

International Garden of Many Colors

LDA 141 Community Participatory Design



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Meet the Team



Millenn Mong

Communication Liaison

Based on previous experiences, the skills I have to contribute include public speaking, outreach, and note-taking. I hope to gain new skills through this project, such as how to work with GIS and other design software.



Natalie Lauerma

AutoCAD

My skills lie in public speaking, outreach and project management, as well as more technical skills with manual and digital graphics, AutoCAD, and GIS. I hope to contribute my experience with AutoCAD to our project, and build on those I am less confident with, including GIS and public speaking.



Katie Michaels

Visual Communication / Design

Skills I will add to this group are my notetaking, sketching, and creating visually-impacting graphics. Since I'm a very visual person, I hope to improve communication and public speaking as we get to know our community partners.



Cathryn Ng

Manual Design

I'm well organized, proficient with spreadsheets, and enjoy sketching. I'm comfortable with AutoCAD, Adobe Suite, and enjoy designing creatively. I'd love to learn more about GIS and practice my design skills. I can contribute design-wise, and I'm very excited about designing for site improvement.



Thomas Black

GIS

I have a background in studying and enjoying architecture and I love learning about new programs and ways I can sustainably design. I hope to strengthen my current GIS skills while simultaneously delivering a quality product!



Nadia Guzman

Writing and Editing

Skills I will contribute to our project include writing, research, and creative hand drawing. I have worked with AutoCAD and Adobe Suite, and enjoy tapping into my artistic side. I strive to have fun while working on projects as it increases creativity, enhances connections, and makes for a better experience. I hope to gain GIS experience, improve my teamwork skills and build relationships with our community partners.



Joaquin Laoyza

Visual Communication / Design

I have a background in architecture, and I am experienced with AutoCAD, Adobe Suite, SketchUp and Rhinoceros 3D. I enjoy the history of Architecture as well as its impacts to the environment. I look forward to learning new programs such as GIS and other visual media that will strengthen my visual design concepts. I hope my strengths in Design and 3D modeling will better contribute to portray the group's design ideas in this project.



Jay Deisman

Research

My skills background is in research, maintenance techniques, and visual communication. I love exploring historical context and ideas, and bringing them into the present. I hope to gain more experience in working with diverse people and projects, and developing new skills in GIS and CAD.



Introduction and Acknowledgements

Enhancing Community Spaces and Mapping with Design, Collaboration and Self-Management Tools in Urban Agriculture

Introduction

Our project is a collaboration with our community partners at the International Garden of Many Colors, to develop a more livable community space, address current site issues, improve the front garden, and turn the current GIS-based map into one that is easier to navigate and understand.

Acknowledgements

- Brenda Ruiz - president of the Sacramento Food Policy counciln who was our main point of contact that gave us direction on our project and helped with our design event
- David de la Peña - Our professor who worked with us during the entire project, gave us input & information, granted us access to the gardens, and advised us on our course of action
- Ellen - the head gardener and interpreter helped us communicate with the gardeners
- Gardeners - for allowing us to come into their safe space to obtain information needed and being open, supportive, and giving us valuable feedback
- Annika -held a GIS-map workshop for our team and enabled us to produce an updated map



IGOMC Project Goals

Mission

Our team mission is to encourage innovation, creativity, and collaboration with our community partners, and to deliver quality programs and designs that support ongoing cultural exchange beyond the tenure of our project.

Our Partners

We will be working with Brenda Ruiz and the larger community of The International Garden of Many Colors, which occupies 3 acres of land in Sacramento and has served as an informal community garden for over 25 years. Largely an immigrant community, occupants of nearby housing have used the gardens to grow food for their families, utilizing growing techniques and crops that connect them to their homelands.

Steps to Our Goals

In order to successfully reach our goals, we will schedule weekly team meetings, and site visits with Brenda Ruiz and the head gardener Ellen. Once we establish roles and responsibilities, we will implement SMART goals to develop a refined GIS mapping tool as well as create a community driven design to the spaces that maintain and strengthen community feel.

Deliverables

The community has expressed interest in obtaining support for maintenance of the garden, including refinement of a GIS-based mapping tool introduced by previous UC Davis students in collaboration with Sacramento Food Policy Council and local gardeners and conceptual designs for the beautification and usability for community plot and the front gate chip drop area.

Long Term Vision

Most importantly, Brenda's vision will be respected throughout the process since we are a guest team invited to work on the project. If we ensure the mapping and workshops are sustainable, useful, and relevant to the IGOMC long after our team leaves, we will have succeeded in achieving our goal!



Visual Observations

This depicts the unused community space in the gardens that are filled with overgrown grass, various plants, and palettes. This would be the site that our group plans to revitalize to bring a better sense of community.



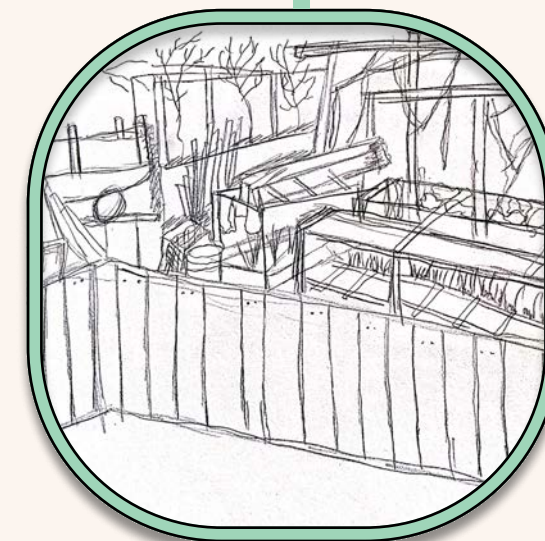
A sketch of one of the southernmost plots in the garden shows lush groundcover growing in the midst of sagging brown crops. The plot's personality was evident to me as I observed the bright, flowing fabrics tying over the stakes

The southern portion of the site feels unruly, with mallow, calendula, and various other weeds growing through the fence and either side of the path. Plants frame this narrow path that take the viewer throughout the site.

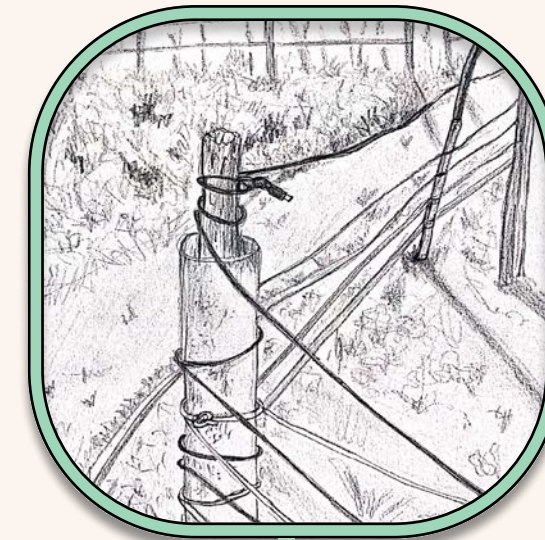
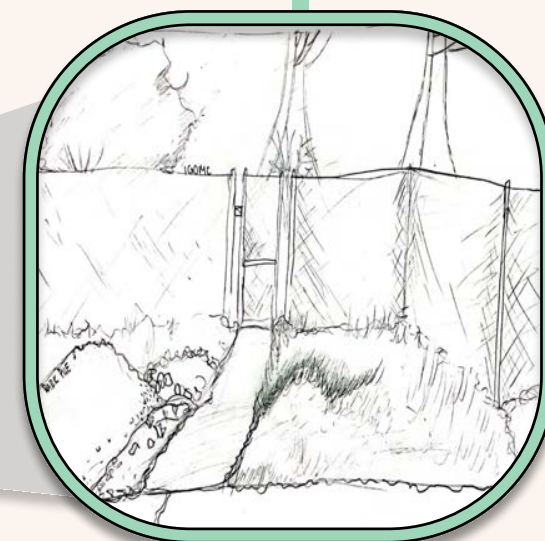


There is a grounded fence, powerlines, and a city-made garden located at the front portraying the struggle of the gardeners versus the city. We intend to beautify this area to match the picturesqueness of the garden inside.

The gardeners are able to make use of local materials to maintain their plot of land in the garden. The fabric strung along the wooden structure is possibly used as a means of keeping the plants warm or providing shade.



