



Concept Plan Aggieville Vision to Reality

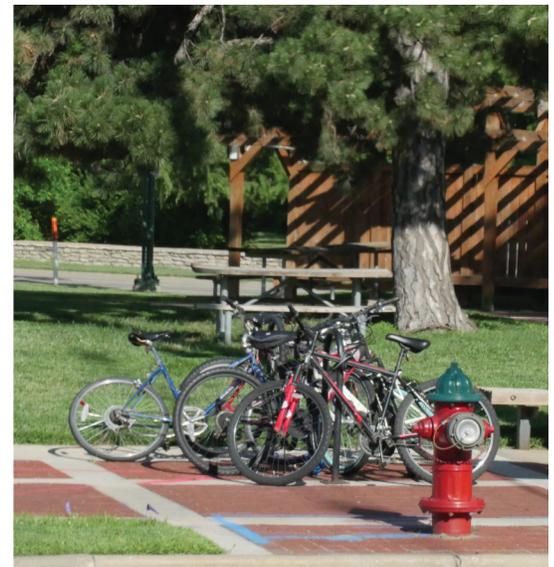
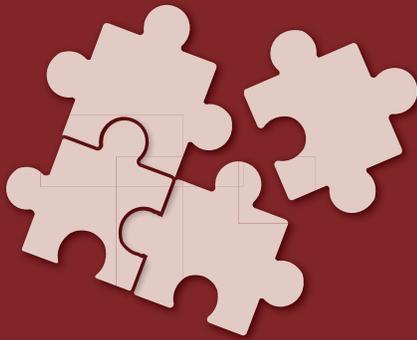
December 2018



What is Aggieville Vision to Reality?

Aggieville Vision to Reality is putting the puzzle pieces of Aggieville's future together. It is a complete design concept that edges Aggieville closer to its envisioned future – a future that enhances Aggieville to achieve its fullest potential. Aggieville Vision to Reality is gathering community input to create a collaborative design concept for the future of Aggieville so that it can achieve its vision of becoming a “vibrant, historic, pedestrian-oriented urban district that offers diverse shopping, dining, entertainment, and residential opportunities to students, visitors, and the broader community.”

With this vision in mind, Aggieville launched a process to build upon its existing features to become a more walkable area that is lined with thoughtful landscaping and lighting and more diverse entertainment options to engage all crowds. This piece of the project specifically focuses on improving the streets, sidewalks, landscaping, traffic circulation, and pedestrian experience, which will enhance Aggieville's existing foundation and serve as a jumping off point for the remainder of the puzzle pieces.





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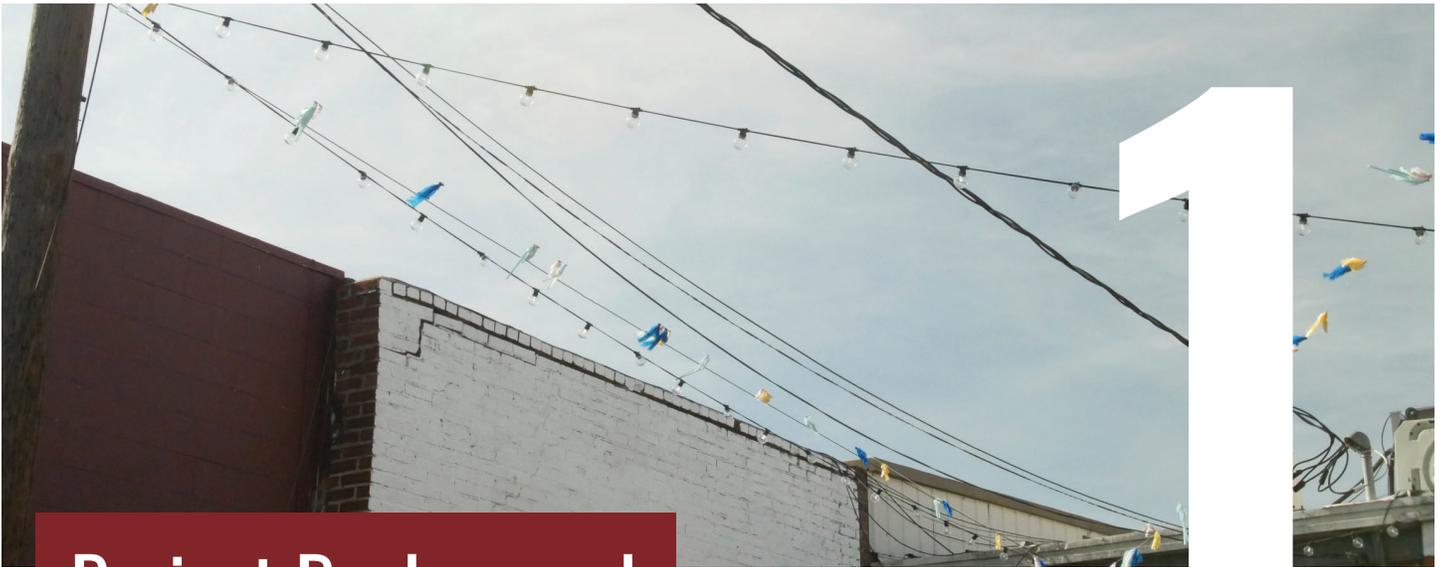
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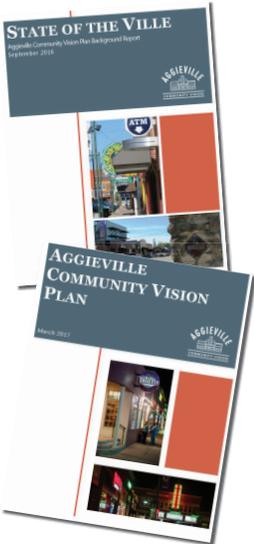
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Project Background

Aggieville is a unique district in Manhattan, Kansas, that draws in locals, visitors, university/college alumni, and Fort Riley services members alike. It is surrounded by several major investment areas, including Kansas State University (K-State), Manhattan Christian College, Manhattan City Park, new and established neighborhoods, and a vibrant and historic downtown. Just as when it first began in 1889, Aggieville continues to cater to the growing desire for dining, shopping, services, and recreation from the surrounding community. Aggieville is truly a community landmark and destination. The City of Manhattan desires to maintain Aggieville as a vital, lively, entertaining, and pedestrian-oriented district that appeals to the entire community and visitors alike.

After a year-long process beginning in spring 2016, the Aggieville Community Vision Plan was created, which defined a clear direction for future development and improvements in Aggieville, addressing and balancing the needs and desires of this area and the Manhattan Community. To create an informed plan, the City conducted several outreach activities to engage residents and university/college alumni to collect opinions on Aggieville and what the public would like to see it become. See below to learn more about the Aggieville Community Vision Plan. This Concept Plan summarizes the public engagement process and findings, the plan refinement process and outcomes, and the infrastructure that would be necessary to make this plan a reality. However, this plan is not intended to be final, but rather serve as a conceptual vision for what Aggieville could be, should it be desired.



State of the Ville

This September 2016 document is a compilation of background information that supplements the Aggieville Community Vision. The State of the Ville establishes the existing conditions and trends over the last few years that are shaping Aggieville in the district and surrounding neighborhoods. This report opens a dialogue of the issues and challenges within the district, while serving as a tool to recognize opportunities throughout the planning process based on observations, informational mapping, and community input. The State of the Ville is a first step to creating a well-informed vision and plan for Aggieville.

Aggieville Community Vision Plan

This is a policy document that is part of an initiative to identify a community-wide vision for Aggieville's future. This plan addresses many issues affecting the area and guides improvements and development opportunities in Aggieville. This plan updates the 2005 Aggieville – Campus Edge District Plan and is a supplemental document to the 2015 Manhattan Urban Area Comprehensive Plan. The Aggieville Community Vision Plan envisions the modern redevelopment of properties surrounding the historic core and multiple streetscape and transportation improvements.



Engagement Activities

Public Engagement

New Boston Creative Group led the Olsson Team’s community engagement activities in the summer of 2018 to determine the attitudes and opinions of various stakeholder groups concerning a future parking garage and streetscape improvements in Aggieville. Full engagement details are available in Volume 2.

This process involved more than 5,000 members of our community in a formal discussion about the future of Aggieville, using a variety of methods. This included:

- Creating, promoting, and monitoring social media accounts and paid advertising for Aggieville Vision to Reality events on Facebook, Twitter, and Instagram;
- Developing three press releases to promote different phases of the project, which generated newspaper, radio, and television media coverage for various aspects of the process;

- Developing and promoting an online community survey (4,636 completed responses);
- Promoting the June 28 Aggieville Community Visioning Event (approximately 155 participants on a 107-degree summer day);
- Facilitating eight focus groups in July and August (with 114 participants);
- Conducting one-on-one and small group interviews with members of the Aggieville business community (included 15 participants);
- Promoting and facilitating a three-day design charrette event Sept. 11-13, led by Ochsner Hare & Hare, a design studio of Olsson Associates (approximately 37 participants);
- Talking with the Aggieville Business Association board of directors and members over several monthly meetings throughout this process; and
- Holding a community open house September 12 (approximately 80 participants).

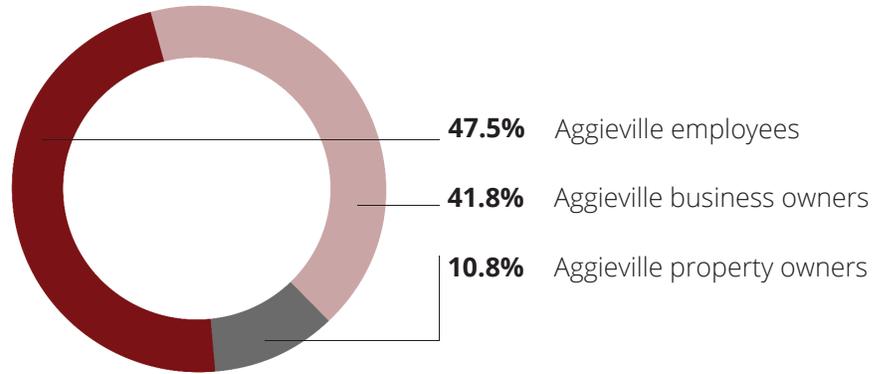
Project Timing

When asked, “Is this a good time to reinvest in Aggieville?” nearly everyone in the focus groups said the project is overdue — one person said the only better time “would have been yesterday.” Participants noted that Aggieville has a well-established brand and history, but they are now often embarrassed to take guests to the district because it is looking so dirty and tired. Many said they’d like to see Aggieville once again become a district that is busy with retail and professional services during the business day and feature a bustling nightlife, as well. Aggieville’s role in helping to recruit students and new residents to the community was also cited as a reason why now is a good time to make the district more of a community asset.

From the Aggieville business community, we heard Aggieville feels like the city’s “step-child” that has been ignored for decades, while downtown recently had major investment. The district feels it is finally now “their turn.”

A Note About Aggieville Participants

Because their numbers were so small in comparison to other demographic groups, in this report property owners, business owners, and Aggieville employees are combined into one audience group, which will be referred to as the Aggieville business community. This should not be confused with the formal organization, the Aggieville Business Association (ABA).



Perceptions of Existing Parking Issue

Focus group participants were asked a yes or no question on their demographic sheets about whether they believe Aggieville has a parking problem today. Combined, 71% of the 114 focus group participants chose “yes,” which was nearly identical to the 70.2% of online survey participants who responded in the affirmative. Students chose “yes” on the survey more frequently than other groups.

Perceptions and Concerns Regarding a Parking Garage

Focus group participants had many questions about the garage, showing that the greater community is still largely unaware of the project. Once the facilitators explained what’s been done already in this process, many questions were asked regarding the garage’s façade: if it will have security and be well-lit; whether it will be free or have user fees; why the city surface parking lot behind Kite’s wasn’t selected because it is more central to the district; and whether Aggieville employees could park in the garage at a reduced rate.

Many people asked about the continued availability of parking in Manhattan City Park, and were concerned when told about plans to reduce parking and add green space.

Regarding user fees, most members of the Aggieville business community conceded that while, ideally, the garage would be free, at least during daytime business hours, this option isn’t realistic. Many people shared concerns that Manhattan’s small-town culture will resist paying to park, especially for short runs to pick up a quick-service lunch or a dozen donuts. Some feared that having to pay to park in Aggieville would result in the district losing some of its charm, while others think people are becoming accustomed to parking in other popular business and tourism districts across the globe, and that if a garage with user fees makes it easier to find parking, people will eventually adapt to the change.

When facilitators pointed out that a free garage could be abused by K-State students and staff who might choose to park in a free Aggieville garage rather than pay to park on campus, most participants agreed that the user fees were needed and should be set at a similar price to those of the K-State Student Union garage, at least during business hours.

Many seemed interested in parking validation concepts, which would waive parking fees for those who made a purchase over a certain amount in the district, or make the first hour or two of a stay free to not discourage short visits for lunch. In nearly every discussion, people stressed finding a solution that does not penalize those who choose to leave their car in the garage overnight, rather than driving while intoxicated. It was suggested repeatedly that parking fees stop accruing at 2 a.m. to encourage safe driving decisions.

Opinions Regarding Redevelopment of Aggieville

What types of new development do people want in Aggieville?

On the online community survey, nearly every audience group — except the Aggieville business community — agreed that the most desired type of new development in Aggieville is more restaurants (86.2%), with retail receiving the second most responses (77%). These two responses were also given the most support in focus groups as well. More bars was the third most common response, higher than restaurants with students.

What role should City government play in shaping development in the new-and-improved district?

Focus group participants were asked whether the city should put design restrictions or guidelines on new development. Most of the focus group participants supported the Aggieville Community Vision Plan’s efforts to keep Moro Street’s historic and varied aesthetic, with buildings at the current height, as well as design standards to keep the varied, locally owned feel of businesses in the district’s core.

While some expressed concern or displeasure at the idea of more five-story buildings in the district’s outer streets, others see increased density as an exciting advantage that would increase foot traffic and help the businesses in the district succeed. Questions were also asked in focus groups about whether the city should in any way try to shape the type of new development going into the district (such as taking a formal action to limit the number of new liquor licenses). While current bar owners especially would favor limitations on the number of

additional bars, students wanted to see more and different types of bars. The majority of the participants think that the free market should dictate new development.

What were some of the specific additions or enhancements people would like to see in a redeveloped Aggieville?

Overall, people enjoy the homegrown flavor of businesses in the district, and would hate to see a bunch of national brands move in. A small grocery store or farmer’s market consistently rose to the top of requests, as well as other types of entertainment besides bars, such as a movie theater.

Several participants in the focus groups volunteered that Aggieville needs more diversity in types of bars and restaurants it offers, specifically requesting more restaurants and nightlife catering to diverse ethnic groups and cultures. It was mentioned in several groups that a designated spot for rideshare services to pick up and drop off customers would be beneficial to both customers and drivers, and would reduce traffic and confusion.

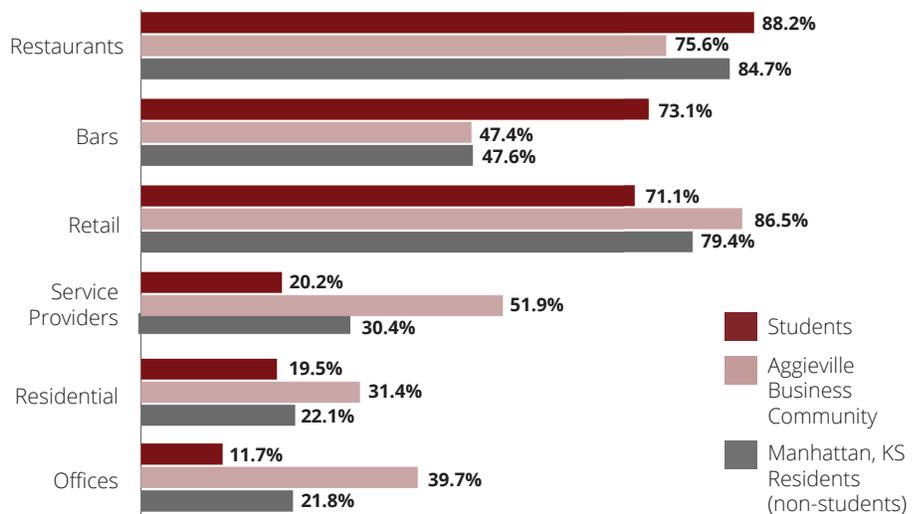
Enhancing Triangle Park

What would inspire more people to use Triangle Park?

Most focus group and survey participants envision Triangle Park as an outdoor plaza with some sort of permanent structure with a roof for sun/rain protection and more seats and benches for outdoor dining and socializing.

We heard repeatedly that the park should be considered a welcoming space for the district and contain an iconic landmark or gateway to serve as an identifying spot for Aggieville in visitor photos. This could include some type of art — a statue, mural, monument, fountain or sign. Many people were concerned about preserving the trees and natural green space of the area.

Most Popular Types of Future Development (Select Audiences)



What other ideas came forth for its enhancement?

Other than art or a gateway to parallel the Higginbotham Gate on the other side of Anderson/Bluemont Avenue, there was a lot of interest in using this space as a public event or gathering space. Ideas included installing either a permanent or temporary stage and sound system, but concerns about traffic noise and safety because of proximity to Anderson/Bluemont Avenue made others hesitant about making a major investment in this area. (Others pointed out there's no reason to recreate what's only a few blocks away in City Park.) Adding a barrier for sound and safety between the park and the streets seems to be a must if Triangle Park is going to be used more as a public gathering space.

Adding a big-screen TV (possibly on the wall of Pie Five) was quite controversial, with some loving the idea of being able to have community watch parties in the park, and others hating this idea, preferring the spot to remain a zone for peaceful interaction and relaxation.

Many people agreed Triangle Park was underutilized, and some felt it wasn't very important in the scheme of the greater redevelopment. There was a contingent of people who felt this land should be turned into additional parking space or transformed into a pick-up/drop-off point for rideshare and public transportation.

Facilitators tested the idea of closing down the street south of the park between the green space and Pie Five — known to many as "Little Moro" — as a way to add more

space to the park. Some thought this was a great idea, while others (especially Aggieville business community members) didn't want to lose this entrance to the district, or its parking.

Moro Street After Garage Is Built

Other than differing opinions as to whether an outdoor big-screen TV would be a positive or negative addition to the district, perhaps the most controversial question posed in the focus groups and the online survey is what to do with Moro Street and its parking after a parking garage is built. In both the focus groups and the survey, people were torn between liking a pedestrian-mall concept with more outside dining, and not wanting to lose parking close to businesses. Many Aggieville business community members were especially vocal about not wanting to remove all on-street parking in front of businesses, and there were repeated concerns about accessibility for the handicapped and elderly customers.

After much discussion on both sides, facilitators felt there was the most acceptance and uniform agreement with the idea of installing temporary bollards at the entrances and closing the street on a regular schedule for weekend evenings, game days, and

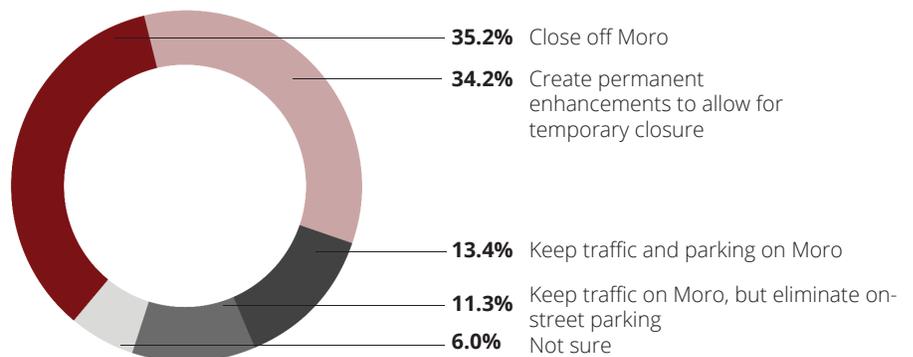
festivals. This flexible compromise would keep pedestrians safe during high-traffic periods and possibly allow for the legal carrying of open containers of alcohol at certain times. If such a plan is adopted, signage would need to be posted near the bollards and regularly adhered to so the community would learn when to expect the road closures and adapt to them.

Transforming Alleys into Public Spaces

At the June 28 visioning event, the public seemed intrigued by concepts that transformed alleyways into charming public spaces tucked away behind restaurants to accommodate outdoor dining and socializing. In the survey, we found that 77% of participants were in favor of transforming some of Aggieville's alleys into more public spaces.

However, through interviews and focus groups, the facilitators uncovered many barriers to doing this, including the current decentralization of trash storage and pick-up services, a desire to add more recycling capacity in the district, a lack of indoor grease traps that forces restaurants to manually transport grease in the alleys (resulting in spillage and odor), and the reality that alleys are used heavily for deliveries. Aggieville

What to do with Moro Street After Garage is Built? (Total Respondents)



business community members were less positive about transforming alleys than other groups were. Before much can be done to clean up and transform alleys into public spaces, the city needs to take the lead in helping the district establish policies to centralize trash/recycling/grease disposal, and new policies need to be put in place (and enforced) to push deliveries into the early morning hours, thus decreasing traffic demand during times the public is in the district. There has been some discussion as to whether ongoing fees for trash/recycling/grease disposal could be consolidated by the city and rolled into Business Improvement District (BID) dues.

Concerns About Construction Process

We visited with the Aggieville Business Association about concerns they have about their businesses surviving during the construction process. Many are already nervous about losing the parking stalls off Bluemont Avenue to the new hotel project without the garage already in place, and past experience has shown that major construction projects can result in significant loss of business since customers will just avoid the area to avoid the hassle.

Other than agreeing the city should avoid major detours or road closures during football season, there was no district-wide consensus on any one time of year that is preferable over another. While some businesses are seasonal (an ice cream restaurant, for example, would like for their construction impact to be felt during the winter), many of the restaurants said they are actually busiest in the summer months when students are gone and more townies come out.

The most important factor in this process is for access to the businesses to remain open through temporary means even when streets and sidewalks are under construction, and for businesses to know far in advance when their access will be impacted, with an estimate of how long they will be affected. Cleaning up the alleys first was a suggestion of many business owners, some of whom could use rear entrances as an alternative entrance when the main streets/sidewalks are closed.

How Can We Define Success?

Ultimately, this will be a very quantifiable project, as the city will be able to measure its return on investment (ROI) directly with increases in sales and property tax revenues. However, qualitatively, many focus group participants said

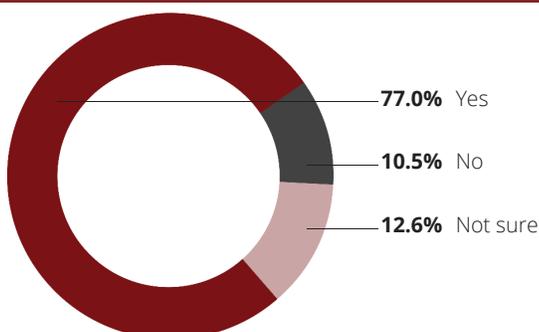
that seeing an improvement in overall attitude and community pride of locals in the community would be the way they could determine success. Behaviorally, many participants said they hope to see more people in Aggieville during the daytime hours, and more Manhattan area residents and families enjoying the district year-round.

Remaining Questions and Concerns

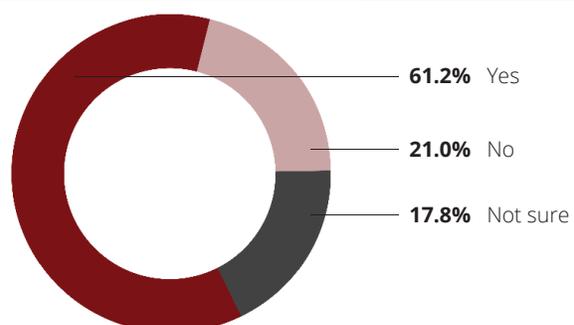
Perhaps the greatest impact of this community engagement process was the opportunity to inform various stakeholder groups about the project and dispel rumors that have been circulating about changes to come. Repeatedly in focus groups and interviews, business owners requested that the city have an aggressive communications plan to keep everyone informed about the process and construction phases, well ahead of actions that could directly affect their customers and therefore their businesses.

Tax Increment Financing (TIF) is difficult for many to understand, so during this process the city must repeatedly stress that funding for these changes will not be a burden property owners will bear, but will instead result from capturing future increases in property values as the district becomes more desirable.

Do You Support Transforming Alleys into Usable Space? (Total Respondents)



Do You Support Transforming Alleys into Usable Space? (Aggieville Business Community)





Design Charrette

As the first step in the public engagement process, a design charrette was held by the design team. A charrette serves to advance the design process—narrowing in on the preferred concepts as determined by stakeholders and members of the public. This three-day period provided time for the design team to meet with stakeholders multiple times to gather insight on their overall vision for Aggieville, as well as specific details critical to the design. The design team also shared the in-progress charrette process with the public and asked for their feedback in an open house format, displaying all work performed and previously presented to the stakeholders.

