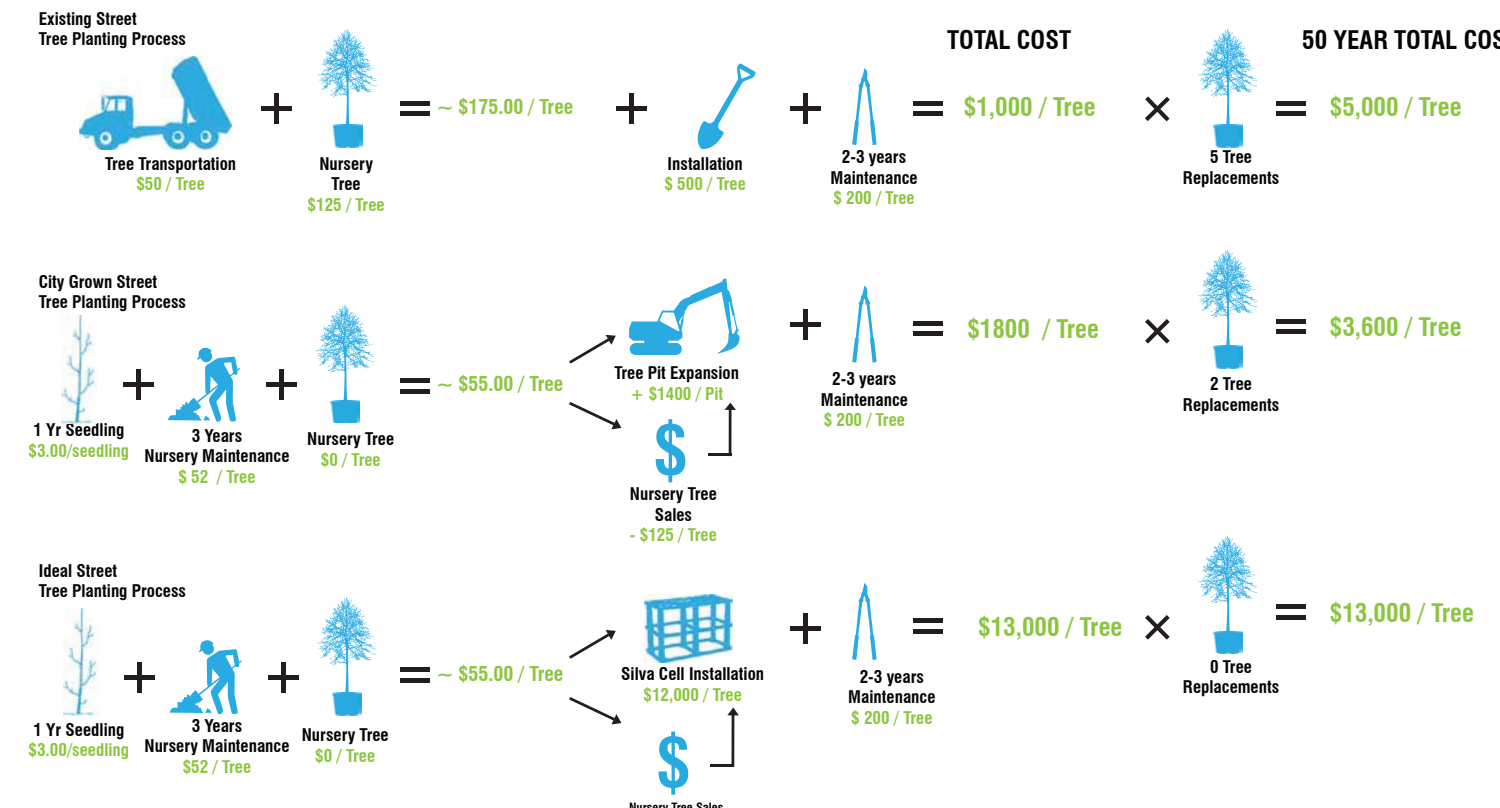


Pocket Nurseries to Pocket Parks: Reclaiming Baltimore's Oliver Neighborhood

CONTEXT



STREET TREE PLANTING METHOD COST



CONCEPT

Baltimore's population has been in decline since 1950 and this decline has caused several issues, most notably, high numbers of vacant lots and vacant buildings. These vacancies provide a unique opportunity to re-plan and redevelop areas of the city to become strengths rather than weaknesses. The challenge that we face is to repurpose the high number of vacant lots and buildings that are spread around the city and concentrated in neighborhoods like Oliver.