Located to the west, this plot has been relatively unutilized by the gardeners but has its own unique quality all its own. The plants were over grown, with annual grasses at their feet. It is an interesting space, and I hope everyone will enjoy it for its serenity.



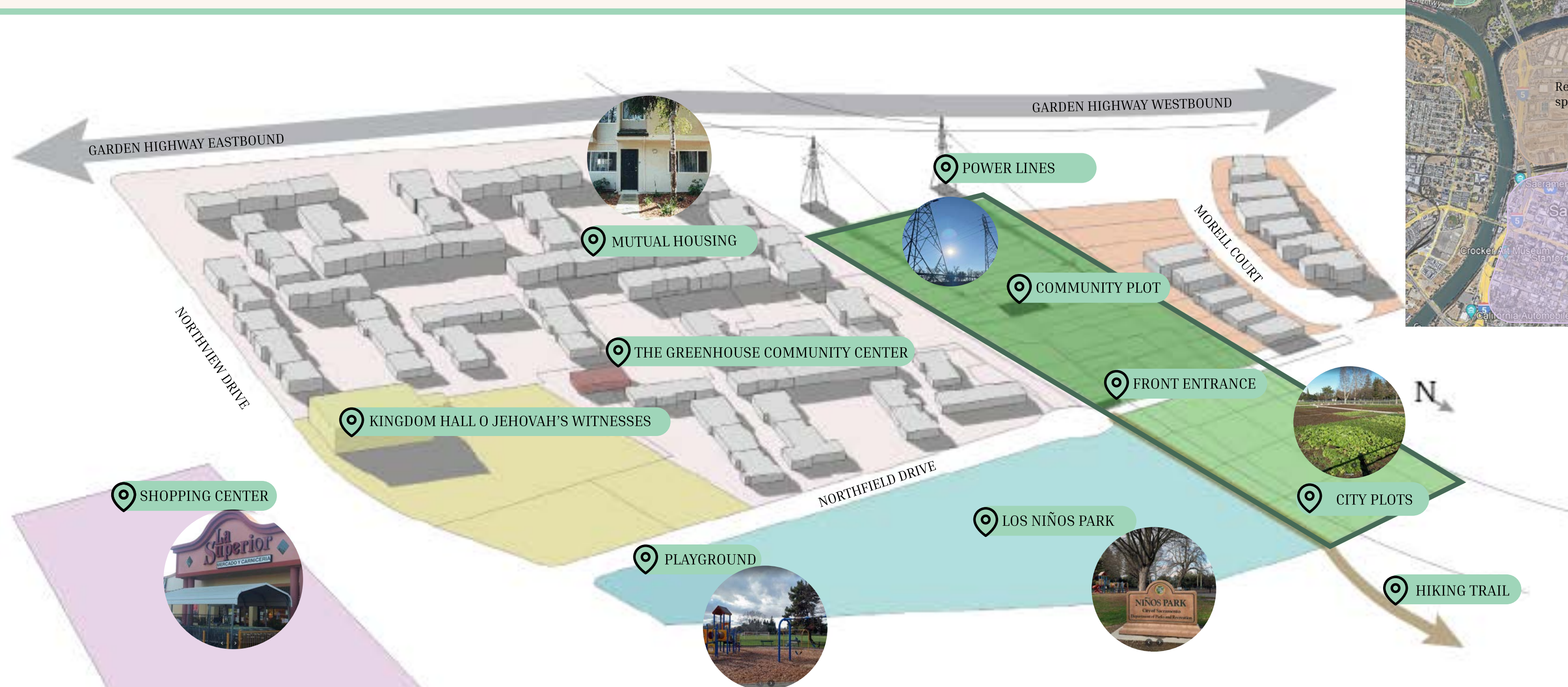
There were several clever ways the gardeners limited the use of metal due to the overhead electrical wires. The cables and old garden hoses stood out because of the innovative way they defined their plot.



For this sketch, I practiced drawing accurate perspective and proportions in order to illustrate how empty this area is. Despite some weeds and overgrown grass, this area has great potential for various uses.



IGOMC: Context Map



Legend

- IGOMC Site
- Original Garden Plots
- City Built Garden Plots
- Playing Fields
- Church Property
- Single Family Housing
- Shopping Plaza
- Affordable Housing

Original Plots vs. City-Built

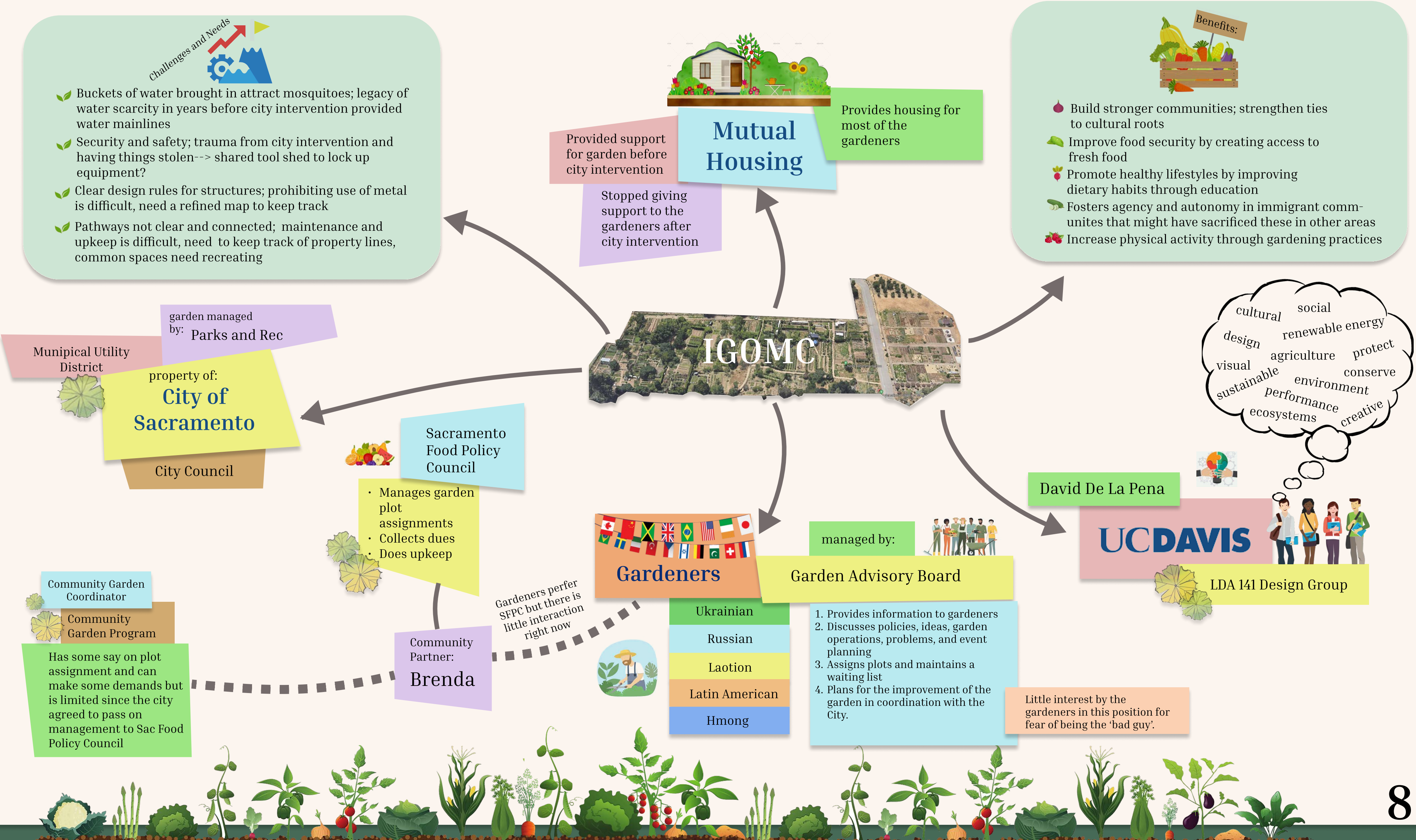
represent equity to the gardeners and have boundaries that change and adapt to the eb and flow of ownership

represent communist equality to the gardeners; some were relocated here upon city intervention

The site is bordered by loud (barking dogs, yelling children) single-family suburban homes to the West, a freeway to the South, and affordable housing buildings to the East where most of the gardeners live. Powerlines tower over the site, extending north and south, constantly buzzing and creating safety constraints for the gardens. Adjacent from the gardens is Los Niños park and playground, serving as recreational space for families living in the area. Half a mile from the garden is a shopping center with culturally relevant restraurants and markets, a 99 cents store, hardware store, thrift store, and gas station.



