

Growing a Healthier Community



2018 KLA Whitepaper Project

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Executive Summary

Growing a Healthier Community Executive Summary

We envision a community garden located on the grounds of Ivy Tech Warsaw. The garden would be completed in three different phases and would be overseen by a board of community members and maintained by members and volunteers. Plots would be assigned on a first come, first served basis and we envision the cost to be between \$10-25 a year for the rental fee. This money would go right back into maintaining the garden and costs incurred.

There are several benefits to a community garden including:

- Increased access to fresh foods
- Reduced risk of obesity and obesity-related diseases
- Increased fruit and vegetable intake
- Improved mental health and promote relaxation
- Improved food security

The community garden would also serve as a place for community education and community donations. Garden members would have the opportunity to donate any of their excess produce and community members will have an opportunity to sponsor garden plots for lower income families.

A community supported garden will have social, health and economic impact for Warsaw. The garden will be tended by volunteers and overseen by a board. There are several area organizations that we have identified as possible partners in this endeavor.

Introduction

Did you know that high percentage of children do not know where their food comes from? Many don't know the origin of food before it hits the grocery store shelves. One in five toddlers have little significant vegetable consumption beyond French fries. One way we can change this is to get children involved in gardening. Children who are involved in growing their own food are more likely to eat it. Connecting our children to the origin of their food not only creates understanding and learning opportunities, but can also help them to form healthy eating habits. Community gardens can empower people to feed themselves healthier foods, create sustainable food security and promote health and well-being.

Community gardens have a significant impact on their communities. Children involved in community gardens get much more than healthy food options out of it. 17% of obese or overweight children improved their body mass index over seven weeks. Of these children, 13% achieved a lower BMI while 23% of overweight children achieved a normal BMI. Community gardeners in Utah had a lower body mass index than their non-gardening siblings and unrelated neighbors. There was an average increase in availability of 2.55 fruits and 4.3 vegetables with participation in community gardens. Children in participating households consumed an average of two additional servings per week of fruit and 4.9 servings per week of vegetables.

Ivy Tech has graciously offered a plot of their land to utilize for the community garden. It is located with easy access to the parking lot and accessibility from the road. Ivy Tech North in Fort Wayne also has a community garden on their property since 2012. The community garden in Kokomo (established in 2003) located on the local Ivy Tech's campus distributed nearly 11,000 pounds of food to area food banks. Lawrenceburg Ivy Tech launched their community garden in the spring of 2017.

We envision the creation of the community garden occurring in phases. An explanation of the scope and phases follows:

Scope

Phase One:

The community garden starts to take shape with fencing surrounding the site. A more decorative fence facing the Ivy Tech facilities should be considered with painted chain-link fencing surrounding the rest of the site. Underground fence would be provided to minimize animals from digging under to gain access. Three vehicular gates would provide access for trucks, tractors and other motorized equipment as needed. Pedestrian gates would be located around the perimeter to provide access for maintenance, egress or other activities as needed. The gates would remain locked except for at the main pedestrian entrance to the east. As one enters the garden, a display board would be located to convey garden rules, upcoming events and other pertinent information. West of the pedestrian entrance would be the first phase of raised planting beds. These would be constructed with a variety of materials to help provide additional visual interest to the project. An assortment of materials such as landscaping timbers, masonry and possibly even galvanized metal panels could be utilized. Stone pathways with geotextile fabric to minimize settlement would provide access throughout and help with accessibility. A stone or permeable paver drive would be located north of the existing tree line. Areas for wildflowers and prairie grasses separate the vehicular drive from the raised beds. Water tanks would be located in this area for use by gardeners and allow easy access to refill. The tanks would be elevated on masonry and earthen pedestals to allow for gravity drainage. The northern most section of the site would be dedicated to row crops. Initially this may be subdivided, but ultimately this area would be dedicated for use by Ivy Tech Agriculture classes as other areas come online in future phases. A compost area would be located at the far west of the site with possible secondary staging located along the fence just north of the phase one raised beds. Strategically placed site seating would be provided for gardener use.

Phase Two:

The total square footage of raised beds triples with stone paths in between. Additional row crop area is prepared along the northwest fence line. An additional 900 square feet of wildflowers are added to help separate the new raised beds from the maintenance drive. Site seating is increased to accommodate the expanded footprint of the garden. The central spine of the raised beds includes art display areas. Five sculpture areas are bookended by walled art display areas. A well is drilled at the southeast corner and a water distribution system is placed to all water tank locations. Compost facilities are expanded to accommodate the expanded footprint.