In preparation for the charrette, the design team reviewed existing planning efforts, including the State of the Ville and Aggieville

Community Vision Plan to better understand the history of Aggieville and its current state. The design team also reviewed the parking garage options proposed along Laramie Street between North 14th Street and North Manhattan Avenue. Currently, there are 595 public on- and off-street parking spaces in Aggieville. The parking garage concepts are included in Appendix A Parking Garage Concepts.

Over the course of the three-day charrette, 37 people participated in the stakeholder sessions. Between each session with the stakeholders, the design team was able to digest, summarize, and alter the concepts according to the stakeholders' and public comments. The charrette was held on September 11 through 13, 2018, at Rally House (623 North Manhattan Avenue) in Aggieville. The schedule of events over the three-day period in the schedule on the following page.

With the past ideas and known challenges in mind, the design team was able to engage the stakeholders and achieve the following goals:

- Clarify key issues
- Identify common concerns between stakeholders
- Explore a myriad of street closure concepts and associated elements
- Narrow options to three final concepts for North 12th Street, Moro Street, and Triangle Park
- Develop typical sections associated with each of the final concepts

Design Charrette Schedule

Day One	Day Two	Day Three
7:00 - 8:00 Design Team Set-Up	7:30 - 8:00 Design Team Set-Up	7:30 - 8:00 Design Team Set-Up
8:00 - 9:00 Kick-Off	8:00 - 9:30 Review Session of Overall Themes, Elements, and Amenities	8:00 - 9:00 Summary of Community Open House/Additional Thoughts
9:00 - 12:00 Open Studio	9:30 - 12:00 Open Studio (concept refinement of streets, streetscapes, amenities, signage, and branding)	9:00 - 1:00 Closed Studio (concept refinement of streetscape, amenities, signage, and branding)
12:00 - 1:00 Closed Studio (diagramming, themes, elements, and amenities)	12:00 - 3:30 Closed Studio (concept refinement of streets, streetscapes, amenities, signage, and branding)	1:00 - 4:30 Closed Studio (final concept refinement)
1:00 - 5:00 Open Studio	3:30 - 5:00 Closed Studio/Community Open House Preparation	4:30 - 6:00 Final Review Session
5:00 - 7:00 Closed Studio (diagramming, themes, elements, and amenities)	5:00 - 7:00 Community Open House	

Day One

On the first day, the design team introduced themselves and covered what their role was in the design charrette process. The stakeholders were presented with their role to provide honest opinions during presentations and group exercises and to be champions of the resulting ideas achieved at the end of the charrette and resultant final report. The process and end goals for the three-day work session was also reviewed and established with the stakeholders.

Then, a summary presentation on the public survey findings from a previous visual preference survey open house were presented. Following this presentation, the design team led an exercise focused on three main questions: What is working, what is not working, and how should Aggieville change?

The design team worked with the stakeholders to answer these questions, and recorded responses on large post-it sheets for everyone to see. This way, each person could visibly see the thought process, a critical element of a design charrette.

Positive themes that emerged included the character and rich history of Aggieville the draw people in. The unique restaurants, music venues, and businesses that line the streets with appealing outdoor spaces make Aggieville a natural community meeting ground. Stakeholders also commented how real and organic Aggieville is, and the need to preserve that feeling. Stakeholders felt the unsightly trash collection containers, incomplete sidewalks, crosswalks, and bike lanes, and general traffic congestion make it difficult for pedestrians to feel safe and enjoy Aggieville.

The design team used the remainder of the day in a studio work session to generate preliminary sketches of concepts. A few stakeholders stopped by during this time to discuss related items that they had not thought of in the morning session.

Day Two

This served as a starting point for day two, which began with a presentation of initial concept sketches generated by the design team in line with the emergent themes discussed the previous day's stakeholder sessions. Stakeholders provided feedback on these concepts either by open discussion, placing comments onto the drawings, or both. This session was productive in that it eliminated some ideas, clarified concepts that the group felt strongly about, and gave the design team direction for the day.



The design team then went into the second closed studio session refining ideas, exploring new concepts, and preparing for the community open house that evening. A few stakeholders stopped by once again during this studio session to provide additional input.

Day Three

On the third and final day, the morning session consisted of a presentation on public feedback provided at the community open house and stakeholder participants were instructed to choose a final design concept for each area of emphasis, including North 12th Street, Moro Street, and Triangle Park, and to select a streetscaping and development approach for Aggieville. Using this focused input from stakeholders, the design team began their final closed studio session to create refined concepts to present to the stakeholders.



That afternoon, a large-scale plan drawing of the entire district was presented, including additional plan drawings and sections depicting three concepts for Moro Street, North 12th Street, and Triangle Park (see Concept Exploration for concept descriptions). The stakeholders voted for their preferred concepts using a dot exercise. The large-scale drawing also displayed future development opportunities within the district that coincided with the Aggieville Community Vision Plan, as well as locations for future parking garages.



When stakeholders get a personal hand in the selection, they are more willing to champion the final narrowed design and be an integral part of its implementation. This design charrette process allowed the stakeholders to do just that.

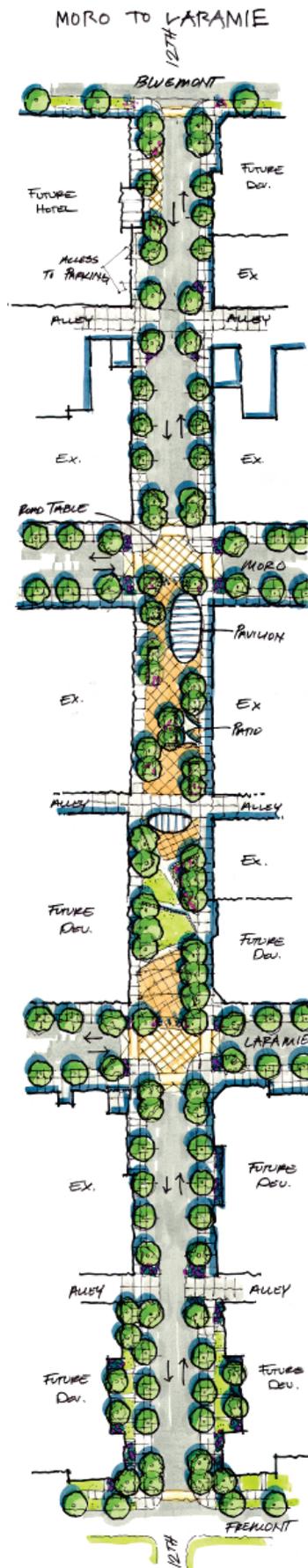


Design Options: North 12th Street

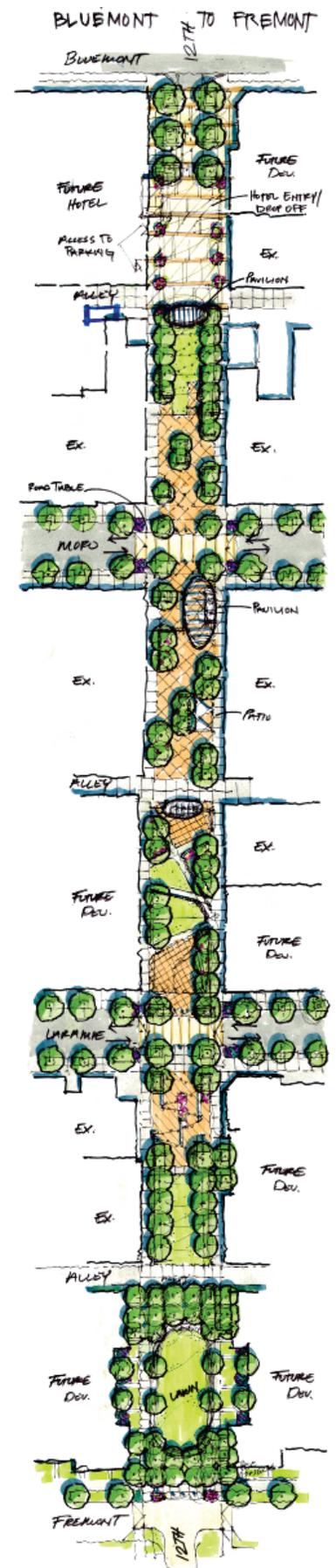
After much contemplation, the stakeholders agreed on the closure of three blocks of North 12th Street from Fremont Street to Anderson/Bluemont Avenue. This minimizes the number of businesses that are impacted as this stretch of road is likely to be part of phase one of the hotel construction nearby. This option minimizes “front-door” impacts, which was an attractive option to both existing and prospective business owners along these blocks of North 12th Street. The options discussed are described below and shown in the graphics to the left:

1. This concept proposes a permanent closure of one block of North 12th Street from Laramie Street to Moro Street.
2. This concept would permanently close three blocks of North 12th Street from Fremont Street to Anderson/Bluemont Avenue.

Option 1 One Block Closure



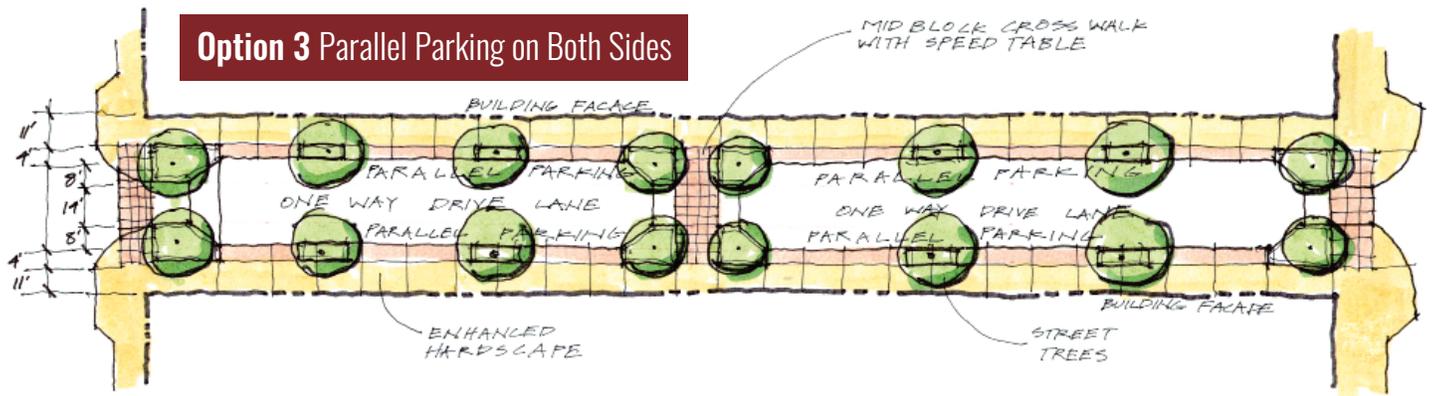
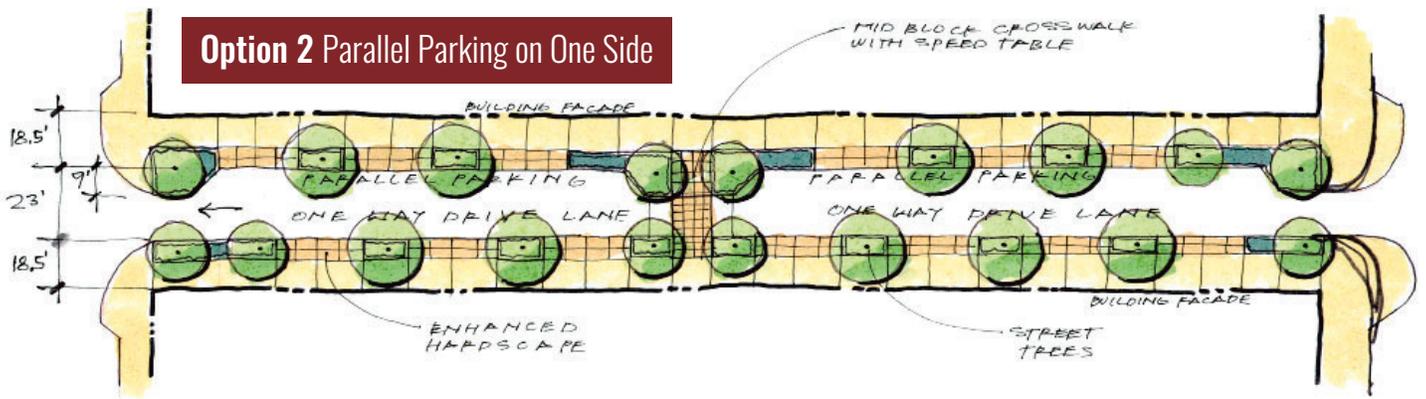
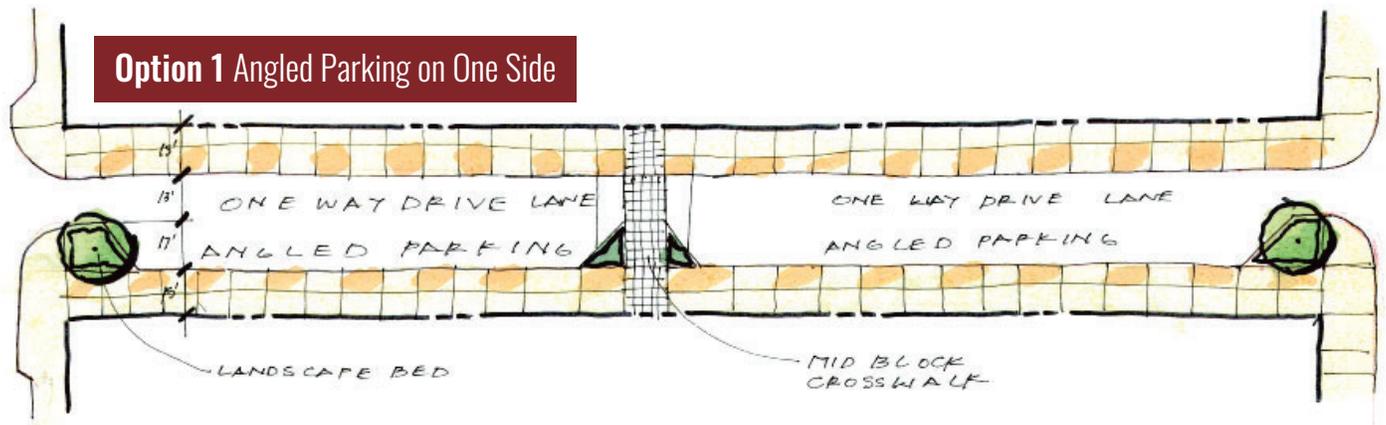
Option 2 Three Block Closure



Design Options: Moro Street

Decisions about Moro Street proved the most difficult for the stakeholders. Parking pressure in Aggieville is limited such that until the new parking garage is constructed it was difficult for the stakeholders and public to have confidence that parking reductions on Moro Street would be advisable or successful. Given this insecurity, most in attendance voted to limit parking to one side of the one-way traffic pattern and increase the amount of open space for pedestrians with added streetscape amenities. The new garage must be in operation prior to any of these possible changes to Moro Street. The options discussed and shown in the graphics below include:

1. One-way with angled parking on one side
2. One-way with parallel parking on one side
3. One-way with parallel parking on both sides



Charrette Conclusions

As described, stakeholders and members of the public shared several potential solutions that could counteract the issues facing Aggieville, as seen in the green dot exercise results. Options presented during the charrette included streetscape enhancements, inviting green spacing, adding lighting to key areas, and encouraged mixed uses.

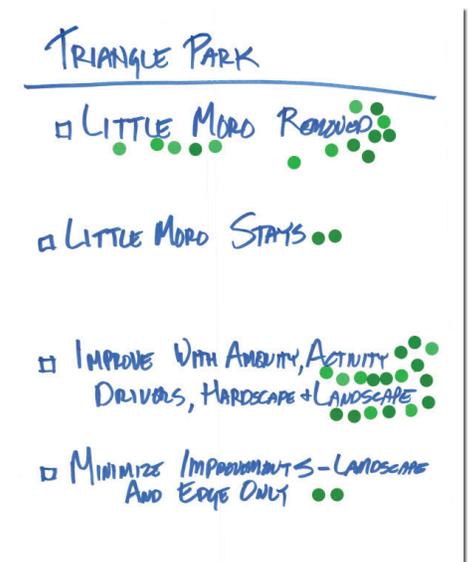
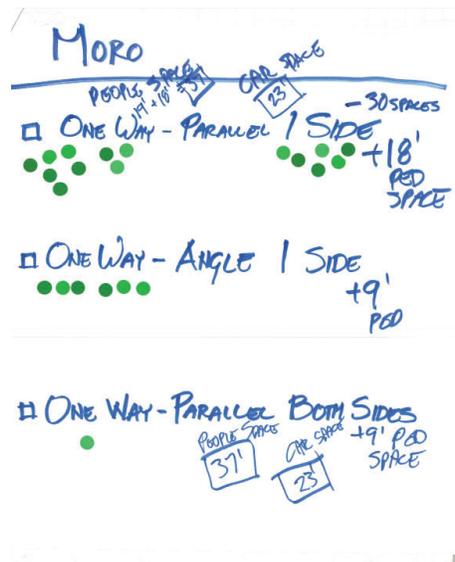
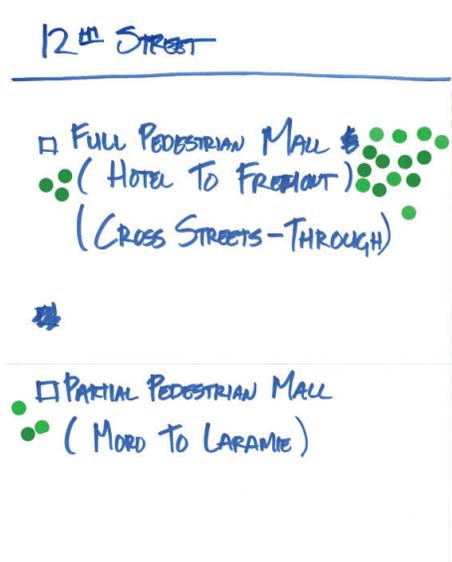
The charrette came to three major conclusions that were carried forward into final design options, including:

1. **North 12th Street:** Permanent closure of three blocks of North 12th Street from Fremont Street to Anderson/Bluemont Avenue, creating a full pedestrian mall.
2. **Moro Street:** One-way traffic with parallel parking on one side.
3. **Triangle Park:** Remove Little Moro Street and improve the park with amenities, activity drivers, hardscape and landscape.

The following refined master design plans are labeled as Option 1, 2, and 3 and each include a table listing the elements/features of each plan. Each plan includes a list of "givens," including the following:

- Parking garage at Laramie Street and North Manhattan Avenue
- Laramie Street, from North 11th Street to North Manhattan Avenue, is two lanes with parallel parking
- Laramie Street, from North Manhattan Avenue to North 14th Street, is three lanes with a center turn lane

The final selected concept was not drawn during the charrette; however, it is represented by combining features of the options shown on the following pages. The selected concept would include all aspects of Option 1, except Little Moro Street would be shut down to vehicular traffic and be absorbed into the park's footprint (as shown in Options 2 and 3).



Option 1 Refined Master Design Plan (Shown During Charrette)



Option 1 Plan Details

All Plans?

North 12th Street is permanently closed for three blocks from Fremont Street to Bluemont Avenue

Moro Street is one-way (westbound) traffic only with parallel parking on one side

Triangle Park has a centralized green space and shelter with Little Moro Street remaining accessible by car with reduced angle and parallel parking options

Parking garage at Laramie Street and North Manhattan Avenue

X

Laramie Street, from North 11th Street to North Manhattan Avenue, is two lanes with parallel parking

X

Laramie Street, from North Manhattan Avenue to North 14th Street, is three lanes with a center turn lane

X

Option 2 Refined Master Design Plan



Option 2 Plan Details

All Plans?

North 12th Street is permanently closed for one block from Laramie Street to Moro Street

Moro Street is one-way (direction to be determined) traffic only with parallel parking on both sides

Triangle Park has additional hardscapes and public parking, with Little Moro Street not accessible by car, but incorporated into the park's footprint

Parking garage at Laramie Street and North Manhattan Avenue

X

Laramie Street, from North 11th Street to North Manhattan Avenue, is two lanes with parallel parking

X

Laramie Street, from North Manhattan Avenue to North 14th Street, is three lanes with a center turn lane

X

Option 3 Refined Master Design Plan



Option 3 Plan Details

All Plans?

North 12th Street is permanently closed for one block from Laramie Street to Moro Street

Moro Street is one-way (direction to be determined) traffic only with angled parking on one side

Triangle Park has additional hardscapes and public parking, with Little Moro Street not accessible by car, but incorporated into the park's footprint

Parking garage at Laramie Street and North Manhattan Avenue

X

Laramie Street, from North 11th Street to North Manhattan Avenue, is two lanes with parallel parking

X

Laramie Street, from North Manhattan Avenue to North 14th Street, is three lanes with a center turn lane

X



Concept Refinement

During plan refinement, previous work was synthesized into consensus built concepts that put together all the pieces. Based on all public engagement and post-charrette analysis, actionable recommendations were formed to create refined concepts that address stakeholders' desires. The public engagement process made it clear that streetscapes along key areas of Aggieville are integral in making it a destination for local residents and those traveling in for the weekend.

During the charrette and subsequent refinement and discussion, several street/streetscape options were developed. It is not the intention of this report to select the final conceptual designs for these streets/streetscapes. It is intended to indicate a myriad of design options available while balancing the considerations indicated by the community as critical during the project process. Those issues are creating valuable and useable pedestrian amenity space (walks, seating, landscape, lighting, amenities); preserving as much

existing parking as possible; provide additional parking options; improve traffic flow; provide clear and reasonable service access.

The concepts try to balance these issues. In all concepts, it is assumed that a parking garage is constructed at the northwest corner of North Manhattan Avenue and Laramie Street to accommodate the need for additional parking in Aggieville.

The concepts are grouped based on their solutions for a specific street or area. It is important to note that ultimately a successful district-wide street/streetscape concept will utilize the repetition of materials, paving, elements, design elements, landscape, site furnishings, signage and lighting to create a connected whole, even though the intensity and use of those elements may vary throughout the district itself. Focusing on the core areas will focus resource use in those areas where it will have the greatest impact. Some streets will remain functionally as is but rehabilitated and upgraded with new district streetscapes.

Other streets won't be modified but will receive upgraded streetscapes.

Street and Streetscape Options

Every street in an area serves a different purpose. Some are meant to mark the boundaries of an area, whereas others define the space. To accommodate these varying purposes, there are several different street/streetscape options that are presented, including:

- **Moro Street**
 - 1.1A: one lane, one way traffic (westbound); parallel parking one side; amenity zones both sides; sidewalk both sides
 - 1.1B: one lane, one way traffic (westbound); parallel parking one side; oversized amenity zone one side; sidewalk both sides
 - 1.2: one lane, one way traffic; angled parking one side; amenity zone both sides; sidewalk both sides
 - 1.3: one lane, one way traffic; parallel parking both sides; amenity zone both sides; sidewalk both sides

- **North 12th Street**
 - 2.1: one-block pedestrian mall; casual seating; decorative concrete; amenity zone one side; sidewalk both sides
 - 2.2: two lanes, two way traffic; parallel parking both sides; amenity zone both sides; sidewalk both sides; alley access
- **Laramie Street**
 - 3.1: two lanes, two way traffic; parallel parking both sides; amenity zone both sides; sidewalk both sides
 - 3.2: three lanes, center turn lane; no parking; amenity zone both sides; sidewalk both sides
- **Perimeter Streets**
 - 4.1: two lanes, two way traffic; no parking; landscape strip both sides; sidewalk both sides
- **Alleys**
 - 5.1: one way traffic; enhancements for pedestrian and service vehicle access; consolidated trash enclosures

Existing Streets with No Change except Upgraded Streetscape

These options present streets that are existing in the Aggieville district that will not experience any type of change (i.e., number of traffic lanes, direction of traffic, etc.), but rather are just recommended to have updated streetscapes. Streetscape recommendations include adding trees and shrubs, pedestrian amenities, lighting, etc. Note that these recommendations are not shown graphically in the pages to follow.

- **11th Street:** west side
- **Fremont Street:** north side
- **14th Street:** east side
- **Bluemont Avenue:** south side

The graphics on the next several pages illustrate the street and streetscape options (i.e. 1.1A, 1.1B, etc.). These are conceptual drawings that will show the street section and plan view for each of the street and streetscape options. As a reminder, the existing streets to be rehabilitated and remain, as well as the existing streets with no change except upgraded streetscape, do not have accompanying illustrations.

