

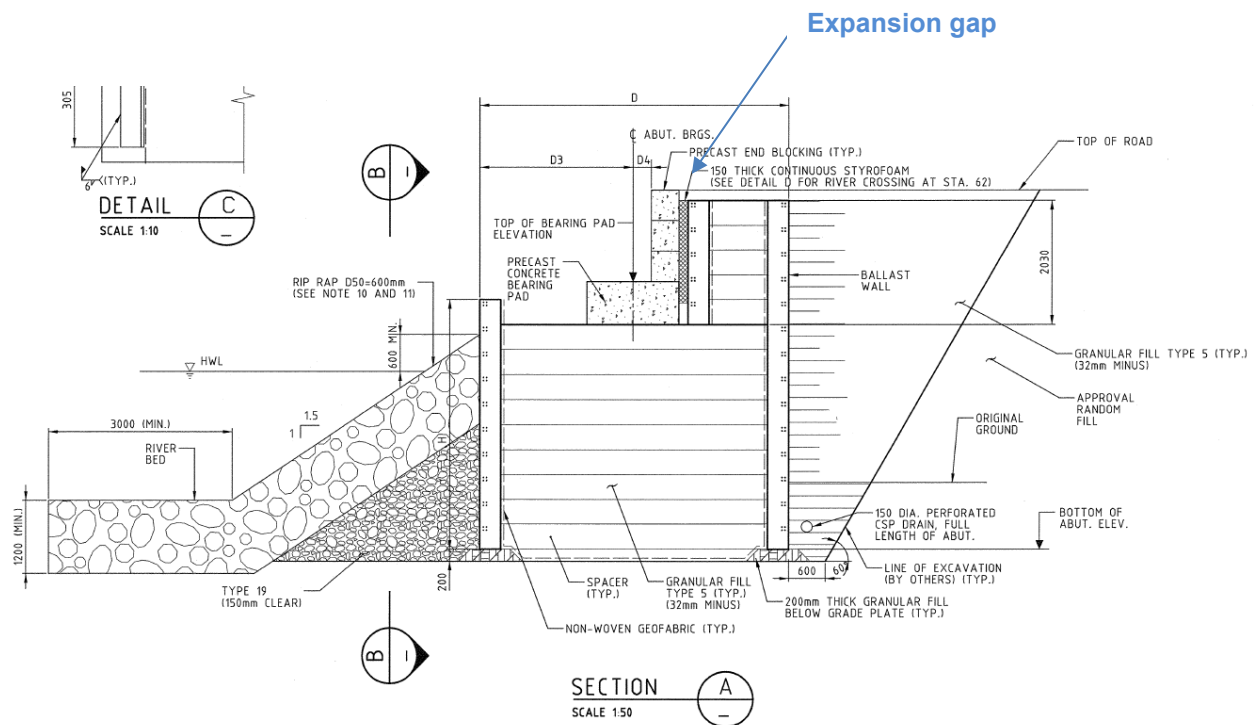
Appendix C.1.7

As-Built Report

Tote Road Bridges Approach Remediation

Four Acrow bridges and abutments were installed in the winter of 2014 during the construction phase of the Mary River Project. After installation, settlement occurred limiting the expansion gap, adding axial pressure to the fixed end, and twisting the bridge from the differential settlement of the bearing pads.

Section of Original Bridges Abutment and Approach



In June 2016, Hatch conducted a temporary repair by opening the expansion gap, removing insulation and shifting back the ballast blocks placed between the bridge sliding end and the road way.

Subsequent efforts to re-establish the gap at the sliding end of the bridge included:

1. Removing the concrete end blocks, pulling back the aggregate and refitting the blocks,
2. Trimming the concrete end blocks in place. These concrete blocks are located at both ends of the bridge and allow transition from the steel bridge structure to the aggregate of the approach.

The four bridges on Baffinland's Tote Road at Km 97, 80, 63 and 17 have pinned at both ends due to the failure of the sliding end approach closing the gap between the bridge end and the approach. All four bridges were designed with one pinned end and one sliding end to facilitate translational, rotational and thermal movement. Pinning the bridges at both ends prevents all translational movement (vertical and horizontal) and all rotational movement at the supports plus limits thermal expansion. If left unresolved, these forces can cause structural damage to the bridges and an associated significant reduction in their useful life.

Photo journal of the typical construction progress is attached as Addendum 1.

