**LOVELAND PLANNING COMMISSION**
**SPECIAL MEETING**
**AGENDA**
**Monday, December 16, 2019**
**500 E. 3rd Street – Council Chambers**
**Loveland, CO 80537**
**6:30 PM**

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**LOVELAND PLANNING COMMISSIONERS: Patrick McFall (Chair), Michael Bears, Jeff Fleischer, Milo Hovland, Susan Peterson, Deborah Tygesen, Jerico Devlin, Paul Eckman, and Yaron Weinberg.**

## CALL TO ORDER

## I. PLEDGE OF ALLEGIANCE

## II. REPORTS:

### A. Citizen Comments

This is the opportunity for citizens to address the Commission on matters not on the published agenda.

### B. Current Planning Updates

#### 1. Monday, January 13, 2019 Meeting Agenda Preview

- **No items currently scheduled**

### C. City Attorney's Office Updates

### D. Committee Reports

### E. Commission Comments

## III. APPROVAL OF MINUTES

**Review and approval of the December 9, 2019 meeting minutes**

## IV. REGULAR AGENDA

### 1. East Loveland Industrial 23rd – Conditional Use Public Hearing
**Presented by staff planner Troy Bliss**

This is a request for Conditional Use approval to allow a Heavy Logistics Center to be developed on an industrially-zoned, vacant 14-acre site located in the East Loveland Industrial Addition. The site fronts on and is accessed from Byrd Drive, north of Crossroads Boulevard. The site is directly north of the Thunder Mountain Harley Davidson Dealership. The east side of the site is adjacent to I-25. The applicant is proposing to develop two similarly-sized industrial flex buildings totaling nearly 200,000 square feet at this location.

A heavy logistics use is defined as a use that generates more than 12 semi-trucks trips on a daily basis. As a conditional use in the I-Developing Industrial zone, a heavy logistics center requires Planning Commission approval following a public hearing. While the applicant is unsure of the tenant mix at this early juncture, approval of the Conditional Use is being pursued to provide greater use flexibility; consequently, the buildings and site are designed to accommodate heavy truck traffic, including numerous loading docks and related site facilities.

The Planning Commission has final authority on this request barring an appeal. City Development Review staff believe that the location is appropriate for a Heavy Logistics Center and has determined that all required criteria have been met. Approval is recommended with the conditions specified in the staff report.

### 2. Connect Loveland – Update
**Presented by Dave Klockeman & Katie Guthrie, Public Works Department**

Connect Loveland is the name of the City's updated Transportation, Transit and Bicycle & Pedestrian Plan. The plan is designed to integrate these three primary transportation systems, providing stronger linkages and establishing a long term vision that anticipates changes in technology and consumer needs. Connect Loveland is a component of the City's Comprehensive Plan, Create Loveland. As such, it takes a broad, encompassing and long-term look at a complex and important community topic. Ultimately, it is designed to provide information and policy guidance to City decision makers.

The Plan was initiated in early 2019 and is expected to be completed in the spring of 2020. The December16th Planning Commission presentation will summarize the planning effort to date and review primary components of the plan. The project team will highlight emerging transportation trends and identify goals for the multi-modal transportation network. As an informational item, the Commission is encouraged to ask questions and make comments on the progress to date. Once a final draft is completed, the project team will schedule a public hearing with the Commission. Ultimately, Connect Loveland will be brought forward to the City Council for adoption.

## V. ADJOURNMENT

# SUPPLEMENTARY INFORMATION

## Public Hearing Procedures

**The purpose of a public hearing is for the Planning Commission (PC as used below) to obtain full information as to the matter under consideration. This includes giving all interested parties the opportunity to speak (provide testimony) at the hearing. The public hearing is a formal process. Below is the typical hearing sequence followed by the Planning Commission.** ***Annotations have been provided for clarity.***

1. **Agenda item is recognized by the Chair**
2. **Public hearing is opened***
3. **Staff presentation**
   *(May include clarifying questions to staff from Commissioners)*
4. **Applicant presentation**
   *(May include clarifying questions to applicant from Commissioners)*
5. **Public comment**
   *(All public comment should be made from the center podium upon direction from the Chair. Citizens should provide their name and mailing address in writing at the podium, and introduce themselves. The PC may ask clarifying questions of the citizens. At a public hearing, the PC does not respond to questions from citizens; questions directed to the applicant or staff should be requested through the Chair.)*
6. **Applicant response**
   *(The Chair typically requests that applicants respond to comments and questions raised during public comment)*
7. **PC questions to staff, the applicant and possibly to citizens who presented**
   *(Commissioners may use this step in the process to gain a more detailed understanding of relevant information)*
8. **Close public hearing**
   *(Unless specifically permitted by the Chair, further testimony is not allowed after the public hearing is closed)*
9. **Motion**
   *(Motions are made by a PC member with possible conditions)*
10. **Motion is seconded**
    *(A 2nd is required before the motion can be considered; a motion that fails to obtain a second dies)*
11. **PC discussion**
    *(The PC discusses the application and whether it satisfies the required criteria as found in adopted City policies and ordinances)*
12. **PC Chair requests that the applicant agrees to any conditions prior to a vote**
    *(When preparing to vote on a motion for approval, the PC Chair will ask if the applicant is willing to accept the proposed conditions, if any. If the applicant does not accept the conditions as proposed, the PC may deny the application)*
13. **Vote**
    (*The decisions of the PC must address relevant findings of fact. These findings respond to criteria specified in adopted plans and codes, and serve to guide zoning, annexation and other land use decisions. Relevant criteria and findings are itemized in the Staff Report and referred to in the recommended motion.)*

*** Note that the Planning Commission may place time limits on presenters. All presenters, including the applicant, staff and citizens, should communicate clearly and concisely, refraining from duplicating detailed information that has been provided by others.**

# CITY OF LOVELAND
# PLANNING COMMISSION MINUTES
# December 9, 2019

A meeting of the City of Loveland Planning Commission was held in the City Council Chambers on December 9, 2019 at 6:30 p.m. Members present: Chairman McFall; and Commissioners Bears, Fleischer, Hovland, Peterson, Tygesen, Devlin, Eckman, and Weinberg. Members absent: None. City Staff present: Robert Paulsen, Current Planning; Laurie Stirman, Assistant City Attorney; Lisa Rye, Planning Commission Secretary.

*These minutes are a general summary of the meeting. A complete video recording of the meeting is available for two years on the City's web site as follows:* https://loveland.viebit.com/

## CITIZEN REPORTS

There were no citizen reports.

## CURRENT PLANNING UPDATES

1. **Robert Paulsen, Current Planning Manager,** announced that the City Council has reappointed Commissioners Michael Bears and Rico Devlin to the Planning Commission. Mr. Paulsen also introduced new Planning Commissioners Yaron Weinberg and Paul Eckman. Commissioner Weinberg stated that he has been in the United States for over ten years and has a local business in Loveland. He has been interested in joining the Planning Commission for quite some time. He has been very involved in local elections and is happy to be serving on the Planning Commission. Commissioner Eckman introduced himself as a lawyer who practiced law with the Fort Collins City Attorney's office from 1980 – 2015 mostly dealing with land use, as well as planning and zoning matters, and is hoping to be of service to the Commission. Mr. Paulsen added that he is excited to have a full commission as there have been vacant seats for several months.

2. **Mr. Paulsen** introduced Savanah Benedick-Welch as a new Strategic Planner for the City of Loveland. Savanah stated that she previously worked for Larimer County for 6 years as a Land Use Planner, and previously for small community in Kansas. Her experience has given her a diverse background in planning and she added that she is excited to be working for the City of Loveland.

3. **Mr. Paulsen** shared that there will be a Planning Commission special meeting next Monday, December 16th at 6:30 p.m. The public hearing for the East Loveland Industrial 23rd Subdivision Rezone, previously scheduled for November 25th was canceled due to weather, will be presented to the Commission at that meeting. Dave Klockeman of the City's Public Works Department will also provide a Connect Loveland update, which is the transportation component of the City's comprehensive plan. Mr. Paulsen added that the new

Commissioner's orientation session will be after the first of the year as he will be on vacation during the latter portion of December.

4. **Mr. Paulsen** stated that the Planning Commission Appreciation Dinner was held prior to the meeting tonight. He thanked Commissioners for their service this year and wished them all a Happy Holiday season.

## CITY ATTORNEY'S OFFICE UPDATE

**Laurie Stirman, Assistant City Attorney,** noted there is nothing to report.

## COMMITTEE REPORTS

There were no committee reports.

## COMMISSIONER COMMENTS

**Commissioner McFall** welcomed Commissioners Eckman and Weinberg and stated that they will both bring great knowledge to the Planning Commission and the citizens of Loveland will benefit.

## APPROVAL OF THE MINUTES

***Commissioner Bears** made a motion to approve the **October 28, 2019** minutes; upon a second from **Commissioner Fleisher**, the minutes were approved unanimously.*

## CONSENT AGENDA

### 1. Grace Church - Public Hearing – Rezoning

This is a request to rezone a 0.3-acre property in southeast Loveland from R3 – High Density Residential District to MAC – Mixed Use Activity Center. The subject property is a portion of Tract D of the Hendrick's first Addition and is located near the intersection of 19th Street and S. Cleveland Avenue. A rezoning request requires a public hearing by the Planning Commission followed by a recommendation that is forwarded to the City Council for final action.

The subject property has been purchased from the Derby Hill Baptist Church, by the Loveland Housing Authority, in order to facilitate development of an affordable housing project. Incorporation of the 0.3-acre property into the larger development site helps to overcome site design challenges associated with grade changes. The purpose of the zone change request is to

establish a consistent zoning on the Housing Authority's property and facilitate a development project consisting of single and multi-family homes.

Based on applicable City policies and code provisions, the Commission's role is to conduct a public hearing and determine if the requested zoning is compatible with surrounding zoning and development, and consistent with applicable policies of the Comprehensive Plan (Create Loveland). Staff supports the requested zone change.

**Commissioner Devlin** announced to the Commission that he helped facilitate the acquisition of this land by Loveland Housing Authority (LHA). He does not have any further financial interest in this project. LHA is an ongoing client of his, but he stated that he believes he can vote and take part in the Commission's discussion without bias. He added that he is willing to abstain if needed.

**Laurie Stirman, Assistant City Attorney,** stated that if there are any concerns, she would welcome anyone to raise those; otherwise, the Commission may move forward on the consent item.

**Commissioner McFall** asked if there were any public, staff, or commissioner requests to remove this item from the consent agenda. There were no responses.

***Commissioner Bears** moved to approve the Consent Agenda consisting of Grace Church Rezoning. **Commissioner Hovland** seconded the motion and it was unanimously approved.*

**2. Regular Agenda South East Elementary School**

**Project Description:** The Poudre School District (PSD) is proposing to develop a new elementary school on a 15-acre site in northeast Loveland. The site is located near the intersection of Fairgrounds Avenue and County Road 30. The school will serve the southeast portion of their district. State Statutes require that new school facilities undergo a location and extent review with the local planning commission.

The first portion of the location and extent process occurred in June of 2016 when PSD first acquired the property and provided a presentation to the Planning Commission. The Commission raised no objections to the site location. Now, a site plan has been prepared and PSD will entertain comments from the Planning Commission regarding the development plans. While the Commission has no direct authority over the design of the project, the Commission may request a meeting with PSD School Board if concerns are identified. Staff has been reviewing the school plans and has not identified any issues of concern.

**Kerri Burchett, Principal Planner,** provided for the Commission a presentation, which gave an overview of the project, as well as the purpose of location and extent review. **Ms. Burchett** stated that PSD purchased 15 acres of property for a new elementary school as the school district was experiencing tremendous growth from Timnath and Windsor. A map of the PSD boundary was shown, which includes a portion of property within Northeast Loveland. **Ms. Burchet**t

stated that construction of the school was to be funded by bonds approved in 2018, and legal proceedings delayed project at the time. The district is now ready to move forward with a Site Development Plan, which is currently being reviewed by the City, with a focus on infrastructure plans.

**Brendan Willits, PSD Planning Manager,** provided a timeline for the Commission which includes the hiring of a principal, the creation of a school naming committee, with the start of construction scheduled for 2020. He added that the school is tentatively scheduled to open in the fall of 2021. The school building is approximately 75,000 square feet. It will be built for Pre-K through 5th Grade with a maximum capacity of 600 students. Mr. Willits shared that the architect selected for the project is Hord, Coplan, and Macht.

**Mr. Willits** presented the Site plan, and stated that the school has been located away from high volume roads. The school will be surrounded by apartments to the north, and condominiums to the south of the site. The staff parking lot and bus loop is located on the west side of the site. He shared that there is a separate preschool entrance on the south side. The east side of the site has a dual stacking lane and approximately 100 visitor parking spots. A fly-through presentation of the school was shown and featured a patio off the cafeteria with garage doors that open, a nature area, a separate fenced area for Pre-K, many breakout rooms, and larger classrooms with the potential to hold 50 children. Modular furniture with many whiteboards were featured throughout the building, as well as a gym and cafeteria separated by a wall that opens and closes.

**COMMISSIONER QUESTIONS:**

- **Commissioner Fleischer** asked for more information about the anticipated parking for the sports field and if it will be integrated into the normal parking. **Mr. Willets** stated that it will be integrated into the parking, as there will not be any access along the north area of the site for security reasons. **Commissioner Fleischer** also asked why the primary access is not aligned with the traffic circle on the north side. **Ms. Burchett** stated that the future plan will allow for the southern road to become a primary thoroughfare, so it was more appropriate location for the main access.

- **Commissioner Devlin** asked how only 100 total parking spots will be adequate for 400-600 students with families needing parking for sports fields and assemblies. **Mr. Willets** answered that that the sports fields are not full size stadiums, so the larger sporting events are not usually at elementary schools. Instead, the events would be for T-ball teams or flag-football teams, which typically would bring only a dozen cars at a time. He added that for day-to-day operation, they have done their best to add as many spaces as possible. Other schools were researched and parking is on par with most recent Thompson and Poudre elementary schools. **Commissioner Devlin** added that he did not see a signalized intersection on Fairgrounds Avenue and it seems with high-density housing and the school could be the site of numerous accidents with all the traffic. **Mr. Willets** answered that a Traffic Impact Study was performed. He stated that the traffic situation may not be ideal in the short term, but the road to the west will eventually connect the north and south streets to Country Road 30 to the north. Mr. Willets

explained that the school district has had years of discussions with traffic engineers. The School district does not decide signalization, the City does. Collaborative efforts between school district and the City to mitigate potential problems. **Ms. Burchett** added that the school is part of a master planning effort. The transportation study came in for the apartments, condominiums, and the school and was analyzed as one project. The transportation trips did comply with city standards. No variance was needed for the intersection or the peak hour trips. She assured the Commission that it has been reviewed and many meetings were held. The City worked very closely with the district to buffer the school from the arterial area. Pedestrian lights and fencing will provide safety. The intersection will be busy, but the future plans will bring relief.

- **Commissioner McFall** asked what the timing will be on installing the new light on Fairgrounds Road. Ms. Burchett clarified that there will be a pedestrian light installed with the project at Fairgrounds and Hwy. 30.

- **Commissioner Eckman** stated that he is pleased with the parking, as there is no parking around Lopez Elementary School, so cars are forced to park in the neighborhood. He added that cars will not be able to park in the condo area due to congestion and predicts that there will be some spillover into the north streets. **Ms. Burchett** added that the condominiums do have limited guest parking, and there is on-street parking along Travers Stakes Drive and American Oaks Street. **Commissioner Eckman** asked if Thompson School District students can attend Poudre Schools. **Mr. Willets** stated that 1200 – 1400 students come into Poudre Schools from other districts. Policy dictates how this happens but bussing would not be provided; however, as long as space is available, students are allowed to enroll across boundary lines.

- **Commissioner Weinberg** asked what the distance is to the closest fire and police stations. **Ms. Burchett** answered that the school is not located within the typical 5 minute response from the City's nearest fire station, and is actually 6 minutes. There is an agreement with the Windsor/Severance Fire District, which has a station located within the required response time, and they would respond first. The Loveland Police would be dispatched if needed. **Commissioner Weinberg** asked about public outreach efforts to get more opinions on the school. **Ms. Burchett** answered that there will not be anymore neighborhood meeting; however, there are activities and committees which can facilitate participation in the school. Lastly, **Commissioner Weinberg** asked if demographic analysis is done in the school area. **Mr. Willets** stated that it is not done for new schools as they serve a geographic region in need of an educational facility. **Ms. Burchett** added when planning was done for the proposed residential development, the school was a part of those neighborhood meetings, so there was larger outreach for the residential and school project, and the main concern at these meetings was their views rather than for the school itself ; however, traffic was also discussed.

- **Commissioner Hovland** stated that with Fairgrounds Avenue being a main artery, and only one entrance into the property, his main concern is for this becoming a bottleneck

for traffic. He asked if there is a possibility of restricting traffic turning north. **Ms. Burchett** stated that there is not a turning restriction; however, there is an access point off American Oak Street open during peak times, it is just difficult to see on the site plan. **Mr. Hovland** stated that he would like to relay to the City that the entrance to the school site is of concern to him.

- **Commissioner McFall** stated that the traffic coming onto Fairgrounds Avenue travels at a high rate of speed and it concerns him to see the pedestrian only walkway; however, he believes that most of the heavier traffic is in the evening. As there were no further questions, he indicated that the Commission would move to the next agenda item. He indicated appreciation for the presentation and thanked the Commission for the questions that were raised.

### 3. Ranch Acres First Addition Rezoning - Public Hearing

**Project Description:** This is an application to rezone properties within the Ranch Acres First Addition from Planned Unit Development (PUD) zoning to B – Developing Business District. A rezoning request requires a public hearing by the Planning Commission followed by a recommendation that is forwarded to the City Council for final action.

The subject property includes two vacant tracts of land (Tracts DD and EE) comprising 6 acres of developable area along with associated street rights-of-way. The property is located along the west side of North Garfield Avenue to the south of 57th Street and to the immediate north of Ranch Acres Drive. The property was annexed and zoned PUD in 2007 through a serial annexation process that included five associated additions. The PUD process was never fully completed and the PUD has expired and affords no development rights.

The current owner, JF Capital, is requesting Developing Business District zoning which allows a variety of commercial, office and multifamily uses. Based on applicable City policies and code provisions, the Commission's role is to conduct a public hearing and determine if the requested zoning is compatible with surrounding zoning and development, and consistent with applicable policies of the Comprehensive Plan (Create Loveland) and the Highway 287 Strategic Plan. Staff supports the requested zone change.

**Troy Bliss, Senior Planner,** described the site location which sits roughly on the west side of Highway 287 to the south of W. 57th Street. It is surrounded by Lauden Ditch to the north; Highway 287 is located to the east with Caliber Collision, Tractor Supply, and Christian Brothers Automotive located directly across the highway. To the south and west of the subject property is a subdivision within Larimer County jurisdiction composed of detached homes.

**Mr. Bliss** presented the preliminary development plan, which established zoning requirements for the Ranch Acres Addition, which was envisioned to be a large commercial center with a variety of office buildings and retail pads for potential restaurants and a bank. The development plan didn't go through the process of getting the document vested and entitled, so there are no land-use entitlements associated with this plan. **Mr. Bliss** stated that the property went through a

serial annexation process since it was not contiguous to city limits. The property is made up of approximately 6 acres, with an additional 9.2 acres of right-of-way.

**Mr. Bliss** stated that a neighborhood meeting was held on October 2, 2019. Neighbors in attendance were from the residential subdivisions to the south and west. Concerns were with the potential for increased traffic in neighborhood since there is no signalized intersection that will allow traffic to enter and exit directly onto Highway 287 from the site. Neighbors shared concerns of the possibility of new traffic cutting through their neighborhood. They also shared concerns regarding building height and preservation of open space. **Mr. Bliss** added that no new correspondence has been received since the neighborhood meeting.

**Mr. Bliss** shared that the zoning being proposed provides opportunity for a variety of uses; however, the current interest of the owner is to develop the site as a senior multi-family facility, which the B-zoning allows. The concept plan was prepared to present the vision of the property, but many further components will need to be evaluated once the rezoning occurs, including a review of building massing, building height, parking, and street requirements.

**Mr. Bliss** indicated that the rezoning request is consistent with policies of the City's Comprehensive Plan and with the Highway 287 Plan. He specifically indicated that the City's Highway 287 Corridor Plan supports the establishment of multi-family uses in the commercial corridors as it provides transitional use and supports commercial uses in the area. **Mr. Bliss** compared the existing PUD zone standards with the proposed B – Developing Business zone, and shared that the PUD is out of date with respect to the Unified Development Code requirements, such as minimum lot square footage, maximum building coverage and minimum building setbacks that are not defined in the PUD, but are in the proposed zoning.

Finally, **Mr. Bliss** stated that City staff is recommending approval of the rezoning. Any motion or action that the Commission takes this evening would be in the form of a recommendation to the City Council, who will decide whether to approve the rezoning request.

## COMMISSIONER QUESTIONS:

- **Commissioner Eckman** asked what type of uses would be allowed in the B-developing business zone since the residential project may or may not happen. **Mr. Bliss** answered that there would be numerous uses allowed by right including retail, standard restaurant, office use, and even light industry, in addition to the multi-family opportunities. **Mr. Paulsen** added that since Commissioner Eckman is familiar with Fort Collins code, which has much more numerous and distinct zoning categories, most of Loveland's zoning districts are intentionally broader. The "B" zone is meant to be utilized most typically along the major commercial corridors.

- **Commissioner Peterson** asked that if the current zoning allows for multi-family, why rezoning is needed. **Mr. Bliss** clarified that there are no land-use entitlements associated

with the existing PUD zoning as the use entitlements have expired. When the PUD was adopted, multi-family uses were not allowed.

- **Commissioner Weinberg** asked when the original zoning was approved. **Mr. Bliss** responded that it was at the time the property was annexed in 2007. Under the previous zoning ordinance, the Final Development Plan would have had to have been submitted within a year of the approval, or requested an extension, which did not occur.

- **Commissioner Hovland** stated that he thought the maximum height on multi-family buildings to be 40 feet, but Attachment C to the staff report lists the overall height up to 50 feet. **Mr. Bliss** stated that if it were zoned "B", they would have to fall under the height allowance of 40 feet and would have to ask for a height exception for anything taller.

**Mr. Brock Loomis of JF Capital**, owner and developer of the property, stated that his company researched the Highway 287 Corridor plan in deciding how to develop the land. He clarified that they would consider other uses after the rezoning, and that the "age-targeted" facility is only conceptual at this point. It the project were pursue, it would be marketed to seniors but not restricted to seniors. He added that the neighborhood meeting was held in October, and height and traffic were the biggest concerns raised. A traffic impact study will be submitted to the City once a development project is identified and his company will comply with associated requirements of the City.

- **Commissioner Weinberg** stated that there is no exit from the neighborhood to the west towards Taft Avenue, due to the railroad tracks. He stated that the only traffic residents would be concerned with would be from Highway 287. He asked for confirmation that they would create an entrance and exit to the apartment project. **Mr. Loomis** confirmed that they will propose an entrance and exit via Ranch Acres Drive and will request a limited entrance and exit off Highway 287 from Colorado Department of Transportation.

- **Commissioner Eckman** asked for clarification of street names regarding Grant Street and Granite Street. He also stated that he agrees that traffic would not be likely to drive through Ranch Acres, unless you live there or are visiting, as there is no way out of that neighborhood.

- **Commissioner McFall** stated that the Planning Commission is deciding on the zoning only and asked if the future development plan would come back before the Commission. **Mr. Paulsen** stated that under the requested "B" zoning, a development plan would not come back before the Commission unless an exceptional is proposed. Most uses allowed in the B zoning district are reviewed and approved administratively

- **Commissioner Weinberg** asked if it could become and automotive repair type use. **Mr. Bliss** stated that some automotive uses, for example, would not be a "by right" use, and would require a neighborhood meeting and go through an administrative process instead

of coming before the Commission for approval. In such cases, the project could come before the Planning Commission upon appeal.

**Mr. Paulsen** added with adoption of the Unified Development Code (UDC), staff worked under City Council direction to minimize the number of projects that will go through a public hearing process, affording a more certain outcome for developers. However, development standards were amended to ensure protection to adjacent properties and neighborhoods. Commissioner McFall suggested, with the addition of new Commissioners, a study session be held in the future to better understand the UDC.

**CITIZEN COMMENTS:**

- **Jim Price**, a property owner in the Ranch Acres Subdivision, and caddy-corner to the proposed development, shared that he is concerned that a 4 story apartment building does not belong in a one and two-level housing development. Mr. Price also shared his concerns regarding access into Ranch Acres. He stated that the intersection is a zoo most of the day anymore, and Highway 287 has heavy traffic. Vehicles headed north on 287 that try to make a left turn into Ranch Acres will have to wait long periods since there is no traffic light there, and stated there have been many accidents at that location. In addition, when it snows, the plows make a big pile onto Ranch Acres, which inclines to the west. The snow piles from the past storm caused a hazardous situation, causing traffic to back up since they couldn't get through.

- **George Kackos**, Ranch Acres resident, stated that he supports what Jim Price shared. He stated that Create Loveland calls for building height to be one to two stories, not four stories. He stated that keeping the development with only two stories would keep it consistent with what is going on in the area. From reading the staff report handout, he feels there is a commitment to plan for developments to fit in with what already exists. He read that primary access would be from Ranch Acres Drive as well as the likelihood of a restricted access with future development onto North Garfield Avenue. He shared there is limited access, and with a four story and 180 unit building, there would be too many residents trying to get into that development. He asks for consideration for the height of the building to be consistent with what fits into the natural look of the area. **Commissioner Weinberg** asked if he was aware of the initial planned development in 2007. **Mr. Kackos** answered that he was not.

**Commissioner McFall** stated that he was concerned with a four-story building going into that area. He asked if the expectation is to have northbound traffic entering onto Ranch Acres, and was the intention to only have southbound traffic entering off Ranch Acres onto Highway 287. **Mr. Bliss** responded that it is anticipated that Ranch Acres Drive would likely serve as the primary entrance into the development from north and southbound traffic. There could be some restriping, and there would likely be restricted turning movement along 287, similar to that by Tractor Supply, which is a restricted right-in and right-out, with the ability to make a left out heading northbound. He added that it is hard to respond with certainty, as that type of analysis has not yet been done since an actual project proposal has not been submitted at this time.

**Commissioner Eckman** stated that it is premature to decide the traffic plans now, but it seems the Ranch Acres residents currently have issues getting onto Hwy. 287 through a left turn out of their development. He suggested a circulation system that would cross over the ditch to the other site to the north via some type of bridge, then the residents of Ranch Acres could access 57th directly. **Mr. Bliss** agreed that residents in Ranch Acres would have to drive down to W. 50th Street in order to access the light to go north on Highway 287.

**Commissioner McFall** stated the bigger concern is the compatibility of a four-story building within the area that the majority of buildings are only two story, and if he were a resident, he too would be concerned. **Mr. Bliss** stated that the apartment building is just a concept plan, and wants to instill in the Commission and the neighbors that there is nothing set in stone stating this will be a four-story building or even that an apartment building will be developed on this site. The Create Loveland Plan suggests that the limiting of building heights to one to three stories should be considered, but the zoning needs to be considered as well, and a business zone allows a 40-foot building. **Commissioner McFall** added that compatibility is something the Commission has always been concerned with, but due to changes included in the UDC, it the review process will be in City staff hands. He asked City staff to be good stewards and to consider these concerns. **Mr. Bliss** added that citizens are welcome to come into Development Services and review plans with staff and voice concerns. Staff will be willing to work with the developer to the best of their ability.

- **George Kackos** added that if the "B" rezoning is granted, will they have the opportunity to build to 40-feet. He shared that he wants the standard set that it won't be four stories and it will be limited to two stories.

**Commissioner Weinberg** asked if the original PUD and the proposed zoning are the same with a maximum building height of 40 feet. **Mr. Bliss** confirmed that they are the same.

**Mr. Loomis** stated that he commends the City for the corridor plan since it puts high density housing toward the corridor, where it belongs. The developer wants to be sensitive to the two story residential that is close to the corridor. He shared that it is more aesthetically pleasing to drive down a major corridor to see a building than to see parking, and it also creates a buffer when the parking is put between the building and the residents.

**Commissioner Peterson** shared that access points are a big concern, especially with an increase in the number of people trying to leave at 7:30 in the morning. **Mr. Loomis** agreed that it is a concern and something that needs to be addressed, since it will affect the surrounding neighbors, as well as the tenants that will live in the proposed project. They will be required to do a Traffic Impact Study, and the City Engineer makes the decision of the number of units would be acceptable. **Commissioner Peterson** stated that she does agree with the residents, and once the zoning is approved, it is like a blank check and the residents don't have much say at that point.

**Commissioner Bears** questioned how the developer will get four stories out of a 40 foot building. Mr. Loomis agreed. **Commissioner Bears** said we need to remove our personal

emotions and opinions regarding what the future may hold, as he has seen the City do a tremendous job of looking out for the community.

**Commissioner Devlin** asked what the likelihood of having an access point as a right-in, right-out at the north of the property. **Mr. Bliss** stated that there is a strong likelihood of having at least a restricted, right-in, right-out access point onto Highway 287, which will alleviate some of the traffic on Ranch Acres.

**Commissioner McFall closed the public hearing at 8:45 p.m.**

***Commissioner Bears*** *moved to* m*ake the findings listed in this Staff Report dated December 9, 2019, and based on those findings recommend approval to the City Council for rezoning Ranch Acres First Addition from P-94: Ranch Acres First Addition Planned Unit Development (PUD) to B – Developing Business.*

## COMMISSIONER DISCUSSION:

- **Commissioner Hovland** asked that **Mr. Loomis** take into consideration the comments made by the residents of Ranch Acres as he agrees that a 40-foot building would be tough to look at, and there is an issue of the access in and out of the property.

- **Commissioner Weinberg** stated that he lives close to the area and believes that if it was your house, a 40-foot building in the back of your yard would be atrocious. However, he believes that the developer has the right to do what he needs to do.

- **Commissioner Eckman** stated he is concerned with traffic, and asked that they look close at the reports and that they meet the requirements of the traffic laws. He said the backside of a building can be ugly, but an architect can make it look alright.

- **Commissioner McFall** stated he was concerned with the height. He hopes that the City and the applicant take the opportunity to be good neighbors and give the community something that is compatible with the area.

**The motion was unanimously approved.**

## ADJOURNMENT:

***Commissioner Weinberg*** *made a motion to adjourn the meeting; with a second made by* ***Commissioner Bears,*** *the motion was approved.*

**The meeting was adjourned at 8:55 p.m.**

Approved by:_____

Patrick McFall, Planning Commission Chair

_____

Lisa Rye, Planning Commission Secretary

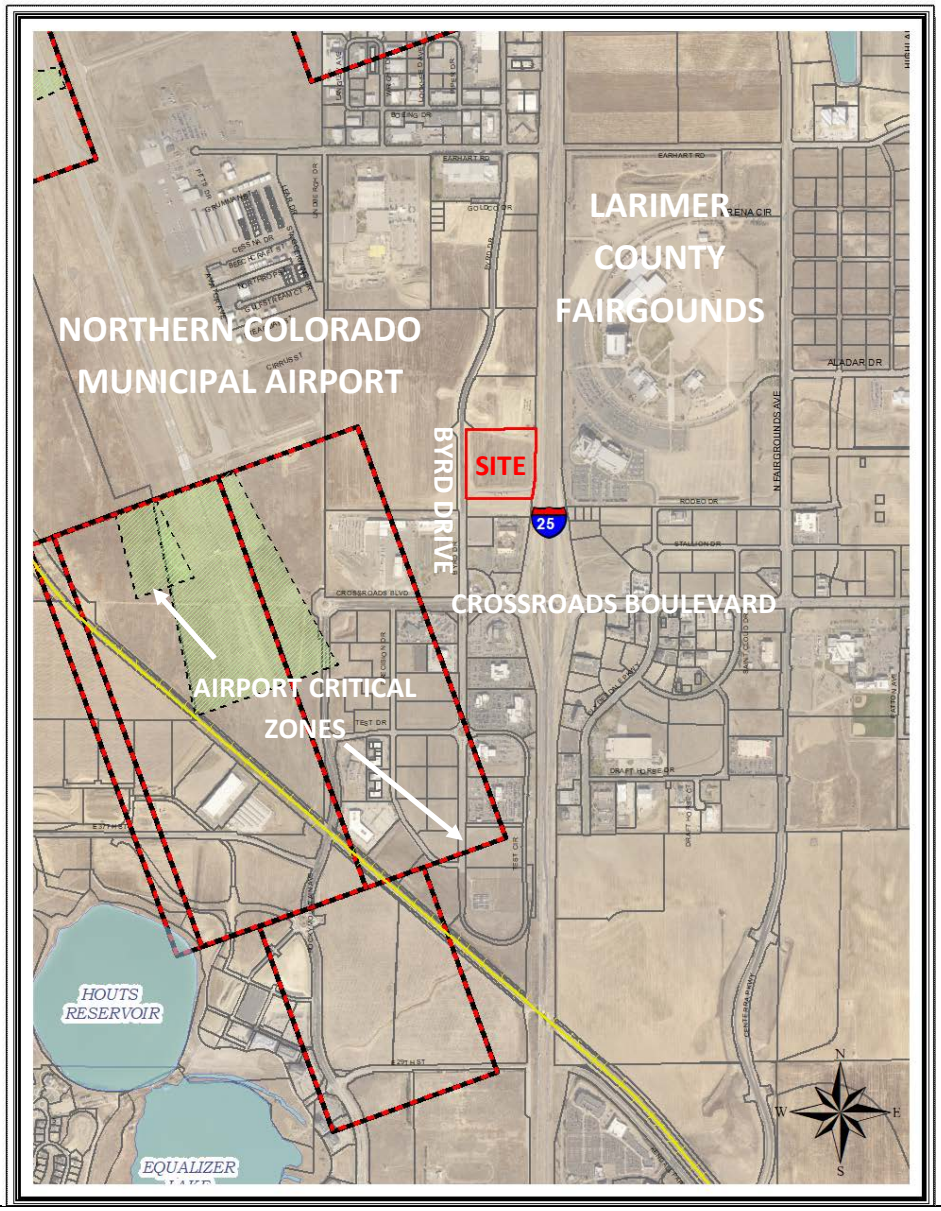
CURRENT PLANNING DIVISION
410 E. 5th Street | Loveland, CO 80537 | 970-962-2523
eplan-planning@cityofloveland.org | cityofloveland.org/DC

# Planning Commission Staff Report

## December 16, 2019

| East Loveland Industrial 23rd Subdivision Conditional Use | | |
|---|---|---|
| **Agenda #**: Regular Agenda 1 | **PZ #19-00169** | **Conditional Use** |
| **Location / Project Summary** | West of I-25 and north of Crossroads Boulevard on the east side of Byrd Drive (vacant add acreage parcel directly north of Thunder Mountain). The property is zoned I-Developing Industrial. The request is for Conditional Use approval to allow a Heavy Logistics Center Use. | |

**VICINITY MAP**



## Development Review Team Recommended Motion

***Recommended Motion(s):***
Move to make the findings listed in this Staff Report dated December 16, 2019, and based on those findings approve the conditional use to allow a heavy logistics center for a portion of Tract B – East Loveland Industrial Addition, subject to the conditions listed under the Staff Recommendation.

| Options | Consequence |
|---|---|
| ***Approve the Motion*** | Approval of the motion would allow the applicant to establish a heavy logistics center and begin operations once all permitting has been issued and tenant finish improvements have been completed. A heavy logistics center is generally either a wholesaling, warehousing, or distribution use expected to generate at least 12 truck trips per day. |
| ***Deny the Motion or take no action*** | Denying the motion would prevent the heavy logistics center at this location. Heavy logistics centers are only allowed through conditional use approval in the I – Developing Industrial and E – Employment zoning districts.<br><br>Taking no action on the motion would cause further delay in the applicant's ability begin construction on the heavy logistics center. |
| ***Adopt a Modified Action*** | As an alternative, additional conditions could be added to the conditional use (based upon the findings) should the Planning Commission identify impacts that were not anticipated by City staff. |
| ***Refer back to Staff*** | If the item was referred back to staff, staff requests specific direction from the Planning Commission would need to be provided in reaching resolution on the requested heavy logistic center. |
| | |

## Project Summary

Purpose
The applicant is proposing the development of two flex industrial buildings (on separate lots), totaling approximately 195,000 square feet in the I – Developing Industrial zoning district. The property is undeveloped fronting along both I-25 and Byrd Drive just north of Crossroads Boulevard. The purpose of the Conditional Use is to allow an unrestricted level of semi-truck trips to occur on the two lots. The only way to accomplish this under the Unified Development Code (UDC: Division 18.19.03 – Heavy Logistic Center) is to classify the proposed flex industrial use as a "heavy logistics center". The proposed development is anticipated to operate more along the lines of light industry per Division 18.19.03 – Light Industry of the UDC, rather than a heavy logistics use. However, the development would be constructed as two spec buildings with no specific users determined. Therefore, in order to achieve the highest level of flexibility in terms of truck trips, a Conditional Use for a Heavy Logistic Center is being requested.

