Immersed Tube Tunnel Construction Method

**Introduction**

The construction of the immersed tube tunnel is based on a combination of technologies that have been tried and tested in Hong Kong. Here is a simplified explanation of the key steps involved:

- **East West Corridor**
  - Existing East Rail Line will be extended from the East Kowloon Train Station to Hong Kong Station
  - East Kowloon Corridor will be extended to the West Rail Line

- **Existing East Rail Line** will be extended from the East Kowloon Train Station to Hong Kong Station to enable the construction of the new immersed tube tunnel.

This tunnel is necessary because the existing rail tunnels are too small to accommodate the new rail service. The new tunnel will be constructed parallel to the existing rail service to ensure minimal disruption to public transportation.

**Legend**

- **Tunnel Sections** to be constructed
- **Tunnel sections** to be extended

**What is Immersed Tube Tunnel (IMT)?**

- IMT is one of the most effective methods used worldwide for constructing cross-harbour or communicate tunnels. It involves the following steps:
  - An immersed tube tunnel is to be constructed
  - Immersed tube tunnel sections are floated on the surface
  - Sections are towed to the installation location
  - Sections are then lowered into the tunnel and connected together

- The SCSA cross-harbour rail tunnel will be constructed using 11 IMT cast-concrete tunnel sections, each approximately 130m long.

**The benefits of using IMT**

- **Speed and Efficiency:** IMT is a highly efficient method for constructing cross-harbour tunnels. The process can be completed within a short period of time.
- **Cost-Effectiveness:** IMT is a cost-effective method for constructing cross-harbour tunnels. The cost can be significantly reduced compared to other construction methods.
- **Reduced Disruption:** IMT is a highly effective method for reducing disruption to public transportation. The tunnel can be constructed in a limited area, minimizing the impact on the surrounding environment.

**IMT Precast units casting yard**

- The IMT precast units casting yard is located on the waterfront. The precast units are cast in a large, enclosed facility to ensure quality control and safety.
- After casting, the precast units are transported to the installation location where they are installed and connected together.

**Community Liaison**

- The construction of the immersed tube tunnel is a significant project that will have a significant impact on the surrounding community. The project team is committed to minimizing the impact on the community and ensuring the smooth execution of the project.

**MTR Projects Hotline:** 2993 3333

**Open House Events:**
- **Saturday:** 3:30pm – 5:30pm
- **Sunday:** 3:30pm – 5:30pm
- Cuts will be transformed to a more aesthetic appearance when the fire is in use or after office hours. Please leave your contact details so we can notify you in case of any emergency. SCL website: www.mtr-shatincentralhkm