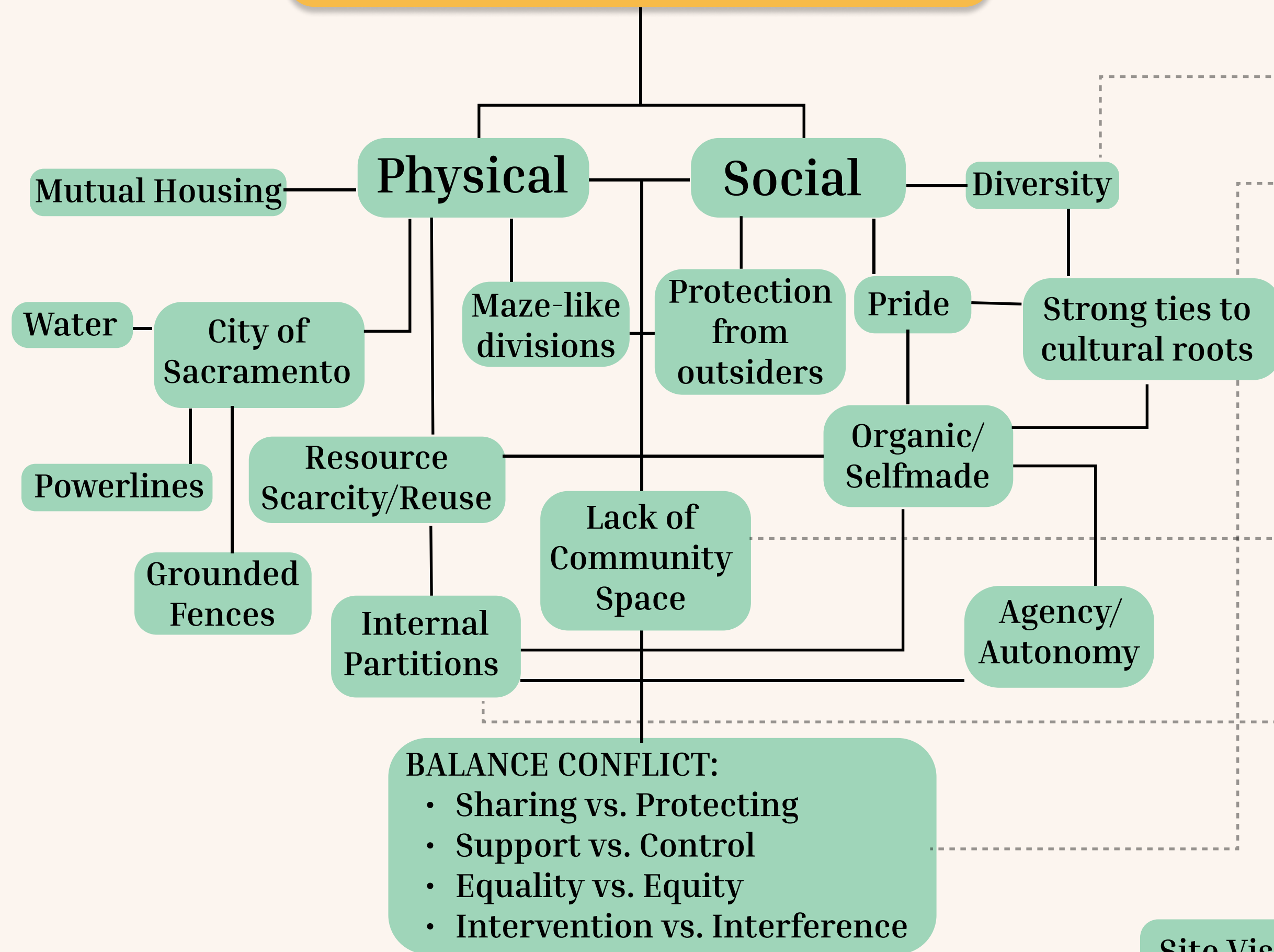
Relatogram



Community Questions



CONTEXT & IMPRESSIONS



KEY QUESTIONS

- Overcoming the language barrier (technological barriers/applications)?
- How can we implement physical changes in the space that accomodate necessary compromises while respecting the trauma that has come from past changes?
- Additions to the community plot (bulletin board, sink, shared tool storage, etc.) that would best serve/be most used by the community?
- Appropriate compromise between beautification of the space and preventing loitering and the necessity for excessive maintenance?
- Enforcement measures appropriate to prevent the use of hazardous materials in plots?

COMMUNICATION METHODS

Visual (sketches, infographics, presentations)

Meetings with community partner and experts

Surveys (translated?)

Site Visits



Situation Analysis

Strengths

Opportunities

Weaknesses

Strengths

- Gardeners are creative and use unconventional materials to set up partitions between plots
- Despite many years of farming, the quality of the soil remains excellent
- Optimal location next to parks, mutual housing, walkways
- Collaboration with the gardeners is understood based on a sense of autonomy

Opportunities

- The entrance to the garden is sparse providing an opportunity for beautification
- The community space is unoccupied and empty, and has potential for amenities

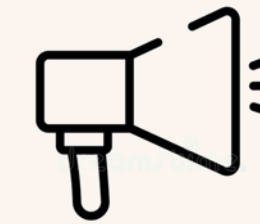
Weaknesses

- For safety reasons, the power lines prevent the gardeners from using any metal larger than 3 feet in their garden
- Plots located in the center of the site create a barrier which prevents free movement
- There is a lack of waste disposal on site

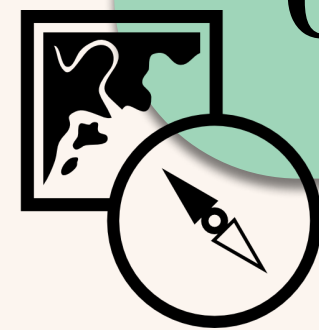
Our weaknesses, opportunities and strengths combine to create actionable strategies. The colors outlining the photos express current conditions and the description box/text describe what they can be.