Monumentation Typology

The entryway points to an area are just as important as the area itself. Defining the borders of a place, as well as key areas within an area, help with placemaking and making visitors feel like they are within a special area.

The types of monumentation changes as you move around an area. For Aggieville, there are four monument types recommended:

- Gateway / Threshold
- Major Monument
- Secondary Monument
- Tertiary Monument

Existing Streets to be Rehabilitated and Remain

The following describe existing streets that are to remain, but be rehabilitated. Note that these recommendations are not shown graphically in the pages to follow.

- **North Manhattan Avenue:** as existing, one lane, one way, angle parking east side. Move cycle track to west side, add temporary closure bollards at Anderson/Bluemont Avenue.
- **Little Moro Street:** as existing, one lane, one way, angle parking south side, parallel parking north side. Add temporary closure bollards at Anderson/Bluemont Avenue.

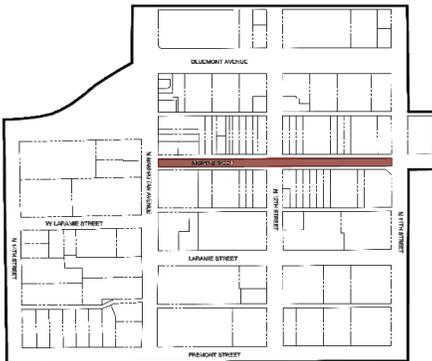
-  Gateway / Threshold
-  Major Monument
-  Secondary Monument
-  Tertiary Monument

Monumentation



Street and Streetscape Options - Moro Street

Type 1.1A Reference Map



Type 1.1A

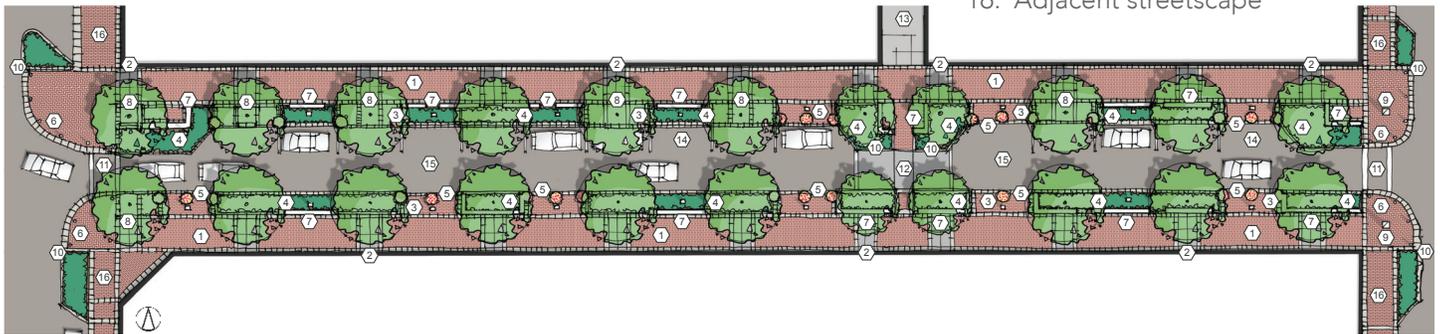
This street/streetscape option features a wide array of pedestrian amenities, like planters, monuments, attractive lighting, and more. All Type 1 street options are along Moro Street from North Manhattan Avenue to North 11th Street.

- One lane with one way traffic (westbound)
- Parallel, on-street parking on one side of the street
- Amenity zones and planting beds on both sides of the street
- Sidewalks on both sides of the street

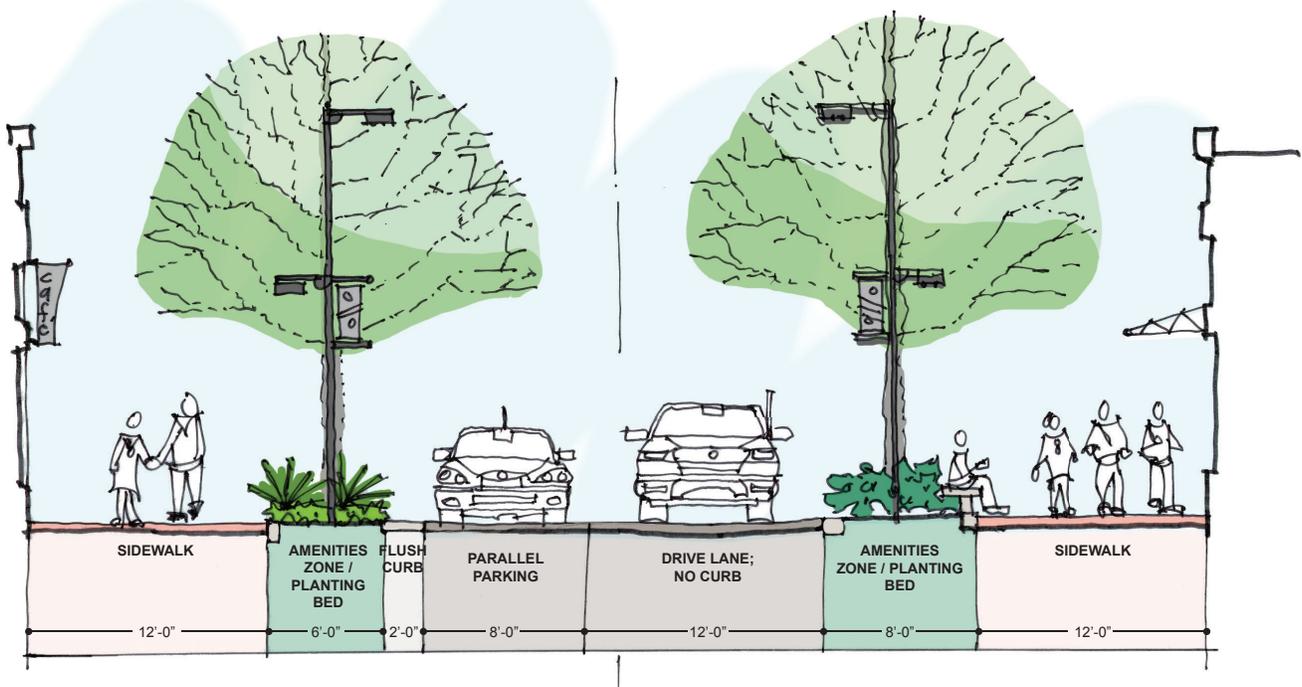
Legend

1. Sidewalk w/ specialty pavers & concrete band
2. Decorative concrete band
3. Amenity zone – brick pavers (benches, trash receptacles, bike racks, lighting)
4. Landscape bed w/ raised curb
5. Landscape pot
6. Bollards
7. Seatwall
8. Street tree w/ tree grate
9. District monument/ marker
10. Curb extension
11. Pedestrian crosswalk
12. Mid block pedestrian crossing
13. Pedestrian alley
14. Parallel parking
15. Vehicular drive lane – one way; no curbs
16. Adjacent streetscape

Type 1.1A Plan View

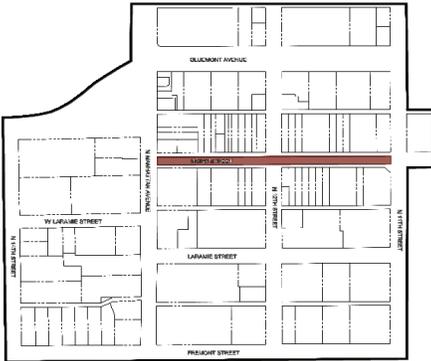


Type 1.1A Street Section



Street and Streetscape Options - Moro Street

Type 1.2 Reference Map



Type 1.2

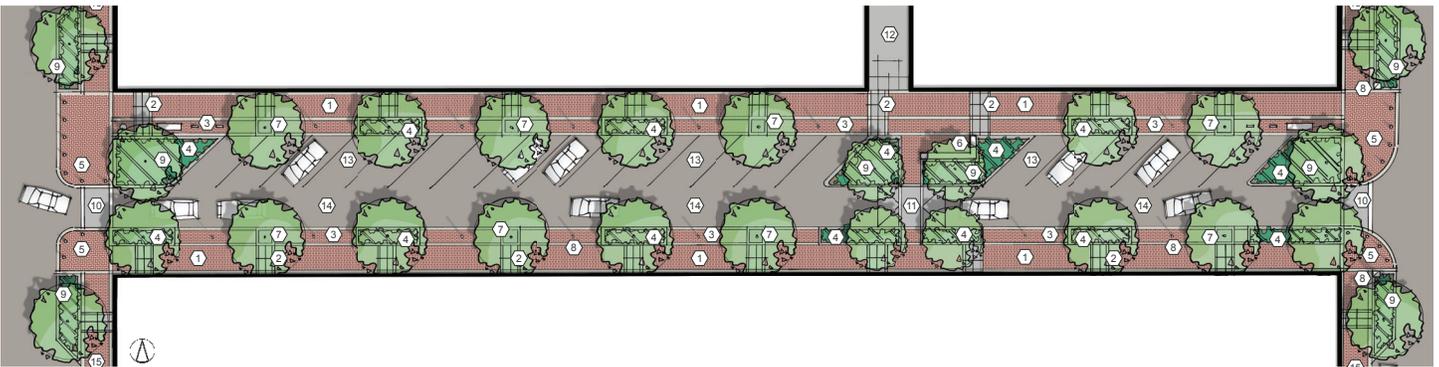
Type 1.2 features less amenities than Types 1.1A and 1.1B, and is differentiated from those options by using angled parking. It is still one lane, one way traffic, like Types 1.1A and 1.1B. There are amenity zones and sidewalks.

- One lane with one way traffic
- Angled, on-street parking on one side of the street
- Amenity zones and planting beds on both sides of the street
- Sidewalks on both sides of the street

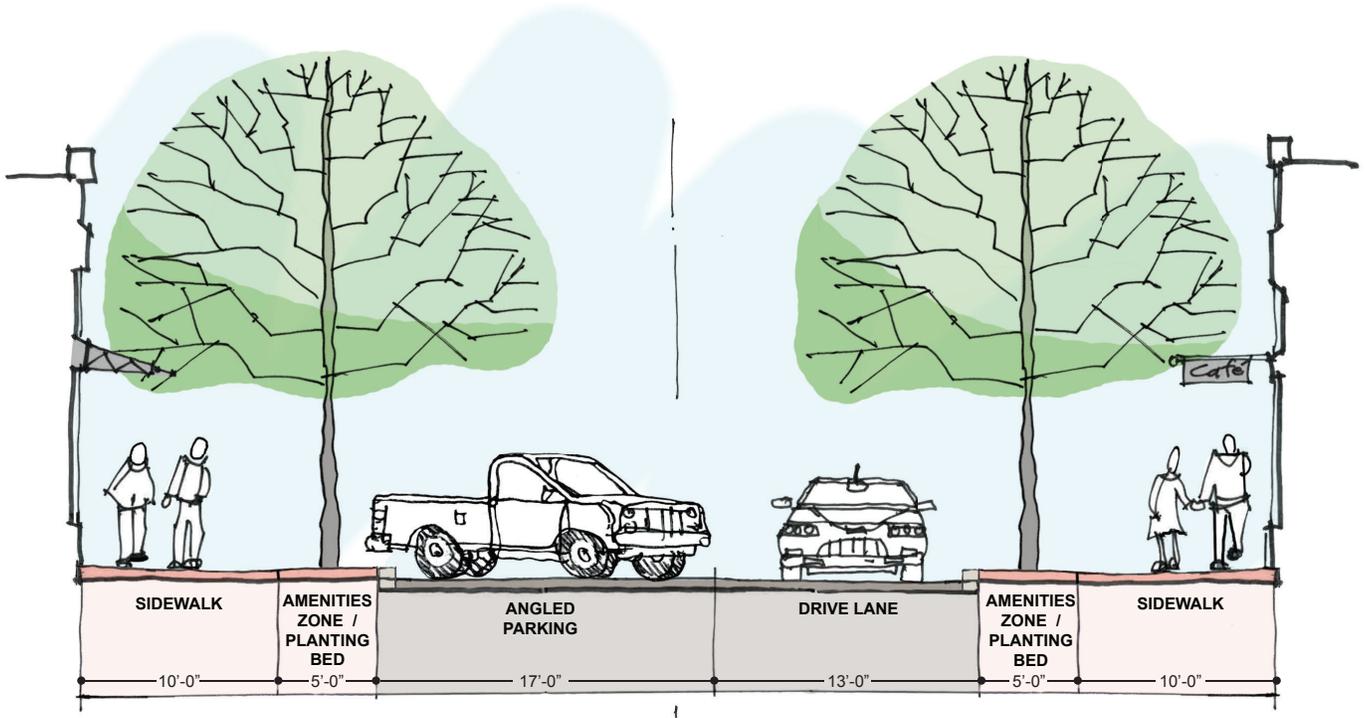
Legend

1. Sidewalk w/ specialty pavers & concrete band
2. Decorative concrete band
3. Amenity zone – brick pavers (benches, trash receptacles, bike racks, lighting)
4. Landscape bed
5. Bollards
6. Seatwall
7. Street tree w/ tree grate
8. District monument/ marker
9. Curb extension
10. Pedestrian crosswalk
11. Mid block pedestrian crossing
12. Pedestrian alley
13. Angled parking
14. Vehicular drive lane – one way
15. Adjacent streetscape

Type 1.2 Plan View

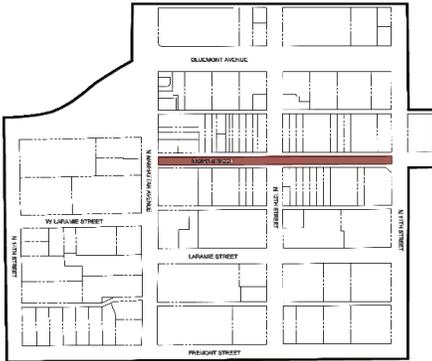


Type 1.2 Street Section



Street and Streetscape Options - Moro Street

Type 1.3 Reference Map



Type 1.3

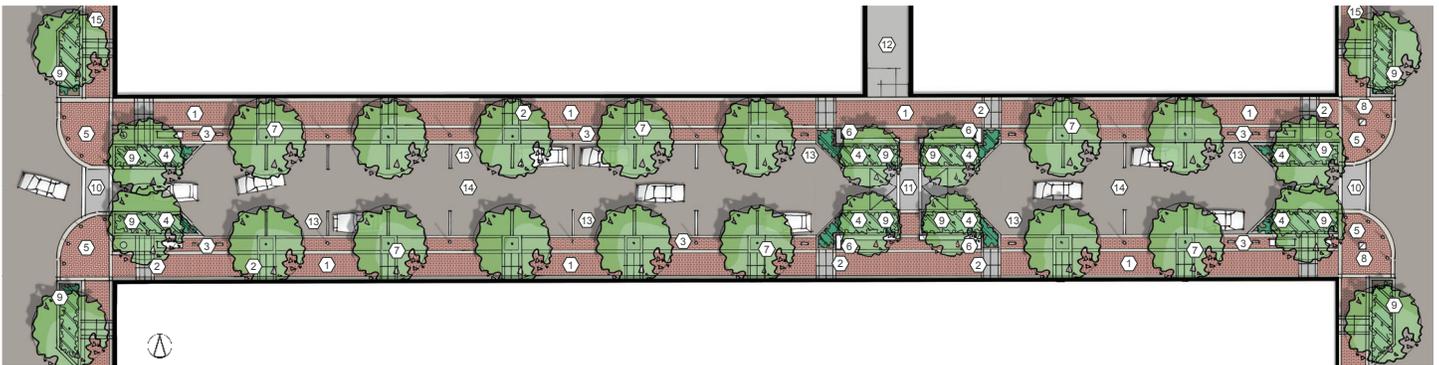
This street/streetscape option still has the one lane of one way traffic, but features parallel parking lanes on both sides of the drive lane.

- One lane with one way traffic
- Parallel, on-street parking on both sides of the street
- Amenity zones and planting beds on both sides of the street
- Sidewalks on both sides of the street

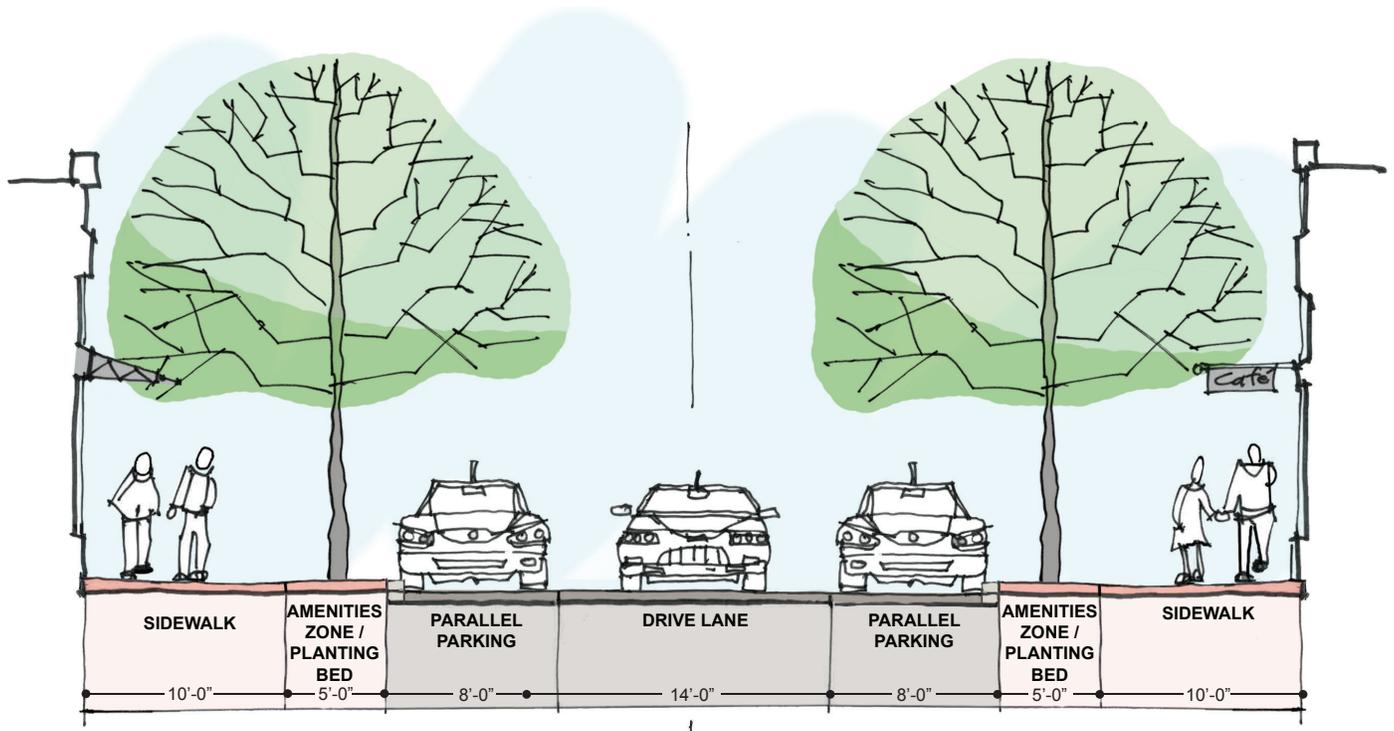
Legend

1. Sidewalk w/ specialty pavers & concrete band
2. Decorative concrete band
3. Amenity zone – brick pavers (benches, trash receptacles, bike racks, lighting)
4. Landscape bed
5. Bollards
6. Seatwall
7. Street tree w/ tree grate
8. District monument/ marker
9. Curb extension
10. Pedestrian crosswalk
11. Mid block pedestrian crossing
12. Pedestrian alley
13. Parallel parking
14. Vehicular drive lane – one way
15. Adjacent streetscape

Type 1.3 Plan View

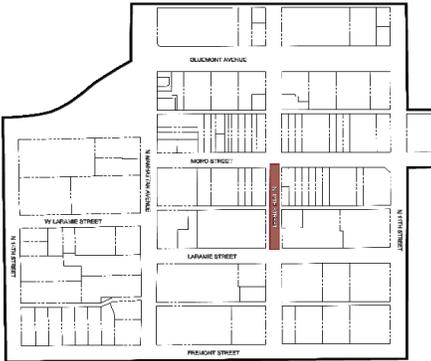


Type 1.3 Street Section



Street and Streetscape Options - North 12th Street (Pedestrian Mall)

Type 2.1 Reference Map



Type 2.1

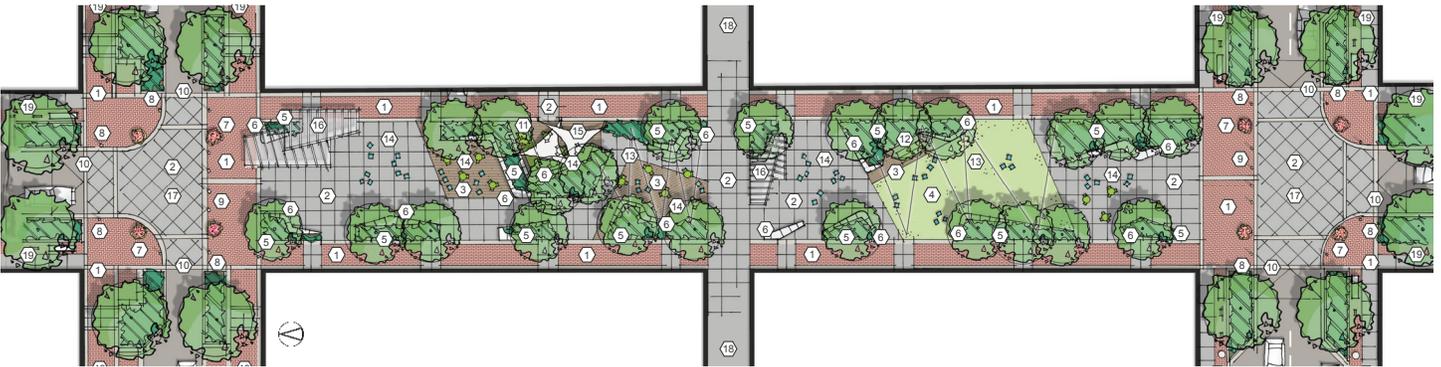
Type 2.1 is the one-block pedestrian mall from Laramie Street to Moro Street. This street type option would completely close this part of Aggieville to vehicular traffic making it a pedestrian only area.

