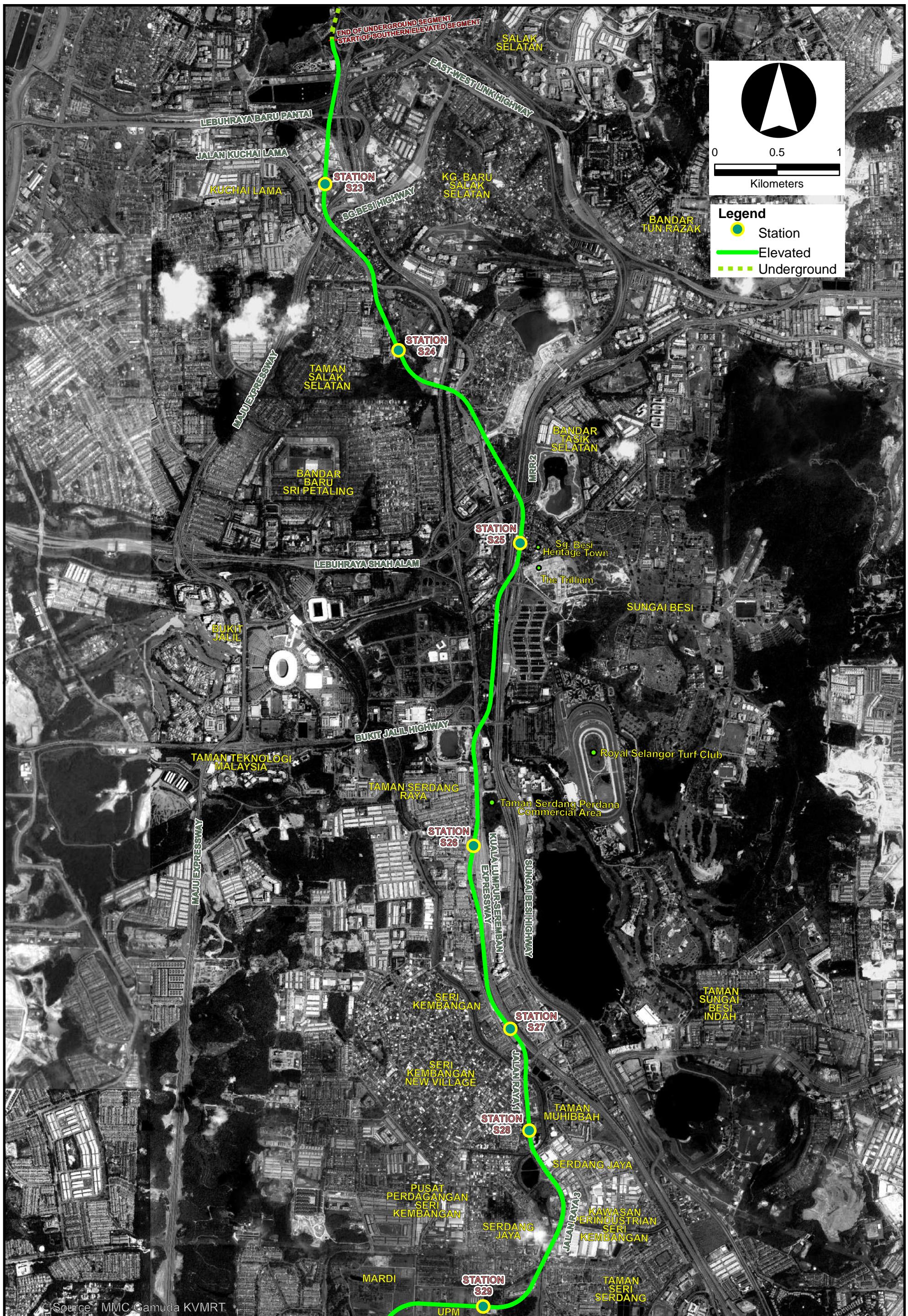


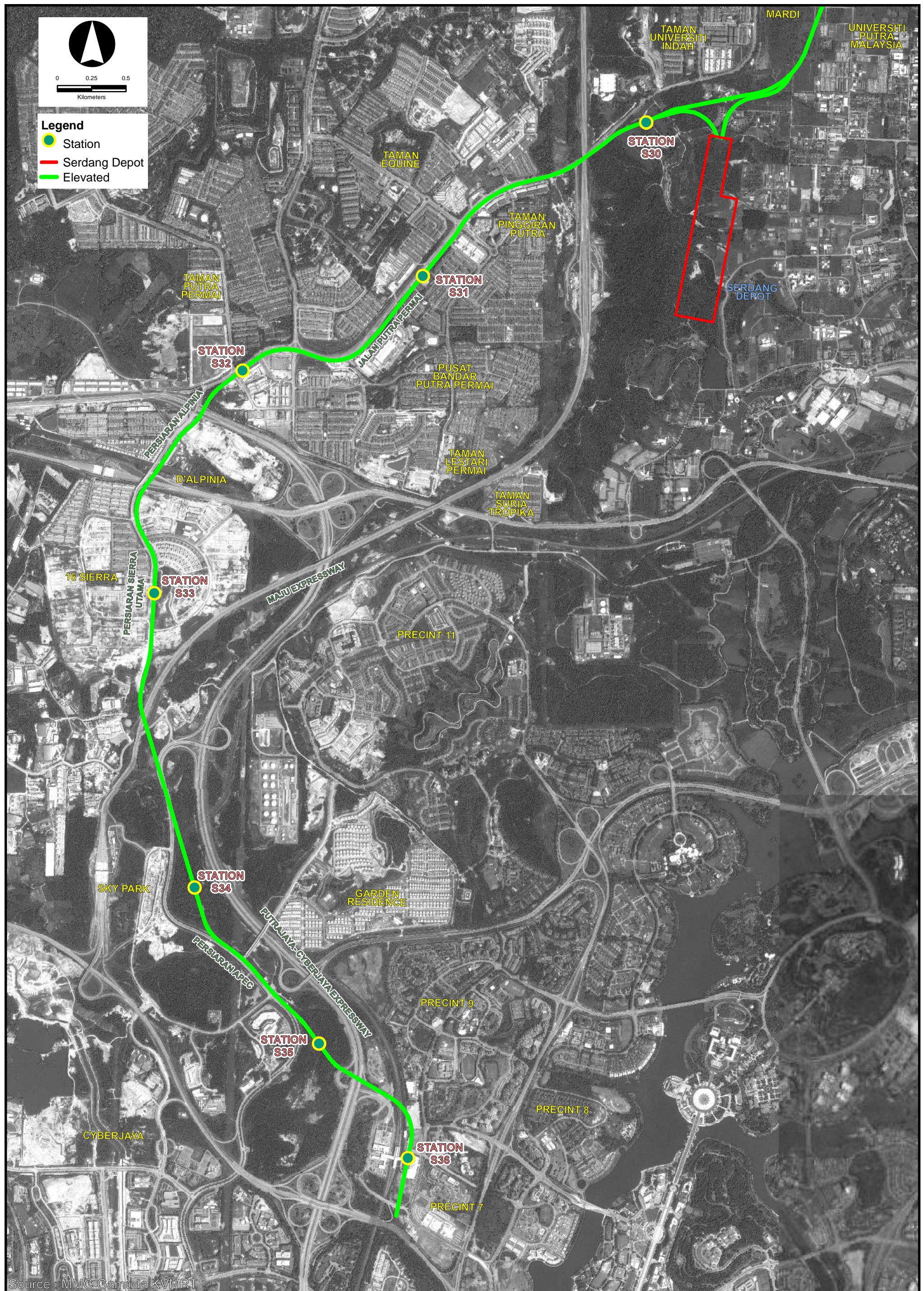
