RootBridge Project: Regenerative Housing and Infrastructure

The project focuses on *biomimetic design* and *urban regeneration* by depicting an inspiration from the root structure of trees to create a multifunctional structure that serves as both a transportation bridge and residential units. This design aims to increase housing availability and help alleviate the impoverished conditions in the area. The chosen site for the future bridge spans across the Songwat and Tha Din Deang areas, where many individuals are living on the streets and numerous damaged trees are found near the site. Due to concerns from local residents about traditional concrete bridges destroying their homes and businesses, the root-structure design provides a lesser effect. Mimicking the roots, this approach seems to minimize damage to the surrounding buildings and business areas. To clarify, the root-structure design for the residential and bridge project benefits people without homes by creating *affordable, adaptable housing* within the bridge. By utilizing vertical space and revitalizing underused areas, the project improves living conditions and fosters community support, addressing housing issues and aiding those in need.