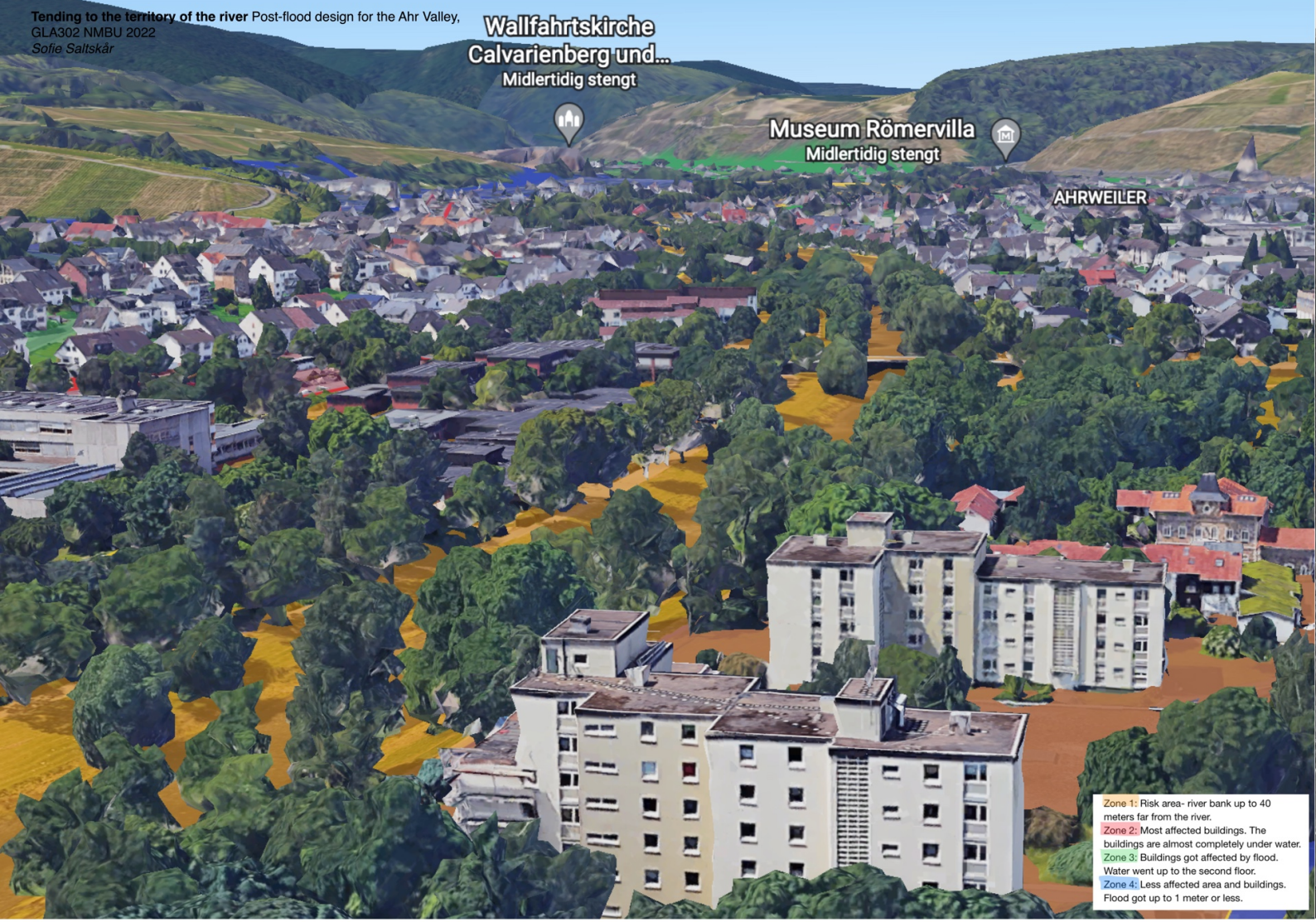


Sofie Hellevang Saltskär



Tending to the territory of the river Post-flood design for the Ahr Valley, GLA302 NMBU 2022  
Sofie Saltskär

