Carriage Hills Square
The Village Square Commons

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LA 447 - Juried Design Studio
# Carriage Hills Square

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The Carriage Hills Shopping Center is a retail center located at the corner of Lake Lansing Road and Hagadorn Road in East Lansing, MI, serving as the study area of this project. The area was previously frequented by a shopping area centered around a large privately owned grocery store. The grocery store serviced many of the surrounding neighborhoods and was a fixture in the local community. In the past few years, the site has diminished, the anchor grocery store has changed owners multiple times and is currently vacant. With this came the end to many of the other stores that populated Carriage Hills Shopping Center.

The goal of this project will be to propose a redesign of the shopping center to restore it to its previous state, where it was a fixture of the neighborhood. The process will take a look at both revitalizing the surrounding neighborhoods in support of the Core area, as well as just redesigning the core shopping center. The redesigns will look to incorporate mixed use development into its design.

The community grocery store gave the surrounding communities a place to gather, a place to visit with one and other. It provided an informal community center. This feature now lacks in the area, which has caused the community to become disjointed. Bringing back these community spaces to connect the surrounding neighborhoods again is one of the most important items to create a successful design.

Another driving characteristic of the design will be the concept of creating a World Class Built Environment. Creating a place to live, work and play will be the defining characteristic of the new shopping center. Bringing a green community together with less of a focus around the automobile and a larger focus on pedestrian travel will be very important. Carriage Hills Shopping Center has many positive aspects to it, it just needs to be brought back to life.
Carriage Hills Square

Existing Conditions

- Much of the retail space is vacant, or disconnected
- No sightlines, or identifiers to the site that notify visitors of what exists in the Carriage Hills Shopping Center
- The signage that exists on site is unattractive and hard to read
- No existing community gathering spaces, that allow the community to interact
- A disconnect between the surrounding neighborhoods and the shopping center, hinders the success of the site
- A large quantity of impervious pavement engulfs the site, making it uninviting and disjointed.
- Neighborhoods that surround the site are all very different than the next. There is no unity in the layout that connects them to the shopping center.
- The CATA public transit system has a single route that travels through the site
- Two elementary schools are within walking distance to the shopping center and offer an opportunity to bring families and children onto site.
- The site lacks a connection to the cities of Lansing and East Lansing
Carriage Hills Square

Site Location

The site is located within Ingham County and is a part of the Meridian Township.

The design will consist of the Core Site which totals 15.79 Acres. The shopping center is located at the corner of Lake Lansing Road and Hagadorn Road. The core shopping center site sits between Lake Lansing and Birch Row Drive.

An 80-90 Acre site which includes the core shopping center site will also be redesigned. The 80-90 Acres can be any selection of the surrounding neighborhoods.
Carriage Hills Square

Public Transportation

#24 CATA Bus Route

West Bound Stops

East Bound Stops

Water on Site
Carriage Hills Square

Program Elements

- Develop the Carriage Hills Shopping Center into a more functional place.

- Implement new architectural elements that draw the attention of visitors and encourage them to investigate further and stay on site longer.

- Create housing that is in a close vicinity to the shopping center that offers diverse and affordable housing.

- Make stores within the shopping center more visible from the main roads of travel and pedestrian travel ways.

- Design community to support with housing that is attractive to all economic groups. Provide multiple uses within these housing communities.

- Provide a travel network that is conducive to all modes of transportation as well as pedestrian travel. Incorporate public transit options within the site. Provide bike lanes and sidewalks to encourage pedestrian travel over vehicular travel.

- Limit vehicular and pedestrian conflict by providing streetscape design principles.

- Increase desity of the area to help to support the businesses that occupy the Carriage Hills Shopping Center.

- Remove impervious surfaces and implement more pervious pavements on site.

- Create a trailway and greenway connection to the local bike trail network.

- Create community gathering spaces that encourage community members to gather and enjoy each others company.

- Provide open greenspace that can be utilized to host community building events, like a farmers market, or art shows.

- Follow the guidelines set forth by the World Class Built Environment.
**Carriage Hills Square**

**Overall Site: Proposed Design Elements**

- Condos for rent, or purchase that will be centrally located to the shopping center.

- Provide apartment options that incorporate multi-use development where the first floor of the facility is office or retail space with apartments above.