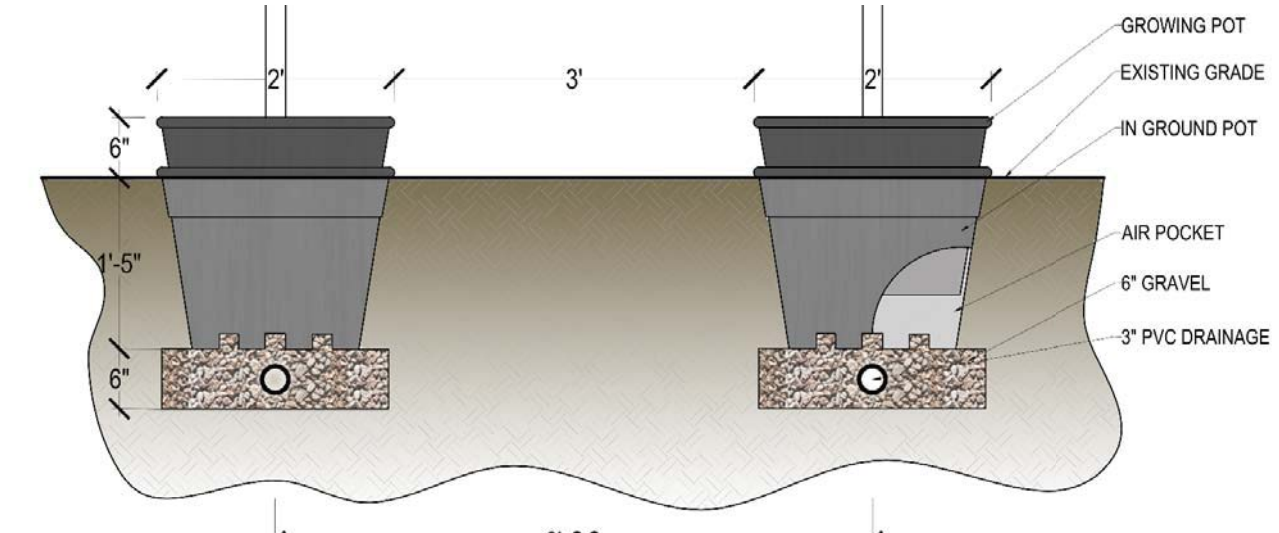
Repurposing vacant lots is a complex task that requires careful planning that extends over several years with multiple phases. Within Baltimore City there is an opportunity to utilize the vast number of vacancies in order to revitalize the streets and create a more livable and walkable city. Currently there is 20 percent tree canopy coverage in Baltimore City. The American Forests recommends 40 percent canopy cover as the ideal and realistic goal for urban areas. Establishing a healthy tree canopy in cities has many benefits, including environmental benefits, economic benefits, and social benefits. The challenge with establishing this tree canopy is the availability of open space. Open space in cities is limited because of high density style of living, but there are two areas that we can utilize to increase the canopy coverage, the streets and vacant lots. The vast number of vacancies provides the opportunity and space to facilitate a program that can begin to establish a new tree canopy that will result in street revitalization that will bring new residents and new businesses. Utilizing the vacancies as tree farms will not only provide new street trees for the city but it will also provide an opportunity to design these tree farms in a manner that can facilitate community interaction, participation, and ultimately transition into pocket parks for the community.

HOFFMAN MASTER PLAN



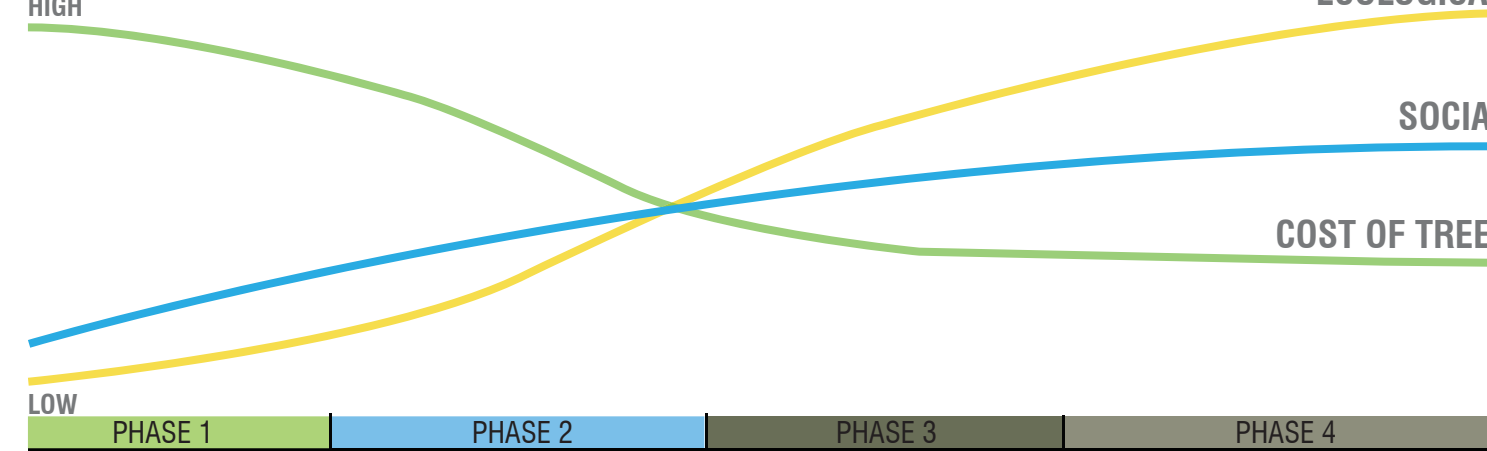
The vast number of vacancies along Hoffman Street has created the opportunity to facilitate the nursery program at a large scale in phase one and later evolve into a series of parks along Hoffman Street. This will create an east west connection between Oliver and Broadway East and Greenmount West which will bring more people and business into the neighborhood.

PLANTING METHOD - POT-IN-POT



Pot-in-Pot planting allows for minimal soil loss from the site, easy tree extraction during any season, and no need for heavy machinery to be brought on site to dig trees. Two men can easily transport the 25 gallon potted trees to a truck and be transported to the planting site.