- No vehicular access, pedestrian only
- Sidewalks on both sides of the mall
- One planting bed with an organic seat wall
- Casual seating with tables and chairs
- Decorative concrete that appeals to pedestrians

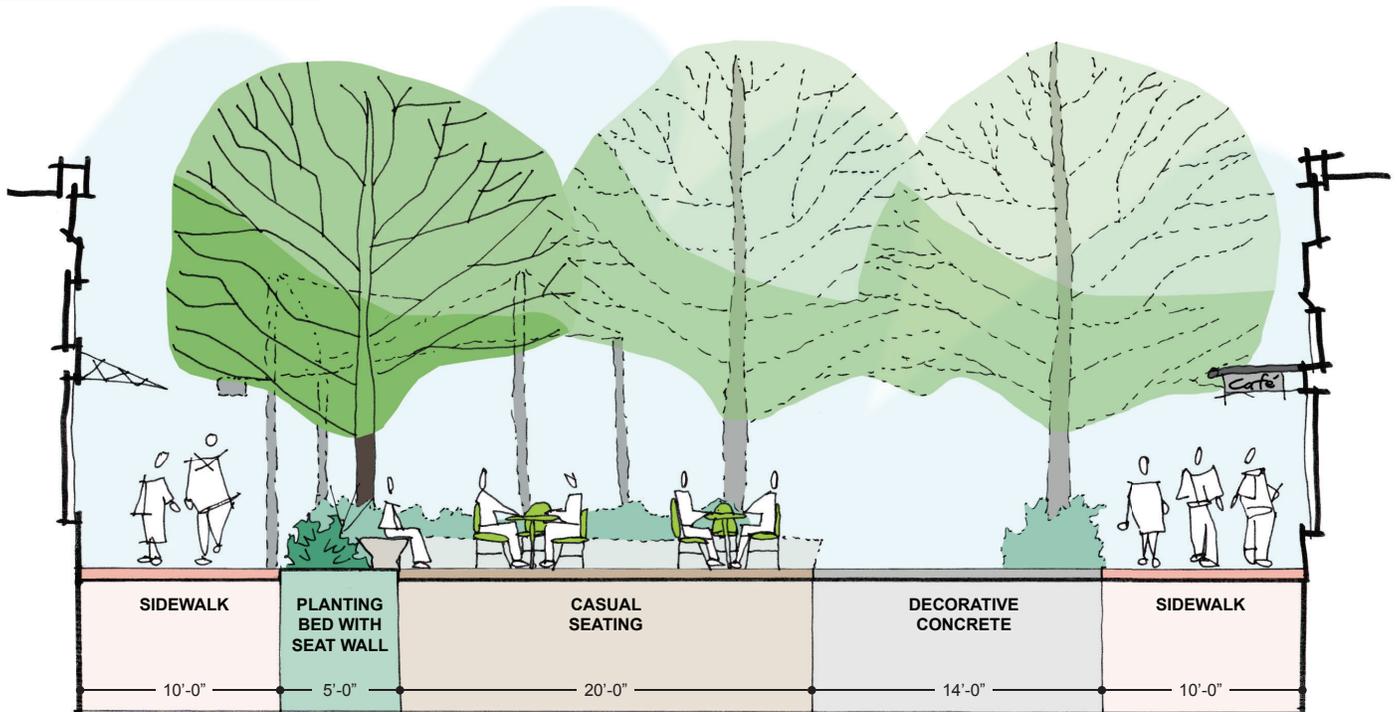
Legend

1. Sidewalk w/ specialty pavers & concrete band
2. Decorative concrete band
3. Specialty paving
4. Lawn
5. Landscape bed
6. Seatwall
7. Landscape pot
8. Bollards
9. Removable bollards
10. Pedestrian crosswalk
11. Farm table
12. Ping pong table
13. Overhead string lights
14. Casual seating
15. Fabric shade structure
16. Architectural shade structure
17. Raised intersection
18. Service alley with enhancements
19. Adjacent streetscape

Type 2.1 Plan View



Type 2.1 Street Section



Street and Streetscape Options - North 12th Street

Type 2.2 Reference Map



Type 2.2

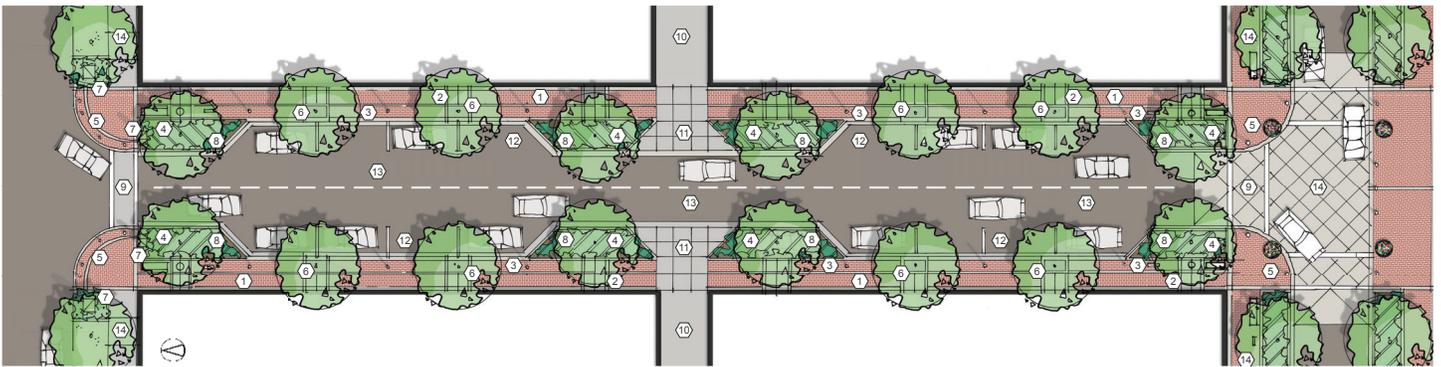
This street type would connect to the pedestrian mall (Type 2.1) and extend to Belmont Avenue and/or Laramie Street.

- Two lanes with two way traffic
- Parallel parking on both sides of the street
- Concrete sidewalks on both sides of the street
- Amenity zones on both sides of the street

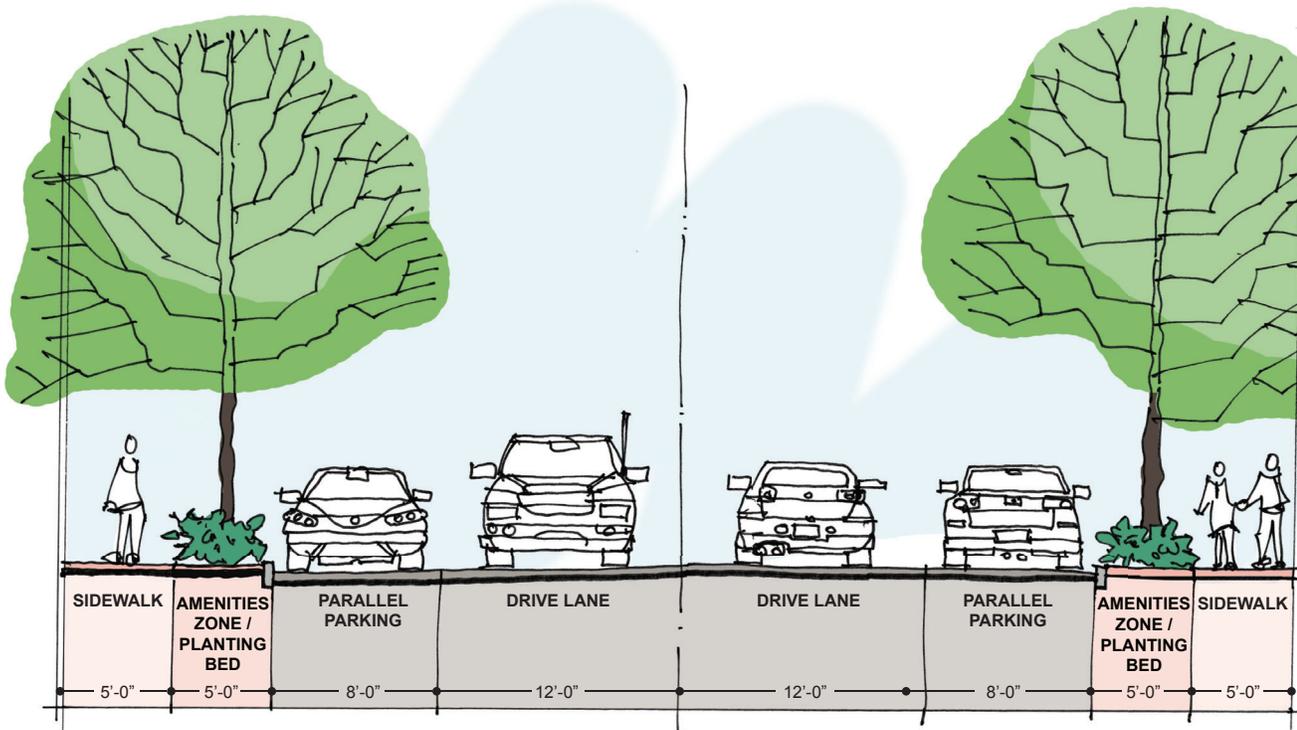
Legend

1. Sidewalk w/ specialty pavers & concrete band
2. Decorative concrete band
3. Amenity zone – brick pavers (benches, trash receptacles, bike racks, lighting)
4. Landscape bed
5. Bollards
6. Street tree w/ tree grate
7. District monument/ marker
8. Curb extension
9. Pedestrian crosswalk
10. Service alley with enhancements
11. Alley drive apron
12. Parallel parking
13. Vehicular drive lane – two way
14. Adjacent streetscape

Type 2.2 Plan View

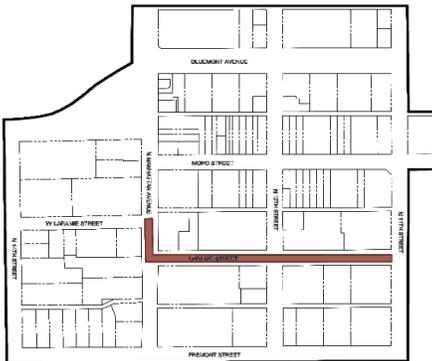


Type 2.2 Street Section



Street and Streetscape Options - Laramie Street

Type 3.1 Reference Map



Type 3.1

This typology could be applied from North 11th Street to North Manhattan Avenue along Laramie Street. Type 3.2 could be an option for this section. Two way traffic with double sided parking offer efficiency and flexibility for vehicles, with safety for pedestrians with sidewalks on both sides of the streets.

- Two lanes with two way traffic
- Parallel, on-street parking on both sides of the street
- Amenity zone on both sides of the street
- Sidewalk on both sides of the street

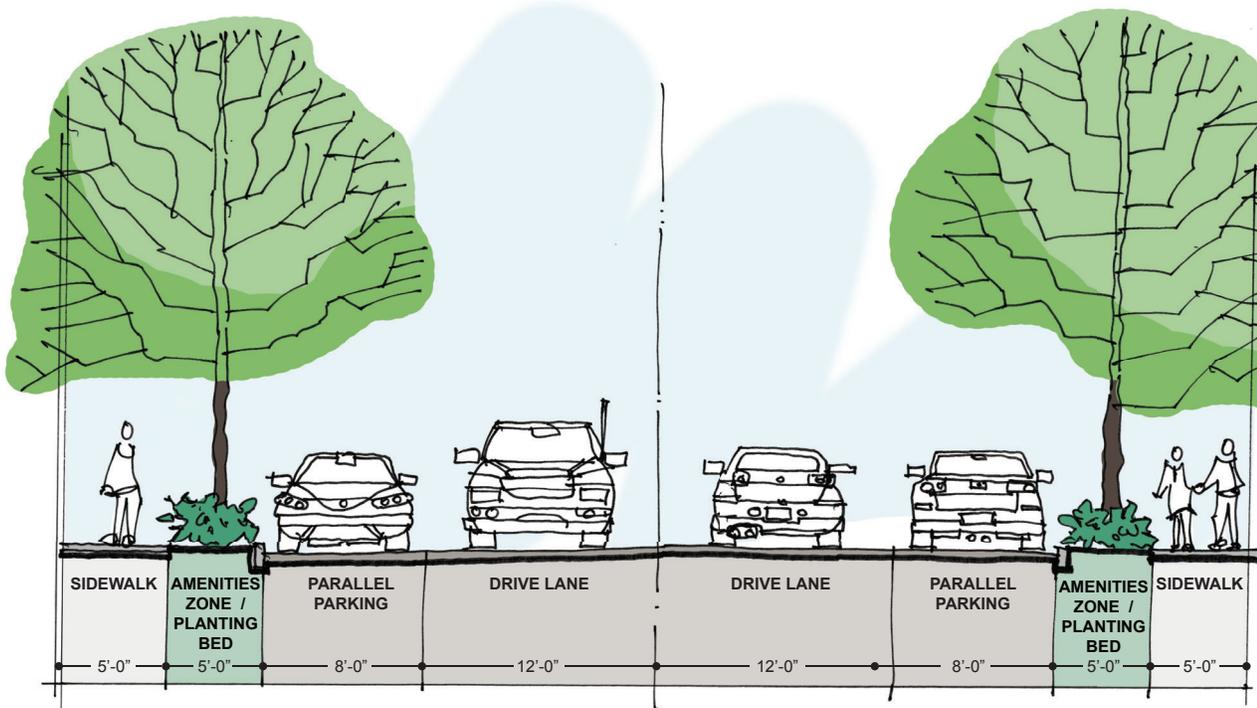
Legend

1. Sidewalk - concrete
2. Amenity zone – brick pavers (benches, trash receptacles, bike racks, lighting)
3. Landscape bed
4. Bollards
5. Street tree
6. District monument/ marker
7. Curb extension
8. Pedestrian crosswalk
9. Parallel parking
10. Vehicular drive lane – two way
11. Adjacent streetscape

Type 3.1 Plan View



Type 3.1 Street Section



Street and Streetscape Options - Laramie Street

Type 3.2 Reference Map



Type 3.2

This type is an option for the streetscape along West Laramie Street. Instead of the two lanes of traffic shown on Type 3.1, there would be three lanes with a center turn lane to help with traffic flow. Additionally, Type 3.2 does not feature parking of any kind.

- Three lanes with a center turn lane
- No parking
- Amenity zone on both sides of the street
- Sidewalk on both sides of the street

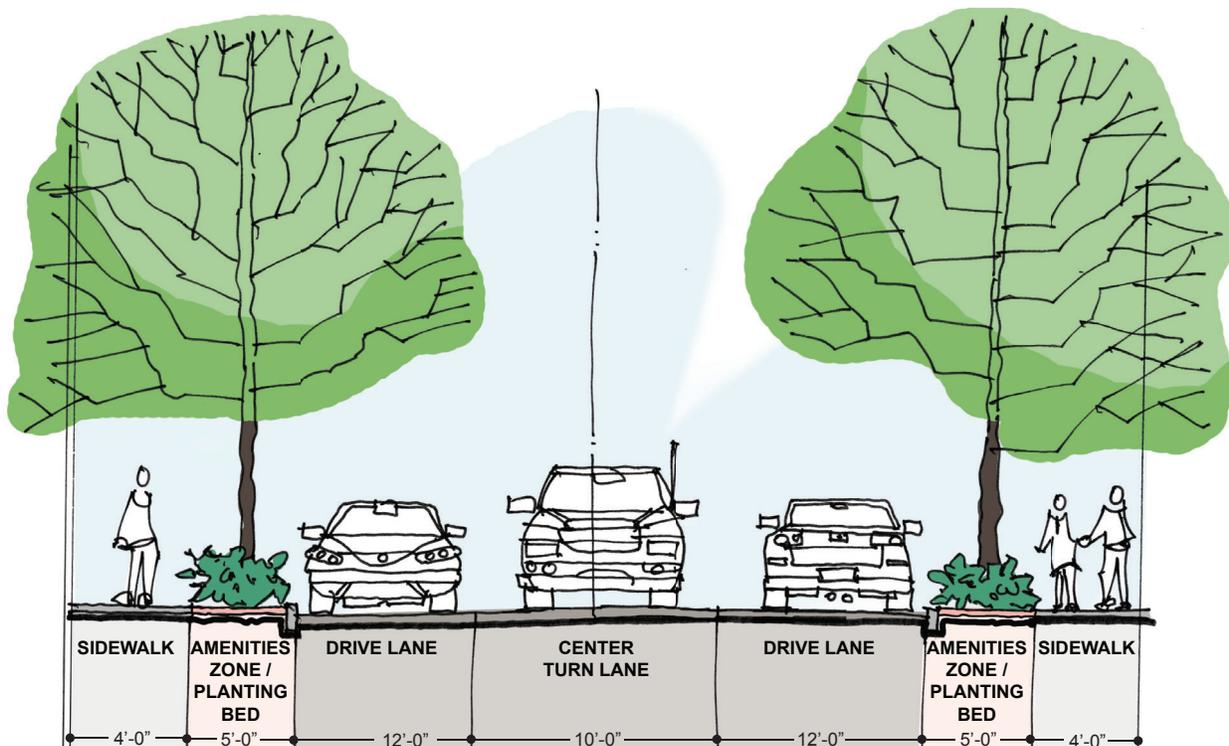
Legend

1. Sidewalk - concrete
2. Amenity zone – brick pavers (benches, trash receptacles, bike racks, lighting)
3. Landscape bed
4. Bollards
5. Street tree
6. District monument/ marker
7. Pedestrian crosswalk
8. Vehicular drive lane – two way
9. Center turn lane
10. Adjacent streetscape

Type 3.2 Plan View



Type 3.2 Street Section



Street and Streetscape Options - Perimeter Streets

Type 4.1 Reference Map



Type 4.1

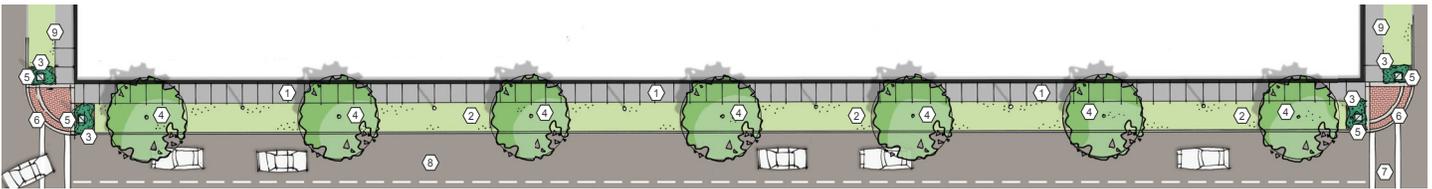
This typology defines the perimeter of Aggieville. Type 4.1 maximizes traffic flow so that people and cars can easily enter / exit the district. Like Type 3.2, this street type does not include parking.

- Existing lanes with two way traffic (lane number varies)
- No parking
- Landscape strip on one side of the street
- Sidewalk on one side of the street

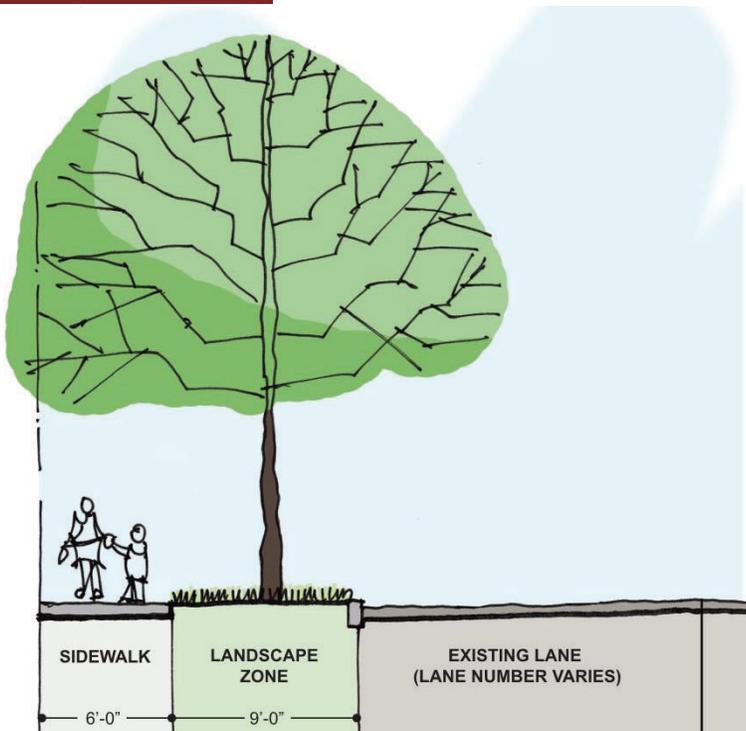
Legend

1. Sidewalk - concrete
2. Landscape/ amenity zone (pedestrian & street lighting)
3. Landscape bed
4. Street tree
5. District monument/ marker
6. Intersection enhancement w/ specialty pavers & concrete band
7. Pedestrian crosswalk
8. Vehicular drive lane – two way
9. Adjacent streetscape

Type 4.1 Plan View



Type 4.1 Street Section



Street and Streetscape Options - Alleys

Type 5.1 Reference Map



Type 5.1

Type 5.1 is considered the alleyways of Aggieville where enhancement is a possibility to make them more pedestrian friendly, while creating better accessibility for service trucks/vehicles. For a total of four blocks of alleyways, Type 5.1 is found between Moro Street and Bluemont Avenue, and Laramie Street and Moro Street.

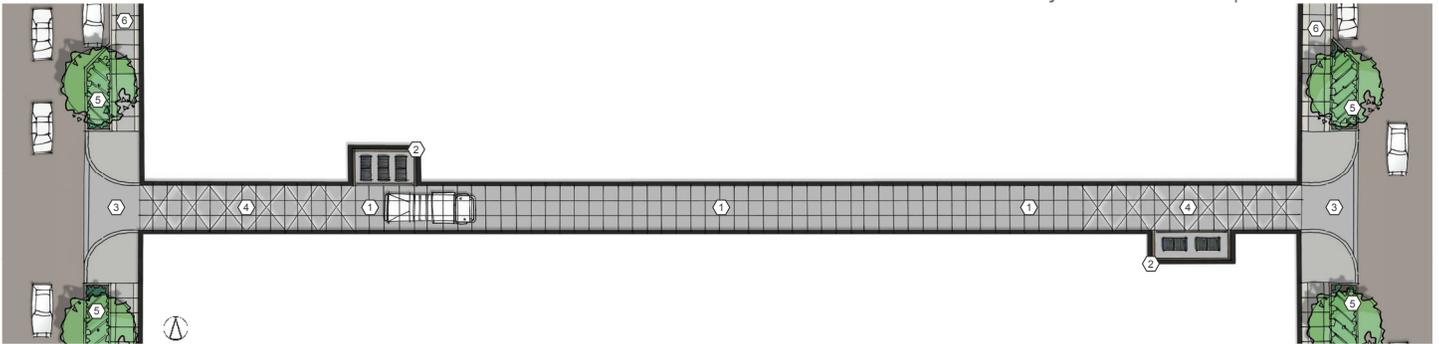
- One way traffic
- Enhancements for pedestrian and service vehicle access
- Consolidated trash enclosures
- Upgraded lighting

The consolidation of trash and grease in the alleys while maintaining service access is a critical issue in Aggieville. A detailed study is recommended to be conducted with the ABA, business owners, service providers, and the City of Manhattan to develop a plan that treats those issues together to address the overwhelming community response to the alleys.

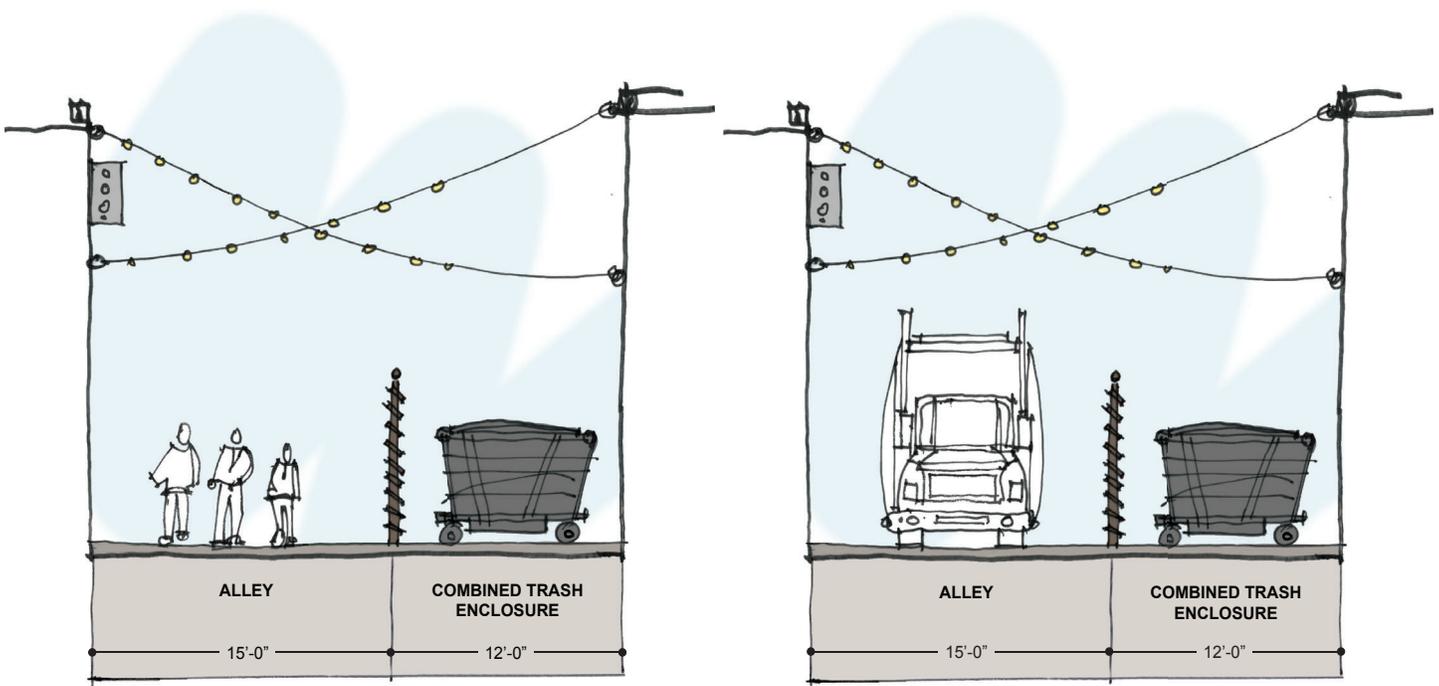
Legend

1. Service alley with enhancements – one way (heavy duty concrete)
2. Consolidated trash enclosure
3. Alley drive apron
4. Overhead sting lights
5. Curb extension
6. Adjacent streetscape

Type 5.1 Plan View



Type 5.1 Street Section



Type 5.1 Alleyways



Alleyway Existing Conditions



Alleyway without Power Lines



Alleyway with Steel Poles



Character and Amenities

To effectively encourage pedestrians to stroll through Aggieville, it is critical to create a look and feel that draws in people. This can be accomplished through thoughtful amenities that provide places to sit, decorative lighting, and attractive site furnishings. Amenities are what make a space feel planned and thought out, which will enhance Aggieville's existing feel and character, while enhancing its attractiveness to visitors.