- Provide open community spaces that incorporate greenspace.

- Outdoor events space for community and public events.

- Children play spaces within parks and other gathering spaces.

- Public transportation to allow access for people from surrounding communities to easily arrive on site and for the use of people who are already on site.

- Create a site that encourages walking and pedestrian travel, and make it a priority.

- Greenway connection from the shopping center and housing to the existing trail system.

**Core Site: Proposed Design Elements**

- Specialty grocery store. (Trader Joe’s, Whole Foods, etc.)

- Provide convenience parking, but utilize parking structures for more long term parking.

- Provide open community spaces that incorporate greenspace.

- Outdoor events space for community and public events.

- Provide pedestrian connections and entrances to encourage pedestrian travel throughout the site.

- Retain Buddies Pub and Grill as an anchor for the Carriage Hills Shopping Center.

- Utilize multi-use buildings with first floor being retail and above floors being office or housing facilities.

- Provides safe connections to local schools and surrounding neighborhoods.
Carriage Hills Square

Background Research and Precedents

**Mixed use Development:**

Mixed-use development is development that blends residential, commercial, cultural, and institutional uses.

Mixed-use development:

- Allows for greater housing variety and density
- Reduces Distances between housing, workplaces, retail businesses and other destinations
- Encourages more compact development
- Strengthens neighborhood character

Source:
**Community Spaces:**

- Community spaces will help to provide interaction within the community

- Some examples of community events that would fit the area well:
  - Farmers Market
  - Outdoor movies in the park
  - Coffee or Restaurant Patios
  - Tastes of the town

- These types of events will draw not just the surrounding neighborhoods but will draw from different neighborhoods and provide opportunities for all the shops and buildings in the shopping center.
Carriage Hills Square

Background Research and Precedents

World Class Built Environment:

- Collaboration
- Walkability
- Stormwater management
- Public transportation
- Teamwork
- Connectivity
- Sense of community
- Social connection
- Environmentally conscious
- Multi-disciplinary
- High density
The Masterplan process will include two different masterplans. One masterplan will look at a perfect scenario and a blank slate. This plan will be a 50 year site plan. A 5 Year Masterplan will look just at the existing Carriage Hills Shopping Center and redesigning that area from more realistic viewpoint.

**50 Year Site Masterplan (A+B):**
- Multi-use retail and office facilities
- Specialty grocery store for surrounding residents
- Outdoor public gathering spaces
- Increase population in the area with various forms of housing

**50 Year Enlarged Core Area Masterplan (B):**
- Focused Masterplan on the Core Retail Areas
- Multi-use retail and office facilities
- Specialty grocery store for surrounding residents
- Site plan with design details, sections and elevations

**5 year Core Site Plan Program Elements:**
- Core shopping center
- Multi-use retail and office facilities
- Specialty grocery store for surrounding residents
- Outdoor public gathering spaces
- Use existing structures to remake the shopping center
Carriage Hills Square

Design Process

The design process started by selecting the 80-100 Acre site which included the existing Carriage Hills Shopping Center. The area selected for this design was in total 110 Acres. The site encompassed the Existing Carriage Hills Shopping Center and all the surrounding multi-family housing to the east and north of the shopping center.

The design process began with the first step being, deciding how the different program elements would layout in the design. By using the functional use diagram to the right, the preliminary arrangement of elements can be seen. Mixed used housing and multi-family housing are two important elements. The intertwining of retail and office mixed with housing is also an important element.

After an initial layout is created in the Functional Use Diagram, the road network began to take shape. To the left displays the initial road network and a few critical areas of interest. The development of a Green Corridor is a very important. The road network aims to encorporate the unique features of the site, while still being functional and easy to understand.
After the functional use diagram and preliminary planning, the first site conceptual masterplan was created. This masterplan featured; mixed-use office and retail, single family housing, multifamily housing and a small executive golf course.

A bike trail connection and other pedestrian oriented travel options provide other options than vehicular travel. Another major characteristic of this version of the design, is many small greenspaces and parks throughout the site to create community interaction.

