

Afterhouse

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Using the constant temperature of the earth Afterhouse is a new urban typology that transforms the concrete foundation of a derelict house into passive solar subterranean greenhouses allowing crops to be extended and moderated in temperate climates. By using readily available materials and techniques while maintaining the scale of the neighborhood, Afterhouse empowers a community to transform a blighted home into productive spaces for growing and celebrating food during the winter.

With 3,400 homes facing demolition in 2016 alone, Detroit is radically changing the way we understand postindustrial urbanity. The typical 1600 square-foot residence has nearly 70 tons of concrete in its foundation that is land-filled in during demolition. In addition to losing the embodied energy of the concrete, the foundation removal is energy and labor intensive. Afterhouse is an alternative to this demolition.

Like too many Detroit houses irreparably damaged by disuse, vandalism and fire, the house at 3347 Burnside must come down. Rather than razing it and leaving fallow land, the house will be deconstructed and the foundation reused to build a semi subterranean,

passive geothermal greenhouse called Afterhouse . Using just the heat of the sun and the constant temperature of the earth, Afterhouse requires no artificial heating in the winter or cooling in the summer and provides an environment where it is possible to raise crops that grow in climates far warmer than Detroit's.

The footprint of the original house is maintained, and vernacular materials used, so that Afterhouse can blend into residential neighborhoods honoring stories of its home's history. Distinct from large-scale urban agriculture projects that require a lot of space, Afterhouse is discrete, almost hidden, making it appropriate for denser urban settings where conventional hoop houses and greenhouses are not. A derelict house transformed from a hazard to a thing of beauty and of use, drawing from what once was to become a part of what Detroit is now, Afterhouse will serve as a prototype for other abandoned houses in post-industrial communities.

