**Mordialloc Bypass Project**
**Environment Effect Statement**
**Inquiry and Advisory Committee**

MAJOR ROAD PROJECTS VICTORIA

# TECHNICAL NOTE

**TECHNICAL NOTE NUMBER:** 01

**DATE:** 8 March 2019

**SUBJECT:** Predicted construction methodology and estimated construction duration

## PURPOSE:

This technical note is provided to address the matters that the Inquiry and Advisory Committee has requested in respect of predicted construction methods and estimated construction duration.

The technical note is provided in three parts:

**Part A**: Estimated duration of driven piling along the alignment;

**Part B**: Estimated duration of works adjacent to Braeside Park; and

**Part C**: Predicted construction methodology for works within Waterways Wetlands.

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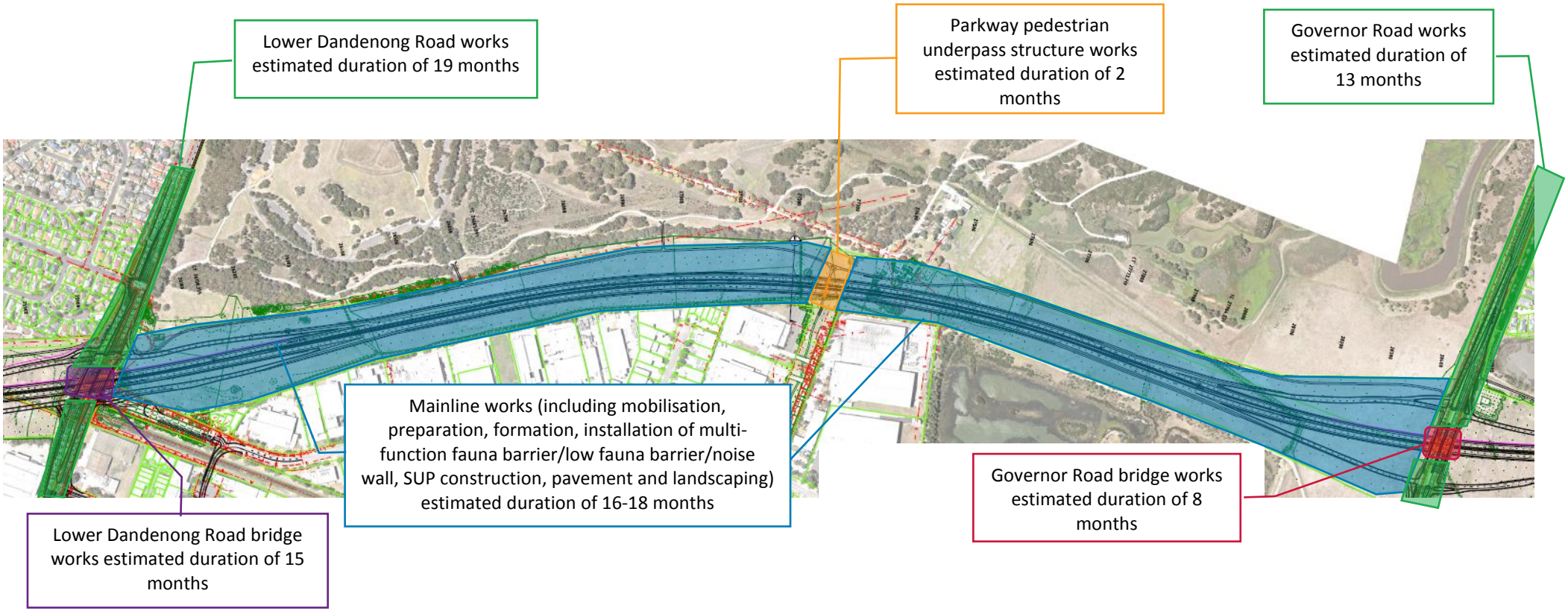
## PART A: Estimated duration of driven piling along the alignment