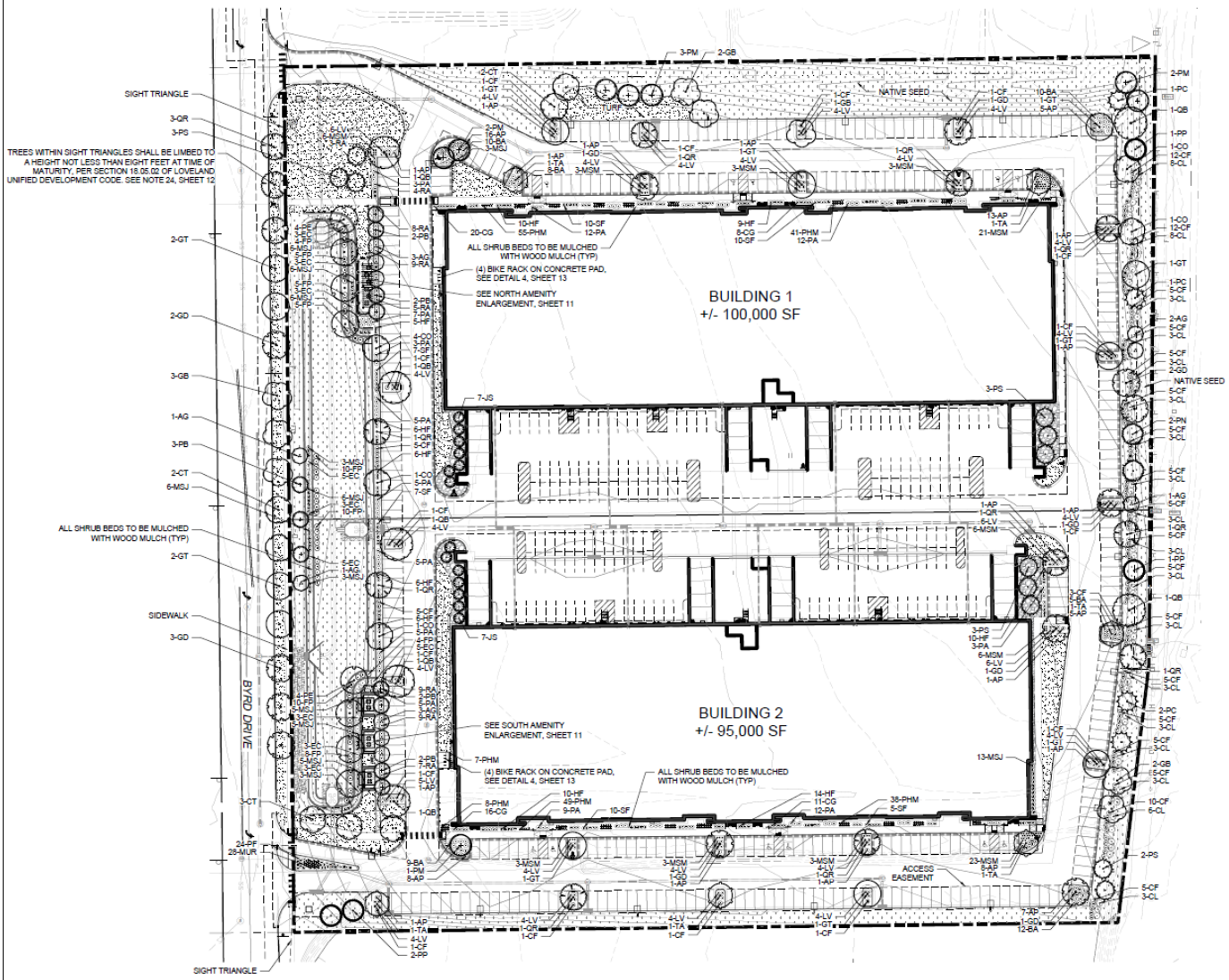
Site/Building Design
The site design is oriented with building fronts facing I-25, Byrd Drive and north/south property boundaries. This creates the potential for unrestricted truck courts between the two buildings, with the flexibility for adjusting loading docks to parking areas, depending upon the user needs. Each building would be on its own separate lot with primary ingress/egress to the site being shared at the northwest corner connecting Byrd Drive. A future round-a-bout is planned at this intersection but is not required to be constructed with this project. A limited (right-in, right-out, and left-in) secondary shared access is also provide at the southwest corner of the site connecting Byrd Drive. As part of

the considerations for a heavy logistics center, a truck routing plan is required. This information is provided in **Attachment C** (see Section 4.0 and Figure 7 with trip distributions). A majority of the traffic volume is to/from Crossroads Boulevard.

**SITE AREA MAP**

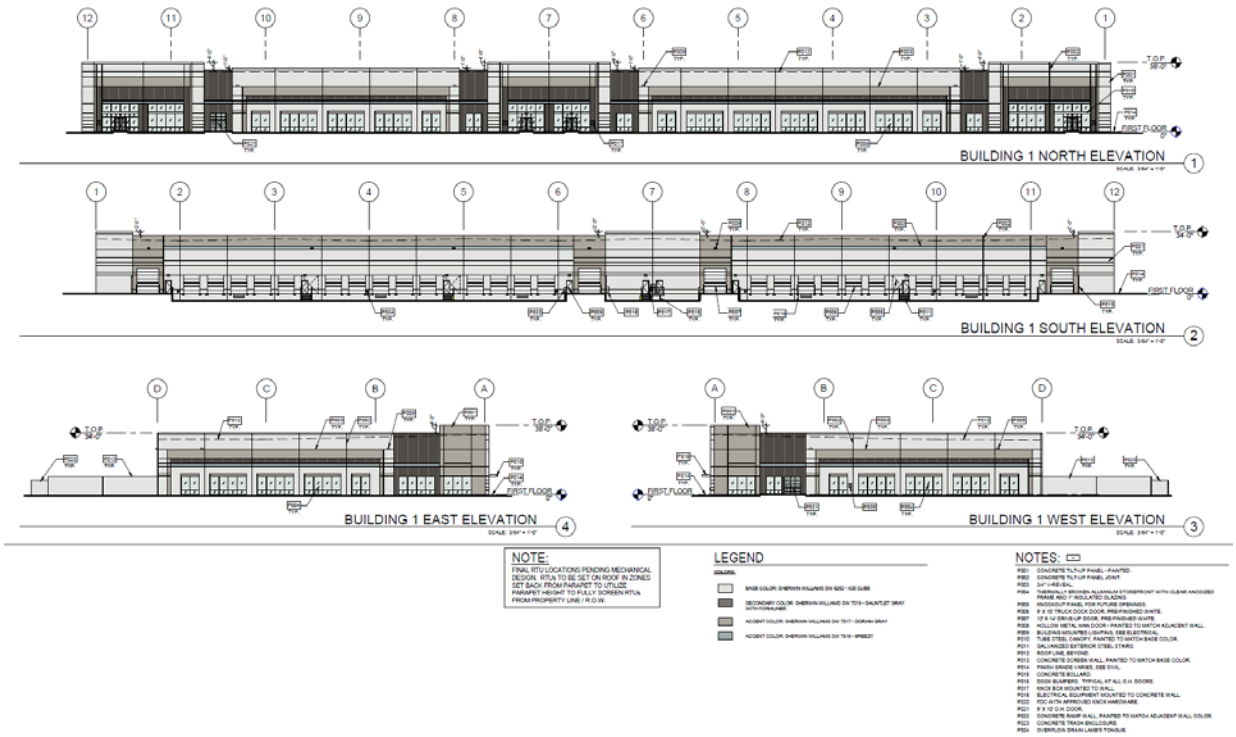
Landscaped bufferyards are provided facing both I-25 and Byrd Drive, in compliance with the City's Type C bufferyard requirements as well providing parking lot screening. On-site amenities including covered shelters, arbors, seating, and grilling areas are dispersed through the site, adding to the creation of a "campus style" development. All parking areas include appropriate landscape treatments such as islands spaced throughout and at ends of all parking rows. Foundation plantings to complement and provide texture to the buildings are provided at the east and west elevations. Given the amount of hard surface and building square footage, the landscape design was a critical component in addressing overall site design and the aesthetic aspects of the development. More than 20% of each lot is devoted to landscaped areas.

**SITE PLAN WITH LANDSCAPE OVERLAY**




The proposed buildings are tilt-up concrete structures with a maximum height of 38 feet and are roughly 180 feet in width by 560 feet in depth. The size creates a substantial amount of building mass. In order to reduce the significant visual aspect of the buildings, the ends of the buildings have been oriented towards I-25 and Byrd Drive help lessen the dominance, especially as seen from public rights-of-way. The buildings include projections/recesses, window treatments, and covered entries along all perimeters (excluding internal truck court). Variations in the roof-lines have also been included to enhance the design as well as screen all roof-top mechanical units. These architectural design features help break-up the massing of the buildings while complying with the City's industrial design standards.

**TYPICAL BUILDING ELEVATION (NORTH BUILDING)**




## Attachments

Attachment A – Applicant's response to UDC use standards and compatibility narrative
Attachment B – Applicant's Community Participation Report
Attachment C – Transportation Impact Study (without appendices and tables)
Attachment D – East Loveland Industrial 23 Subdivision Conditional Use Site Development Plan

| Applicant Information | Development Review Team Contacts |
|---|---|
| **Applicant:** | **Planner:** Troy Bliss |
| David Klebba | **Traffic Engineer:** Randy Maizland |
| Etkin Johnson Real Estate Partners | **LFRA:** Ingrid McMillan-Ernst |
| **Property Owner:** | **Stormwater:** Suzette Schaff |
| John Casale | **Power:** Mark Warner |
| Atrium Holding Company | **Water/Wastewater:** Chris Pletcher |

| Site Data | |
|---|---|
| **Subdivision** | East Loveland Industrial Addition |
| **Land Area** | 14.4 acres |
| **Proposed Buildings** | 195,000 square feet |
| **Topography** | The site is flat, sloping slightly from east to west |
| **Access** | Entering/existing the site from Byrd Drive |
| **Water Provider** | Fort Collins-Loveland Water District |
| **Wastewater Provider** | South Fort Collins Sanitation District |
| **Power Provider** | City of Loveland |

| Subject Property and Adjacent Property Designations | | | |
|---|---|---|---|
| | **Existing Zoning** | **Comprehensive Plan** | **Existing Land Use(s)** |
| **Subject Property** | I – Developing Industrial | Industrial | Undeveloped |
| **Adjacent North** | I – Developing Industrial | Industrial | Undeveloped |
| **Adjacent South** | I – Developing Industrial | Industrial | Motorcycle Sales/Training and Outdoor Venue |
| **Adjacent East** | I – Developing Industrial | Industrial | Interstate 25 and Larimer County Fairgrounds |
| **Adjacent West** | I – Developing Industrial | Industrial | Undeveloped |

| Relevant Zoning District Regulations | | |
|---|---|---|
| **I – Developing Industrial** | **Required** | **Proposed** |
| **Lot Area** | 1 acre | 7.6 acres/6.8 acres |
| **Lot Frontage** | 100 feet | 294 feet/379 feet |
| **Maximum Building Heights** | 50 feet maximum | 38 feet |
| **Maximum Lot Coverage** | N/A | 30.5%/32.3% |
| **Minimum Building Setback:** | | |
| • **Front (Byrd Drive)** | 25 feet | 140 feet |
| • **Rear** | 0 feet (depending on easements, bufferyards and building/fire code requirements) | North Building: 88 feet<br>South Building: 86 feet |
| • **Side** | 0 feet (depending on easements, bufferyards and building/fire code requirements) | North Building: 136 feet/100 feet<br>South Building: 100 feet/100 feet |
| • **Street Side I-25)** | 25 feet | North Building: 88 feet<br>South Building: 86 feet |
| **Minimum Parking Requirements (both buildings – shared parking):** | -Warehouse: 1 space/1,000 square feet totaling 71 spaces<br>-Office: 3 spaces/1000 square feet totaling 91<br>-162 total spaces<br>-Accessible: 6 spaces | -175 total spaces<br>-6 accessible spaces (including van accessible) |
| **Bufferyards (I-25 and Byrd Drive)** | Type C – 15 foot minimum width | Type C<br>I-25: 30 feet (average)<br>Byrd Drive: 84 feet |

| Neighborhood Outreach | |
|---|---|
| **Notification** | A neighborhood meeting was held on October 22, 2019, at the Development Center and began at 6:00 p.m. Property owners within a 250-foot radius from the subject site were notified by mail and a sign was posted on site at least 15 days in advance of the meeting. Additionally, notice for the Planning Commission hearing on November 25, 2019 was also mailed to property owners within a 250-foot radius of the site and a sign was posted at least 15 days in advance of the hearing. |
| **Neighborhood Response** | No neighborhood response has been provided. At the neighborhood meeting held on October 22, 2019, two guests attended and asked general questions about the development. Unanimous support was shared by attendees. |

## Planning Commission Findings for Approval or Denial

**An application for conditional use approval may be approved if it is demonstrated that the proposal meets the specific use standards of Divisions 18.02.04.08 and 18.19.03, Use Standards identified below:**

**Criteria**

Use Definitions

The UDC defines Heavy Logistics Centers as follows: A wholesaling, warehousing, or distribution use that provides a central location for receiving, storing and distributing raw materials, semi-finished goods, or finished goods. Heavy logistics centers may be warehouses in which goods are stored, or truck terminals in which goods are transferred between trucks or between trucks and trains or other transportation modes, or moving warehouses, or wholesaling operations (but not wholesale membership clubs in which memberships are available to the general public). Heavy logistics centers are expected to generate at least 12 truck trips per day. Warehousing and distribution uses that involve fewer than 12 truck trips per day are classified as light industry.

Per the UDC's definition of Light Industry (as specified in the last sentence of the Heavy Logistics Center definition above), a distribution center that involves less than 12 truck trips per day is categorized as a Light Industry. Light Industry is considered a less intensive use, and as such is a use by right in the I-Developing Industrial district.

Thus, the use of a property zoned I-Developing Industrial for a distribution center is considered a Use by Right if the volume of semi-trailer truck trips is limited to less than 12 per 24-hour period, and a Conditional Use if it is involves 12 or more semi-trailer truck trips per 24-hour period.

The definition section of the UDC further clarifies that only semi-trailer truck trips are counted towards the 12 truck trips per day distinction; van, light truck, and car trips are not utilized to assess whether a distribution center falls under the Heavy Logistics Center or the Light Industry definition.

Use Standards

Heavy Logistics Center:

1. Location. The subject property shall not adjoin a property that is zoned or used for residential purposes.
2. Access. The use shall be located such that trucks have direct access to an arterial or collector street, or to a local street that is only used for industrial purposes.
3. Buffering. A type C bufferyard shall be installed along arterial street or state or federal highway frontages.
4. Truck Routing Plan. A truck routing plan is required.

In addition to needing to meet all generally applicable UDC standards, uses categorized as Conditional, Limited, or Adaptable are subject to additional UDC *Use Standards*. The Heavy Logistics Center Use Standards are described in the Planning Commission Findings section of this report. In order to approve a Conditional Use, the Planning Commission shall find that the proposal meets both the Use Standards specific to Heavy Logistics Centers and the conventional Conditional Use standards, also described under the Planning Commission Findings section of this report. Through the

staff review of the associated Site Development Plan, Construction Plans, Site Work Permit, and Building Permits, staff will ensure that all other Municipal Code requirements relevant to the development are met.

*The applicant has demonstrated that the proposed conditional use meets the above criteria.*

*Analysis:*

- *The location of the subject property does not adjoin a property that is zoned or used for residential purposes.*
- *Trucks entering/exiting the site shall have direct access to Byrd Drive which is a designated as an arterial street per the City's 2035 Transportation Plan.*
- *Type C bufferyards are provided along both I-25 and Byrd Drive frontages.*
- *A truck routing plan was provided in conjunction with the Transportation Impact Study.*

**Pursuant to Section 18.02.414 of the City of Loveland Unified Development Code, an application for conditional use approval may be approved if, in addition to the specific standards of this Division 18.02.04, Use Standards, that apply to the proposed use, it is demonstrated that:**

## Criteria

**B. 1. The proposed conditional use in its proposed location will not tend to frustrate the implementation of current adopted plans of the City, including, but not limited to, the Comprehensive Plan.**

*The applicant has demonstrated that the proposed conditional use meets the above criteria.*

*Analysis: The Create Loveland Comprehensive Plan designates the subject property and all surrounding areas as "Industrial" uses. As a high employment generator with minimal externalities, a Heavy Logistics Center is appropriate for areas so designated. See the Create Loveland Comprehensive Plan summary in the section below for a more detailed description. The proposed use on the subject property is not anticipated to negatively impact the ability to develop surrounding industrial uses. Rather, the proposed use is intended to be complementary to industrial uses.*

**B. 2. The location, size, design and operating characteristics of the proposed conditional use will be consistent with or complementary to the existing and future land uses within the surrounding neighborhood and will not create significant noise, traffic, or other conditions that may be objectionable or detrimental to other permitted uses in the vicinity.**

*The applicant has demonstrated that the proposed conditional use meets the above criteria.*

*Analysis: The proposed use is an appropriate industrial use of which, noise or other externalities created would be similar to other permitted uses in the vicinity and not anticipated to be detrimental.*

**B. 3. The proposed conditional use will not negatively impact the land use patterns of existing or approved development within the neighborhood or discourage permitted uses or reinvestment in permitted uses by making the vicinity less desirable for them.**

*The applicant has demonstrated that the proposed conditional use meets the above criteria.*

*Analysis: The establishment of a Heavy Logistics Center, which is a type of industrial land use, in an area designated for industrial uses is not anticipated to negatively impact existing or approved development, or discourage permitted uses, within the area. The proposed use for the subject property will be quite similar in nature to existing and permitted land uses in the area.*

**B. 4. The proposed conditional use is consistent with the standards in the UDC, as amended, and meets the requirements in Chapter 18.15 Adequate Community Facilities.**

*The applicant has demonstrated that the proposed conditional use meets the above criteria.*

*Analysis: No application for development approval shall be approved unless a positive determination of adequacy or a positive determination of adequacy subject to conditions has been made by the City in accordance with Chapter 18.15 Adequate Community Facilities.*

*This application has been reviewed by the City's Development Review Team (DRT) which has concluded that a positive determination of adequacy subject to conditions can be made. The conditions are provided below under the staff recommendation.*

***PW-Transportation:***

- This project complies with the Adequate Community Facilities Standards in the Unified Development Code.
- The proposed development will have primary access from Byrd Drive. The development will also construct a 6-foot detached sidewalk along Byrd Drive.
- *A Traffic Impact Study (TIS), prepared by Kimley Horn, has been submitted with the Byrd Drive - Loveland Industrial SDP which demonstrates that the existing transportation system, can adequately serve the proposal.*
- *Access to the development will be provided by a full movement access near the north property boundary on Byrd Drive and a 3/4 restricted movement access near the south boundary on Byrd Drive.*
- T*he TIS has demonstrated that the proposed accesses and nearby intersections will operate acceptably within ACF standards in the short range.*
- *The development is estimated to generate approximately 802 daily trips, 73 weekday AM peak hour trips, and 59 weekday PM peak hour trips.*

*In conclusion, the development of the subject property pursuant to any of the uses permitted by right under the zoning district will not adversely impact any existing City infrastructure. A positive determination of adequacy for transportation facilities for the proposed application has been made.*

***Fire:***

*Staff believes that this finding can be met, due to the following:*
*The development site will comply with the requirements in the ACF Ordinance for response distance requirements from the first due Engine Company.*

- *The proposed development will not negatively impact fire protection for the subject development or surrounding properties.*
- *When approved the fire code requirements pertaining to site access and water flow will be satisfied.*

***Water/Waster:***

*This development is located within the Fort Collins-Loveland Water District and South Fort Collins Sanitation District. The City has no concerns regarding the development.*

***Storm:***

*Staff believes that this finding can be met, due to the following:*

- *The proposed development meets all applicable requirements contained in the City of Loveland Storm Drainage Criteria.*
- *The proposed development provides for adequate major drainage facilities to convey stormwater flows from a one hundred year storm event which will minimize property damage.*
- *Sufficient stormwater utility facilities are available to serve the subject property, while maintaining sufficient levels of service to existing development.*
- *The proposed development meets all applicable drainage requirements of the City.*

***Power:***

*This development is situated within the City's current service area for power. The Department finds that the Development will be compliant to ACF for the following reasons:*

- *The proposed development will not negatively impact City power facilities.*
- *The proposed public facilities and services are adequate and consistent with the City's utility planning and provides for efficient and cost-effective delivery of City power.*

**B. 5. The design, operation, location, and buffering of the use mitigates its impacts with regard to:**

**a. Risks associated with the use and storage of hazardous materials; or**
**b. Potentially hazardous conditions, such as projectiles leaving the subject property; and**
**c. Odors;**

**d. Dust;**
**e. Lighting;**
**f. Vibration; and**
**g. Noise.**

*The applicant has demonstrated that the proposed conditional use meets the above criteria.*

*Analysis: The proposed use is for a Heavy Logistics Center, accommodating a variety of flex industrial uses. Hazardous materials, such as those associated with heavy industrial uses, are not a part of the operation. With no manufacturing activities occurring, projectiles, odors, dust, lighting, vibration, and noise are not anticipated to be emitted from the building to a greater extent that the other light industrial uses that dominate in the immediate area. A lighting plan for the exterior of the property was submitted. It meets the UDC's light standards.*

**B. 6. There is a demonstrated need in the City for the conditional use, in order to serve demands created by City residents.**

*The applicant has demonstrated that the proposed conditional use meets the above criteria.*

*Analysis: The establishment of an employment generating use may provide work opportunities for city residents. The goods distributed by the proposed use may serve a demand for such goods by residents.*

| **Planning Commission Comprehensive Plan Policy Guidance for Approval or Denial** | |
|---|---|
| **In considering an application for approval or denial the Planning Commission finds that the application either complies or does not comply with the following goals, and policies within the City of Loveland Comprehensive Plan:** | |
| **Create Loveland** | Land Use Designation: Industrial<br>• Provides locations for a wide range of industrial uses and related services, where appropriate; avoid residential, restaurant, and retail encroachment.<br>• Ranges from attractive light industrial/office uses to less attractive heavy industrial and uses with outdoor storage<br>• Concentrated in the vicinity of the Airport and the Crossroads/I-25 area.<br>• Industrial locations typically provide direct access to major highways. |

**Staff Recommendation**

City staff is recommending conditional approval of the conditional use application subject to the following conditions:

**Current Planning**

1.This Conditional Use shall be contingent upon approval and recordation of the East Loveland Industrial 23rd Subdivision.

**PW-Transportation**

1. All public improvements shall comply with the Larimer County Urban Area Street Standards (LCUASS).

2. The developer agrees to acquire and dedicate, at no cost to the City, any rights-of-way necessary for the required street improvements associated with this development.

3. Prior to the issuance of any building permits on Lots 1 & 2, Byrd Drive -- Loveland Industrial Subdivision, pursuant to the Unified Development Code of the City Municipal Code, the Developer shall design and construct the following public improvements unless already designed and constructed by others:

a) All public improvements on Byrd Drive including accesses, turn lanes and sidewalk as shown on the City approved Public Improvement Construction Plans.

4. City signed Site Development Plans (including any associated Public Improvement Construction Plans), or the issuance of building permits, does not allow any construction within public street or alley rights-of-way or pedestrian easements. A separate City Development Construction Permit and Street right-of-way (ROW) Work Permit must be obtained by the Developer and/or his Contractor at the City Project Engineering office (and approved by Project Engineering) prior to any repair or construction of sidewalk, curb and gutter, driveway accesses, or any other construction in City street or alley rights-of-way or pedestrian easements, (this includes all items proposed in rights-of-way such as utility street cuts, sidewalk ramps, construction staging proposed in street, landscaping, traffic control, etc.). (Call 970-962-2771 to discuss details to obtain a ROW Work Permit).

5. Prior to the commencement of any construction activity that will involve any existing or proposed street signs or traffic control devices for or within public street rights-of-way (ROW), the Developer and/or his Contractor shall contact the City Traffic Division at (970) 962-2535 to coordinate the removal, relocation, installation, and/or proper storing of the sign(s) or traffic control device(s) and obtain a ROW work permit from the City Public Works Engineering Division to do such work. However, if the Developer and/or his Contractor removes or relocates any existing street sign(s) or traffic control device(s) for or within the public ROW without first obtaining a ROW work permit from the City Public Works Division, then the contractor will be charged for the labor, materials, and equipment to reinstall the sign(s) or traffic control device(s) as deemed necessary by the City. The Developer and/or his Contractor will also be charged to replace any existing street signs or traffic control devices that were damaged or blemished during any construction activity as deemed necessary by the City. The Developer and/or his Contractor may also be subject to additional fines as per the Loveland Municipal Code.

6. The Developer and/or his Contractor shall contact the Public Works Street Inspector to discuss the proposed work and schedule necessary inspections prior to any construction activity within a street or alley right-of-way or pedestrian easement.

7. All trees, shrubs, and other plant materials located within clear sight triangles shall be trimmed in accordance with the requirements of Section 7 of the Larimer County Urban Area Street Standards (LCUASS). Under current LCUASS requirements, trees shall be limbed to a height of not less than eight (8) feet and shrubs and other plant materials shall be maintained at a height of not more than thirty (30) inches, and said maintenance shall be conducted in perpetuity. Trees are also required to be kept limbed up a minimum of 8’ above all street sidewalks.

**East Loveland Industrial Twenty-Third Subdivision**
**Conditional Use Assessment Report**

**Conditional Assessment Report** demonstrating compliance with the following:

a. Use Standards: List the applicable use standards in UDC Section 18.02.04 and describe how each standard will be met.

**Heavy Logistics Center.** Heavy logistics center uses shall comply with the following standards, in addition to all other applicable standards in the UDC:

1. Location: The subject property shall not adjoin a property that is zoned or used for residential purposes.

***Response:*** *There are no properties zoned or used for residential purposes adjoining the subject property. All adjoining properties are similarly zoned as FZO – Flexible Zoning Overlay – Developing Industrial, or I – Developing Industrial.*

2. Access: The use shall be located such that trucks have direct access to an arterial or collector street, or to a local street that is only used for industrial purposes.

***Response:*** *Access to the site is provided along Byrd Drive, which is designated as a 2-lane minor arterial.*

3. Buffering: A type C buffer yard shall be installed along arterial street or state or federal highway frontages.

***Response:*** *The landscape design in the Site Development Plan has met or exceeded the plantings required for a Type C buffer yard on the west side along Byrd Drive and the east side along I-25.*

4. Truck Routing Plan: A truck routing plan is required.

***Response:*** *A truck routing plan has been provided in the SDP submittal. Trucks will be routed south on Byrd Drive to Crossroads Boulevard and east out to I-25.*

Pursuant to UDC Section 18.02.414, the following describes how each of the standards will be met.

b. Consistency with City Plans. Describe how the proposed conditional use in its proposed location will not tend to frustrate the implementation of any current, adopted plans of the City, including but not limited to, the Comprehensive Plan, US 34 Corridor Plan, and the 287 Strategic Plan.

***Response:*** *The proposed heavy logistics project is projected to operate in a way that will not impede with any current adopted plans of the city. The Create Loveland Comprehensive Plan Future Land Use Plan Map designates the subject property for "Industrial" uses. Primary uses for the Industrial Category include employment, light and heavy industrial, and outdoor storage uses. Chapter 3, p. 21. The Comprehensive Plan further states that the City should "reserve industrial lands for future primary jobs […] and protect them from encroaching conflicting uses." Chapter 2, p. 27. As a high employment generator with minimal externalities, a Heavy Logistics Center is appropriate for this industrial area. While this is being designated as heavy logistics, this has not been designed as a heavy distribution center. The tenants that we are targeting are companies looking for flex office space that will not be dependent on large quantities of truck deliveries.*

c. Compatibility. Describe how the location, size, design and operating characteristics of the proposed conditional use will be consistent with and/or complimentary to the existing and future land uses within the surrounding neighborhood, and will not create significant noise, traffic, or other conditions that may be objectionable or detrimental to other permitted uses in the vicinity.

***Response:*** *With the design of this project being 2 spec buildings, the exact number of truck trips per day has not been established. The design of these buildings lead to smaller tenants that would not likely create a large number of daily truck traffic. The two buildings on this property are designed to have the truck docks face inward towards the center of the site, with no dock doors facing neighboring properties. Dock parking will be screened with screen walls along Byrd Drive and I-25. As there are no manufacturing or other such intensive uses proposed to occur on the subject property, there are no noise or other externalities of the operation that ae anticipated to be detrimental to other permitted uses in the vicinity. The operations should be consistent with future developments in the neighboring developing industrial zoned properties.*

d. Impacts on Land Use Patterns. Describe how the proposed conditional use will not negatively impact the land use patterns of existing or approved development within the neighborhood or discourage permitted uses or reinvestment in permitted uses by making the vicinity less desirable for them.

***Response:*** *The proposed heavy logistics use is in an area that is conveniently located for easy truck access off I-25 and Crossroads Blvd. It is located in area where surrounding properties are zoned for developing industrial.*

e. Compliance with the UDC. Describe how the proposed conditional use is consistent with the standards in the UDC and meets the requirements in Chapter 18.15 Adequate Community Facilities.

***Response:*** *The proposed development with the conditional use is in an area that will help facilitate truck traffic with easy access to I-25 The traffic impact study provided with the submittal indicates that the development meets City level of service standards and will not have a negative impact on the existing street network. The buildings will set a high quality design precedent for future buildings on adjacent sites. This will provide a new service to this area that is currently not available.*

- *Fire – The proposed development will comply with the requirements in the ACF Ordinance for response distance requirements from the first due Engine Company.*
- *Water / Wastewater – This development is situated within the City's current service area for both water and wastewater. The development will not frustrate the implementation of the current water and wastewater master plan and meets the requirements of ACF per the UDC.*
- *PW-Stormwater – The proposed development meets all applicable requirements contained in the City of Loveland Storm Drainage Criteria. The proposed development provides for adequate drainage facilities to convey stormwater flows from a one hundred year storm event which will minimize property damage.*
- *Power – The proposed development is situated within the City's current service area for power. The proposed development is consistent with the ACF because it will not negatively impact City power facilities and because the proposed public facilities and services are adequate and consistent with the City's utility planning and provides for efficient and cost-effective delivery of City power.*

f. Mitigation of Impacts. Describe how the design, operation, location, and buffering of the use mitigates its impacts with regard to:

i. Risks associated with the use and storage of hazardous materials; or
ii. Potential hazardous conditions, such as projectiles leaving the subject property; and
iii. Odors;
iv. Dust;
v. Lighting
vi. Vibration; and
vii. Noise

***Response:*** *The proposed development will not create these types of impacts on the site. Hazardous materials, such as those associated with heavy industrial uses, are not a part of the operation. With no manufacturing activities occurring, projectiles, odors, dust, lighting, vibration, and noise are not anticipated to be emitted from the building to a greater extent than any other light industrial use in the area. A lighting plan for the exterior of the building was submitted. It meets the UDC's light standards .*

g. Demonstrated Need. Describe how there is a demonstrated need in the City for the conditional use, in order to serve demands created by City residents.

***Response:*** *The proposed facilities with conditional use will provide a flexibility to future tenants to bring businesses to these two buildings that are consistent with light industrial, but could potentially require more truck trips per day than the UDC limitation of 12 per day.*

ETKIN JOHNSON
REAL ESTATE PARTNERS

November 8, 2019

City of Loveland
Current Planning, Development Services Department
Senior Planner
410 East 5th Street
Loveland, Colorado 80537
Attention: Mr. Troy Bliss

Dear Mr. Bliss,

A Neighborhood Outreach Meeting was conducted on October 22, 2019 to present the East Loveland Industrial Twenty-Third Subdivision project (PZ #19-00169 & PZ#19-00171). The purpose of the meeting was to address the City of Loveland's conditional approval to change the zoning from Industrial to Heavy Logistics Industrial. Although the proposed project is really a flex office/industrial project with generally limited truck traffic (i.e.- not a distribution center), the Owner cannot be limited to the truck traffic restrictions the zoning currently restricts the project to.

Property Owners directly north and south of the proposed project attended the meeting. This included Todd Erdmann, Owner of Thunder Mountain Harley-Davidson (directly to the south) and Colton Lind, Principal of Water Valley Land Company (directly to the north). Both property owners were interested in learning more about the project and its intended use. The Owner walked the neighbors through the building configuration describing that this is a front-park/rear-load product that generally has a limited amount of heavy truck traffic that enters into and out of the site on a daily basis. The Owner described tenant profiles that are located in similar owned buildings throughout the Denver-metro area. The architectural elements and ingress/egress of the project were also presented and reviewed.

Once the neighbors understood that the proposed development was not a distribution center type of product with exceptional truck traffic, their concerns were addressed. They stated that they were willing to endorse the project at the end of the presentation. It was the Owner's takeaway that no further action was required to specifically address their concerns.

Sincerely,

Dave Klebba
Vice President of Development, Partner

**PC ATTACHMENT B**

1512 Larimer Street, Suite 100 (Bridge Level), Denver, CO 80202 P 303.629.5212 E info@etkinjohnson.com www.etkinjohnson.com

| EAST LOVELAND INDUSTRIAL 23RD SUBDIVISION | NEIGHBORHOOD MEETING | 22-Oct-19 |
|---|---|---|
| name | address | phone or email |
| Todd Ehrman | 4250 Byrd Drive | Todd@TMHarlep.com |
| Colton Lind | 4350 Byrd Dr | Clind@watervalley.com |

PC ATTACHMENT B

Traffic Impact Study

# Byrd Drive Industrial
## Loveland, Colorado

Prepared for:

**Ware Malcomb**

Kimley»Horn

**PC ATTACHMENT C**

**T R A F F I C  I M P A C T  S T U D Y**

# Byrd Drive Industrial

Loveland, Colorado

**Prepared for**
**Ware Malcomb**
45 West 2nd Avenue
Denver, CO 80223

**Prepared by**
**Kimley-Horn and Associates, Inc.**
4582 South Ulster Street
Suite 1500
Denver, Colorado 80237
(303) 228-2300

September 2019

*This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.*

**PC ATTACHMENT C**

**TABLE OF CONTENTS**

TABLE OF CONTENTS ..... i
APPENDICES ..... ii
LIST OF TABLES ..... ii
LIST OF FIGURES ..... ii
1.0 EXECUTIVE SUMMARY ..... 1
2.0 INTRODUCTION ..... 5
3.0 EXISTING AND FUTURE CONDITIONS ..... 7
3.1 Existing Study Area ..... 7
3.2 Existing and Future Roadway Network ..... 7
3.3 Existing Traffic Volumes ..... 10
3.4 Unspecified Development Traffic Growth ..... 10
4.0 PROJECT TRAFFIC CHARACTERISTICS ..... 14
4.1 Trip Generation ..... 14
4.2 Trip Distribution ..... 14
4.3 Traffic Assignment ..... 16
4.4 Total (Background Plus Project) Traffic ..... 16
5.0 TRAFFIC OPERATIONS ANALYSIS ..... 20
5.1 Analysis Methodology ..... 20
5.2 Key Intersection Operational Analysis ..... 21
5.3 Project Access Operational Analysis ..... 25
5.4 Peak Hour Traffic Volume Analysis for Arterial Links ..... 26
5.5 Turn Bay Vehicle Queuing Analysis ..... 26
5.6 Bicycle and Pedestrian Access ..... 28
6.0 CONCLUSIONS AND RECOMMENDATIONS ..... 32



**PC ATTACHMENT C**

## APPENDICES

Appendix A – Transportation Impact Study Base Assumptions
Appendix B – Intersection Count Sheets
Appendix C – Trip Generation Worksheet
Appendix D – Intersection Analysis Worksheets
Appendix E – Signal Warrant Analysis
Appendix F – City of Loveland ACF Calculations
Appendix G – Queue Analysis Worksheets
Appendix H – Conceptual Site Plan

## LIST OF TABLES

Table 1 – Byrd Drive Industrial Traffic Generation ..... 14
Table 2 – Level of Service Definitions ..... 20
Table 3 – Loveland Motor Vehicle LOS Standards (Intersections) ..... 21
Table 4 – Byrd Drive and Earhart Road LOS Results ..... 23
Table 5 – Byrd Drive and Crossroads Boulevard LOS Results ..... 24
Table 6 – Project Access LOS Results ..... 25
Table 7 – ACF Traffic Compliance ..... 26
Table 8 – Turn Lane Length Analysis Results ..... 27

## LIST OF FIGURES

Figure 1 – Vicinity Map ..... 6
Figure 2 – Surrounding Site Area ..... 8
Figure 3 – Existing Lane Configurations and Control ..... 9
Figure 4 – Existing Traffic Volumes ..... 11
Figure 5 – 2020 Background Traffic Volumes ..... 12
Figure 6 – 2040 Background Traffic Volumes ..... 13
Figure 7 – Project Trip Distribution ..... 15
Figure 8 – Project Traffic Assignment ..... 17
Figure 9 – 2020 Background Plus Project Traffic Volumes ..... 18
Figure 10 – 2040 Background Plus Project Traffic Volumes ..... 19
Figure 11 – 2020 Recommended Lane Configurations and Control ..... 30
Figure 12 – 2040 Recommended Lane Configurations and Control ..... 31



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## 1.0 EXECUTIVE SUMMARY

Byrd Drive Industrial is a proposed industrial development to be located along the north side of the previous I-25 NW Frontage Road after the curve from Byrd Drive, approximately 1,300 feet north of Crossroads Boulevard, in Loveland, Colorado. Byrd Drive Industrial is anticipated to include two buildings totaling approximately 196,200 square feet of building space. It is expected that the project will be completed by 2020; therefore, analysis was conducted for the 2020 short term horizon as well as the 2040 long-term horizon.

The purpose of this traffic study is to identify project traffic generation characteristics and potential project traffic related impacts on the local street system, as well as to develop mitigation measures required for identified impacts. The following intersections were incorporated into this traffic study in accordance with City of Loveland and State of Colorado Department of Transportation (CDOT) standards and requirements:

- Earhart Road and Byrd Drive
- Crossroads Boulevard and Byrd Drive

In addition, the two (2) proposed project accesses along the east side of Byrd Drive were also included for evaluation.

