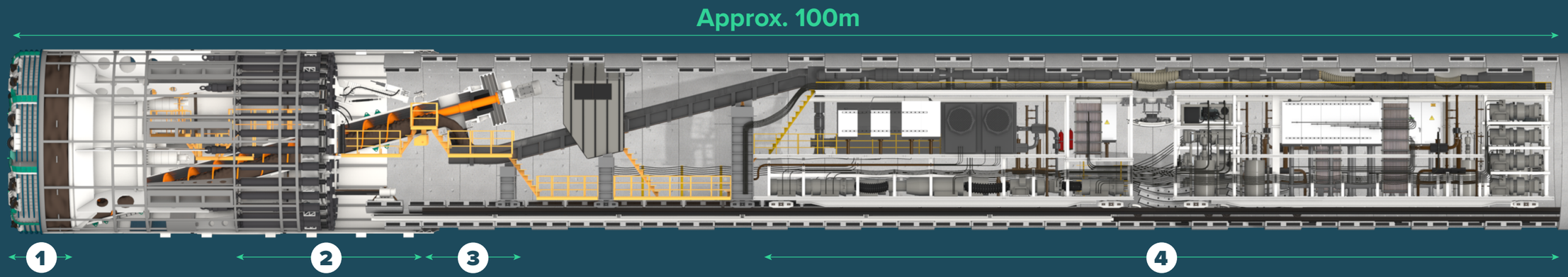

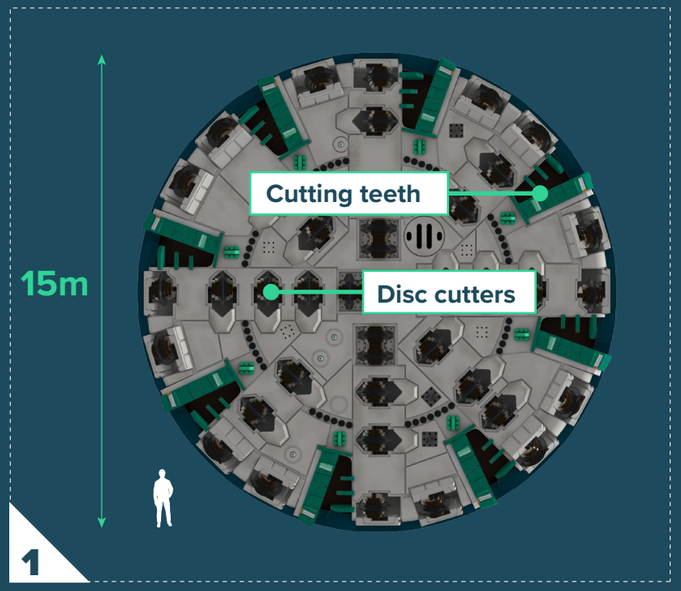

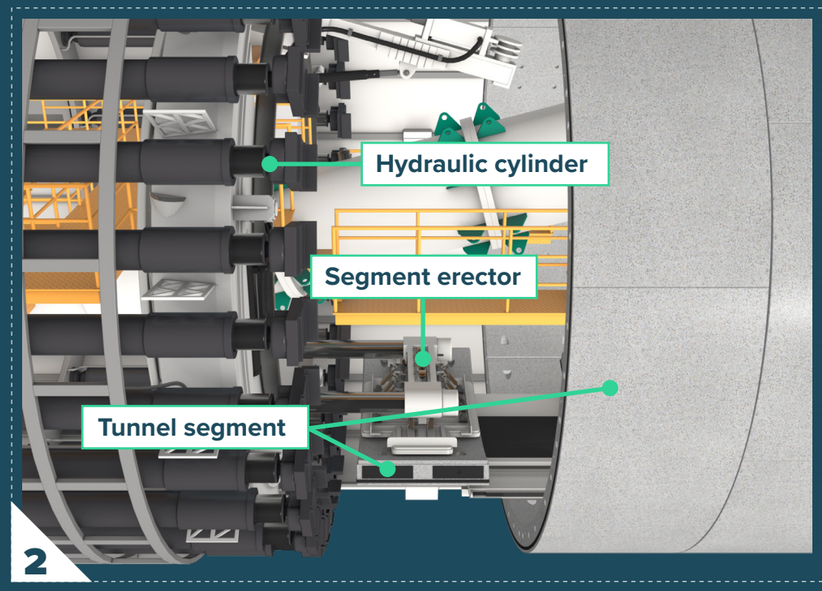

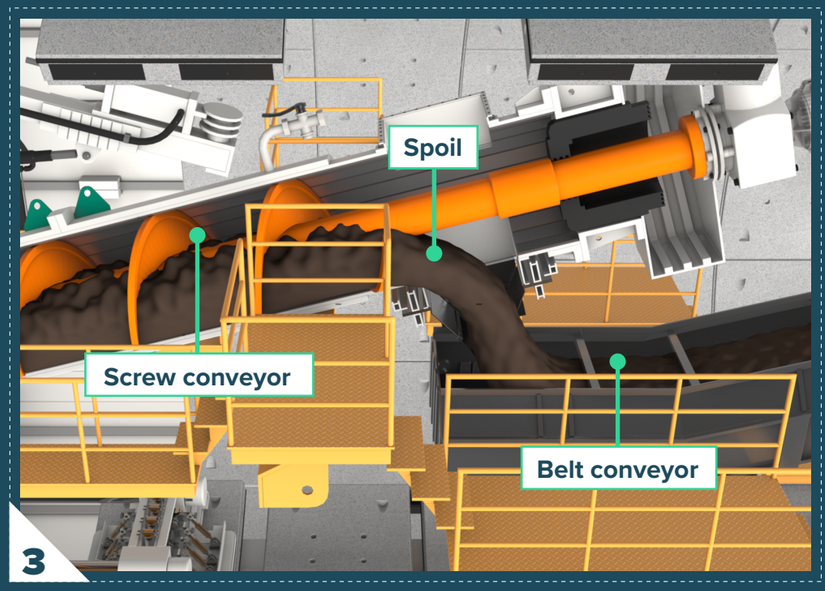

T2D → TORRENS TO DARLINGTON

Tunnel boring machine

The T2D Project tunnels will be constructed using tunnel boring machines (TBMs) which are complex and extremely big pieces of machinery. They are manufactured to suit the ground conditions for the project, and will progress at about 8-10m per day.

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1 Cutterhead

The cutterhead rotates to excavate soil and rock (known as spoil) from the tunnel face using cutting teeth and discs.

2 Segment erector

Precast concrete tunnel lining segments are installed in a ring to form the tunnel walls by a segment erector. When the ring is complete, hydraulic cylinders press against the new tunnel ring to push the TBM forward to excavate more of the tunnel face.

3 Conveyors

Spoil is transferred away from the tunnel face by a screw conveyor and then out of the tunnel via a belt conveyor to the surface to be managed.

4 Logistic operating facilities

A large portion of the TBM houses all the logistic facilities needed to operate the overall system, with up to 20 people working inside.