Project Timeline



Goal #1



GIS Mapping Tool



Strategy/Action Items

Mapping workshop

Transition existing map into GIS

Make accessible to community partner

Create interactive mapping tool via ArcGIS Online

Goal #2



Community Plot Design



Survey to gauge community interests, advertise for workshop

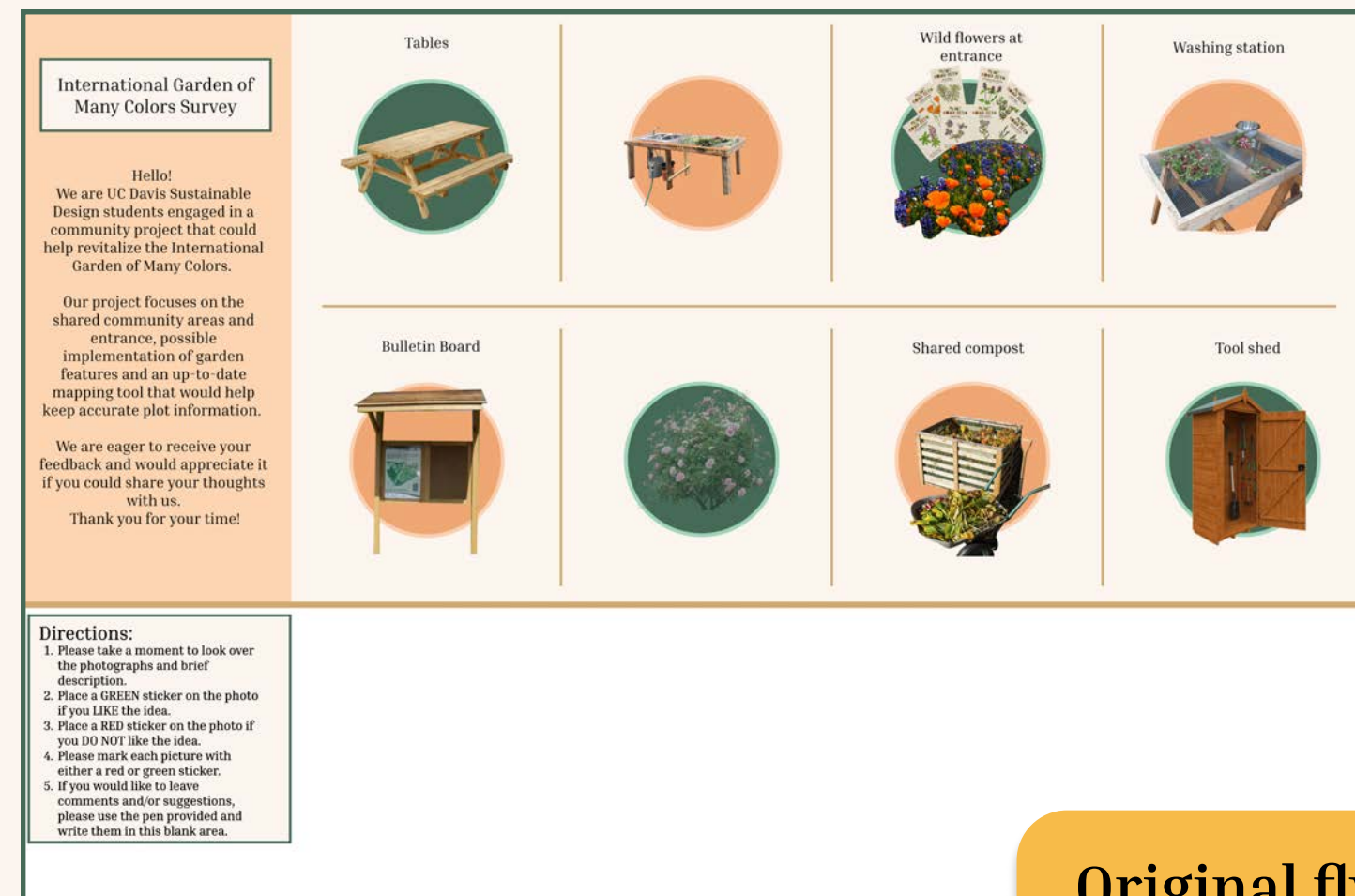
Tactical Design/ Village Talk Workshop

Compose community plot design

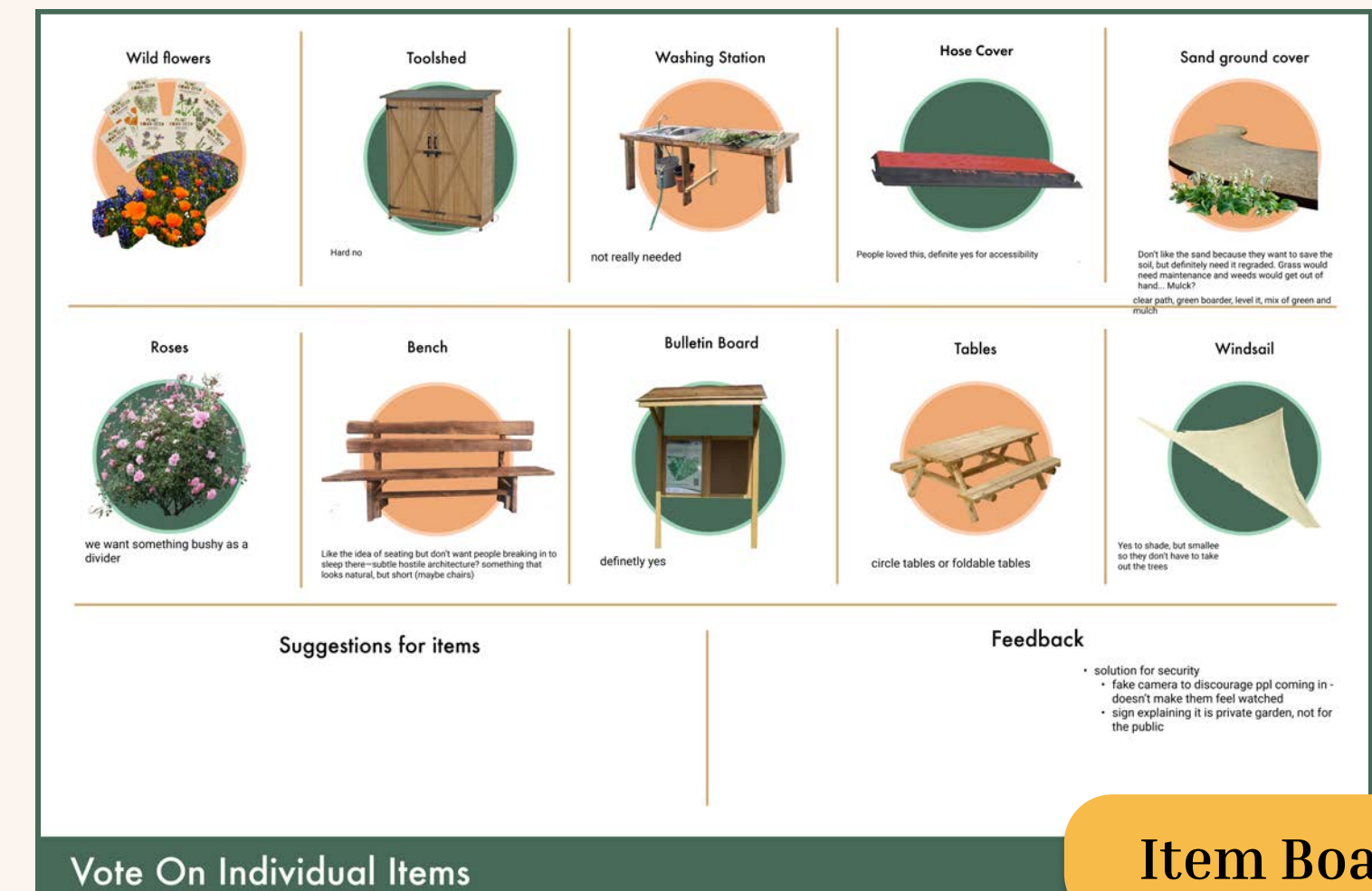
Design Implementation



Design Process: Plot



Original flyer



Item Board

Initially our team planned to hand out flyers to introduce ourselves, advertise our event, and have the gardeners start thinking about the space. We came up with items that they might want as well as space to give us suggestions.

After meeting with our community organizer the flyer evolved into a poster board that would be presented at a mandatory meeting for the gardeners. We decided on having two poster boards with one focusing on individual items, and one representing how the space could look with those items. We wanted the boards to be as visual as possible because many of the gardeners spoke little English, therefore, we didn't want to rely on words.

After much discussion, we decided to have the gardeners mark the item boards with green stickers if they liked them, and red ones if they did not. For the design mock up board we decided to have them rank the boards with green being their favorite, yellow being their second favorite, and red being their least. We chose these colors because they almost universally were associated with yes or no.



Design Mock Up

Design Deliverables: Plot



Key - Items

Community Plot

1. Covering
 - a. Grass - leveling
 - b. Mulch
2. Hose ramp cover
3. Bulletin board
4. Shading
 - a. Casita/pergala
 - b. Umbrella attached to circular picnic table
5. Tables
 - a. Foldable table
 - b. Circular picnic table
6. Seating
 - a. Foldable chairs
 - b. Double chair with attached
 - c. Circular picnic table with seating
 - d. Lawn chairs
7. Greenery
 - a. Wildflowers
 - b. Shrubs
8. Vegetable/hand washing station



Gates

- Sign
- Fake security camera



Second Design Mock Up



Front Entrance Mock Up

Community Plot

With the input given verbally and on the boards we reimaged the space once more.

Some of our take aways were:

- People did not feel safe in the space and didn't want to invite outsiders in, but they did want to have a gathering space.
 - We tried to balance these wants by suggesting having foldable furniture or furniture that would not be able to be laid on. We also designed a sign to discourage outsiders from entering and add a fake security camera.
- People wanted a more cleared ground path but wanted the soil to be able to grow if the plot was returned to a personal plot.
 - We suggested leveling the ground and adding mulch.
- People wanted a clearer distinction of where the community plot was
 - We suggested using shrubs or clearing a path.

If we had more time we would have hoped to send out the second mock up to be voted on as well. We also created a Google Doc for our community partner with links and prices for the items suggested which is found through the QR code.

Front Entrance

Our community partner wanted a beautification of the front entrance and a design that would be functional for wood chip drops.

- Our design was to level the ground and make dividers for the chips out of cinder blocks. We also suggested adding greenery to the space.



Design Deliverables: Casitas

Late in our process Brenda introduced to us the ongoing issue of structures within the garden plots.

She referred to them as 'casitas' and asked if we could provide a concept of similar structures, which could be approved by the city as well as power authority.



