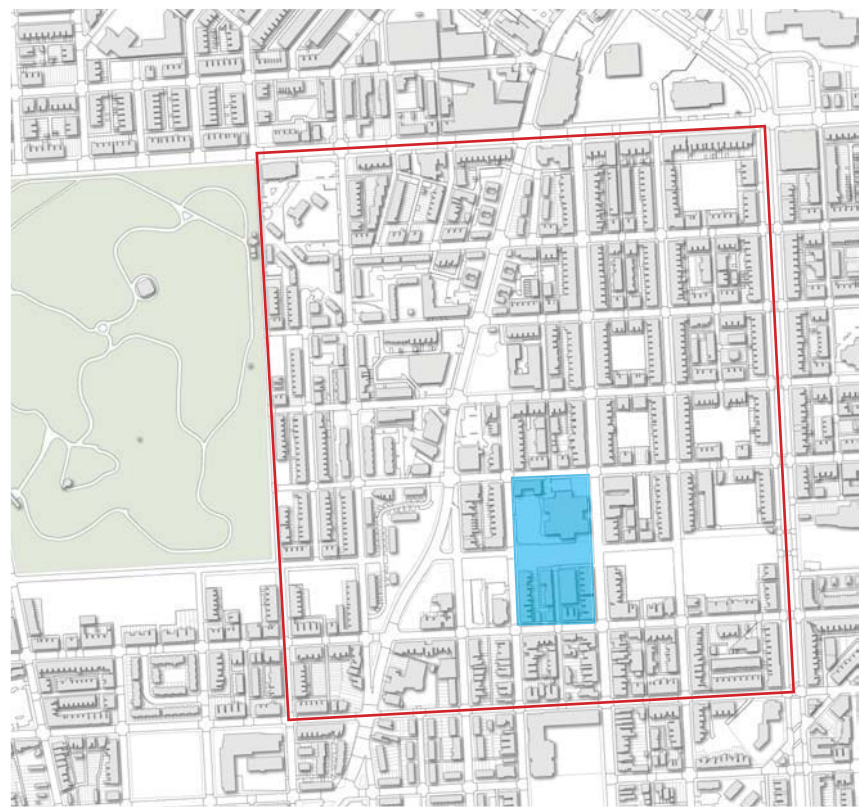


Re-Connecting Fragmented Habitats Through Baltimore's Oliver Neighborhood

CONTEXT

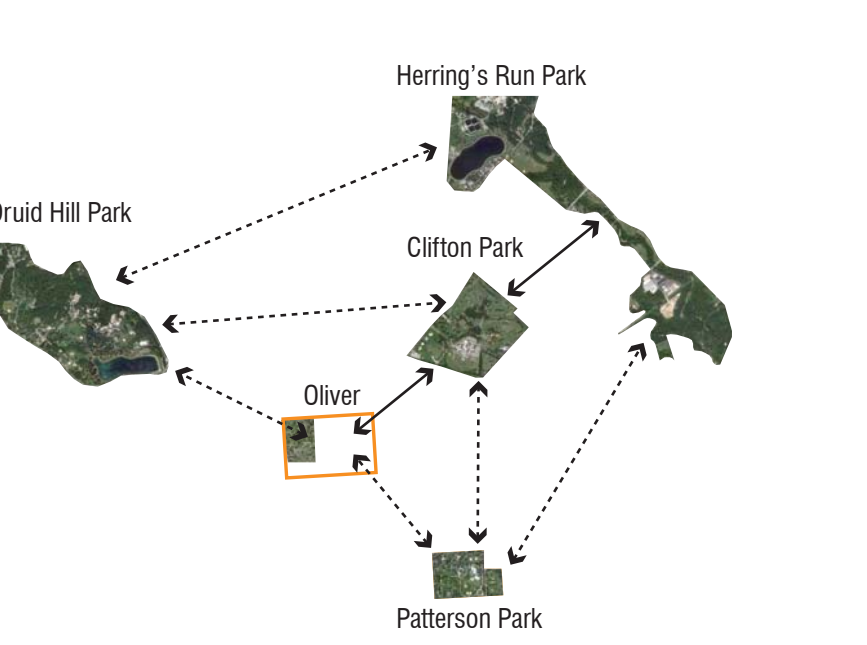


CONCEPT

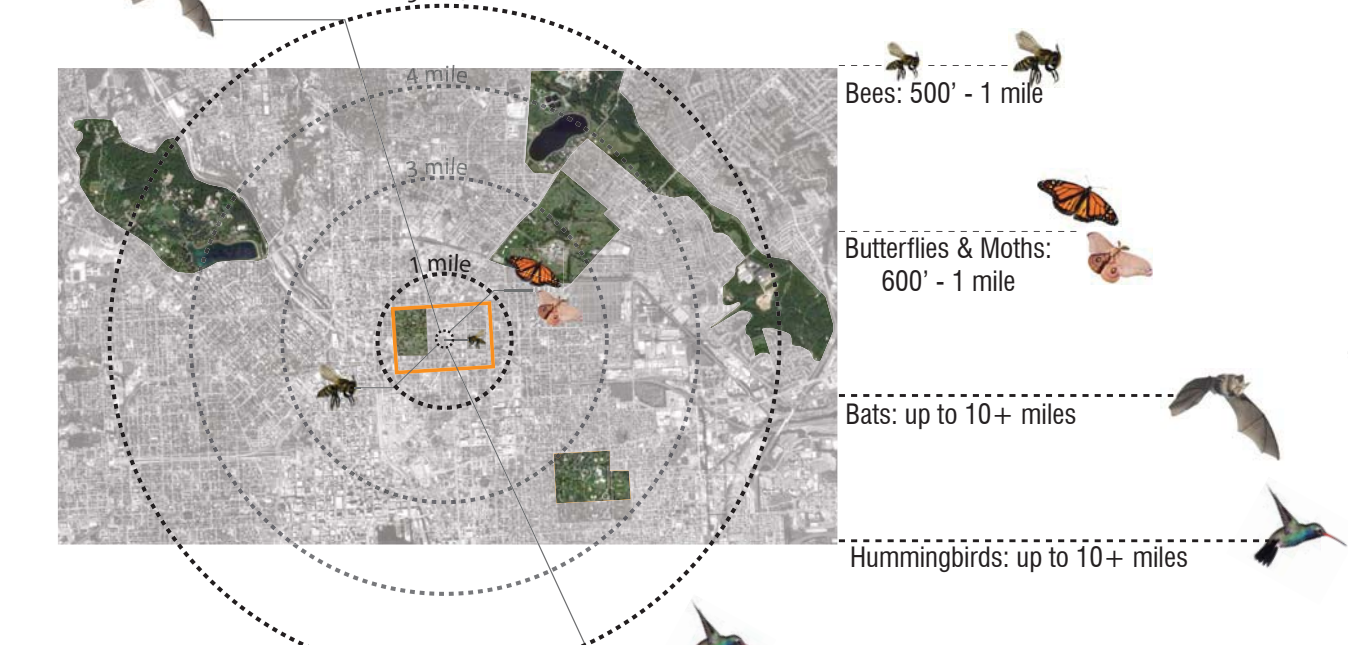
The neighborhood of Oliver within the city of Baltimore has been burdened with the growing issue of property vacancy. As population density decreases the number of abandoned buildings and vacant properties increase. Oliver offers potential for the systematic deconstruction and demolition of a number of abandoned buildings, which can then be paired with the numerous vacant lots in the neighborhood to begin to facilitate an urban-greenway system through Oliver connecting the larger public open spaces of Clifton Park, Patterson Park, and Herring Run Park. Connecting Oliver to these larger, pre-existing ecosystems provides a strong framework that the neighborhood can build off of to enhance habitat production for pollinator species of insects and birds alike. A number of pollinating species of butterflies, moths, and bees are suffering from a decline in habitat, causing a chain reaction in flower and food production. The city of Baltimore also lacks canopy coverage.

The implementation of an urban greenway will help to increase canopy coverage while serving as potential habitat and food source for pollinating species. By converting these vacant lots to public spaces that provide ecological benefit will help to increase education as well as improve the aesthetic quality of the neighborhood and the ecological implications of vacant lots. If successful, other projects that benefit pollinating species can be implemented such as urban agriculture providing the neighborhood with a more economic opportunity. It can also benefit the housing market, raise awareness to the issues related to vacancy, and provide ecological and social benefits for the future success of the neighborhood.