Regional access will be provided by Interstate 25 (I-25) and Eisenhower Boulevard (US-34). Primary access to the site will be provided by Crossroads Boulevard, Earhart Road, and Rocky Mountain Avenue. Direct access to the project is proposed from two accesses along the east side of Byrd Drive. The north project access is proposed to allow full turning movements. In the future, this may be a roundabout intersection with site access being the east leg. The proposed roundabout T-intersection is to be located approximately 2,000 feet north of the Byrd Drive and Crossroads Boulevard intersection (measured center to center). The south project T-intersection access is proposed as a three-quarter movement access with restricted left-out movements to be located approximately 1,300 feet north of the Byrd Drive and Crossroads Boulevard intersection (measured center to center).



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Byrd Drive Industrial is expected to generate approximately 802 daily weekday trips with 73 of these trips occurring during the weekday morning peak hour and 59 trips occurring during the weekday afternoon peak hour.

Distribution of site traffic on the street system was based on the area street system characteristics, existing traffic patterns, anticipated surrounding development in the area, and the proposed access system for the project. Assignment of project traffic was based upon the trip generation described previously and the distributions developed.

Based on the analysis presented in this report, Kimley-Horn believes the proposed Byrd Drive Industrial development will be successfully incorporated into the existing and future roadway network. The proposed project development and expected traffic volumes resulted in the following recommendations and conclusions:

- With completion of the Byrd Drive Industrial development, the site proposes two new access locations along the east side of Byrd Drive. The north access is proposed to allow full turning movements and be located approximately 2,200 feet north of Crossroads Boulevard (measured center to center) while the south access is proposed from a new three-quarter access T-intersection with restricted left turn exiting movements to be located approximately 1,300 feet north of the Byrd Drive and Crossroads Boulevard intersection (also measured center to center). Both accesses are recommended to have R1-1 “STOP” signs installed for the westbound exiting approaches. The westbound exiting approach at the south access will restrict westbound to southbound left turning movements onto Byrd Drive. To provide signage for the proposed three-quarter restricted accesses, it is recommended that R3-2 No Left Turn sign be placed underneath the STOP sign. One exiting lane should be sufficient at both access locations along Byrd Drive.

- According to Larimer County Urban Area Street Standards Figure 8-4, right turn lanes are required along 2-lane arterials with a speed limit of 45 miles per hour when the volume of right-turns during the peak hour exceeds 40 vehicles per hour if the adjacent through volume is greater 500 vehicles per hour. Based on this, neither access warrants a separate right turn lane for either the 2020 and 2040 horizons. However important to note, the eastbound and northbound approaches to the Earhart Road and Byrd Drive intersection



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currently warrant right turn lanes based on existing traffic volumes. Based upon Figure 8-2 within Larimer County Urban Area Street Standards, new southbound left turn lanes will be needed at both accesses along Byrd Drive and should be constructed with lengths of 235 feet plus 200-foot tapers.

- With development of this project, it is anticipated that new sidewalk will be constructed along the east side of Byrd Drive adjacent to project frontage. This sidewalk should provide a connection to the existing sidewalk along Byrd Drive to provide a connection to the Crossroads Boulevard signalized intersection.

- Byrd Drive is classified as a minor arterial roadway within the City of Loveland 2030 Transportation Plan. All roadway segment links studied within this report are expected to be within ACF compliance for both peak hours studied in 2020 and 2040 with the addition of project traffic.

- By the year 2040, if future volumes are realized, the intersection of Byrd Drive and Earhart Road may operate unacceptably during peak hours. It is recommended that either a roundabout or traffic signal be constructed at this intersection in the long-term horizon. If a roundabout is implemented, single lane approaches are recommended on all four roundabout legs. If signalization is implemented at this intersection, it is recommended that a southbound left turn lane be designated. There is currently sufficient pavement width to stripe this left turn lane without widening the southbound approach to this intersection.

- Vehicle queues may extend beyond existing turn lanes at several locations during the peak hours in 2040. By the 2040 long term horizon, southbound left turn queues may exceed the existing 300-foot storage length at the intersection of Crossroads Boulevard and Byrd Drive. However, this storage length cannot be further extended due to the existing back-to-back left turn lane that exists for the US Energy Department driveway located along the west side of Byrd Drive. Southbound dual left turn lanes may need to be provided at the Crossroads Boulevard and Byrd Drive intersection in the long-term future to prevent long vehicle queues if the need arises. It is recommended that vehicle queues be further studied by the long-term horizon to determine if existing turn lanes lengths are sufficient for future traffic volumes.

- To improve overall operations at the intersection of Byrd Drive and Crossroads Boulevard, it is recommended that the southbound left turn movement operate with protected-permissive phasing in the year 2040.

- By 2040, it is anticipated that the northern full movement access will be a roundabout based on discussions with City Staff. The east leg will be incorporated as the site access. The proposed roundabout T-intersection is recommended to provide a single lane on all approaches.

- Any on-site and off-site signing and striping improvements should be incorporated into the Civil Drawings and conform to City of Loveland and CDOT Standards as well as the Manual on Uniform Traffic Control Devices – 2009 Edition (MUTCD).

## 2.0 INTRODUCTION

Kimley-Horn and Associates, Inc. has prepared this report to document the results of a Traffic Impact Study of future traffic conditions associated with the proposed Byrd Drive Industrial development to be located along the north side of the previous I-25 NW Frontage Road after the curve from Byrd Drive, approximately 1,300 feet north of Crossroads Boulevard, in Loveland, Colorado. A vicinity map illustrating the project location is shown in **Figure 1**. Byrd Drive Industrial is anticipated to include two buildings totaling approximately 196,200 square feet of industrial building space. A conceptual site plan illustrating the development is shown in **Appendix H**. It is expected that the project will be completed by 2020; therefore, analysis was conducted for the 2020 short term horizon as well as the 2040 long-term horizon per City of Loveland requirements. The City of Loveland required Transportation Impact Study Base Assumptions form is included in **Appendix A**.

The purpose of this traffic study is to identify project traffic generation characteristics and potential project traffic related impacts on the local street system, as well as to develop mitigation measures required for identified impacts. The following intersections were incorporated into this traffic study in accordance with City of Loveland and State of Colorado Department of Transportation (CDOT) standards and requirements:

- Earhart Road and Byrd Drive
- Crossroads Boulevard and Byrd Drive
- Byrd Drive Accesses

Regional access will be provided by Interstate 25 (I-25) and Eisenhower Boulevard (US-34). Primary access to the site will be provided by Crossroads Boulevard, Earhart Road, and Rocky Mountain Avenue. Direct access to the project is proposed from two accesses along the east side of Byrd Drive. The north project access is proposed to allow full turning movements. In the future, this may be a roundabout intersection with site access being the east leg. The proposed roundabout T-intersection is to be located approximately 2,000 feet north of the Byrd Drive and Crossroads Boulevard intersection (measured center to center). The south project T-intersection access is proposed as a three-quarter movement access with restricted left-out movements to be located approximately 1,300 feet north of the Byrd Drive and Crossroads Boulevard intersection (measured center to center).

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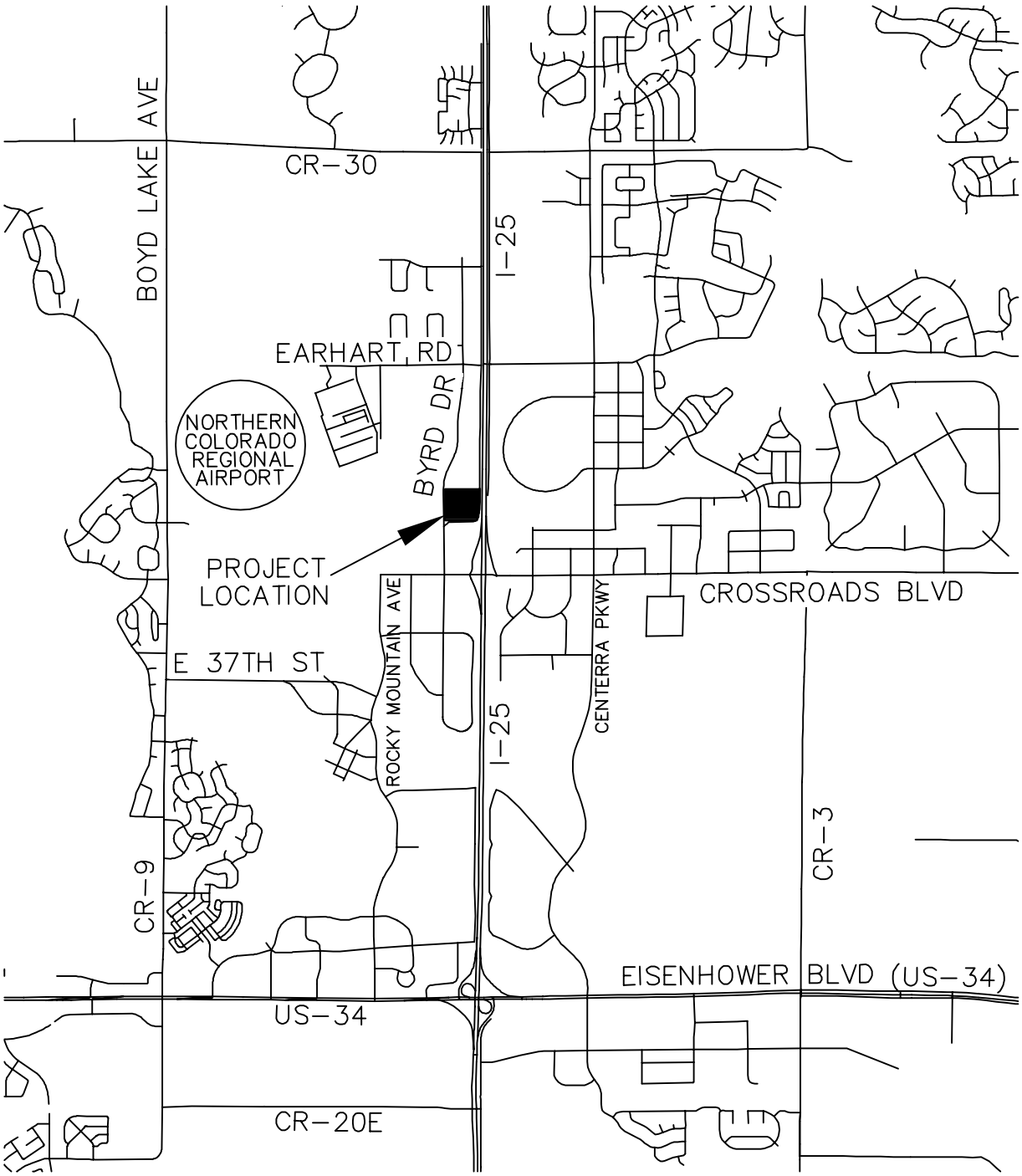
NORTH
NTS 096373015




BYRD DRIVE INDUSTRIAL
LOVELAND, CO
VICINITY MAP

FIGURE 1

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## 3.0 EXISTING AND FUTURE CONDITIONS

### 3.1 Existing Study Area

The existing site is comprised of vacant land while the immediate surrounding area mainly consists of commercial uses, industrial uses, or vacant land. The Northern Colorado Regional Airport is located directly west of the project site and Interstate-25 is located directly east of the project site. Further west, the primary areas of the City of Loveland exists. The land uses and roadway network surrounding the site are shown in **Figure 2**.

### 3.2 Existing and Future Roadway Network

Earhart Road provides one through lane of travel both eastbound and westbound with designated bicycle lanes in both directions of travel and a shared two-way left-turn lane. Earhart Road has a posted speed limit of 35 miles per hour. Byrd Drive is a three-lane roadway with one through lane of travel in each direction, northbound and southbound, and designated bicycle lanes in both directions of travel. Byrd Drive has a posted speed limit of 45 miles per hour. Crossroads Boulevard provides two through lanes of travel both eastbound and westbound with a raised center median, designated bicycle lanes in both directions of travel, and left and right turn lanes at major intersections. Crossroads Boulevard has a posted speed limit of 35 miles per hour.

The intersection of Byrd Drive and Earhart Road is unsignalized and operates with All-Way Stop Control (AWSC). The eastbound approach provides a two-way left-turn lane and a shared through/right tun lane. The westbound and northbound approaches provide a left turn lane and a shared through/right turn lane. The southbound approach provides a single lane for shared movements.

The intersection of Byrd Drive and Crossroads Boulevard is signalized and operates with protected-permissive left turn phasing on the eastbound and westbound Crossroads Boulevard approaches and with permissive-only left turn phasing on the northbound and southbound Byrd Drive approaches. The eastbound and westbound approaches provide a left turn lane, two through lanes, and a right turn lane. The northbound and southbound approaches provide a left turn lane, one through lane, and a right turn lane. The intersection lane configuration and control for the study area key intersections are shown in **Figure 3**.

NORTH
NTS 096373015

BYRD DRIVE INDUSTRIAL
LOVELAND, CO
SURROUNDING SITE AREA

FIGURE 2

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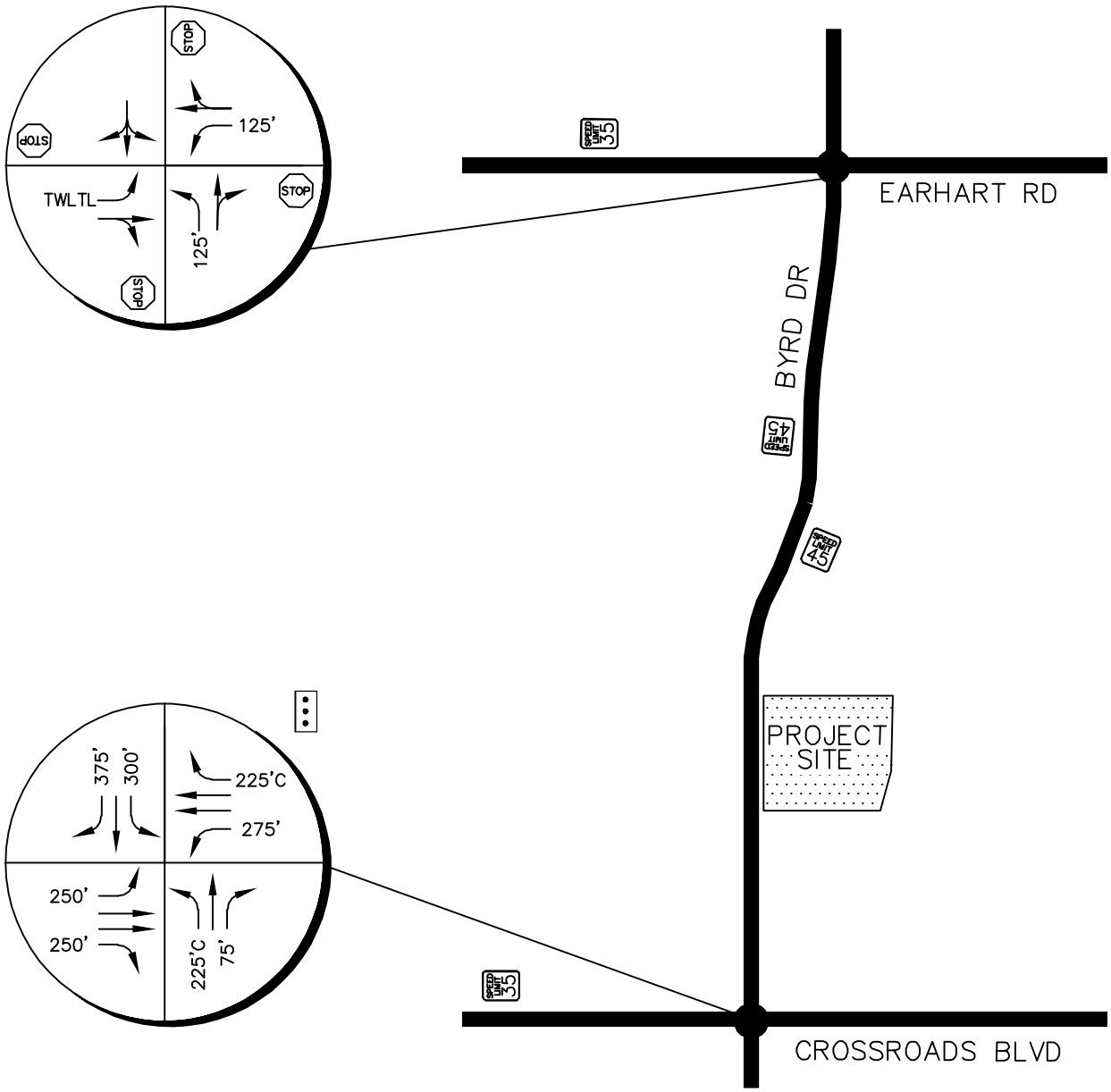


BYRD DRIVE INDUSTRIAL
LOVELAND, CO
EXISTING LANE CONFIGURATIONS

FIGURE 3

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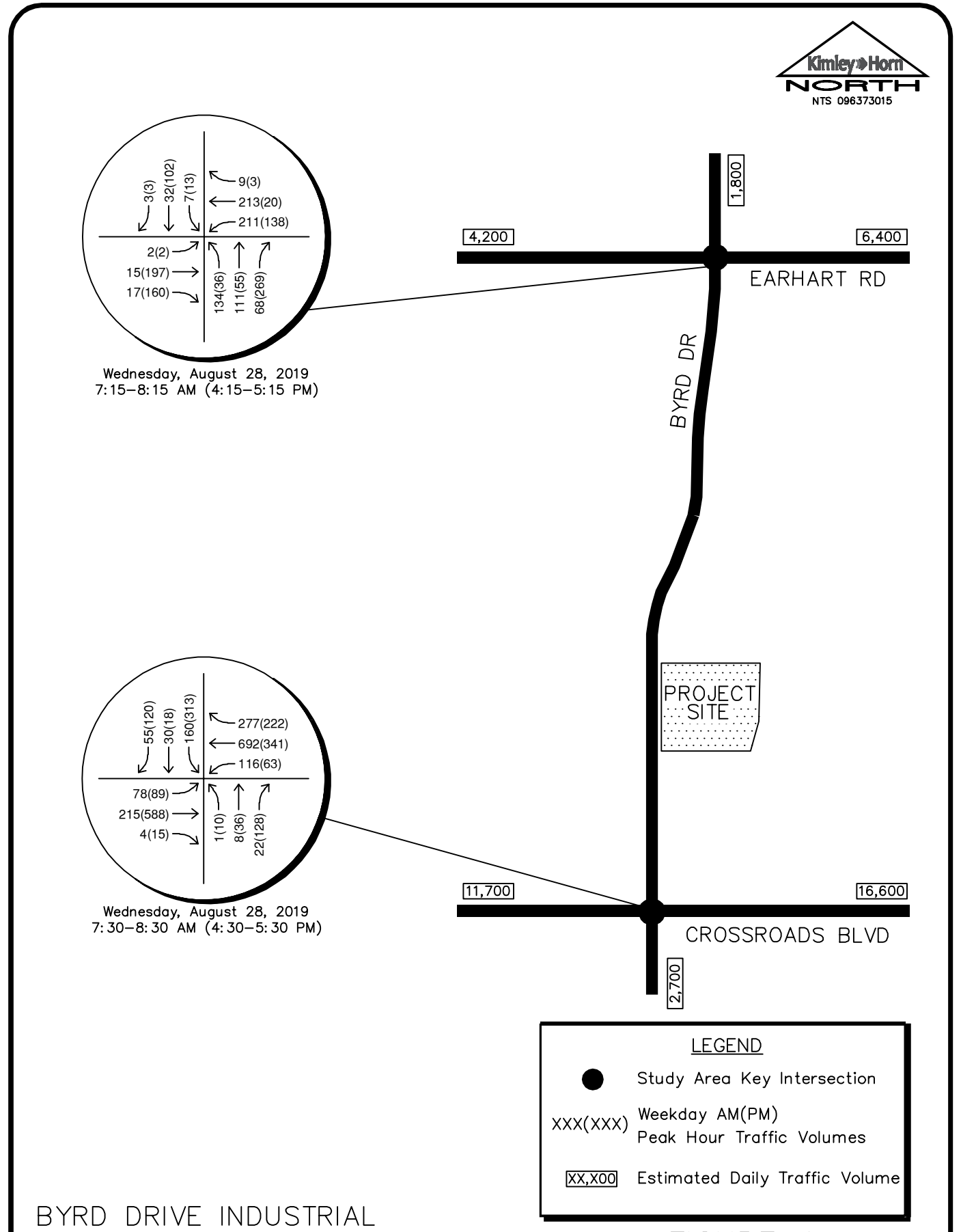
### 3.3 Existing Traffic Volumes

Existing peak hour turning movement counts were conducted at the key intersections on Wednesday, August 28, 2019. Counts were conducted in 15-minute intervals during the morning and afternoon peak hours of adjacent street traffic from 7:00 AM to 9:00 AM and 4:00 PM to 6:00 PM on this count date. Existing turning movement counts are shown in **Figure 4** with count sheets provided in **Appendix B**.

### 3.4 Unspecified Development Traffic Growth

Based on past study history, City of Loveland staff has recommended use of an annual traffic volume growth rate between one and two percent. To provide a conservative analysis, an annual traffic volume growth rate of two (2) percent was applied to calculate future traffic volumes. This annual growth rate was used to estimate near term 2020 and long term 2040 traffic volume projections at the key intersections without the addition of the project. Background traffic volumes for 2020 and 2040 are shown in **Figure 5** and **Figure 6**, respectively.




BYRD DRIVE INDUSTRIAL
LOVELAND, CO
EXISTING TRAFFIC VOLUMES

FIGURE 4

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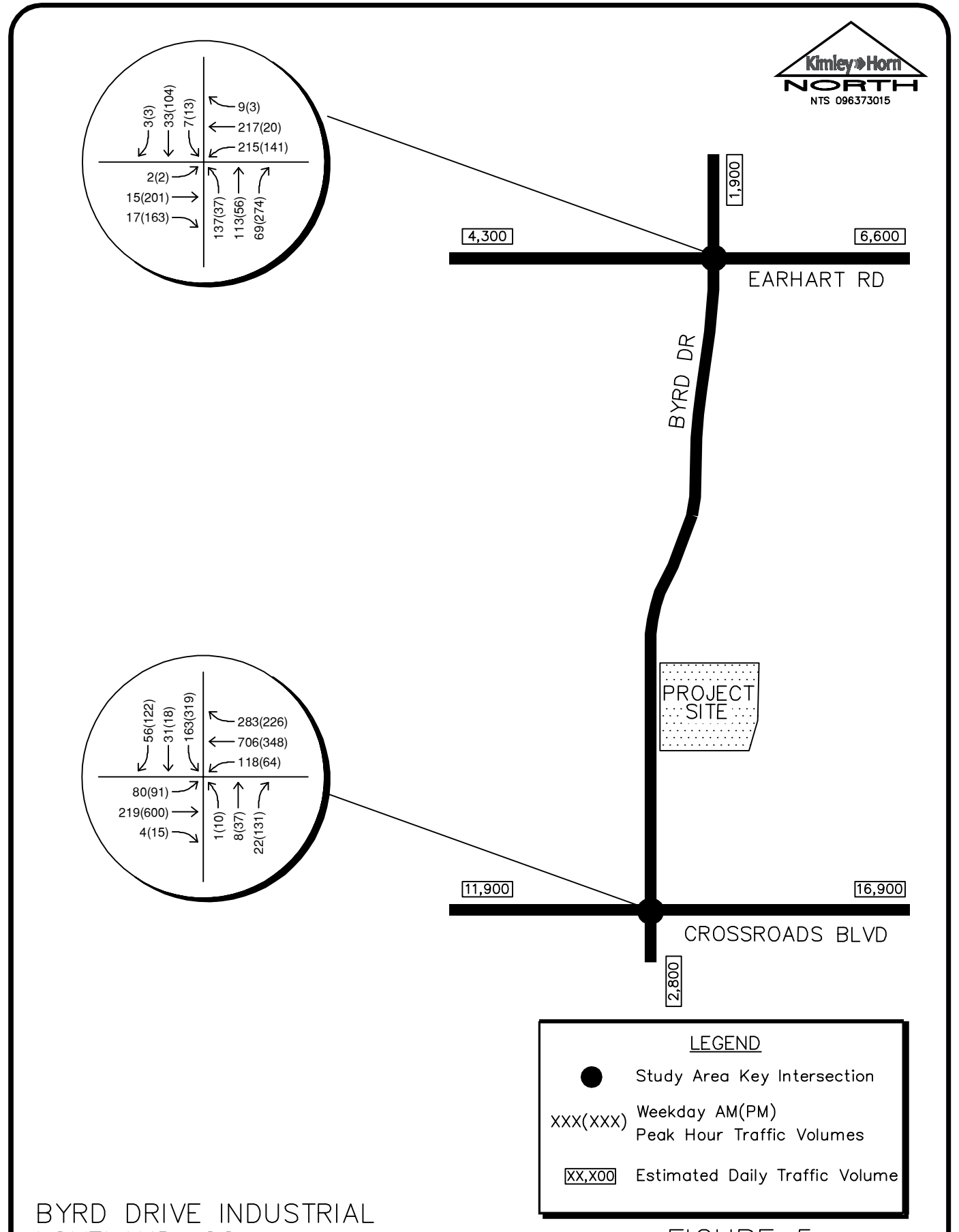


BYRD DRIVE INDUSTRIAL
LOVELAND, CO
2020 BACKGROUND TRAFFIC VOLUMES

FIGURE 5

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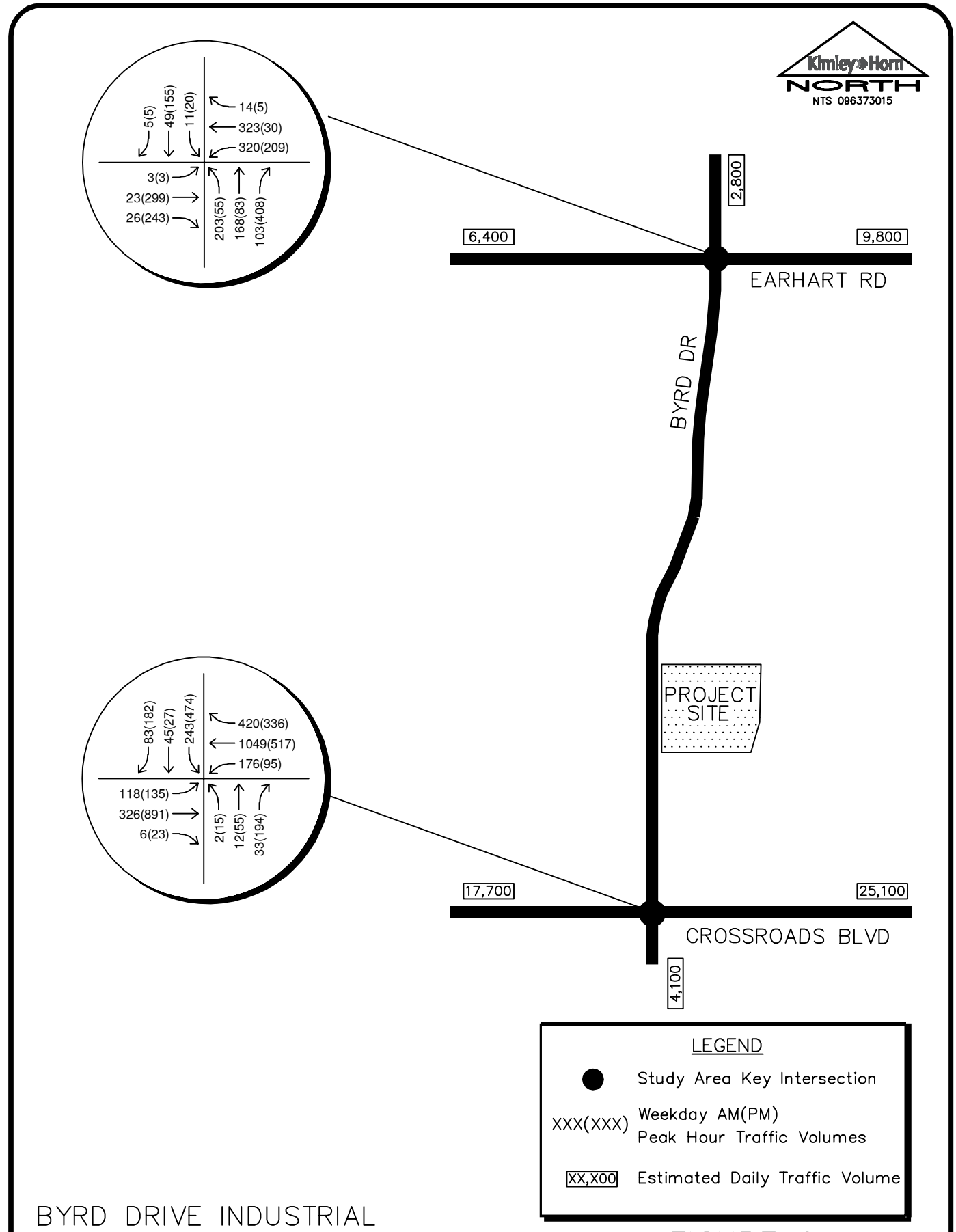


BYRD DRIVE INDUSTRIAL
LOVELAND, CO
2040 BACKGROUND TRAFFIC VOLUMES

FIGURE 6

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## 4.1 Trip Generation

Site-generated traffic estimates are determined through a process known as trip generation. Rates and equations are applied to the proposed land uses to estimate traffic generated by the development during a specific time interval. The acknowledged source for trip generation rates is the *Trip Generation Manual*[1] published by the Institute of Transportation Engineers (ITE). ITE has established trip rates in nationwide studies of similar land uses. For this study, Kimley-Horn used the ITE Trip Generation fitted curve equations that apply to general light industrial land use (ITE Code 110) for traffic associated with the development.

Byrd Drive Industrial is expected to generate approximately 802 daily weekday trips with 73 of these trips expected to occur during the morning peak hour and 59 trips occurring during the afternoon peak hour. Calculations were based on the procedure and information provided in the ITE *Trip Generation Manual, 10th Edition – Volume 1: User's Guide and Handbook*, 2017. **Table 1** summarizes the estimated trip generation for the proposed development. The trip generation worksheet is included in **Appendix C**.

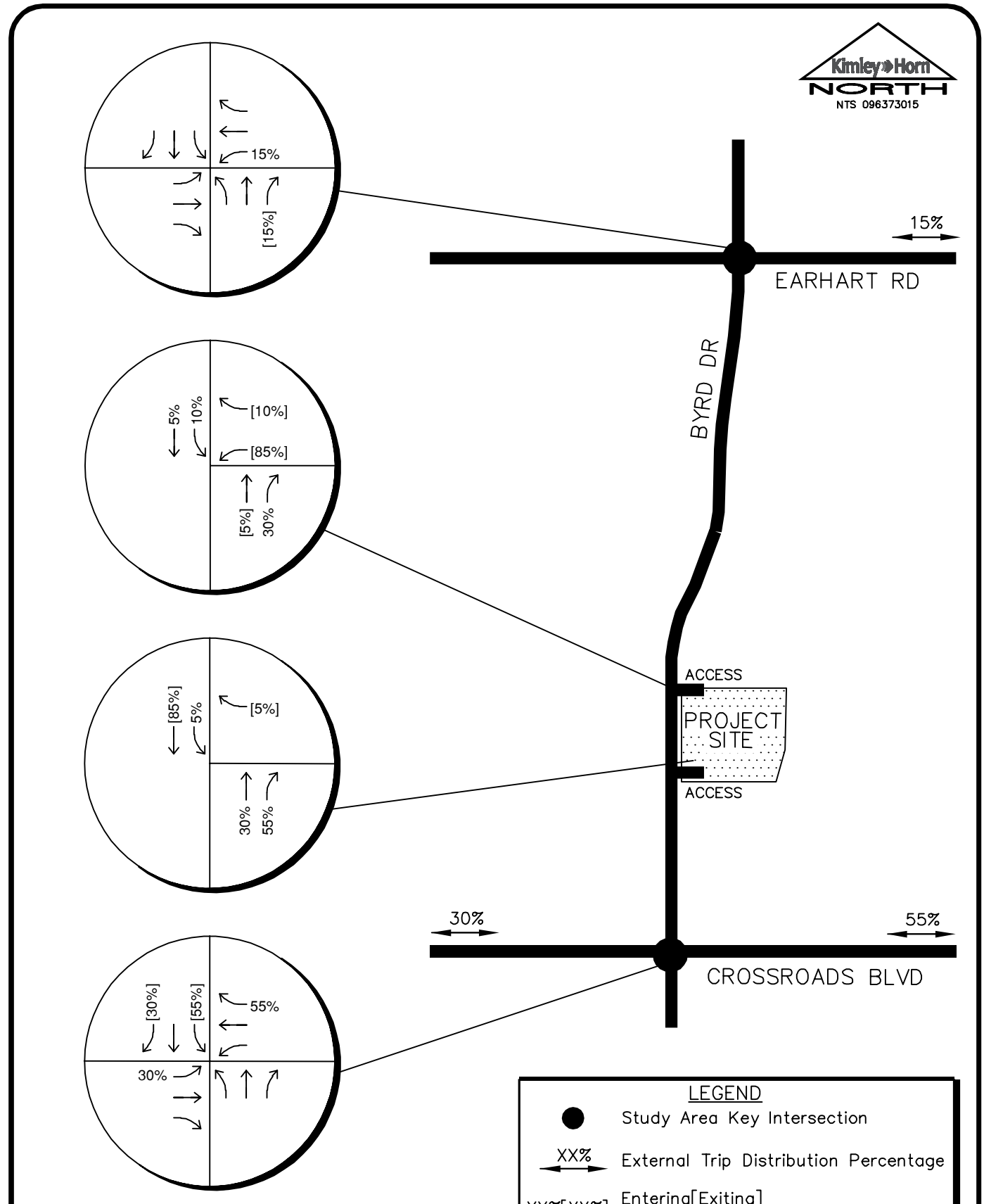
**Table 1 – Byrd Drive Industrial Traffic Generation**

| Land Use | Vehicle Trips | | | | | | |
|---|---|---|---|---|---|---|---|
| | Daily | AM Peak Hour | | | PM Peak Hour | | |
| | | In | Out | Total | In | Out | Total |
| General Light Industrial (ITE 110) – 196,200 Square Feet | 802 | 64 | 9 | 73 | 8 | 51 | 59 |

## 4.2 Trip Distribution

Distribution of site traffic on the street system was based on the area street system characteristics, existing traffic patterns, existing and anticipated surrounding demographic information, expected roadway improvements, and the proposed access system for the project. The directional distribution of traffic is a means to quantify the percentage of site-generated traffic that approaches the site from a given direction and departs the site back to the original source. The project trip distribution is illustrated in **Figure 7.**

[1] Institute of Transportation Engineers, *Trip Generation Manual*, Tenth Edition, Washington DC, 2017.




BYRD DRIVE INDUSTRIAL
LOVELAND, CO
PROJECT TRIP DISTRIBUTION

FIGURE 7

Kimley»Horn

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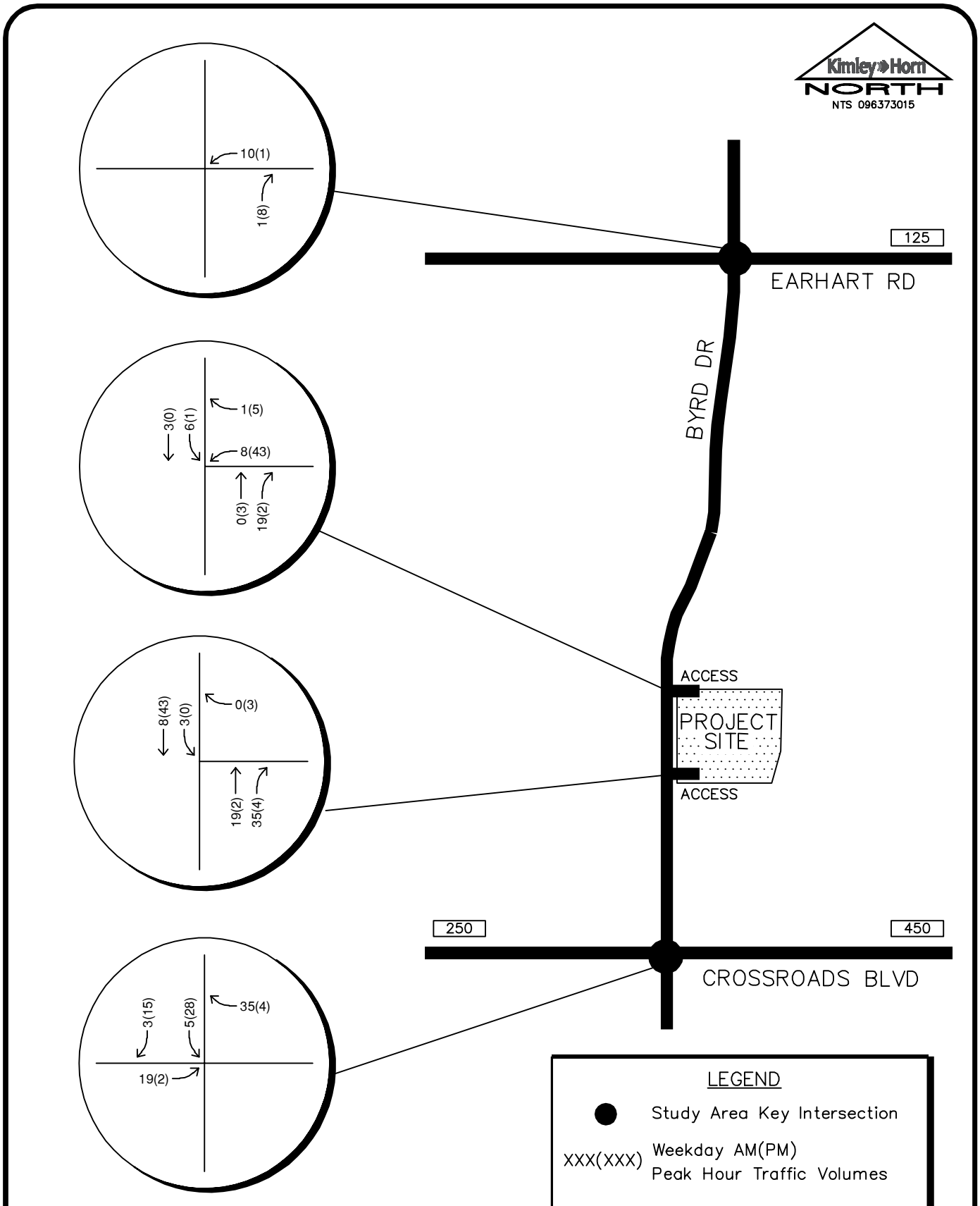
### 4.3 Traffic Assignment

Traffic assignment was obtained by applying the project trip distribution to the estimated traffic generation of the development shown in **Table 1**. Site traffic assignment for Byrd Drive Industrial is shown in **Figure 8.**

### 4.4 Total (Background Plus Project) Traffic

Site generated traffic volumes were added to the background volumes to represent estimated traffic conditions for the short term 2020 horizon and long term 2040 horizon. These total traffic volumes for the site are illustrated for the 2020 and 2040 horizon years in **Figures 9** and **10**, respectively.