Source : MMC Gamuda KVMRT

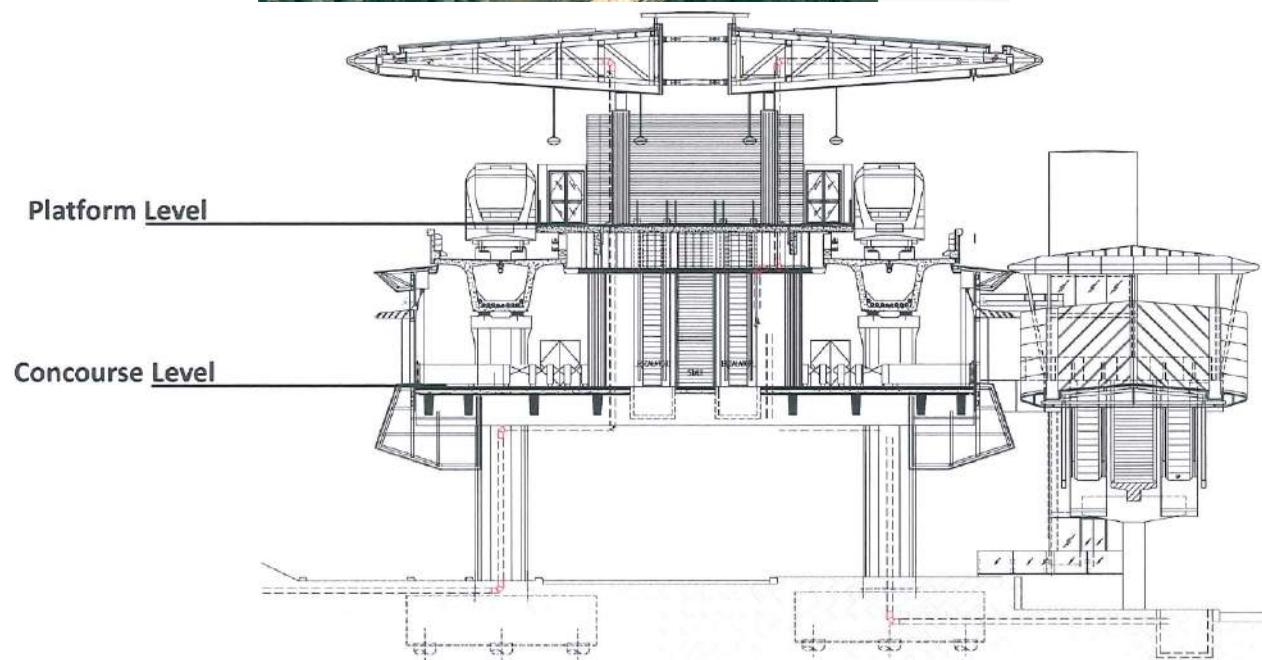


Figure 3-2

Underground Segment