PARK NETWORK



POLLINATOR FORAGING RANGES



CITY-WIDE ECOSYSTEM CONNECTIONS



LINKS

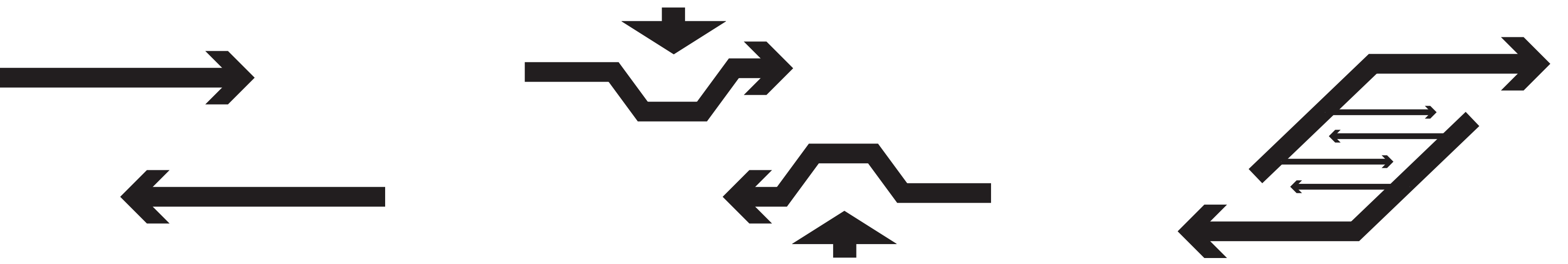
This site provides the neighborhood of Oliver and its vacant properties the opportunity to become an ecological link between the larger ecological amenities, such as Druid Hill Park and Herring's Run Park.

INFLUENCES

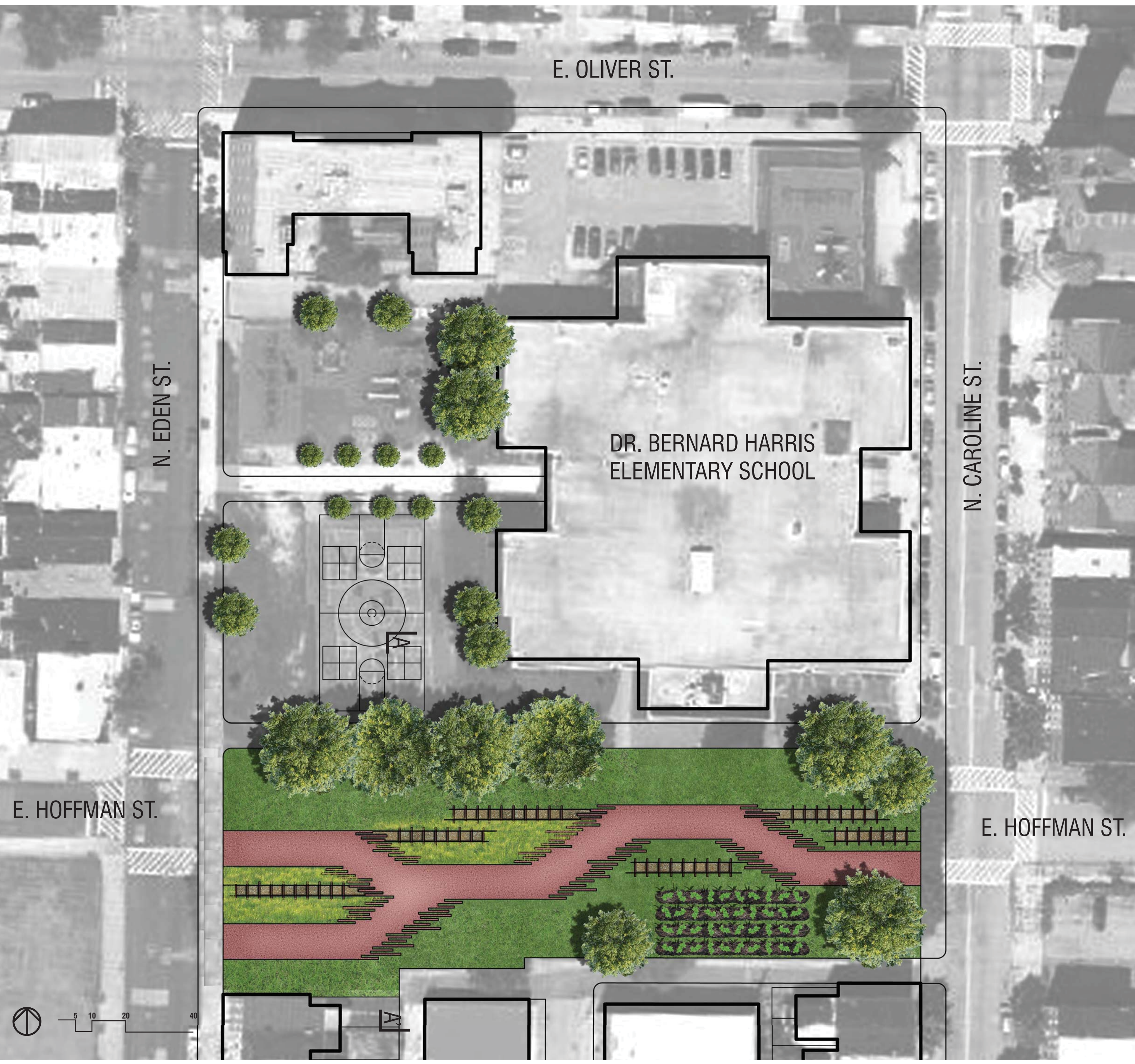
Each vacant property within Oliver presents its own unique programmatic elements that can influence a design or the way in which a project is handled.