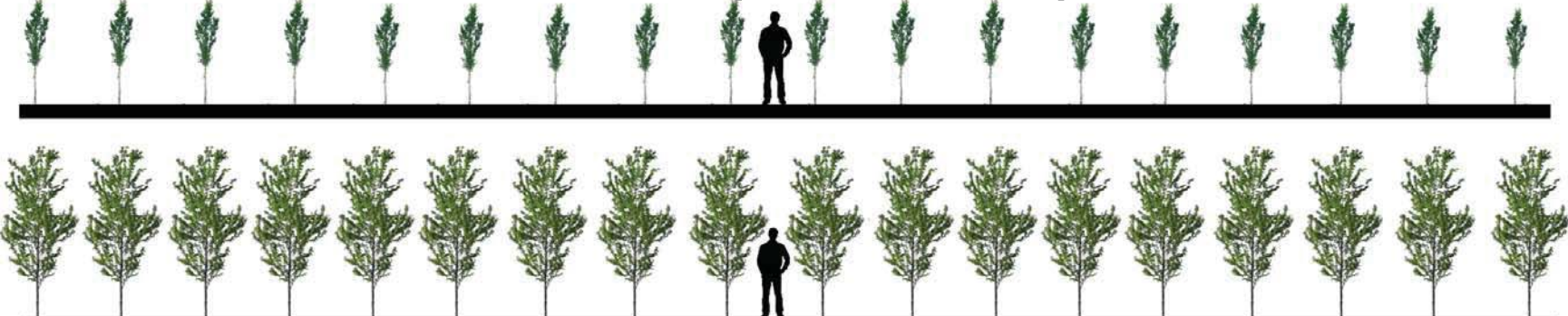
BENEFITS THROUGH PHASES



PLANTING SCHEDULE BY PHASE

PLANT SCHEDULE						
	QNT.	BOTANICAL NAME	COMMON NAME	SIZE	COND.	BLOOM
PHASE 1 & 2	130	<i>Acer rubrum 'Armstrong'</i>	Armstrong Red Maple	1 Year Seedling	Bareroot	April
	130	<i>Acer rubrum 'Autumn Flame'</i>	'Autumn Flame' Red Maple	1 Year Seedling	Bareroot	April
	100	<i>Aesculus x carnea 'Britton'</i>	Ruby Horsehoe Chestnut	1 Year Seedling	Bareroot	May-June
	160	<i>Gleditsia triacanthos var. inermis 'Skyline'</i>	'Skyline' Honey Locust	1 Year Seedling	Bareroot	May-June
	150	<i>Gleditsia triacanthos var. inermis 'Shademaster'</i>	'Shademaster' Honey Locust	1 Year Seedling	Bareroot	May-June
	200	<i>Platanus x acerifolia 'Bloodgood'</i>	London Plane	1 Year Seedling	Bareroot	May-June
	115	<i>Quercus coccinea</i>	Scarlet Oak	1 Year Seedling	Bareroot	April-May
	115	<i>Quercus rubra</i>	Red Oak	1 Year Seedling	Bareroot	April-May
	100	<i>Tilia x euclora</i>	Crimson Linden	1 Year Seedling	Bareroot	June-July
	100	<i>Tilia tomentosa</i>	Silver Linden	1 Year Seedling	Bareroot	June-July
PHASE 3	120	<i>Acer campestre</i>	Hedge Maple	1 Year Seedling	Bareroot	April-May
	120	<i>Acer glabrum</i>	Amur Maple	1 Year Seedling	Bareroot	April-May
	80	<i>Crataegus punctata</i>	Washington Hawthorn	1 Year Seedling	Bareroot	June-July
	80	<i>Crataegus punctata var. 'Inermis'</i>	Thornless Hawthorn 'Ohio Pioneer'	1 Year Seedling	Bareroot	May-June
	120	<i>Magnolia x soulangeana</i>	Saucer Magnolia	1 Year Seedling	Bareroot	May-June
	120	<i>Magnolia serrulata</i>	Star Magnolia	1 Year Seedling	Bareroot	April-May
	140	<i>Prunus serotina 'Kwanzan'</i>	Kwanzan Cherry	1 Year Seedling	Bareroot	April
	54	<i>Asclepias incarnata</i>	Swamp Milkweed	#5 pot	#5 pot	May-June
	90	<i>Andropogon gerardii</i>	Big Bluestem	#5 pot	#5 pot	August-September
	45	<i>Aquilegia canadensis</i>	Red Columbine	#5 pot	#5 pot	April-May
PHASE 4	30	<i>Dichanthelium clandestinum</i>	Deer-Tongue	#5 pot	#5 pot	May-October
	30	<i>Ilex verticillata</i>	Winterberry Holly	#5 pot	#5 pot	June-July
	64	<i>Rudbeckia fulgida</i>	Early Coneflower	#5 pot	#5 pot	July-October
	23	<i>Ilex glabra</i>	Inkberry	#5 pot	#5 pot	May-June
	25	<i>Myrica pensylvanica</i>	Northern Bayberry	#5 pot	#5 pot	April-May
	15	<i>Spiraea humboldtiana</i>	Burnald spirea	#5 pot	#5 pot	June-September
	19	<i>Viburnum dentatum</i>	Arrowwood Viburnum	#5 pot	#5 pot	May-June
17	<i>Viburnum opulus compactum</i>	European Cranberrybush	#5 pot	#5 pot	May-June	

PHASE ONE - NURSERY (YEARS 1-3)



The first phase is the initial planting of 1300 trees utilizing a pot-in-pot planting method (left). The above section shows the initial planting of 1 year seedling trees that can be harvested after 3 years of growth and be planted along the streets of Baltimore or sold to residents.