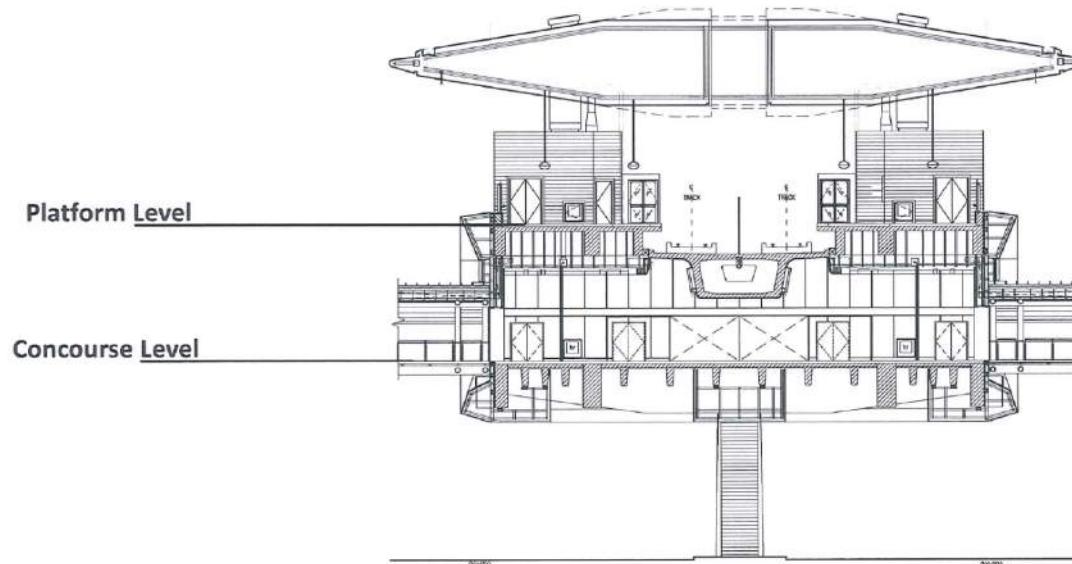
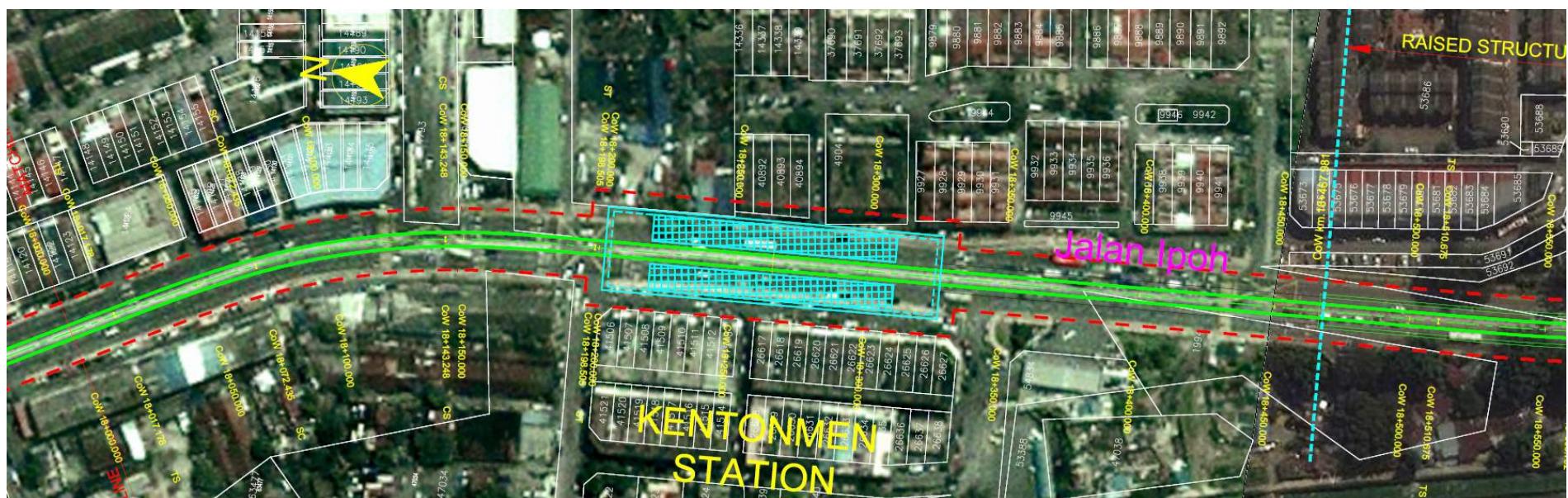