BYRD DRIVE INDUSTRIAL
LOVELAND, CO
PROJECT TRAFFIC ASSIGNMENT

FIGURE 8

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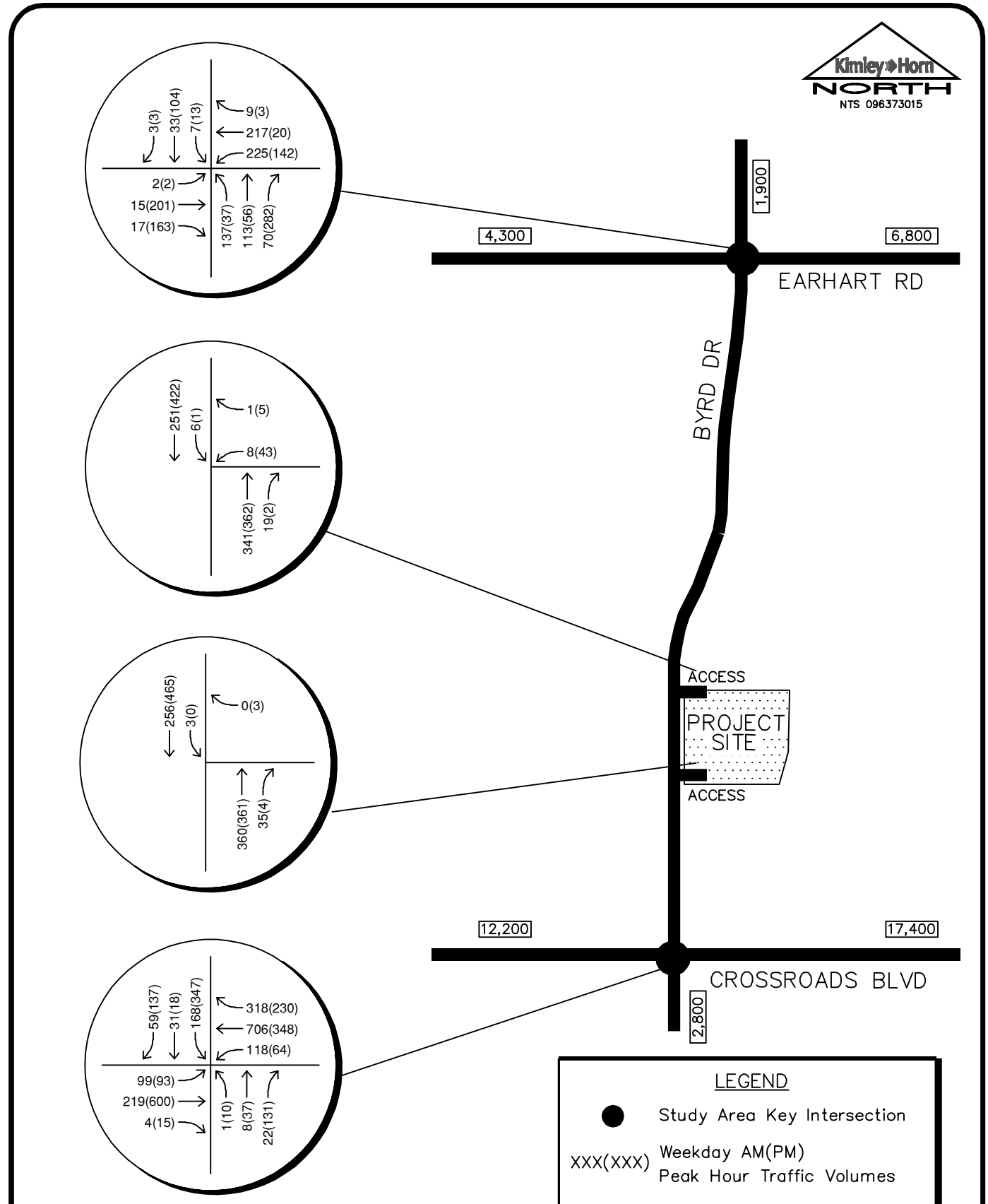


BYRD DRIVE INDUSTRIAL
LOVELAND, CO
2020 BACKGROUND PLUS
PROJECT TRAFFIC VOLUMES

FIGURE 9

Kimley»Horn

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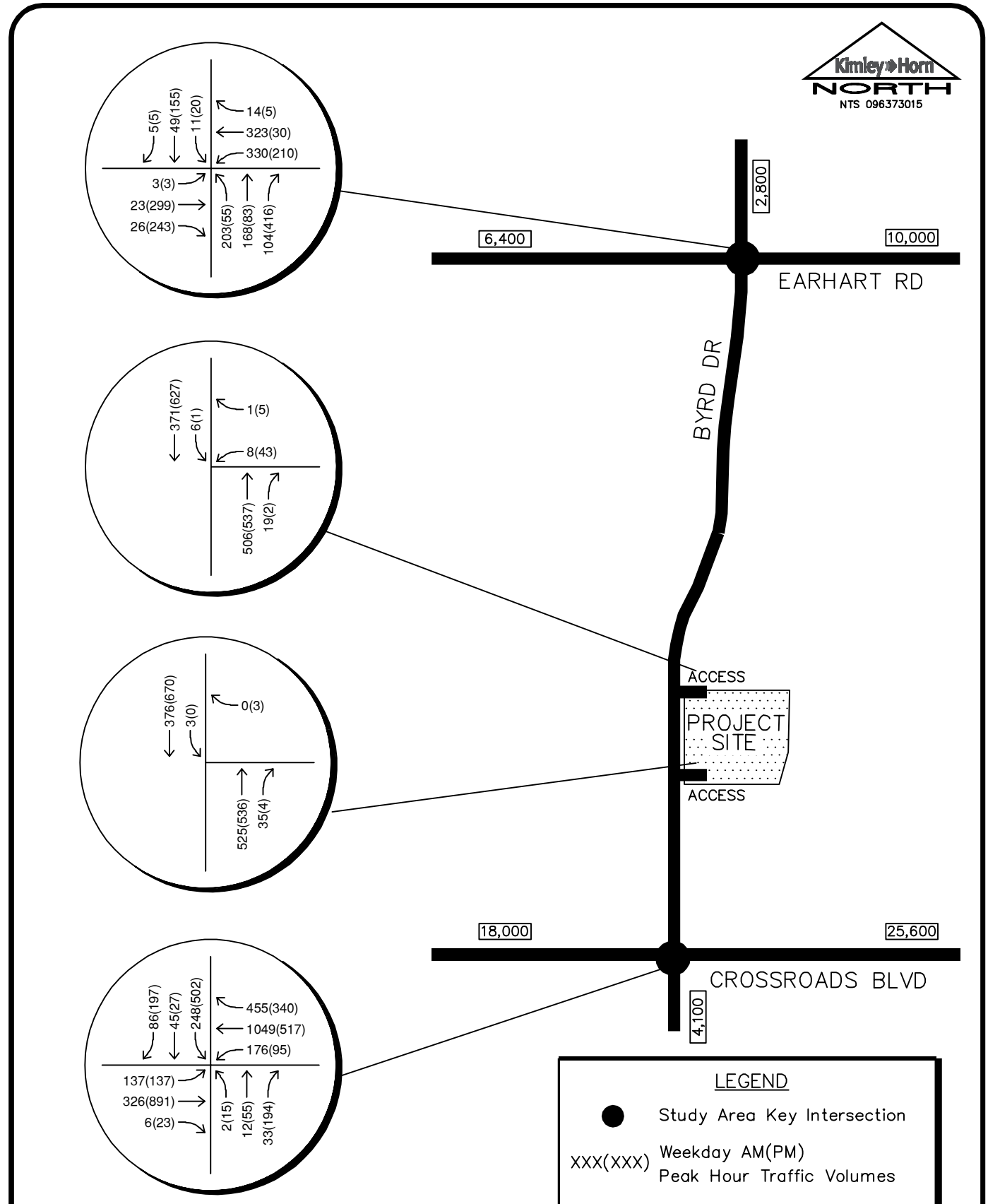


BYRD DRIVE INDUSTRIAL
LOVELAND, CO
2040 BACKGROUND PLUS
PROJECT TRAFFIC VOLUMES

FIGURE 10

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## 5.0 TRAFFIC OPERATIONS ANALYSIS

Kimley-Horn's analysis of traffic operations in the site vicinity was conducted to determine potential capacity deficiencies in the 2020 and 2040 development horizons at the identified key intersections and access driveways. The acknowledged source for determining overall capacity is the current edition of the *Highway Capacity Manual (HCM)*[2].

### 5.1 Analysis Methodology

Capacity analysis results are listed in terms of Level of Service (LOS). LOS is a qualitative term describing operating conditions a driver will experience while traveling on a particular street or highway during a specific time interval. It ranges from A (very little delay) to F (long delays and congestion). Typical standard traffic engineering practice recommends intersection LOS D for signalized intersections and LOS E for movements or approaches of unsignalized intersections as the minimum threshold for acceptable operations. **Table 2** shows the definition of level of service for signalized and unsignalized intersections.

**Table 2 – Level of Service Definitions**

| Level of Service | Signalized Intersection Average Total Delay (sec/veh) | Unsignalized Intersection Average Total Delay (sec/veh) |
|---|---|---|
| A | ≤ 10 | ≤ 10 |
| B | > 10 and ≤ 20 | > 10 and ≤ 15 |
| C | > 20 and ≤ 35 | > 15 and ≤ 25 |
| D | > 35 and ≤ 55 | > 25 and ≤ 35 |
| E | > 55 and ≤ 80 | > 35 and ≤ 50 |
| F | > 80 | > 50 |

Definitions provided from the Highway Capacity Manual, Sixth Edition, Transportation Research Board, 2016.

Study area intersections were analyzed based on average total delay analysis for signalized and unsignalized intersections. Under the unsignalized analysis, the LOS for a two-way stop-controlled intersection is determined by the computed or measured control delay and is defined for each minor movement. LOS for a two-way stop-controlled intersection is not defined for the intersection as a whole. LOS for a signalized and all-way stop controlled intersection is defined for each approach and for the overall intersection.

[2] Transportation Research Board, *Highway Capacity Manual*, Sixth Edition, Washington DC, 2016.

The City of Loveland has identified acceptable operation thresholds for level of service based on the overall intersection, approaches, and movements at signalized and unsignalized intersections as applicable. Level of service thresholds in Loveland are summarized in the following **Table 3**.

**Table 3 – Loveland Motor Vehicle LOS Standards (Intersections)**

| Intersection Component | Major Intersection[1] | Minor Intersection[2] | Driveway |
|---|---|---|---|
| **Overall (City Limits)** | LOS C | LOS C | No Limit |
| **Overall (GMA)** | LOS D | LOS D | No Limit |
| **Any Leg** | LOS D | LOS E | No Limit |
| **Any Movement** | LOS E | LOS F | No Limit |

[1] **Includes all signalized and unsignalized arterial/arterial and arterial/major collector intersections**
[2] **Includes all unsignalized intersection (except major intersections) and high volume driveways**
[3] **There are no LOS standards for I-25 Interchanges**

The proposed accesses along Byrd Drive are classified as Minor Intersections. The following intersections are classified as Major Intersections, which have an identified target of LOS C or better:

- Crossroads Boulevard and Byrd Drive
- Earhart Road and Byrd Drive

It is important to note that the reduced level of service category requirement of LOS C instead of using a LOS D as is standard traffic engineering practice has been shown to provide an overall degradation in the level of service for all road users. By holding the intersections and roadways to a higher LOS C standard causes the roadways and intersections to be overbuilt, which induces increase vehicle speeds and a reduction in safety for pedestrians and bicycles. The current traffic engineering practice and methodology is to allow for an increase in vehicle delay to a level of service of D or E to allow for improved safety for pedestrians and bicyclists by not overbuilding the roadways causing it to be a vehicle-centric only environment.

### 5.2 Key Intersection Operational Analysis

Calculations for the level of service at the key intersections and project access driveways for the study area are provided in **Appendix D**. The existing year analysis is based on the lane geometry and intersection control shown in **Figure 3**. Synchro traffic analysis software was used to analyze the study area intersections and access driveways. The Synchro Highway



**PC ATTACHMENT C**

Capacity Manual (HCM) methodology reports were used to analyze intersection delay and level of service.

**Byrd Drive and Earhart Road**

The intersection of Byrd Drive and Earhart Road is unsignalized and operates with All-Way Stop Control (AWSC). With this control and the existing lane configuration, this intersection currently operates acceptably with LOS C or better during peak hours and is anticipated to continue operating acceptable with the addition of project traffic in 2020.

By the year 2040, if future volumes are realized, this intersection may operate unacceptably with LOS F during the afternoon peak hour. It is recommended that either a roundabout or traffic signal be constructed at this intersection by the 2040 long term horizon. If a roundabout is implemented at this intersection, single lane approaches are recommended on all four roundabout legs.

A four-hour vehicular volume signal warrant is met in the long-term horizon based on 2040 traffic projections at this intersection. The signal warrant analysis figure for this intersection is included in **Appendix E**. Therefore, a roundabout or signalization is recommended at this location in the 2040 project buildout year. Additionally, it is recommended that a southbound left turn lane be designated at this intersection if signalization is implemented. There is currently sufficient pavement width to stripe this left turn lane without widening the southbound approach to this intersection. With either of the recommended improvements in the 2040 project buildout year this intersection is anticipated to operate acceptably with LOS C or better during peak hours. **Table 4** provides the results of the level of service at this intersection.

**Table 4 – Byrd Drive and Earhart Road LOS Results**

| Scenario | AM Peak Hour | | PM Peak Hour | |
|---|---|---|---|---|
| | Delay (sec/veh) | LOS | Delay (sec/veh) | LOS |
| **2019 Existing** | 12.7 | B | 19.6 | C |
| **2020 Background** | 12.9 | B | 20.6 | C |
| **2020 Background Plus Project** | 13.1 | B | 21.2 | C |
| **2040 Background** | 24.1 | C | 120.8 | F |
| **2040 Background Plus Project (AWSC)** | 25.0 | C | 124.2 | F |
| **2040 Background Plus Project #** | 15.6 | B | 11.9 | B |
| **2040 Background Plus Project ##** | 19.1 | B | 33.6 | C |

# = Roundabout; ## = Signalization and SBL Turn Lane



**PC ATTACHMENT C**

### Byrd Drive and Crossroads Boulevard

The intersection of Byrd Drive and Crossroads Boulevard is signalized and operates with protected-permissive left turn phasing on the eastbound and westbound Crossroads Boulevard approaches and with permissive-only left turn phasing on the northbound and southbound Byrd Drive approaches. With this control and the existing lane configurations, all movements at this intersection currently operate acceptably with LOS C or better during the morning and afternoon peak hours. With or without the addition of project traffic in 2020 and 2040, all movements at this intersection are anticipated to continue to operate acceptably with LOS D or better during the peak hours. To improve overall operations, it is recommended that the southbound left turn movement operate with protected-permissive phasing in the year 2040. **Table 5** provides the results of the level of service analysis for this intersection.

**Table 5 – Byrd Drive and Crossroads Boulevard LOS Results**

| Scenario | AM Peak Hour | | PM Peak Hour | |
|---|---|---|---|---|
| | Delay (sec/veh) | LOS | Delay (sec/veh) | LOS |
| **2019 Existing** | 18.7 | B | 21.8 | C |
| **2020 Background** | 18.8 | B | 22.2 | C |
| **2020 Background Plus Project** | 19.0 | B | 24.3 | C |
| **2040 Background #** | 21.7 | C | 36.4 | D |
| **2040 Background Plus Project #** | 22.0 | C | 37.7 | D |

# SB Protected-Permissive Left Turn Phasing



**PC ATTACHMENT C**

### 5.3 Project Access Operational Analysis

With completion of the Byrd Drive Industrial development, the site proposes two new access locations along the east side of Byrd Drive. The north access will allow full turning movements. A south access is proposed from a three-quarter access intersection with restricted left turn exiting movements.

The Byrd Drive north access will be located approximately 2,000 feet north of the Byrd Drive and Crossroads Boulevard intersection (measured center to center). The Byrd Drive south access is located approximately 1,300 feet north of the Byrd Drive and Crossroads Boulevard intersection (measured center to center). Both accesses are recommended to have a R1-1 "STOP" signs installed for the westbound exiting approaches. The westbound exiting approach at the south access will restrict westbound to southbound left turning movements onto Byrd Drive. To provide signage for the proposed three-quarter restricted accesses, it is recommended that R3-2 No Left Turn sign be placed underneath the STOP sign. A southbound left turn lane should be striped within the existing pavement width at both accesses with lengths of 235 feet plus 200-foot tapers. One exiting lane should be sufficient at both access locations. By 2040, it is understood that the north access location may be a roundabout intersection.

With the recommended lane configurations and control, all movements at all project accesses are expected to operate acceptably during the peak hours during the 2020 project buildout year as well as throughout the 2040 long term horizon. The operational analysis at the proposed project driveways is summarized in **Table 6**. Detailed results of the operational analysis are also provided in **Appendix D**.

**Table 6 – Project Access LOS Results**

| Access and Movement | 2020 Total Traffic | | | | 2040 Total Traffic | | | |
|---|---|---|---|---|---|---|---|---|
| | AM Peak Hour | | PM Peak Hour | | AM Peak Hour | | PM Peak Hour | |
| | Delay (sec/ veh) | LOS | Delay (sec/ veh) | LOS | Delay (sec/ veh) | LOS | Delay (sec/ veh) | LOS |
| **Byrd Drive North Access (TWSC)** | | | | | | | | |
| Westbound Approach | 14.0 | B | 18.3 | C | | | | |
| Southbound Left | 8.2 | A | 8.2 | A | - | - | - | - |
| **Byrd Drive North Access (Roundabout)** | - | - | - | - | 6.6 | A | 8.2 | A |
| **Byrd Drive South Access (3/4 Access)** | | | | | | | | |
| Westbound Approach | 0.0 | A | 10.7 | A | 0.0 | A | 12.4 | A |
| Southbound Left | 8.3 | A | 0.0 | A | 9.0 | A | 0.0 | A |



**PC ATTACHMENT C**

### 5.4 Peak Hour Traffic Volume Analysis for Arterial Links

The City of Loveland requires that roadway segments adjacent to the project be evaluated to determine if they are projected to exceed ACF capacity with development of the project. ACF capacities for the surrounding street network were calculated based upon the City of Loveland procedure as provided in **Appendix F**. Byrd Drive is classified as a minor arterial roadway within the City of Loveland 2030 Transportation Plan. All roadway segment links studied within this report are expected be within ACF compliance for both peak hours studied in 2020 and 2040 with the addition of project traffic. Projected link volumes along with estimated link capacities for the Byrd Drive roadway segments are shown in **Table 7**.

**Table 7 – ACF Traffic Compliance**

| Location | Direction | 2020 Total Traffic | | 2040 Total Traffic | | ACF Traffic Threshold | ACF Compliance | |
|---|---|---|---|---|---|---|---|---|
| | | AM Peak | PM Peak | AM Peak | PM Peak | | AM Peak | PM Peak |
| Byrd Drive, S/O Earhart Road | NB | 320 | 375 | 475 | 554 | 860 | Y | Y |
| | SB | 275 | 409 | 405 | 608 | 860 | Y | Y |
| Byrd Drive, N/O of Crossroads Blvd | NB | 425 | 360 | 604 | 532 | 900 | Y | Y |
| | SB | 258 | 502 | 379 | 726 | 900 | Y | Y |

### 5.5 Turn Bay Vehicle Queuing Analysis

A vehicle queuing analysis was conducted for turn lanes at the study area intersections. The queuing analysis was performed using the Synchro analysis software presenting the results of the 95th percentile queue length. Queue analysis worksheets at the signalized intersections are provided in **Appendix G**. Queue length calculations for unsignalized intersections are provided within the level of service operational sheets provided in **Appendix D**. Results of the vehicle queuing analysis are shown in the following **Table 8**.

**Table 8 – Turn Lane Length Analysis Results**

| Intersection<br>Turn Lane | Existing Turn Lane Length (feet) | 2020 Total Queue Length (feet) | 2020 Recommended Turn Lane Length (feet) | 2040 Total Queue Length (feet) | 2040 Recommended Turn Lane Length (feet) |
|---|---|---|---|---|---|
| **Byrd Dr & Earhart Rd (AWSC)** | | | | | |
| Eastbound Left | TWLTL | 25’ | TWLTL | 25’ | TWLTL |
| Westbound Left | 125’ | 70’ | 125’ | 185’ | **200’** |
| Northbound Left | 125’ | 30’ | 125’ | 65’ | 125’ |
| **Byrd Dr & Earhart Rd (Roundabout)** | | | | | |
| Eastbound Approach | DNE | N/A | N/A | 25’ | C |
| Westbound Approach | DNE | N/A | N/A | 225’ | C |
| Northbound Approach | DNE | N/A | N/A | 50’ | C |
| Southbound Approach | DNE | N/A | N/A | 25’ | C |
| **Byrd Dr & Earhart Rd (Signal)** | | | | | |
| Eastbound Left | TWLTL | N/A | N/A | 25’ | TWLTL |
| Westbound Left | 125’ | N/A | N/A | 263’ | **275’** |
| Northbound Left | 125’ | N/A | N/A | 173’ | **175’** |
| Southbound Left | DNE | N/A | N/A | 25’ | **150’** |
| **Byrd Dr & Crossroads Blvd** | | | | | |
| Eastbound Left | 250’ | 54’ | 250’ | 107’ | 250’ |
| Eastbound Right | 250’ | 25’ | 250’ | 25’ | 250’ |
| Westbound Left | 275’ | 60’ | 275’ | 111’ | 275’ |
| Westbound Right | 225’ C | 45’ | 225’ C | 68’ | 225’ C |
| Northbound Left | 225’ C | 25’ | 225’ C | 30’ | 225’ C |
| Northbound Right | 75’ | 25’ | 75’ | 115’ | **125’** |
| Southbound Left | 300’ | 286’ | 300’ | 464’ | **300’** |
| Southbound Right | 375’ | 34’ | 375’ | 43’ | 375’ |
| **Byrd Drive North Access** | | | | | |
| Westbound Approach | DNE | 25’ | **25’** | RAB | RAB |
| Southbound Left | DNE | 25’ | **235’** | RAB | RAB |
| **Byrd Drive South Access** | | | | | |
| Westbound Right | DNE | 25’ | **25’** | 25’ | 25’ |
| Southbound Left | DNE | 25’ | **235’** | 25’ | 235’ |

TWLTL = Two-Way Left-Turn Lane; DNE = Does Not Exist; N/A = Not Applicable; C = Continuous Lane; RAB = Roundabout

As shown in the table representing the queuing results, all anticipated vehicle queues are accommodated or managed within existing or proposed turn lanes at the study area intersections in the 2020 project buildout year. All new auxiliary turn lanes should be constructed with the lengths reported in **Table 8**.

Vehicle queues may extend beyond existing turn lanes at several locations during the peak hours in 2040. By the 2040 long term horizon, southbound left turn queues may exceed the existing 300-foot storage length at the intersection of Crossroads Boulevard and Byrd Drive. However, this storage length cannot be further extended due to the existing back-to-back left



**PC ATTACHMENT C**

turn lane that exists for the US Energy Department driveway located along the west side of Byrd Drive. Southbound dual left turn lanes may need to be provided at the Crossroads Boulevard and Byrd Drive intersection in the long-term future to prevent long vehicle queues. It is recommended that vehicle queues are studied further by the long-term horizon to determine if existing turn lanes lengths are sufficient for future traffic volumes.

According to Larimer County Urban Area Street Standards Figure 8-4, right turn lanes are required along 2-lane arterials with a speed limit of 45 miles per hour when the volume of right-turns during the peak hour exceeds 40 vehicles per hour if the adjacent through volume is greater 500 vehicles per hour. Based on this, neither access warrants a separate right turn lane for the 2020 and 2040 horizons.

Based upon Figure 8-2 within Larimer County Urban Area Street Standards, the new southbound left turn lane at both Byrd Drive accesses should be designated with 235 feet of length plus a 200-foot taper.

**5.6 Bicycle and Pedestrian Access**

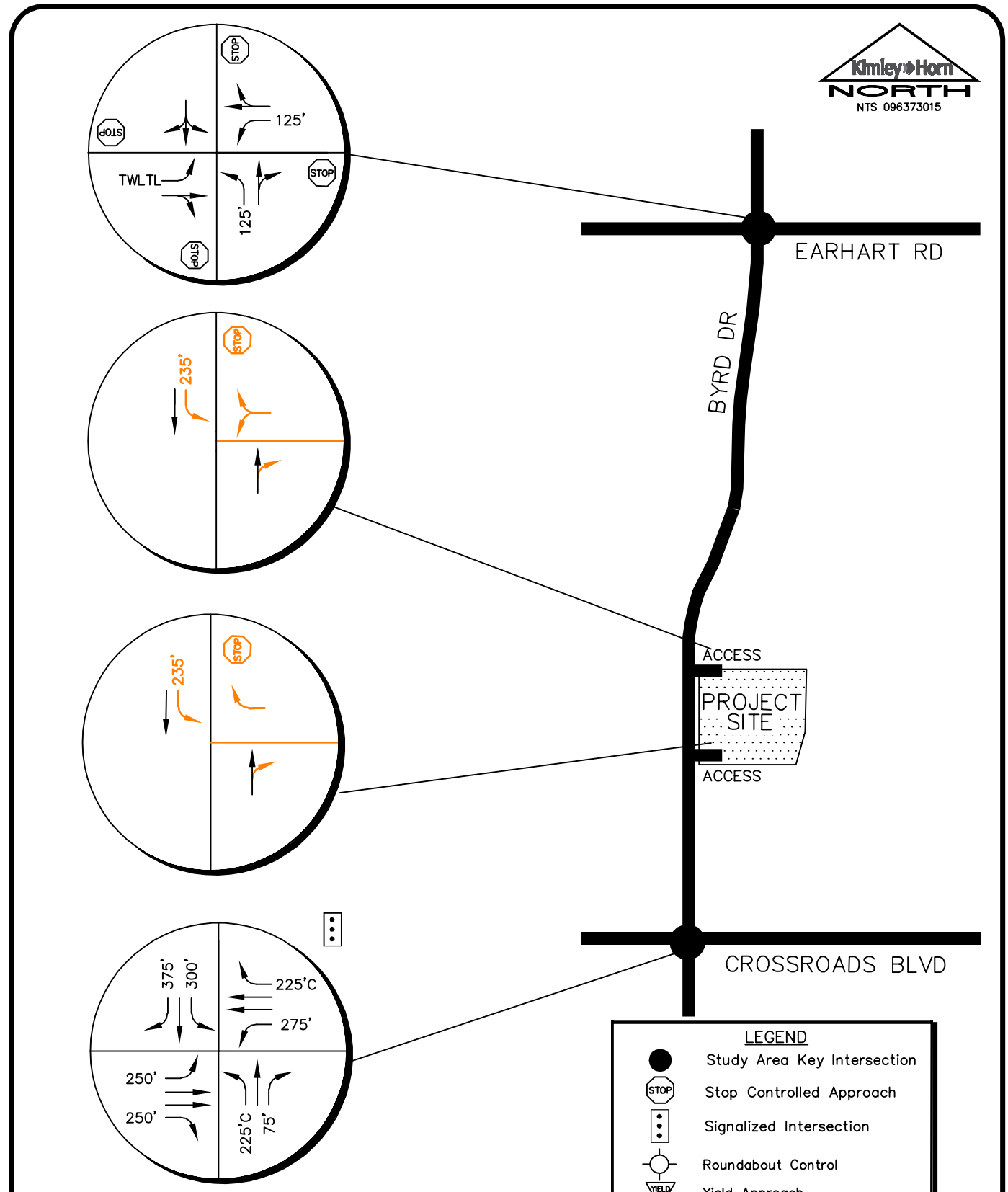
A bicycle and pedestrian access evaluation was conducted for the proposed Byrd Drive Industrial development. Designated bicycle lanes are provided on both the north and south sides of Earhart Road and of Crossroads Boulevard. Designated bicycle lanes are also provided on both the east and west sides of Byrd Drive within the project vicinity and study area.

A sidewalk is located on the south side of Crossroads Boulevard from the I-25 Frontage Road to Precision Drive. Additionally, a sidewalk exists on the east side of Byrd Drive from Crossroads Boulevard to the commercial driveway intersection located approximately 675-foot to the north. Designated and timed pedestrian crossings are located along all four approaches at the intersections of Crossroads Boulevard and Byrd Drive. With the area surrounding Byrd Drive being mainly undeveloped, there are no observed sidewalks or designated street crossings along Byrd Drive located to the north of the project site or along Earhart Road. With development of this project, it is anticipated that new sidewalk be constructed along the east side of Byrd Drive adjacent to project frontage. This sidewalk should provide a connection to the existing sidewalk along Byrd Drive at the Crossroads Boulevard signalized intersection.

Based on the results of the intersection operational and turn lane analysis, the recommended lane configurations and control of the study key intersections are shown for the 2020 project buildout year in **Figure 11** and for the 2040 long term horizon in **Figure 12**.



**PC ATTACHMENT C**

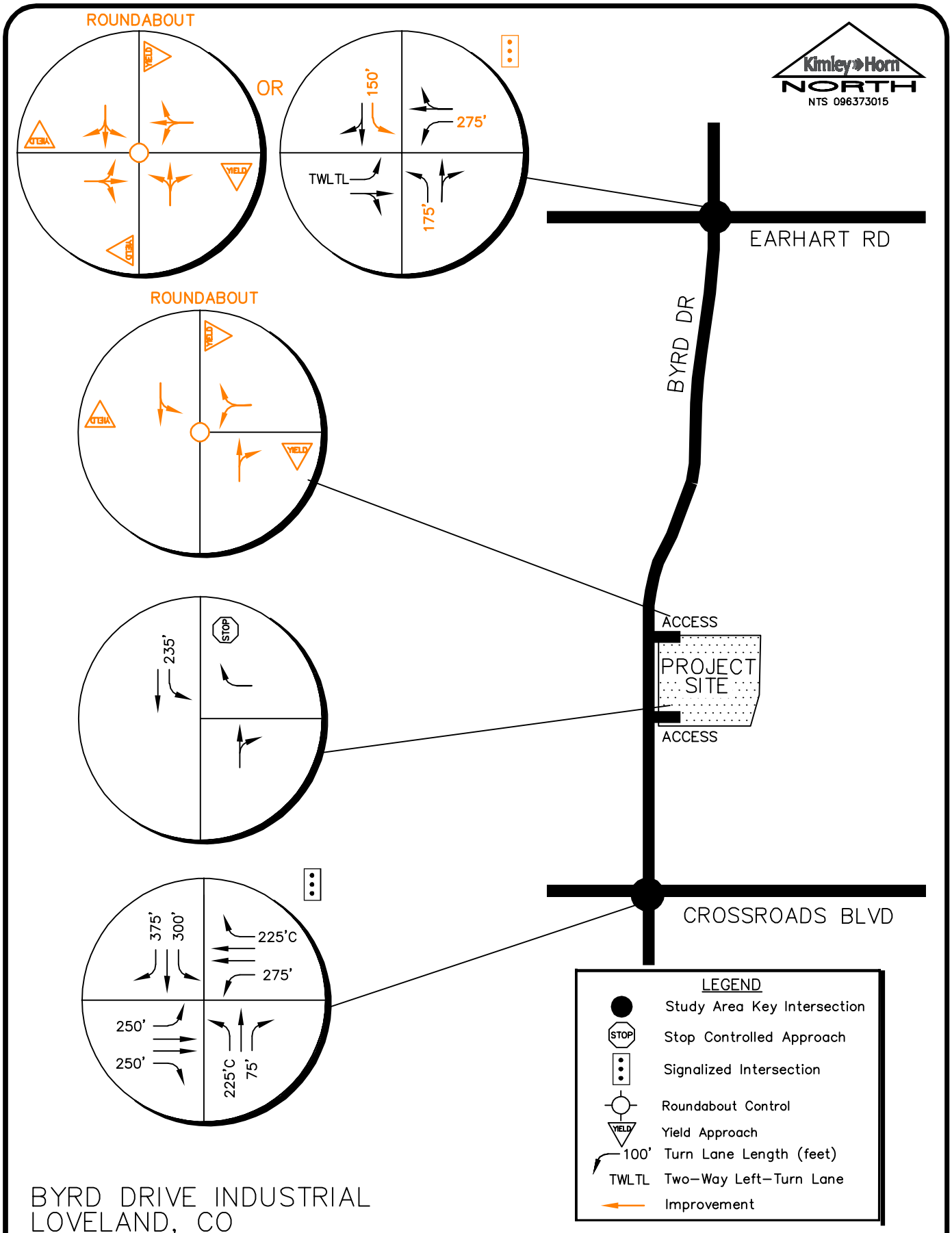



BYRD DRIVE INDUSTRIAL
LOVELAND, CO
2020 RECOMMENDED
LANE CONFIGURATIONS AND CONTROL

FIGURE 11

Kimley»Horn

PC ATTACHMENT C




BYRD DRIVE INDUSTRIAL
LOVELAND, CO
2040 RECOMMENDED
LANE CONFIGURATIONS AND CONTROL

FIGURE 12

Kimley»Horn

PC ATTACHMENT C

## 6.0 CONCLUSIONS AND RECOMMENDATIONS

Based on the analysis presented in this report, Kimley-Horn believes the proposed Byrd Drive Industrial development will be successfully incorporated into the existing and future roadway network. The proposed project development and expected traffic volumes resulted in the following recommendations and conclusions:

- With completion of the Byrd Drive Industrial development, the site proposes two new access locations along the east side of Byrd Drive. The north access is proposed to allow full turning movements and be located approximately 2,200 feet north of Crossroads Boulevard (measured center to center) while the south access is proposed from a new three-quarter access T-intersection with restricted left turn exiting movements to be located approximately 1,300 feet north of the Byrd Drive and Crossroads Boulevard intersection (also measured center to center). Both accesses are recommended to have R1-1 “STOP” signs installed for the westbound exiting approaches. The westbound exiting approach at the south access will restrict westbound to southbound left turning movements onto Byrd Drive. To provide signage for the proposed three-quarter restricted accesses, it is recommended that R3-2 No Left Turn sign be placed underneath the STOP sign. One exiting lane should be sufficient at both access locations along Byrd Drive.

- According to Larimer County Urban Area Street Standards Figure 8-4, right turn lanes are required along 2-lane arterials with a speed limit of 45 miles per hour when the volume of right-turns during the peak hour exceeds 40 vehicles per hour if the adjacent through volume is greater 500 vehicles per hour. Based on this, neither access warrants a separate right turn lane for either the 2020 and 2040 horizons. However important to note, the eastbound and northbound approaches to the Earhart Road and Byrd Drive intersection currently warrant right turn lanes based on existing traffic volumes. Based upon Figure 8-2 within Larimer County Urban Area Street Standards, new southbound left turn lanes will be needed at both accesses along Byrd Drive and should be constructed with lengths of 235 feet plus 200-foot tapers.

- With development of this project, it is anticipated that new sidewalk will be constructed along the east side of Byrd Drive adjacent to project frontage. This sidewalk should provide a

connection to the existing sidewalk along Byrd Drive to provide a connection to the Crossroads Boulevard signalized intersection.

- Byrd Drive is classified as a minor arterial roadway within the City of Loveland 2030 Transportation Plan. All roadway segment links studied within this report are expected to be within ACF compliance for both peak hours studied in 2020 and 2040 with the addition of project traffic.

- By the year 2040, if future volumes are realized, the intersection of Byrd Drive and Earhart Road may operate unacceptably during peak hours. It is recommended that either a roundabout or traffic signal be constructed at this intersection in the long-term horizon. If a roundabout is implemented, single lane approaches are recommended on all four roundabout legs. If signalization is implemented at this intersection, it is recommended that a southbound left turn lane be designated. There is currently sufficient pavement width to stripe this left turn lane without widening the southbound approach to this intersection.