Addendum 1 – Construction Progress Photo Journal

Tote Road Bridge Abutment Maintenance – 2025



Photo 1. Pre-construction condition of bridge sliding end (typical)



Photo 2. Typical excavation of abutment area



Photo 3. Typical Abutment support – customized 20' Seacan



Photo 4. Four custom abutment anchors installed, awaiting rockfill.



Photo 5. Abutment anchors partially filled



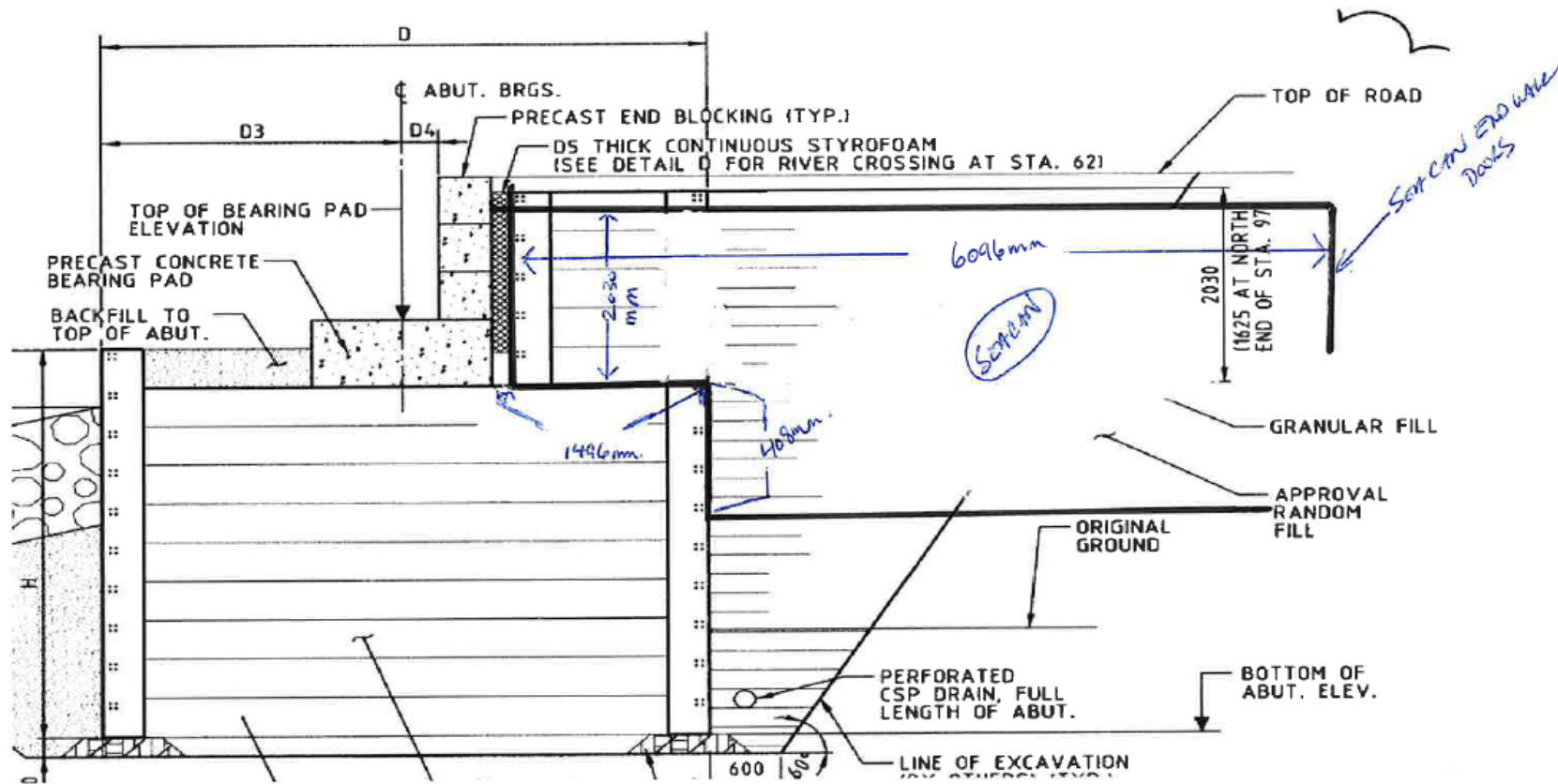
Photo 6. Abutment anchors fully backfilled



Photo 7. Bridge access road fully restored.



Photo 8. Post-construction condition of bridge sliding end



Typical Seacan Abutment Mock-up