Phase Three:

Progress continues with raised beds to the northwest. Stone paths are placed between the beds. Another two water tanks and pedestals are added to reduce travel distance for this portion of the expansion. Another area dedicated to row crops is prepared between the new raised beds and the fence line. At the east side of the garden, a 30' x 40' wood timber pavilion is added to accommodate outside gatherings and provide shelter from the elements. Space has also been allocated for a potential Ivy Tech Aquaponics Lab.

*You will find renderings of the different phases at the end of this packet.

Community Gardens across the U.S.

There are an estimated 18,000 community gardens across the United States according to the American Community Gardening Association.



Frazer Community Garden- Portland, Oregon



Daybreak Community Garden – South Jordan, Utah



Charlotte, North Carolina



Ivy Tech North- Fort Wayne, Indiana

Garden Operations

The first step that we need to complete would be a community survey to gauge community interest. We would distribute the survey through social media and handouts at designated locations.

The second step that we would complete would be creating a planning committee/board to oversee the project. We would also form partnerships with community organizations. Some of the organizations that we consider potential partners: Ivy Tech, YMCA, Purdue Extension, Combined Community Services, local schools, Fellowship Missions, Master Gardeners, local churches, K21 Health Foundation (possible grant potential).

After the site has been prepared and developed, we will then organize how we are going to distribute the plots. Contracts will be drawn up for community members that would like to rent a plot in the garden. The rental fee will be between \$10-\$25 for the year. The contract will cover issues including: responsibility for the upkeep and maintenance of the plots, tool storage, signing release before work in the garden can begin, prohibiting weed killers, theft of tools or other gardener's produce and clearing of plots at the end of the growing season. Failure to comply with the rules/contract will result in revocation of garden membership.

We also foresee the opportunity for community members to help offset the cost of the rental fee for lower income families through donations and scholarships. The dues will be put right back into the running of the garden.

There will be a few different ways for members to communicate. We will have a weather proof bulletin board, phone tree and email tree for members to use. There will also be meetings with members and the board.

We see this community garden being taken care of by volunteers with an advisory board that oversees the operations. The board should be made up of members from different organizations and churches in the community. We want to ensure that a huge cross section of demographics are represented in both its use and operation.

One of the demographics we are hoping to represent would be children. We will have a separate area of the garden that will be just for children. They will be able to get involved and grow their own produce.

To summarize the operations plan:

- Determine the need and interest of the community
- Create planning committee and board / identify community partners
- Determine rental fees (Between \$10-\$25 per year)
- Prepare/develop site

- Sign up renters, set communication plan, determine volunteer duties

We would utilize the \$1000 Northenor award to survey the community and purchase marketing materials regarding the garden and getting the community excited for this project.

Benefits to the Community

There are several benefits to a community in regards to a community garden:

1. The increased sense of community through the garden for members. There will be meetings, events held, and multiple communication options. We want the garden to bring neighbors together and get to know each other.
2. Helps to develop healthier eating habits
3. Horticulture therapy – gardening and exposure to green space helps to reduce stress
4. Lower obesity rates
5. The ability to donate produce to those in need. We envision a donation bin for those who wish to donate any of their excess produce to local organizations.
6. Reducing carbon footprint and food waste
7. Gardening is considered a moderate to heavy intensity physical activity so gardeners are exercising while enjoying their hobby.
8. Youth education – we want to host classes for local children to develop an interest in gardening and healthy eating
9. Benefits to elderly and disabled members by creating a place for social interaction and the opportunity to do something independently
10. Helps improve air and soil quality
11. Increased access to healthy foods which improves food security

Conclusion

In conclusion, community gardens can lead to a healthier community that benefits people in numerous ways. Healthier diets, physical activity, community reinvestment, supporting local families, sustaining charitable organizations and improving community socialization are all positive effects that stem from community gardens.

We'd like to leave you with the following considerations:

WHAT IF...we could give people the opportunity to try various fruits or vegetables they wouldn't normally have access to?

WHAT IF...those who did not have access to a yard could still have a garden?

