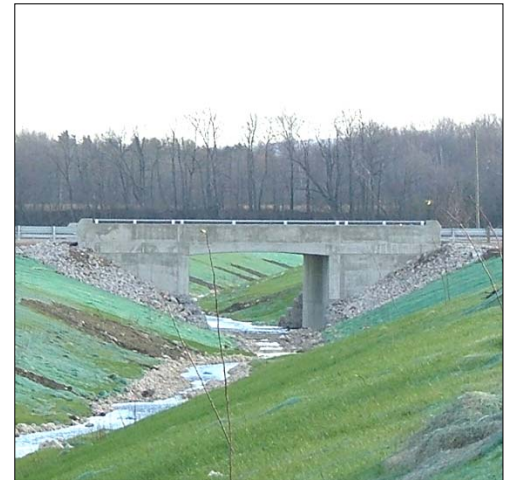




Preparing the footings for the bridge after excavation.



Pouring and finishing the deck after completion of the superstructure.



The finished bridge over Black Ash Creek showing the extensive rip rap around the inlet and outlet of the structure, the slope and channel design and completed landscaping.

Sixth Street Bridge (Black Ash Creek, Phase 3) Town of Collingwood and NVCA

In 2004, as part of the ongoing Black Ash Creek Channelization Project (Phase 3), a new bridge was constructed on Sixth Street in the Town of Collingwood. Phase 3 of the Black Ash Creek Project continues the channelization of the creek upstream an additional 2.5 kms beyond the end of Phase 2. Having completed the design for the bridge previously, the Ainley Group suggested to the Town that modifications be made to incorporate a future expansion of Sixth Street to a four-lane road. With the added width incorporated into the design, a temporary concrete wall was constructed on the downstream (north) side of the bridge giving a 3-metre wide pathway for the Georgian Trail until the road is widened.

In the fall of 2003, in preparation for the bridge construction, a 40-metre extension was added to the existing multi-plate steel culvert to divert the stream flow. In the spring of 2004, a two-lane temporary detour was built over the extension and the excavation for the bridge began. Since the bridge is an integral part of the Black Ash Creek Channelization project, particular care was given to the placement of rip-rap scour protection at the inlet and outlet of the structure, the location of geotextile fabric under the rip rap and the placement and compaction of backfill in the excavated area.

After the construction of the bridge was completed, the existing culvert and temporary detour were removed and the road was reinstated to its original alignment over the new structure.

Project Facts

Client: Town of Collingwood and Nottawasaga Valley Conservation Authority

Scope of Work:

- Detailed structural and hydraulic design
- Tendering
- Contract administration for:
 - Excavation
 - Bridge construction
 - Landscaping.

Key Design Criteria:

- Construction of temporary detour
- Pathway for Georgian Trail
- Incorporating the bridge design into the Black Ash Creek Phase 3 project.

Project Cost: \$600,000 (2004)