Source : MMC Gamuda KVMRT



Figure 3-5

Example of Island Platform Station

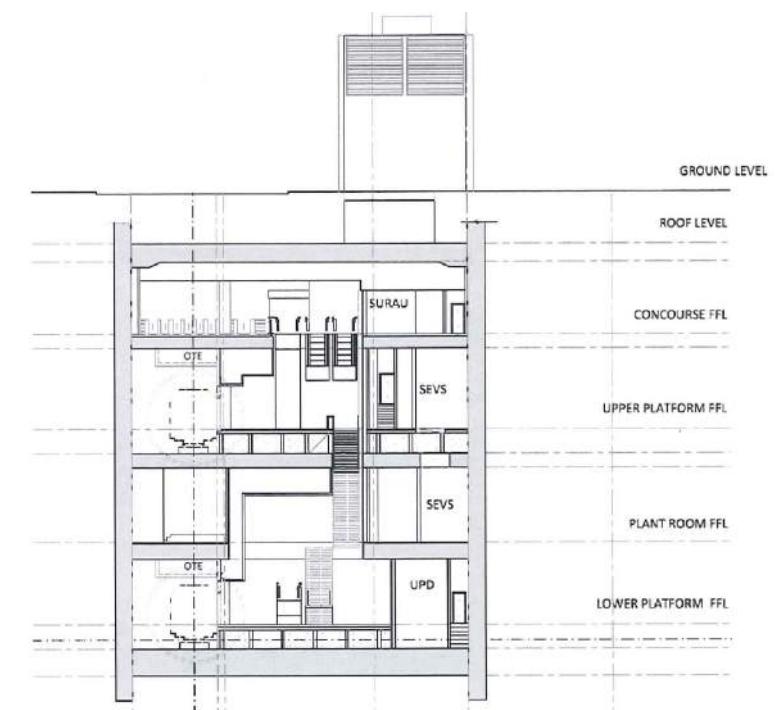


Source : MMC Gamuda KVMRT



Figure 3-6

Example of Side Platform Station



Source : MMC Gamuda KVMRT



Figure 3-7

Example of Stacked Platform Station

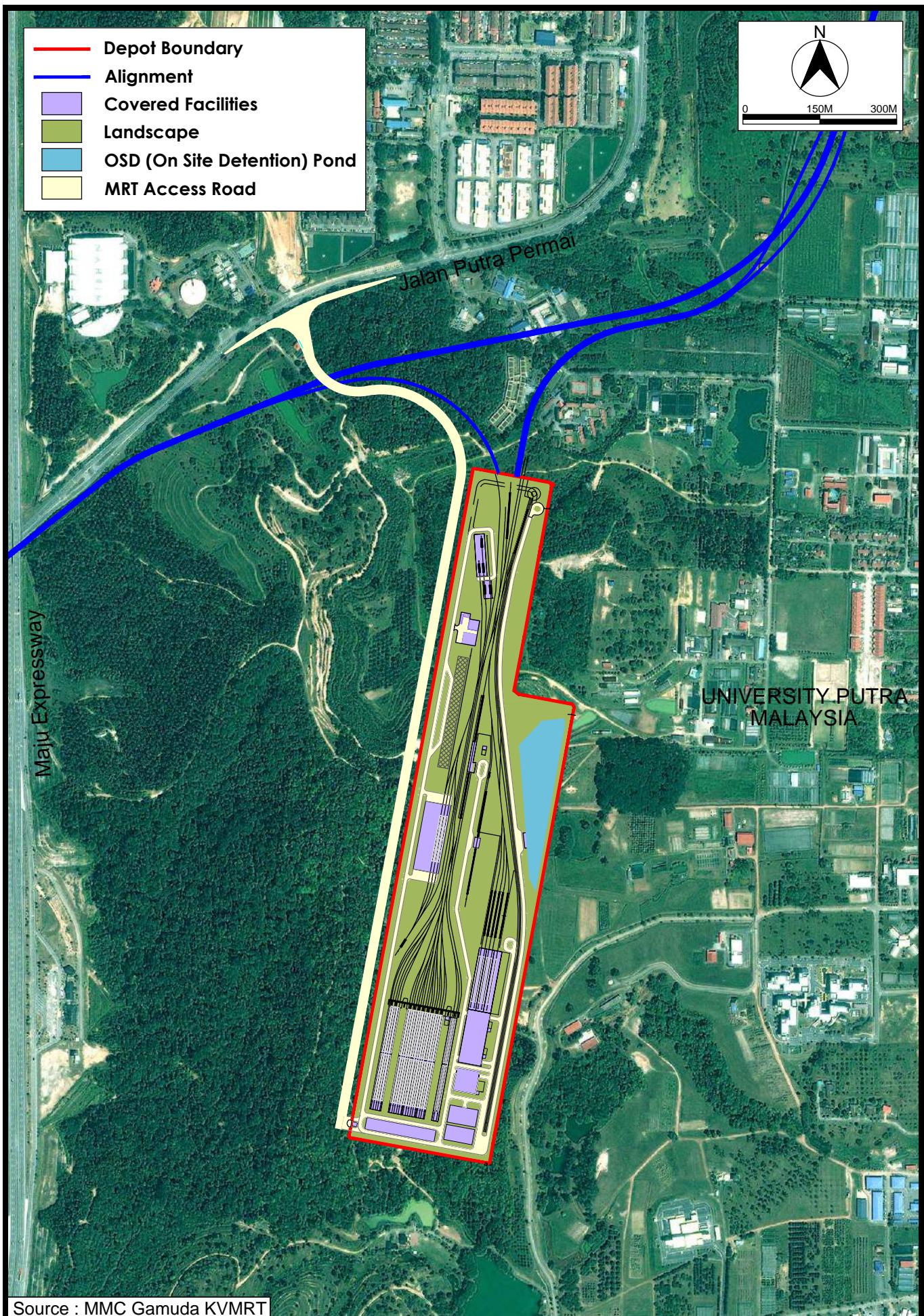
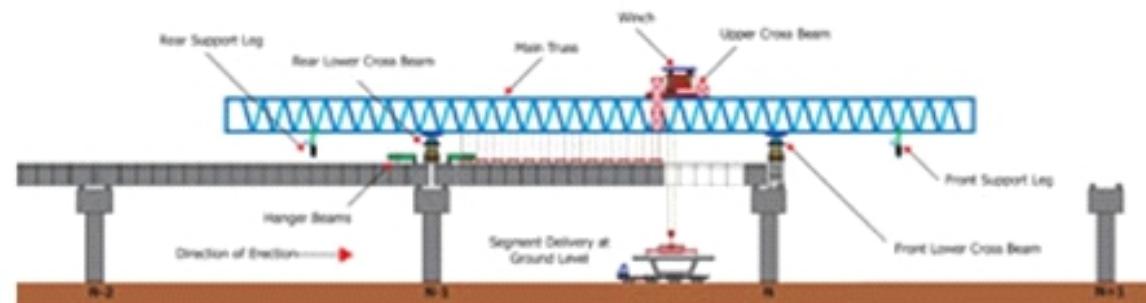
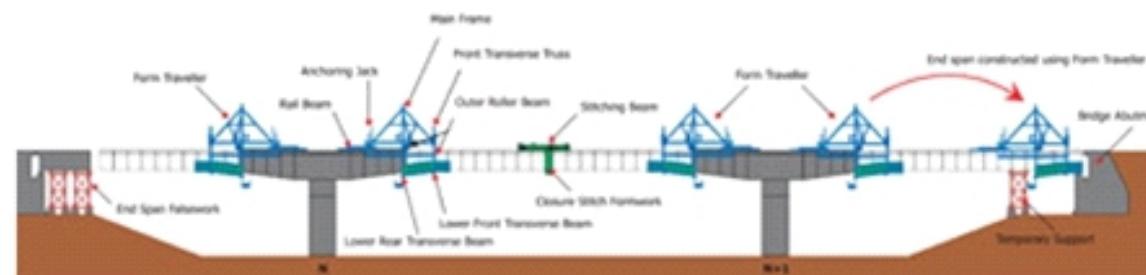