The next few pages provide examples of imagery that convey this look and feel that is envisioned for Aggieville. These images do

not represent exactly what will be in Aggieville, but rather provide context for the ambiance that the selected amenities should create.

Amenities selected for the Aggieville district include site furnishings, like benches, trash receptacles, and bollards, lighting, and landscaping options. Examples of these amenities are included in this section, as well.



Character Images Site Furnishings



Character Images Lighting



Character Images Landscaping



Character Images Paving



Amenities

A critical consideration in the development of a high-quality pedestrian streetscape environment is the site furnishings. Those elements, along with the hardscape, landscape and unique amenities define the space, its style, its interest, its comfort, and its overall usability. Two families of site furnishings are included that would

be appropriate for the streetscape. One is traditional in character and design, reflecting historic lines and materials that fit with the existing character of Aggieville. The second is a more transitional family of furnishings that respect the past, but also look forward. Either option, or a combination of the two, have a place in the revitalization of Aggieville.

Amenities Traditional / Historic



BENCH
 PRODUCT NAME: TOWNE SQUARE
 MANUFACTURER: LANDSCAPE FORMS
 MATERIAL: CAST IRON
 FINISH: POWDERCOAT
 COLOR: BLACK OR STORMCLOUD



LITTER/RECYCLING RECEPTACLE
 PRODUCT NAME: PLAINWELL LITTER RECEPTACLE
 MANUFACTURER: LANDSCAPE FORMS
 MATERIAL: STEEL & ALUMINUM
 FINISH: POWDERCOAT
 COLOR: BLACK OR STORMCLOUD



BIKE RACK
 PRODUCT NAME: BIKE POST TWO LOOPS
 MANUFACTURER: SITESCAPES
 MATERIAL: STEEL TUBING
 FINISH: POWDERCOAT
 COLOR: ONYX

Amenities Transitional



BENCH
 PRODUCT NAME: AUSTIN BENCH
 MANUFACTURER: LANDSCAPE FORMS
 MATERIAL: ALUMINUM
 FINISH: POWDERCOAT
 COLOR: BRONZE OR SILVER



LITTER/RECYCLING RECEPTACLE
 PRODUCT NAME: POE LITTER RECEPTACLE
 MANUFACTURER: LANDSCAPE FORMS
 MATERIAL: CAST & EXTRUDED ALUMINUM
 FINISH: POWDERCOAT
 COLOR: BRONZE OR SILVER



BIKE RACK
 PRODUCT NAME: BOLA BIKE RACK
 MANUFACTURER: LANDSCAPE FORMS
 MATERIAL: STAINLESS STEEL TUBING
 FINISH: POWDERCOAT
 COLOR: BRONZE OR SILVER

Amenities Traditional / Historic



TABLES & CHAIRS
 PRODUCT NAME: SIENNA TABLE & CHAIR
 MANUFACTURER: KEYSTONE RIDGE
 MATERIAL: STEEL
 FINISH: POWDERCOAT
 COLOR: GLOSS BLACK



TREE GRATE
 PRODUCT NAME: SONOMA
 MANUFACTURER: IRON AGE DESIGNS
 MATERIAL: CAST IRON
 FINISH: RAW



PLANTERS
 PRODUCT NAME: MASARU PLANTER
 MANUFACTURER: LANDSCAPE FORMS
 MATERIAL: CONCRETE
 FINISH: SANDBLAST FINISH
 COLOR: BRICK RED OR PEBBLE



SECURITY BOLLARD
 PRODUCT NAME: HARTFORD BCA
 MANUFACTURER: ANTIQUE STREET LAMPS
 MATERIAL: CAST ALUMINUM
 FINISH: POWDERCOAT
 COLOR: BLACK



BOLLARD / PATHWAY LIGHT
 PRODUCT NAME: HARTFORD BLCA
 MANUFACTURER: ANTIQUE STREET LAMPS
 MATERIAL: CAST ALUMINUM
 FINISH: POWDERCOAT
 COLOR: BLACK

Amenities Transitional



TABLES & CHAIRS
 PRODUCT NAME: PARC CENTRE TABLE & CHAIR
 MANUFACTURER: LANDSCAPE FORMS
 MATERIAL: STEEL
 FINISH: POWDERCOAT
 COLOR: OCEAN, FLAMBE ORANGE, OR GRASS



TREE GRATE
 PRODUCT NAME: DIVERSADERO
 MANUFACTURER: IRON AGE DESIGNS
 MATERIAL: CAST IRON
 FINISH: RAW



PLANTERS
 PRODUCT NAME: SORELLA PLANTER
 MANUFACTURER: LANDSCAPE FORMS
 MATERIAL: STEEL
 FINISH: POWDERCOAT
 COLOR: BRONZE OR SILVER



SECURITY BOLLARD
 PRODUCT NAME: ARCHITECTURAL FIXED BOLLARD
 MANUFACTURER: CALPIPE
 MATERIAL: STEEL
 FINISH: STAINLESS STEEL



BOLLARD / PATHWAY LIGHT
 PRODUCT NAME: FPG PATHWAY LIGHT
 MANUFACTURER: LANDSCAPE FORMS
 MATERIAL: CAST ALUMINUM
 FINISH: POWDERCOAT
 COLOR: BRONZE OR SILVER

Amenities Traditional / Historic



PEDESTRIAN LIGHT
 PRODUCT NAME: ASHBERY AREA LIGHT
 MANUFACTURER: LANDSCAPE FORMS
 MATERIAL: CAST IRON
 FINISH: POWDERCOAT
 COLOR: BLACK



STRING LIGHTS
 PRODUCT NAME: LITESPHERE ADAPT
 MANUFACTURER: TIVOLI



CATENARY LIGHT
 PRODUCT NAME: OMEGA
 MANUFACTURER: STERNBERG LIGHTING
 MATERIAL: ALUMINUM
 FINISH: POWDERCOAT
 COLOR: BLACK

Amenities Transitional



PEDESTRIAN LIGHT
 PRODUCT NAME: FPG AREA LIGHT
 MANUFACTURER: LANDSCAPE FORMS
 MATERIAL: CAST ALUMINUM
 FINISH: POWDERCOAT
 COLOR: BRONZE OR SILVER



STRING LIGHTS
 PRODUCT NAME: LITESPHERE ADAPT
 MANUFACTURER: TIVOLI



CATENARY LIGHT
 PRODUCT NAME: ARNE CATENARY LIGHT
 MANUFACTURER: LANDSCAPE FORMS
 MATERIAL: ALUMINUM
 FINISH: POWDERCOAT
 COLOR: BRONZE OR SILVER





Infrastructure

This section covers the behind the scenes items that make the amenities and street enhancements possible. The infrastructure lays the groundwork - literally - to bring the final plan to life. The necessary infrastructure to make this plan a reality includes parking, roads and pavement, utilities, and public Wi-Fi.

Parking

As has been discussed, a component of the Aggieville Community Vision Plan is to address issues affecting the area and guide development opportunities for existing and future parking related needs. Multiple concept alternatives for structure parking have been explored at a site identified along Laramie Street between North 14th Street and Manhattan Avenue to respond to the need for parking supply. This site is a City-owned property.

The parking structure concept iterations considered multiple scenarios including:

- Structure footprint, massing, and capacity
- Integrated development space both at grade and full height
- Programmed public space between Rally House and structure
- Future adaptive reuse potential

All concept alternatives explored focused on functionality and overall parking efficiency for an enhanced end user experience. Being an extension of the roadway system, the goal is for the facility to be a logical, safe, and comfortable environment where one can circulate and locate a parking space in a reasonable amount of time. Factors affecting the selection of the final functional solution include:

- Parking supply to meet the community needs
- User type (employee, customer, residents)
- Peak-hour volumes
- Wayfinding
- Flow capacity
- Floor height
- Parking geometrics

Equally important as these pieces is to recognize the pedestrian is the ultimate fruition of the design and that intuitive access for the pedestrian and motorist to reach their destination should not be overlooked. The footprint efficiency is essential for creating an economical parking structure while blending in user comfort.

Although multiple parking structure configuration options were evaluated, the four preferred alternatives presented are the most viable options to achieve the overall program goal of providing 500 to 600 structured parking spaces, as identified in the previous phase of this project. All solutions are considered efficient layouts with the alternatives presented in Option 1 being slightly more efficient than those presented under Option 2. The final determination will be a function of additional programmatic elements available or desired for the project.

Option 1

Both alternatives explored as part of Option 1 require additional land acquisition beyond the existing surface lot currently owned by the city to facilitate the proposed functional solution. The driving factor is the ramp length required to effectively traverse between each of the floor levels. Each alternative employs an angled parking one-way traffic flow in a two bay wide scenario.

Option 1 Alternative A

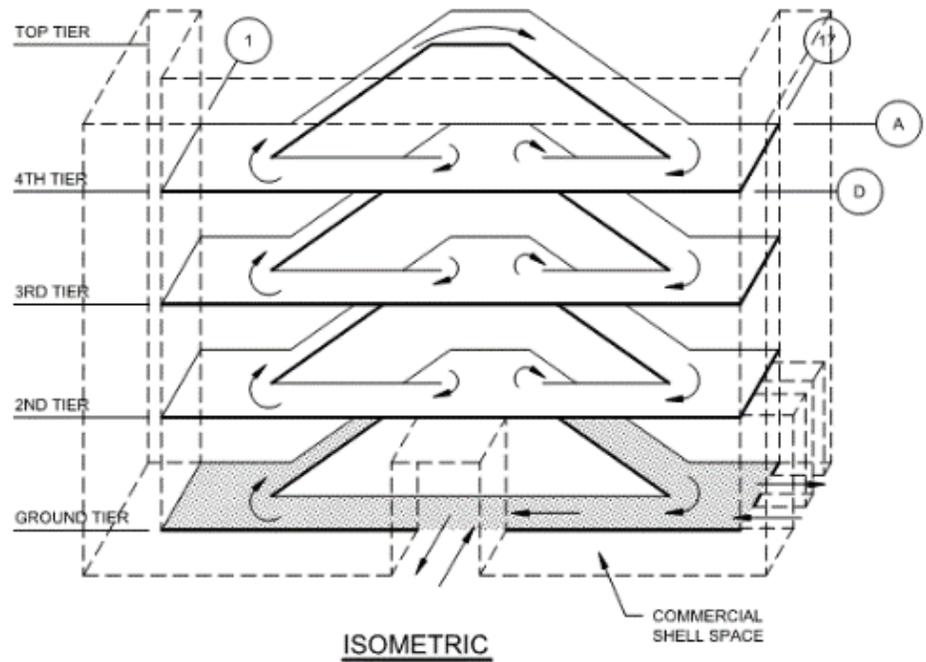
Alternative A allows for a full height commercial, residential liner, or combination of both on all sides except for the existing alley and elevation adjacent to the Rally House. The additional parcel necessary for this is located along North 14th Street, which is currently occupied by Burger King. The main vehicular egress point would be along Laramie Street, providing access to the clockwise, one-way travel flow camelback functional solution. An alternate egress could be located along Manhattan Avenue, but it is not required for maintaining flow capacity, or necessarily desired as it impedes pedestrian access.

The parking geometrics selected are considered above average using an 8'-9" wide stall and 17'-6" drive aisles. The capacity provides over 560 spaces including accessible parking. The solution is highly efficient with the circulation path eliminating half the spaces to be passed allowing for improved flow capacity for vehicles either entering or exiting the facility.

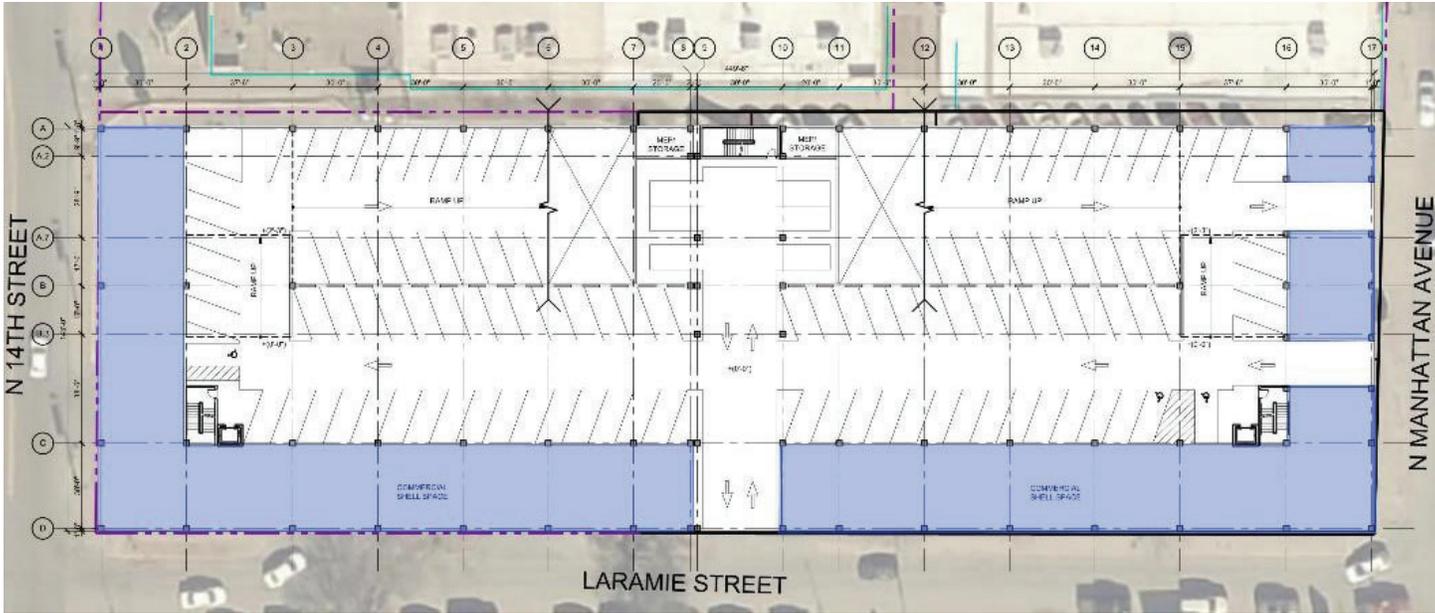
CAR COUNT

8'-9" 90° STANDARD SPACE
8'-9" 70° STANDARD SPACE

TIER	STANDARD	CAR ACCESSIBLE	VAN ACCESSIBLE	TOTAL	PARKING AREA (SQ FT)	EFFICIENCY (SQ FT/STALL)
GROUND	117	1	2	120	39438	329
SECOND	136	3	0	139	42421	305
THIRD	136	3	0	139	42421	305
FOURTH	136	3	0	139	42421	305
TOP	24	0	0	24	6986	291
TOTAL	549	10	2	561	173,687	310



Option 1 Alternative A



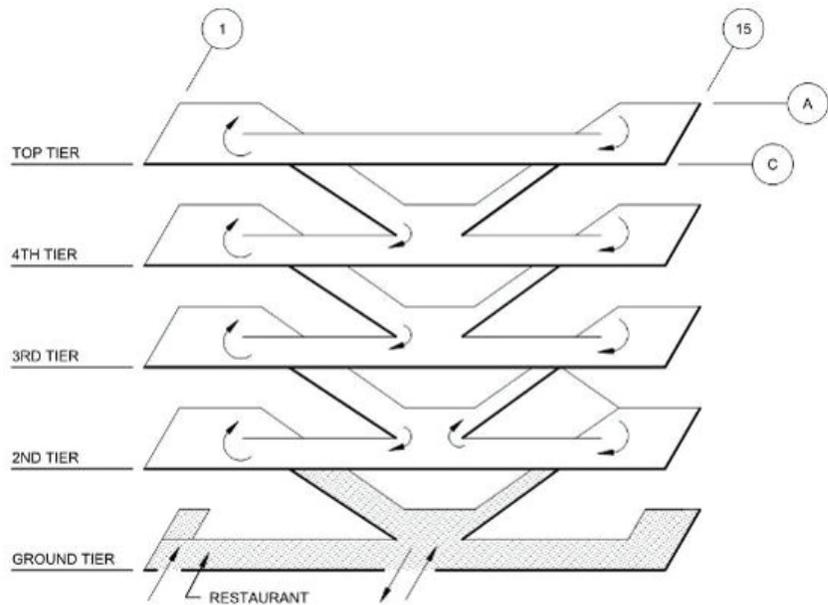
Option 1 Alternative E

The concept for Alternative E maintained the same parking geometrics as Alternative A, allowing for a quantitative comparison between the two regarding capacity and efficiency. Although slightly less efficient due to the inability to end bay park on the west side of the structure, the solution provides a higher capacity with over 600 spaces. This total accounts for replacement of the existing surface parking spaces that would be displaced at the existing site to be acquired along 14th Street by incorporating them into the parking structure with a dedicated use for that amenity. While this alternative stills requires acquisition of some additional property, the existing restaurant currently undergoing a remodel could be maintained. The inverted camelback functional solution results in the same overall building height with only a partial below grade level in the middle of the structure on one bay only. The smaller overall footprint does not allow programming for commercial space to be accommodated easily, but it provides ample space for a park let area between the structure and the existing Rally House. Should the structure need to be shifted to be closer to the Rally House commercial space, it could be programmed along Laramie Street. The final setback from Rally House will be determined once a final concept is selected and design related parameters are vetted further.

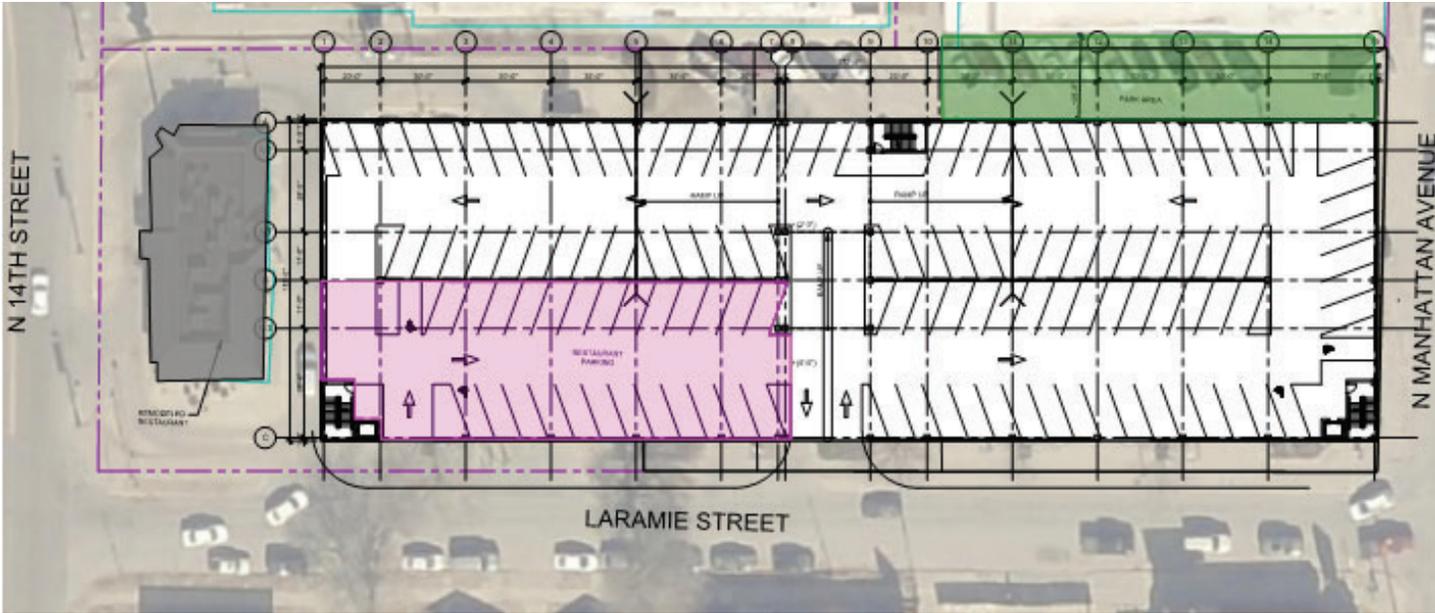
CAR COUNT

8'-9" 90° STANDARD SPACE
8'-9" 70° STANDARD SPACE

TIER	STANDARD	CAR ACCESSIBLE	VAN ACCESSIBLE	TOTAL	PARKING AREA (SQ FT)	EFFICIENCY (SQ FT/STALL)
BASEMENT	22	0	0	22	6,528	297
GROUND	96	0	2	98	31,905	326
SECOND	127	3	0	130	40,608	312
THIRD	127	3	0	130	40,608	312
FOURTH	127	3	0	130	40,608	312
TOP	113	1	0	114	33,426	293
TOTAL	590	10	2	602	187,155	311
RESTAURANT PARKING	24	1	1	26	8,573	330
DISPLACED RESTAURANT PARKING	32	0	0	32		
NET LOSS OF 6 STALLS						



Option 1 Alternative E



Option 2

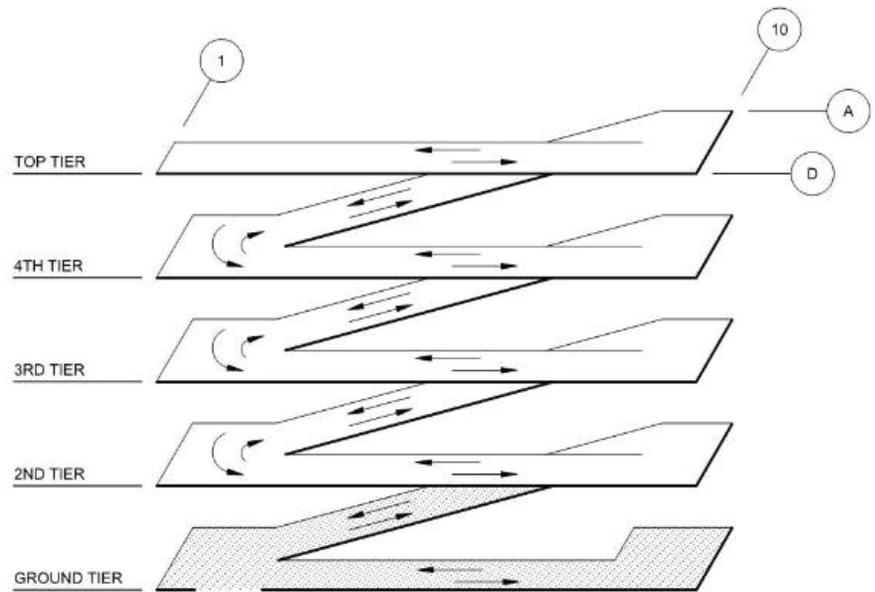
The alternatives explored as part of Option 2 utilize only the existing parcel currently owned and would not require additional land purchase. As a result, the parking capacities for these alternatives are significantly less than those presented in Option 1, unless the overall building height was to increase by one level. The smaller building footprint also adversely affects the efficiency as compare to Option 1 since similar parking geometry was considered for both options.