The next step was taking feedback and looking at how to arrange certain areas of the design to make it function better. The images to the left and right show this thought process. The two plans are specifically focused around the Core site and looking at how to make the area more functional and connect it to the other parts of the design.
The next evolution of the masterplan begins to tackle the population density issue. By bringing in large amounts of housing options and increasing the population the residents will be the supporting figures for all the retail and office spaces.

A large amount of single family home lots ranging in different lot sizes surrounds the golf course providing a unique golf community experience.

With Savannah, GA as inspiration, multiple traffic squares in the retail area helps to slow traffic in the area. This will encourage vehicular traffic to slow and see all the retail options. These traffic squares also provide open greenspace and parks for the community to use.

Following comments made on the above masterplan, the retail area continues to be explored and reworked to create a better design.
Design Concept

The development of Carriage Hills Square started with the desire of the community to have community gathering spaces. These community spaces increase interaction between neighbors and make it a very desirable place to live. Another major aspect of the design was to make Carriage Hills Square pedestrian friendly, not only for the Carriage Hills Square residents, but also the surrounding neighborhoods connecting them to Carriage Hills Square.

The types of retail the community was looking for were intended to be basic community services, so that they did not have to go very far to get what they needed. They were also looking for the retail area to be very close and easily walkable to encourage other alternatives of transportation besides cars. With inspiration from Savannah, Georgia the proposed design accomplishes this in the retail area with central squares in between roadways with uses directly relating to them. These spaces can have multiple community uses. Unique streetscapes throughout the retail area make the whole development green and inviting to pedestrian travel.

The proposed housing design centered around providing various housing options for all income levels. In addition to providing various housing types, it was the goal was to provide each resident with a unique view, access to small parks, golf course views, or convenient access to the natural area north of the site. These community greenspaces highlight some of the unique experiences provided to residents of Carriage Hills Square.

Precedent Images

Savannah, GA served as inspiration for the retail district. Green squares streets are unique to the area.

Multi-use facilities will be key to the core site area. Retail and office spaces on the first floor with residential above them much like the above image. Brings users directly into the retail locations.

Each square provides a greenspace for the public to use and breaks up traffic. They allow views of the greenspaces to the surrounding structures.

The image to the left displays multi-family housing on a golf course. This is a very unique feature in a golf course community.
<table>
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<tr>
<th>Building</th>
<th>Area (SF)</th>
<th>Floors</th>
<th>Parking per SF</th>
<th>Residential Floors</th>
<th>Units per Floor</th>
<th>Total Units</th>
<th>Parking per Unit</th>
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<td>A.</td>
<td>29,000</td>
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<td>20</td>
<td>40</td>
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<td>B.</td>
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<td>2</td>
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<td>18</td>
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<td>20</td>
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<tr>
<td>E.</td>
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<td>F.</td>
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<td>1</td>
<td>7</td>
<td>14</td>
<td>2</td>
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<td>G.</td>
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<td>7,250</td>
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<td>1</td>
<td>7</td>
<td>14</td>
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<tr>
<td>J.</td>
<td>10,200</td>
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<td>1</td>
<td>10</td>
<td>20</td>
<td>2</td>
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<td>14</td>
<td>28</td>
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<td>12,300</td>
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<td>1</td>
<td>12</td>
<td>36</td>
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</table>
Carriage Hills Square

