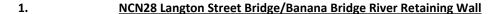
#### Critical Assets Harbour Asset Remedial Works Detailed Description of 3 High Priority River Walls

### Appendix A iii





This river retaining wall asset is showing substantial stability movement and condition depreciation of the south retaining wall over a distance of 100m, centred about the Langton Street Footbridge (Banana Bridge), but retaining the adjacent York Road. Whilst the failure of this river wall asset is unlikely to impact the footbridge or surrounding infrastructure, that potential of partial failure does immediately exist, so it does require immediate structural stabilisation attention, and would certainly require a partial closure of the adjacent Highway (York Road), in the event of any further displacement or observed movement. It is also worthy of note that the cost of mitigation will be substantially increased, should a full or partial collapse actually occur. This would be evidenced by the failure of Cumberland Road River Wall and the 12-million-pound stabilisation out turn cost, post failure.

#### 2. NCN16 The Gateway/Slipway (Adjacent to Gaol Ferry Entrance Gate)



Whilst the (SP) Critical Asset Overview Report focussed on the localised masonry defect to the West of this structural failure, this river wall will require full structural repair, the remaining 30m length of river wall collapse to the East is of a much more and far higher critical priority but has not been addressed fully in the (SP) Report. This 30m failure has exposed the existing sedimentary rock face on the river bank, so the structural reinstatement of the lower river retailing wall and the ultimate scour protection restatement, will ultimately support for the higher level secondary walls on Cumberland Road and thus is a very critical high priority.

#### 3. NCN21/23 Bedminster Bridge wingwall (Adjacent to Bedminster Old Bridge)



This is purely masonry displacement (rotational hinging) in the adjacent bridge wingwall though vegetation growth and overburden, which is easily rectified via traditional masonry reconstruction methods. The remedial works are deemed to be high priority, as the failure to address this structural issue, could lead to a partial collapse, which could endanger the footpath and adjacent Bus Shelter users, and would make the repair costs substantially much higher, although the risk of such a collapse is considered medium to low at the present time.

# <u>Summary of the Identified workstreams & associated Current Investigation/Design Work Estimated Costs</u> (From the £2.5m Capital funding)

1.	NCN28 Langton Street Bridge/Banana Bridge River Retaining Wall:	£435k.
2.	NCN16 The Gateway/Slipway – Adjacent to Cumberland Road:	£514k.
3.	NCN21/23 Bedminster Bridge wingwall – Adjacent to Coronation Road:	£150K
4.	NCN-11 Gaol Ferry Rock Faces – Ecology/clearance/Survey and report (No design/GI)	£150k*
5.	New Cut LIDAR survey/Data management:	£30k
6.	Ecological Survey (Stage 1):	£20k
7.	General De-vegetation (For LIDAR/Survey work):	£20k
8.	BCC internal staff costs @ 15%	£200k
9.	Initial Strategic Partner Report (Out-turn cost, including BCC staff costs)	£160k
10.	Site welfare/accommodation (Preliminaries):	£45k
11.	Diving surveys (Grain Barge and Feeder Canal)	£30k

#### **Current total estimated/committed:**

£1.75m

\*Item 4 (Gaol Ferry River Wall Rock Faces) the sum allows for the initial survey and reporting, which is a high-level overview, and the design of any remedial works/Ground Investigation, will be in the region of £300k (Additional to the above)

It is worthy of note that any remaining budget from the approved £2.5m (Over and above the £2m noted above) will be utilised in investigating additional collapses/defects, three of-which have been identified to the south bank, to the east of Vauxhall Footbridge subsequent to the Strategic Partnership Critical Asset Overview Report

The mobilising of a Principal Contractor and Principal Designer for this level of commission work, is a time-heavy task due to the requirement for the accurate investigatory scoping of the works, the availability and lead-times for the Contractor, the nominated Consultants and the specialist Sub-Contractors, and the gaining of the required ecological licences and associated Environment Agency (EA) permissions. However, in order to expedite the mitigation of theses identified works as the Bedminster Bridge works and the required minor design input, it has been decided to prioritise these works to simply progress with construction and to mobilisation to site.

## NCN28 Langton Street Bridge/Banana Bridge River Retaining Wall & NCN16 The Gateway/Slipway (2 of the 3 High Priority Walls)

With regard to NCN-28 and NCN-16, Both of these projects are potentially highly complicated, as until we have completed Stages 1 & 2 of the D& B designs (Including the Ground Investigation) the extent of the works remains unknown, although the budget costs discussed to-date are based on a piled solution, such being the most obvious approach.

#### NCN-28 and NCN-16 Project Programme Timeline to date:

- The draft Scope document was issued on 25<sup>th</sup> July 2023 (Design Stages 1 & 2)
- The budget quotation was received on 7<sup>th</sup> September 2023 (Design Stages 1 & 2)
- The Purchase Order issued on 3<sup>rd</sup> October 2023 (Design Stages 1 & 2)

The Principal Contractor and Designer are now engaged and are preparing the Ground investigation Scope and Specification for Client approval, as well as engaging in a desk study and liaison with Statutory Undertakers, and external stakeholders.

#### Bedminster Bridge - NCN-21/23 (last of the 3 High Priority Walls) - Programme Timeline to date:

- The draft Scope document (Design and Construction) was issued on 25<sup>th</sup> July 2023
- The budget quotation was received on 7<sup>th</sup> September 2023
- The Purchase Order issued on 3<sup>rd</sup> October 2023.

This facilitates the Principal Contractor (AGCL), to officially appoint the Principal Designer (Hydrock Consultants) who have noted a two-month design time, so the programme is showing a site commencement date in early 2024, with a revised budget estimate in the region of £150k + Prelims and added 40% Contingency.

### <u>Summary of additional other Secondary Project Workstreams</u>

- Light Detection and Radar (LIDAR), survey of the full entirety of the New Cut River Full Scope document to be compiled and issued by end of November. This will enable ongoing movement monitoring and modelling.
- Monitoring of the remainder of the Cumberland Road Chocolate Path Wall This will be covered using
  in-house personnel and equipment Survey stations to be marked-out and baseline survey to be
  completed within three weeks.
- Gaol Ferry Rock Faces (Inspection and assessment) Phase 1 Scope document (Site clearance) issued 3rd October 2023.