
  5. FOR FURTHER DETAILS REFER TO PARKMAN REPORT No. 21261/02101/01 - INSPECTION FOR ASSESSMENT.
  6. REFER TO PARKMAN DRAWING No. 21261/02101/02 - GENERAL ARRANGEMENT (SHEET 2 of 3) FOR SECTION B - B & BEAM DETAILS, REFER PARKMAN DRAWING No. 21261/02101/03 - GENERAL ARRANGEMENT (SHEET 3 of 3) FOR BEAM & STIFFENER DETAILS.

= BEAMS REPLACED

= MAIN BEAM REPAIRS AND OVERPLATING



Revision	Description	By	Date	Checked by	Date
D	REVISIONS ADDED	23/09/00			
C	ADDITIONAL BEAMS ADDED - HIGHWAY PIT	17/11/00	10/02/00		11/05/00
B	ADDITIONAL BEAMS ADDED	01/04/00	14/04/00		14/04/00
A	FIRST ISSUE	23/11/99	23/11/99		23/11/99

		Client: Bristol City Council Project: BRIDGE ASSESSMENTS - GROUP 4 Drawing Title: PRINCE STREET SWING BRIDGE GENERAL ARRANGEMENT (SHEET 1 of 3)	
Purpose: AS-CONSTRUCTED	Scale(s): AS SHOWN (A1)	Drawing Number: Z101-01D	Version: D
Drawing Office: BRISTOL	Telephone: 0117 931 2120	Drawing Number: 21261/02101/01	Version: D