Example of existing non-approved structure

The structures had to be <50% enclosed, universal in application, affordable, and of accessible materials (with the exception of metal).

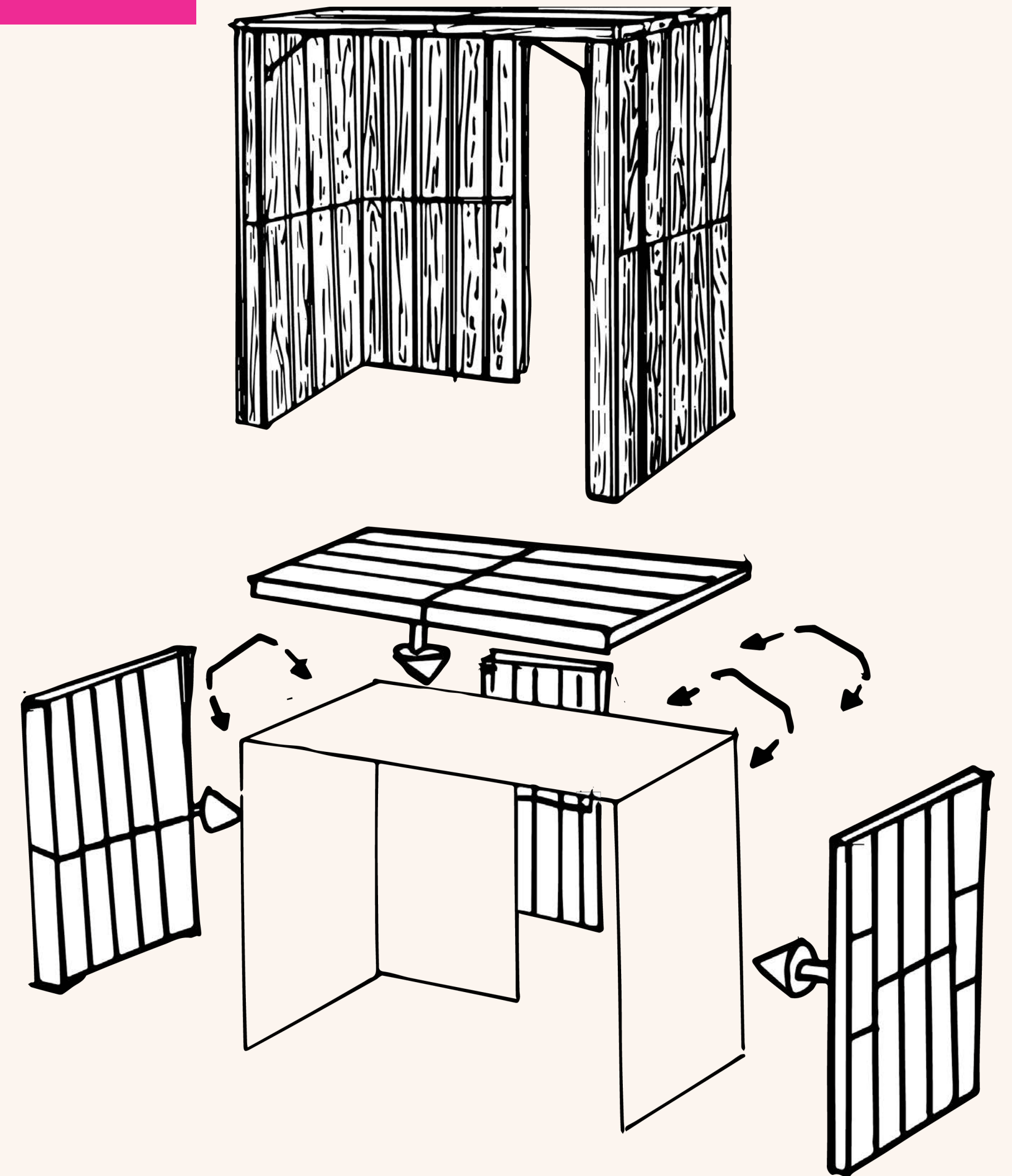
We proposed a modular structure constructed of repurposed shipping pallets. They could be assembled in units of 2 pallets which make up the walls and roof. Each structure would require 4 of these units with the proposed configuration. Bracing may also be necessary in the upper corners for stability.

Gardeners could add paint, seating, storage, or other approved customizations as desired.

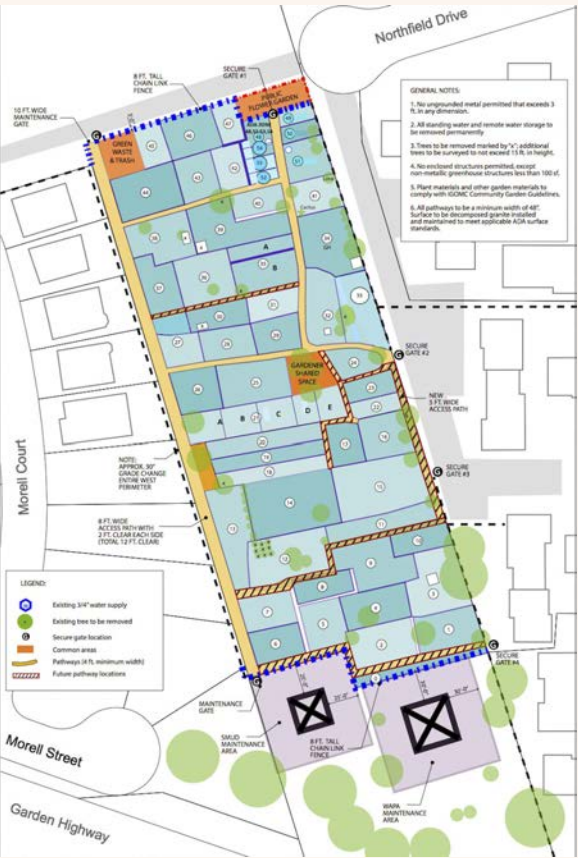
Dimensions: Approx. 7' H x 8' L x 4' W

Materials:

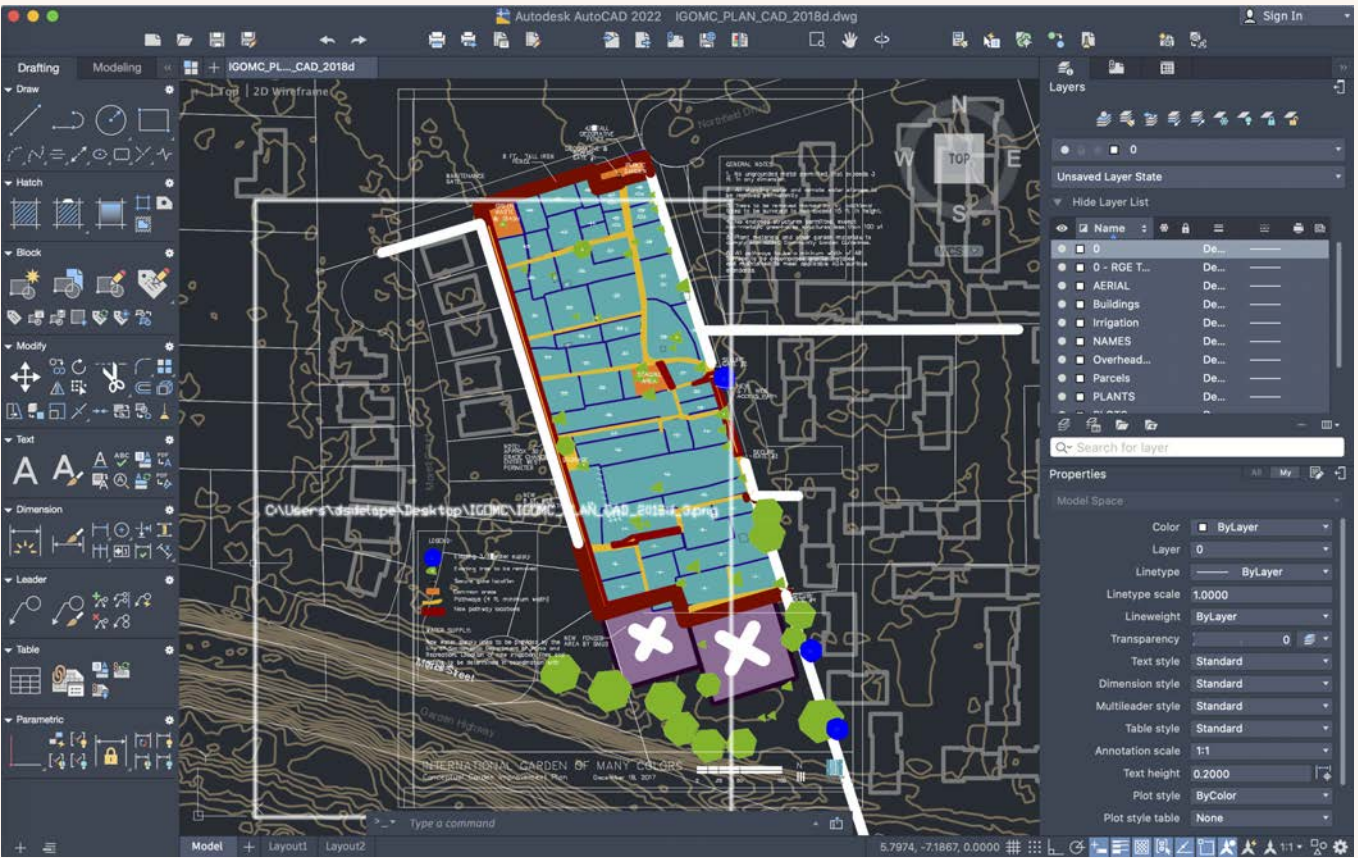
- Pallets (x8)
- Corner braces (x4)
- Wood to connect pallets
- Fasteners as needed