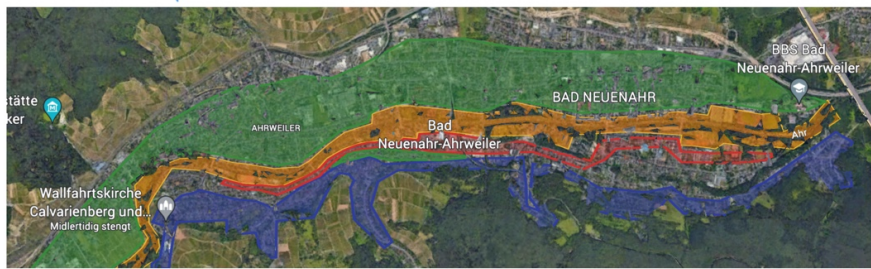
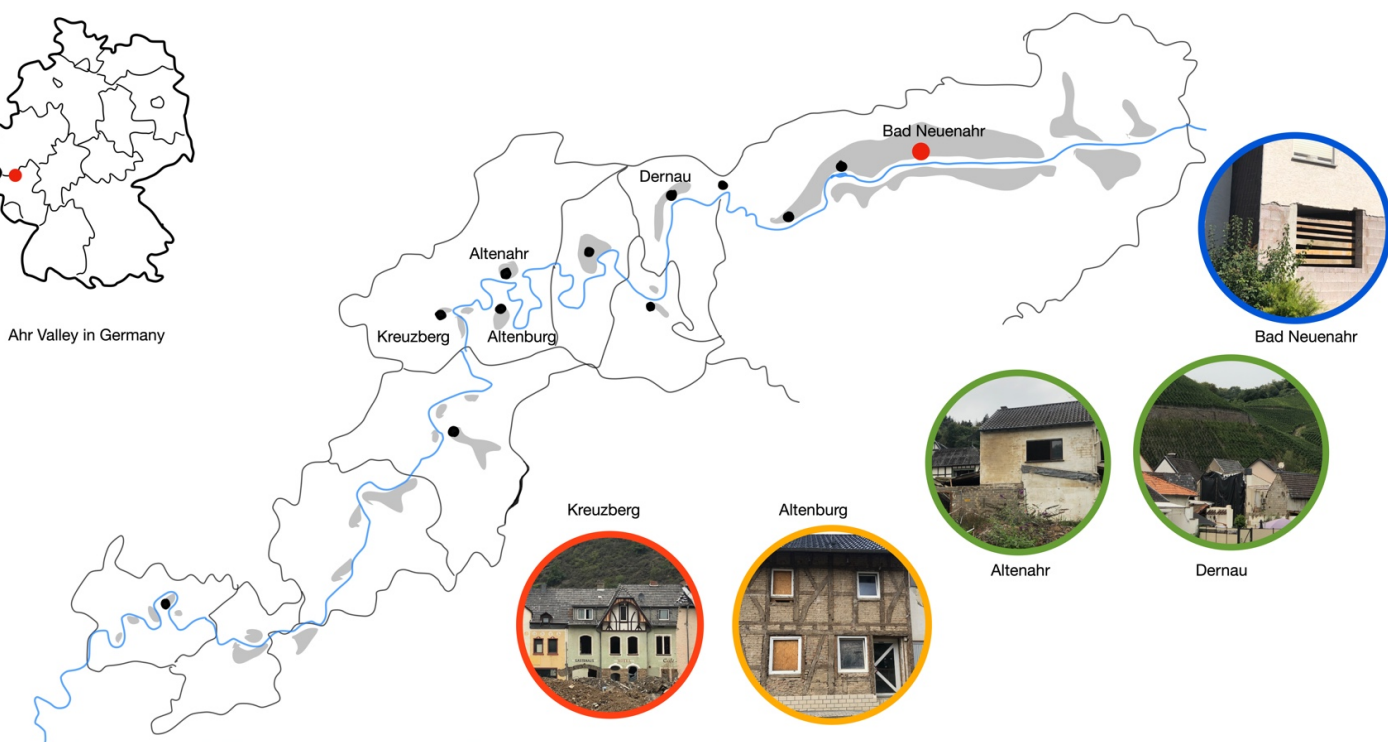


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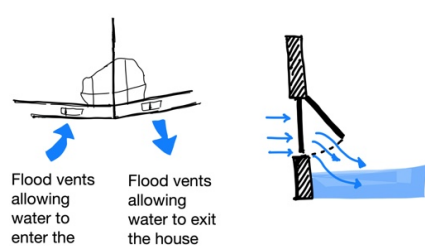
Ahr Valley in Germany



**Zone 1:** Risk area- river bank up to 40 meters far from the river.  
**Zone 2:** Most affected buildings. The buildings are almost completely under water.  
**Zone 3:** Buildings got affected by flood. Water went up to the second floor.  
**Zone 4:** Less affected area and buildings. Flood got up to 1 meter or less.

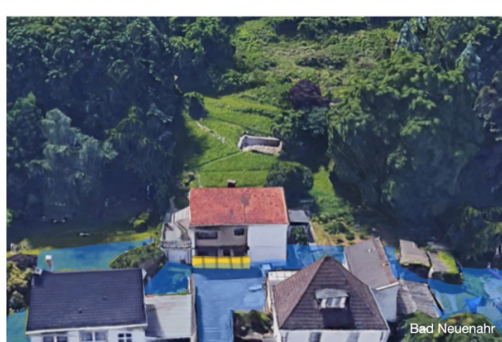
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Toolkit List: Structural Strategies

- | Riverine Barriers   | Elevation   | Floodproofing  |
|---|---|--|
| <ul style="list-style-type: none"> <li>- Floodwalls</li> <li>- Bulkheads</li> <li>- Berms and Leves</li> <li>- Deployable Floodgates</li> </ul> | <ul style="list-style-type: none"> <li>- Raise Land</li> <li>- Create Redundant Emergency Routes</li> <li>- Raise Critical Systems</li> <li>- Elevate Structures Above Water Level</li> </ul> | <ul style="list-style-type: none"> <li>- Fill Levels Below HQ100</li> <li>- Wetproof Levels Below The Water</li> <li>- Dry Proof Levels Below</li> </ul> |



**Deployable floodgates**  
 Floodgates that are mobile elements, integrated into static flood barriers, that are closed during flood events to fill gaps in protective barriers and prevent floodwater intrusion.

