Preparation of Detailed Project Report (DPR) and providing Pre-Construction activities in respect of the Approach Roads with Avalanche Protection Works in between Z-morh Tunnel East portal to Zojila Tunnel West Portal and Access Road at Zojila East Portal

#### **ANNEXURE**

Preparation of Detailed Project Report (DPR) and providing Pre-Construction activities in respect of the Approach Roads with Avalanche Protection Works in between Z-morh Tunnel East portal to Zojila Tunnel West Portal and Access Road at Zojila East Portal

# ANNEXURE-1 SASE REPORT ON AVALANCHE PROTECTION STRUCTURES

# Conceptual layout of Avalanche Protection Structures between Z Morh & Zojila Tunnels



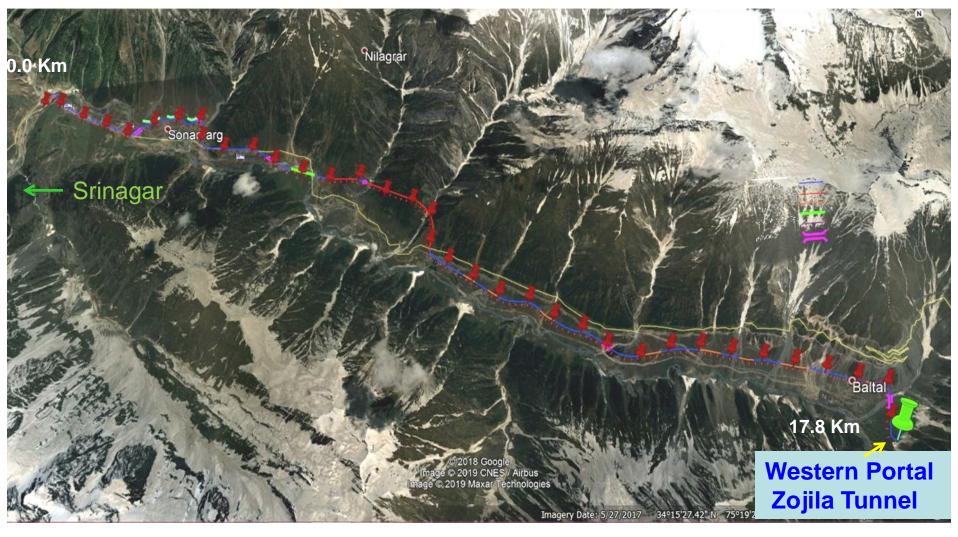




Snow and Avalanche Study Establishment Research & Development Centre, Him Parisar, Sector 37-A Chandigarh-160036

DRAFT REPORT

#### New Road alignment between Z Morh & Zojila Tunnels





Length of the new alignment = 17.8 km

#### New Road alignment between Z Morh & Zojila Tunnels

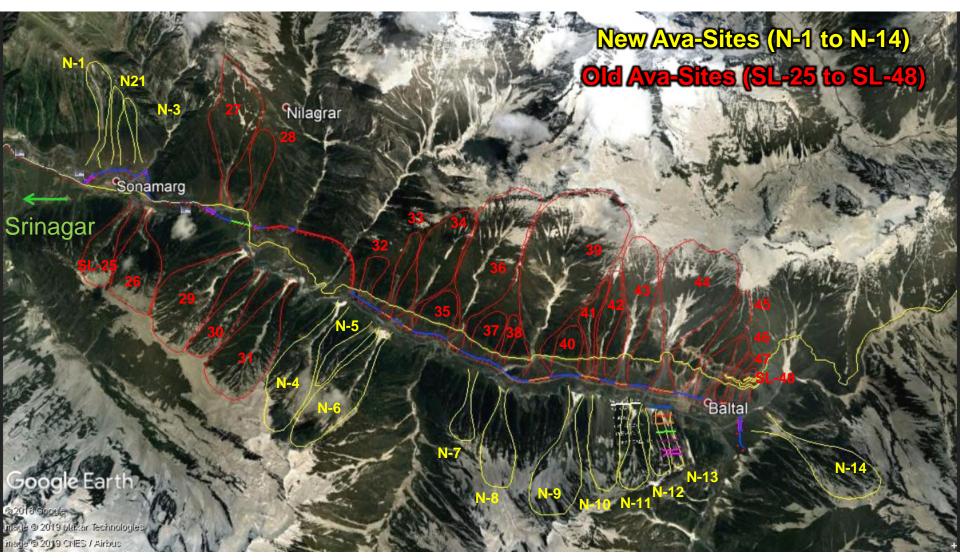




Length of the new alignment = 17.8 km (Winter view)