Figure 3-8

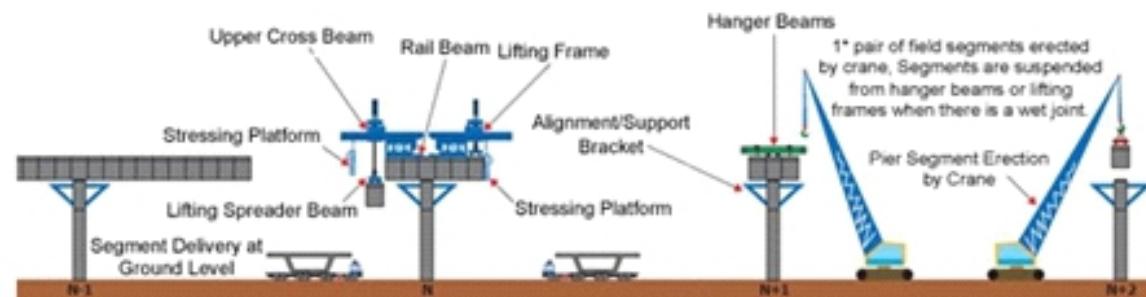
Depot at Serdang



Elevation View Span-by-span Erection with Launching Gantry Method



Elevation View Form-traveller Method



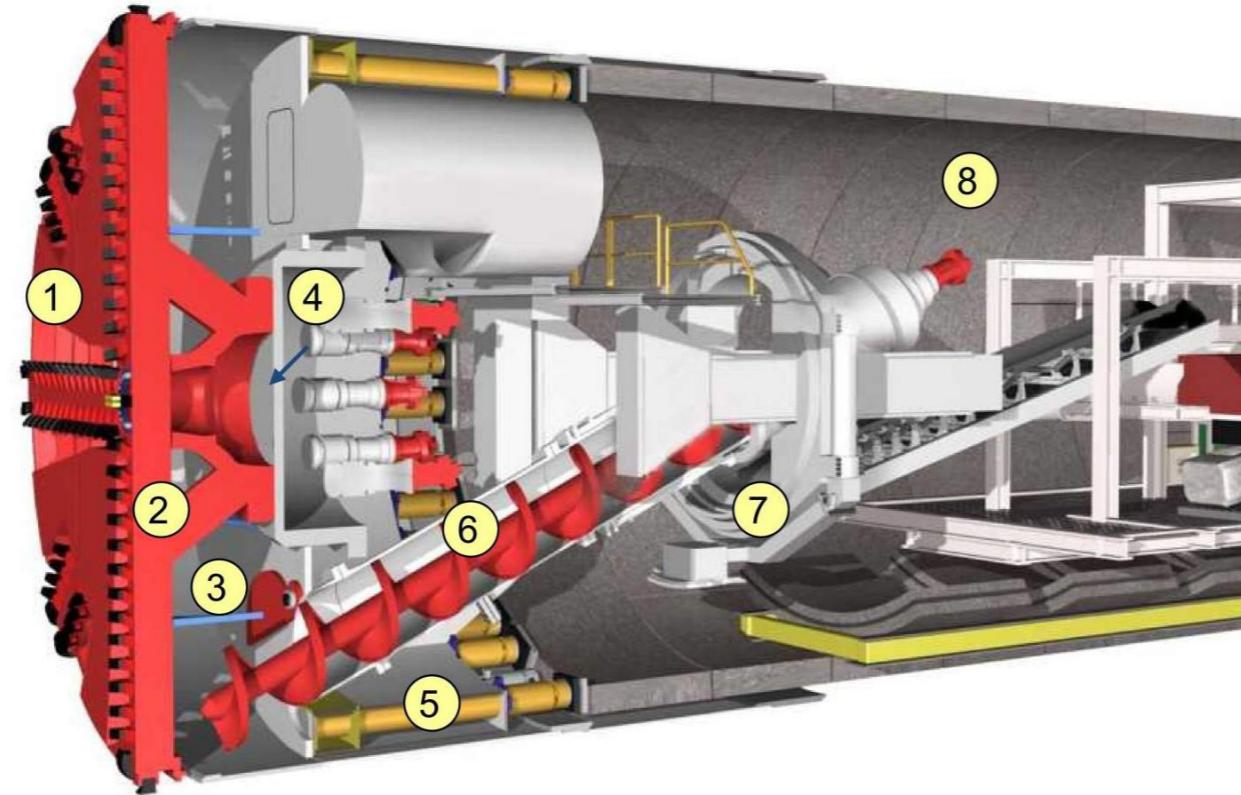
Elevation View Balanced cantilever erection with lifting frames Method