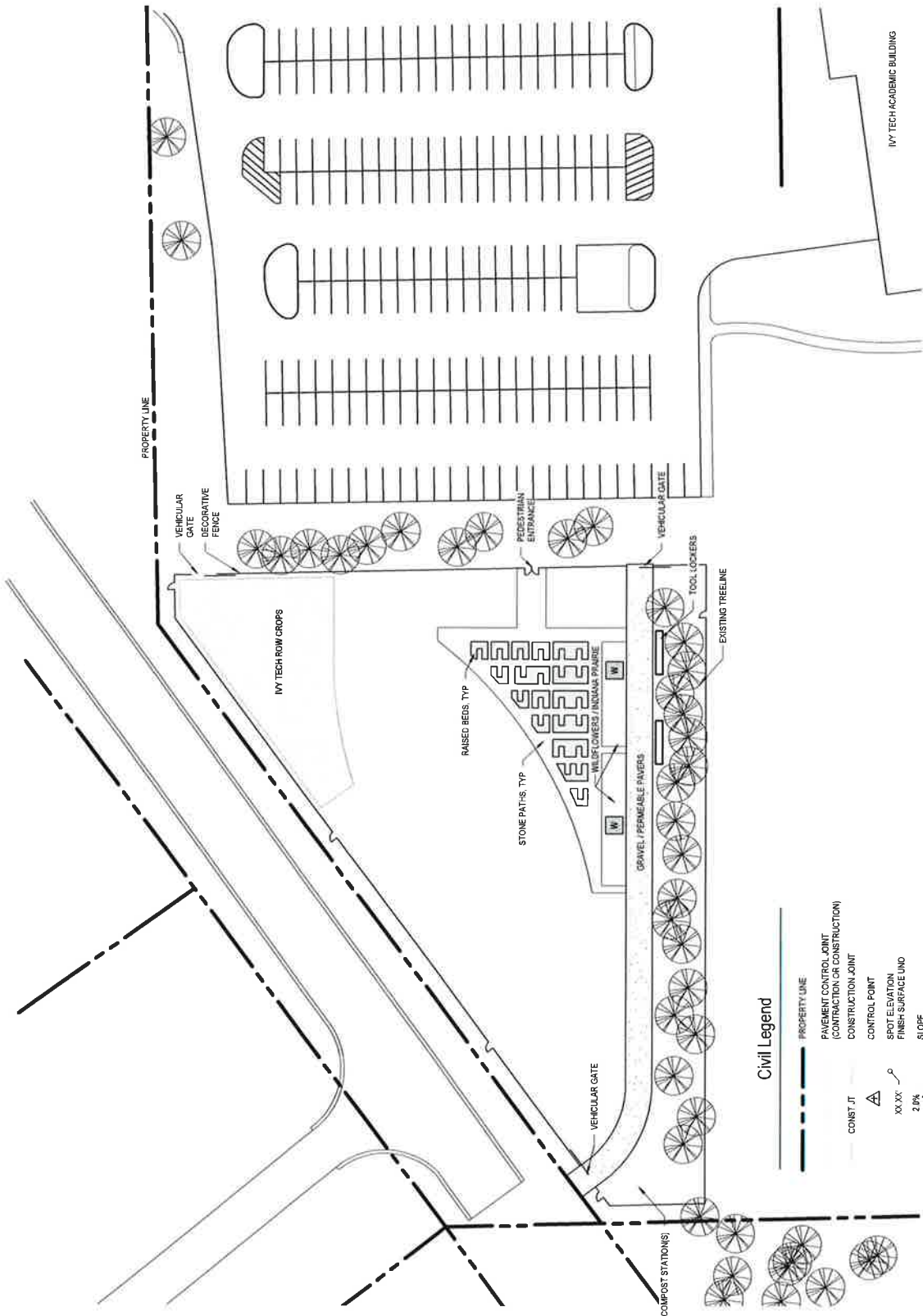
WHAT IF...home-grown knowledge and healthy eating habits could be taught to children by having them grow their own food?

WHAT IF...barriers between individuals could be broken down by spending time outside working on a project together?

WHAT IF...we could give people something to do other than playing on their phones?

WHAT IF...we could create a beautiful environment that could help promote healthy eating habits while bringing individuals together?

Thank you!