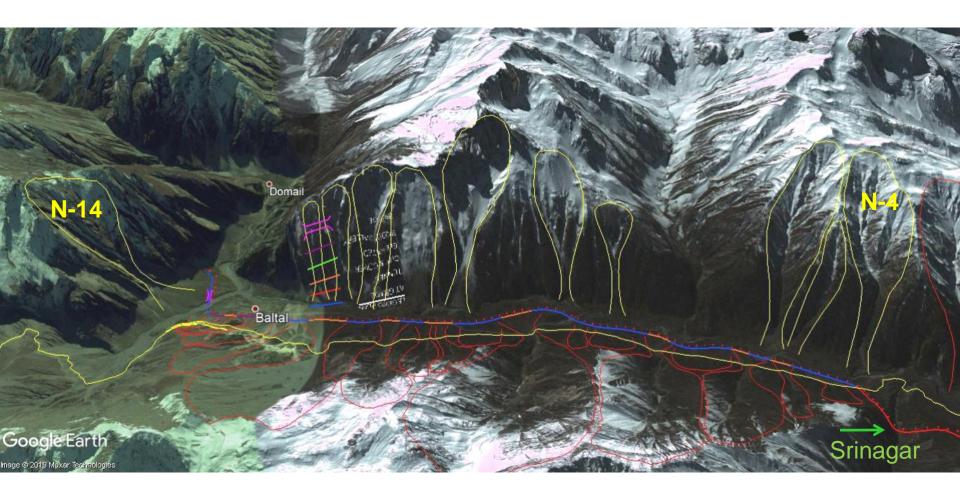
DRAFT REPORT

#### **Avalanche Sites from Both Slopes**



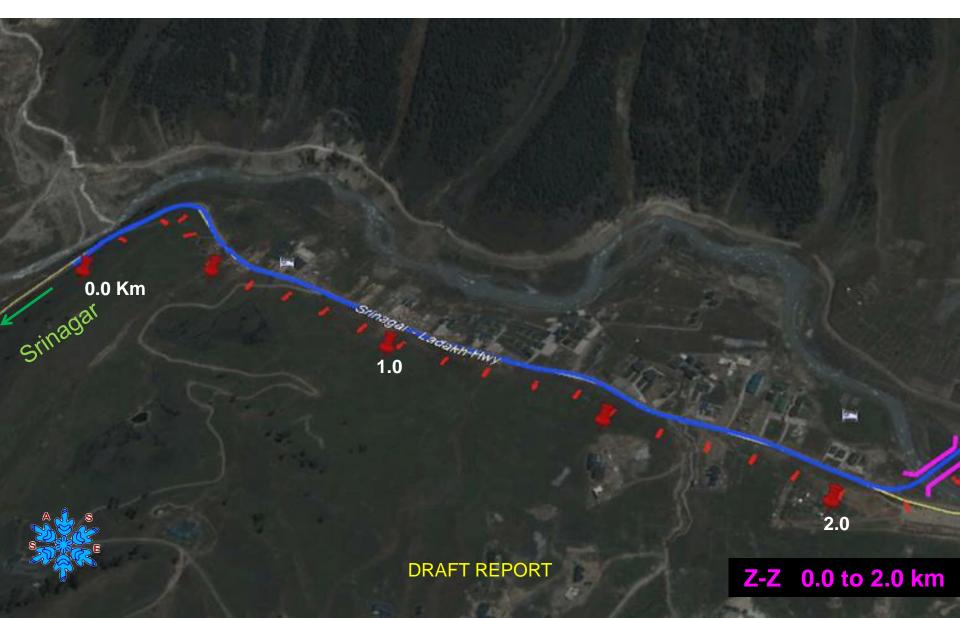


## New Avalanche Sites from Opposite