

# Tunnel Construction Method Statement

## 1. Introduction

This method statement covers the safe and systematic approach for the excavation, reinforcement, and lining of tunnels.

## 2. Scope of Work

- Site preparation and setup
- Tunnel excavation
- Rock stabilization and lining
- Drainage and ventilation installation

## 3. Objectives

1. Deliver a structurally sound and durable tunnel.
2. Ensure worker safety during excavation.
3. Minimize environmental impact and disruption.

## 4. Resources Required

### 4.1. Personnel

Mining engineers, geotechnical experts, and tunneling crews.

### 4.2. Equipment

Tunnel boring machines, rock drills, and conveyors.

### 4.3. Materials

Reinforcement bars, shotcrete, and lining materials.

## **5. Work Methodology**

### **Step 1: Site Setup**

- Mobilize equipment and set up utilities.

### **Step 2: Excavation**

- Excavate using TBMs or drill-and-blast methods.

### **Step 3: Stabilization**

- Apply shotcrete and install rock bolts.

### **Step 4: Lining and Drainage**

- Cast concrete linings and install drainage systems

## **6. Safety Measures**

- Regular ventilation checks.
- Ensure blasting procedures are conducted safely.