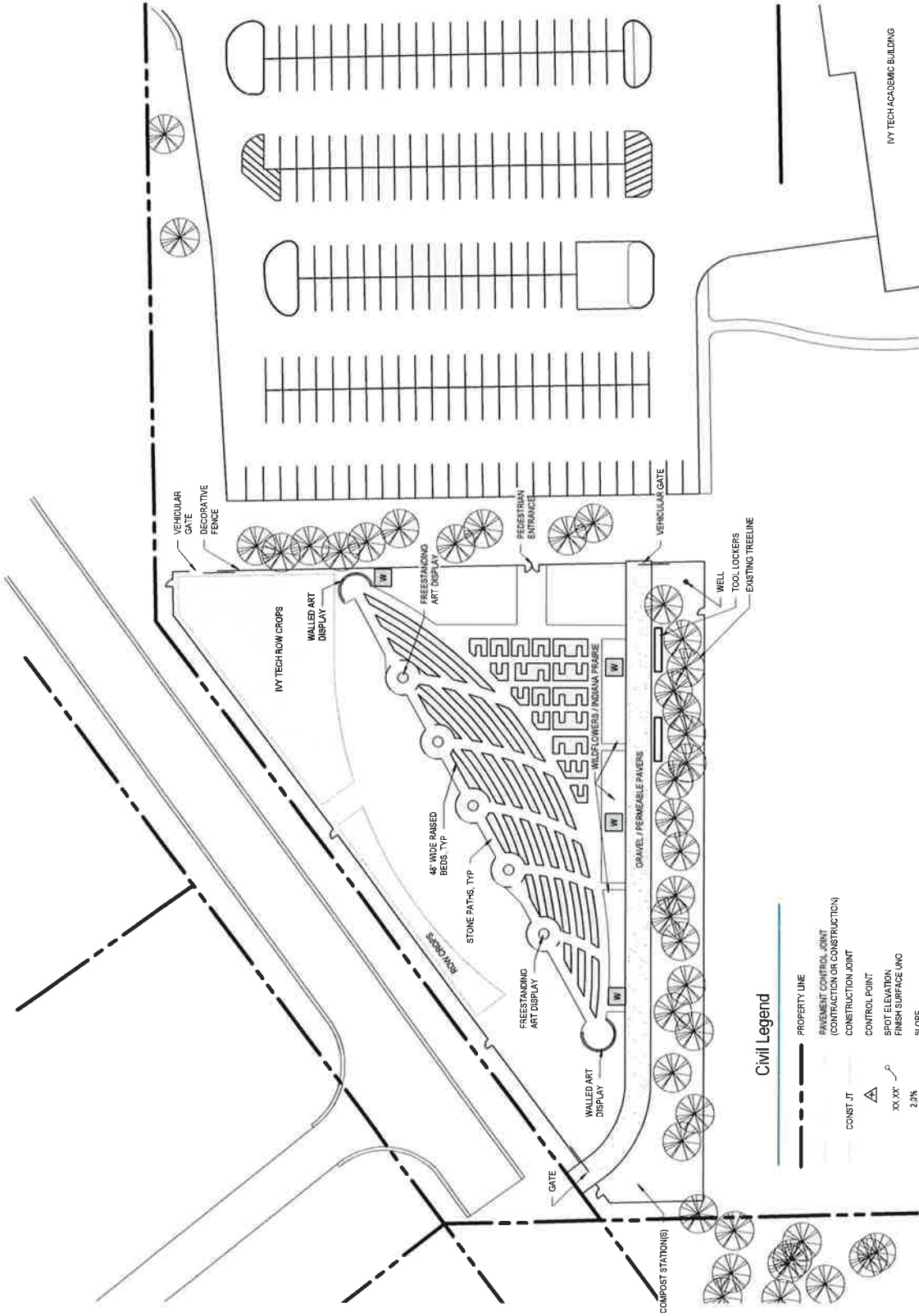
Civil Legend

	PROPERTY LINE
	PAVEMENT CONTROL JOINT (CONTRACTION OR CONSTRUCTION)
	CONSTRUCTION JOINT
	CONTROL POINT
	SPOT ELEVATION FINISH SURFACE UNO
	SLOPE
	SOIL BORINGS (SEE REPORT)
	WATER SUPPLY POINT

