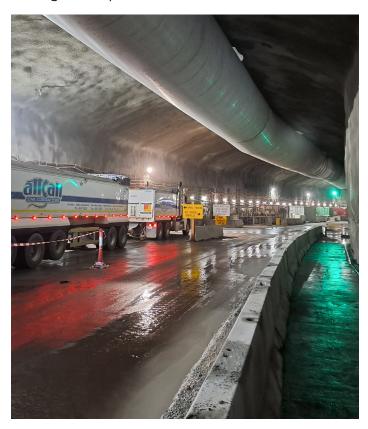


# Western Harbour Tunnel Underground Spoil Loadout

In the original Environmental Impact Statement (EIS), spoil load-out for the Western Harbour Tunnel (WHT) - Southern Tunnelling Works Project was set to occur at the site of the old Balmain Leagues Club on the corner of Victoria Road and Darling Street, Rozelle.

The 8,500m<sup>2</sup> Balmain Leagues site is bounded by residential properties, Rozelle Public School and numerous small retail businesses. With up to 420 heavy vehicle movements anticipated to enter the site daily, this proposal was likely to be highly impactful for the community.

John Holland and CPB Contractors Joint Venture (JHCPB) the design and construction contractors for the works, developed an innovative solution – Underground spoil load-out!





### **Innovation**

By retrofitting the existing WHT portal within the Rozelle Interchange Project footprint to contain a spoil stockpile and load-out access zone, the team avoided use of the Balmain Leagues Club site as a construction support site.

The team set up the infrastructure needed for this innovative solution by:

- prioritising completion of the Rozelle Interchange drainage bridge which runs along the edge of the WHT portal,
- adding two temporary cross-passages for heavy vehicle access/egress (avoiding the need to reverse heavy vehicles),
- pouring a 20,000m<sup>2</sup> concrete slab to enable spoil truck access and a further 6,000m<sup>3</sup> as spoil bin walls to store excavated spoil,
- relocating the Project's water treatment plant underground to minimise surface footprint impacts,
- establishing new site offices along City West Link and The Crescent,
- relocating mechanical and electrical workshops underground.

## **Benefits**

### **Social**

### · Pedestrian safety

Significantly less interaction between construction vehicles and pedestrians, particularly school children attending Rozelle Public School

### Public access to green space

Site offices placed at the WHT portal, rather than within the future Rozelle Parklands, mean opening this public green space to the community earlier than anticipated

### **Financial**

### Site establishment

Months of site establishment (environmental controls, traffic management and site access points) and associated costs avoided

### Excavation

Temporary decline excavation and associated costs avoided

### **Programme benefits**

### Accelerated program

Excavation began 3 weeks earlier than forecast

### Government acquisition

No need for government acquisition or leasing of the Balmain Leagues site

### **Economic**

#### Businesses

No traffic congestion from heavy vehicle movements exiting site at Victoria Road and Darling Street, Rozelle means less impact on business performance and deliveries

### Site redevelopment

Allows potential earlier redevelopment of the disused Balmain Leagues site



Installing the site offices alongside the WHT portal (in an existing commercial/industrial area) reduced negative impacts to visual amenity.





### **Environment**

### Noise

Noise contained within WHT tunnel portal

### Heavy vehicle routes

Heavy vehicles enter and exit the site via City West Link, a major arterial road large enough to accommodate heavy vehicle traffic

### Sensitive receivers

No immediately adjacent residential or commercial neighbours

#### Dust

Less dust potential associated with spoil management

### Flood risk

No increased flood risk (the original design brought a risk of changes to nearby water flows)

### **Sustainability**

### · Sustainable material use

The WHT cut and cover structure is an existing site, so fewer materials required to establish a spoil load-out zone



The new WHT support site (green) has fewer sensitive receivers than the original design (blue), and adjoins a major road (City West Link) that can better accommodate heavy vehicles.