Option 2 Alternative A

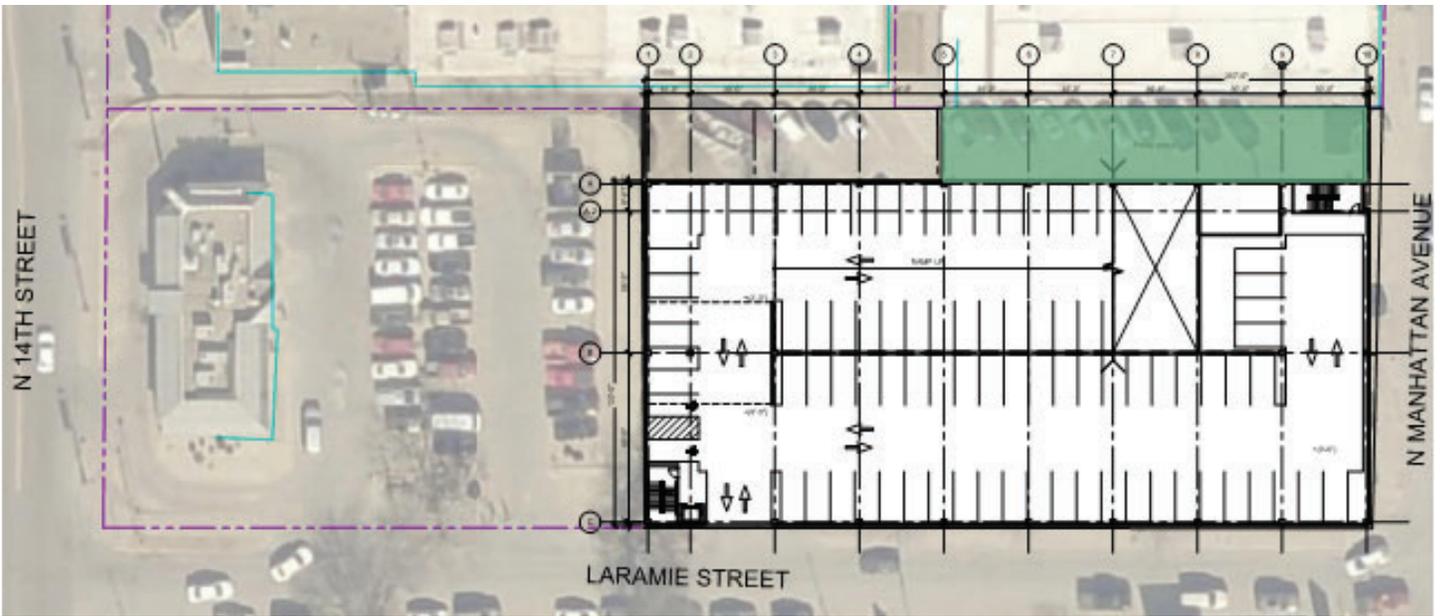
Alternative A utilizes a two-bay wide, basic, single-thread helix functional configuration with two-way traffic flow and ninety-degree parking. A single egress point is located again near mid-block of Laramie Street. The resulting circulation pattern requires vehicles to pass almost every parking space on the search path both entering and exiting. The drawback is this adversely affects the flow capacity for the structure and could result in larger than desired vehicle queuing during peak usage. The dead end aisle at grade at the top level also does not allow for continuous traffic flow. The reduced efficiency for this alternative is a function of the inability to end bay park vehicles along Manhattan Avenue due to the ramp length necessary to traverse from floor to floor. As presented, the layout allows for a park let area to be programmed, but there is flexibility to shift the structure footprint closer to the existing Rally House to allow for commercial space along Laramie Street. Additionally, commercial space could be programmed at grade along Manhattan Avenue, but would sacrifice some parking capacity.

CAR COUNT
8'-9" 90° STANDARD SPACE

TIER	STANDARD	CAR ACCESSIBLE	VAN ACCESSIBLE	TOTAL	PARKING AREA (SQ FT)	EFFICIENCY (SQ FT/STALL)
GROUND	85	0	2	87	28458	327
SECOND	95	2	0	97	30265	312
THIRD	95	2	0	97	30265	312
FOURTH	95	2	0	97	30265	312
TOP	62	2	0	64	22666	354
TOTAL	432	8	2	442	141,919	321



Option 2 Alternative A



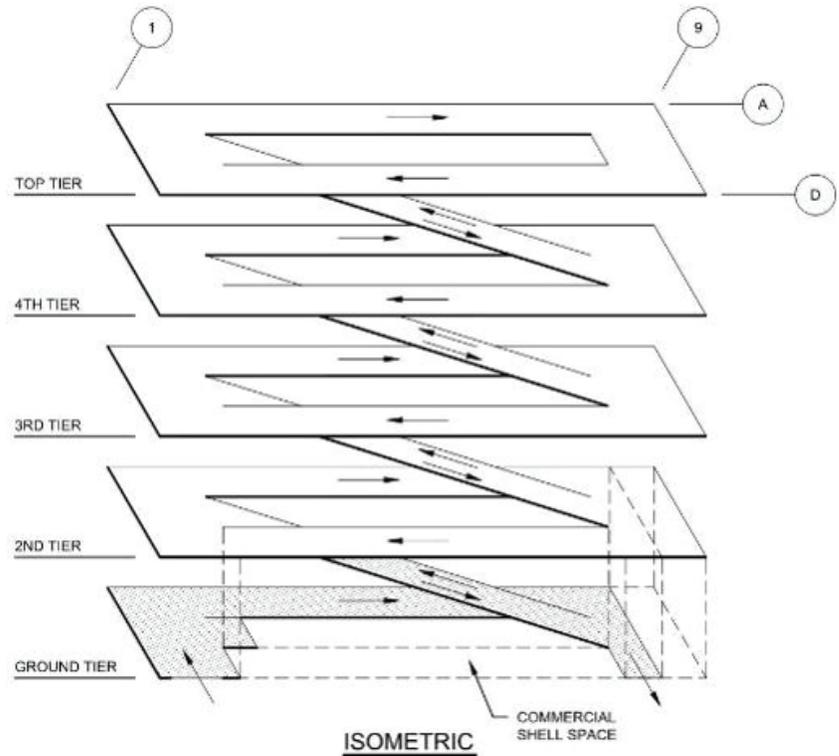
Option 2 Alternative B

The concept for Alternative B maintains the same parking geometrics as Alternative A, but utilizes both perpendicular and angled parking in a three bay wide, side-by-side helix configuration. The advantage to this solution over Alternative A is improved flow capacity for vehicles either entering or exiting the facility with the circulation path eliminating half of the spaces to be passed. The drawback is the parking efficiency is adversely affected with the bay along Laramie Street as it only provides a single loaded parking aisle.

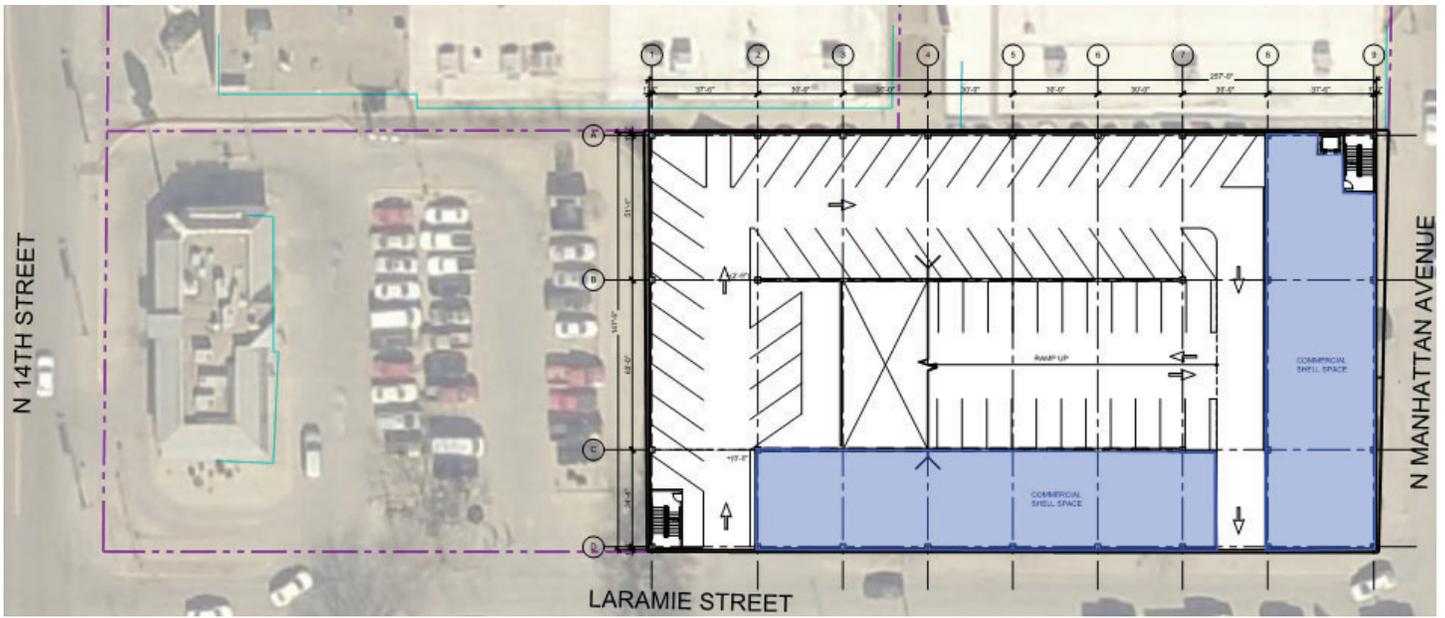
The layout will not allow for programming a park let space between the structure and Rally House. Flexibility exists to accommodate commercial space on both Laramie Street and Manhattan Avenue or repurpose these areas to commercial in the future to capture additional parking.

CAR COUNT
 8'-9" 90° STANDARD SPACE
 8'-9" 55° STANDARD SPACE

TIER	STANDARD	CAR ACCESSIBLE	VAN ACCESSIBLE	TOTAL	PARKING AREA (SQ FT)	EFFICIENCY (SQ FT/STALL)
GROUND	69	0	0	69	24495	355
SECOND	107	2	1	110	36822	335
THIRD	107	2	1	110	36822	335
FOURTH	107	3	0	110	36822	335
TOP	90	0	0	90	30798	342
TOTAL	480	7	2	489	165,759	339



Option 2 Alternative B



Parking Summary and Scenarios

Parking is a major part of the Aggieville district and is absolutely necessary for the future success of this plan's implementation. Having a parking garage in place will enable many other positive changes for the district and how to accommodate parking needs during construction must be considered. The following images and explanations provide overviews of the parking scenarios for Aggieville such that an informed decision can be made about how to proceed.

The following provides a breakdown of the parking stall garage option assuming 550 spaces and assuming the following loss to parking in the district:

- 49 stalls for the new hotel
- 79 stalls from new parking garage site (N. Manhattan & Laramie)
- 9 stalls from Laramie in front of garage
- 54 stalls from Moro going to one way with parallel parking
- 25 stalls from 12th Street from Moro to Laramie

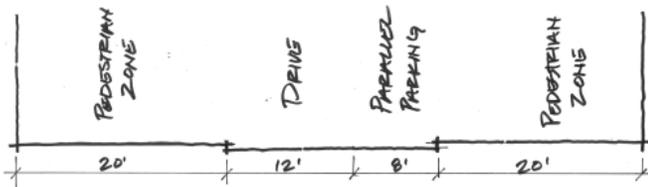
This option would leave 334 total stalls in the garage, with 330 stalls

post improvements to the streets and remaining two public lots. Currently, there are 589 parking spots in the district. After all improvements are made, there would be 664 stalls. This represents a completed net gain of 75 stalls (664 future minus 589 existing).

Parking Scenario: Moro Street

The following text and graphics provide three parking scenarios for Moro Street. The existing condition is one-way traffic with angled parking on one side and parallel parking on the other side with 76 stalls and 60 feet of right-of-way (41 feet for vehicular and 19 feet for pedestrian).

Moro Option 1

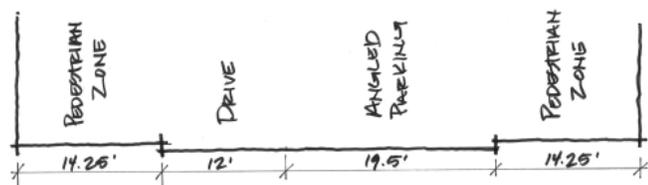


Option 1

This option would feature one-way traffic with parallel parking on one side of the street and a mid-block crossing (60' right-of-way: 20' for vehicular and 40' for pedestrian).

- 22 stalls on Moro Street (loss of 54 stalls)
- 550 stall garage (loss of 79 surface stall lot south of Rally House)
- 417 Stall Net Gain

Moro Option 2

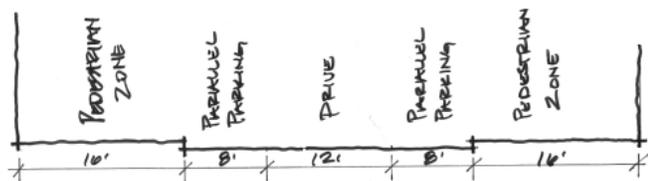


Option 2

This option would have one-way traffic with angled parking on one side of the street and a mid-block crossing (60' right-of-way: 31.5' for vehicular and 28.5' for pedestrian).

- 50 stalls on Moro Street (loss of 26 stalls)
- 550 stall garage (loss of 79 surface stall lot south of Rally House)
- 445 Stall Net Gain

Moro Option 3



Option 3

This option would have one-way traffic with parallel parking on both sides of the street and a mid-block crossing (60' right-of-way: 28' for vehicular and 32' for pedestrian).

- 44 stalls on Moro Street (loss of 32 stalls)
- 550 stall garage (loss of 79 surface stall lot south of Rally House)
- 439 Stall Net Gain

Parking Scenario: 12th Street

The following options represent parking scenarios for 12th Street. The existing parking condition on 12th street includes:

- 53 parking stalls
- 60' right-of-way: 40' for vehicular and 20' for pedestrian.

Option 1

This option would feature a partial closure from Moro Street to Laramie Street with bumpouts at the street and alley intersections.

- 28 parking stalls (loss of 25 stalls)
- 550 stall garage (loss of 79 surface stall on lot south of Rally House)
- 446 Stall Net Gain

Option 2

This option would fully close from Fremont Street to Anderson/Bluemont Avenue.

- 0 parking stalls (loss of 53 stalls)
- 550 stall garage (loss of 79 surface stall on lot south of Rally House)
- 418 Stall Net Gain

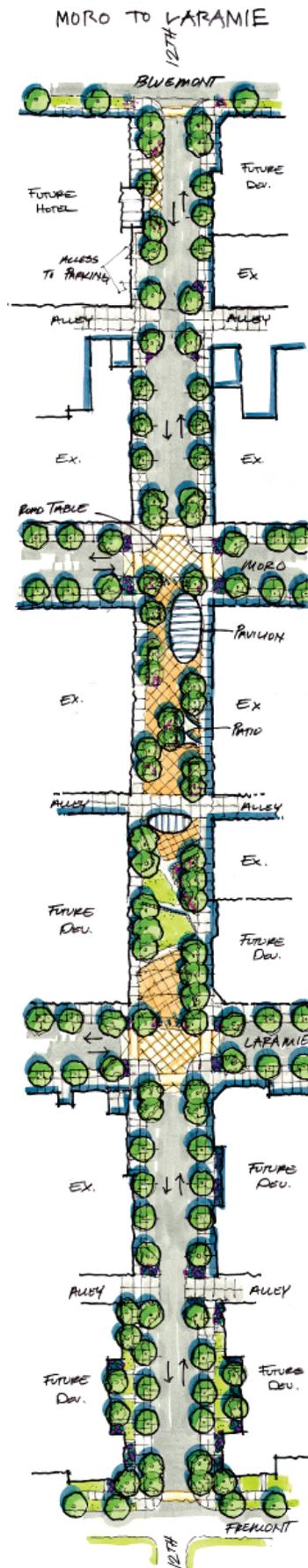
Parking Assumptions at Full Buildout

Options have been discussed on how a parking garage would impact parking, but also the realization that any streetscape option will also eliminate parking from the streets. Below is a summary of parking for Moro Option 1 and North 12th Street option 1 (partial mall) if selected and how parking would be impacted.

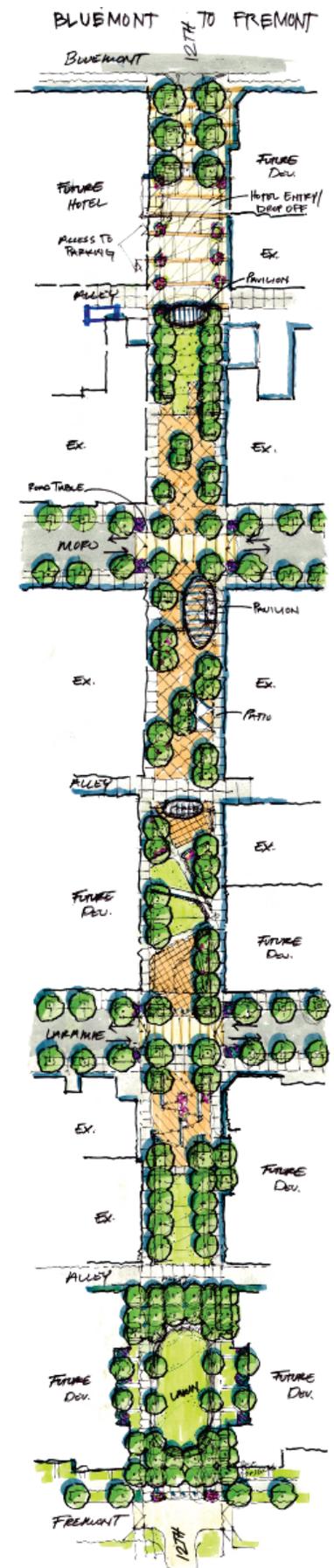
Parking Assumptions: Full Buildout

Parking Assumption	Loss/Gain of Parking Stalls
Existing Parking in District	589
New Parking Garage	550 (gain)
Hotel Parking Lot	49 (loss)
Lot South of Rally House (new garage)	79 (loss)
Laramie in front of New Garage	9 (loss)
Moro Option 1 (one way parallel)	54 (loss)
12th Street Option 1 (Partial Mall)	25 (loss)
Total Stalls with New Garage	923

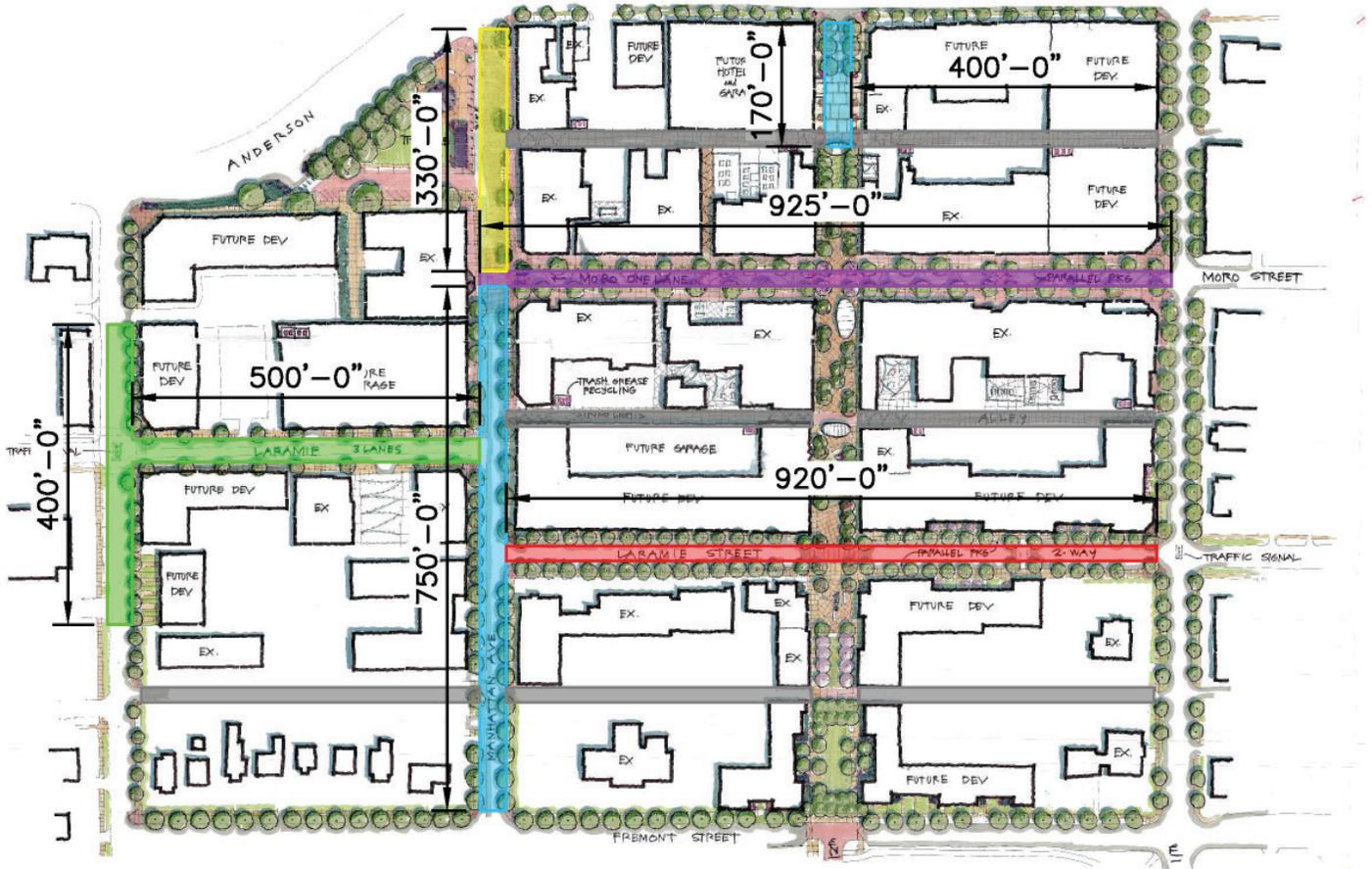
Option 1 One Block Closure



Option 2 Three Block Closure



Pavement Widths



Legend	Street Name	Lane 1 Width	Lane 2 Width	Lane 3 Width	Parallel Parking (1)	Parallel Parking (2)	Angled Parking	Total	Length
	Moro	14	0	0	8	0	0	22	925
	Laramie (E)	12	12	0	8	8	0	40	920
	Laramie (W)	11	11	11	0	0	0	33	500
	14th	11	11	11	0	0	0	33	400
	12th	12	12	0	8	0	0	32	170
	Manhattan (S)	12	12	0	8	0	0	32	750
	Manhattan (N)	12	0	0	0	0	17.5	29.5	330
	Alley	0	0	0	0	0	0	15	2,800

Note: All values provided in feet. Letters after street names indicate direction.

Utilities

The primary utility provider that has been involved with the Aggieville plan is Westar Energy (Westar), which provides electricity to both residences and businesses in Manhattan. Several meetings have been held with Westar to determine the feasibility of burying the electrical primary and secondary lines in the alleyways of Aggieville.

The current voltage within Aggieville can be classified as having 208- and 240-volt systems. Westar, if rebuilding, still would have to maintain both voltages because business owners would need to replace existing coolers/motors to accommodate one voltage. This would be cost prohibitive to some of the businesses, so both would be necessary to maintain through the allies. Other utilities such as COX Communications and AT&T will have to follow this same plan, as determined by Westar.

Westar has looked at a few options with the design team, which brought forth the high priority or removing the overhead electrical lines in Triangle Park and installing them underground. The full-scale relocation of utilities to be underground in the two allies on the north and south sides of Moro Street appear to be challenging and expensive. It is not the actual burial of the lines, but it is where to locate transformers, switchgear, and other equipment in the allies. This equipment must be placed in public areas that can be serviced and be capable of serving multiple businesses. Service lines into the buildings, which are all overhead connections, will need to be maintained.

The overall cost of this would impact businesses to relocate the utility to accept the underground connection. Therefore, another option would be to design the alley utilities with a combination of underground and overhead options. There would be strategically placed steel poles that can still house the transformers and provide the overhead connection. This will clean up the area even though some lines would not be completely underground.

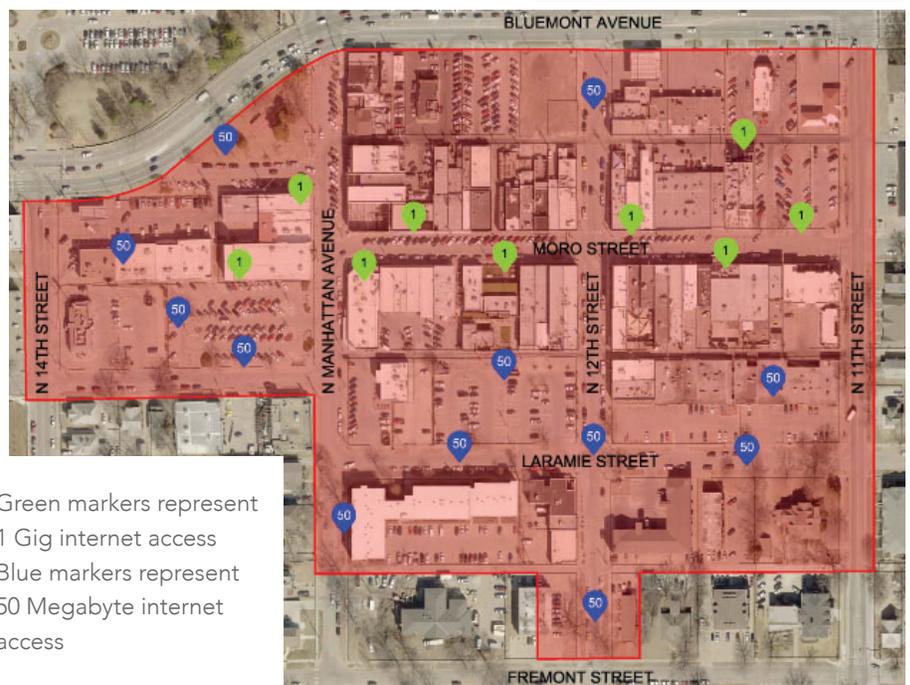
As more information is obtained from Westar, the cost of these improvements will be better defined as other options are still being discussed.

