

Since Christmas, construction work on our 230 million dollar Bogong Power Station development has escalated dramatically. Initially earth-works contractors were brought in. Then we have witnessed the tunnelling crews plan and commence the mammoth task of boring into the mountain.

The vacant car park behind Pyles Falls Creek Coach depot has been transformed into a hive of activity as equipment and materials arrive and they are sorted and then forwarded to the site at Bogong Village.

Two tunnels are to be constructed. The smaller of the two is the High Pressure Head Race Tunnel, which is three metres in diameter and will leave the power station site, adjacent to the tennis courts at Bogong Village and will be drilled and blasted in a south-westerly direction

or 1.2km to meet up with the 90 metre drop shaft from the main Head Race tunnel. This High Pressure Head Race Tunnel will then be completely lined with steel, grouted in with concrete.

The second, the Main Head Race Tunnel is a major part of the project, being five metres in diameter and will finally be 6.5km in length. It is to be bored through solid rock and to achieve this, a 12 million dollar Tunnel Boring Machine (TBM) built by Robbins in the USA and refurbished in Europe is being shipped to the site. Prior to the TBM starting its work, approximately 120 metres of tunnel has to be dug through softer material before solid rock is reached – which is where the TBM will start to perform.

In the last couple of weeks, the 80 or so workers on the site have started their shift work and this shift rotation should remain in place for the duration of the project – the completion date is set for December 2009.

Recently, the town witnessed the arrival of the main parts of the TBM as it was transported through the community on low loaders, with the road to Falls Creek being closed for a short period as the convoy proceeded to Bogong Village. Right now, the staff is engaged in assembling the relevant parts and getting ready for the launch.

Tunnelling tradition says that the TBM cannot start work until it is given a name. AGL Hydro and McConnell Dowell are running a competition among all school students in the Alpine Shire to find that name. Titled 'A Boring Kinda Competition', it is open to all students who attend school in the Alpine Shire. Entries should be from individuals (not groups) and there are two parts. Provide a name for the TBM, and explain why in 25 words. The second part is to draw a caricature of the machine. The results of the competition, the winners and the name will be announced at a Public Open Day planned for the near future. Relevant dignitaries, department heads and the responsible members of parliament are being invited to this launch – which will be a great opportunity for members of this community to examine the machine.



***Caption:** The entrance to the tunnel Picture – Ken Bell*

Students of this engineering should have a look at www.robbinstbm.com/products/tunnel/main_beam.shtml. It is quite fascinating.

The main part of the TBM is 30 meters in length, and this will be joined by a series of carriages containing staff amenities, first aid room, transformers and gantries. All up, the TBM will be approximately 140 metres in length. The amenities will cater to the staff who will work in two ten hour shifts per day. The remaining four hours will be down-time when the boring heads are replaced, the power cable and the conveyor belt extended. The TBM requires around 11,000 volts. The conveyor will carry the spoil from the cutting head over the top of all the carriages on gantries and out of the tunnel to a point where it will be loaded into trucks and carted to a storage site. Much of this spoil will be used in the forming and re-aligning of the Bogong High Plains Road prior to the sealing of the road between Falls Creek and the Omeo Highway at Shannonvale.

Several aspects of the project that deserve credit are the work being undertaken to protect the environment and to reduce the impact on the community.

As all earth-works are being completed – even in these early stages of the project, enviromat is spread and trees, shrubs and grasses are planted. Safety guard-rail has been installed alongside walking paths to protect walkers from traffic movement, and the existing walking tracks around Lake Guy at Bogong Village and the Spring Saddle Track have been re-aligned so that they remain open during the course of the project, with virtually no disruption to visitors. Another interesting aspect is that several water tanks have been installed to harness and store water that may appear as a result of the project.

The power station itself, which will be 30 metres in height, will be partially buried below the existing ground level, and will be almost completely covered (bunkered) with reclaimed earth and replanted once the project is completed.

New staff arriving in town have been welcomed and several social events have taken place between MacConnell Dowell staff and local residents. Our local kinder has taken on several more kiddies, as have the primary and secondary schools.

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