

## Neilsoft: Providing design services for Infrastructure development for cargo and passenger traffic

<p><b>Service Provider:</b> Neilsoft Ltd.  <b>Customer:</b> A world's leading construction company  <b>Vertical:</b> Infrastructure</p>	<p><b>Customer Profile:</b>  A world leader in construction and project development in the Infrastructure</p>
<p><b>Project Profile:</b>  Design, analysis, and detailed engineering services for a 11 km tunnel project consisting of rock and concrete tunnels being developed for solving traffic congestion issues, providing for cargo &amp; passenger traffic links from major seaports to other countries, and to reduce noise &amp; pollution for local residents</p>	<p>Neilsoft's engineering team worked collaboratively with the client's engineering teams in designing the tunnels and associated works like retaining walls, crash barriers, pump houses, escape routes, etc. The project was to be delivered under a tight schedule to minimise the impact in the local areas</p>
<p><b>Duration of the Project:</b> 18+ months  <b>Tools/Technologies Used:</b>  Standard 2D/3D engineering tools, advanced analysis/FEM tools for linear and non-linear stress, dynamic &amp; thermal analysis, and client-specific tools/standards/codes. The team also leveraged 3D/4D tools for construction simulation &amp; sequencing</p>	<p><b>Team Description:</b>  Structural design engineers, detailers and 3D/4D modellers</p>
<p><b>Methodology:</b>  Neilsoft leveraged its proprietary global delivery methodology for executing on this prestigious &amp; complex project collaboratively with our client. The deliverables included over 30+ design reports and 300+ drawings  The team was well-versed with the local standards, had experience of using high-end analysis tools, and in the design of different types of structures (RCC, Steel, Precast). The team worked closely with the client's engineering team to meet the requirements of the contractors involved in the project and the road administration authorities</p>	<p><b>Results Achieved</b>  <b>Technical Benefits:</b>  High quality design reports &amp; drawings  Alternate suggestions in design  More detailed engineering/drawings  <b>Business Benefits:</b>  Lower design/engineering costs due to outsourcing  Reduction in overall project &amp; construction cost due to higher levels of detailed engineering and construction sequencing  Reduction in project completion time  <b>Innovations:</b>  The team leveraged 4D simulation tools for upfront sequencing of construction process &amp; equipment required thereby reducing the cost of errors on project site and effective construction planning</p>