## PART B: Estimated duration of works adjacent to Braeside Park

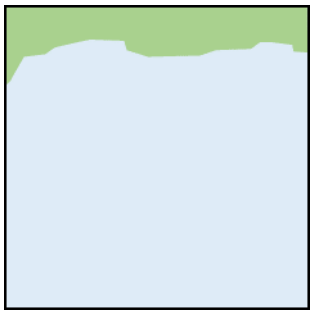
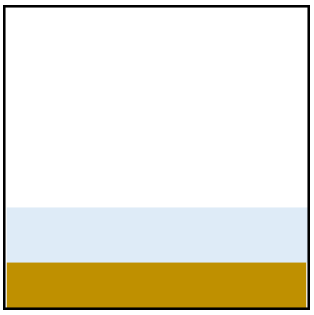
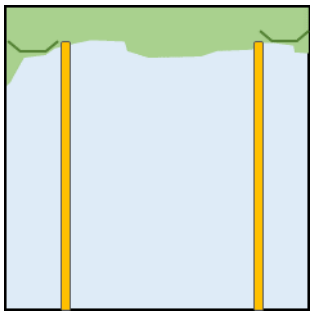
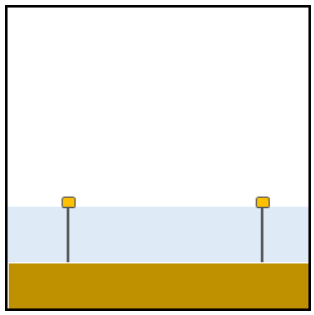
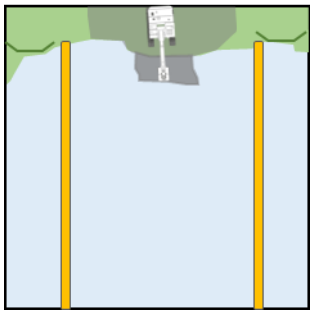
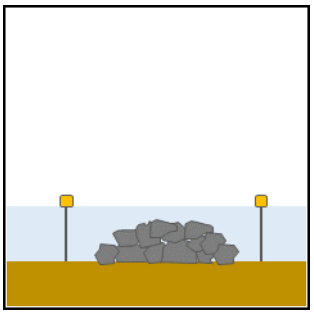