PHASE TWO - NURSERY (YEARS 3-6)



Ten of the phase one trees are to remain on site to begin the transition into a pocket park. Maintaining some trees on site will create a layered tree canopy come phase four. 1 year seedlings are planted once again and grow for 3 years before being harvested.

PHASE THREE - SPECIES CHANGE (YEARS 6-9)



Now that there are some large canopy sized trees on site the incorporation of more shade tolerant species can occur to add to the layered landscape. This allows for a more diverse palette of plants to be established bringing in more bird and insect species.

PHASE FOUR - POCKET PARK (YEARS 9-12)



The final phase is the establishment of a layered landscape now opened up to the public as a pocket park. Passive recreation space as well as bioretention are implemented and there is an established tree canopy along Baltimore's streets and vacancies are occupied by public openspace.

EXISTING SITE CONDITIONS



The existing site contains two alleys that would be removed along with 11 units 6 of which are vacant. This will help eliminate nuisance vacancies and open the site up to the streets making it more visible and safer.

PHASE ONE SITE PLAN



The initial planting of 1300 trees on the 1.5 acre site will jumpstart the initiative and be the pilot site for a larger network of pocket nurseries along the Hoffman Corridor.

INCREASED AESTHETIC



A view from Hoffman Street looking into a planted nursery near harvesting time. A wood fence made from deconstructed rowhomes discourages people from cutting through the site and damaging the nursery stock. Signage indicates to the community the purpose of the nurseries.

COMMUNITY TREE SELECTION



Human and habitat interaction is important in creating community awareness. Allowing community members to select the tree to be planted near their home allows them to become involved in the process and help create a relationship between the community and the new habitat. (Above) A family selects a tree to be planted in front of their home.