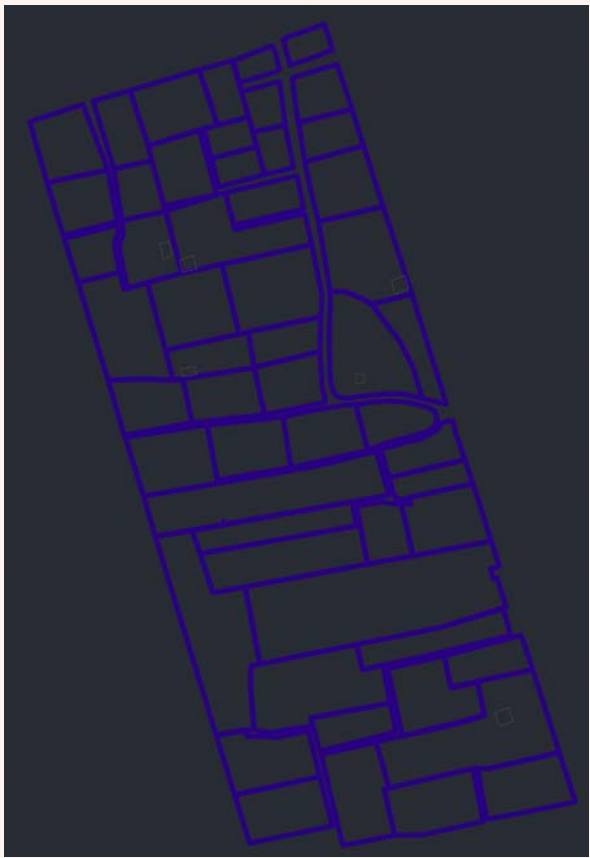
Process of Mapping Tool



Started with previous classwork's Illustrator Files



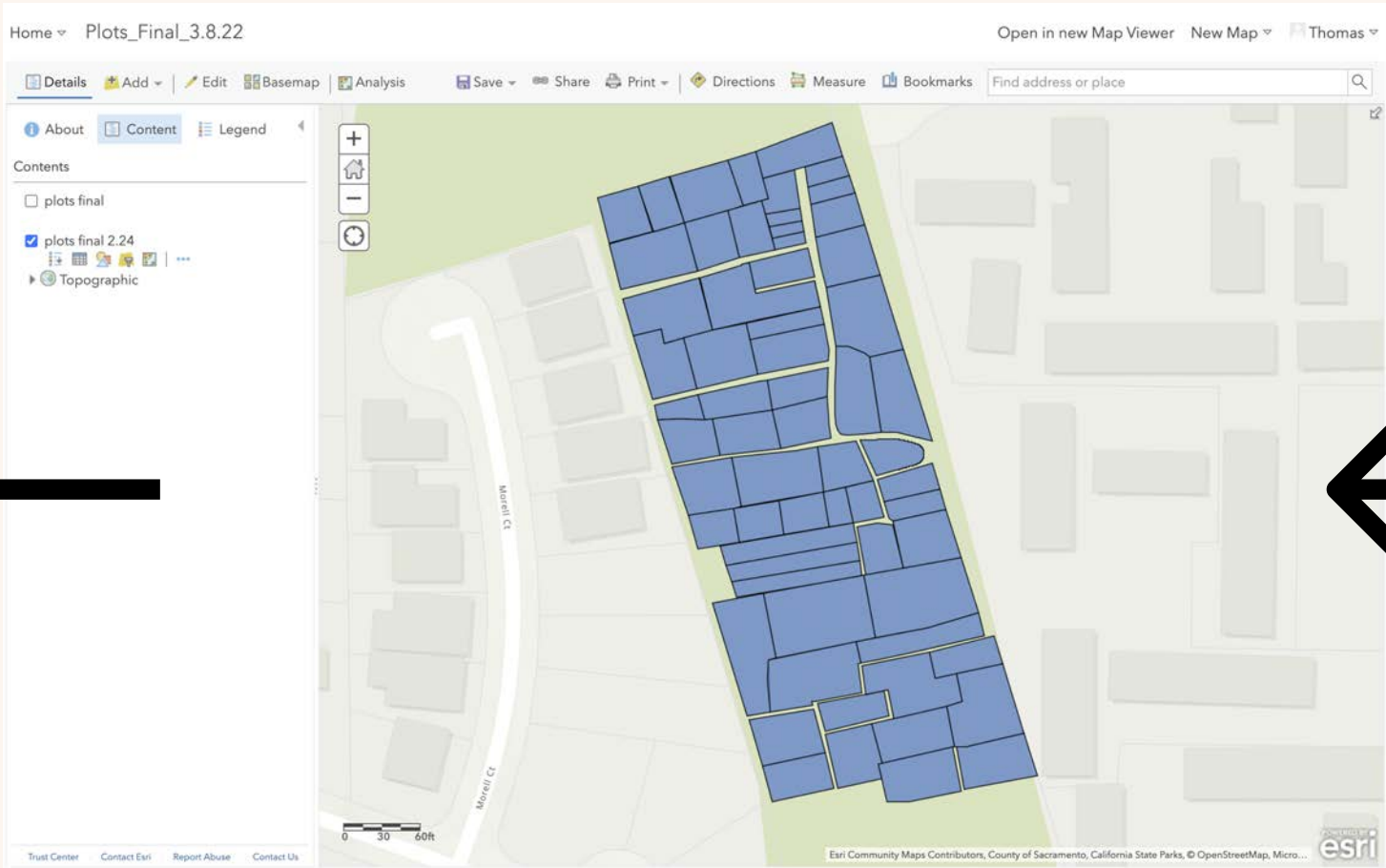
Brought Illustrator Base Map into AutoCad in order to isolate line work