- Vehicle queues may extend beyond existing turn lanes at several locations during the peak hours in 2040. By the 2040 long term horizon, southbound left turn queues may exceed the existing 300-foot storage length at the intersection of Crossroads Boulevard and Byrd Drive. However, this storage length cannot be further extended due to the existing back-to-back left turn lane that exists for the US Energy Department driveway located along the west side of Byrd Drive. Southbound dual left turn lanes may need to be provided at the Crossroads Boulevard and Byrd Drive intersection in the long-term future to prevent long vehicle queues if the need arises. It is recommended that vehicle queues be further studied by the long-term horizon to determine if existing turn lanes lengths are sufficient for future traffic volumes.
- To improve overall operations at the intersection of Byrd Drive and Crossroads Boulevard, it is recommended that the southbound left turn movement operate with protected-permissive phasing in the year 2040.

- By 2040, it is anticipated that the northern full movement access will be a roundabout based on discussions with City Staff. The east leg will be incorporated as the site access. The proposed roundabout T-intersection is recommended to provide a single lane on all approaches.

- Any on-site and off-site signing and striping improvements should be incorporated into the Civil Drawings and conform to City of Loveland and CDOT Standards as well as the Manual on Uniform Traffic Control Devices – 2009 Edition (MUTCD).

# EAST LOVELAND INDUSTRIAL TWENTY-THIRD SUBDIVISION
# CONDITIONAL USE SITE DEVELOPMENT PLAN

LOCATED IN THE SOUTHWEST QUARTER OF SECTION 34, TOWNSHIP 6 NORTH, RANGE 68 WEST OF THE 6TH PRINCIPAL MERIDIAN, CITY OF LOVELAND, COUNTY OF LARIMER, STATE OF COLORADO.


architecture
planning
interiors
graphics
site development

1600 champa street
suite 350
denver, colorado 80202
p 720.488.2626

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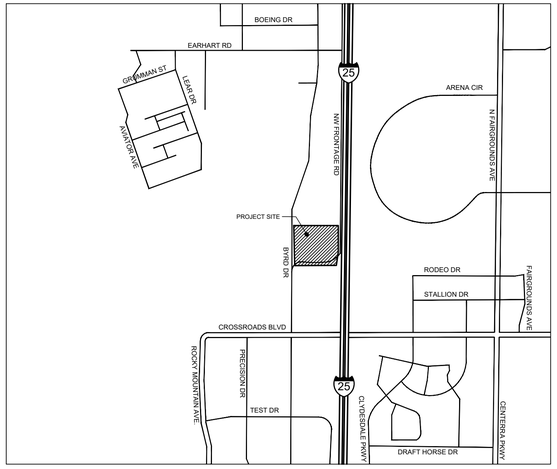
FIRST SDP SUBMITTAL 09/06/2019
SECOND SDP SUBMITTAL 10/28/2019


VICINITY MAP

## STATISTICAL INFORMATION

| Zone District: I - Developing Industrial | | |
|---|---|---|
| General Zone Lot Information | Square Feet | Acres |
| Lot 2 (Building 1) | | |
| Zone Lot Size (Gross Project Area) | 330,602 SF | 7.59 Acres |
| Hardscape - Includes: Parking & Drive Aisles | 136,498 SF (41.3%) | |
| Building #1 | 100,722 SF (30.5%) | |
| Landscape Area | 93,382 SF (28.2%) | |
| TOTAL | 330,602 SF (100%) | |
| | | |
| Lot 1 (Building 2) | | |
| Zone Lot Size (Gross Project Area) | 294,801 SF | 6.77 Acres |
| Hardscape - Includes: Parking & Drive Aisles | 136,431 SF (46.3%) | |
| Building #2 | 95,256 SF (32.3%) | |
| Landscape Area | 63,114 SF (21.4%) | |
| TOTAL | 294,801 SF (100%) | |
| | | |
| Primary Street Designation | Byrd Drive | |
| Proposed Uses | Warehouse, Light Industrial, Office | |
| Occupancy Classification | S-1 / F-1 / B | |
| Construction Type | IIB - Fully Sprinklered | |
| Design Elements | Max (i) | Provided |
| Building #1 Height, Feet | 50'-0" | 38'-0" |
| Building #2 Height, Feet | 50'-0" | 38'-0" |
| Parking | Required | Provided |
| Building #1 (Lot 2) (70% Warehouse / 30% Office) | | |
| Standard Spaces - Warehouse (1/1000 sf) | 70,505 sf/1000 = 71 spaces | |
| Standard Spaces - Office (1/333 sf) | 30,217 sf/333 = 91 spaces | |
| Total Spaces | 162 | 175 |
| Accessible | 6 | 6 |
| Potential Future Truck Court Parking | | 84 |
| Parking abutting I-25/Byrd Drive | 77 space / 260 spaces =29.6% | |
| | | |
| Building #2 (Lot 1) (70% Warehouse / 30% Office) | | |
| Standard Spaces - Warehouse (1/1000 sf) | 66,679 sf/1000 = 67 spaces | |
| Standard Spaces - Office (1/333 sf) | 28,577 sf/333 = 86 spaces | |
| Total Spaces | 153 | 184 |
| Accessible | 6 | 6 |
| Potential Future Truck Court Parking | | 86 |
| Parking abutting I-25/Byrd Drive | 77 spaces / 270 spaces =28.5% | |

| | |
|---|---|
| Water Provider | Fort Collins - Loveland Water District |
| Wastewater Provider | South Fort Collins Sanitation District |
| Power Provider | Loveland |
| Overlay Zone | Airport |

## LEGAL DESCRIPTION

A tract of land located in the Southwest quarter of Section 34, Township 6 North, Range 68 West of the 6th Principal Meridian in the City of Loveland, County of Larimer, State of Colorado, and being more particularly described as follows:

Considering the North line of said Southwest quarter as bearing North 89°45'20" East and with all bearings contained herein relative thereto:

Commencing at the West quarter corner of said Section 34; thence along said North line, North 89°45'20" East 2,423.02 feet to the Westerly right-of-way line of Interstate Highway 25; thence along said Westerly right-of-way line, South 00°36'41" West 598.90 feet to the Point of Beginning; thence continuing along said line, South 00°36'41" West 557.82 feet; thence continuing South 06°53'11" West 455.54 feet to the North line of that parcel described as Reception No. 91018318; thence along said North line, South 89°22'13" West 767.49 feet to the Northwest corner of said parcel; thence along the prolongation of the West line thereof, North 00°37'47" West 78.95 feet to the Northeast corner of a Western Area Power Administration parcel; thence along the North line of said W.A.P.A. parcel, North 89°55'19" West 50.00 feet; thence along a line parallel with said prolongation of said West line of said parcel described as Reception No. 91018318, North 00°37'47" West 929.75 feet; thence North 89°22'13" East 889.16 feet to the Point of Beginning, County of Larimer, State of Colorado.

EXCEPTING therefrom that portion conveyed in Deed of Dedication for Right-of-Way recorded August 1, 2003 at Reception No. 20030098329 and Correction Deed of Dedication for Right-of-Way recorded August 23, 2005 at Reception No. 20050071127.

EXCEPTING therefrom that portion conveyed in Warranty Deed recorded August 29, 2005 at Reception No. 20050072427 and Correction Warranty Deed recorded May 11, 2007 at Reception No. 20070035691.

## CONDITIONS

All public improvements shall comply with the Larimer County Urban Area Street Standards (LCUASS).

The developer agrees to acquire and dedicate, at no cost to the City, any rights-of-way necessary for the required street improvements associated with this development.

Prior to the issuance of any building permits on Lots 1 & 2, Byrd Drive -- Loveland Industrial Subdivision, pursuant to the Unified Development Code of the City Municipal Code, the Developer shall design and construct the following public improvements unless already designed and constructed by others:
a) All public improvements on Byrd Drive including accesses, turn lanes and sidewalk as shown on the City approved Public Improvement Construction Plans.

City signed Site Development Plans (including any associated Public Improvement Construction Plans), or the issuance of building permits, does not allow any construction within public street or alley rights-of-way or pedestrian easements. A separate City Development Construction Permit and Street right-of-way (ROW) Work Permit must be obtained by the Developer and/or his Contractor at the City Project Engineering office (and approved by Project Engineering) prior to any repair or construction of sidewalk, curb and gutter, driveway accesses, or any other construction in City street or alley rights-of-way or pedestrian easements, (this includes all items proposed in rights-of-way such as utility street cuts, sidewalk ramps, construction staging proposed in street, landscaping, traffic control, etc.). (Call 970-962-2771 to discuss details to obtain a ROW Work Permit).

Prior to the commencement of any construction activity that will involve any existing or proposed street signs or traffic control devices for or within public street rights-of-way (ROW), the Developer and/or his Contractor shall contact the City Traffic Division at (970) 962-2535 to coordinate the removal, relocation, installation, and/or proper storing of the sign(s) or traffic control device(s) and obtain a ROW work permit from the City Public Works Engineering Division to do such work. However, if the Developer and/or his Contractor removes or relocates any existing street sign(s) or traffic control device(s) for or within the public ROW without first obtaining a ROW work permit from the City Public Works Division, then the contractor will be charged for the labor, materials, and equipment to reinstall the sign(s) or traffic control device(s) as deemed necessary by the City. The Developer and/or his Contractor will also be charged to replace any existing street signs or traffic control devices that were damaged or blemished during any construction activity as deemed necessary by the City. The Developer and/or his Contractor may also be subject to additional fines as per the Loveland Municipal Code.

The Developer and/or his Contractor shall contact the Public Works Street Inspector to discuss the proposed work and schedule necessary inspections prior to any construction activity within a street or alley right-of-way or pedestrian easement.

All trees, shrubs, and other plant materials located within clear sight triangles shall be trimmed in accordance with the requirements of Section 7 of the Larimer County Urban Area Street Standards (LCUASS). Under current LCUASS requirements, trees shall be limbed to a height of not less than eight (8) feet and shrubs and other plant materials shall be maintained at a height of not more than thirty (30) inches, and said maintenance shall be conducted in perpetuity. Trees are also required to be kept limbed up a minimum of 8' above all street sidewalks.


| OWNER | DEVELOPER |
|---|---|
| ETKIN JOHNSON<br>DAVID KLEBBA<br>1512 LARIMER STREET, SUITE 100 (BRIDGE LEVEL)<br>DENVER, COLORADO 80202<br>PH: (303) 629-5212 | ETKIN JOHNSON<br>DAVID KLEBBA<br>1512 LARIMER STREET, SUITE 100 (BRIDGE LEVEL)<br>DENVER, COLORADO 80202<br>PH: (303) 629-5212 |
| **ARCHITECT** | **CIVIL ENGINEER** |
| WARE MALCOMB<br>ERIK RANDA<br>1600 CHAMPA STREET<br>SUITE 350<br>DENVER, COLORADO 80202<br>PH: (303) 689-1534 | WARE MALCOMB<br>TED SWAN<br>990 S. BROADWAY<br>SUITE 230<br>DENVER, COLORADO 80209<br>PH: (303) 689-1516 |
| **ELECTRICAL ENGINEER** | **LANDSCAPE ARCHITECT** |
| AE ENGINEER. DESIGN GROUP<br>ERIC REITAN<br>1900 WAZEE STREET<br>SUITE 205<br>DENVER, COLORADO 80202<br>PH: (303) 296-3034 | PLAN WEST<br>MICK KITTLE<br>767 SANTA FE DRIVE<br>DENVER, COLORADO 80204<br>(303) 741-1411 |


## PROPERTY OWNER

The undersigned agree that the real property described in the application and shown on the Site Development Plan filed herewith, shall be subject to the requirements of Chapter 18 of the Municipal Code of the City of Loveland, Colorado, and any other ordinances of the City of Loveland. The undersigned accepts the conditions and restrictions set forth on said Plan and in the conditions of approval by the City of Loveland. The undersigned also understands that if the next required approval or permit has not been applied for to establish the use or commence the construction that is authorized by the approval of the Site Development Plan or if the use does not require a building permit and is not established, ongoing, and in operation within three years of the date of approval, or other completions date or dates established in a development agreement approved by the City, the Site Development Plan shall expire and shall be deemed null and void.

_____
(Owner's Signature)

_____
(Title)

STATE OF COLORADO )
) ss.
COUNTY OF LARIMER )

The foregoing agreement was acknowledged before me this _____ day of, _____, 2_____, by _____.
Witness my hand and official seal.

My commission expires:_____

_____.
Notary Public

## CITY APPROVAL

Approved this _____ day of _____, 2_____, by the Current Planning Manager of the City of Loveland, Colorado.

_____
Current Planning Manager

## PLANNING COMMISSION APPROVAL

Approved this _____ day of _____, 2_____, by the Planning Commission of the City of Loveland, Colorado.

_____
Planning Commission Chair

## SHEET INDEX


1 OF 22 ---------- COVER SHEET
2 OF 22 ---------- SITE PLAN
3 OF 22 ---------- SITE PLAN
4 OF 22 ---------- GRADING PLAN
5 OF 22 ---------- GRADING PLAN
6 OF 22 ---------- UTILITY PLAN
7 OF 22 ---------- UTILITY PLAN
8 OF 22 ---------- BUILDING 1 EXTERIOR ELEVATIONS
9 OF 22 ---------- BUILDING 2 EXTERIOR ELEVATIONS
10 OF 22 ---------- LANDSCAPE PLAN
11 OF 22 ---------- AMENITY PLAN
12 OF 22 ---------- LANDSCAPE NOTES
13 OF 22 ---------- LANDSCAPE DETAILS
14 OF 22 ---------- LANDSCAPE DETAILS
15 OF 22 ---------- PHOTOMETRIC PLAN
16 OF 22 ---------- PHOTOMETRIC PLAN
17 OF 22 ---------- PHOTOMETRIC PLAN
18 OF 22 ---------- IRRIGATION LEGEND & NOTES
19 OF 22 ---------- IRRIGATION PLAN NORTH
20 OF 22 ---------- IRRIGATION PLAN SOUTH
21 OF 22 ---------- IRRIGATION DETAILS I
22 OF 22 ---------- IRRIGATION DETAILS II




**PC ATTACHMENT D**

# EAST LOVELAND INDUSTRIAL TWENTY-THIRD SUBDIVISION
# CONDITIONAL USE SITE DEVELOPMENT PLAN

LOCATED IN THE SOUTHWEST QUARTER OF SECTION 34, TOWNSHIP 6 NORTH, RANGE 68 WEST OF THE 6TH PRINCIPAL MERIDIAN, CITY OF LOVELAND, COUNTY OF LARIMER, STATE OF COLORADO.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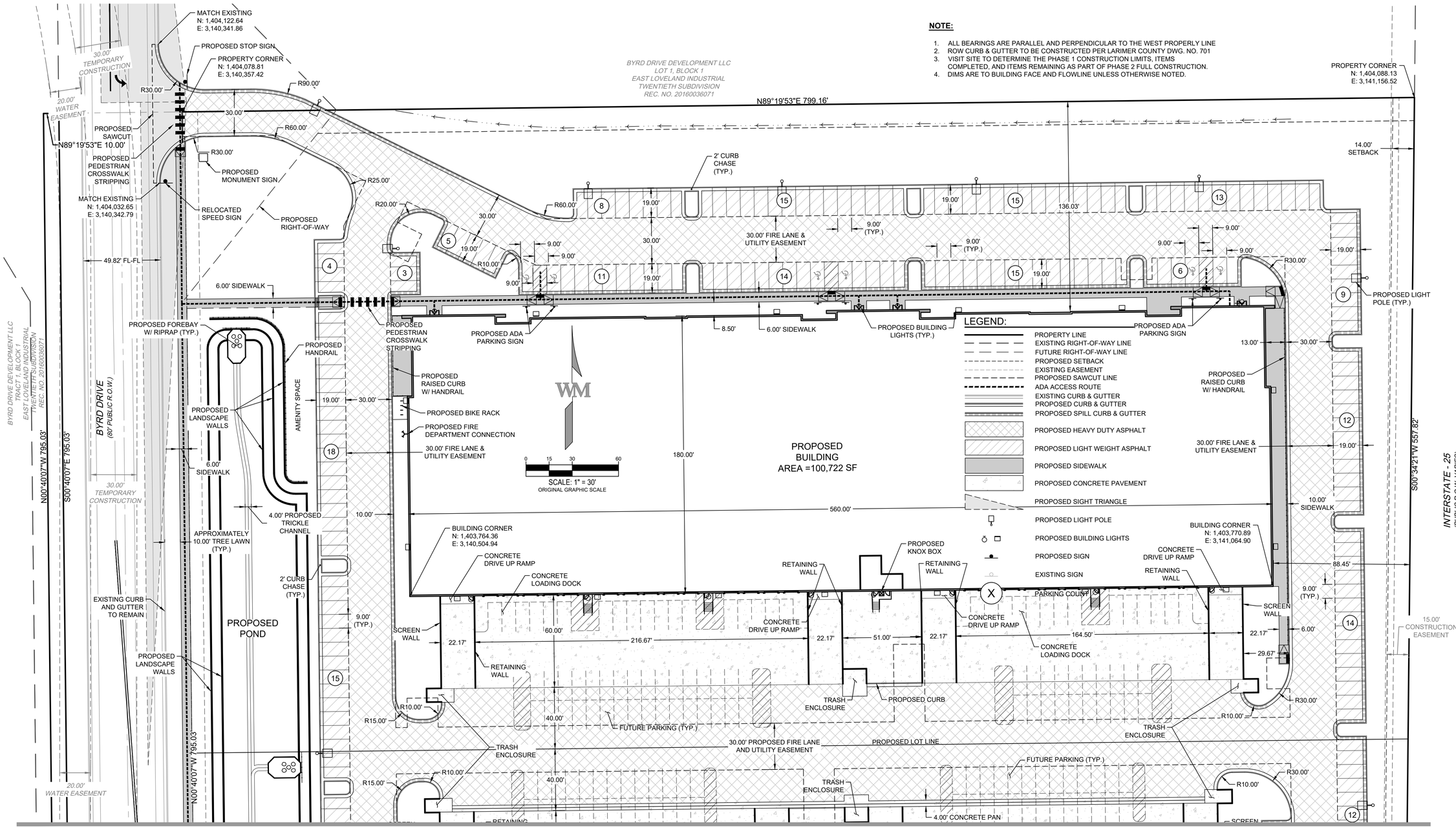
denver, colorado 80202
p 720.488.2626

**WARE MALCOMB**
Leading Design for Commercial Real Estate


FIRST SDP SUBMITTAL 09/06/2019
SECOND SDP SUBMITTAL 10/28/2019




MATCHLINE - SEE SHEET 2

SITE PLAN
SHEET 2 OF 22

**PC ATTACHMENT D**

# EAST LOVELAND INDUSTRIAL TWENTY-THIRD SUBDIVISION
# CONDITIONAL USE SITE DEVELOPMENT PLAN

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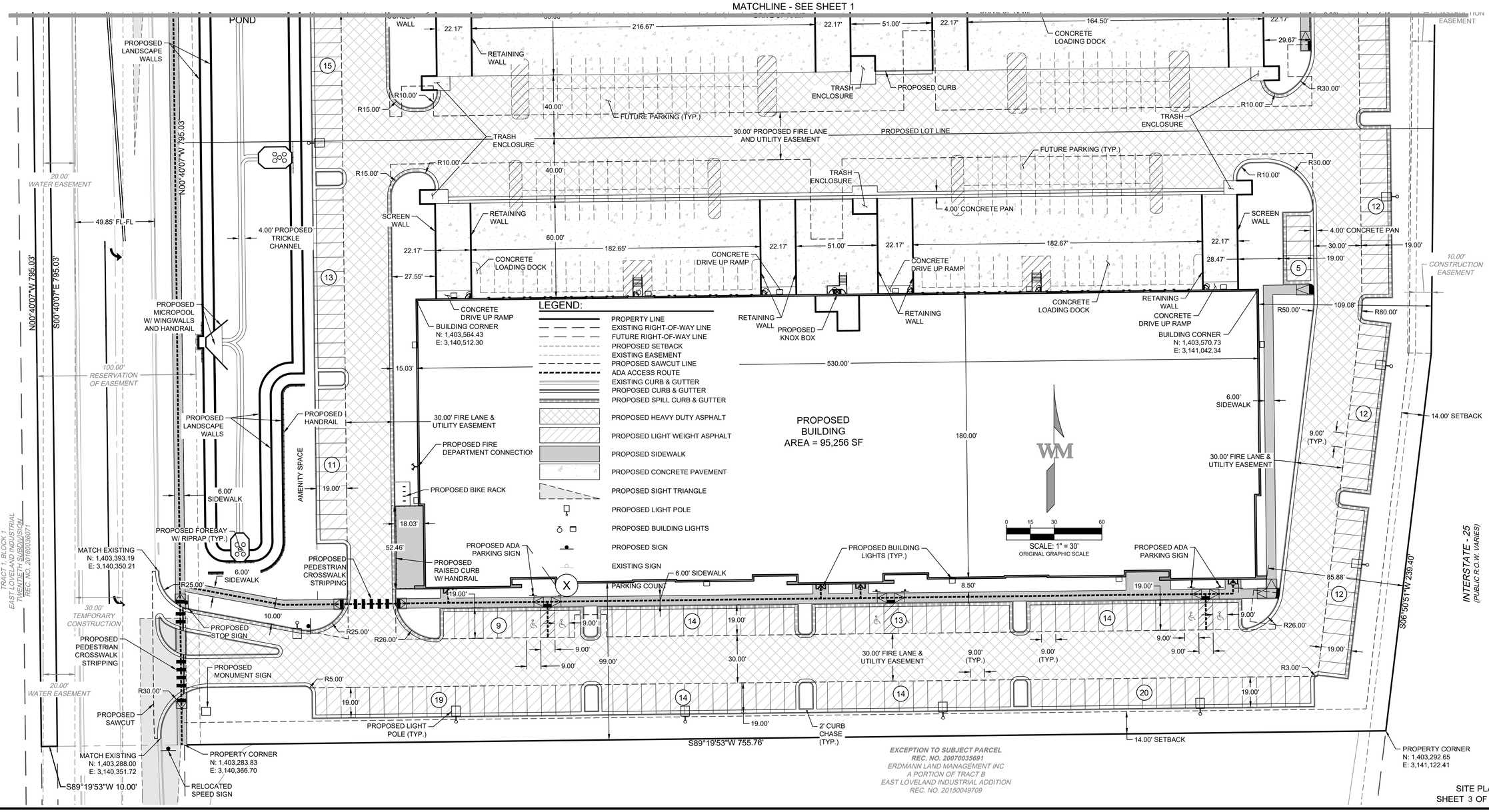
**NOTE:**

1. ALL BEARINGS ARE PARALLEL AND PERPENDICULAR TO THE WEST PROPERLY LINE
2. ROW CURB & GUTTER TO BE CONSTRUCTED PER LARIMER COUNTY DWG. NO. 701
3. VISIT SITE TO DETERMINE THE PHASE 1 CONSTRUCTION LIMITS, ITEMS COMPLETED, AND ITEMS REMAINING AS PART OF PHASE 2 FULL CONSTRUCTION.
4. DIMS ARE TO BUILDING FACE AND FLOWLINE UNLESS OTHERWISE NOTED.




SITE PLAN
SHEET 3 OF 22

**PC ATTACHMENT D**

# EAST LOVELAND INDUSTRIAL TWENTY-THIRD SUBDIVISION
# CONDITIONAL USE SITE DEVELOPMENT PLAN

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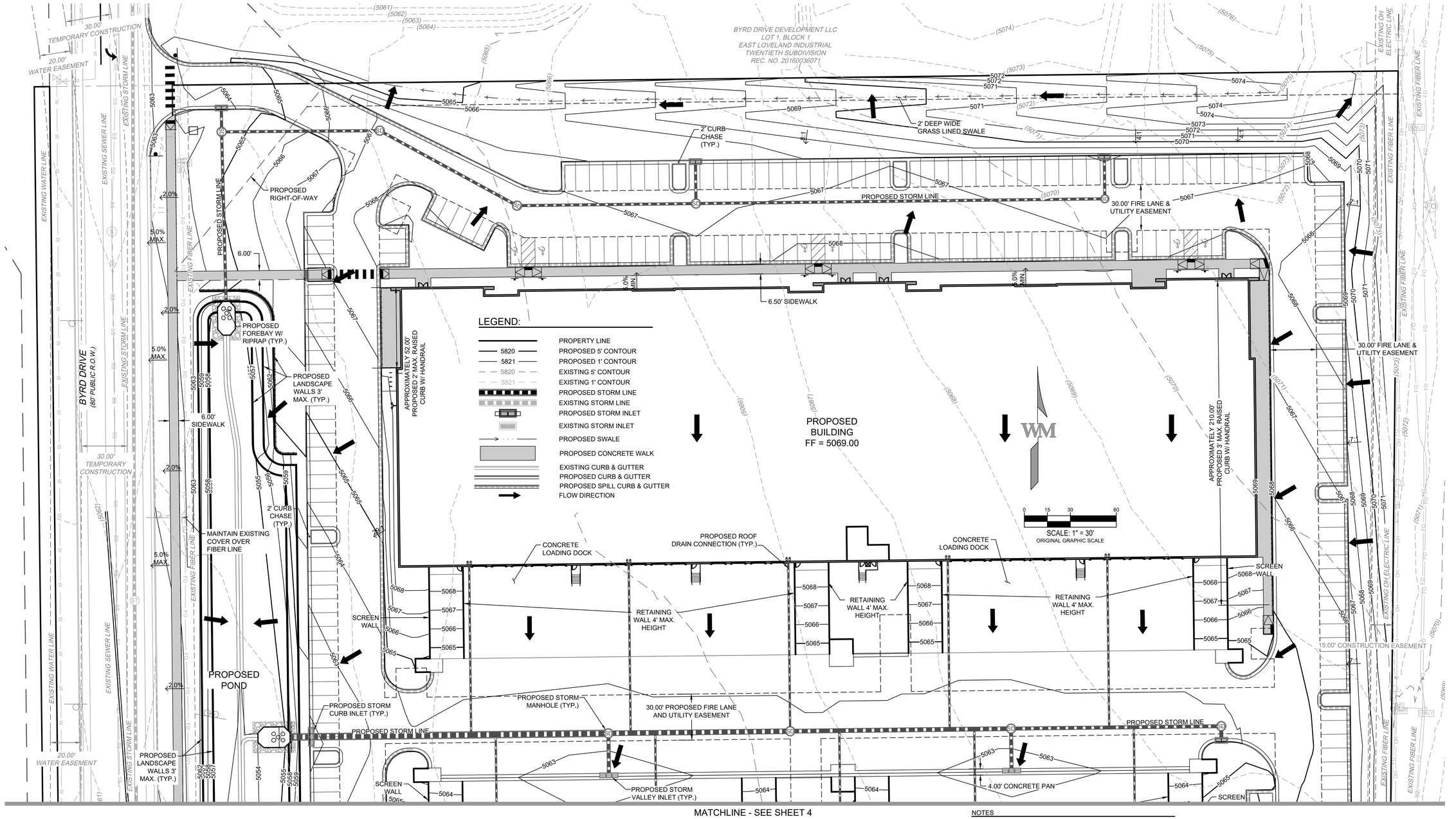


NOTES

1. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES WITH THE PROPOSED ELEVATIONS SHOWN ON THE GRADING PLAN. THE ENGINEER WILL NOT BE LIABLE FOR ANY COSTS ASSOCIATED WITH CHANGES TO THE DESIGN WITHOUT PROPER NOTIFICATION.
2. SIDEWALKS AND LANDINGS SHALL SLOPE 2.0% TOWARDS ROADS, DRIVE LANES, AND PARKING AREAS UNLESS NOTED OTHERWISE.



**PC ATTACHMENT D**

# EAST LOVELAND INDUSTRIAL TWENTY-THIRD SUBDIVISION
# CONDITIONAL USE SITE DEVELOPMENT PLAN

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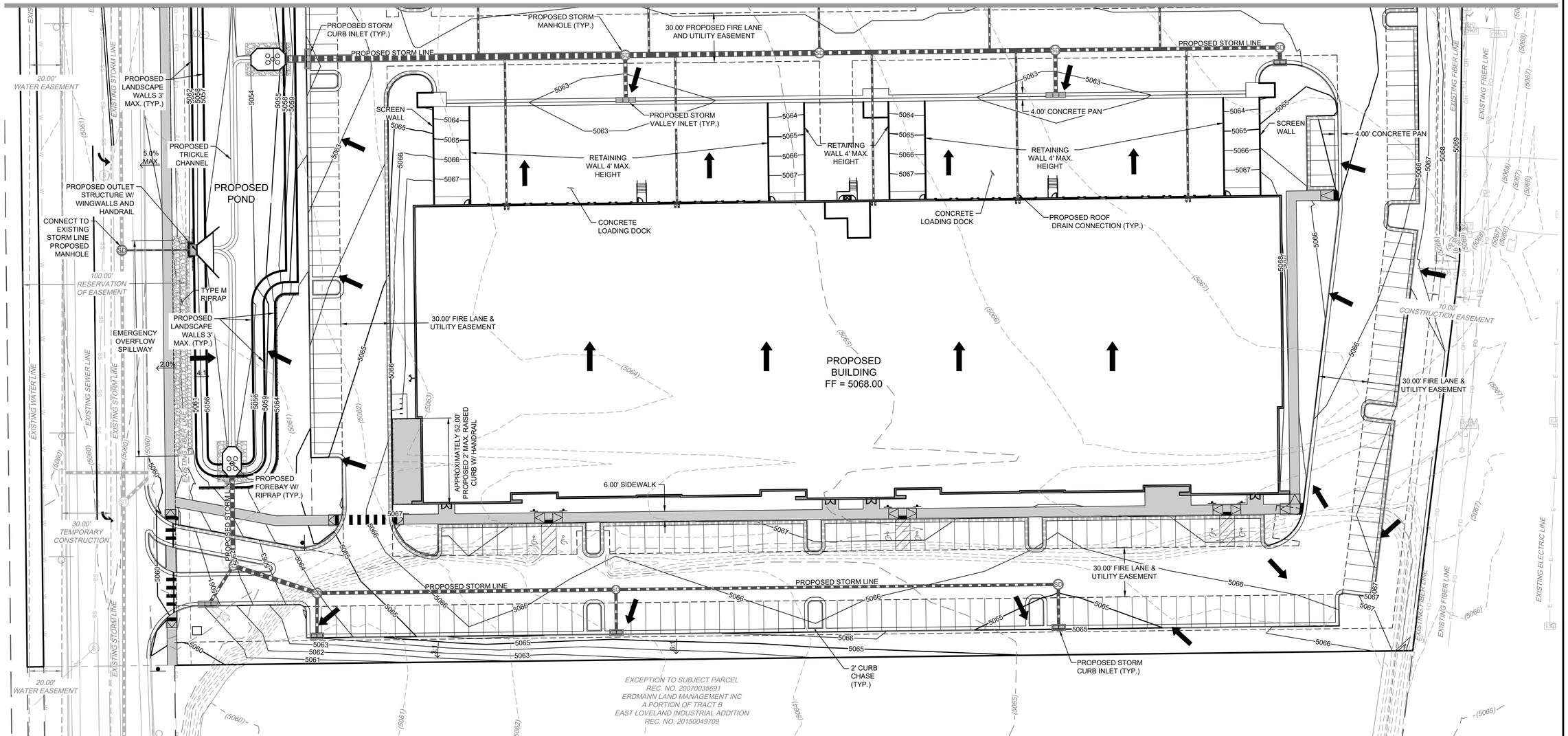
LEGEND:

- PROPERTY LINE
- 5820 — PROPOSED 5' CONTOUR
- 5821 — PROPOSED 1' CONTOUR
- 5820 — EXISTING 5' CONTOUR
- 5821 — EXISTING 1' CONTOUR
- PROPOSED STORM LINE
- EXISTING STORM LINE
- PROPOSED STORM INLET
- EXISTING STORM INLET
- PROPOSED SWALE
- PROPOSED CONCRETE WALK
- EXISTING CURB & GUTTER
- PROPOSED CURB & GUTTER
- PROPOSED SPILL CURB & GUTTER
- FLOW DIRECTION

0 15 30 60
SCALE: 1" = 30'
ORIGINAL GRAPHIC SCALE

NOTES

1. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES WITH THE PROPOSED ELEVATIONS SHOWN ON THE GRADING PLAN. THE ENGINEER WILL NOT BE LIABLE FOR ANY COSTS ASSOCIATED WITH CHANGES TO THE DESIGN WITHOUT PROPER NOTIFICATION.
2. SIDEWALKS AND LANDINGS SHALL SLOPE 2.0% TOWARDS ROADS, DRIVE LANES, AND PARKING AREAS UNLESS NOTED OTHERWISE.




GRADING PLAN
SHEET 5 OF 22

**PC ATTACHMENT D**

# EAST LOVELAND INDUSTRIAL TWENTY-THIRD SUBDIVISION
# CONDITIONAL USE SITE DEVELOPMENT PLAN

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BYRD DRIVE DEVELOPMENT LLC
LOT 1, BLOCK 1
EAST LOVELAND INDUSTRIAL
TWENTIETH SUBDIVISION
REC. NO. 20160036071

30.00' TEMPORARY CONSTRUCTION
20.00' WATER EASEMENT
EXISTING FIRE HYDRANT TO BE RELOCATED
CONNECT TO EXISTING WATERLINE
EXISTING WATER LINE
EXISTING STORM LINE
EXISTING SANITARY LINE
PROPOSED STORM LINE
PROPOSED RIGHT-OF-WAY
PROPOSED WATER LINE
10.00' MIN. (TYP.)
PROPOSED STORM LINE
PROPOSED WATER LINE
30.00' FIRE LANE & UTILITY EASEMENT
PROPOSED LIGHT POLE (TYP.)
EXISTING OH ELECTRIC LINE
EXISTING FIBER LINE
EXISTING FIBER LINE
CONNECT TO EXISTING WATERLINE
PROPOSED FIRE HYDRANT RELOCATED
EXISTING RIGHT-OF-WAY
BYRD DRIVE
(80' PUBLIC R.O.W.)
EXISTING STORM LINE
EXISTING FIBER LINE
PROPOSED STORM LINE
PROPOSED FOREBAY W/ RIPRAP (TYP.)
PROPOSED BUILDING LIGHTS (TYP.)
30.00' FIRE LANE & UTILITY EASEMENT
PROPOSED FIRE DEPARTMENT CONNECTION
PROPOSED SANITARY MANHOLE (TYP.)
PROPOSED SANITARY SERVICE (RE: PLUMBING PLANS)
PROPOSED WATER LINE
PROPOSED WATER LINE
30.00' TEMPORARY CONSTRUCTION
MAINTAIN EXISTING COVER OVER FIBER LINE
PROPOSED POND
PROPOSED SANITARY LINE
PROPOSED ROOF DRAIN CONNECTION (TYP.)
PROPOSED KNOX BOX
10.00' MIN. (TYP.)
PROPOSED WATER VAULT
PROPOSED FIRE HYDRANT (TYP.)
15.00' CONSTRUCTION EASEMENT
PROPOSED DOMESTIC SERVICES
PROPOSED FIRE LINE
PROPOSED STORM MANHOLE (TYP.)
PROPOSED WATER LINE
30.00' PROPOSED FIRE LANE AND UTILITY EASEMENT
PROPOSED STORM LINE
PROPOSED STORM LINE
PROPOSED DOMESTIC SERVICES
PROPOSED FIRE LINE
PROPOSED WATER VAULT
PROPOSED STORM VALLEY INLET (TYP.)
EXISTING WATER LINE
EXISTING SANITARY LINE
EXISTING STORM LINE
EXISTING FIBER LINE
20.00' WATER EASEMENT
EXISTING OH ELECTRIC LINE
EXISTING FIBER LINE
EXISTING FIBER LINE
INTERSTATE - 25
(PUBLIC R.O.W. VARIES)
BYRD DRIVE DEVELOPMENT LLC
TRACT 1, BLOCK 1
EAST LOVELAND INDUSTRIAL
TWENTIETH SUBDIVISION
REC. NO. 20160036071
MATCHLINE - SEE SHEET 6

## UTILITY NOTES:

1. ALL FIRE HYDRANTS SHALL BE LOCATED NOT LESS THAN THREE FEET - SIX INCHES (3' – 6") AND NOT MORE THAN 8 FEET FROM THE BACK OF CURB TO THE CENTER OF THE HYDRANT AND BE UNOBSTRUCTED ON THE STREET SIDE. MINIMUM CLEARANCE ON ALL OTHER SIDES SHALL BE 5 FEET. FIRE HYDRANTS MUST BE GRADE STAKED IN THE FIELD. FIRE HYDRANTS ARE NOT ALLOWED IN SIDEWALKS.
2. ALL FIRE HYDRANTS MUST BE GRADE STAKED IN THE FIELD WHENEVER CURB AND GUTTER HAS NOT BEEN INSTALLED.
3. ALL UTILITY EASEMENTS MUST REMAIN UNOBSTRUCTED AND FULLY ACCESSIBLE ALONG THEIR ENTIRE LENGTH FOR MAINTENANCE EQUIPMENT.
4. WATER LINE VALVES ARE NOT ALLOWED IN CROSS PANS.
5. ALL WATER METERS, WATER SERVICE LINES AND SANITARY SEWER SERVICE LINES ARE NOT ALLOWED IN OR UNDER DRIVEWAYS.
6. REDUCED PRESSURE PRINCIPE BACKFLOW PREVENTION DEVICES ARE REQUIRED ON THE DOMESTIC AND FIRE LINE SERVICES, AND ON ANY IRRIGATION SERVICE OR BRANCH OFF THE DOMESTIC.
7. MECHANICAL JOINT RESTRAINTS ARE REQUIRED ON ALL WATER FITTINGS WITH ADDITIONAL JOINT RESTRAINT LENGTH DETERMINED BY THE ENGINEER BASED ON UNBALANCED THRUST FORCES.