CONNECTIONS

Ultimately in the end each reclaimed vacant property can become a connection through the neighborhood of Oliver that can provide utilitarian as well as ecological functions to the community.

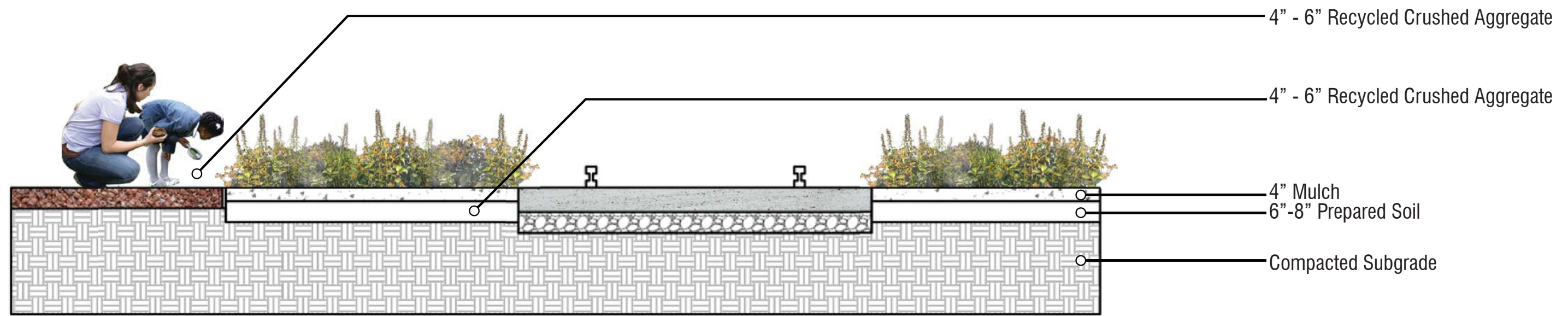


MASTER PLAN

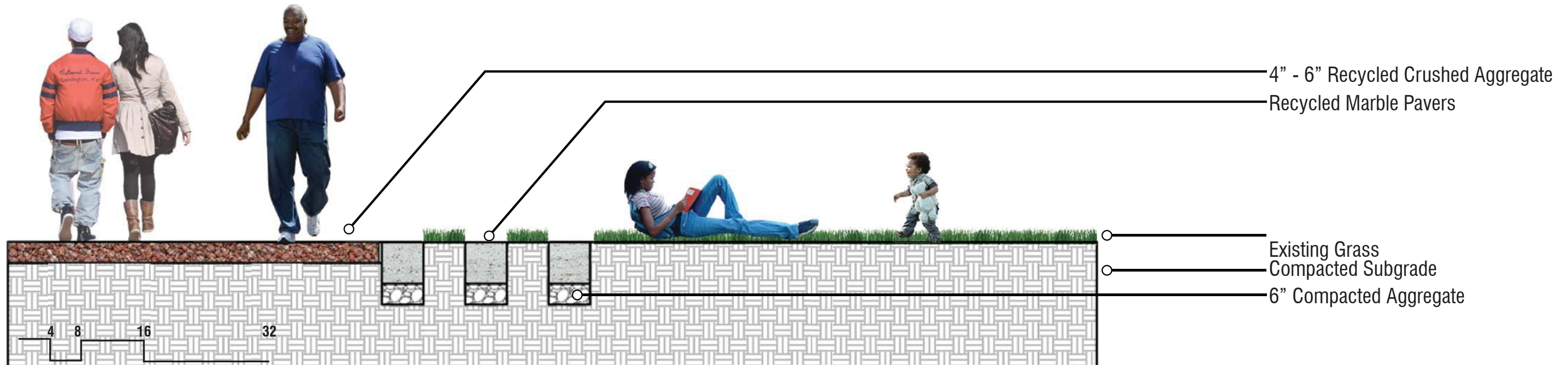


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acre

Re-Connecting Fragmented Habitats Through Baltimore's Oliver Neighborhood



1 RECYCLED PATHWAY AND RAILROAD
Scale: 1/4" = 1'



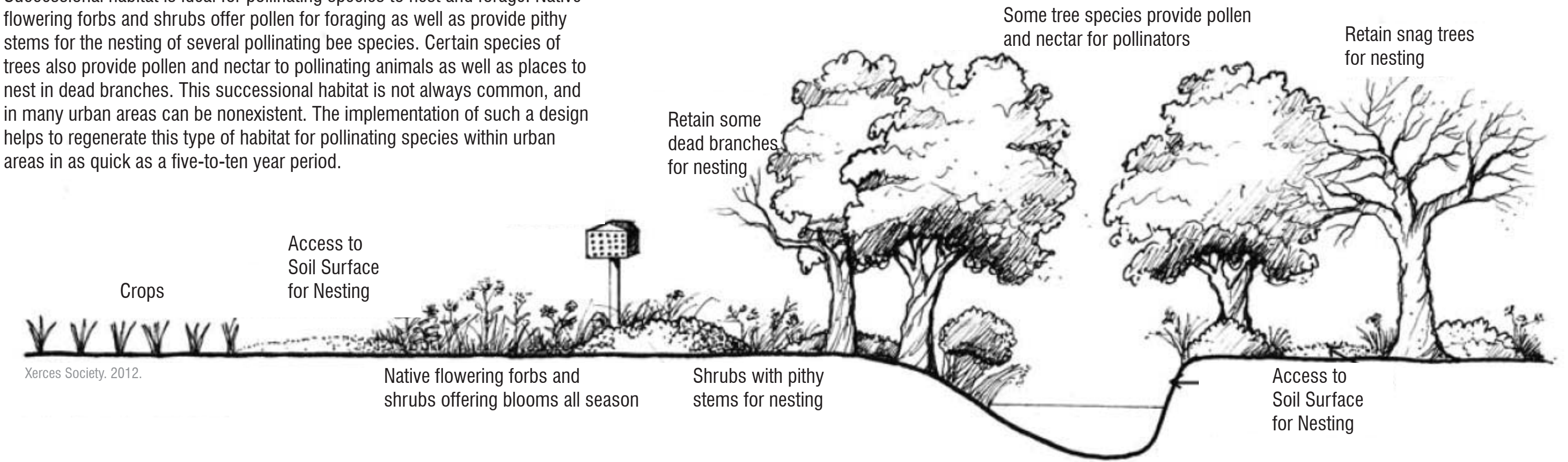
2 RECYCLED PATHWAY AND MARBLE PAVERS
Scale: 1/4" = 1'



Re-Connecting Fragmented Habitats Through Baltimore's Oliver Neighborhood

SUCCESSIONAL POLLINATOR HABITAT

Successional habitat is ideal for pollinating species to nest and forage. Native flowering forbs and shrubs offer pollen for foraging as well as provide pithy stems for the nesting of several pollinating bee species. Certain species of trees also provide pollen and nectar to pollinating animals as well as places to nest in dead branches. This successional habitat is not always common, and in many urban areas can be nonexistent. The implementation of such a design helps to regenerate this type of habitat for pollinating species within urban areas in as quick as a five-to-ten year period.