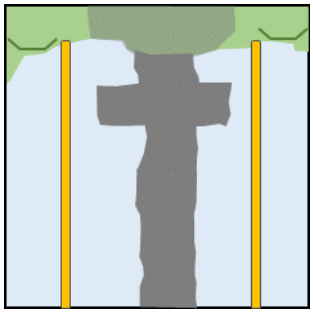
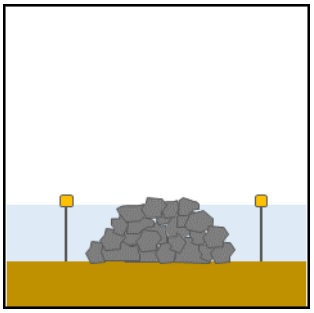
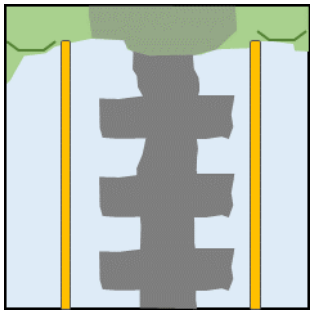
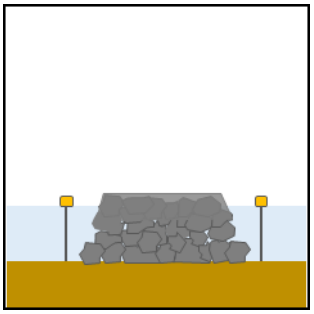
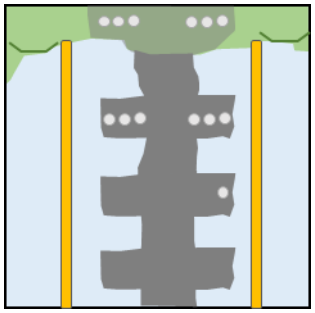
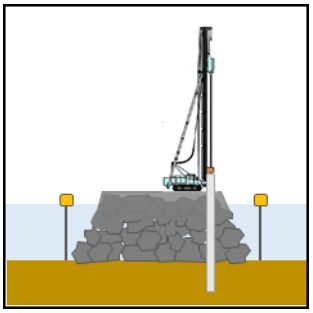
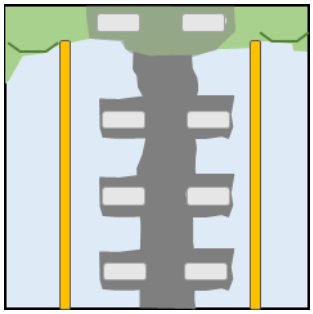
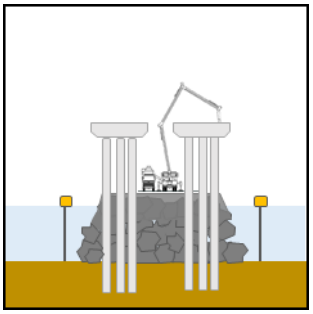
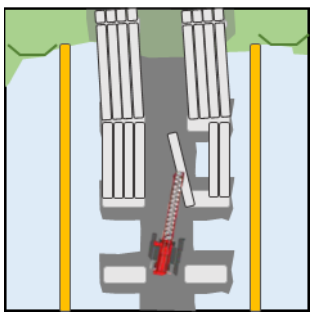
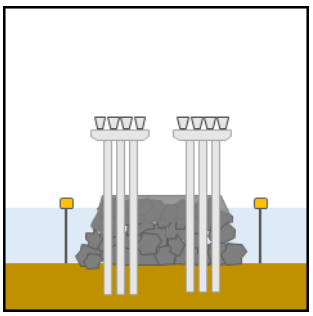
## PART C: Predicted construction methodology for works within the Waterways Wetlands

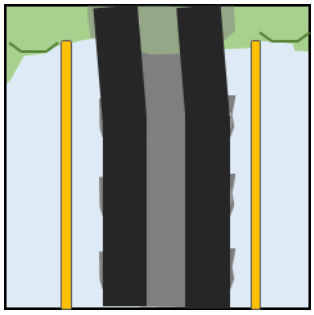
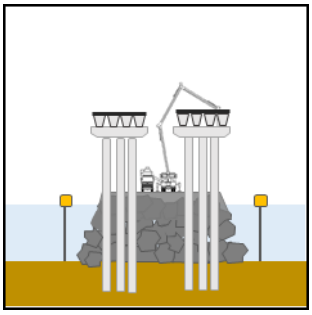
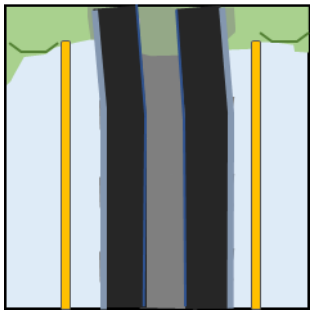
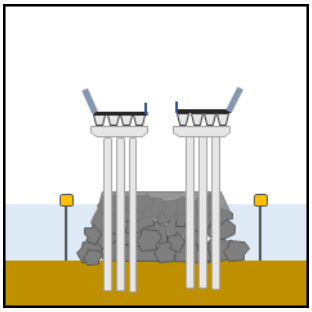
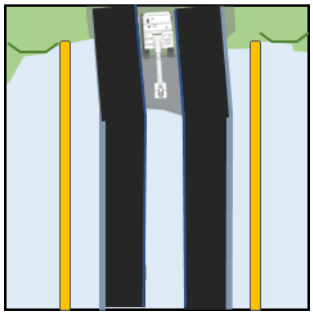
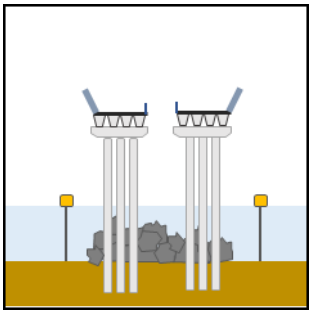
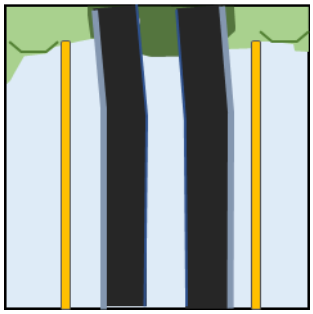
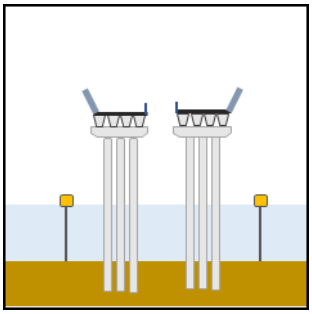
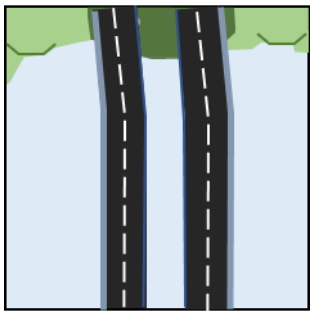
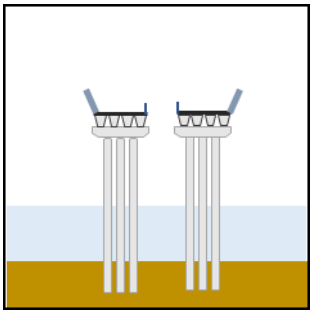
1. The first summer period would be preferred to allow for installation of environmental controls and working platform within the Waterways Wetlands.