1
C101
Site Plan - Phase 1
1" = 40'

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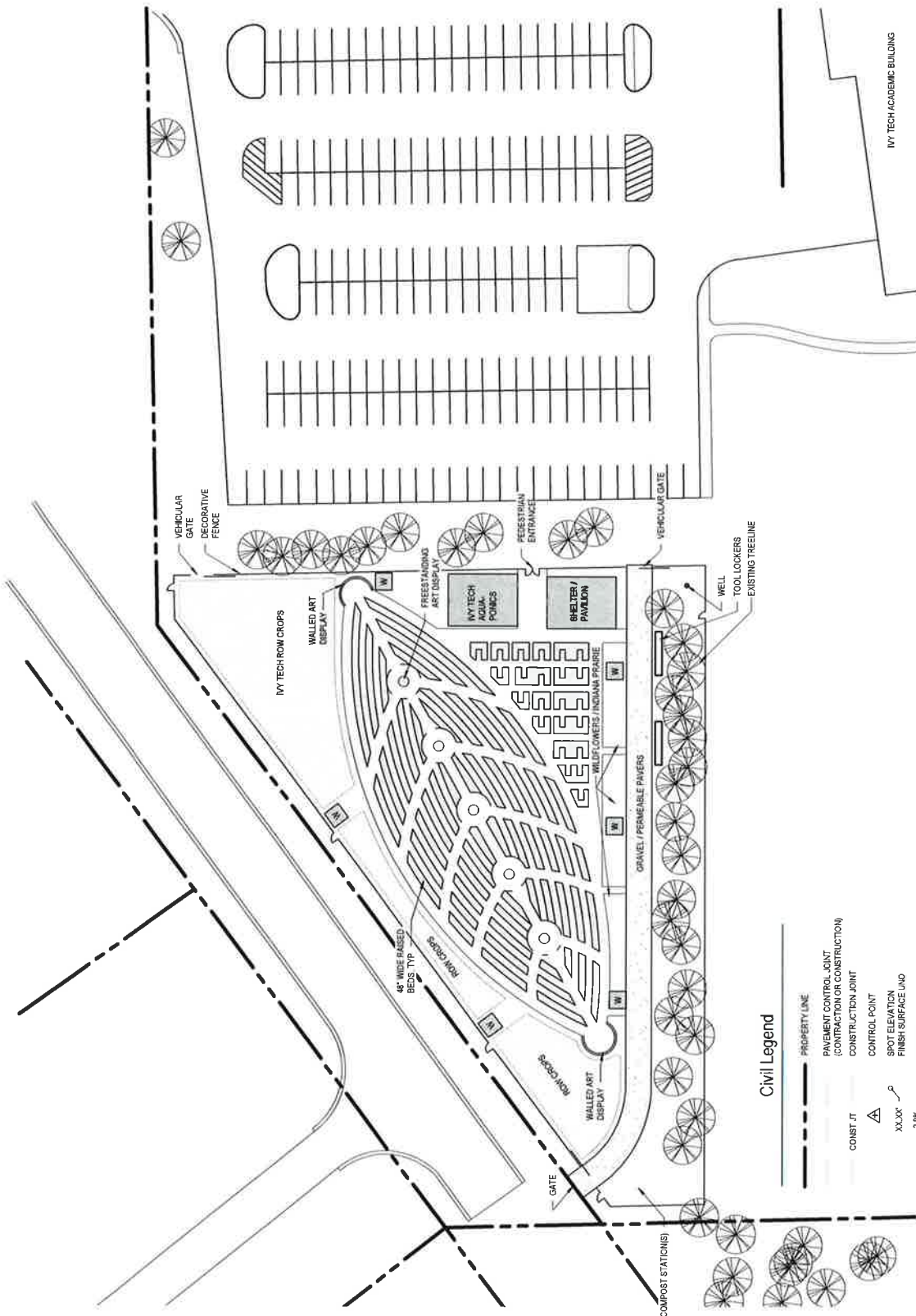
Civil Legend

- PROPERTY LINE
- PAVEMENT CONTROL JOINT (CONSTRUCTION OR CONSTRUCTION)
- CONSTRUCTION JOINT
- CONTROL POINT
- SPOT ELEVATION FINISH SURFACE UNO
- SLOPE
- SOIL BORING (SEE REPORT)
- WATER SUPPLY POINT