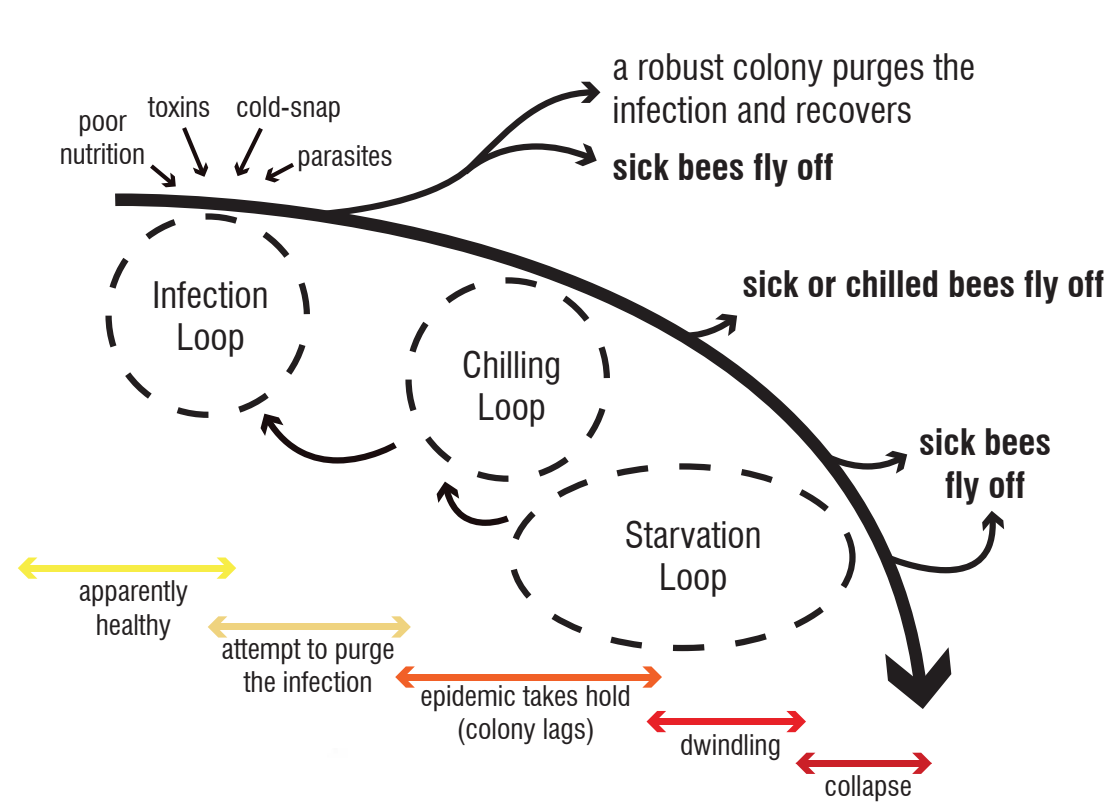


SUCCESSIONAL HABITAT GENERATION



COLONY COLLAPSE

Some causes of Colony Collapse Disorder are: Pesticide poisoning through exposure to pesticides applied to crops or for in-hive insect or mite control. Bee management stress. Foraging habitat modification. Inadequate forage/poor nutrition, and Potential immune-suppressing stress on bees caused by one or a combination of factors identified above.



POLLINATOR "RED-LIST" OF MARYLAND:

- king's hairstreak *Satyrus kingi*
- hessel's hairstreak *Mitoura hesseli*
- early hairstreak *Erora laeta*
- northern metalmark *Calephelis borealis*
- frosted elfin *Callophrys irus*
- rare skipper *Problema bulenta*
- persius duskywing *Erynnis persius persius*
- regal fritillary *Speyeria idalia*
- rusty patch bumble bee *Bombus affinis*

VACANT LOTS



ABANDONED BUILDINGS



OLIVER NEIGHBORHOOD



MAINTENANCE + = \$\$

CARRYING COST OF VACANT PROPERTIES

3 GRASS CUTTINGS/SEASON	\$760
4 TRASH/DEBRIS REMOVALS/YEAR	\$1,015
TOTAL AVERAGE MAINTENANCE COSTS	
2009	\$9,540,625
2010	\$7,100,000
TOTAL VACANT LOTS	
2009	5,375
2010	4,000

Baltimore Office of Sustainability, 2010.

