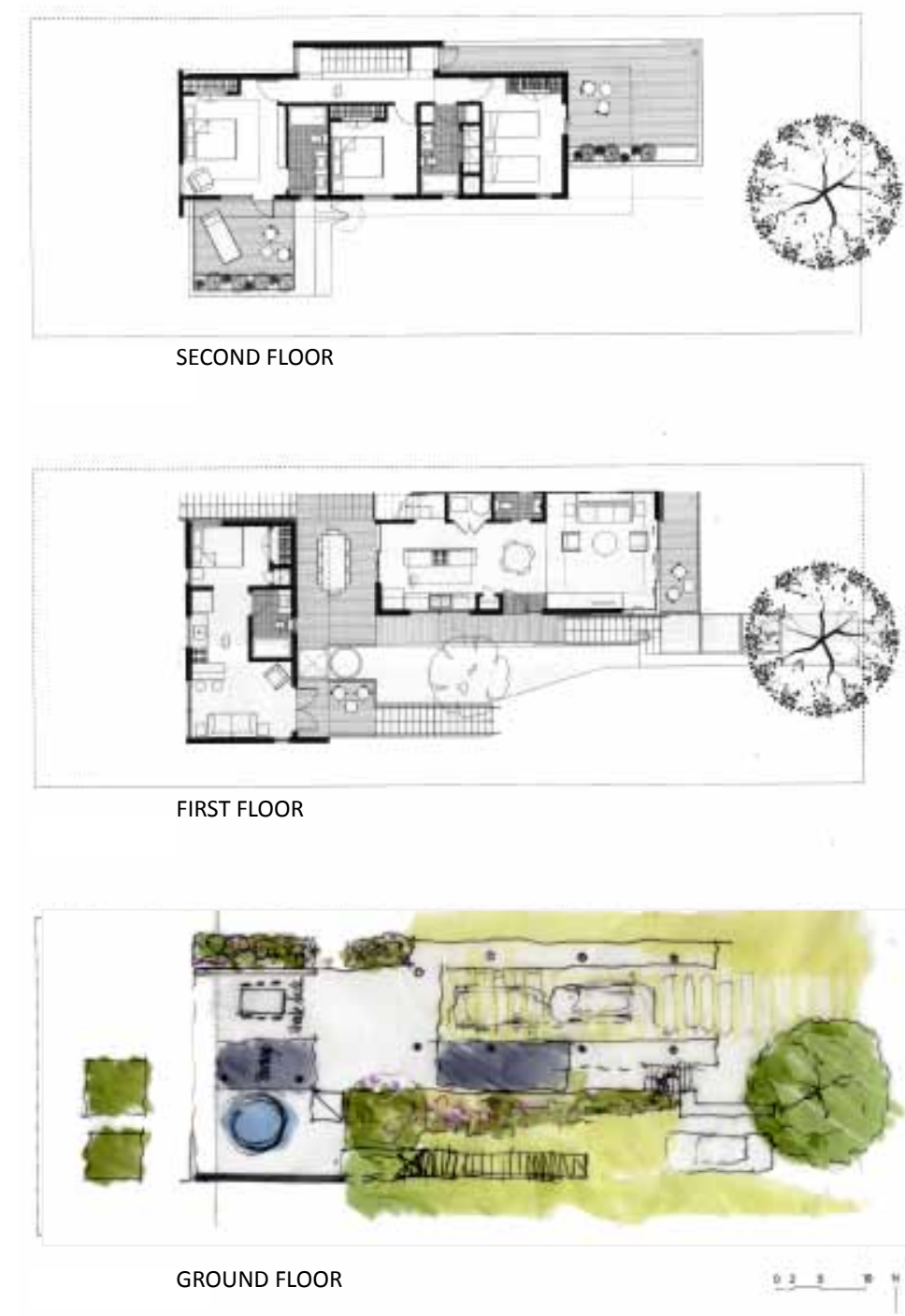


The Flow House



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PROJECT DATA:

The Flow House was designed as disaster relief housing in New Orleans, LA, post-Hurricane Katrina. It was designed based on William McDonough's Cradle to Cradle approach of sustainability. It is a prefabricated, modular duplex that can be adapted based on the needs of the occupants, and incorporates a series of outdoor rooms which serve as an expansion of the interior living space.

"Flow House celebrates Earth's abundance, promoting and nurturing connections between human and natural communities. The design looks to natural systems for inspiration and relies on the belief that all design decisions should support the creation of community and family. Embodying the ideas and ideals of the Lower Ninth Ward and New Orleans, through the Flow House the office strives to create a safe and healthy environment, both natural and built, with all material nutrients returning safely to biological or technical cycles- manifesting a true Cradle to Cradle residential icon." from Architecture in Times of Need by Kristin Feireiss

- PROJECT TYPE: duplex
- COMPLETION: Not yet built- in construction document phase
- Architect: William McDonough + Partners, Charlottesville, VA
- TOTAL SQUARE FEET: 1,900
- UNITS PER ACRE: 2
- COST PER SQUARE FOOT: not known
- UNIT 1 BREAKDOWN: 3 bedroom, 2.5 bath, kitchen, living room, dining area, access to four outdoor decks
- UNIT 2 BREAKDOWN: 1 bedroom, 1 bath, living/kitchen, and deck

HOME QUALITIES:

"The Flow House reflects the Make It Right Foundation's vision for sage, healthy, and high design quality homes- inspired by Cradle to Cradle thinking - that preserve the community spirit of the Lower 9th Ward. The design celebrates the movement of light, shade, air and water as a means of connecting a family with their community and the natural world."

"Referencing vernacular typologies, Flow House responds to the gulf coast's hot, humid climate by providing cool shaded spaces and promoting passive ventilation. The living room fully extends from the 'dogtrot' to the front porch. The design provides views up and down the street to promote a more secure and connected community."

MATERIALS AND ASSEMBLIES:

The Flow House is composed of three prefabricated modular units. Each unit is 16'0" wide and constructed off site. The house was designed by the architects to be 100-percent Cradle to Cradle, which means that each part has the potential to be disassembled and reused and/or "returned to the Earth within biological cycles or to industry within technical cycles."

Wall and roof assemblies are conceived as metal structural insulated panels (SIPs) while foundations, exterior cladding, and millwork are specified as wood (biological nutrients). "Wood will either be FSC certified, formaldehyde-free, and responsibly harvested for millwork, or (non-toxic) acetylated for exterior cladding, structural columns, and foundation piles. Interior walls will be finished with gypsum-free, mold-resistant, and low-VOC drywall (biological nutrient)."

SUSTAINABLE STRATEGIES:

The sustainable strategies include: deep overhangs, multiple connections with exterior areas allowing for lots of daylight and natural ventilation, roof mounted PV panels, water cisterns to harvest rainwater runoff and rain gardens to absorb any storm runoff. According to the architects: "Flow House is designed to maintain materials in biological and technical metabolisms, a goal that informs everything from the selection of products to disassembly strategies at both the building and product level. The material palette is comprised of Cradle to CradleCM Certified products and materials that embody Cradle to Cradle principles"- meaning that after its useful life, all materials in the house can be either recycled or returned to nature.