1 Site Plan - Phase 2
C102
1" = 40'-0"

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Civil Legend

- PROPERTY LINE
- PAVEMENT CONTROL JOINT (CONTRACTION OR CONSTRUCTION)
- CONSTRUCTION JOINT
- △ CONTROL POINT
- XXX SPOT ELEVATION
- FINISH SURFACE LINE
- 2.0% SLOPE
- ⊕ SOIL BORING (SEE REPORT)
- ⊕ WATER SUPPLY POINT

1 Site Plan - Phase 3
1" = 40'-0"

C103



PROJECT OPINION OF PROBABLE COST

Date: 2018-03-27

Project: Growing a Healthier Community

Range: \$280,000 - \$300,000



DESCRIPTION	QUANTITY	UNIT	COST/UNIT	SUB-TOTAL	TOTAL
General Conditions					
General Conditions (Builders Risk/Bond)	10%	Pct.	\$23,847.75	\$23,847.75	
Design Contingency - (15% = Schematic Design Level)	15%	Pct.	\$28,617.30	\$28,617.30	
Project Contingency	10%	Pct.	\$19,078.20	\$19,078.20	
Phase One					
Chainlink Fence (Painted)	869	LF	\$32.00	\$27,808.00	
Decorative Fence	308	LF	\$52.00	\$16,016.00	
Drive Gates	1	EA	\$1,775.00	\$1,775.00	
Drive Gates - Decorative	2	EA	\$3,500.00	\$7,000.00	
Pedestrian Gates	5	EA	\$400.00	\$2,000.00	
Pedestrian Gate - Decorative	2	EA	\$375.00	\$750.00	
Underground Fence	1177	LF	\$2.50	\$2,942.50	
Indiana Prairie	1064	SF	\$0.50	\$532.00	
Wildflowers	840	SF	\$0.75	\$630.00	
Water Tanks	2	EA	\$500.00	\$1,000.00	
Water Tank Pedestals	2	EA	\$1,400.00	\$2,800.00	
Raised Beds	1787	SF	\$3.25	\$5,807.75	
Pathways (Stone/Geo Fabric)	5265	SF	\$1.00	\$5,265.00	
Stone Drive /Geotech Fabric	5574	SF	\$1.00	\$5,574.00	
Site Seating	4	EA	\$600.00	\$2,400.00	
Tool Lockers	6	EA	\$250.00	\$1,500.00	
Row Crops	7562	SF	\$0.75	\$5,671.50	
Compost Location	1	EA	\$200.00	\$200.00	
Bulletin Board	1	EA	\$300.00	\$300.00	
				Sub-total	\$89,471.75
Phase Two					
Raised Beds	3704	SF	\$3.25	\$12,038.00	
Pathways (Stone/Geo Fabric)	8361	SF	\$1.00	\$8,361.00	
Row Crops	1766	SF	\$0.75	\$1,324.50	
Wildflowers	900	SF	\$0.75	\$675.00	
Site Seating	4	EA	\$600.00	\$2,400.00	
Art Display Areas	1	LOT	\$2,000.00	\$2,000.00	
Well Drilling	1	LOT	\$5,000.00	\$5,000.00	
Water Distribution	800	LF	\$4.00	\$3,200.00	
Water Tanks	2	EA	\$500.00	\$1,000.00	
Water Tank Pedestals	2	EA	\$1,400.00	\$2,800.00	
Compost Location	1	EA	\$200.00	\$200.00	
				Sub-total	\$38,798.50
Phase Three					
Raised Beds	3712	SF	\$3.25	\$12,064.00	
Pathways (Stone/Geo Fabric)	6204	SF	\$1.00	\$6,204.00	
Row Crops	3125	SF	\$0.75	\$2,343.75	

DESCRIPTION	QUANTITY	UNIT	COST/UNIT	SUB-TOTAL	TOTAL
Water Tanks	2	EA	\$500.00	\$1,000.00	
Water Tank Pedestals	2	EA	\$1,400.00	\$2,800.00	
Pavilion	1	LOT	\$35,000.00	\$35,000.00	
Site Seating	4	EA	\$600.00	\$2,400.00	
				Sub-total	\$59,411.75
Total Construction Cost:					\$ 262,325
Fees:					\$ 26,233
Project Total:					\$ 288,558

Team Members

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