Source : MMC Gamuda KVMRT



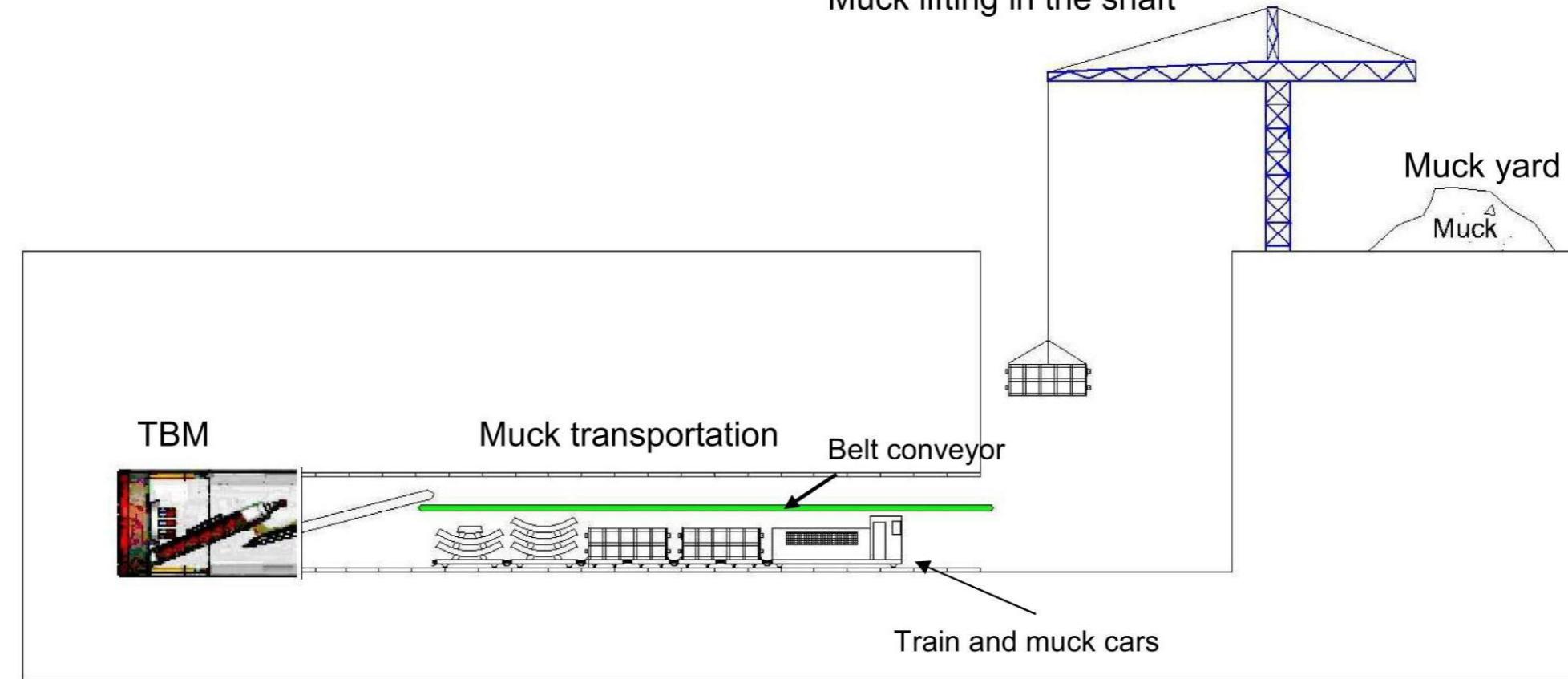
Figure 3-9

Example Elevation View for Post-tension Balanced Cantilever  
(2 Methods Proposed)



- 1. Tunnel face
- 2. Cutting wheel
- 3. Excavation chamber
- 4. Pressure bulkhead
- 5. Thrust cylinders
- 6. Screw conveyor
- 7. Erector
- 8. Segment lining