Public Wi-Fi

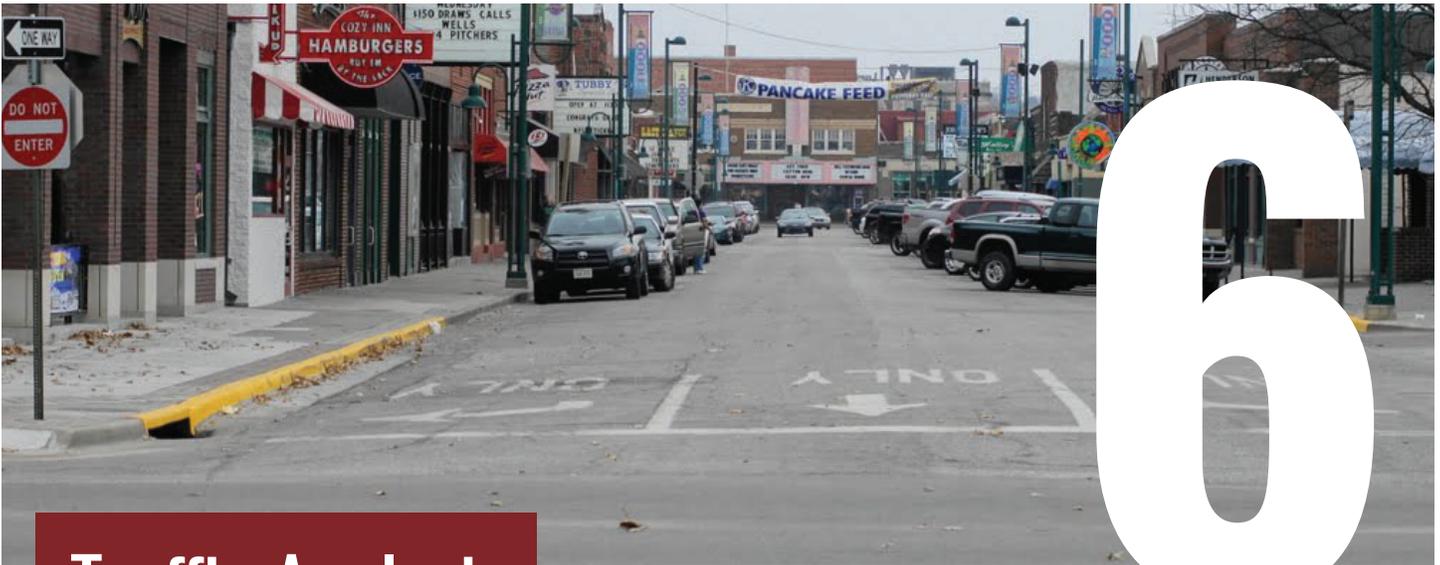
Public Wi-Fi in Aggieville would be a very large asset to the live, work, and play atmosphere in the Aggieville entertainment district. An internet provider already has fiber conduits in the allies of Aggieville and is beginning discussion to provide gigabyte service to the business community.

Providing Wi-Fi for the public is a different cost structure because the Wi-Fi boxes would need to be placed either on pedestrian lights or on buildings to provide district-wide coverage. It is not very expensive to install the underground conduits and hardware, however, there would be a monthly recurring charge to provide the public service, which would be provided by the district. Once installed and implemented, the costs could decrease as technology changes daily. The biggest item for public Wi-Fi is to provide the underground infrastructure such that it can thrive once a provider is determined.

Assumed Wi-Fi Access Points



- Green markers represent 1 Gig internet access
- Blue markers represent 50 Megabyte internet access



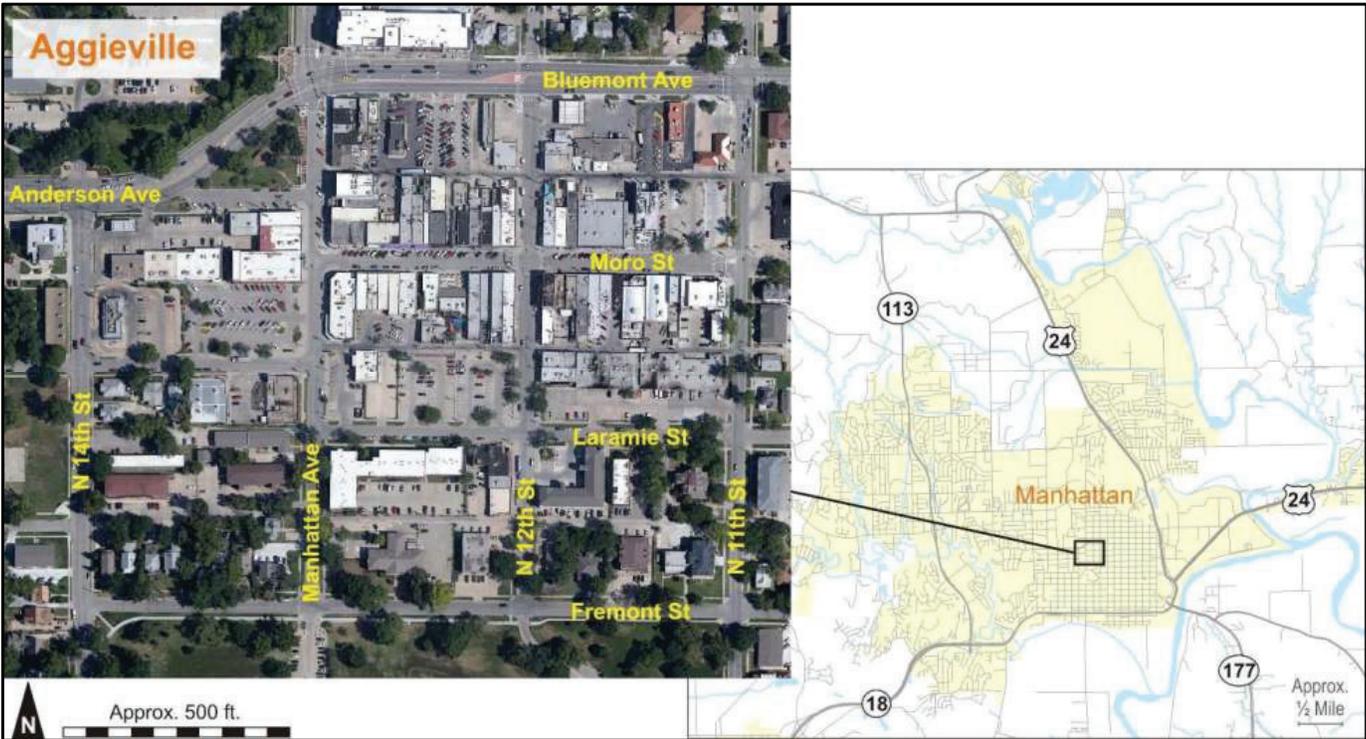
Traffic Analysis

The following traffic analysis was prepared by HDR as part of the Aggieville Community Vision Plan. The purpose of the analysis was to evaluate the traffic impacts of several potential changes being considered, including parking modifications, full or part-time street closures, and street reconfigurations. **Figure 1** shows the extent of the study area.

Data Analysis
 Traffic count data for several intersections were taken from the recently completed Aggieville Infrastructure Analysis, prepared by Olsson in January 2018. The traffic counts from this study were collected in September 2017 while K-State and other local schools were in session.

Figure 2 on the following page shows the existing turning-movement traffic volumes at each study intersection for the Mid-day and P.M. peak hours. Note the first number represents the Mid-day volume and the second number (in parentheses) represent the P.M. peak volume.

Figure 1 Location Map



Existing Street Network and Parking

According to the Functional [Street] Classification Map adopted by the Manhattan City Council in 2013, the following classifications apply to the streets of Aggieville.

- Bluemont/Anderson Avenue – Minor Arterial
- North 14th Street – Major Collector
- Fremont Street – Minor Collector
- North 11th Street – Minor Collector
- Moro Street, Laramie Street, North 12th Street, and Manhattan Avenue – Local Road

Arterial roadways, such as Bluemont Avenue, are intended to maximize mobility. They are the primary vehicular routes within a community, commonly with multiple traffic lanes and traffic signals at major intersections. These roadways typically carry relatively high traffic volumes at relatively high speeds. Collector roadways, major and minor, are intended to connect local roadways to the arterial street system. Local roads are intended to be low-volume, low-speed facilities and are often designed to discourage through traffic.

Figure 3 (following page) shows the existing lane geometry and traffic control for each study intersection. Figure 4 (following page) shows the amount of public parking spaces available in Aggieville according to the Manhattan Area Transportation Strategy, completed by HDR in 2015.

Existing Traffic Conditions

Traffic conditions for the existing Mid-day and P.M. peak periods were assessed using the Synchro traffic analysis software package. The Highway Capacity Manual, 6th Edition (HCM 6) procedures were the basis of analysis. The primary measures used for this analysis were delays and Level of Service (LOS). LOS is a measure that uses letter grades A through F to reflect the quality of travel and are based on the amount of predicted delays under prevailing conditions. LOS A represents very good operations with the lowest shortest delays and LOS F represents poor operations with significant delays. A summary of traffic operations for the study intersections under existing conditions is provided in Table 1. The results indicate that most intersections operate within desirable LOS goals during both the Mid-day and P.M. peak hours. The exception is the Moro Street and 11th Street intersection during the

P.M. peak hour, which the analysis indicates operates at a LOS F with 55 seconds of delay per vehicle. This undesirable delay occurs because there is a fairly substantial amount of northbound traffic (420 vehicles) that eastbound traffic (150 vehicles) must yield to. The volume-to-capacity (V/C) ratio for the heavy eastbound left-turn movement is estimated at 0.95, which is considered congested and very near its capacity. There are several options to consider.

- Convert to all-way stop control
- Install a traffic signal
- Increase the number of through lanes to two in each direction on 11th Street

The first option is the least costly and would improve LOS for the eastbound traffic, but at the expense of much more delay added for 11th Street traffic and the overall intersection operations would still be considered poor at LOS E. The second and third options would both resolve the undesirable LOS. However, there are considerations for both.

Figure 2 Existing Traffic Volumes

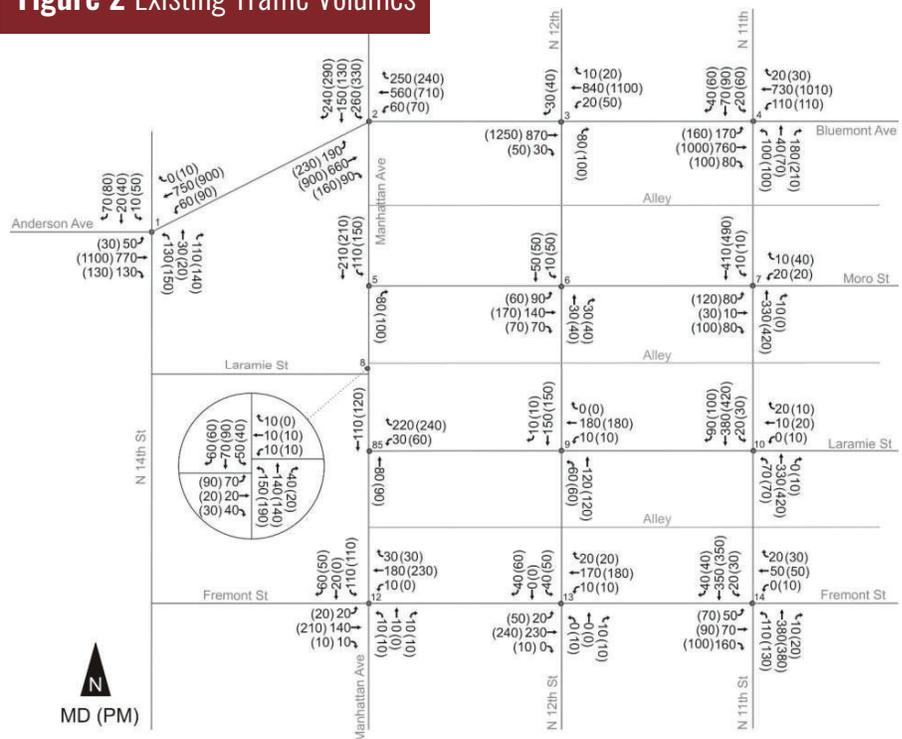
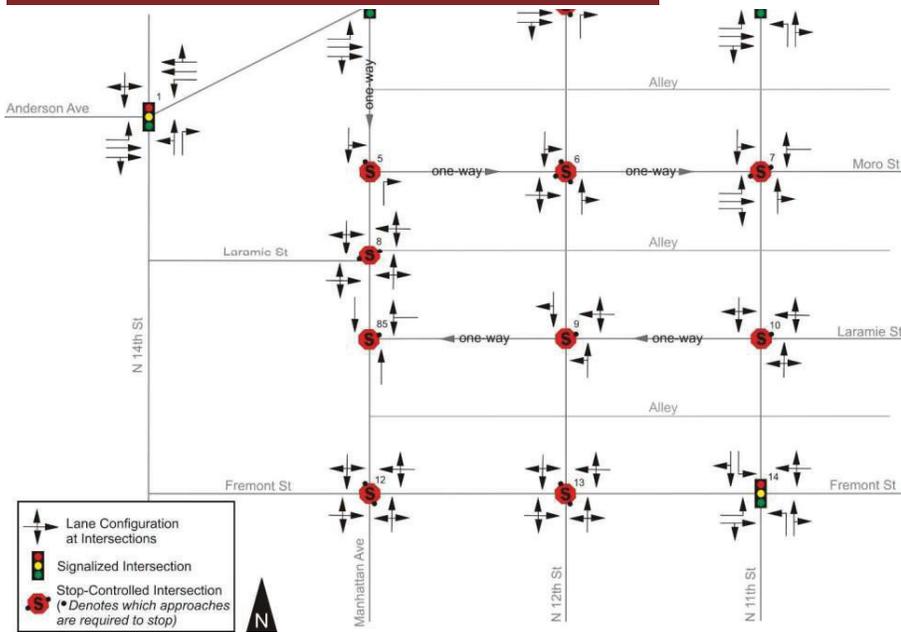
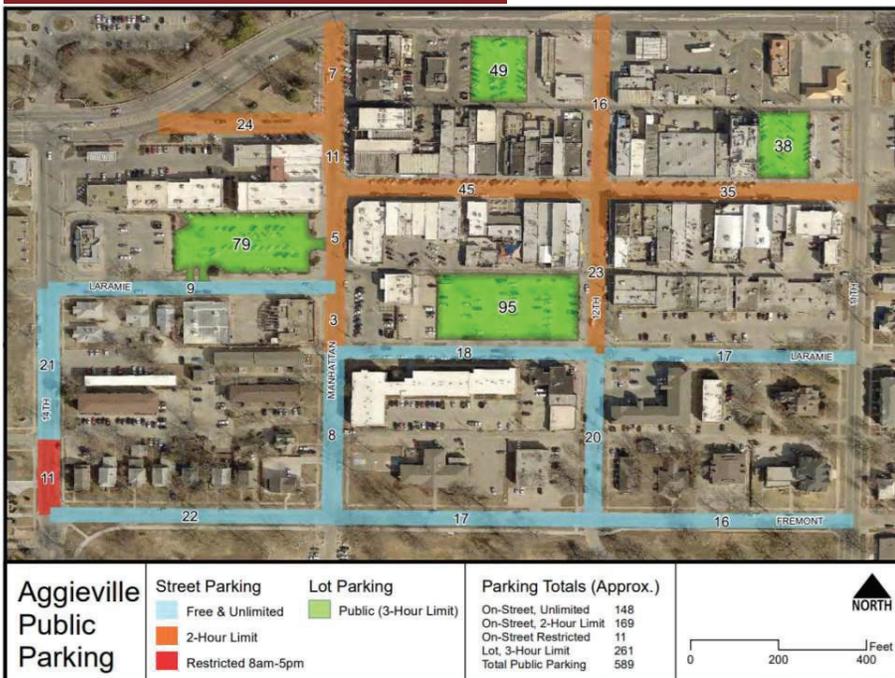


Figure 3 Existing Lane Geometry and Traffic Control



If a new traffic signal were installed at the intersection of 11th Street and Moro Street, it would be located approximately 400 feet from the existing Bluemont Street signal and approximately 750 feet from the existing Fremont Street signal. Current guidelines, such as the Access Management Manual, published by the Transportation Research Board, suggest that closely spaced traffic signals (less than ¼ mile apart) are undesirable because this can have negative impacts on the maximum efficiency of the signal system. While this is generally true, 11th Street is not a major arterial roadway with a primary purpose of maximizing throughput, but rather it is a collector roadway and its purpose is to balance the needs of side street traffic with the 11th Street through traffic.

Figure 4 Aggieville Public Parking Map



Source: Manhattan Area Transportation Strategy (2015)

The intersection appears to meet the minimum conflicting peak hour volume criteria found in the latest version of the Manual on Uniform Traffic Control Devices (MUTCD), published by the Federal Highway Administration. However, the MUTCD states that "this signal warrant shall be applied only in unusual cases, such as office complexes, manufacturing plants, industrial complexes, or high-occupancy vehicle facilities that attract or discharge large numbers of vehicles over a short time." Although this description doesn't exactly fit the examples, it is unique in that it is a one-way street funneling all eastbound traffic for a large business district. As for the undesirable spacing to the adjacent traffic signal, the primary reason for this is for corridor planning and good platooning of vehicles. In this case, Aggieville is a major contributor of traffic to the 11th Street corridor.

Table 1 Existing Conditions Analysis Results

Location	Existing			
	M.D. Peak		P.M. Peak	
	Delay	LOS	Delay	LOS
1. Anderson Avenue @ 14th Street (Signal)	27.6	C	28.9	C
2. Anderson Avenue @ Manhattan Avenue (Signal)	25.6	C	17.2	B
3. Bluemont Avenue @ 12th Street (TWSC) ¹	13.2	B	18.3	C
4. Bluemont Avenue @ 11th Street (Signal)	12.7	B	15.7	B
6. Moro Street @ 12th Street (AWSC)	9.1	A	9.5	A
7. Moro Street @ 11th Street (TWSC) ¹	23.6	C	55.6	F
8. Laramie Street @ Manhattan Avenue (N) (TWSC) ¹	21.1	C	29.2	D
85. Laramie Street @ Manhattan Avenue (S) (TWSC) ¹	10.4	B	11.1	B
9. Laramie Street @ 12th Street (TWSC) ¹	15.3	C	15.3	C
10. Laramie Street @ 11th Street (TWSC) ¹	10.5	B	20.7	C
12. Fremont Street @ Manhattan Avenue (TWSC) ¹	14.9	B	15.9	C
13. Fremont Street @ 12th Street (TWSC) ¹	12.2	B	13.5	B
14. Fremont Street @ 11th Street (Signal)	9.3	A	8.6	A

1. For TWSC intersections, the worst movement results are shown.
2. Intersection 5 cannot be analyzed using HCM methodology.

Adding an additional through lane to both northbound and southbound 11th Street is another measure that would be expected to relieve the predicted congestion at the intersection. However, in order for this change to be effective, the additional through lanes would need to extend from Fremont Avenue to Bluemont Avenue. Multi-modal transportation options is something that has been brought up by stakeholders as a desire for Aggieville and throughout the City. Adding through lanes would take up space that would be used for other modes. Widening would be expected to be fairly costly for this option taking into consideration potential property and utility impacts.

2040 No-Build Traffic Conditions

When assessing traffic impacts it is customary to consider potential future traffic growth. There were two separate components considered for background growth. The first was additional traffic passing through Aggieville. This background traffic was taken from growth volumes prepared by Olsson Associates.

The second component considered was traffic growth due to land use redevelopment changes inside of Aggieville. The Aggieville Infrastructure Analysis, dated January 2018 and prepared by Olsson Associates considered several potential future land use and intensity changes within Aggieville. This study assumes the “Low Growth” scenario. This additional traffic was distributed through the study intersections to and from the proposed garage.

Shown in Figures 5 and 6 are the 2040 No-Build traffic volumes at each study intersection for the Mid-day and P.M. peak hours without and with redevelopment growth, respectively.

A summary of traffic operations for the study intersections under existing conditions is provided in Table 2. The results indicate that with additional traffic growth and without remediation, the delays at the intersection of Moro Street and 11th Street will continue to get worse and in fact would result in the intersection operating over capacity (V/C = 1.24). All other intersections are expected to continue operating within the goal of LOS D or better.

2040 Build Conditions

Several potential changes were considered in the analysis that would have impacts to traffic. Each of the Build scenarios assessed are described below.

Scenario 1 (Base Scenario): This scenario estimates impacts of building a new parking garage on the west end of Aggieville, to be located along the north side of Laramie Street between 14th Street and Manhattan Avenue. Several variations of a garage in this location have been discussed and a final concept has not yet been decided upon. For the purposes of this study, it was assumed that the garage would include up to approximately 600 spaces and incorporate the existing fast food restaurant located in the northeast quadrant of the 14th Street and Laramie Street intersection or similar use.

Figure 5 2040 No-Build Traffic Volumes without Replacement

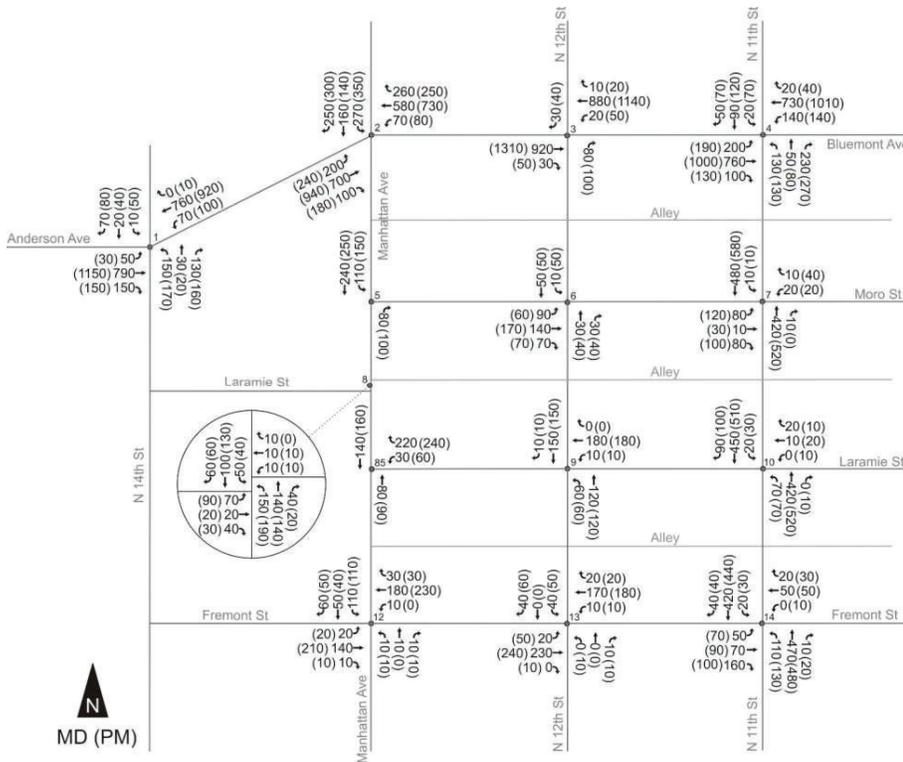
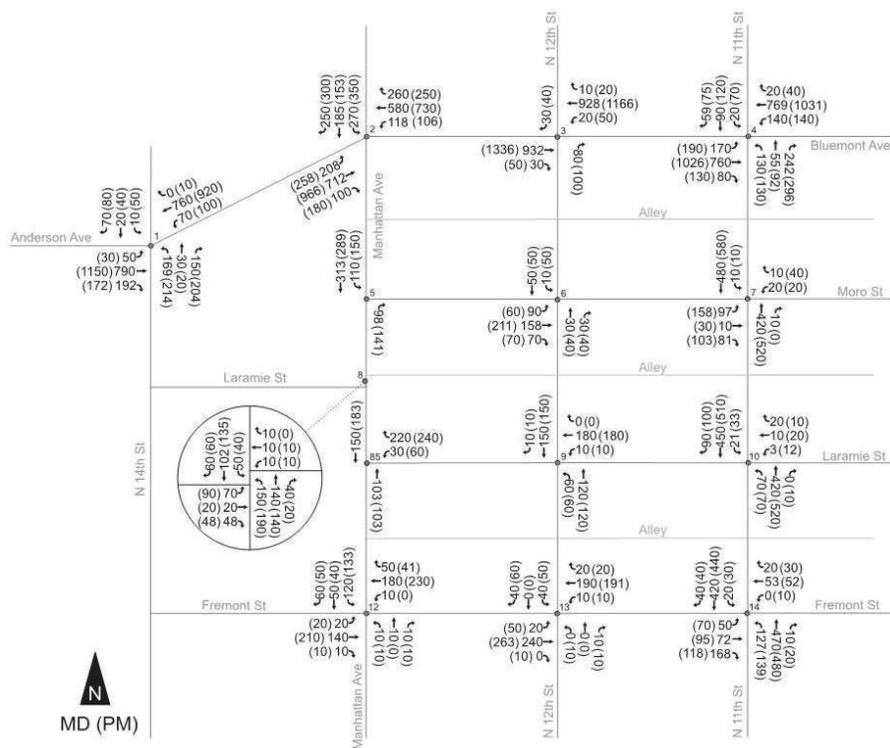


Figure 6 2040 No-Build Traffic Volumes with Redevelopment



While nothing is guaranteed at this stage, this is considered the Base Scenario because a proposed parking garage has been identified as a core need in the Vision Plan. The closure of Little Moro is a relatively minor change that was included to keep the number of scenarios to a modest number.