## FIRE FLOW DATA

FIRE FLOW REQUIREMENTS ARE 6750 **GPM** MIN. (3,**375 GPM** MIN. W/ 50% REDUCTION) @ 20 PSI RESIDUAL PRESSURE.

THIS BUILDING REQUIRES **4** FIRE HYDRANTS @ 350' SPACING TO MEET FIRE-FLOW REQUIREMENTS.

EACH FIRE HYDRANT MUST SUPPLY 1500 GPM MINIMUM @ 20 PSI RESIDUAL PRESSURE.

CODE USED FOR ANALYSIS: 2015 IFC
OCCUPANCY GROUP: COMMERCIAL
CONSTRUCTION TYPE: **II-B** (COMMERCIAL)
FIRE AREA: 100,**722± SF**
THIS BUILDING IS FULLY SPRINKLERED

PROPOSED BUILDING

## LEGEND:

- PROPERTY LINE
- UTILITY CROSSING
- PROPOSED STORM LINE
- EXISTING STORM LINE
- PROPOSED STORM INLET
- EXISTING STORM INLET
- PROPOSED SANITARY SEWER W/ MANHOLE
- EXISTING SANITARY SEWER W/ MANHOLE
- PROPOSED WATERLINE & VALVE
- PROPOSED FIRE HYDRANT ASSEMBLY
- PROPOSED WATER METER
- PROPOSED LIGHT POLE
- PROPOSED BUILDING LIGHTS
- EXISTING WATERLINE & VALVE
- EXISTING FIRE HYDRANT
- EXISTING GAS LINE
- EXISTING TELEPHONE LINE
- EXISTING ELECTRIC LINE
- EXISTING CABLE TV LINE
- EXISTING OVERHEAD LINE
- EXISTING FIBER OPTIC LINE
- EXISTING IRRIGATION LINE
- EXISTING SPRINKLER CONTROL
- EXISTING LIGHT POLE

0 15 30 60
SCALE: 1" = 30'
ORIGINAL GRAPHIC SCALE



**PC ATTACHMENT D**

# EAST LOVELAND INDUSTRIAL TWENTY-THIRD SUBDIVISION
# CONDITIONAL USE SITE DEVELOPMENT PLAN

LOCATED IN THE SOUTHWEST QUARTER OF SECTION 34, TOWNSHIP 6 NORTH, RANGE 68 WEST OF THE 6TH PRINCIPAL MERIDIAN, CITY OF LOVELAND, COUNTY OF LARIMER, STATE OF COLORADO.


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SECOND SDP SUBMITTAL 10/28/2019

## UTILITY NOTES:

1. ALL FIRE HYDRANTS SHALL BE LOCATED NOT LESS THAN THREE FEET - SIX INCHES (3' – 6") AND NOT MORE THAN 8 FEET FROM THE BACK OF CURB TO THE CENTER OF THE HYDRANT AND BE UNOBSTRUCTED ON THE STREET SIDE. MINIMUM CLEARANCE ON ALL OTHER SIDES SHALL BE 5 FEET. FIRE HYDRANTS MUST BE GRADE STAKED IN THE FIELD. FIRE HYDRANTS ARE NOT ALLOWED IN SIDEWALKS.
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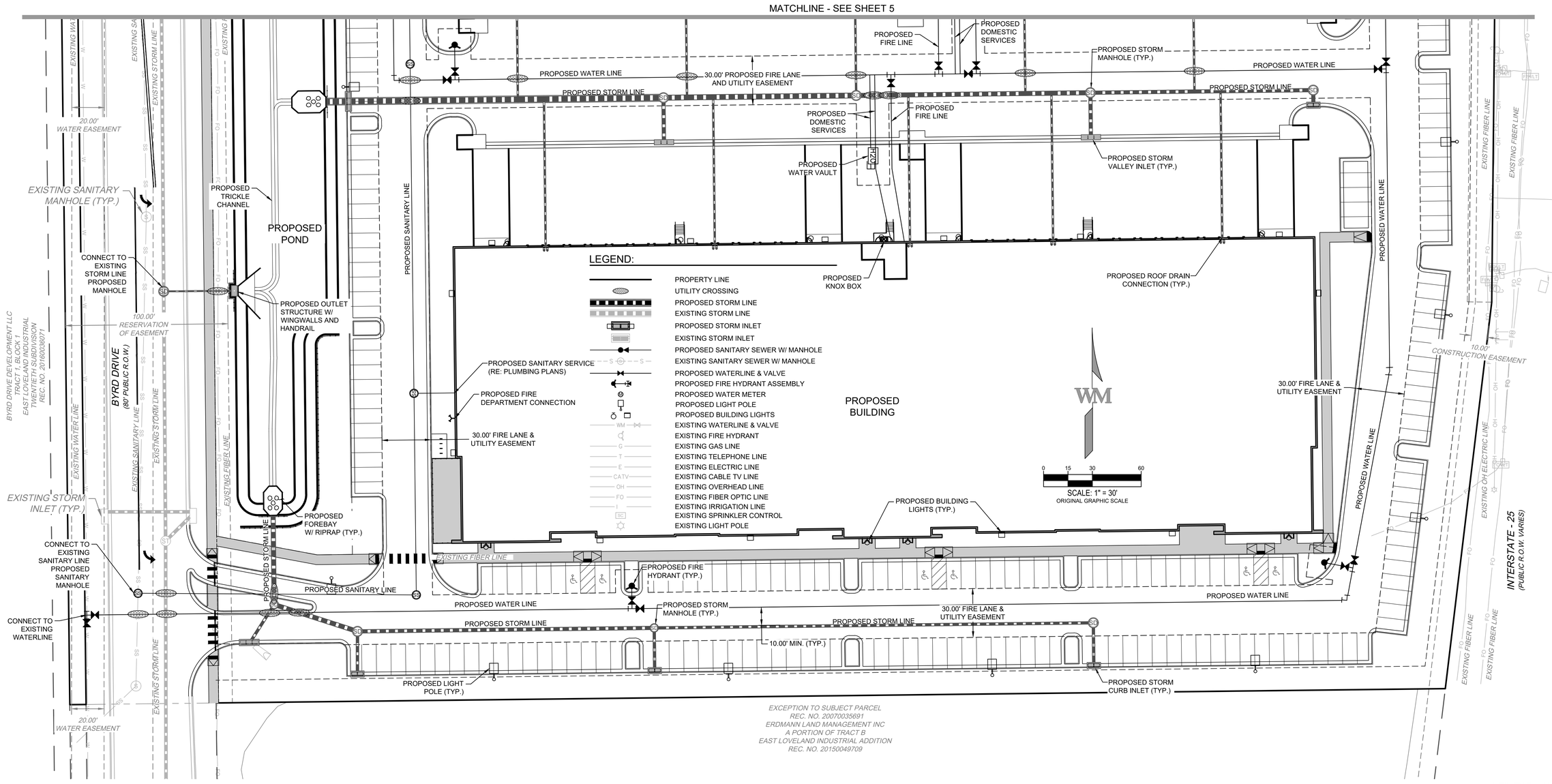
## FIRE FLOW DATA

FIRE FLOW REQUIREMENTS ARE 6500 **GPM** MIN. (1,687.5 **GPM** MIN. W/ 75% REDUCTION) @ 20 PSI RESIDUAL PRESSURE.

THIS BUILDING REQUIRES **4** FIRE HYDRANTS @ 350' SPACING TO MEET FIRE-FLOW REQUIREMENTS.

EACH FIRE HYDRANT MUST SUPPLY 1500 GPM MINIMUM @ 20 PSI RESIDUAL PRESSURE.

CODE USED FOR ANALYSIS: 2012 IFC
OCCUPANCY GROUP: COMMERCIAL
CONSTRUCTION TYPE: **II-B** (COMMERCIAL)
FIRE AREA: 95,**256± SF**
THIS BUILDING IS FULLY SPRINKLERED




UTILITY PLAN
SHEET 7 OF 22

**PC ATTACHMENT D**

# EAST LOVELAND INDUSTRIAL TWENTY-THIRD SUBDIVISION CONDITIONAL USE SITE DEVELOPMENT PLAN

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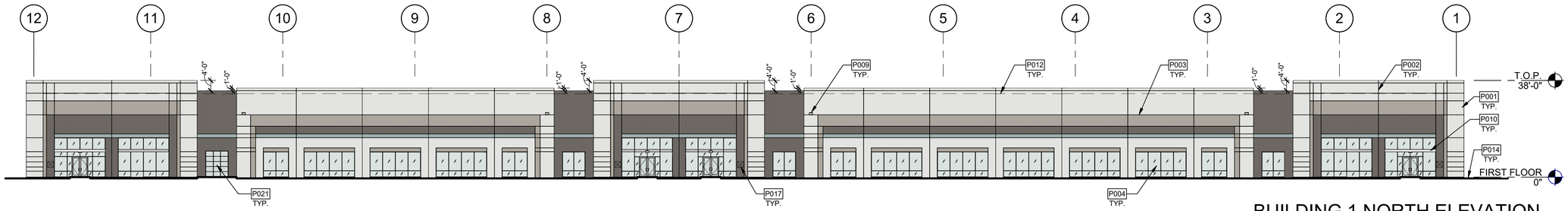
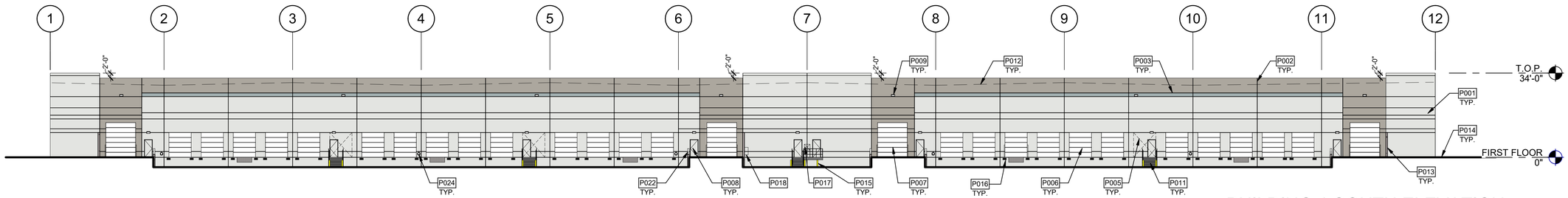


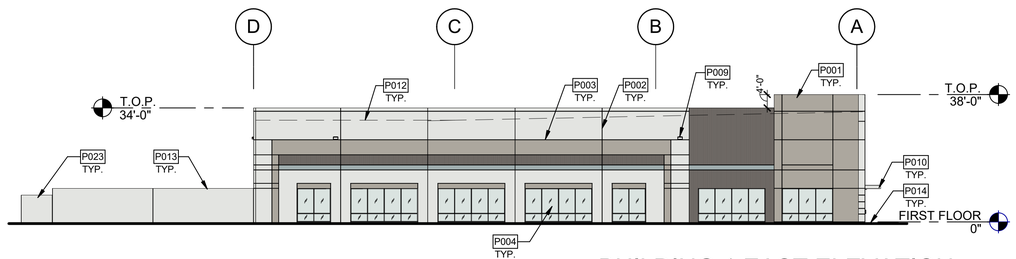

## BUILDING 1 NORTH ELEVATION 1

SCALE: 3/64" = 1'-0"



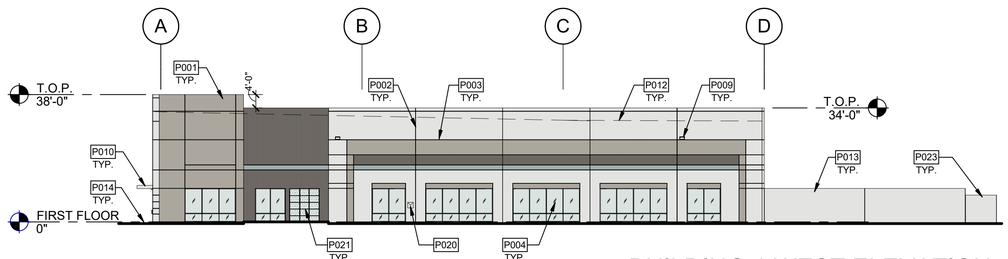

## BUILDING 1 SOUTH ELEVATION 2

SCALE: 3/64" = 1'-0"




## BUILDING 1 EAST ELEVATION 4

SCALE: 3/64" = 1'-0"




## BUILDING 1 WEST ELEVATION 3

SCALE: 3/64" = 1'-0"

## NOTE:

FINAL RTU LOCATIONS PENDING MECHANICAL DESIGN. RTUs TO BE SET ON ROOF IN ZONES SET BACK FROM PARAPET TO UTILIZE PARAPET HEIGHT TO FULLY SCREEN RTUs FROM PROPERTY LINE / R.O.W.

## LEGEND

**COLORS:**

- BASE COLOR: SHERWIN WILLIAMS SW 6252 - ICE CUBE
- SECONDARY COLOR: SHERWIN WILLIAMS SW 7019 - GAUNTLET GRAY WITH FORMLINER
- ACCENT COLOR: SHERWIN WILLIAMS SW 7017 - DORIAN GRAY
- ACCENT COLOR: SHERWIN WILLIAMS SW 7616 - BREEZY

## NOTES: -

| | |
|---|---|
| P001 | CONCRETE TILT-UP PANEL - PAINTED. |
| P002 | CONCRETE TILT-UP PANEL JOINT. |
| P003 | 3/4" V-REVEAL. |
| P004 | THERMALLY BROKEN ALUMINUM STOREFRONT WITH CLEAR ANODIZED FRAME AND 1" INSULATED GLAZING. |
| P005 | KNOCKOUT PANEL FOR FUTURE OPENINGS. |
| P006 | 9' X 10' TRUCK DOCK DOOR, PRE-FINISHED WHITE. |
| P007 | 12' X 14' DRIVE-UP DOOR, PRE-FINISHED WHITE. |
| P008 | HOLLOW METAL MAN DOOR - PAINTED TO MATCH ADJACENT WALL. |
| P009 | BUILDING MOUNTED LIGHTING, SEE ELECTRICAL. |
| P010 | TUBE STEEL CANOPY, PAINTED TO MATCH BASE COLOR. |
| P011 | GALVANIZED EXTERIOR STEEL STAIRS. |
| P012 | ROOF LINE, BEYOND. |
| P013 | CONCRETE SCREEN WALL, PAINTED TO MATCH BASE COLOR. |
| P014 | FINISH GRADE VARIES, SEE CIVIL. |
| P015 | CONCRETE BOLLARD. |
| P016 | DOCK BUMPERS. TYPICAL AT ALL O.H. DOORS. |
| P017 | KNOX BOX MOUNTED TO WALL. |
| P018 | ELECTRICAL EQUIPMENT MOUNTED TO CONCRETE WALL. |
| P020 | FDC WITH APPROVED KNOX HARDWARE. |
| P021 | 9' X 10' O.H. DOOR. |
| P022 | CONCRETE RAMP WALL, PAINTED TO MATCH ADJACENT WALL COLOR. |
| P023 | CONCRETE TRASH ENCLOSURE. |
| P024 | OVERFLOW DRAIN LAMB'S TONGUE. |



**PC ATTACHMENT D**

# EAST LOVELAND INDUSTRIAL TWENTY-THIRD SUBDIVISION CONDITIONAL USE SITE DEVELOPMENT PLAN

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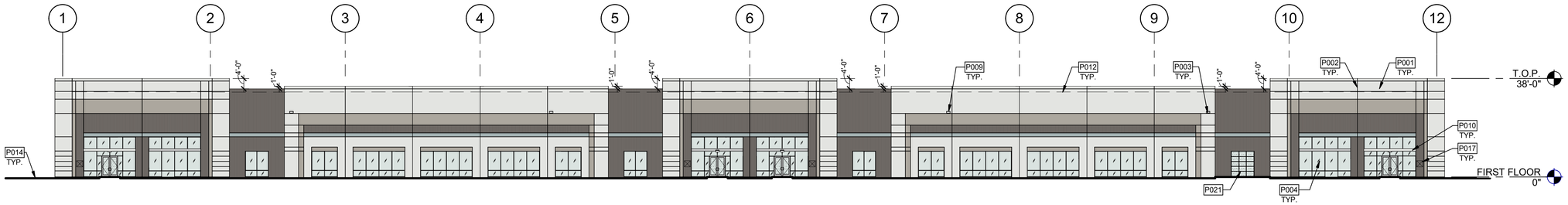
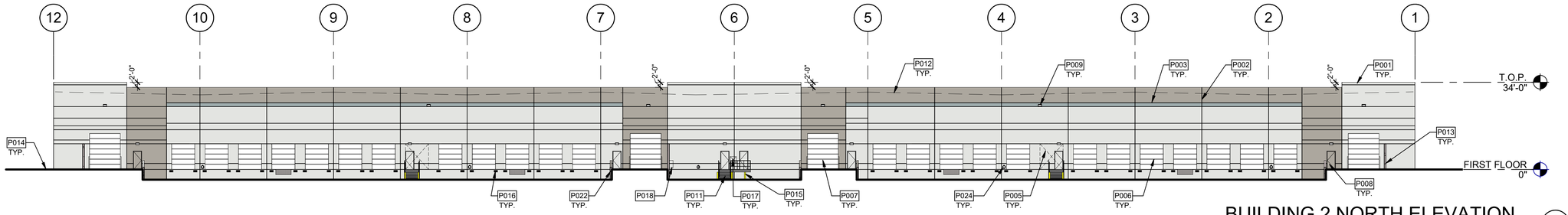


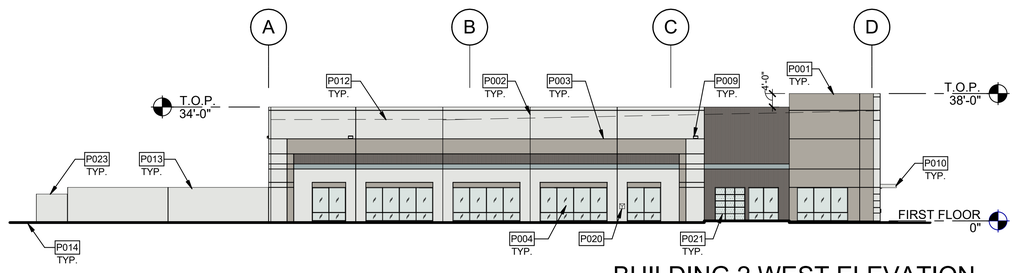

BUILDING 2 SOUTH ELEVATION 1

SCALE: 3/64" = 1'-0"



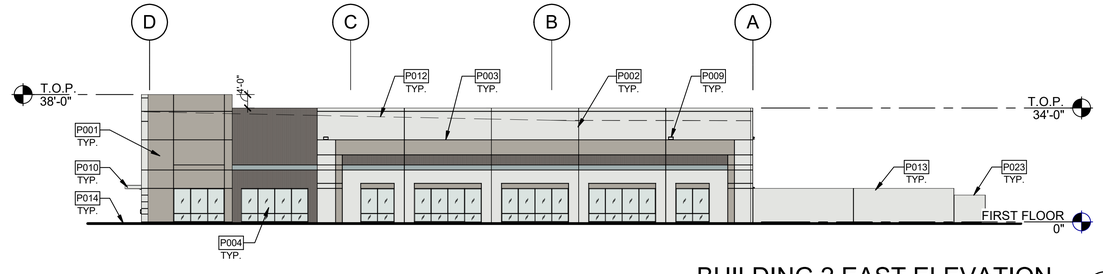

BUILDING 2 NORTH ELEVATION 2

SCALE: 3/64" = 1'-0"




BUILDING 2 WEST ELEVATION 4

SCALE: 3/64" = 1'-0"




BUILDING 2 EAST ELEVATION 3

SCALE: 3/64" = 1'-0"

## NOTE:

FINAL RTU LOCATIONS PENDING MECHANICAL DESIGN. RTUs TO BE SET ON ROOF IN ZONES SET BACK FROM PARAPET TO UTILIZE PARAPET HEIGHT TO FULLY SCREEN RTUs FROM PROPERTY LINE / R.O.W.

## LEGEND

**COLORS:**

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- ACCENT COLOR: SHERWIN WILLIAMS SW 7616 - BREEZY

## NOTES: -

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| P008 | HOLLOW METAL MAN DOOR - PAINTED TO MATCH ADJACENT WALL. |
| P009 | BUILDING MOUNTED LIGHTING, SEE ELECTRICAL. |
| P010 | TUBE STEEL CANOPY, PAINTED TO MATCH BASE COLOR. |
| P011 | GALVANIZED EXTERIOR STEEL STAIRS. |
| P012 | ROOF LINE, BEYOND. |
| P013 | CONCRETE SCREEN WALL, PAINTED TO MATCH BASE COLOR. |
| P014 | FINISH GRADE VARIES, SEE CIVIL. |
| P015 | CONCRETE BOLLARD. |
| P016 | DOCK BUMPERS. TYPICAL AT ALL O.H. DOORS. |
| P017 | KNOX BOX MOUNTED TO WALL. |
| P018 | ELECTRICAL EQUIPMENT MOUNTED TO CONCRETE WALL. |
| P020 | FDC WITH APPROVED KNOX HARDWARE. |
| P021 | 9' X 10' O.H. DOOR. |
| P022 | CONCRETE RAMP WALL, PAINTED TO MATCH ADJACENT WALL COLOR. |
| P023 | CONCRETE TRASH ENCLOSURE. |
| P024 | OVERFLOW DRAIN LAMB'S TONGUE. |



**PC ATTACHMENT D**

# EAST LOVELAND INDUSTRIAL TWENTY-THIRD SUBDIVISION
# CONDITIONAL USE SITE DEVELOPMENT PLAN

LOCATED IN THE SOUTHWEST QUARTER OF SECTION 34, TOWNSHIP 6 NORTH, RANGE 68 WEST OF THE 6TH PRINCIPAL MERIDIAN, CITY OF LOVELAND, COUNTY OF LARIMER, STATE OF COLORADO.

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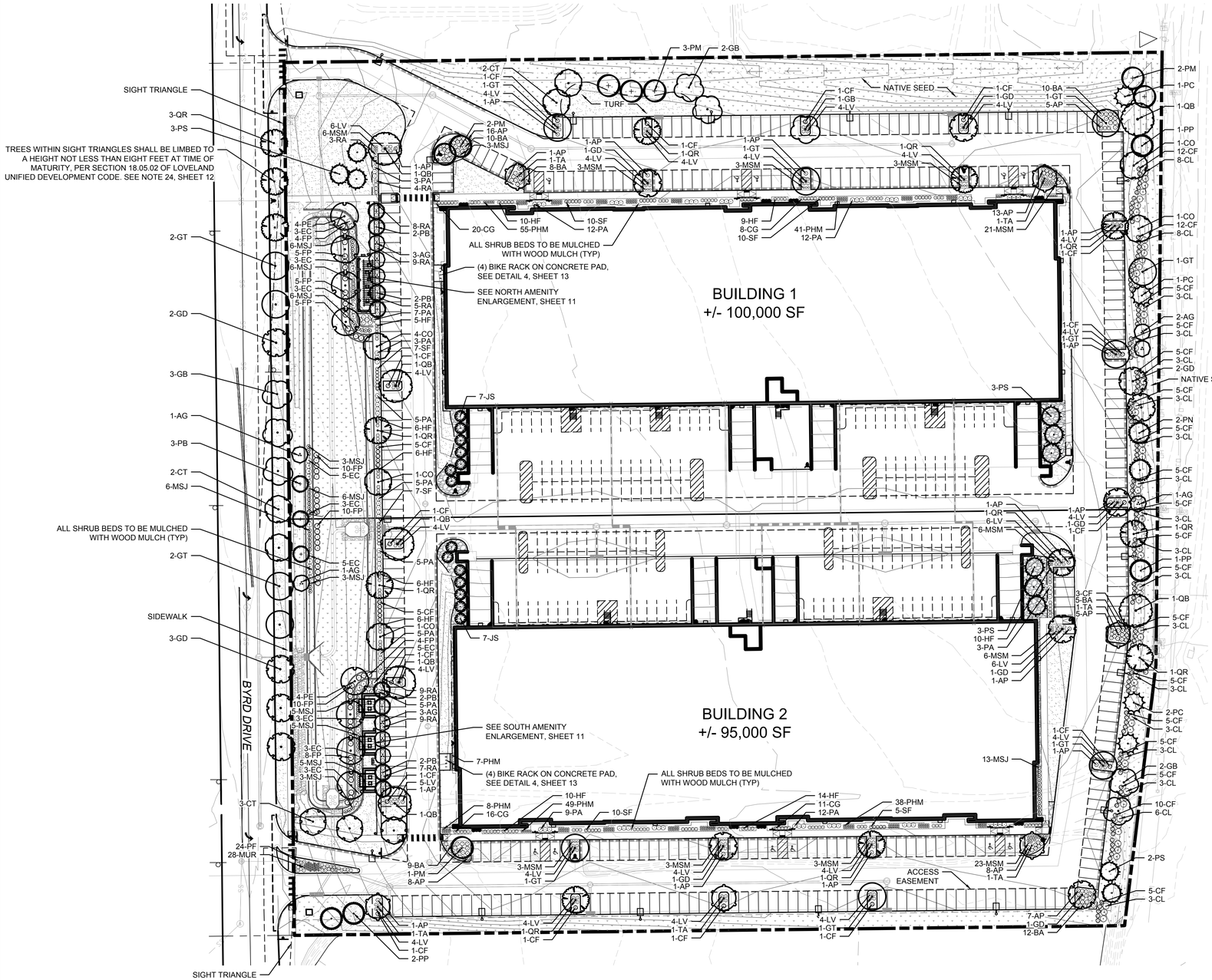


## LEGEND

- PROPERTY BOUNDARY
- EASEMENT
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- FIRE HYDRANT
- 6' BENCH - SEE DETAIL 2, SHEET 13
- TRASH RECEPTACLE - SEE DETAIL 1, SHEET 13
- BIKE RACK ON CONCRETE PAD - SEE DETAIL 4, SHEET 13
- ROAD SIGN
- STEEL EDGER - SEE DETAIL 3, SHEET 14
- CONCRETE WALK
- 'RFT' WATER SAVER SOD
- NATIVE SEED
- ROCK MULCH

NORTH

0' 25' 50' 100'

SCALE 1" = 50'

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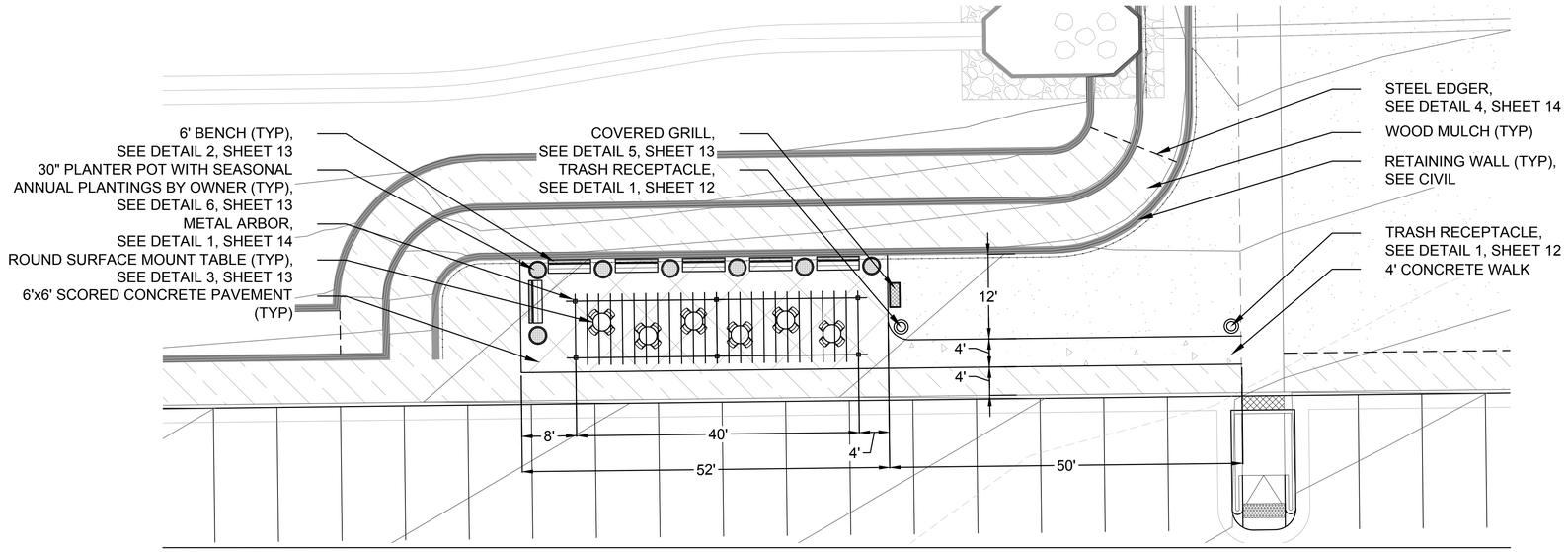
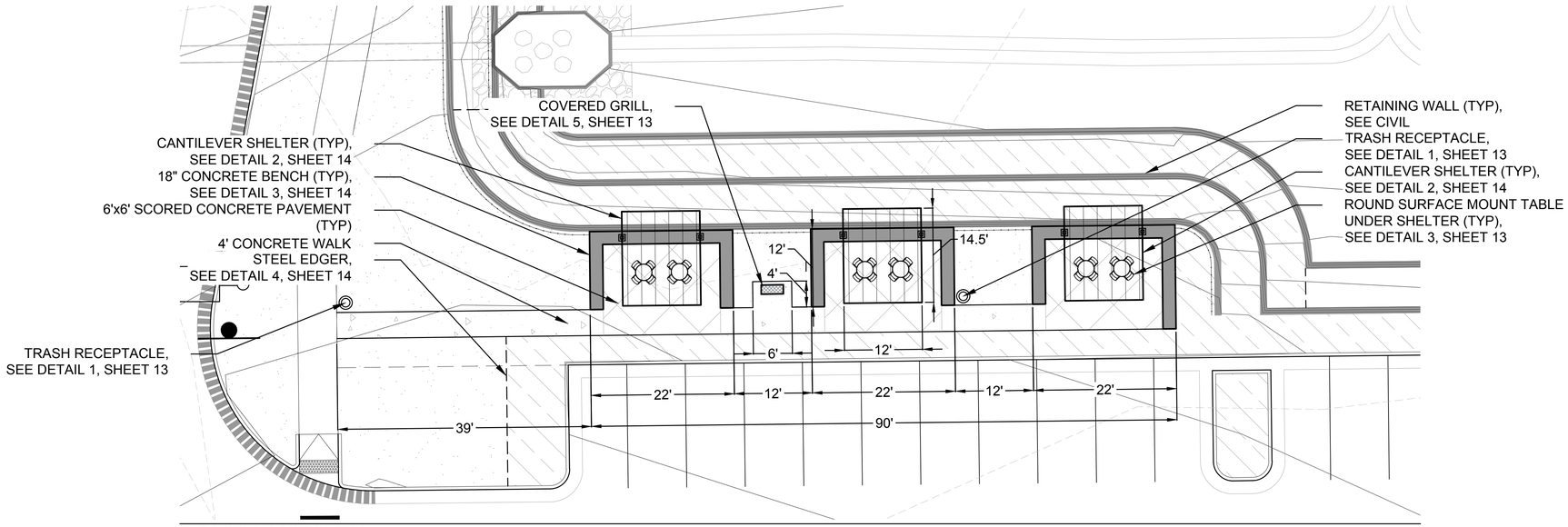



NORTH AMENITY




SOUTH AMENITY

## LEGEND

- EASEMENT
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- FIRE HYDRANT
- 6' BENCH - SEE DETAIL 2, SHEET 13
- TRASH RECEPTACLE - SEE DETAIL 1, SHEET 13
- PLANTER POT WITH SEASONAL PLANTING BY OWNER - SEE DETAIL 6, SHEET 13
- ROUND SURFACE MOUNT TABLE - SEE DETAIL 3, SHEET 13
- STEEL EDGER - SEE DETAIL 3, SHEET 14
- CONCRETE WALK
- 'RFT' WATER SAVER SOD
- NATIVE SEED
- ROCK MULCH

NORTH
0' 5' 10' 20'
SCALE 1" = 10'

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## LANDSCAPE NOTES

1. THE REPRODUCTION OF ANY INFORMATION GENERATED BY ENGINEERS AND ARCHITECTS ON THESE DRAWINGS IS FOR THE EXPRESS PURPOSE OF COORDINATION AND EASE OF REFERENCE ONLY. INCLUSION OF SAID INFORMATION ON THESE DRAWINGS DOES NOT CONSTITUTE A REPRESENTATION BY PLAN WEST, INC. AS TO THE SUFFICIENCY OR ACCURACY OF SAID INFORMATION.
2. VERIFY FIELD CONDITIONS AND NOTIFY THE LANDSCAPE ARCHITECT OF ANY DISCREPANCIES PRIOR TO PROCEEDING WITH THE WORK. PROVIDE A STAKED LAYOUT OF NEW SITE IMPROVEMENTS INCLUDING, BUT NOT LIMITED TO, PLANTING LAYOUT, BED LINES, CONCRETE FLATWORK, ENTRY MONUMENTATION, LANDSCAPE WALLS, CONCRETE CURBS, AND TURF AREAS FOR APPROVAL PRIOR TO BEGINNING WORK.
3. LOCATION OF EXISTING UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO ACTUAL CONSTRUCTION. FOR INFORMATION CONTACT THE UTILITY NOTIFICATION CENTER OF COLORADO @ 1-800-922-1987.
4. CONTRACTOR SHALL SECURE AND PAY ALL APPLICABLE TAXES, PERMITS AND FEES IN CONNECTION WITH THE WORK UNDER THE CONTRACT, PROVIDE FOR PROTECTION OF ALL UTILITIES, PRIVATE OR PUBLIC PROPERTY, PUBLIC SAFETY, AND EXISTING SITE IMPROVEMENTS FOR THE DURATION OF THE CONTRACT AND COSTS TO THE OWNER . THE CONTRACTOR SHALL KEEP THE PREMISES CLEAN AND ORDERLY AND DISPOSE OF WASTE AND DEBRIS AT AN APPROVED LOCATION OFF-SITE DAILY DURING CONSTRUCTION AND PRIOR TO FINAL ACCEPTANCE.
5. LANDSCAPING SHALL BE WARRANTED FOR A PERIOD OF TWELVE (12) MONTHS FROM THE DATE OF FINAL ACCEPTANCE. WARRANTY SHALL INCLUDE, BUT NOT BE LIMITED TO PLANT MATERIAL INCLUDING TREES, SHRUBS, AND GROUND COVERS SHALL BE WARRANTED AGAINST DEATH OR UNSATISFACTORY GROWTH. PLANTS SHALL BE REPLACED BY THE CONTRACTOR AT NO EXTRA COST TO THE OWNER DURING THE WARRANTY PERIOD. ANY AREAS DAMAGED BY REPLACEMENT SHALL BE RESTORED TO ORIGINAL CONDITION AT THE CONTRACTORS EXPENSE. WARRANTY PERIOD TO BE EXTENDED AT THIS TIME. THE WARRANTY SHALL ALSO INCLUDE ALL EQUIPMENT AND WORKMANSHIP FOR THE IRRIGATION SYSTEM.
6. ALL PLANT MATERIALS SHALL BE IN ACCORDANCE WITH AMERICAN ASSOCIATION OF NURSERY MEN SPECIFICATION FOR NUMBER ONE GRADE.
7. ALL TURF AREAS TO BE IRRIGATED WITH AUTOMATIC POP-UP IRRIGATION SYSTEM. ALL SHRUB BEDS AND TREES TO BE IRRIGATED WITH AN AUTOMATIC DRIP (TRICKLE) IRRIGATION SYSTEM, OR ACCEPTABLE ALTERNATIVE. THE IRRIGATION SYSTEM IS TO BE ADJUSTED TO MEET THE WATER REQUIREMENTS OF THE INDIVIDUAL PLANT MATERIAL.
8. ALL SHRUB BEDS TO BE MULCHED WITH WOOD MULCH (3" AVERAGE DEPTH).
9. EDGING SHALL BE INSTALLED BETWEEN GRASS AND SHRUB BEDS, SET LEVEL WITH TOP OF SOD.
10. CHANGES IN PLANT SPECIES OR PLANT LOCATIONS FROM WHAT IS LISTED ON THE LANDSCAPE PLAN WILL REQUIRE THE APPROVAL OF THE CITY OF LOVELAND DEVELOPMENT SERVICES DEPARTMENT PRIOR TO INSTALLATION OR REPLACEMENT. OVERALL QUANTITY AND QUALITY TO BE CONSISTENT WITH APPROVED PLANS. IN THE EVENT OF CONFLICT WITH THE QUANTITIES INCLUDED IN THE PLANT LIST, SPECIES AND QUANTITIES SHALL BE PROVIDED.
11. STREET AND ORNAMENTAL TREES SHALL BE PLANTED NO CLOSER THAN FORTY (40) FEET AND FIFTEEN (15) FEET RESPECTIVELY FROM STREET LIGHTS. NO TREES SHALL BE PLANTED WITHIN TEN (10) FEET FROM WATER AND SEWER LINES, FOUR (4) FEET FROM GAS, TELEPHONE AND ELECTRIC UTILITIES, AND TEN (10) FEET FROM ANY DRIVEWAY.
12. MINIMUM CLEARANCE OF THREE (3) FEET ON EACH SIDE OF FIRE DEPARTMENT CONNECTION (FDC). NO VEGETATION OTHER THAN TURF OR GROUND COVERS PLANTED IN FRONT OF FDC.
13. THE IRRIGATION SYSTEM SHALL BE INSTALLED OR SECURED WITH THE CITY OF LOVELAND PRIOR TO ISSUANCE OF A CERTIFICATE OF OCCUPANCY.
14. DEVELOPER SHALL ENSURE THAT THE LANDSCAPE PLAN IS COORDINATED WITH THE PLANS DONE BY OTHER CONSULTANTS SO THE PROPOSED GRADING, STORM DRAINAGE, OR OTHER CONSTRUCTION DOES NOT CONFLICT NOR PRECLUDE INSTALLATION AND MAINTENANCE OF LANDSCAPE ELEMENTS ON THIS PLAN.
15. PRIOR TO INSTALLATION OF PLANT MATERIALS, ORGANIC AMENDMENTS SUCH AS COMPOST, PEAT, OR AGED MANURE SHALL BE THOROUGHLY INCORPORATED AT A RATE OF AT LEAST FOUR (4) CUBIC YARDS PER 1,000 SQUARE FEET AND TILLED TO A DEPTH OF SIX (6) INCHES. A SOIL TEST IS RECOMMENDED TO DETERMINE APPROXIMATE SOIL MIX.
16. TURF GRASS WILL BE SEEDED OR SODDED WITH DROUGHT TOLERANT BLEND. TREES TO BE PLANTED IN TURF AREAS WILL BE INSTALLED WITH AN ORGANIC MULCH RING THAT HAS AT LEAST TWELVE (12) INCHES OF COVERAGE OUTSIDE OF THE ORIGINAL ROOT BALL.
17. TO THE MAXIMUM EXTENT FEASIBLE, TOPSOIL THAT IS REMOVED DURING CONSTRUCTION ACTIVITY SHALL BE CONSERVED FOR LATER USE ON AREAS REQUIRING REVEGETATION AND LANDSCAPING.
18. NO SUBSTANTIAL IMPEDIMENT TO VISIBILITY BETWEEN THE HEIGHTS OF THREE (3) FEET AND EIGHT (8) FEET SHALL BE CREATED OR MAINTAINED AT STREET INTERSECTIONS WITHIN A SITE TRIANGLE AS DESCRIBED WITHIN THE LARIMER COUNTY URBAN AREA STREET STANDARDS.
19. IF PLANTS ARE IN NEED OF REPLACEMENT DUE TO DECLINING HEALTH, DISEASE OR DEATH, THE PLANTS MUST BE REPLACED WITH THE ORIGINAL SPECIES UNLESS APPROVED BY THE CITY OF LOVELAND DEVELOPMENT SERVICES DEPARTMENT.
20. CONTRACTOR SHALL CONSTRUCT PROJECT AS ILLUSTRATED IN CONSTRUCTION DRAWINGS. IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL QUANTITIES.
21. TO THE MAXIMUM EXTENT FEASIBLE, TOPSOIL THAT IS REMOVED DURING CONSTRUCTION ACTIVITY SHALL BE CONSERVED FOR LATER USE ON AREAS REQUIRING REVEGETATION AND LANDSCAPING.
22. ALL UTILITY EASEMENTS SHALL REMAIN UNOBSTRUCTED AND FULLY ACCESSIBLE ALONG THEIR ENTIRE LENGTH FOR MAINTENANCE EQUIPMENT ENTRY.
23. ALL TREES SHALL BE A MINIMUM OF 10 FEET FROM ALL STORM SEWERS AND ALL SHRUBS SHALL BE A MINIMUM OF 5 FEET FROM ALL STORM SEWERS.
24. ALL TREES, SHRUBS, AND OTHER PLANT MATERIALS LOCATED WITHIN CLEAR SIGHT TRIANGLES SHALL BE TRIMMED IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION 7 OF THE LARIMER COUNTY URBAN AREA STREET STANDARDS (LCUASS). UNDER CURRENT LCUASS REQUIREMENTS, TREES SHALL BE LIMBED TO A HEIGHT OF NOT LESS THAN EIGHT (8) FEET AND SHRUBS AND OTHER PLANT MATERIALS SHALL BE MAINTAINED AT A HEIGHT OF NOT MORE THAN THIRTY (30) INCHES, AND SAID MAINTENANCE SHALL BE CONDUCED IN PERPETUITY. TREES ARE ALSO REQUIRED TO BE KEPT LIMBED UP A MINIMUM OF 8' ABOVE ALL SIDEWALKS.

