Interactive comment on “Assessing the tsunami mitigation effectiveness of a planned Banda Aceh Outer Ring Road (BORR), Indonesia” by Syamsidik et al.

Anonymous Referee #2

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General comments: This paper assessed the tsunami mitigation effect of the future Banda Aceh Outer Ring Road (BORR) using numerical simulations. Considering the significant tsunami hazard that Banda Aceh has experienced during the 2004 Indian Ocean tsunami and the potential tsunami threat in the future, having tsunami mitigation structures is urgently important. The evaluation method is valid and the results are appropriate to support the general conclusion. Detailed comments: 1. For the earthquake scenarios, two magnitudes Mw 8.5 and Mw 9.15 are chosen. More justification is required to explain how the fault parameters (e.g. focal depth, dip and slip angle and slip value) are decided. For example, providing some evidences for the fault geometry.

2. Figure 10 and Figure 11, caption, correct to “...with BORR (right)” 3. Table 1. In COMCOT, the Manning roughness coefficients will not function when the SWE type is “Linear”, so the second last column should be set to “None” when the SWE type is “linear”