2. Construction within the Waterways Wetlands is estimated to take up to 24 months.

3. These diagrams are schematic only and are not to scale.

| Description of works | Plan view | Cross section view |
|---|---|---|
| 1. Establish baseline conditions<br>• Monitoring would be undertaken and baseline conditions would be recorded |  |  |
| 2. Installation of environmental controls<br>• Establish no-go zones<br>• Install floating berms, sediment curtains and sediment fences<br>• Perform pre-clearance surveys |  |  |
| 3. Installation of working platform<br>• Vegetation clearance undertaken in accordance with approvals, including the EPRs for the project<br>• Oversized rock and quarry rubble would be placed into waterbody with excavator |  |  |

| Description of works | Plan view | Cross section view |
|---|---|---|
| 4. Installation of working platform<br>• Rock and rubble is placed until the level is suffciently high (typically above water levels expected in minor flood events)<br>• At each pier location, branches would be constructed off the main platform<br>• The working platform would allow water to flow through large voids between rock and rubble |  |  |
| 5. Capping of working platform<br>• The working platform would be capped with crushed rock material to provide a smooth and consistent working surface |  |  |
| 6. Piling works<br>• Steel piles would be driven at each pier location and for abutments north of Bowen Parkway and south of the Melbourne Water flood levee |  |  |
| 7. Crosshead construction<br>• Timber shutters would be formed and crossheads poured in-situ using a concrete boom |  |  |
| 8. Beam installation<br>• Beams would be installed using a crane sitting on working platform<br>• Beams would be installed from the outside edge working towards the centre |  |  |

| Description of works | Plan view | Cross section view |
|---|---|---|
| 9. Deck works<br>• Bridge deck poured using concrete boom |  |  |
| 10. On-structure works<br>• Installation of on-structure stormwater drainage, bridge parapets, barriers and noise walls |  |  |
| 11. Removal of working platform<br>• The working platform would be removed<br>• Oversized rock and quarry rubble would be recovered and transferred to a local recycling plant where possible |  |  |
| 12. Landscaping and revegetation works<br>• Landscaping and revegetation work would be completed in accordance with the EMF, including the EPRs for the project |  |  |
| 13. Removal of environmental controls<br>• Floating berms and sediment curtains would be removed following removal of the working platform and landscaping works<br>• Environmental monitoring activities would remain in place in accordance with the EMF, including the EPRs for the project |  |  |