Review of: "Effective use of Waste Materials: A Case Study of Utilization of Fly Ash in Flexible Pavement Structures"

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Potential competing interests: No potential competing interests to declare.

" **Effective use of Waste Materials: A Case Study of Utilization of Fly Ash in Flexible Pavement Structures**" This paper needs to be revised to improve the flow. There are a few places where the interpretation seems complicated. The abstract and conclusion need to be rewritten and should be more focused on the research. However, some comments need to be addressed, as follows:

1. The authors need to be adequately revised for an introduction section. Authors must address the research objectives at the end of the introduction section, making it easy to read for the reader.
2. The intention of the study must be extended at the end of the introduction (not only the objectives). Why is this paper being written, and what is the difference between the present submitted paper and previous works? What is needed for this paper? Explain all these questions at the end of the introduction part of the paper.
3. The literature review needs more enhancements, and I would expect much more on the technical issues that reflect the supplementary pavement materials such as fly ash (FA). For example, one valuable reference

    a. **https://doi.org/10.3390/ma15207098**
    b. **https://doi.org/10.3390/su13063330**

4. In many lines, authors mentioned (conducted), try using other words reflecting the entire manuscript ? However, they need to check the whole manuscript with professional English language editing.
5. The authors need to adjust Figures 1 vertically to enhance them ; also, more discussion is required?
6. The authors need to give credit for the feasibility of supplementary cementitious materials' application in solving diverse civil engineering problems.
7. Authors need to support this work with benchmarks in the results and discussion section?
8. In conjunction with lime and water, fly ash forms cementitious compounds due to its pozzolanic properties? Explain this matter ?
9. In order to ensure that fly ash is incorporated into flexible pavements according to engineering specifications, quality control and testing measures should be implemented? Authors need to justify this ?
10. In my opinion, the research articles still need to be enhanced since there are many researchers interested in the utilization of FA in flexible pavement and the topic is hot for scientific credibility.