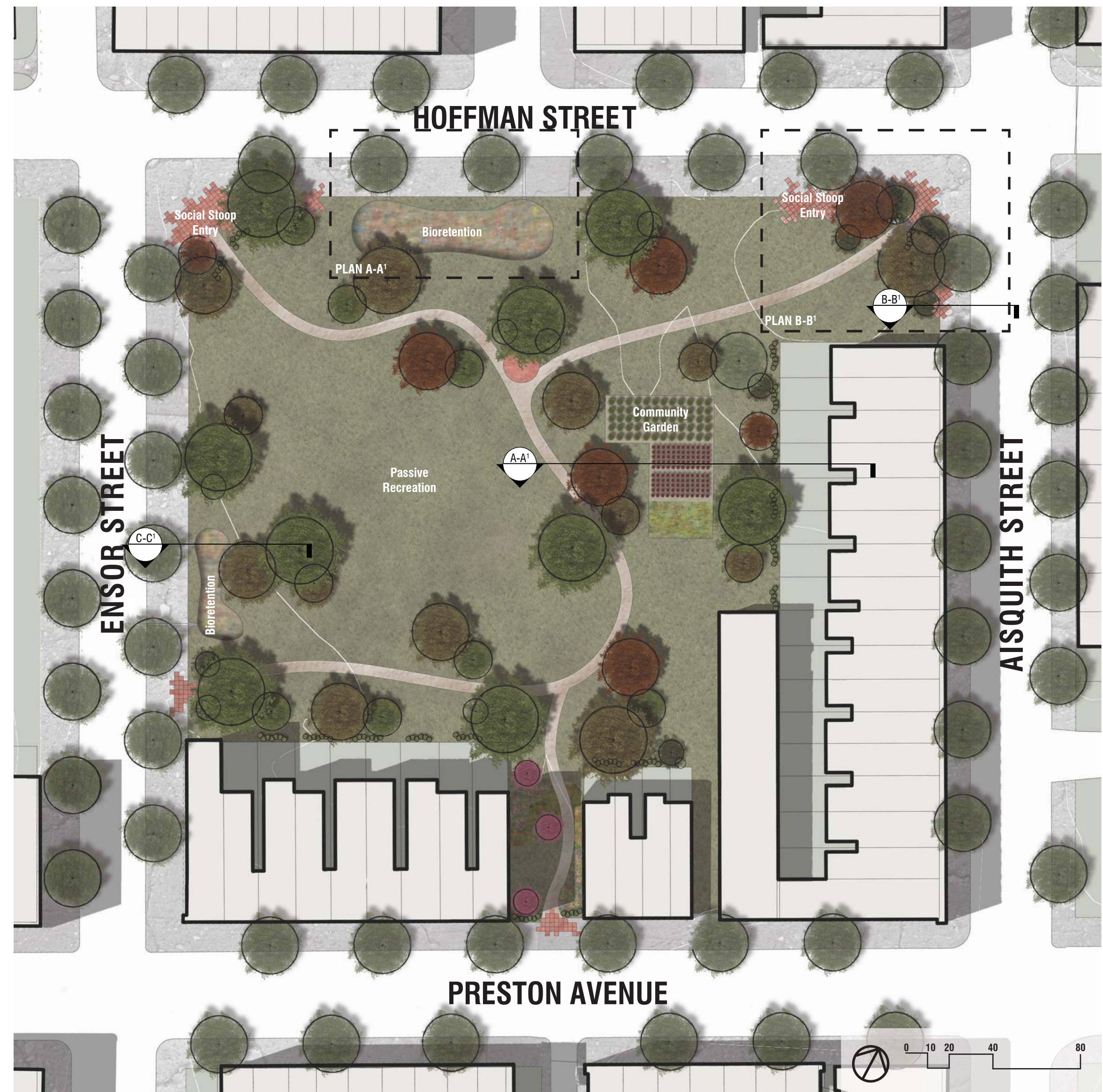
COMMUNITY TREE PLANTING



Experienced volunteers and city employees can assist in tree plantings within the community. Encouraging and allowing participation can strengthen community