Typically in districts like Aggieville, whatever parking is closest to businesses and establishments tends to fill up first. This would include on-street parking, surface lots, and the ground floor of the garage. Once those spaces fill up, the upper levels of the garage would get utilized. Figure 7 includes a rough sketch of the changes considered for the Base Scenario.

A trip generation exercise was undertaken to estimate impacts of the garage on travel patterns. Trips for each block of the district were estimated based on the land use, size of buildings, and available parking. Those trips were assigned to the surrounding street network using Vistro traffic analysis software based on travel patterns derived from existing traffic counts. This allows district traffic to be distinguished from other through traffic.

A portion of the trips for the district were then subtracted from the street network and reassigned to the parking garage. Similarly, existing traffic on Little Moro was determined from existing traffic counts and reassigned to adjacent streets. The resulting 2040 Build Base Scenario volumes are shown in Figure 8.

Table 2 2040 No-Build Conditions Analysis Results

Location	2040 No Build without Redevelopment				2040 No Build with Redevelopment			
	M.D. Peak		P.M. Peak		M.D. Peak		P.M. Peak	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
1. Anderson Avenue @ 14th Street (Signal)	20.7	C	31.6	C	25.7	C	35.4	D
2. Anderson Avenue @ Manhattan Avenue (Signal)	16.3	B	17.7	B	17.0	B	18.1	B
3. Bluemont Avenue @ 12th Street (TWSC) ¹	13.6	B	19.3	C	13.7	B	19.7	C
4. Bluemont Avenue @ 11th Street (Signal)	14.6	B	24.0	C	15.1	B	26.1	C
6. Moro Street @ 12th Street (AWSC)	9.6	A	9.5	A	9.9	A	10.8	B
7. Moro Street @ 11th Street (TWSC) ¹	33.3	D	124.8	F	37.7	E	>200	F
8. Laramie Street @ Manhattan Avenue (N) (TWSC) ¹	22.5	C	32.6	D	22.4	C	32.5	D
85. Laramie Street @ Manhattan Avenue (S) (TWSC) ¹	10.4	B	11.3	B	10.7	B	11.5	B
9. Laramie Street @ 12th Street (TWSC) ¹	15.3	C	15.3	C	15.3	C	15.3	C
10. Laramie Street @ 11th Street (TWSC) ¹	11.3	B	27.0	D	13.5	B	29.0	D
12. Fremont Street @ Manhattan Avenue (TWSC) ¹	16.3	C	18.2	C	17.0	C	20.2	C
13. Fremont Street @ 12th Street (TWSC) ¹	12.2	B	13.5	B	12.5	B	13.9	B
14. Fremont Street @ 11th Street (Signal)	9.5	A	8.9	A	9.8	A	9.4	A

1. For TWSC intersections, the worst movement results are shown.
2. Intersection 5 cannot be analyzed using HCM methodology.

Revisions for the remaining build scenarios were completed manually by subtractions and additions from the Base Scenario. Volumes for these other 2040 Build scenarios are included in the attachments for reference.

All geometry remains the same as existing in this scenario, with the exception of no opening to Little Moro from Anderson Avenue. However, the analysis did not include the 14th Street and Laramie intersection, which may benefit from an exclusive southbound left-turn lane and/or an exclusive westbound right-turn lane. While not necessarily required, providing an eastbound left-turn lane on Laramie Street at the garage entrance would make ingress/egress optimal. A three-lane section on Laramie between 14th Street and Manhattan Avenue would be beneficial.

Scenario 2: This scenario includes the Base Scenario changes plus estimated redistributions of traffic that are anticipated to result from flipping Moro Street from one-way eastbound to one-way westbound, closing 12th Street between the alley south of Bluemont Avenue and Laramie Street, and opening Laramie to two-way traffic between Manhattan Street and 11th Street. **Figure 9** includes a rough sketch of the changes considered for Scenario 2.

The assumed geometric modifications (compared to existing) used as the basis for analysis in this scenario are as follows:

- Close 12th Street between the alley just south of Bluemont Avenue to Laramie Street
- Provide a single westbound through lane and remove all eastbound lanes on Moro Street between 11th Street and Manhattan Avenue
- Switch stop control from southbound Manhattan Avenue to westbound Moro Street, provide a single westbound lane
- Provide two-way traffic on Laramie Street between 11th Street and Manhattan Avenue, with a single through lane each direction
- Add a left-turn lane on Laramie Street at 11th Street

Figure 7 Base Scenario (New Parking Garage plus Close Little Moro)

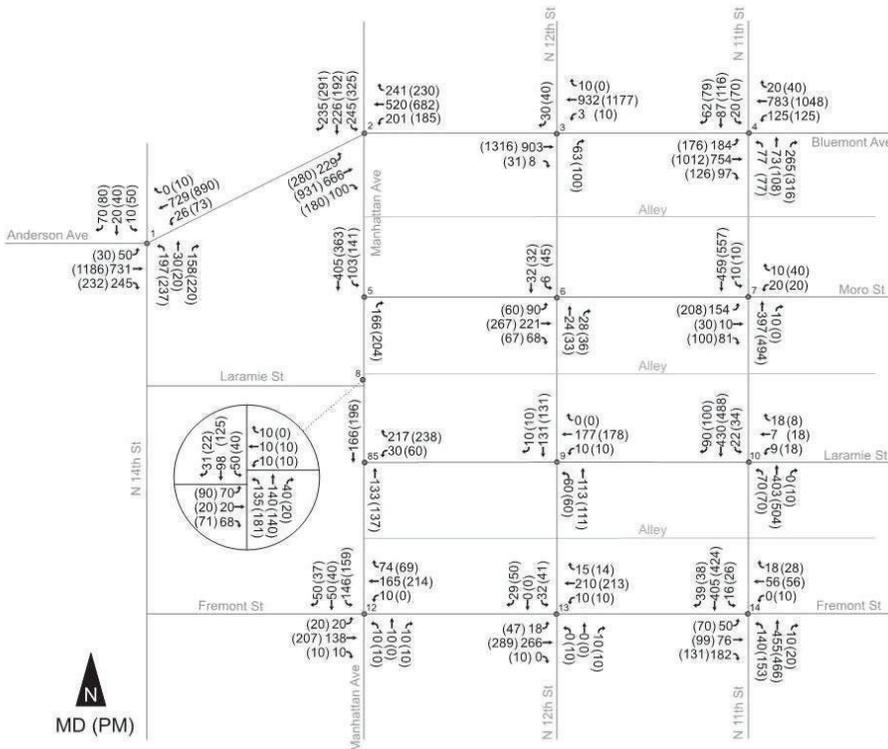


Scenario 3: This scenario includes the Base Scenario changes plus converting Manhattan Avenue from one way to two-way traffic north of Moro Street. This adds a fourth approach (northbound) to the Bluemont Avenue and Manhattan Avenue intersection. Figure 10 includes a rough sketch of the changes considered for Scenario 3.

This change would make it easier to get from the proposed parking garage to Bluemont Avenue, but would add more conflicting traffic at the Manhattan Avenue and Moro Street intersection. The assumed geometric modifications (compared to existing) used as the basis for analysis in this scenario are as follows:

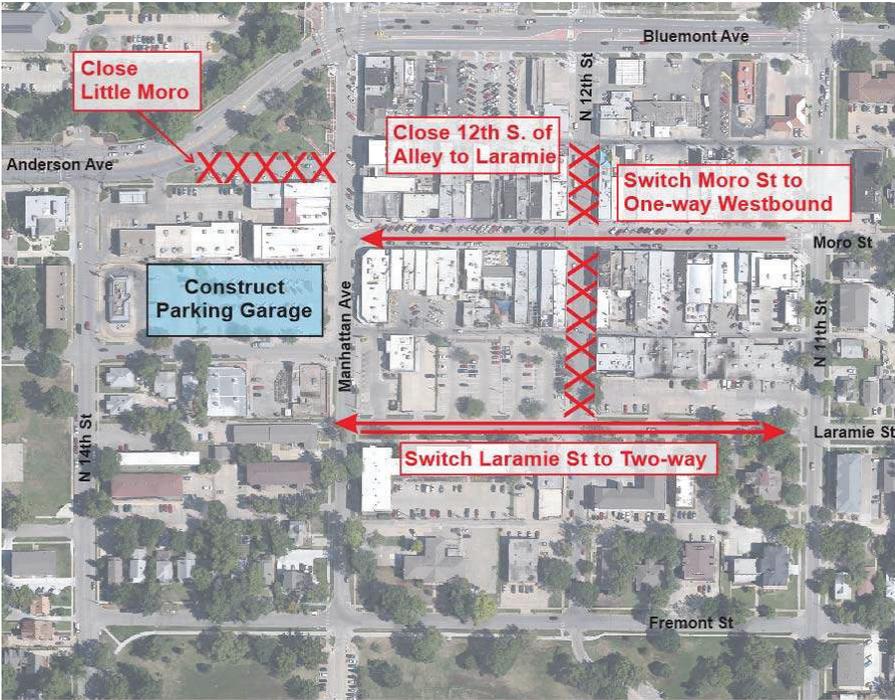
- Provide three lanes on the northbound approach of Manhattan Avenue at Bluemont Avenue (left, through and right) and a single northbound lane

Figure 8 2040 Base Build Traffic Volumes with Redevelopment



Scenario 4: This scenario would include the Base Scenario changes plus closing Moro Street completely between Manhattan Avenue and 11th Street. Closing Moro to vehicular traffic would allow for opportunities to convert the corridor to a pedestrian promenade or other similar use. A closure would force the vehicular traffic to other nearby routes like Bluemont Avenue and Laramie Street. Figure 11 includes a rough sketch of the changes considered for Scenario 4.

Figure 9 Scenario 2 (Base plus Flip Moro, Close 12th and Two-way Laramie



The assumed geometric modifications (compared to existing) used as the basis for analysis in this scenario are as follows:

- Maintain northbound and southbound through traffic on Manhattan Avenue, 12th Street and 11th Street, with a stop sign westbound on Moro Street at 11th Street
- Convert Laramie to two-way traffic by adding an eastbound through lane from Manhattan Avenue to 11st Street
- On Laramie Street, add a westbound left-turn lane at Manhattan Avenue and an eastbound left-turn lane at 11th Street
- On Laramie Street at 12th Street, change from westbound stop control to two-way stop control north/south
- At Laramie Street and 11th Street, add stop control for eastbound traffic and leave westbound stop control in place

Figure 10 Scenario 3 (Base plus Convert Manhattan Avenue to Two-way North of Moro Street

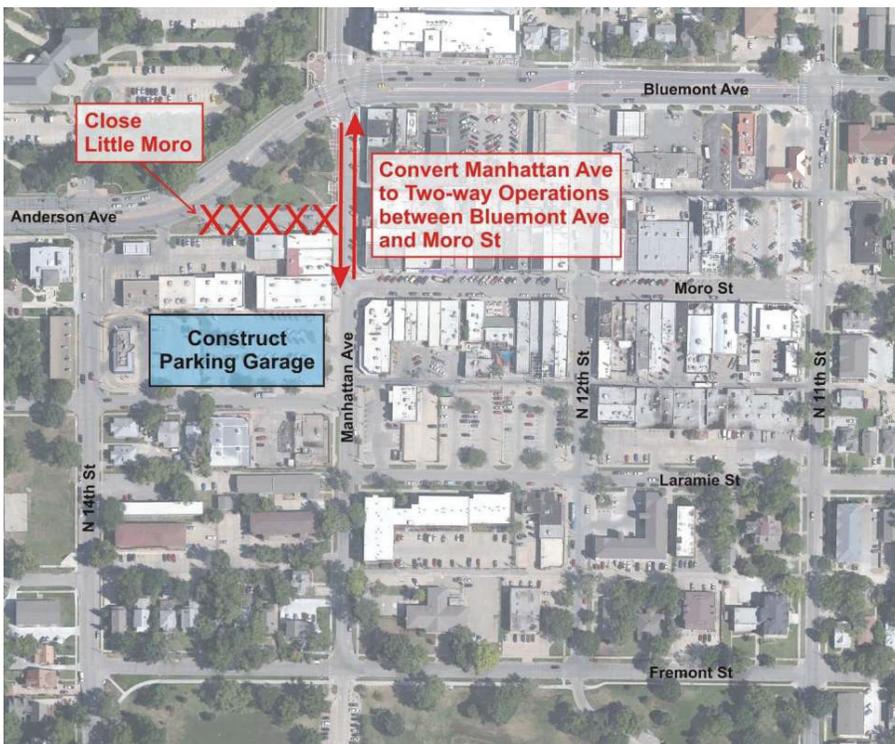


Table 3 summarizes traffic operations for the 2040 Build Conditions scenarios. The results indicate most intersections are expected to operate within desirable goals (LOS D or better), except for:

- The delays at 11th Street and Moro Street will need remediation under Scenario 1 (Base) and Scenario 3 (Two-way Manhattan), just like under the No-Build Conditions.

Figure 11 Scenario 4 (Base Plus Moro Street Full Closure)



- Both Scenario 2 (Flip Moro, Close 12th, and Two-way Laramie) and Scenario 4 (Moro Full Closure) are expected to result in the need for remediation at the intersection of 11th Street and Laramie Street.
- Under Scenario 4 (Moro Full Closure) the Intersection of Laramie Street and 12th Street operates moderately above the LOS E delay threshold under the two way stop control condition that was assumed in the analysis. A four-way stop may be needed.

Table 3 2040 Build Conditions Analysis Results

Location	Scenario 1 Base				Scenario 2 Flip Moro, Close 12th				Scenario 3 Two-way Manhattan				Scenario 4 Moro Full Closure			
	M.D. Peak		P.M. Peak		M.D. Peak		P.M. Peak		M.D. Peak		P.M. Peak		M.D. Peak		P.M. Peak	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
1. Anderson Avenue @ 14th Street (Signal)	35.2	D	36.6	D	26.6	C	31.9	C	18.3	B	35.4	D	32.1	C	36.6	D
2. Anderson Avenue @ Manhattan Avenue (Signal)	18.1	B	19.1	B	17.8	B	18.6	B	22.5	C	32.8	C	18.1	B	19.1	B
3. Bluemont Avenue @ 12th Street (TWSC) ¹	13.0	B	17.9	C	12.3	B	14.4	B	12.6	B	16.7	C	13.0	B	17.9	C
4. Bluemont Avenue @ 11th Street (Signal)	14.9	B	23.4	C	15.4	B	28.9	C	20.9	C	46.2	D	14.9	B	30.5	C
6. Moro Street @ 12th Street (AWSC)	10.6	B	11.6	B	8.6	A	8.7	A	9.7	A	10.9	B	NA	NA	NA	NA
7. Moro Street @ 11th Street (TWSC) ¹	54.8	F	>200	F	20.2	C	28.2	D	37.4	E	180.6	F	16.6	C	17.3	C
8. Laramie Street @ Manhattan Avenue (N) (TWSC) ¹	19.4	C	27.0	D	19.5	C	27.2	D	19.4	C	27.0	D	16.4	C	24.3	C
85. Laramie Street @ Manhattan Avenue (S) (TWSC) ¹	11.0	B	12.1	B	11.8	B	14.6	B	11.0	B	12.1	B	16.7	C	23.9	C
9. Laramie Street @ 12th Street (TWSC) ¹	14.6	B	14.6	B	11.3	B	11.3	B	12.2	B	12.2	B	46.5	E	40.5	E
10. Laramie Street @ 11th Street (TWSC) ¹	16.4	C	33.1	D	35.8	E	55.1	F	15.3	C	29.0	D	189.9	F	>200	F
12. Fremont Street @ Manhattan Avenue (TWSC) ¹	18.2	C	21.9	C	18.4	C	21.0	C	18.2	C	21.9	C	18.2	C	21.9	C
13. Fremont Street @ 12th Street (TWSC) ¹	12.8	B	14.1	B	14.8	B	17.5	C	9.9	A	13.0	B	12.8	B	14.1	B
14. Fremont Street @ 11th Street (Signal)	10.2	B	9.7	A	10.4	B	9.7	A	10.2	B	9.7	A	10.2	B	9.7	A

1. For TWSC intersections, the worst movement results are shown.
 2. Intersection 5 cannot be analyzed using HCM methodology.

Conclusion

Below are the improvements identified for each of the study scenarios to accomplish the street modifications and mitigate the undesirable delays shown in **Table 3**.

All Scenarios:

- Install a southbound left-turn on 14th Street and Laramie Street with a minimum length of 150 feet plus taper.
- Widen Laramie Street to provide an eastbound left-turn lane at the proposed garage entrance with minimum length of 150 feet plus taper, but ideally a center two-way left-turn lane (TWLTL) could be provided from 14th Street to Manhattan Avenue.

Scenario 1: If no changes are made to the street configurations within Aggieville, the intersection of 11th Street and Moro Street is expected to have undesirable delays without mitigation by the design horizon year of 2040.

- Install a traffic signal at the intersection of 11th Street and Moro Street when warranted

Scenario 2: Flipping Moro Street from one-way eastbound to one-way westbound, closing 12th Street between the alley south of Bluemont Avenue and Laramie Street, and opening Laramie to two-way traffic between Manhattan Street and 11th Street is expected to provide traffic operations within desirable goals, considering the following improvements in addition to those listed above under All Scenarios.

- Close 12th Street between the alley just south of Bluemont Avenue to Laramie Street

- Provide a single westbound through lane and remove all eastbound lanes on Moro Street between 11th Street and Manhattan Avenue
- Switch stop control from southbound Manhattan Avenue to westbound Moro Street
- Provide two-way traffic on Laramie Street between 11th Street and Manhattan Avenue, with a single through lane each direction
- Add an eastbound left-turn lane with minimum length of 150 feet plus taper on Laramie Street at 11th Street
- Install a traffic signal at the intersection of 11th Street and Laramie Street when warranted

Scenario 3: Converting Manhattan Avenue from one-way southbound to two-way traffic north of Moro Street is expected to provide traffic operations within desirable goals, considering the following improvements in addition to those listed above under All Scenarios.

- Provide three lanes on the northbound approach of Manhattan Avenue at Bluemont Avenue (left, through and right) and a single northbound lane
- Install a traffic signal at the intersection of 11th Street and Moro Street when warranted

This scenario would result in fairly significant impacts to the parking and properties south of Bluemont Avenue in order to accommodate the additional lanes required to make the signal function adequately. It would likely increase the cycle lengths needed for not only the Bluemont Avenue and Manhattan Avenue intersection, but also the other adjacent signals along

the Bluemont Avenue corridor. Increasing cycle lengths at traffic signals tends to increase delays.

Scenario 4: Completely closing Moro Street between Manhattan Avenue and 11th Street is expected to provide traffic operations within desirable goals, considering the following improvements in addition to those listed above under All Scenarios.

- Maintain northbound and southbound through traffic on Manhattan Avenue, 12th Street and 11th Street, with a stop sign westbound on Moro Street at 11th Street
- Convert Laramie to two-way traffic by adding an eastbound through lane from Manhattan Avenue to 11st Street
- On Laramie Street, add a westbound left-turn lane at Manhattan Avenue and an eastbound left-turn lane at 11th Street
- At Laramie Street and 11th Street, add stop control for eastbound traffic and leave westbound stop control in place
- Install a traffic signal at the intersection of Manhattan Avenue and Laramie Street when warranted
- Install a four-way stop at the intersection of Laramie Street and 12th Street

Although the intersections could operate within desirable goals, streets like Laramie Street, Manhattan Avenue, and 11th Street may feel more congested under this configuration with most of the east/west traffic now being concentrated along one street (Laramie Street) instead of two (Laramie Street and Moro Street).



Opinion of Probable Cost

Opinion of Probable Cost

Approximate costs have been generated for all aspects of this conceptual plan, including the parking garage options, pavement and roads, and utilities. These are estimates only that have been developed using quantities from the conceptual plan. Unit costs have been approximated from historical construction cost data for similar projects within the area. Costs can vary substantially depending on final design, contractor workloads, and changes in material prices at the time of construction. The Opinion of Probable Cost table puts together all of the individual components of the plan to provide an approximate overall cost to implement this plan in full.

Parking Garage

Parking Garage	\$9,584,000 - \$12,660,000
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Electrical and Public Wi-Fi

Westar and Public Wi-Fi	\$3,500,000 - \$4,000,000
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Roads, Utilities, Streetscapes, and Amenities

City Utilities and Street	\$3,800,000 - \$4,500,000
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Street Type 1A	\$2,100,000 - \$3,000,000
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Street Type 1B	\$1,900,000 - \$2,450,000
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Street Type 2	\$1,700,000 - \$2,200,000
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Street Type 3	\$1,500,000 - \$1,850,000
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Street Type 4	\$300,000 - \$400,000
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Pedestrian Mall	\$900,000 - \$1,150,000
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Monumentation	\$200,000 - \$350,000
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Subtotal Option 1A	\$10,500,000 - \$13,450,000
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Subtotal Option 1B	\$10,300,000 - \$12,900,000
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Summary of Costs

Parking Garage	\$9,584,000 - \$12,660,000
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Electrical and Public Wi-Fi	\$3,500,000 - \$4,000,000
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Roads, Utilities, Streetscapes, and Amenities	Option 1A: \$10,500,000 - \$13,450,000 Option 1b: \$10,300,000 - \$12,900,000
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All In Project Total	Option 1A: \$23,584,000 - \$30,050,000 Option 1B: \$23,384,000 - \$29,560,000
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Final Thoughts

As described, stakeholders and members of the public shared several potential solutions, as seen in the green dot exercise results. Although most of the downtown businesses and large groups outside of Aggieville participated over the three days, all community members were welcome throughout the process and shared thoughts and ideas that developed the concepts presented. Those that could not attend had their voices expressed after the charrette process was over.

The conclusion is thus based on the design charrette process and costs determined in the aforementioned public, open door process. The design team has continued to work with the Aggieville community to develop a conceptual plan that is consensus-built. The concept will be presented at an upcoming City Commission meeting. Options presented during the design charrette included streetscape enhancements, inviting green spaces, lighting options, and mixed uses.

As previously stated, the design charrette brought forth three preliminary conclusions for the Aggieville district, including:

- **North 12th Street:** Permanent closure of three blocks of North 12th Street from Fremont Street to the alley south of Bluemont Avenue, creating a full pedestrian mall.
- **Moro Street:** One-way traffic with parallel parking on one side.
- **Triangle Park:** Remove Little Moro Street and improve the park's amenities, activity drivers, hardscapes, and landscape.

The refined master design concepts also contain a list of “givens,” including the following:

- Parking garage at Laramie Street and North Manhattan Avenue.
- Laramie Street, from North 11th Street to North Manhattan Avenue, is two lanes with parallel parking.
- Laramie Street, from North Manhattan Avenue to North 14th Street, is three lanes with a center turn lane.

This process concluded with an overall district concept that was drawn by combining features of the three district plans presented earlier in the document. The concept that was used to obtain the opinion of probable cost is based on Option 1, but uses the Triangle Park concept from Option 2.

The options presented in the Plan Refinement section are just that, options. These are conceptual drawings that are not considered final and can be modified as different needs arise or opinions change. The goal of this document is provide the Aggieville district with an idea of how its future could be shaped to achieve the goal of being a pedestrian-oriented district bustling with people, shops, restaurants, bars, and entertainment.

What ultimately gets adopted by the City Commission may not resemble these concepts, or perhaps it will be exactly what you see here. Conceptual plans are inherently flexible and this document simply serves as a starting point for the Aggieville vision to become a reality.

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VISION TO REALITY

Master Plan