

## **SP-8 Basic Tunnel Protection Track Layout Illustration - General Description**

The SP-8 layout, titled “Basic Tunnel Protection,” represents a track configuration designed to ensure safe train operations through a tunnel by using protective signaling on both ends. **Basic Tunnel Protection** refers to a safety mechanism that controls train movements as they approach and pass through a tunnel, typically involving signals to prevent two trains from entering the tunnel from opposite directions simultaneously, thereby reducing collision risk.

This layout is divided into three blocks:

**Blocks:** 1, 3 (the tunnel), and 4. Block 3 represents the tunnel area, while Blocks 1 and 4 are the approach and exit sections on either side of the tunnel.

The signaling system includes two single-headed signals, positioned at the entry points of Blocks 1 and 4. These signals control train access into the tunnel, ensuring only one train is in the tunnel section at any given time.

There are no turnouts in this layout, as it is solely focused on providing protective measures for trains passing through the tunnel.

This configuration is suitable for simple tunnel operations where basic protection is required. The use of signals at each end of the tunnel maintains safe train passage, preventing conflicts and ensuring smooth traffic flow through this potentially limited-visibility section of the track.