Slope N-4 to N-14

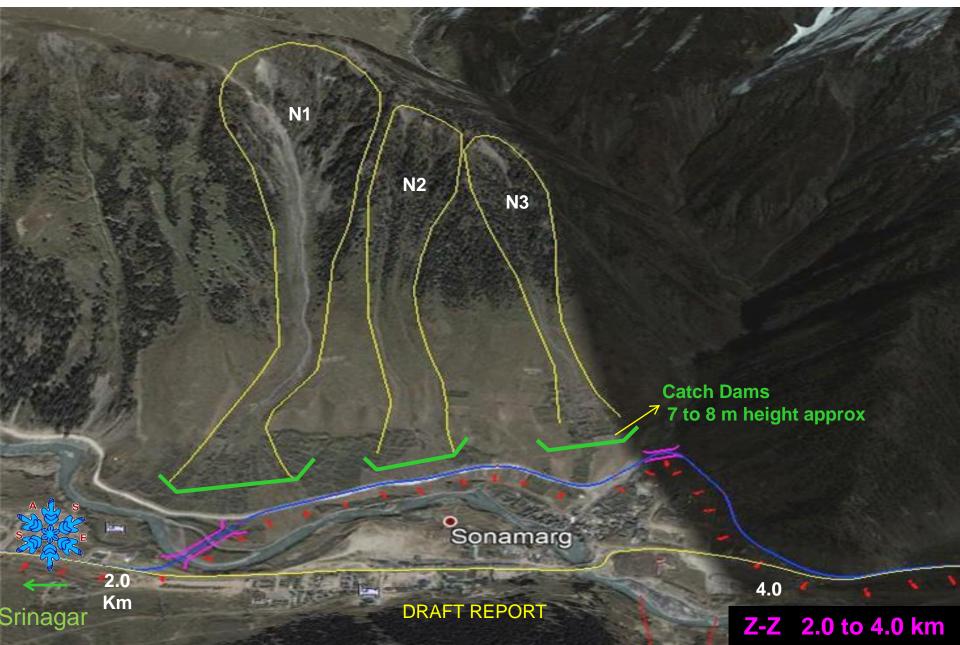




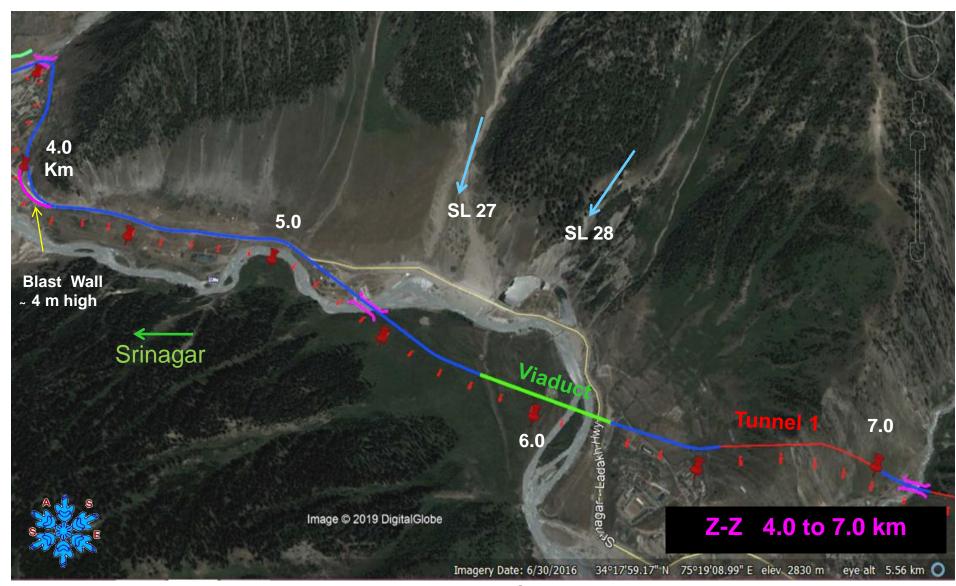
## New Road alignment between Z Morh & Zojila Tunnels 0.0 to 2.0 Km