## PLANT SCHEDULE

| TREES | CODE | QTY | COMMON NAME | BOTANICAL NAME | CONT | CAL |
|---|---|---|---|---|---|---|
| | CO | 9 | Common Hackberry | Celtis occidentalis | 15 gal | 2.5"Cal |
| | CT | 3 | Turkish Filbert | Corylus colurna | 15 gal | 2.5"Cal |
| | GB | 8 | Ginkgo Tree | Ginkgo biloba `Autumn Gold` TM | 15 gal | 2.5"Cal |
| | GT | 12 | Shademaster Locust | Gleditsia triacanthos inermis `Shademaster` | 15 gal | 2.5"Cal |
| | GD | 12 | Kentucky Coffeetree | Gymnocladus dioica `Espresso` | 15 gal | 2.5"Cal |
| | PE | 8 | Exclamation London Plane Tree | Platanus x acerifolia `Exclamation` | 15 gal | 2.5"Cal |
| | QB | 7 | Texas Red Oak | Quercus buckleyi | 15 gal | 2.5"Cal |
| | QR | 13 | English Oak | Quercus robur | 15 gal | 2.5"Cal |
| | TA | 6 | American Linden | Tilia americana | 15 gal | 2.5"Cal |

| EVERGREEN TREES | CODE | QTY | COMMON NAME | BOTANICAL NAME | CONT | SIZE |
|---|---|---|---|---|---|---|
| | JS | 14 | Rocky Mountain Juniper | Juniperus scopulorum | 15 gal | 6-8` Tall |
| | PC | 4 | Colorado Spruce | Picea pungens | 15 gal | 6-8` Tall |
| | PN | 2 | Austrian Black Pine | Pinus nigra | 15 gal | 6-8` Tall |
| | PP | 4 | Ponderosa Pine | Pinus ponderosa | 15 gal | 6-8` Tall |
| | PS | 11 | Scotch Pine | Pinus sylvestris | 15 gal | 6-8` Tall |

| ORNAMENTAL TREE | CODE | QTY | COMMON NAME | BOTANICAL NAME | CONT | SIZE |
|---|---|---|---|---|---|---|
| | AG | 11 | `Autumn Brilliance` Serviceberry | Amelanchier x grandiflora `Autumn Brilliance` | 15 gal | 6-8` Cl |
| | PM | 8 | Amur Chokecherry | Prunus maackii | 15 gal | 2"Cal |
| | PB | 11 | Autumn Blaze Pear | Pyrus calleryana `Autumn Blaze` | 15 gal | 2"Cal |

| SHRUBS | CODE | QTY | COMMON NAME | BOTANICAL NAME | SIZE |
|---|---|---|---|---|---|
| | AL | 20 | Leadplant | Amorpha canescens | 5 gal |
| | AP | 76 | Panchito Manzanita | Arctostaphylos `Panchito` | 5 gal |
| | BA | 54 | Red Leaf Japanese Barberry | Berberis thunbergii `Atropurpurea` | 5 gal |
| | CG | 55 | Globe Peashrub | Caragana frutex `Globosa` | 5 gal |
| | CF | 138 | Fernbush | Chamaebatiaria millefolium `Fernbush` | 5 gal |
| | CL | 67 | Peking Cotoneaster | Cotoneaster lucidus | 5 gal |
| | EC | 36 | Compact Burning Bush | Euonymus alatus `Compactus` | 5 gal |
| | FP | 60 | New Mexico Privet | Forestiera pubescens var. pubescens | 5 gal |
| | HF | 82 | Sunburst Hypericum | Hypericum frondosum `Sunburst` | 5 gal |
| | LV | 107 | Lodense Privet | Ligustrum vulgare `Lodense` | 5 gal |
| | PA | 86 | Russian Sage | Perovskia atriplicifolia | 5 gal |
| | PF | 24 | Sutter`s Gold Potentilla | Potentilla fruticosa `Sutters Gold` | 5 gal |
| | RA | 54 | Alpine Currant | Ribes alpinum | 5 gal |
| | SF | 49 | Froebel Spirea | Spiraea japonica `Froebelii` | 5 gal |

| ORNAMENTAL GRASS | CODE | QTY | COMMON NAME | BOTANICAL NAME | SIZE |
|---|---|---|---|---|---|
| | MSM | 81 | Eulalia Grass | Miscanthus sinensis `Morning Light` | 5 gal |
| | MSJ | 70 | Yaku Jima Dwarf Maiden Grass | Miscanthus sinensis `Yaku Jima` | 5 gal |
| | MUR | 28 | Undaunted Ruby Muhly | Muhlenbergia reverchonii Undaunted | 5 gal |
| | PHM | 198 | Blue Switch Grass | Panicum virgatum `Heavy Metal` | 5 gal |

| PERENNIALS | CODE | QTY | COMMON NAME | BOTANICAL NAME | SIZE |
|---|---|---|---|---|---|
| | KSH | 7 | Red Hot Poker | Kniphofia x `Stark`s Early Hybrids` | 5 gal |

| TURF SOD | QTY | SPECIES |
|---|---|---|
| | +/- 31,000 | 'RFT' WATER SAVER |

| NATIVE SEED MIX | QTY | SPECIES | % OF MIX |
|---|---|---|---|
| | +/-100,000 SF | CANADA WILDRYE | 20% |
| | | CRESTED WHEATGRASS | 15% |
| | | SLENDER WHEATGRASS | 15% |
| | | ANNUAL RYEGRASS | 10% |
| | | SHEEP FESCUE | 10% |
| | | BIG BLUESTEM | 10% |
| | | SIDEOATS GRAMA | 10% |
| | | CANADA BLUEGRASS | 5% |
| | | BLUE GRAMA | 5% |

| LANDSCAPE REQUIREMENTS | | |
|---|---|---|
| **STREET BUFFERYARDS** | | |
| **EAST BUFFER AT I-25 (800 LF)** | | |
| PLANT TYPE | REQUIRED | PROVIDED |
| CANOPY TREE | 11 TREES | 11 TREES |
| FLOWERING TREE | 11 TREES | 13 TREES / LARGE SHRUBS |
| SHRUBS | 28 SHRUBS | 168 SHRUBS |
| EVERGREEN TREE | 6 TREES | 10 TREES |
| **WEST BUFFER AT BYRD DRIVE (660 LF)** | | |
| PLANT TYPE | REQUIRED | PROVIDED |
| CANOPY TREE | 9 TREES | 16 TREES |
| FLOWERING TREE | 9 TREES | 14 TREES |
| SHRUB | 23 SHRUBS | 229 SHRUBS |
| EVERGREEN TREE | 5 TREES | 5 TREES |
| **STREET TREES** | | |
| REQUIRED | DISTANCE | PROVIDED |
| 1 TREE AT 35' ON CENTER | 450' | 16 TREES |

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# CONDITIONAL USE SITE DEVELOPMENT PLAN

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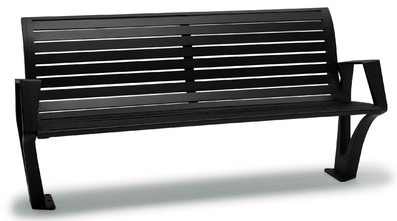
NOTES:
1. SEE PLANS FOR TRASH RECEPTACLE LOCATIONS
2. TRASH RECEPTACLE TO BE WABASH VALLEY URBANSCAPE, WOODRIDGE COLLECTION 32 GALLON WITH LINER. MODEL: WO3B39S
3. TRASH RECEPTACLE TO HAVE SOLID BONNET LID WITH SLAT PATTERN.
4. ALL TRASH RECEPTACLES TO BE SURFACE MOUNTED ON CONCRETE PAD, PER MANUFACTURERS RECOMMENDATIONS.

CAN COLOR: ESPRESSO
LID COLOR: MOCCASIN

1 TRASH RECEPTACLE ON CONCRETE PAD
1"=5'

NOTES:
1. SEE PLANS FOR TRASH RECEPTACLE LOCATIONS
2. BENCHES TO BE WABASH VALLEY URBANSCAPE, WOODRIDGE COLLECTION 6' BENCH WITH BACK AND ARMS. MODEL: WO1112S
3. BENCH TO HAVE FAUX-WOOD PATTERN.
4. ALL BENCHES TO BE SURFACE MOUNTED ON CONCRETE PAD, PER MANUFACTURERS RECOMMENDATIONS.

BENCH COLOR: ESPRESSO
LEG COLOR: MOCCASIN



2 6' SURFACE MOUNT BENCH
NOT TO SCALE

NOTES:
1. SEE PLANS FOR TABLE LOCATIONS
2. TABLES TO BE WABASH VALLEY URBANSCAPE, CAMDEN COLLECTION 36" ROUND TABLE WITH ATTACHED SEATS. MODEL: CAD422C
3. BENCH TO HAVE FAUX-WOOD PATTERN.
4. ALL TABLES TO BE SURFACE MOUNTED ON CONCRETE PAD, PER MANUFACTURERS RECOMMENDATIONS.

TOP AND SEAT COLOR: ESPRESSO
LEG COLOR: MOCCASIN

3 ROUND SURFACE MOUNT TABLE
NOT TO SCALE

NOTES:
1. SEE PLAN FOR BIKE RACK LOCATIONS
2. BIKE RACKS TO BE URBAN ACCESSORIES, MODEL: CURVES IN GRAY IRON, ASTM A48 WITH RAW FINISH.
3. ALL BIKE RACKS TO BE SURFACE MOUNTED, INSTALLED PER MANUFACTURERS RECOMMENDATIONS.

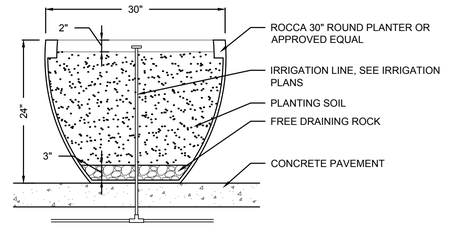
4 BIKE RACK ON CONCRETE PAD
NOT TO SCALE

NOTES:
1. SEE PLANS FOR GRILL LOCATIONS
2. GRILL TO BE WABASH VALLEY COVERED GRILL MODEL NO. GR105N
3. GRILLS TO BE PEDISTAL MOUNT, INSTALL PER MANUFACTURERS RECOMMENDATION

5 COVERED GRILL
NOT TO SCALE

NOTES:
1. SEE PLANS FOR POT LOCATIONS
2. PLANTER POTS TO BE PLANTERS UNLIMITED 30" ROCCA ROUND PLANTER, SKU: F1-ROC-R3024 OR APPROVED EQUAL
3. ALL PLANTER POTS TO BE IRRIGATED WITH AUTOMATIC IRRIGATION.

COLOR: PARCHMENT
FINISH: MATTE




6 PLANTER POT
NOT TO SCALE

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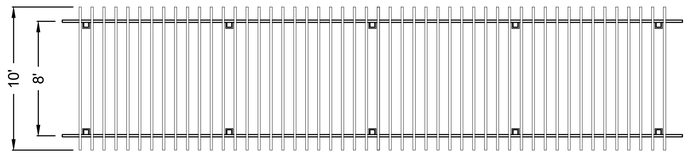
NOTES:
1. SEE PLANS FOR ARBOR LOCATION.
2. SHELTER TO BE ICON SHELTERS, STRAIGHT ARBOR WITH STEEL SLATS.
3. INSTALL PER MANUFACTURERS RECOMMENDATIONS.

POWDER COAT COLOR: PEDESTAL GRAY

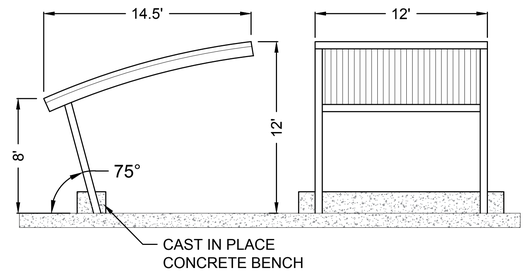



## 1 METAL ARBOR

1"=5'

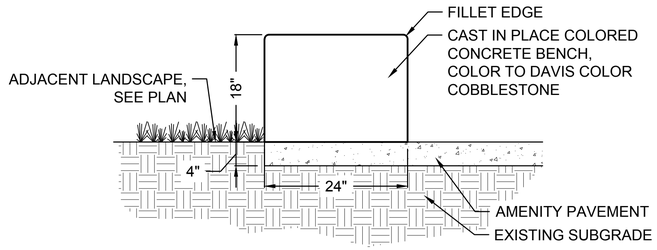
NOTES:
1. SEE PLANS FOR SHELTER LOCATION.
2. SHELTER TO BE ICON SHELTERS, CANTILEVER DESIGN.
3. INSTALL PER MANUFACTURERS RECOMMENDATIONS.

POWDER COAT COLOR: ASH GRAY
ROOF COLOR: CHARCOAL

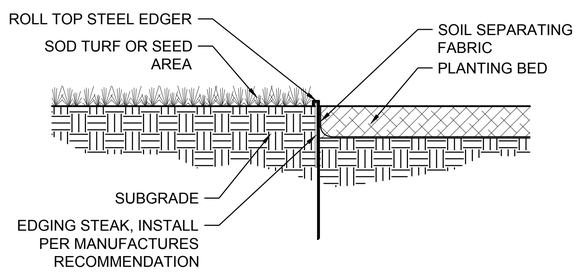



## 2 CANTILEVER SHELTER

1"=5'

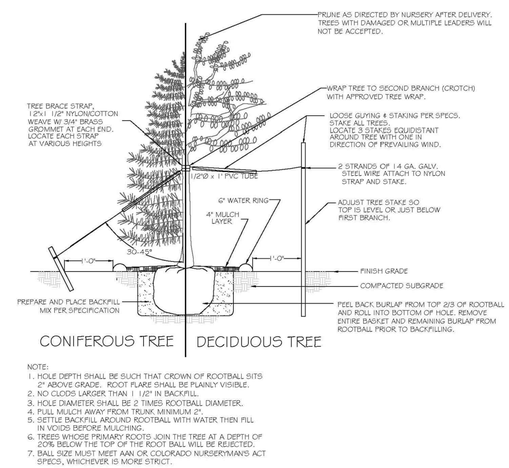



## 3 CAST IN PLACE CONCRETE BENCH




## 4 STEEL EDGING

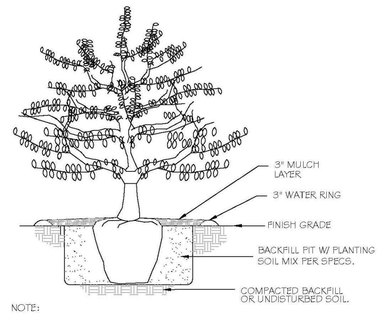
NOT TO SCALE




NOTE:
1. HOLE DEPTH SHALL BE SUCH THAT CROWN OF ROOTBALL SITS 2" ABOVE GRADE. ROOT FLARE SHALL BE PLAINLY VISIBLE.
2. NO CLODS LARGER THAN 1 1/2" IN BACKFILL.
3. HOLE DIAMETER SHALL BE 2 TIMES ROOTBALL DIAMETER.
4. PULL MULCH AWAY FROM TRUNK MINIMUM 2".
5. SETTLE BACKFILL AROUND ROOTBALL WITH WATER THEN FILL IN VOIDS BEFORE MULCHING.
6. TREES WHOSE PRIMARY ROOTS JOIN THE TREE AT A DEPTH OF 20% BELOW THE TOP OF THE ROOT BALL WILL BE REJECTED.
7. BALL SIZE MUST MEET AAN OR COLORADO NURSERYMAN'S ACT SPECS, WHICHEVER IS MORE STRICT.

## 5 TREE PLANTING DETAIL

N.T.S.




NOTE:
1. HOLE DEPTH SHALL BE SUCH THAT CROWN OF ROOTBALL SITS 2" ABOVE GRADE. ROOT FLARE SHALL BE PLAINLY VISIBLE.
2. NO CLODS LARGER THAN 1 1/2" IN BACKFILL.
3. HOLE DIAMETER SHALL BE 2 TIMES ROOTBALL DIAMETER.
4. PULL MULCH AWAY FROM TRUNK MINIMUM 2".
5. SETTLE BACKFILL AROUND ROOTBALL WITH WATER THEN FILL IN VOIDS BEFORE MULCHING.

## 6 SHRUB PLANTING DETAIL

N.T.S.

FOR INFORMATION ONLY

PLANWEST
767 Santa Fe Drive
Denver, CO 80204
(303) 741-1411
planwest.com
PLANNING
SITE DESIGN
ENTITLEMENTS
LANDSCAPE ARCHITECTURE



PC ATTACHMENT D

# EAST LOVELAND INDUSTRIAL TWENTY-THIRD SUBDIVISION
# CONDITIONAL USE SITE DEVELOPMENT PLAN

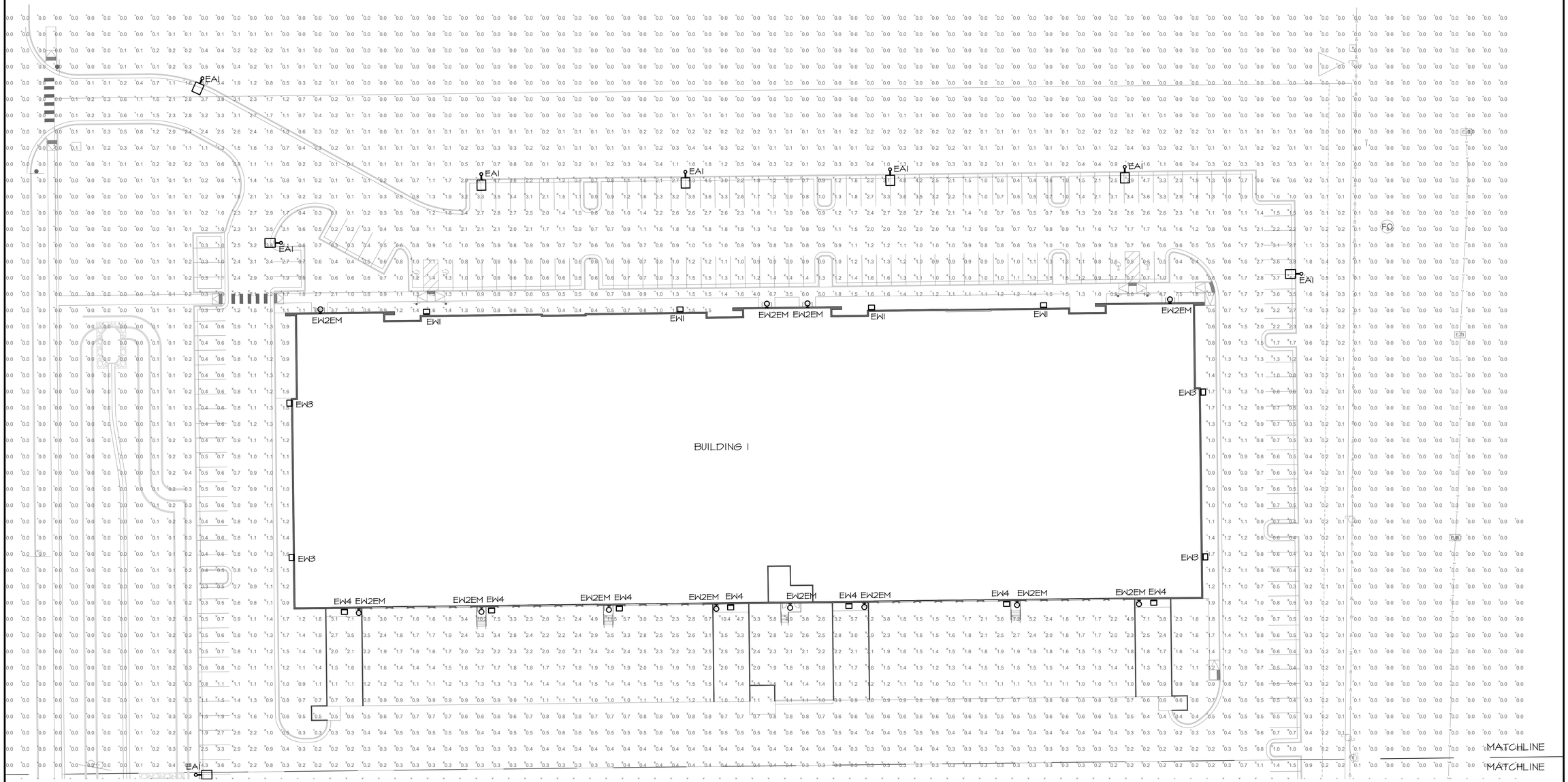
LOCATED IN THE SOUTHWEST QUARTER OF SECTION 34, TOWNSHIP 6 NORTH, RANGE 68 WEST OF THE 6TH PRINCIPAL MERIDIAN, CITY OF LOVELAND, COUNTY OF LARIMER, STATE OF COLORADO.


architecture
planning
interiors
graphics
site development

1600 champa street
suite 350
denver, colorado 80202
p 720.488.2626

**WARE MALCOMB**
Leading Design for Commercial Real Estate


| GENERAL NOTES | |
|---|---|
| A. | ALL SITE LIGHTING SHALL BE CONTROLLED VIA PHOTOCELL TIMECLOCK. |
| B. | ALL SITE LIGHTING SHALL BE FULL-CUTOFF USING ENERGY EFFICIENT LED SOURCES. |
| C. | ILLUMINANCE VALUES SHOWN ARE AT GRADE AND SHOULD BE CONSIDERED INITIAL USING A LIGHT LOSS FACTOR OF 1.0. |
| D. | ILLUMINANCE VALUES SHOWN HERE REPRESENT LIGHTING FROM LUMINAIRES SHOWN EXPLICITLY ON THIS DRAWING. |
| E. | ILLUMINANCE VALUES MEASURED 20 FEET BEYOND THE PROPERTY LINE SHALL NOT EXCEED 0.1 FOOT-CANDLES. |
| F. | ALL LIGHT POLES HAVE A MAXIMUM HEIGHT OF 20'-0" ABOVE GRADE. |


EA1
EW2EM
EW1
EW2EM EW2EM
EW1
EW1
EW2EM
EW3
EW3
EW3
BUILDING 1
EW4 EW2EM
EW2EM EW4
EW2EM EW4
EW2EM EW4
EW2EM
EW4 EW2EM
EW4 EW2EM
EW2EM EW4
EA1
EA1
EA1

# EAST LOVELAND INDUSTRIAL TWENTY-THIRD SUBDIVISION
# CONDITIONAL USE SITE DEVELOPMENT PLAN

LOCATED IN THE SOUTHWEST QUARTER OF SECTION 34, TOWNSHIP 6 NORTH, RANGE 68 WEST OF THE 6TH PRINCIPAL MERIDIAN, CITY OF LOVELAND, COUNTY OF LARIMER, STATE OF COLORADO.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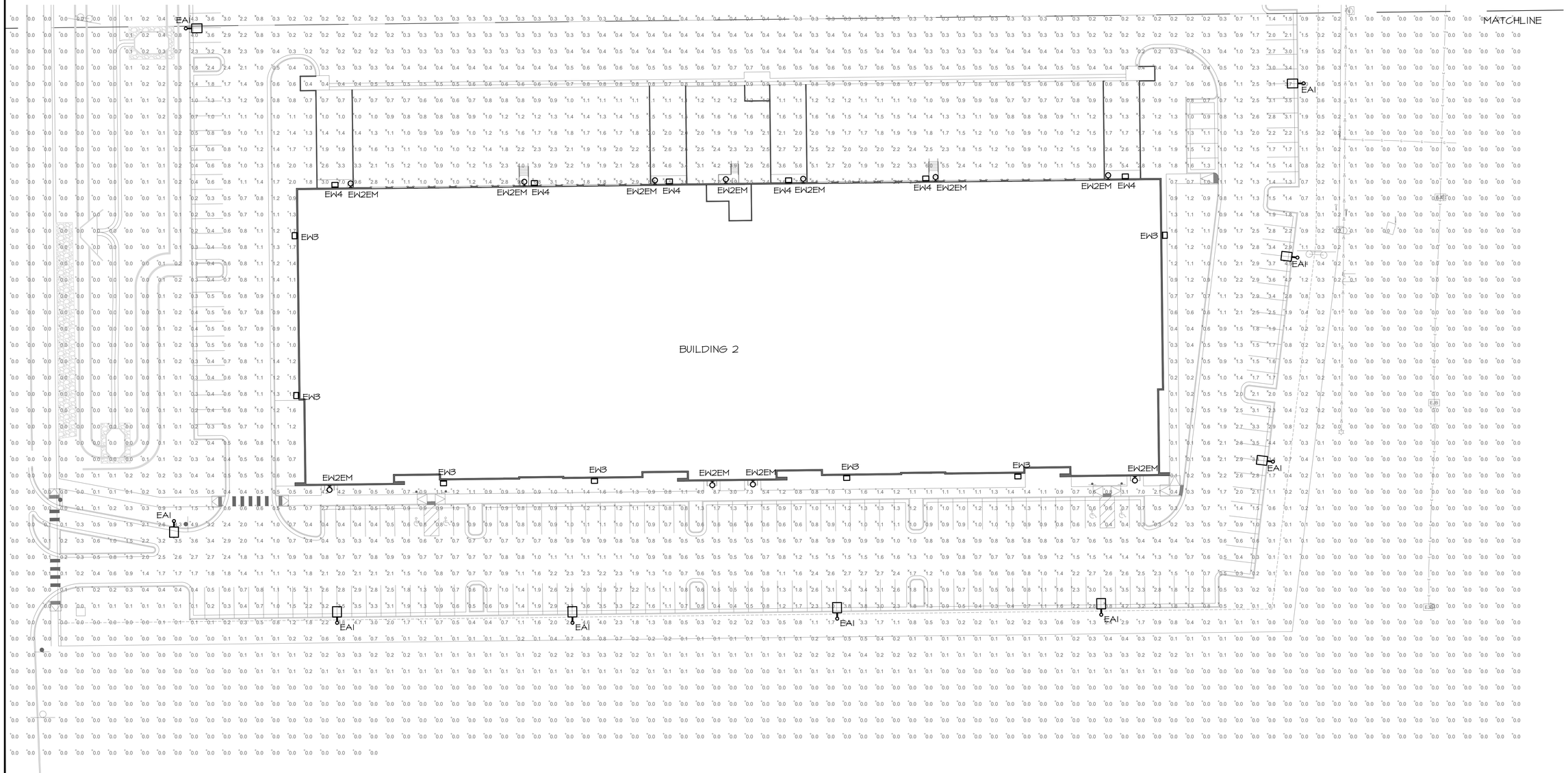
**WARE MALCOMB**
**Leading Design for Commercial Real Estate**



AE DESIGN
Integrated Lighting and Electrical Solutions
1900 Wazee Street #205 | Denver, CO 80202 | 303.296.3034
aedesign-inc.com
Project #:4637.00


FIRST SDP SUBMITTAL 09/06/2019
SECOND SDP SUBMITTAL 10/28/2019

| GENERAL NOTES | |
|---|---|
| A. | ALL SITE LIGHTING SHALL BE CONTROLLED VIA PHOTOCELL TIMECLOCK. |
| B. | ALL SITE LIGHTING SHALL BE FULL-CUTOFF USING ENERGY EFFICIENT LED SOURCES. |
| C. | ILLUMINANCE VALUES SHOWN ARE AT GRADE AND SHOULD BE CONSIDERED INITIAL USING A LIGHT LOSS FACTOR OF 1.0. |
| D. | ILLUMINANCE VALUES SHOWN HERE REPRESENT LIGHTING FROM LUMINAIRES SHOWN EXPLICITLY ON THIS DRAWING. |
| E. | ILLUMINANCE VALUES MEASURED 20 FEET BEYOND THE PROPERTY LINE SHALL NOT EXCEED 0.1 FOOT-CANDLES. |
| F. | ALL LIGHT POLES HAVE A MAXIMUM HEIGHT OF 20'-0" ABOVE GRADE. |




1 BUILDING 2 SITE PHOTOMETRIC PLAN
SCALE: 1" = 30'-0"



**PC ATTACHMENT D**

# EAST LOVELAND INDUSTRIAL TWENTY-THIRD SUBDIVISION
# CONDITIONAL USE SITE DEVELOPMENT PLAN

LOCATED IN THE SOUTHWEST QUARTER OF SECTION 34, TOWNSHIP 6 NORTH, RANGE 68 WEST OF THE 6TH PRINCIPAL MERIDIAN, CITY OF LOVELAND, COUNTY OF LARIMER, STATE OF COLORADO.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FIRST SDP SUBMITTAL 09/06/2019
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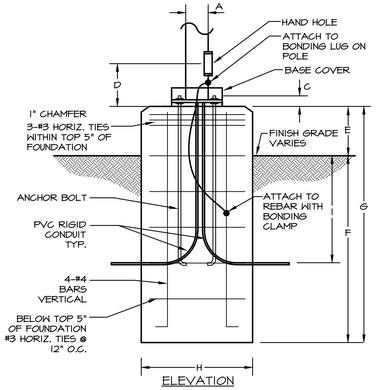
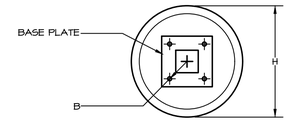



ELEVATION




TOP VIEW

| POLE KEY | OVERALL HEIGHT | A | ANCHOR BOLT DATA B | SIZE | C | D | E | F | G | H | I |
|---|---|---|---|---|---|---|---|---|---|---|---|
| EA1 | 20'0" | 4" | PER MANUFACTURER | | | 2'0"* | 7'0" | 9'0" | 24" | 36" | |

* FOR ALL POLES IN LANDSCAPE AREAS, TOP OF CONCRETE BASE TO BE ONLY 0'6" ABOVE THE FINISHED GRADE.

4 | POLE BASE DETAIL
SCALE: N.T.S.

POINT ILLUMINANCE SUMMARY:

| AREA | AVERAGE (fc) | MAX (fc) | MIN (fc) | MAX/MIN | AVG/MIN |
|---|---|---|---|---|---|
| OVERALL SITE | -- | 10.0 | 0.0 | -- | -- |
| BUILDING 01 NORTH PARKING LOT | 1.0 | 4.8 | 0.3 | 16.0:1 | 4.8:1 |
| BUILDING 01 EAST PARKING LOT | 1.0 | 4.1 | 0.3 | 15.7:1 | 4.7:1 |
| BUILDING 01 WEST PARKING LOT | 1.0 | 3.8 | 0.3 | 12.7:1 | 3.8:1 |
| BUILDING 02 SOUTH PARKING LOT | 1.0 | 4.2 | 0.3 | 14.0:1 | 4.2:1 |
| BUILDING 02 EAST PARKING LOT | 1.0 | 4.7 | 0.3 | 15.7:1 | 4.7:1 |
| BUILDING 02 WEST PARKING LOT | 0.9 | 3.6 | 0.3 | 12.0:1 | 3.6:1 |

LIGHTING FIXTURE SCHEDULE

| TYPE | DESCRIPTION | MANUFACTURER | CATALOG NUMBER | VOLTAGE | FIXTURE QTY | LAMP QTY | LAMP WATT | LAMP TYPE | LUMEN OUTPUT | DIMMING UTILIZED | MAX WATTS | MOUNTING LOCATION | INFORMATION BOF/RFD/OFH | NOTES |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EA1 | POLE MOUNTED AREA FIXTURE, LED TYPE 3 MEDIUM DISTRIBUTION WITH HOUSE SIDE SHIELD; P4 OPTICS, | LITHONIA | DSXI LED P4 30K T3M MVOLT SPA H5 | 120-277 | 13 | 1 | 125 | LED 3000K | 13457 | -- | 125 | POLE GROUND | 20'-0" POLE HEIGHT | 1 |
| EW1 | EXTERIOR LED WALLPACK, TYPE 2 DISTRIBUTION, 1000mA | LITHONIA | DSXWI LED 20C 1000 30K T2M MVOLT | 120/277 | 4 | 1 | 74 | LED 3000K | 7204 | -- | 74 | SURFACE WALL | 25'-0" BOF | 1 |
| EW2EM | EXTERIOR LED WALLPACK, WIDE THROW WITH EM, BATTERY PACK, BLACK FINISH | LITHONIA | WST LED P1 30K VF MVOLT E20WC | 120/277 | 22 | 1 | 12 | LED 3000K | 3512 | -- | 12 | SURFACE WALL | 10'-0" BOF | 1 |
| EW3 | EXTERIOR LED WALLPACK, TYPE 3 DISTRIBUTION, 1000mA | LITHONIA | DSXWI LED 20C 1000 30K T3M MVOLT | 120/277 | 12 | 1 | 74 | LED 3000K | 7052 | -- | 74 | SURFACE WALL | 25'-0" BOF | 1 |
| EW4 | EXTERIOR LED WALLPACK, TYPE 4 DISTRIBUTION, P4 OPTICS | LITHONIA | DSXI LED P4 30K T4M MVOLT | 120/277 | 12 | 1 | 125 | LED 3000K | 13165 | -- | 125 | SURFACE WALL | 25'-0" BOF | 1 |

ABBREVIATIONS: BOF - BOTTOM OF FIXTURE, RFD - RECESSED FIXTURE DEPTH, OFH - OVERALL FIXTURE HEIGHT, AFF(AFG) - ABOVE FINISHED FLOOR (GRADE), WFD - WALL FIXTURE DEPTH

GENERAL NOTES:
A. ALL LED LAMPS TO BE4000K COLOR TEMPERATURE AND A MINIMUM OF 82CRI, UNLESS NOTED OTHERWISE.
B. PROVIDE LUMINAIRES SHOWN AS SHADED WITH EMERGENCY BATTERY BALLASTS, UNLESS OTHERWISE NOTED. EMERGENCY LUMINAIRES SHALL SENSE UN-SWITCHED POWER TO THE SPACE AND OPERATE AUTOMATICALLY UPON LOSS OF NORMAL POWER. ALL SHADED LUMINAIRES WITH 2FT AND 4FT LAMPS SHALL HAVE ONE (1) 90 MINUTE RATED, TWO LAMP, 1400 LUMEN EMERGENCY BALLAST. ALL SHADED LUMINAIRES WITH COMPACT FLUORESCENT LAMPS SHALL HAVE A FACTORY INSTALLED 90 MINUTE EMERGENCY BALLAST. ALL EMERGENCY LUMINAIRES SHALL HAVE REMOTE TEST SWITCHES AND VISIBLE INDICATING LIGHTS. CONNECT THE EMERGENCY BATTERY BALLAST TO THE UN-SWITCHED LEG OF THE LIGHTING CIRCUIT INDICATED.