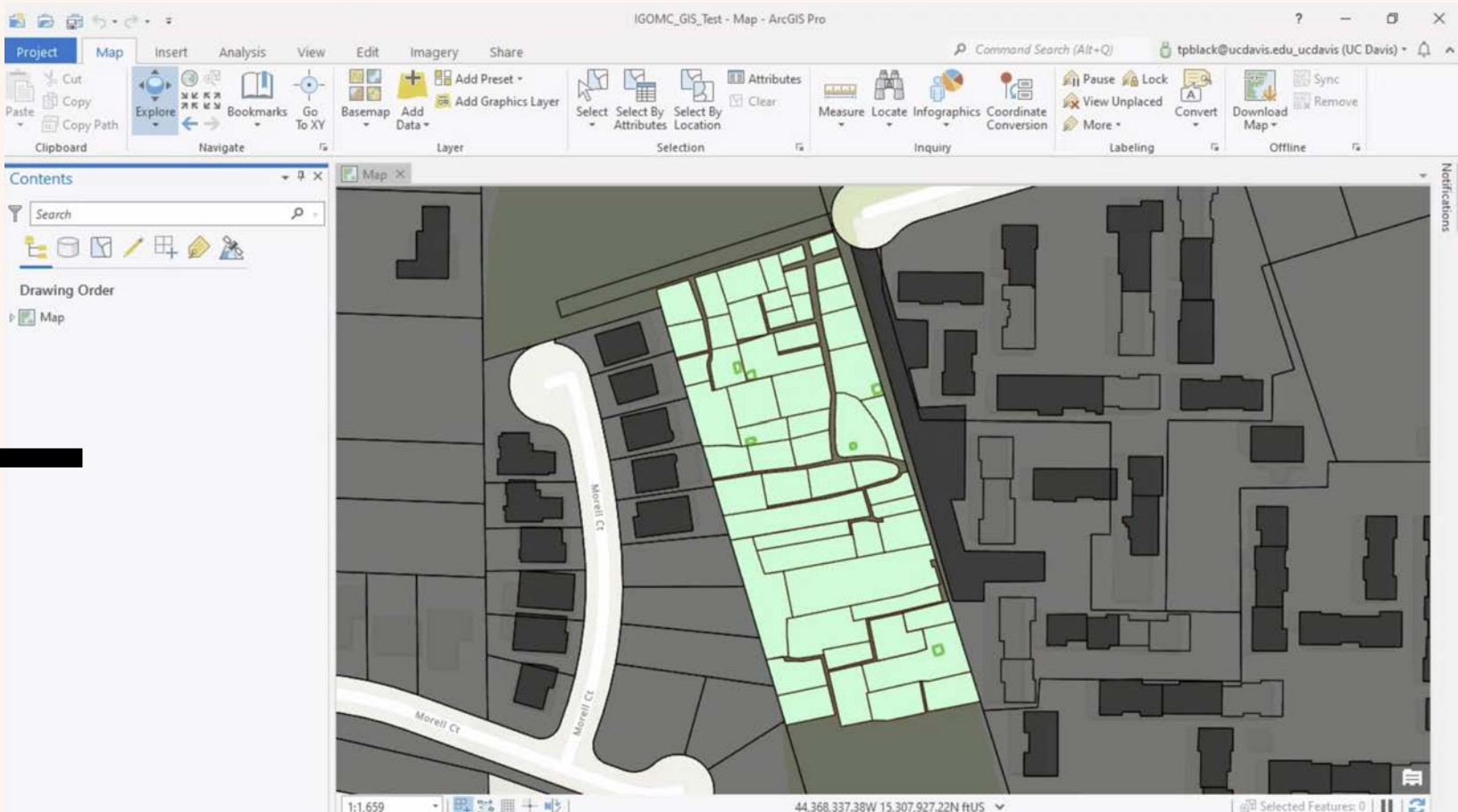
Isolated linework and prepared to export



Made map available for field use on Field Maps application



Exported polygon feature layer into ArcGIS online for easy access to parties invited

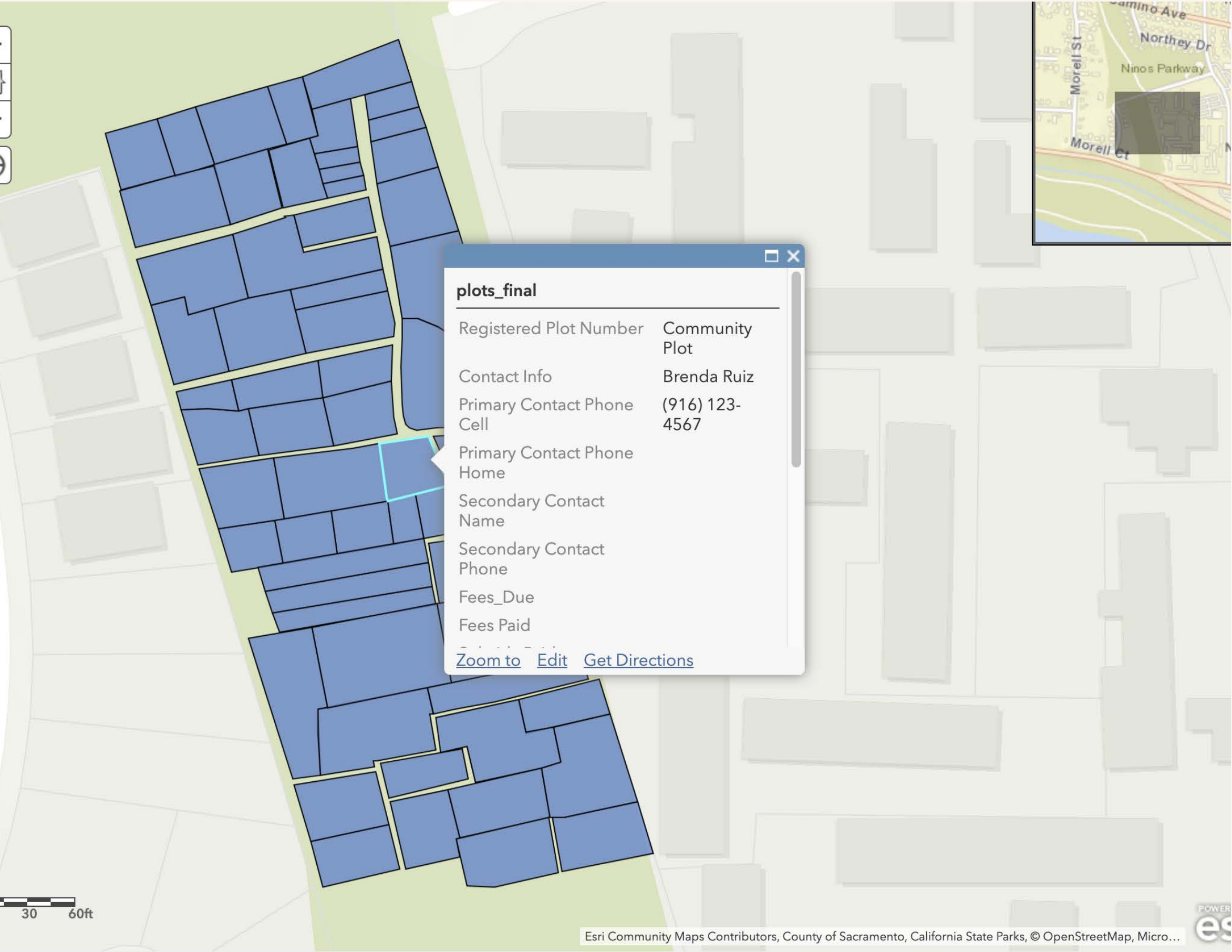


Imported linework into ArcGIS Pro, georeferenced linework from before, and added new polygon feature layer for linework