Final Masterplan Building Legend

<table>
<thead>
<tr>
<th>Building</th>
<th>Square Footage</th>
<th>Retail Spaces</th>
<th>Residential Second Floor:</th>
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<tbody>
<tr>
<td>M.</td>
<td>20,185 SF</td>
<td>Computer Store, Cell Phone Store,</td>
<td>-20 Units per floor, -2 Floors,</td>
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<tr>
<td></td>
<td></td>
<td>Technology Repair</td>
<td>-40 Total Units, -2 parking spaces per Unit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-1 parking space per 250 SF</td>
<td></td>
</tr>
<tr>
<td>N.</td>
<td>12,604 SF</td>
<td>Large Restaurant</td>
<td>-12 Units per floor, -2 Floors,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-24 Total Units, -2 parking spaces per Unit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-1 parking space per 250 SF</td>
<td></td>
</tr>
<tr>
<td>O.</td>
<td>23,000 SF</td>
<td>3 Clothing Stores</td>
<td>-21 Units per floor, -2 Floors,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-42 Total Units, -2 parking spaces per Unit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-1 parking space per 250 SF</td>
<td></td>
</tr>
<tr>
<td>P.</td>
<td>7,200 SF</td>
<td>2 Clothing Stores</td>
<td>-3 Floors</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-1 parking space per 250 SF</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Parking Second Floor:</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>-3 Floors</td>
<td></td>
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<tr>
<td>Q.</td>
<td>22,500 SF</td>
<td>Large Department Store, Clothing</td>
<td>-20 Units per floor, -2 Floors,</td>
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<td></td>
<td></td>
<td>Store, Technology Repair</td>
<td>-40 Total Units, -2 parking spaces per Unit</td>
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<tr>
<td></td>
<td></td>
<td>-1 parking space per 250 SF</td>
<td></td>
</tr>
<tr>
<td>R.</td>
<td>14,000 SF</td>
<td>Eye Doctor, Chiropractic Services</td>
<td>-1 parking space per 250 SF</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S.</td>
<td>16,000 SF</td>
<td>Sporting Goods</td>
<td>-1 parking space per 250 SF</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T.</td>
<td>22,800 SF</td>
<td>Grocery Store and Pharmacy</td>
<td>-1 parking space per 250 SF</td>
</tr>
<tr>
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</tbody>
</table>
- The road network map displays the proposed road network.
- Main roads will see higher traffic volumes.
- Tertiary Roadways will be more of a private road compared to the others.

PARKING ZONES

- Having convenient and centrally located parking is very important.
- Each section having their own parking zone part of what makes the design successful.

PEDESTRIAN NETWORK

- With a World Class Built Environment it is important to have an easy and interesting pedestrian network. Pedestrians were one of the main focuses of this design.

Mass Void displays all the hard surfaces within the design.
- All items that remain white will be softscape or pervious pavement.
---The 5 Year Core Site Design will occur within the existing Carriage Hills Shopping Center.

- Much of the shopping is owned by the DTN Management company who will serve as the main client on this project.

- The intent of this portion is to find design solutions that can utilize the infrastructure that already exists within the site

- Adding and removing some structures is permissible, but the Gas Station, Option 1 Credit Union and the Apartments in the Northwest corner of the site, must remain in their current locations

- Retaining Buddies Pub and Grill and adding a specialty grocery store are the two most important things according to community members.
The technical data sheet outlines the design area.

- By looking at the Meridian Township ordinances, the design outline begins to take shape.

- The intent of this portion is to locate what design ideas can and cannot be constructed.
Carriage Hills Square

5 Year Core Site Design Process

--The image to the right shows the development of spaces. Following the preliminary masterplan to the left, the community spaces needed development to make them unique and attractive to the community.

--The design process begins with the image above. Following the technical data sheet, buildings and road network take a rough shape. This particular design incorporates the town squares from Savannah, GA as a guide. Adding multi-use structures as close to Lake Lansing Road gives the area a whole new feel. Establishing a streetscape and main entrance will help to bring people onto the site.

- Continuing a development of spaces, creating more spaces around the central square that are both interesting and that offer people a place to enjoy the outdoors. The central entrance road starts establishing the space. Views down this entrance road will show the open central square and all the way down to Buddies Pub and Grill. This will truly make Buddies an anchor and a place the whole community wishes to visit.

- The bottom image on the right shows the new articulation to the buildings that will make them more interesting than a simple straight wall. The higher towers will also serve as a marking point within the site.
- The above image is the next version of the masterplan. The square footages of structures are calculated, this will in turn assess how many parking spaces must be on site in order to meet city ordinances.
- Because of a lack of parking, the image below looks to find new parking locations in the northeast corner.

- The image above looks to reduce the size of the structure by articulating building facades to draw interest. Creating more room between the building and road to the north of the building is needed in order to add convenience parking to the area.
- The image below is continuing the development of the masterplan to the left. This version is focused around the central square and making it into a place people must visit. The street also looks at entrances and the development of those.
- The section below is looking at the Hagadorn Road entry-way and a service road was implemented between Option 1 Credit Union and Hagadorn.

- The Entrance will be one of the more important design features. Creating something that gets peoples attention but is not an overwhelming distraction is very important. The above image is my initial ideas for the sign.

