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Design Narrative

Christ United Methodist Church
3515 S Harvard Ave,
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Scope of Work : Zone 7

Converting available space into an edible, medicinal, regenerative food forest. The space needs to be efficient, self sustaining, and relaxing. The space should provide food and medicine year round. Approximate space is 250 sq/ft, and 10 cubic yards at 18" deep beds.

Materials

Mulch- From City of Tulsa Mulch Site - free to pick up - $20 for truck rental of a few hours

Cardboard- From local dumpsters and recycled from local stores - free (remove plastic tape and labels, don't use heavily painted or plastic boxes)

Edging- From using recycled or recovered wood / bamboo for stakes and recycled burlap and other cloth for walls, free. Otherwise approx. $300 to cover cloth costs - I recommend a 14" wide burlap roll (this one is 10 yards long at $30) to run all along the edge of the concrete to form the walls of the grow beds, which will prevent the majority of the soil runoff from rains; and approx. $100 or less for "salvage" wood to be cut into 2' long stakes with an angled end. For the bamboo, there are a few homes in the area that might be willing to let us cut some of their overgrowth to use.

Stones- for the swale/water catch: free if salvaging/finding concrete/stone from around the city/county. Need approx. 80-100 sq/ft of stones.

Soil- I recommend getting 10 cubic yards of garden soil from GemDirt for $330+$65= $395

From GemDirt - $65 per delivery (2-12 cubic yard each) -

- Sandy loam: $15/c. yd
- Topsoil: $24/c. Yd
- Garden soil: $33/c. Yd
- Compost: $75/c. yd

Tools- approx. $300 or less for: digging shovel / spade, hoe / weeder, rake, wheelbarrow, hand trowel / hori hori knife, pruning shears / lopper / pruning saw, gloves, hose, spray nozzle, (sledge)hammer, nails / staples, manual edger, sythe

Approx max install cost (without plants) - $1,120.

Possible Return on Investment: over 100% per year: from air layering / propagation / medicine, fruit and vegetable vending / educational fundraising.

Install

Trimming nearby oak tree, setting up water catchment, and building the growing beds. The grow beds are easy to set up with layers and watering. > I enjoy this link that talks about no-dig beds further. < To make the walls you can save money by using wooden stakes from local trees cut between 2-3' long, then use burlap/garden cloth, or similar material as a lining. The leaf material and twigs can be mulch to fill in the beds above the cardboard for a few layers. Composting can be done directly into the beds > here is a great video talking about this < Bokashi takes fresh kitchen scraps to the next level and is another supplement to the compost setup that further boosts decomposition for little work and almost no cost. > Here is everything you need to know about bokashi <

There should be about 5 - 1 gallon clay pots spread throughout the space that are buried to the rim for worms and are additional helpers like those from > permaculturenews.org < These would be dumped over the soil when full, just like the composting method above, then placed back into space to be filled again.

Bee baths are not shown in the design but could be included; these can be simple bowls with a nice layer of gems or rocks on the inside, filled part way with clean water. The bees will stop here to drink water and rest while doing their hard work. The swale will also act like a bee bath when it has water.

The water from rain would be stored in the soil with the help of the swale and raised beds. If additional watering is needed in the dry months, it should not be a lot and it can be done by dumping a few gallons from buckets directly into the swales or around tree trunks. If unsure in the dry months: before watering, test the soil moisture about 1-2 feet from the trunks by sticking your finger 1-2 knuckles deep in the soil, if wet then do not water.

The trellis in the design is open to interpretation in construction and can be removed once the canopy of trees is formed; they can be small enough for a few vine plants to grow in a tight space. There is a trellis on the design that is intended for tomatoes. > Here are some trellis ideas.< Another great trellis idea is bull fencing, about 4' height, 4' length, and 6" wide square holes.

Planting

For the > **plant list** **<** specifically: the **CAOF** code should be the edible version of *calendula officinalis.* The *Brassica* and *Allium* families are interchangeable within the family. The pear, apple, plum and peach trees would need to be species varied to allow pollination (example: 1 honeycrisp and 1 fuji apple tree).

Not all of the plants in the plant list are included in the design, but they are all great options for zone 7 planting. Filling in the spaces that are not filled in the design with other plants as the years go on will be great, especially if they are propagated!

> Mushroom growing < is encouraged in the shaded areas, can be hay bales, old logs, or another medium that is easy to get a hold of. These are not listed on the plant list or in the design because they would stay mobile. Growing mushrooms is easy and cheap to start with spores.

Example Guilds (plants that work together and fill food forest needs niches**)**:

Apple:

Honeycrisp Apple	Malus pumila 'Honeycrisp'	MAPU
Camas	Camassia quamash	CAQU
Chives	Allium schoenoprasum	ALSC
American Grape	Vitis labrusca	VILA
Strawberry	Fragaria x ananassa	FRx
Comfrey	Symphytum officinale	SYOF
Daffodil	Narcissus species	NASP
Dill	Anethum graveolens	ANGR
Garlic	Allium sativum	ALSA
Purple Coneflower	Echinacea angustifolia	ECAN
Pea (Garden or Field)	Pisum sativum	PISA
Siberian Iris	Iris siberica	IRSI

Peach:

Peach	Prunus persica	PRPE
American Grape	Vitis labrusca	VILA
Asparagus	Asparagus officinalis	ASOF
Egyptian Onion	Allium × proliferum	ALPR
Garlic	Allium sativum	ALSA
Potato	Solanum tuberosum	SOTU
Tomato	Solanum lycopersicum	SOLY
Sweet Alyssum	Lobularia maritima	LOMA
White Clover	Trifolium repens	TRRE
Rosemary	Rosmarinus officinalis	ROOF
Borage	Borago officinalis	BOOF

Pear:

Common Pear	Pyrus communis	PYCO
Alfalfa	Medicago sativa .	MESA
White Clover	Trifolium repens	TRRE
Pea (Garden or Field)	Pisum sativum	PISA
Pole Bean	Phaseolus vulgaris (pole)	PHVU
Red Flowering Currant	Ribes sanguineum	RISA
American Vetch	Vicia americana	VIAM