bonds and create a sense of ownership amongst the community.

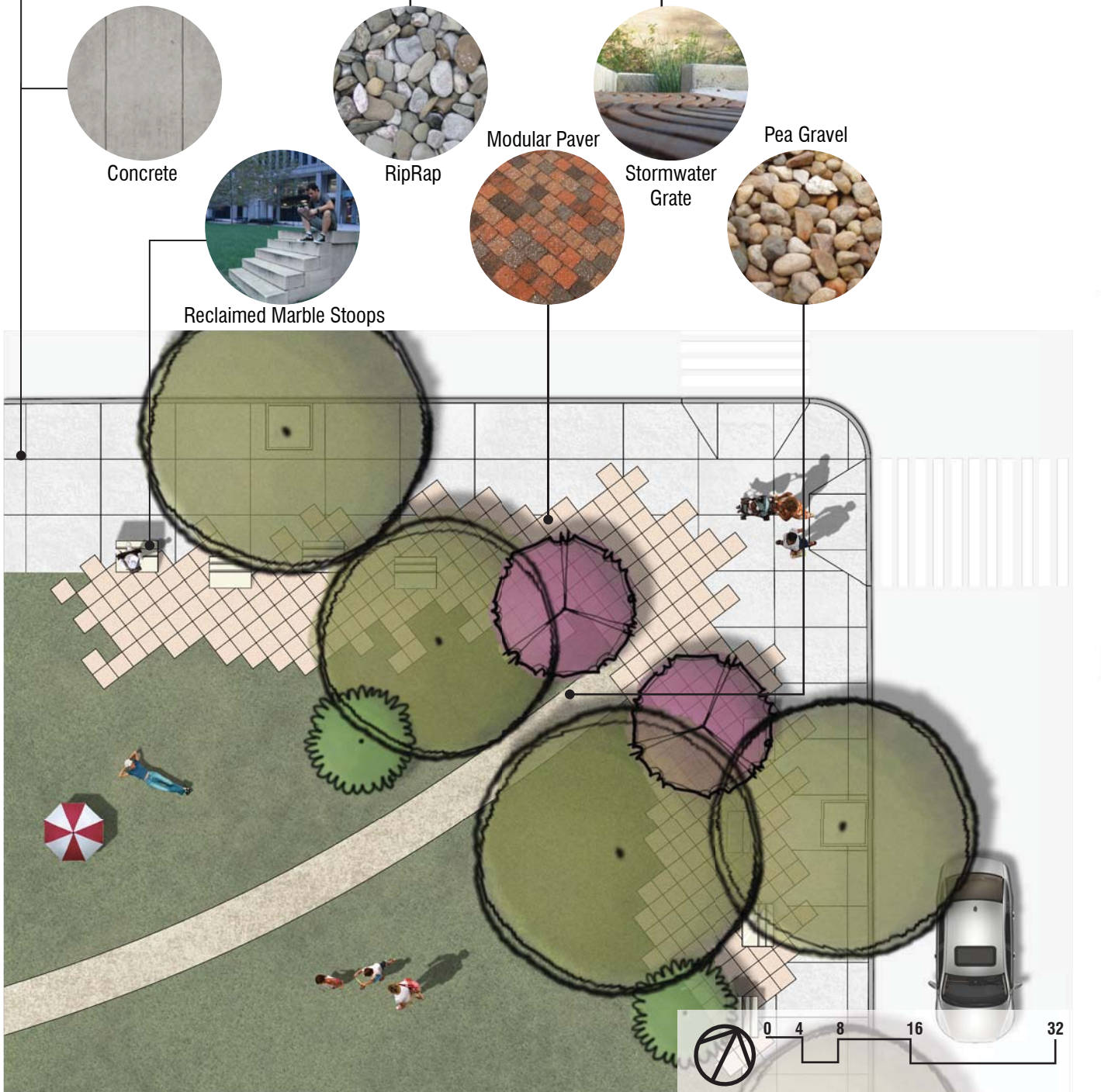
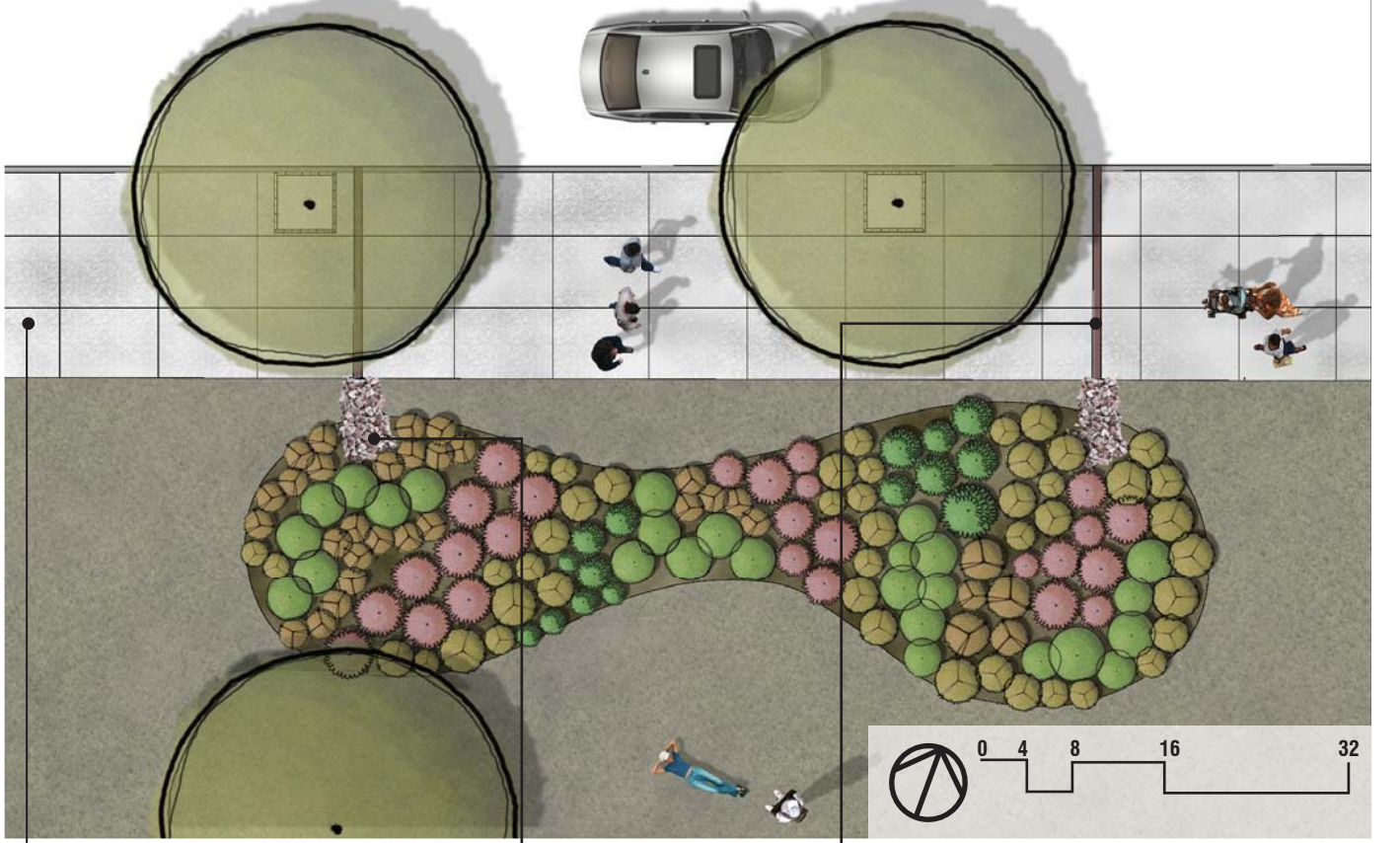
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PHASE FOUR SITE PLAN