# New Road alignment between Z Morh & Zojila Tunnels 2.0 to 4.0 Km



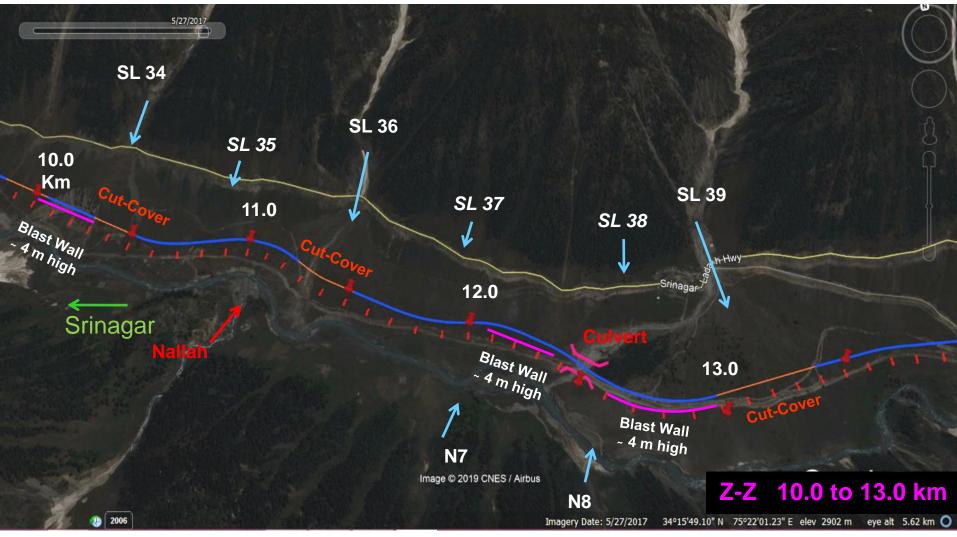
## New Road alignment between Z Morh & Zojila Tunnels 4.0 to 7.0 Km



## New Road alignment between Z Morh & Zojila Tunnels 7.0 to 10.0 Km

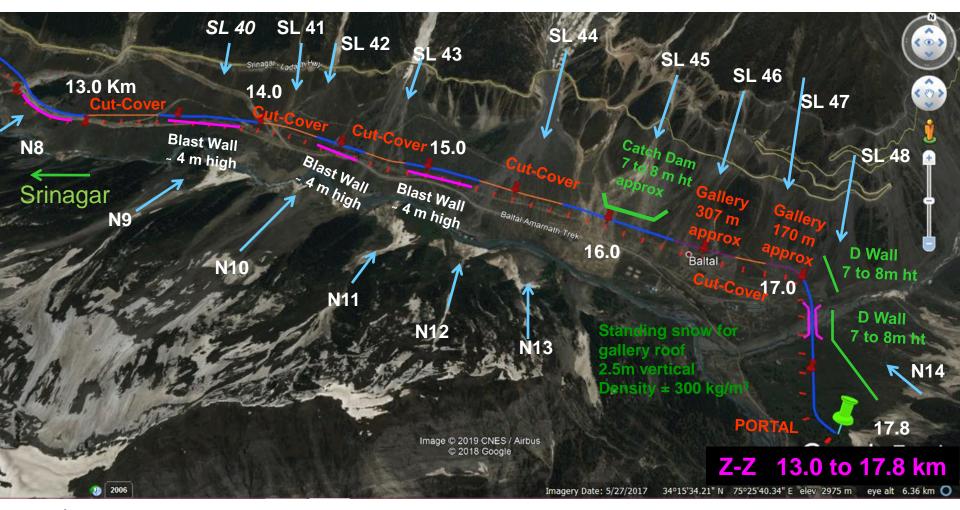


## New Road alignment between Z Morh & Zojila Tunnels 10.0 to 13.0 Km





#### New Road alignment between Z Morh & Zojila Tunnels 13.0 to 17.8 Km





DRAFT REPORT

**Guide walls for Galleries and Cut-Cover as per Contours**