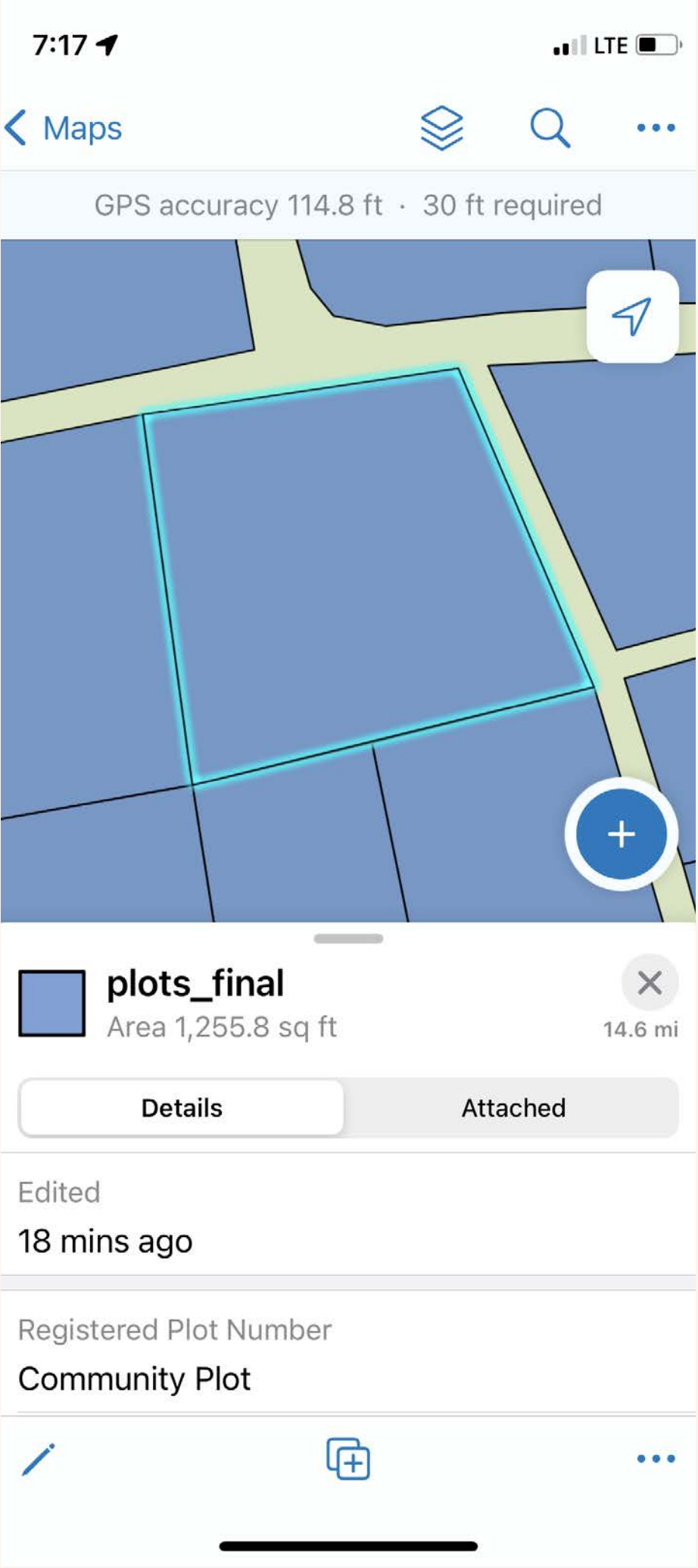
Design Deliverables: GIS

ArcGIS Online Interface



Management Map - Hosted on ArcGIS Online and Field Maps application, this plot map possesses attribute tables that has fields for each plot. These fields will contain information such as gardener contact information, plot fees due, plot fees paid, and upkeep notes for Brenda and the gardeners. The polygons representing each plot are editable, and the line features to adjust the sizes can be changed via ArcGIS Online or Field Maps.

Field Maps Application Interface

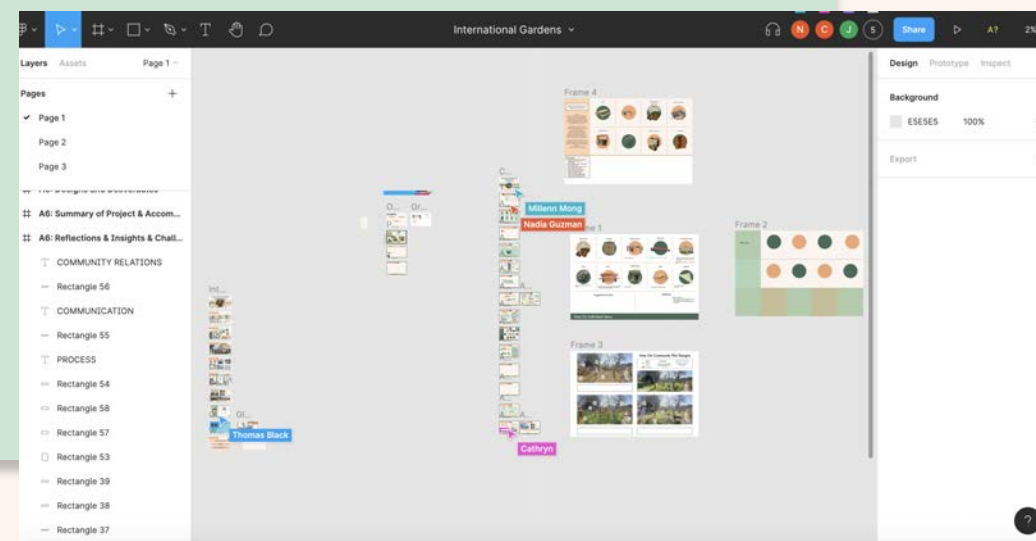


Team Reflection

PROCESS

Our project began with a lot of uncertainty due to less than ideal communication with a very busy community partner. We found that documenting our process empowered us to feel more confident moving forward through uncertainty and allowed us to redirect our energy from sitting in discomfort to asking questions, talking through the process, and making tangible progress toward a goal. We struggled a bit when we were remote, but found our rhythm when we were able to sit together, talk, ask questions, reassess our goals and timelines, and repeat.

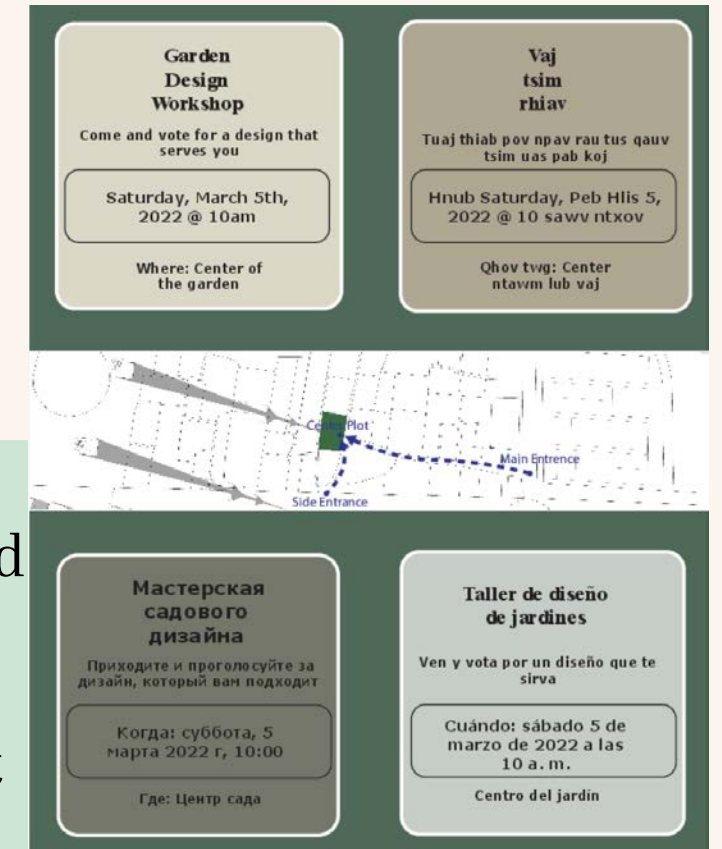
However, when communication resumed we found that some of those goals needed to change to better support the community. The ability to adapt and incorporate feedback was integral to successful completion of our deliverables. Our design process was collaborative and visual. This made room for all of us to contribute and support the completion of our deliverables and class assignments to support our group members across our assigned roles.



COMMUNICATION

Our group learned the importance of persistent and clear dialogue with community partners and within the group. Within our group, we found that documenting our process and meetings in a way that would be more accessible to those who missed meetings would have presented an opportunity for better efficiency, reflection, and teamwork. Additionally, though some frustration stemmed from difficult conversations trying to get on the same page as our community partner, her push for us to get our even planning documented and shared contributed greatly to its success.

A flyer we made to advertise our design event that did not get sent out due to miscommunication with our partner



COMMUNITY RELATIONS

Unanimously, our group's most important and impactful takeaway was the relationship we built with our larger group of community partners: the gardeners. We faced a lot of introspective questions about ethics and our right to access, occupy, and change the spaces that meant to much to them, but found that approaching the relationship by meeting the community where they were —acknowledging participation fatigue and larger community/world contexts (i.e. the Russian invasion of Ukraine)—build trust and empowered the community to contribute their voices to the design process. We also took note of interesting group decision making dynamics that taught us about the importance of welcoming culture into the design process.



What's Next?



Community Space Design Implementation: Del Paso Heights Growers Alliance

- Del Paso Heights Growers Alliance has a close contract with the city and will be able to make our community space designs come to life once everything is finalized.
- Del Paso Heights Growers Alliance would like to have volunteers come to help them with tasks on site and plan to have weekly maintenance and bigger clean up days every other month.

Opportunities: Volunteer & to continue working with our community partner, Brenda.

- Students are able to take a directed group study next quarter that's dedicated to continue working on this project.

Living Document and Box Link for Future

Goals:
Deliverables that Brenda expressed a need for, but were not possible within our quarter

- There are multiple deliverables that our group were unable to complete due to time, but would like to provide the ideas and requested deliverables to the next cohort that will be in the LDA 141 course and is assigned IGOMC as their site.
- A couple of goals that could be accomplished next time includes: designing ADA pathways.