- By establishing unique streetscapes on all the streets, it notifies visitors and people driving by that there is something different about this places. Having light fixtures and benches along this streetscape, will also help to establish that. The central square, is the focus of the whole design. Everything radiates from this central area. An inside-out philosophy takes place throughout the site. Having buildings as close to the road as possible, with parking hidden behind the buildings, it creates spaces that are not vehicle oriented and instead they are pedestrian oriented spaces.
Carriage Hills Square

5 Year Enlarged Core Site Design Process

- It is important to create people spaces. These spaces will encourage visitors to come into the space, sit and stay in that space. This will increase community interaction and offer spaces to host events in the future.

- Below is an image of the central square and the initial design concept for that space. A fountain in the center will serve as the focal point. Benches around the outside will give people a place to sit while enjoying this space.

- The Main Entrance (to the left) will have a few unique features that notify people driving or walking by of Carriage Hills Square. Establishing a streetscape with lights and trees is only accentuated by brick paver crosswalks and the brick entrance signs. It is these small details that make a space feel connected.

- The image above is the northern pedestrian connection way. A sliver of the large structure that existed previously is taken out to make a connection to the north. The brick paver strip will be seen throughout the main pedestrian ways. It serves as a guide for people as they travel into the site.
- The section above shows the central square space. The large fountain in the center is the focal point. Benches and sidewalks help people get around the area. A streetscape buffer between the road and this space will make it feel more secluded from the road and a great pedestrian space.

- The section above shows the relationship between a single story retail building a secondary roadway within the site. The streetscape is established throughout the site with smaller ornamental trees. These trees are seen throughout the site and continue to establish that sense of place that is lacking in the existing site.
- This section is of Hagadorn road. On the far left, the service road for Option 1 Credit Union is seen. Between that and Hagadorn is a pedestrian walkway. Hagadorn has a streetscape with larger trees and a single row of the ornamental tree that is seen throughout the site.

- The design detail of the central square is the most important space within the site. Some small alterations are made to the fountain area to reduce the wide open feeling that was seen in previous versions. Benches are placed around the fountain. Small greenspace areas offer places to go sit and enjoy the grass. The brick paver crosswalks are also a staple throughout the site to give power to the pedestrian.
- Buddies Pub and Grill remains in its current location. A patio is added to the southern side. A space is then created by the addition of another restaurant to the south of Buddies. This restaurant also has a patio that faces Buddies. The two patios will form a small space that is then completed with the addition of a public fireplace. A short walk from the central square makes this space a good gathering location for people waiting to eat.

- The design detail pedestrian connection to the north is shown. Ornamental trees line the walkway and frame the connection. The trees attempt to soften the hard surfaces of the nearby buildings. The pavement runner guides pedestrians toward the central square. This pavement runner goes all the way to Birch Row Drive in order to draw pedestrian to the northern neighborhoods.
- The secondary entrance will have a smaller sign that simply guides cars and pedestrians into the site. Brick Paver crosswalks on Hagadorn establish the connection to the site. The secondary entrance roads all lead to the central square.

- The main entrance sign is surrounded by the ornamental tree that is seen on site. The sign will be a verticle feature that catches peoples attention as they drive by and draws them in. The small plantings make the area more attractive and inviting. Again, brick paver crosswalks will establish the sense of place and encourage pedestrian travel and safe crossings at an otherwise busy intersection.
**CARRiAGE HILLS SQUARE**

**5 Year Enlarged Core Site Details**

**Detail 6 - Main Entrance Sign**

- The Main Entrance sign is clean and simple. It does not show any of the stores that lie within, in an effort to get people into the space to explore not for one simple thing. By going vertical, the sign will catch peoples eye and cause them to look within.

**Detail 7 - Secondary Entrance Sign**

- The secondary entrance sign is smaller with only one vertical post. There will be one on each side of the entrances. The seasonal flower plantings seen in front of the sign will make the area even more attractive to people passing by.
Overall, the designs proposed are centered around making Carriage Hills Square a place to visit. The design meets the criteria set forth by the residents and the developers. By creating community spaces that can be used year round give it a community atmosphere that many of the local residents are looking for. This will draw in businesses and people to come and live in the area. The success of Carriage Hills Square will revitalize the area to the great neighborhood that it once was.