General Organic Garden Background:

The Organic Garden project for the Indiana University Sustainability Task Force is going to be a compilation of local business sponsorship and the IU student body support. This project will create an area on campus to foster the knowledge of sustainable growing practices as well as general sustainable project involvement.

The garden will be located in the Foster Quadrangle between Foster Shea and Foster Martin Hall across from the IU Baseball facility (see image 1-1). This area was chosen due to interest from the student body located in the Foster Living and Learning Centers as well as general viewership. The project will provide an outdoor leisure space for students, an opportunity for environmental interaction through garden maintenance, as well as a learning opportunity in environmental practice. The project will provide exposure to both organic gardening as well as composting applications.

Proposed Methods:

The proposed garden will have sides of 20 feet and an arc reaching 20 feet at its furthest point. This garden would then provide approximately 225 square feet of land for planting. As seen in image 1-2 below, the proposed garden site has a slope of approximately 8-9º (this was found using a standard trigonometric table). With the slope on this plot of land being so great there are two options for leveling. The first option is to bring in soil and supplement the area after tilling until the land is flattened. The second option would be to cut into the side of the hill and use the land displaced by the cutting to level the area. I suggest the second method as it would save transporting new soil to the area as well as to produce natural seating along the garden edge (please see appendix 1-1). The second option would allow for a border of natural limestone (provided by local quarries) which would match the Indiana University standard (appendix 1-2). The limestone stack would be supported and kept from movement by the hill to its rear and would stack approximately 3 feet high (hitting the calf of the average individual) or to the top of the cut land.
Limestone is being solicited from local quarries such as B.G. Hoadley, Reed Quarries as well as Independent Limestone. Donations have been discussed with B.G. Hoadley and selection as well as transport for the materials is being arranged. The current donation option is a 2”x2”x6” scrap material however this may vary by groundbreaking.

To advertise for the garden as well as keep students, volunteers etc informed about garden projects an announcement board will be constructed in the Northwest corner between Foster Shea and the Pine tree at the apex of the garden. This announcement board would feature an outdoor cork board upon which garden history, purpose and mission statement would be displayed. Also featured on this board would be upcoming projects, featured plants and donors as well as general information about sustainable practices. I envision this announcement board to be between four and six feet long and about five feet off of the ground. This announcement board could be made in several ways. The most expensive way would be to feature an outdoor cork board from Ghent Manufacturing. The model seen in appendix figure 1-3 is six foot long and three foot high featuring three locking, shatter proof doors. This model costs approximately $519.99 and comes a 5 year warranty. The least expensive method to erect the announcement board would be to use standard particle board and attach the information to the board using a wood stapler (like flier boards on campus) this would cost approximately $10-$20 for a six by three piece. The announcement board would also be modeled after the bus stop on campus (see appendix 1-4). It would be sheltered with a pitched roof which could feature the cedar shingles as seen on the IU Bus Stop. This would create an inviting area to read information regarding the project as well as match the décor of the campus. The support for the board would be standard four by four lumber.

This garden provides a wonderful opportunity to show case the local plants of southern Indiana. Local varieties I wish to include in the garden are seen in appendix 1-5 courtesy of the Indiana Native Plant and Wildflower Society. I wish to include various areas in the garden for features of local plant life in addition to growing vegetables and herbs. As this garden is going to focus on organic and permaculture practices there will be a bordering of herbs which are natural pest repellents such as marigolds and henbit. The garden will also feature symbiotic relationships such as the planting of petunias to boost growth and flavor of beans as well as the use of caraway to naturally loosen soil for root growth. The garden will also feature sustainable education projects such as a rain barrel workshop to naturally water the garden and
composting workshops to demonstrate the use of yard/kitchen waste in cultivation. Attached is a diagram of a potential garden layout (appendix 1-6).

The garden project will require a storage area as well as composting area. The proposed area is currently to the east of the dumpsters. An addition the dumpster shelter would be simple (requiring only two four by fours for support as opposed to a free standing structure). This addition could model the dumpster shelter and the announcement board with the pitched roof and shingles and would be hidden from view on Fee Lane. The garden shelter would need to be about four feet deep and would extend half the length of the dumpster shelter (approximately five feet). Within this shelter would be kept wheelbarrows, hoses, shovels etc. With the remaining five feet of the dumpster shelter traditional compost would be set up with three bins and open air. This would serve as a workshop area and regular service project for the garden.

The garden currently has the donation of some lumber (four 4x4 posts, some particle board for the roofing and recycled cedar for shingles), a peach tree, four raspberry bushes, a wheelbarrow, two hoses, three shovels as well as some various odds and ends. We are currently waiting for further donations to be made by larger organizations.

The garden project could serve as a great partnership for not only the Foster residents but also students throughout the University. I am in the process of meeting with Alexis Suskin-Sperry about a service-learning class which could assist with labor for the garden and could turn into a long-term endeavor. Also the partnership could extend into the Fine Arts department. Pieces of student art could be put on display in the garden and provide a “student’s” touch. I am currently speaking with the School of Fine Arts in regard to this program. I am also speaking with the Biology department to develop a partnership with the community garden as well. This garden could also provide a link between the University and local charities such as the Hilltop Garden Project; I am waiting for a response from the program regarding their interest.

According to the Organic Garden Encyclopedia, the average last frost date for Southern Indiana is April 24th which would mean that planting should begin around the second week of April (April 13th-19th) to be the most protected from unexpected weather. While tentatively setting the planting date for the week of April 13th, the groundbreaking for this garden should precede the planting by at least two weeks. The two week grace period allows for weather changes, equipment rental and labor. With this timeline in mind this would set the planting date for the week of March 23rd. My suggestion is that groundbreaking begin over student Spring Break (March 14th-22nd) as the use of heavy machinery would not disturb student life and the lack of student traffic would provide for easy access to the normally heavily trafficked area. It is recommended that the soil be tested for wiring, plumbing as well as general stability by the University prior to groundbreaking. The soil in the Bloomington area tends to exhibit a silt layer followed by heavy clay at about the 20cm mark. This would mean that groundbreaking would be labor intensive and could require heavy machinery. This would lead me to believe that the use of a trencher or bulldozer would expedite process as well as limit human injury. During the groundbreaking process I would also suggest digging holes for the announcement board and garden shelter.
Appendix

Appendix 1-1

Appendix 1-2: Walls made of this stacking limestone are seen along 3rd Street as well as throughout campus.
Appendix 13: Ghent Enclosed Bulletin Board - 5 year warranty - 6’ wide and 3’ high - acrylic shatterproof doors

https://www.schooloutfitters.com/catalog/product_family_info/cPath/CAT385_CAT33/pfam_id/PFAM9

Appendix 14: Bus stop outside of McNutt Residence Hall