The phase four site plan (above) shows how the site has evolved from a pocket nursery. The 1.5 acre site consists of four main programs; Passive Recreation, Stormwater Management, Social Stoop Spaces, and Community Gardens. The ultimate goal is to have the pocket nurseries transform into pocket parks that can be utilized by the community as public open space and also reintroduce habitat for insects, birds and other small animals in order to improve the overall ecology of Baltimore.

PLAN A-A'

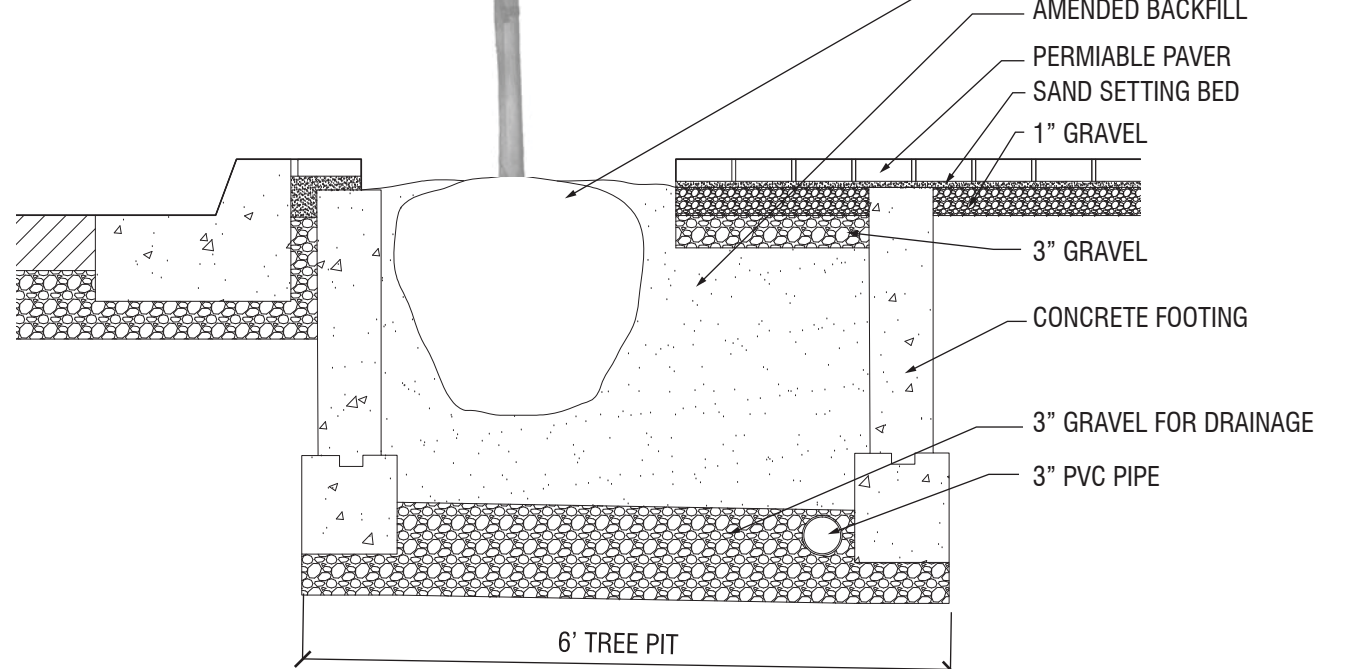


PLAN B-B'

Plan A-A' shows in detail one of the bioretention areas on site. Adjacent to the sidewalk and street, the bioretention areas can manage site runoff as well as runoff from the street directed into curb cuts and through stormwater grates in the sidewalks. Adjacency to the street is important in showing the community the process of water filtration with native vegetation.

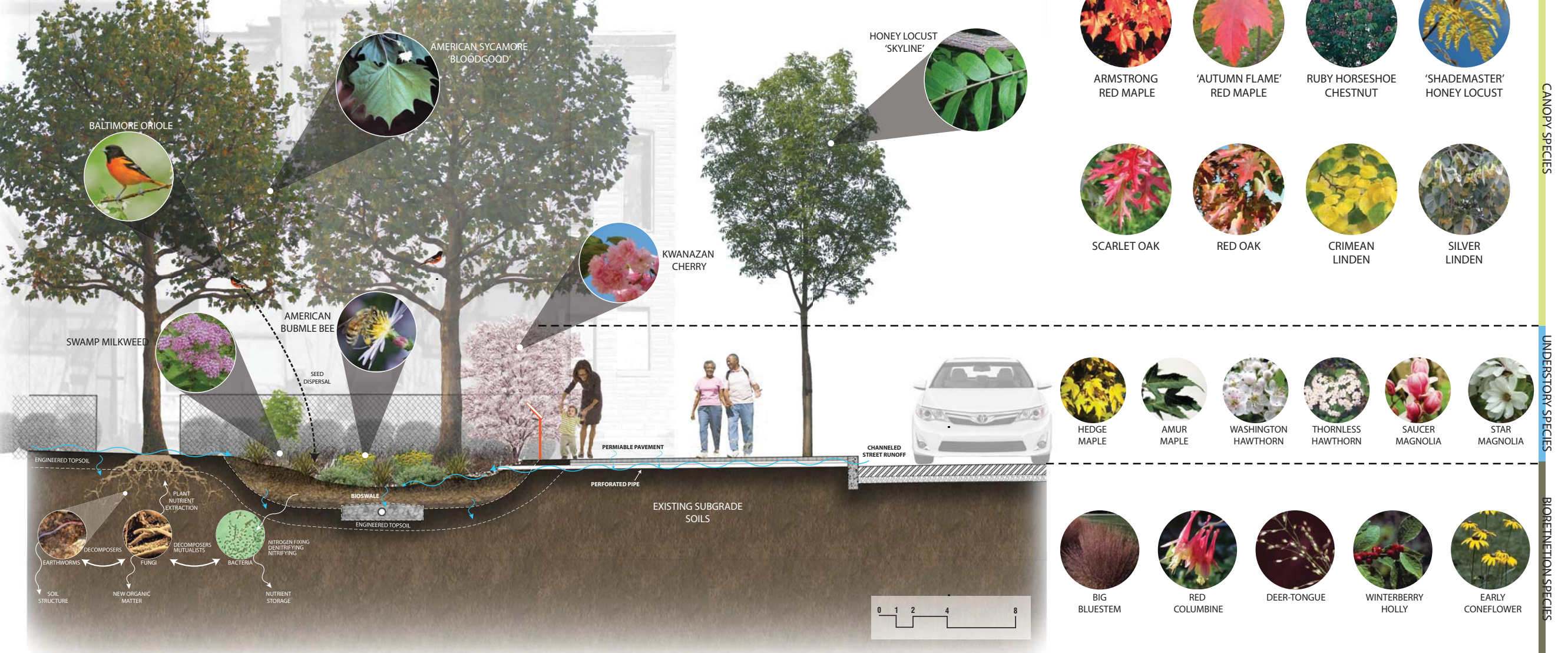
Plan B-B' details a corner entry condition at the northeast portion of the site. Pavement spills from the pocket park on to the sidewalk creating an area for gathering along the street. The addition of reclaimed marble stoops allows the community to gather in a familiar fashion, on stoops. The familiarity of the stoop space will make the community at ease with the new park because it contains a familiar part of the culture of Oliver.

