

LLOYD CROSSING | Portland, Oregon, U.S



Size: Urban community/district: 35 blocks, 8000 residents

Dates: 2005-2050

Team: (Planning Phase) Project Team: Mithun Architects+Designers+Planners, KPFF Consulting Engineers, GreenWorks, PC, SOLARC Architecture and Engineering, LLC

Description: Lloyd crossings is a 35 block area located in down-town Portland, OR. The planning will allow for mixed use commercial services and residential units in a pioneering eco district that compliments Portland's 25 year strategic road map

Intent: Lloyd Crossings aspires to meet and not exceed per-development water, biodiversity, energy, and carbon metrics of the site while creating a densely urban city district

S

Sit+Place

GOALS: (Food) Not reported other than proximity to resources within urban center ; (Habitat+Biodiversity) 4 acres (10%) of public accessible park space ; (Transport) Not defined

STRATEGIES: (Food) Not reported ; (Habitat+Biodiversity) 30% tree coverage using native forest species, green roofs, habitat corridor, hierarchical system of green streets, pedestrian streets, bioswales, habitat corridors, 50 acres of restored forest habitat implemented off-site ; (Transport) Existing public transit system, streetcar line planned, underground parking lots, bike infrastructure, ride sharing

W

Water

GOALS: 2050 water neutral
Potable water from rainwater: 100%
Storm water runoff: 45%

STRATEGIES: Blackwater treatment system, 60% water conservation through efficiency, separated water types in all buildings, individual rainwater harvesting systems in all development, bioswales, and water used for landscaping, non-potable building uses

E

Energy

GOALS: Carbon Neutral, 80% carbon reduction by 2050, 90% energy from renewable sources by 2050, 60% reduction in energy demand

STRATEGIES: Pre-development metrics, solar massing guidelines for future buildings, net energy producer incorporating solar, wind, biomass, and carbon credits on and off site, pre-development metrics of the site, strict efficiency standards, 10% of energy from on-site renewable resources, energy retrofits of existing buildings

E

Equity

Percentage of affordable units: Not defined
GOALS: Not defined

STRATEGIES: Monitor indoor air quality, daylighting, walkable with diverse accessible services, biophilic design, community identity

M

Materials

GOALS: (Materials) Not defined ; (Waste) Zero Waste

STRATEGIES: (Materials) Minimize use of virgin materials, materials come from 300-500 miles radius. Materials selected based on LCAs, toxicity, recycled and renewable sources, energy performance, durable, low maintenance ; (Waste) Eliminate waste, optimize reuse and salvaging, compost, waste to energy recovery systems, adaptability and flexibility of systems, buildings, etc.

SUSTAINABILITY MATRIX

		STANDARD	GOOD	BETTER	LIVING COMMUNITY	REGENERATIVE
S Site+Place	Limits to growth			Built on greyfield of brown-field, developed for density, conserves habitat land		
	Urban Ag		Some community garden space			
	Habitat Exchange				Each hectare of development requires an equal amount of land set aside in perpetuity	
W Water	Human Powered Living			Walkable streets, bicycle infrastructure, public transit links, car sharing, EV charging stations, easy access to services		
	Net Positive Water			Greywater purification & reuse, on-site treatment of some blackwater, constructed wetlands, stormwater prevention (green-roofs & impermeable surfaces)		
E Energy	Net Positive Energy			2030 standards of efficiency, advanced construction techniques, ongoing monitoring to meet goals, net +ve energy, carbon neutral goals, 100% renewable energy		
H Health+ Happiness	Civilized Environment		Community has some groups to promote social connections			
	Healthy Neighborhood Design		Some access to walking trails that connect to amenities, parks, recreation areas			
	Biophilic Environment				Innovative landscaping, designed to include elements that encourage human/nature connection, aesthetic design	
	Resilient Community Connections			Emergency planning, access to facilities in case of emergency		
M Materials	Living Material Plan			Rigorous material selection standards, material plan made available to public		
	Embodied Carbon Footprint			Material selection requirements, proxy standards for reducing CO2 in material selection and construction on-going energy monitoring		
	Net Positive Waste			Reduction in construction waste, material selection for recycled/recyclable materials, innovative waste collection facilities, waste to energy		
	Human Scale and Humane Places			Project is designed to create human-scaled places, promotes culture & interaction		
E Equity	Universal Access to Nature and Place			Access to parks, innovative landscaping, promotes sense of place, community agriculture, daylighting for buildings		
	Universal Access to Community Services			Diversity of services available in community easily accessible by different modes of transportation,		
	Equitable Investment	No contribution to charity				
B Beauty	Beauty and Spirit					
	Inspiration and Education			Unit metering, education on sustainable practices, opportunities for community engagement		

SOURCES:

- http://ecolloyd.org/wordpress/wp-content/uploads/2013/02/lloyd_roadmap_FINAL_hires.pdf
- <http://www.aiatopen.org/node/159>
- <https://www.asla.org/awards/2005/05winners/022.html>
- <https://placesjournal.org/assets/legacy/pdfs/lloyd-crossing-sustainable-urban-design-plan-and-catalyst-project.pdf>
- <http://mithun.com/project/lloyd-crossing-sustainable-urban-design-plan/>



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