Muck lifting in the shaft

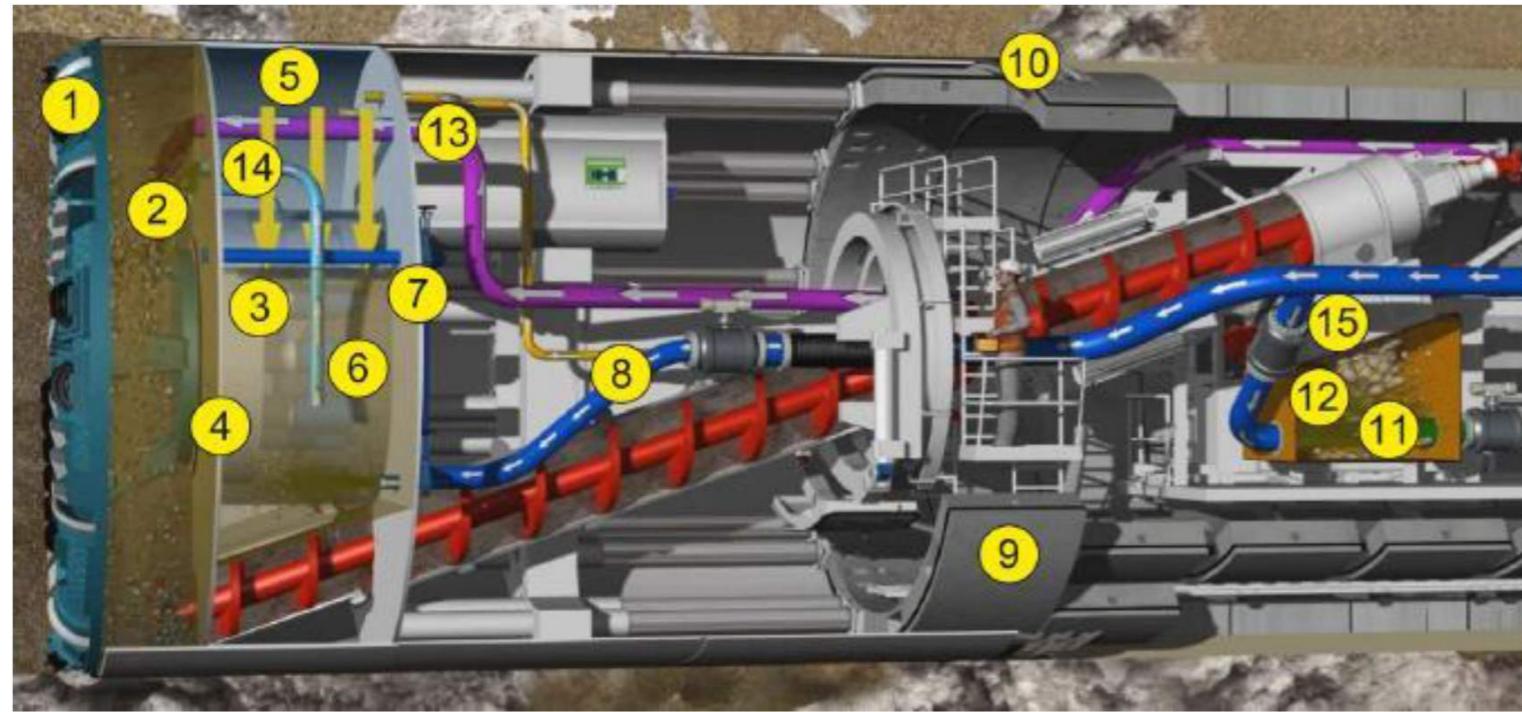


Source : MMC Gamuda KVMRT



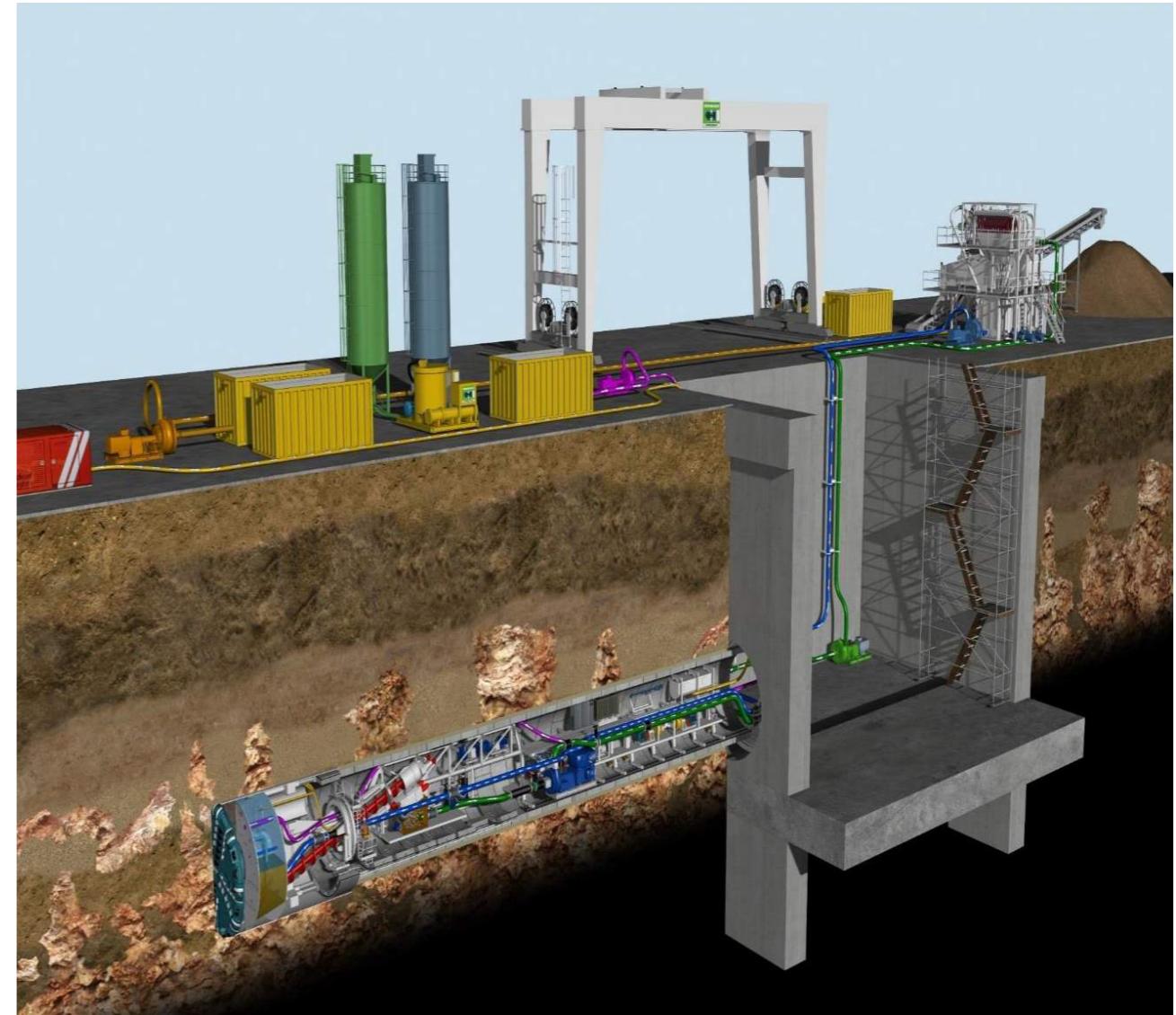
Figure 3-10

Earth Pressure Balance (EPB) Tunnel Boring Machine



[1] Cutting wheel  
[2] Excavation chamber  
[3] Face support medium  
[4] Submerged wall  
[5] Air bubble  
[6] Working chamber  
[7] Bulkhead  
[8] Feedline (LDSM)  
[9] Segment

[10] Tailskin  
[11] Slurry line  
