Broughty Ferry to Monifieth Active Travel Route NCN 01

Dighty Bridge Marine Licence Application

January 2023

APPENDIX 02 Construction Method Statement



BFMAT

Dighty Bridge : Outline Method Statement Jan 2023

 John McCarey BEng CEng MIEI
 Senior Technical Manager
 McLaughlin & Harvey Ltd

 t: <u>+442890 342 777</u>
 [Redacted]
 w: <u>www.mclh.co.uk</u>

<u>Dighty Bridge</u>

- Prior to commencement of any below MHWS works a Construction Method Statement (CMS) will be agreed with Nature Scotland and will incorporate all of the mitigation measures set out within Table 6 of the Report to Inform the Appropriate Assessment RIAA. Mobilise to site and establish a local satellite compound for the Dighty Bridge works
- 2. Construct temporary access and working platforms along with pipe culvert to accommodate the existing normal flows from Dighty Burn
- 3. Working platform top level installed at +3.2mOD approximately 0.5m above Mean High Water Springs.
- 4. Rotary bored piles with a rock socket will be installed through the working platform infill using a rotary piling rig with progress achieved using a combination of augers and down the hole hammers. Refer enclosed drawings for pile locations.
- 5. The rotary bored concrete piles will include contiguous sleeved formwork to underside of bridge beam seating / pile caps.
- 6. Rock armour scour protection will then be installed either side of the Dighty around the landfall columns and tied into the spandrel walls of the existing railway bridge.
- 7. The rock armour re profiling for 260m east of Dighty Bridge will be undertaken in parallel with piling operations and bridge protection armour placement. These works are to be undertaken inter tidally using land based plant / equipment operating from the upper foreshore. A 20m length of three groynes will be removed to provide a 260m long working platform which when required will incorporate a stone platform set 0.3m above existing foreshore level. See construction sequence drawing 18641-DCC-ZZ-XX-DR-K-655 Ch2900 for proposed construction sequence.
- 8. Temporary false work will be erected to support the column cross head construction. The steel reinforcement will be fixed in situ and formwork erected with the concrete placed using a crane and a concrete skip.
- 9. Alternatively precast concrete beams will be installed by crawler crane and in situ stitched to tie the heads of columns and provide support for the pre cast bridge beams which will be installed using 2nr telescopic crawler cranes
- 10. Steel reinforcement will be fixed between the pre cast beams and the concrete deck poured using a combination of mobile concrete pump and a concrete skip suspended from a crane
- 11. The stair access to the beach will also be installed at this time supported off a combination of rotary bored piles and rock backfill.
- 12. Any in-situ concrete pours to adjoin any existing structures or foundations connections will also be completed at this time and the new parapet railing installed
- 13. Once the bridge deck is completed the required waterproofing / surfacing will be completed. including the sealing of joints
- 14. Drainage and provision for services will be undertaken before completing the backfilling and re profiling with rock protection.
- 15. Removal of any remaining falsework for the crossheads / deck will be followed by removal of the imported granular material used to form the working platform and access routes including the Dighty culvert pipes.
- 16. As the temporary access bund is removed any final permanent scour protection will be installed and the areas reinstated
- 17. Once the bridge surfacing is complete street furniture / vehicle control bollards will be installed.
- 18. The local satellite compound for the works will be demobilised and the area reinstated





















