

## Review Form 1.7

Journal Name:	<b>Journal of Engineering Research and Reports</b>
Manuscript Number:	<b>Ms_JERR_99551</b>
Title of the Manuscript:	<b>Resilience in the Face of Seismic Challenges: Design of Earthquake-Resistant Tunnel Supports</b>
Type of the Article	<b>Original Research Article</b>

### **General guideline for Peer Review process:**

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound. To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

(<https://www.journaljerr.com/index.php/JERR/editorial-policy> )

**Review Form 1.7**

**PART 1: Review Comments**

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
<p><b>Compulsory</b> REVISION comments</p> <p>1. Is the manuscript important for scientific community? (Please write few sentences on this manuscript)</p> <p>2. Is the title of the article suitable? (If not please suggest an alternative title)</p> <p>3. Is the abstract of the article comprehensive?</p> <p>4. Are subsections and structure of the manuscript appropriate?</p> <p>5. Do you think the manuscript is scientifically correct?</p> <p>6. Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form.</p> <p><u>(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)</u></p>	<p>1. The manuscript uses Q and RMR to classify rock mass quality, and combines finite element analysis to design and study tunnel branches. This study has certain theoretical guidance significance for practical engineering.</p> <p>2. The title of the manuscript does not reflect specific methods and research subjects, and it is recommended to make modifications.</p> <p>3. The author should add on this basis what key issues this study mainly addresses.</p> <p>4. The overall structure of the manuscript is appropriate, but it is recommended to highlight the research highlights in the conclusion section.</p> <p>5. I think the manuscript is scientifically correct.</p> <p>6. The references are insufficient and not new enough, which is also reflected in the introduction section. The author did not provide a detailed discussion on the classification of rock mass quality and the research progress of tunnel support, and significant improvements are needed.</p> <p>In addition to the above opinions, there are also the following opinions that need to be explained or modified.</p> <p>1. There are many methods for rock mass quality classification, in addition to Q and RMR, as well as BQ and CSIR. Please explain.</p> <p>2. Lack of comparison with other methods or practical applications, resulting in unreliable research results.</p> <p>3. What is the basis for selecting coefficients (like horizontal seismic coefficient of 0.3 and vertical seismic coefficient of -0.15) in the numerical modeling section, and will they have a significant impact on the results?</p> <p>4. "The study is focused on selecting a set of earthquake-resistant supports for each rock type in a Himalayan tunnel." Is this statement in line with actual operability?</p> <p>5. As a manuscript primarily focused on engineering applications, I suggest a clearer introduction to the Himalayan tunnel in section 3.1.</p>	
<p><b>Minor</b> REVISION comments</p> <p>1. Is language/English quality of the article suitable for scholarly communications?</p>	I Suggest seeking relevant institutions for polishing.	
<p><b>Optional/General</b> comments</p>	major revision	

**PART 2:**

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Are there ethical issues in this manuscript?	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

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