[12] Slurryfier box  
[13] Suspension line (HDSM)  
[14] Communication pipes  
[15] Rotary crusher

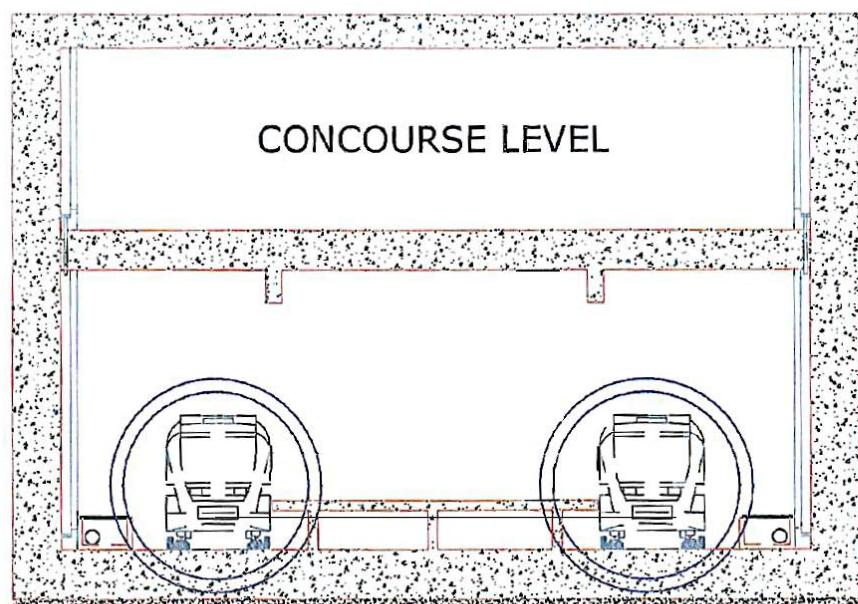


Source : MMC Gamuda KVMRT

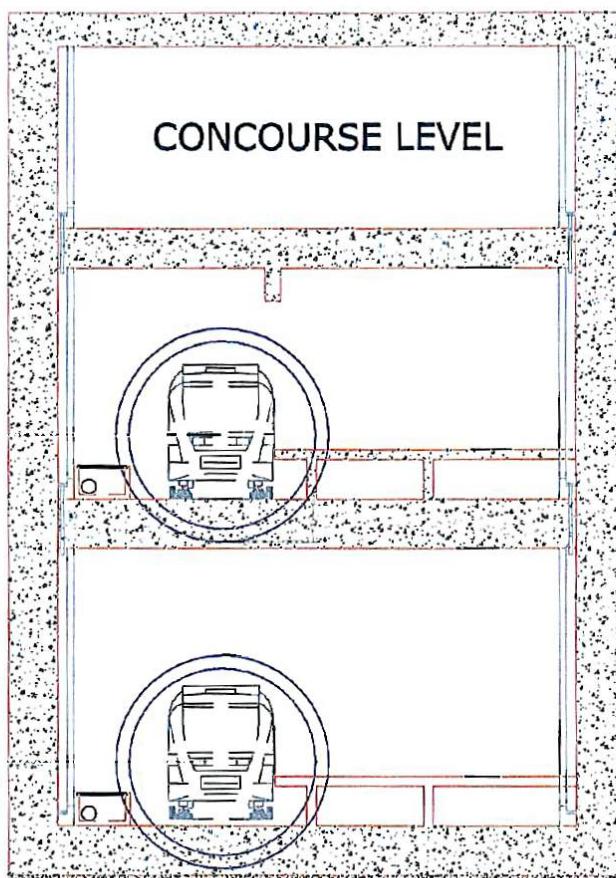


Figure 3-11

Variable Density Tunnel Boring Machine



**Parallel Platform Underground Station**



**Stacked Platform Underground Station**

Source : MMC Gamuda KVMRT



Figure 3-12

Example of Underground Station