TREE PIT DETAIL



Expansion of tree pits in Baltimore is critical in establishing a legitimate tree canopy that includes many social, economic, and ecologic benefits. Expansion of tree pits allows for more root growth which allows the trees to grow larger and greatly enhance the social, economic, and ecologic benefits. Expansion will significantly reduce the frequency of tree replacement, saving money in the long term.

SECTION C-C'



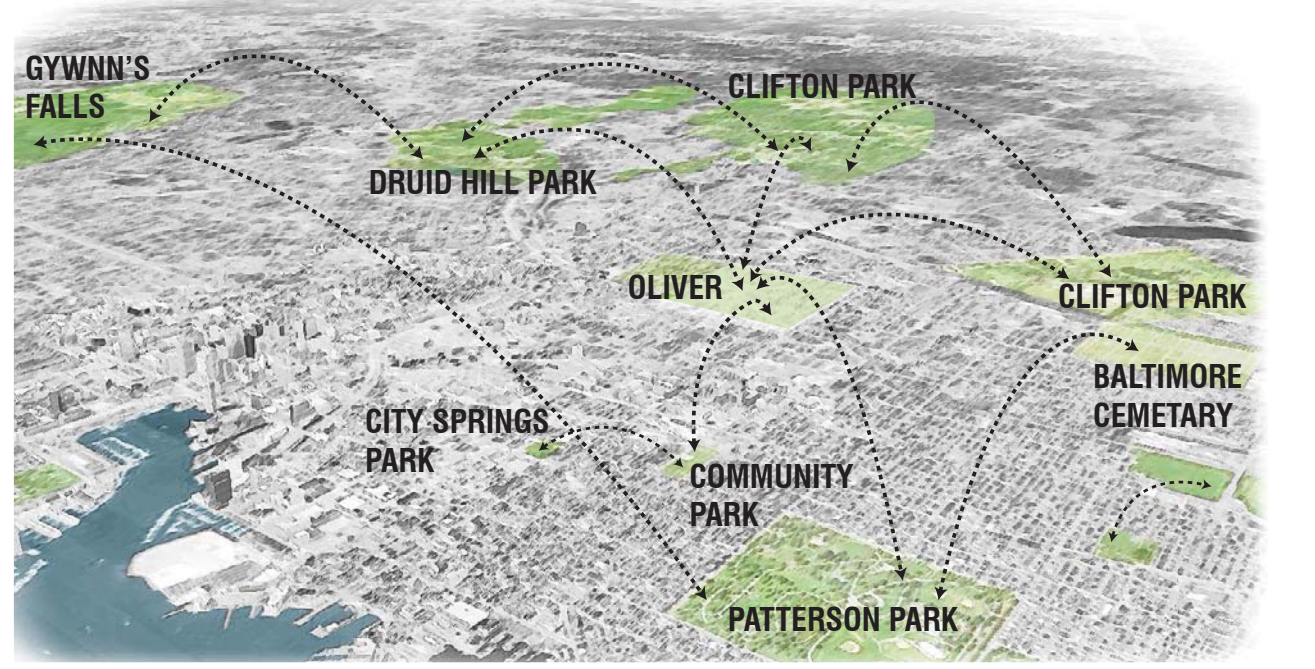
The improved ecology of the Oliver Neighborhood is a critical aspect of the phased process. A diversity of low perennial species in the bioretention areas will attract a variety of bird and insect species. Large canopy trees provide areas for birds to nest, perch, and disperse seeds back in to the site creating a continual cycle that will improve on site ecology. Earthworms, fungi, and bacteria in the soil will provide healthy soil structure and assist in the filtration of water.

PHASE 4 PERSPECTIVE

Phase four, the eventual establishment of a pocket park on the site will have strong visual connections to the streets and have access all along the perimeter. Access and visual connections will create a sense of safety due to high visibility into and out of the park. Openness will also discourage crime and mischief from occurring. Stormwater grates allow water to be visibly directed from the street into the park's bioretention areas.



ECOLOGY PATCH NETWORK



Currently there is little habitat within the inner city. By establishing tree nurseries in phase one there will be an expansion of habitat for bird and insects. In the eventual phase four, Oliver will have a tree canopy of 40% distributed along the streets and in newly established pocket parks. This will provide an inner city habitat for birds and insects that are currently limited to the edge of the city.

SECTION A-A'



The relationship between the public pocket park and residential yards is important in not making the homeowners feel as if their space is being invaded by the public. Separation is created by low plantings that allow a visual connection but also let park goers know that there is a separation between yard and park. The layered nature of the trees is created by maintaining trees from each of the first three nursery phases.

SECTION B-B'



The park space adjacent to the street is utilized to create a familiar feeling space where the community can gather. The reclaimed marble stoops provide gathering areas around the periphery and serve as meeting places that provide shade for the community in the summer months.