SPECIFIC NOTES:
1. ARCHITECT TO CONFIRM FINISH TYPE AND POLE SHAPE.

# WST LED
Architectural Wall Sconce

Catalog Number | Notes | Type

Hit the Tab key or mouse over the page to see all interactive elements.

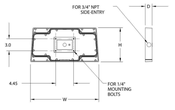
### Specifications

**Luminaire**

**Height:** 8-1/2" (21.59 cm)
**Width:** 17" (43.18 cm)
**Depth:** 10-3/16" (25.9 cm)
**Weight:** 20 lbs (9.1 kg)

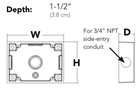
**Optional Back Box (PBBW)**

**Height:** 8.49" (21.56 cm)
**Width:** 17.01" (43.21 cm)
**Depth:** 1.70" (4.32 cm)




**Optional Back Box (BBW)**

**Height:** 4" (10.2 cm)
**Width:** 5-1/2" (14.0 cm)
**Depth:** 1-1/2" (3.8 cm)




### Capable Luminaire

This item is an A+ capable luminaire, which has been designed and tested to provide consistent color appearance and system-level interoperability.

- All configurations of this luminaire meet the Acuity Brands' specification for chromatic consistency
- This luminaire is A+ Certified when ordered with DTL® controls marked by a shaded background. DTL DLL equipped luminaires meet the A+ specification for luminaire to photocontrol interoperability1
- This luminaire is part of an A+ Certified solution for ROAM® or XPoint™ Wireless control networks, providing out-of-the-box control compatibility with simple commissioning, when ordered with drivers and control options marked by a shaded background[1]

To learn more about A+, visit www.acuitybrands.com/aplus.

See ordering tree for details.

A+ Certified Solutions for ROAM require the order of one ROAM node per luminaire. Sold Separately: Link to Roam; Link to DTL DLL



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3 | TYPE EW2EM
SCALE: N.T.S.

d^series

# D-Series Size 1
LED Wall Luminaire

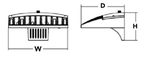
Catalog Number | Notes | Type

Hit the Tab key or mouse over the page to see all interactive elements.

### Specifications

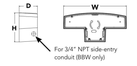
**Luminaire**

**Width:** 13-3/4" (34.9 cm)
**Weight:** 12 lbs (5.4 kg)
**Depth:** 10" (25.4 cm)
**Height:** 6-3/8" (16.2 cm)




**Back Box (BBW, ELCW)**

**Width:** 13-3/4" (34.9 cm)
**BBW Weight:** 5 lbs (2.3 kg)
**Depth:** 4" (10.2 cm)
**ELCW Weight:** 10 lbs (4.5 kg)
**Height:** 6-3/8" (16.2 cm)




### Ordering Information

**EXAMPLE:** DSXW1 LED 20C 1000 40K T3M MVOLT DDBTXD

DSXW1 LED

| Series | LEDs | Drive Current | Color temperature | Distribution | Voltage | Mounting | Control Options |
|---|---|---|---|---|---|---|---|
| DSXW1 LED | 10C 10 LEDs (one engine)<br>20C 20 LEDs (two engines) [7] | 350 350 mA<br>530 530 mA<br>700 700 mA<br>1000 1000 mA (1 A) [1] | 30K 3000 K<br>40K 4000 K<br>50K 5000 K<br>AMBPC Amber phosphor converted | T2S Type II Short<br>T2M Type II Medium<br>T3S Type III Short<br>T3M Type III Medium<br>T4M Type IV Medium<br>TFTM Forward Throw Medium<br>ASYDF Asymmetric diffuse | MVOLT [2]<br>120 [3]<br>208 [3]<br>240 [3]<br>277 [3]<br>347 [3,4]<br>480 [3,4] | **Shipped included**<br>(blank) Surface mounting bracket<br>BBW Surface-mounted back box (for conduit entry) [5] | **Shipped installed**<br>PE Photoelectric cell, button type [6]<br>DMG 0-10V dimming driver (no controls; wires pulled outside fixture)<br>PIR 180° motion/ambient light sensor, <15' mtg ht [8,9]<br>PIRH 180° motion/ambient light sensor, 15-30' mtg ht [8,9]<br>PIR1FC3V Motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 1fc [8,9]<br>PIRH1FC3V Motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 1fc [8,9]<br>ELCW Emergency battery backup (includes external component enclosure), non CEC compliant [8,9] |

| Other Options | | Finish (required) | | | |
|---|---|---|---|---|---|
| **Shipped installed** | **Shipped separately** [9] | DDBXD Dark bronze | DSSXD Sandstone | DWHGXD Textured white | |
| SF Single fuse (120, 277 or 347V) [3,9] | BSW Bird-deterrent spikes | DBLXD Black | DDBTXD Textured dark bronze | DSSTXD Textured sandstone | |
| DF Double fuse (208, 240 or 480V) [3,9] | WG Wire guard | DNAXD Natural aluminum | DBLBXD Textured black | | |
| HS House-side shield [9] | VG Vandal guard | DWHXD White | DNATXD Textured natural aluminum | | |
| SPD Separate surge protection | DDL Diffused drop lens | | | | |

**Accessories**
Ordered and shipped separately.

DSXWHS U House-side shield (one per light engine)
DSXWBSW U Bird-deterrent spikes
DSXWTWG U Wire guard accessory
DSXWTVG U Vandal guard accessory

NOTES
1 20C 1000 is not available with PIR, PIRH, PIR1FC3V or PIRH1FC3V.
2 MVOLT driver operates on any line voltage from 120-277V (50/60 Hz).
3 Single fuse (SF) requires 120, 277 or 347 voltage option. Double fuse (DF) requires 208, 240 or 480 voltage option.
4 Only available with 20C, 700mA or 1000mA. Not available with PIR or PIRH.
5 Back box ships installed on fixture. Cannot be field installed. Cannot be ordered as an accessory.
6 Photocontrol (PE) requires 120, 208, 240, 277 or 347 voltage option. Not available with motion/ambient light sensors (PIR or PIRH).
7 Reference Motion Sensor table on page 3.
8 Cold weather (-20C) rated. Not compatible with conduit entry applications. Not available with BBW mounting option. Not available with fusing. Not available with 347 or 480 voltage options. Emergency components located in back box housing. Emergency mode IES files located on product page at www.lithonia.com
9 Not available with ELCW.
10 Also available as a separate accessory; see Accessories information.



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2 | TYPE EW1, EW3, EW4
SCALE: N.T.S.

d^series

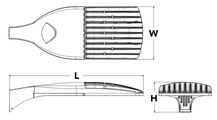
# D-Series Size 1
LED Area Luminaire

Catalog Number | Notes | Type

Hit the Tab key or mouse over the page to see all interactive elements.

### Specifications

**EPA:** 1.01 ft² (0.09 m²)
**Length:** 33" (83.8 cm)
**Width:** 13" (33.0 cm)
**Height:** 7-1/2" (19.1 cm)
**Weight (max):** 27 lbs (12.2 kg)




### Introduction

The D-Series Wall luminaire is a stylish, fully integrated LED solution for building-mount applications. It features a sleek, modern design and is carefully engineered to provide long-lasting, energy-efficient lighting with a variety of optical and control options for customized performance.

With an expected service life of over 20 years of nighttime use and up to 74% in energy savings over comparable 250W metal halide luminaires, the D-Series Wall is a reliable, low-maintenance lighting solution that produces sites that are exceptionally illuminated.

### Capable Luminaire

This item is an A+ capable luminaire, which has been designed and tested to provide consistent color appearance and system-level interoperability.

- All configurations of this luminaire meet the Acuity Brands' specification for chromatic consistency
- This luminaire is A+ Certified when ordered with DTL® controls marked by a shaded background. DTL DLL equipped luminaires meet the A+ specification for luminaire to photocontrol interoperability1
- This luminaire is part of an A+ Certified solution for ROAM® or XPoint™ Wireless control networks, providing out-of-the-box control compatibility with simple commissioning, when ordered with drivers and control options marked by a shaded background[1]

To learn more about A+, visit www.acuitybrands.com/aplus.

1. See ordering tree for details.
2. A+ Certified Solutions for ROAM require the order of one ROAM node per luminaire. Sold Separately: Link to Roam; Link to DTL DLL

A+ Capable options indicated by this color background.

### Ordering Information

**EXAMPLE:** DSX1 LED P7 40K T3M MVOLT SPA DDBXD

DSX1LED

| Series | LEDs | Color temperature | Distribution | Voltage | Mounting |
|---|---|---|---|---|---|
| DSX1 LED | **Forward optics**<br>P1 P4 P7<br>P2 P5 P8<br>P3 P6 P9<br>**Rotated optics**<br>P10 [1] P12 [1]<br>P11 [1] P13 [1] | 30K 3000 K<br>40K 4000 K<br>50K 5000 K<br>AMBPC Amber phosphor converted [2] | T1S Type I short<br>T2S Type II short<br>T2M Type II medium<br>T3S Type III short<br>T3M Type III medium<br>T4M Type IV medium<br>TFTM Forward throw medium<br>T5VS Type V very short<br>T5S Type V short<br>T5M Type V medium<br>T5W Type V wide<br>BLC Backlight control [27]<br>LCCO Left corner cutoff [27]<br>RCCO Right corner cutoff [27] | MVOLT [4,5] 120 [6] 208 [5,6] 240 [5,6] 277 [6] 347 [5,6,7] 480 [5,6,7] | **Shipped included**<br>SPA Square pole mounting<br>RPA Round pole mounting<br>WBA Wall bracket<br>SPUMBA Square pole universal mounting adaptor [8]<br>RPUMBA Round pole universal mounting adaptor [8]<br>**Shipped separately**<br>KMA8 DDBXD U Mast arm mounting bracket adaptor (specify finish) [8] |

| Control options | | | Other options | Finish (required) | |
|---|---|---|---|---|---|
| **Shipped installed** | PIRH1FC3V Bi-level, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 1fc [9,10,11] | | **Shipped installed** | DDBXD Dark bronze | |
| NLTAIR2 nLight AIR generation 2 enabled [12] | BL30 Bi-level switched dimming, 30% [5,9,10] | | HS House-side shield [13] | DBLXD Black | |
| PER NEMA twist-lock receptacle only (controls ordered separate) [14] | BL50 Bi-level switched dimming, 50% [5,9,10] | | SF Single fuse (120, 277, 347V) [6] | DNAXD Natural aluminum | |
| PERS Five-wire receptacle only (controls ordered separate) [14,15] | PNMTD3 Part night, dim till dawn [5,9] | | DF Double fuse (208, 240, 480V) [6] | DWHXD White | |
| PER7 Seven-wire receptacle only (controls ordered separate) [14,15] | PNMTSD3 Part night, dim 5 hrs [5,9] | | L90 Left rotated optics [1] | DDBTXD Textured dark bronze | |
| DMG 0-10V dimming extend out back of housing for external control (leads exit fixture) | PNMTFD3 Part night, dim 6 hrs [5,9] | | R90 Right rotated optics [1] | DBLBXD Textured black | |
| DS Dual switching [11,16] | PNMT5D3 Part night, dim 7 hrs [5,9] | | **Shipped separately** | DNATXD Textured natural aluminum | |
| PIR Bi-level, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 5fc [9,10,11] | FAO Field adjustable output [9] | | BS Bird spikes [27] | DWHGXD Textured white | |
| PIRH Bi-level, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 5fc [9,10,11] | | | EGS External glare shield [27] | | |
| PIRHN Network, Bi-Level motion/ambient sensor [9] | | | | | |



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1 | TYPE EA1
SCALE: N.T.S.

PHOTOMETRIC PLAN
SHEET 17 OF 22

PC ATTACHMENT D

City of Loveland

# MEMORANDUM

**To:** Planning Commission

**From:** *Connect Loveland* - David Klockeman, Project Manager, and Katie Guthrie, Deputy Project Manager (Public Works Department)

**Date:** December 16, 2019

**Re:** *Connect Loveland* Update

## I. INTRODUCTION

The City of Loveland is currently developing updated Transportation, Transit and Bicycle & Pedestrian Plans. These updates will look at transportation as an entire multi-modal system centered on Loveland, including the regional impacts of jobs, shopping and medical services. The update, known as *Connect Loveland*, is focusing in on three key areas: the Street Network, Transit System, and Bicycle & Pedestrian Network. This is the first time the City has combined these separate areas into one overall effort, not only creating a stronger link between the different travel modes, but also including long-term vision for the rapidly changing needs and technologies.

*Connect Loveland* commenced in early 2019 and is expected to be completed in Spring 2020. This effort falls under the umbrella of the City's Comprehensive Plan (*Create Loveland*), and requires a formal process by the Planning Commission. Tonight's Discussion Item is intended to give the Planning Commission an update on the overall process and status, and seek input for going forward into the development of the final document.

## II. BACKGROUND

The City of Loveland has previously completed plans related to different modes of transportation with links to each other, but primarily as standalone documents. The 2035 Transportation Plan (2012), Bicycle & Pedestrian Plan (2012) and the Transit Plan Update (2009) have been in place for over 7 years. Since those plans were completed, a number of major projects have been completed, other plans and policies have been created and adopted, and new trends in the community have occurred, including:

- Large annual increases in home prices and decreasing housing affordability.
- Ongoing shifts in community development patterns.
- Interest in mobility options.
- Increasing concerns about traffic congestion, particularly along the main arterials, and the limited options for additional roadways due to geographic constraints.

As with most long range planning efforts, the revenue ends up increasing in the later years of the planning horizon and many of the projects and that is when many of the projects are constructed. Loveland's approach to funding projects is "pay as you go", which has resulted in the construction

of much needed projects, but has created the unintended consequence of internal competition for funding, and a reduced ability to move broad-based implementation plans forward.

## FOCUS OF EFFORT

In addition to traditional topics covered in the aforementioned plans, additional emerging issues and opportunities have been identified that will help inform the plan updates:

- **Growth & Community Buildout** Evaluation of the community's Growth Management Area (GMA), planning for the final remaining vacant lands within the GMA, and preparing for the continued shift in development patterns towards infill development and implications for compatibility and existing infrastructure.
- **Mobility** Developing a framework for community mobility through safe, accessible multi-modal options, while addressing congestion and creating a balanced transportation system.
- **Regionalism** Loveland's role and collaboration in a fast-growing region, especially in relation to transportation and transit, I-25 congestion and expansion, jobs-housing variables, commuter shed, etc.
- **Technology & Connectivity** Identifying and planning for emerging technologies or potential social changes, such as autonomous vehicles, smart grids, increasing automation, and envisioning how technology can enable better connectivity and interaction with local government and support various community priorities.
- **Livability** Enhancing community livability, including improving health and safety, infrastructure upgrades, as well as aging and car-free populations.
- **Innovation** Ensuring the community is not complacent but able to consider and nimbly respond to potential new ideas, strategies, and solutions to our challenges and opportunities.
- **Public Engagement** Designing, coordinating, and implementing an innovative and inclusive public outreach and engagement strategy will be crucial. The Public Works Department's Outreach and Education lead and the City's Public Information Office will be key partners in all public engagement efforts.
- **Partnerships** Cultivating new and existing partnerships, locally and regionally, for better communication, efficiencies, and support.
- **Strategic Implementation** Development of specific criteria of implementation across all areas of the City's multi-modal, well-balanced transportation system -- including short-term, mid-term and long-term needs with phasing and funding – while addressing gaps and eliminating overlaps.

## ADMINISTRATION

*Connect Loveland* is a cooperative effort that will be managed between the City's Public Works Department, Transportation Engineering Division, Traffic Division and Transit (COLT) Division. The selected consultant team will confer/meet with the project members on a regular basis to review progress, present deliverables and findings, and solicit direction.

The City has hired a consultant, Fehr & Peers, to help develop this overall plan. Fehr & Peers is a Transportation Planning
In addition, the project will include internal and external stakeholder groups.

Internal Stakeholders (Focus Group):

- City of Loveland
- Development Services

- Engineering (Transportation Development Review, Capital Projects, Traffic)
- Utilities (Stormwater, Water/Wastewater, Power, etc.)
- Parks Planning & Development
- Police Services
- City Manager's Office, including Public Information Office
- Boards and Commissions
  - Transportation Advisory Board (TAB) – Primary – Monthly Updates
    - "Connectors" – Board Liaisons from other key Boards and Commissions – Attend TAB every other month for updates

External Stakeholders (*Connect Loveland* Stakeholder Committee "*CLSC*"):

- North Front Range Metropolitan Planning Organization (NFRMPO)
- Larimer County
  - Engineering
  - Planning
  - Health Department
- Downtown Development Authority
- Regional Partners / Municipalities / Transit Agencies
- Colorado Department of Transportation (CDOT)
- Outside Utility Service Districts
- Thompson School District (TSD)
- Loveland Fire and Rescue Authority
- Business Representatives

**KEY AREAS**

Street Network:

The current street network in Loveland has over 330 miles of arterial, collector and local streets. The historic core is roughly bounded by First Street, Madison Avenue, Eisenhower Boulevard, and Taft Avenue. The core was fully developed in Loveland's early history and is mostly laid out in a tight grid system of tree-lined streets that provide many routing options for motorists seeking either local or through travel to their destinations.

Areas of growth have both suburban and rural characteristics, reflecting the development patterns of the 1970's and beyond, including fewer through streets, more curving roads and cul-de-sacs. The outer area also contains over 35 lakes of varying size and shape, which, when combined with the relative lack of through streets, present many man-made and natural barriers to through travel. These barriers contribute to a lack of continuous arterial streets and limit both north-south and east-west travel in and through the City.

Transit System:

The City of Loveland Transit (COLT) provides local and paratransit service in the City of Loveland. COLT operates five fixed routes, including the FLEX route, which provides a connection north, to Fort Collins and south, to Longmont and Boulder. Fixed-route service is provided Monday through Saturday and generally begins between 6:30 and 6:40 AM, with the last trip scheduled to depart between 5:30 and 6:00 PM.

Paratransit service currently operates between the hours of 6:38 AM and 6:15 PM Monday through Saturday within the Loveland city limits. COLT operates under an informal service philosophy that intends to provide as much service as possible throughout the community within existing resources in a safe and efficient manner. COLT serves a variety of transit users including adults, seniors and persons with disabilities, youth, and paratransit users.

Bicycle & Pedestrian Network:

Bicycle Plan: The bicycle is an alternative to the automobile for many trips. It can also play an important role in helping the City to improve its air quality and to develop a more balanced transportation system. This element of Connecting Loveland identifies improvements to existing street and trail facilities that are presently suitable for bicycles and development of an expanded system of bicycle-friendly roads and trails for Loveland's future. The current plan was developed based on the analysis of existing conditions, as well as input from Loveland's Bicycle and Pedestrian Committee and recommends significant improvements to the existing bicycle system, including new roads with added bike lanes, improvements to existing roads without bike lanes, and a comprehensive commuter trail system to compliment the City's recreational trails system and accommodate all modes of travel.

Pedestrian Plan: Similar to the Bicycle Plan, the Pedestrian Plan identifies pedestrian projects that provide connectivity, continuity, addresses safety problems, and also identifies access to schools. The current plan shows 153 pedestrian improvements that included construction of new sidewalks, filling in missing segments, intersection improvements and widening of existing sidewalks.

**PROCESS**

| | |
|---|---|
| Task 1: | Project Kickoff and Work Plan Finalization |
| Task 2: | Loveland 2018 (Existing Conditions), Policy and Plan Review, Coordination with Travel Behavior, Community Values Survey – Existing Conditions Report Completed (Attached) |
| Task 3: | Future Loveland – Report Completed (Attached) |
| Task 4: | Goals, Objectives and Vision Statements – Report Completed (Attached) |
| **Task 5:** | **Alternatives Development and Testing - CURRENT** |
| Task 6: | Draft Plan Development |
| Task 7: | Final Plan |
| Task 8: | Adoption |
| Outreach | Included in All Tasks |

## III. PROCESS HIGHLIGHTS / CURRENT STATUS

**Existing Conditions** – Complete (Report Attached):

Included information on Connect Loveland, a multifaceted effort to update the City's street network, transit system, and bicycle and pedestrian facilities, must be underpinned by a thorough understanding of the current transportation network and how it serves both Loveland and connects to the surrounding region. This summary, as well as Connect Loveland, addresses all modes operating within the City—vehicles, bicyclists, pedestrians, and transit. This existing conditions summary also details all aspects of the transportation network, including recent shifts

in traffic volumes, safety concerns, the existing bicycle and pedestrian network, and transit service as well as demographic indicators, land use trends, and economic data.

**Summary:**
- Highlights where Loveland's transportation system is today by describing the existing multimodal networks
- Identifies opportunities for Loveland to offer improved mobility and access for residents and visitors
- Reviews recent City and regional plans that Connect Loveland will update
- Builds off the established policies, goals, objectives, and public input from recent plans
- Analyzes data of the existing state and historical trends of the transportation system including demographics, employment, land use, bicycle and pedestrian facilities, crashes, transit services, and vehicle performance
- Informs key gaps or inefficiencies

Key Challenges include: the dependence on Single Occupancy Vehicles (SOV's) for trips to work as currently 81% Drive Alone, 8.5% Carpool, 0.5% use Transit, 1.5% Walk, 1% Bike, and 7.5% Other (work from home or tele-commute); the Demographics are changing with population growth, the desire for aging in place, and the changing housing market; Travel Patterns are resulting in the demand for more choices overall specifically related to provide alternatives to the current patterns and the increase in commuters; and taking into account the constraints created by the natural boundaries, including lakes and rivers.

**Future Loveland** – Complete (Report Attached):

*Connect Loveland* provides guidance for meeting the future travel needs of residents and visitors. *Connect Loveland* will address a variety of factors, including:

- Ensuring the transportation system supports forecasted population and employment growth.
- Enhancing the biking, walking, and transit experience.
- Reducing the number of miles driven by each resident (this concept is referred to throughout as VMT or Vehicle Miles Traveled).
- Prioritizing transportation investments.
- Ensuring transportation in Loveland is equitable by providing comfortable, safe, and accessible options for all users.

A variety of items have been identified related to anticipated changes going forward:
- Both housing in employment will increase in the future, with jobs growing faster than available housing. This will result in more commuter traffic.
- Housing affordability, preference and generational trends will have a great impact on all modes of travel related to the different needs and desires.
- The anticipated significant growth in N0n-Residential Development (Office, Retail and Industrial) will have a large impact on travel.
- While it is anticipated that individuals will travel less, overall travel will increase due to population and employment growth.
- Demand for biking and walking options and infrastructure will increase.
- Emerging trends will have a yet to be fully determined impact on the transportation network. This area includes Shared Mobility, Curbside Management, Electric Vehicles, Autonomous and Connect Vehicles, Mobility as a service, and Home Delivery.

**Vision, Goals, and Objectives** - Complete (Report Attached):

As part of the *Connect Loveland* process, a draft vision along with a set of proposed goals and objectives was developed. Goals and corresponding objectives have been divided into topic areas that will ultimately represent different sections of *Connect Loveland*.

Many elements were adopted from previous planning efforts in Loveland and some pieces have been drafted specifically for *Connect Loveland*, based on more recent changes in the rapidly evolving transportation landscape and Loveland's growing population.

The framework uses the following definitions:

**Vision:** Thinking about the future with wisdom and/or imagination. Something to be pursued, **the end result.**

**Goals:** The desired end result of any number of efforts. A goal **defines the direction and destination,** changes the direction of the City toward the end result.

**Objectives:** All about the tactics. Objectives are **action items** to get from where we are to where we want to be. A goal defines the direction and destination, but the road to get there is accomplished by a series of objectives.

*Connect Loveland* Vision: ***Loveland's multimodal transportation network will be safe, accessible, regionally connected, and user-friendly, providing reliable and convenient access to everyday destinations for all ages and abilities.***

In order to fully address the broad range of items for all travel modes, a list of 10 Topic Areas were was developed. The Topic Areas include: Multimodal Connectivity; Aligning Transportation and Land Use and Development; Trails/Recreation; Environment; Health and Safety; Policies and Programs; Implementation/Funding; Equitable Access; Regional Coordination; and Innovation.

**Alternatives Development and Testing** - In Process:

Taking into account all of the items identified in the *Connect Loveland* work to date, three (3) Alternative Scenarios were identified that illustrate different transportation patterns, respective priorities and levels of investment. They consist of:

- Scenario 1 – Base Case
  - Maintain current funding levels for Transportation Capital based on recommendations of 2035 Transportation Plan, including maintenance
  - Continue to incrementally increase Transit service, including frequency and connections to regional transit (FLEX and Bustang)
  - Develop additional safety and comfort criteria for bicycles and pedestrians
  - No Land Use Changes

- Scenario 2 – Increased Funding in All Modes / Some Land Use Changes
  - Increase current funding levels for Transportation Capital above existing levels; Maintain existing level of maintenance funding

- Increase Transit service frequency and coverage; contribute to regional transit expansion
- Increase funding for bicycles and pedestrians to prioritize improvements on existing gaps, specifically connections to the Transit system and other facilities
- Land Use – Increase Mixed Use Development along major corridors by 20%

- Scenario 3 – Increased Funding for Active Modes / Additional Land Use Changes
  - Increase current funding levels for Active Modes (Transit, Bicycles and Pedestrians) and maintain existing funding for vehicle and maintenance
  - Increase Transit service frequency and coverage, including addition of high frequency corridors ; contribute to regional transit expansion
  - Increase funding for bicycles and pedestrians to complete all improvements on existing gaps, specifically connections to the Transit system and other facilities
  - Land Use – Add high density development near Transit hubs; Increase Mixed Use Development along major corridors by 20%; Increase Mixed by 40% along high frequency corridors

Each of these scenarios is being reviewed to determine the impact on the overall transportation network. The recommended approach included in the final *Connect Loveland* document will be a combination of items from each scenario that best addresses the overall needs.

## IV. NEXT STEPS

- Complete Alternatives Development and Testing – November / December 2019
- Prepare Draft Document – January 2020
- Prepare Final Document – February / March 2020
- Adoption – April 2020

City of Loveland

# CONNECT LOVELAND UPDATE

PLANNING COMMISSION

DECEMBER 16, 2019

City of Loveland

1

# AGENDA

1. PROJECT TEAM
2. HISTORY
3. LOVELAND 2018
4. FUTURE LOVELAND
5. PUBLIC INVOLVEMENT / OUTREACH
6. VISIONS, GOALS AND OBJECTIVES
7. ALTERNATIVES DEVELOPMENT AND TESTING
8. SCHEDULE / NEXT STEPS

City of Loveland

CONNECT LOVELAND

# MEET THE TEAM

City of Loveland
PUBLIC WORKS

**DAVID KLOCKEMAN, PE**
Senior Civil Engineer
Project Manager

**KATIE GUTHRIE, AICP**
Transportation Planner
Deputy Project Manager

**CONSULTANT TEAM:**

**LEAD CONSULTANT**

FEHR PEERS

**ANN BOWERS, PE, PTOE, PTP**
Consultant Team
Project Manager

EPS

MIG

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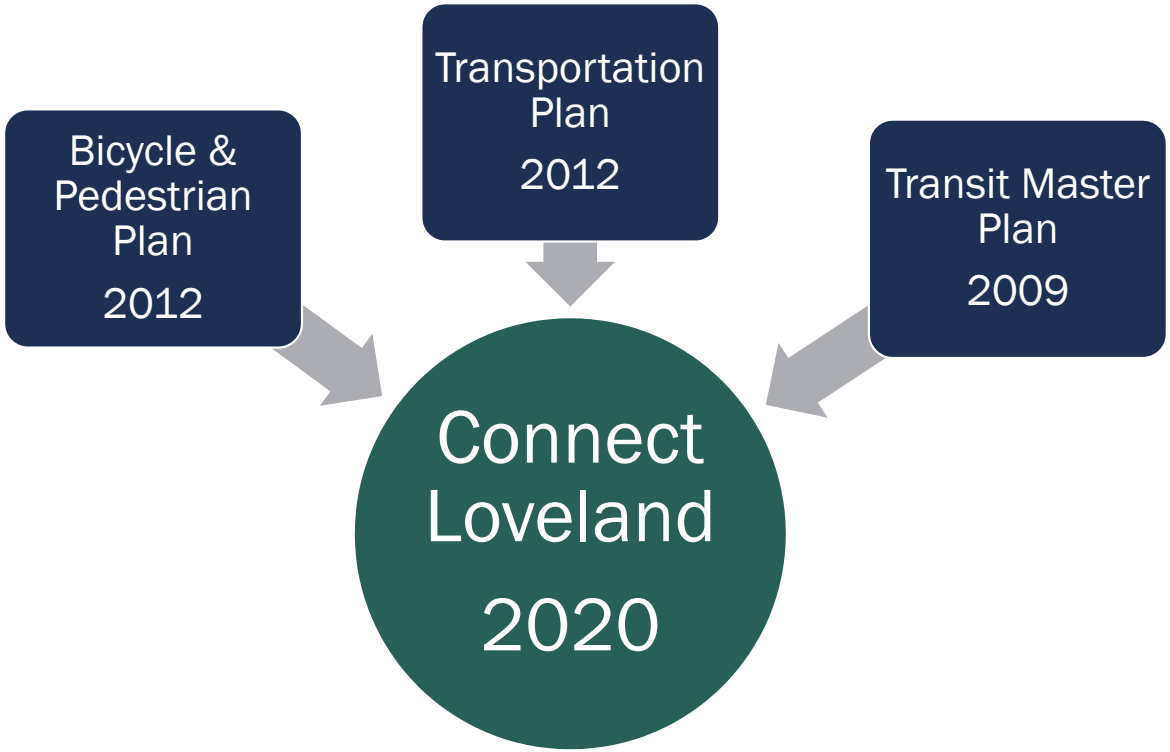
# HISTORY

# WHY NOW?

- Existing plans are 7 to 10 years old
- Implementation plans need to be included
  - Create Loveland
  - NFRMPO Regional Transportation Plan
- Demographics are changing
- Changing technology
- Need to develop forward thinking / vision document



# LOVELAND 2018

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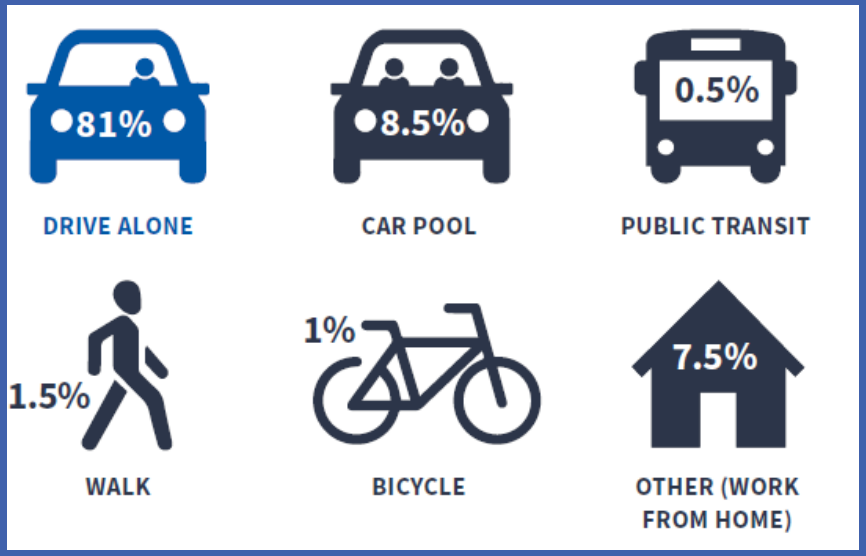


# CHALLENGES

## DEMOGRAPHICS

- Population growth
- Aging in place
- Housing market

## TRAVEL PATTERNS

- Transportation choices
- Current mode split
- Commuters

## ENVIRONMENTAL CONSTRAINTS

- Lakes and natural boundaries

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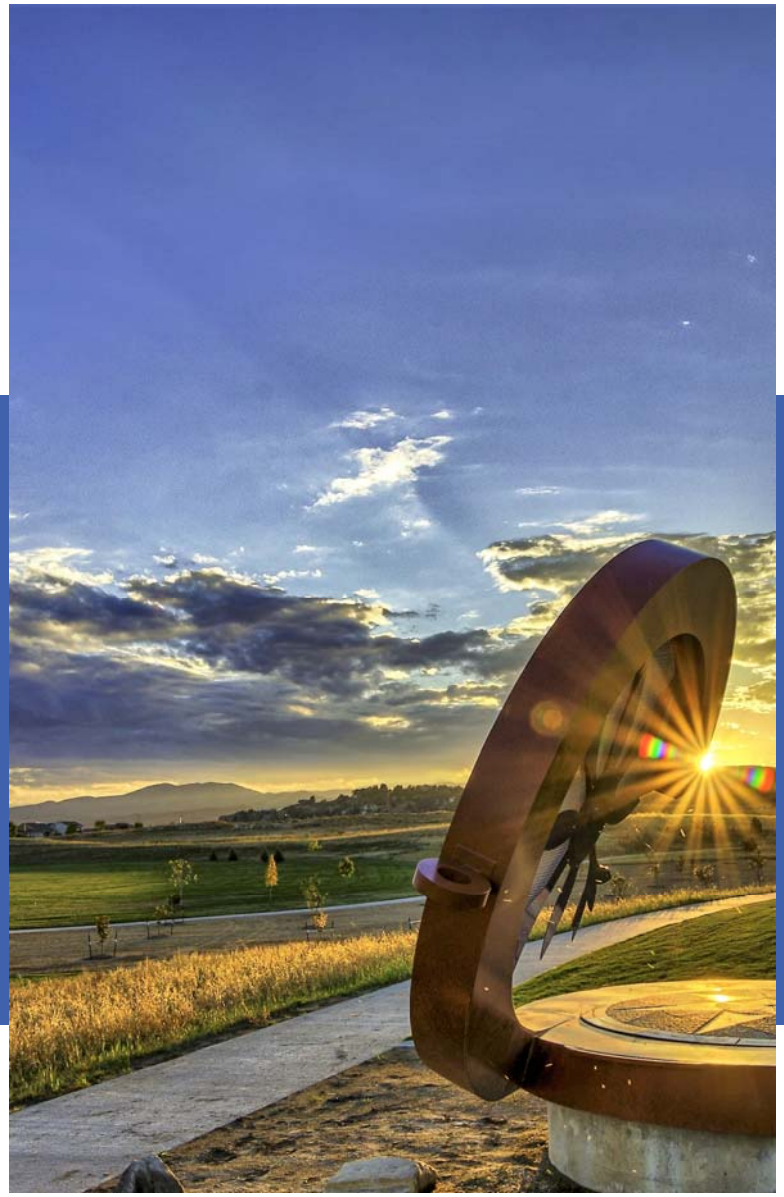
# FUTURE LOVELAND



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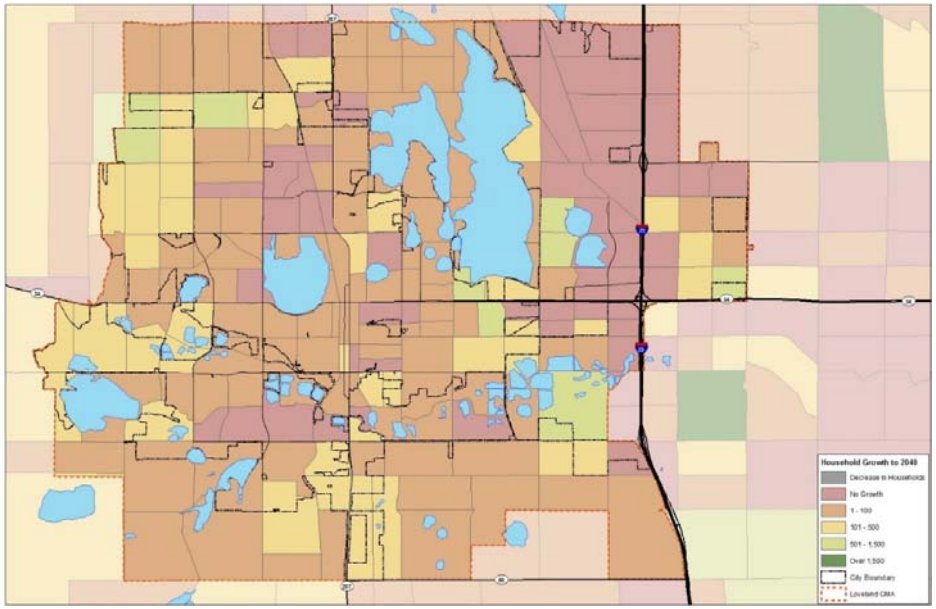
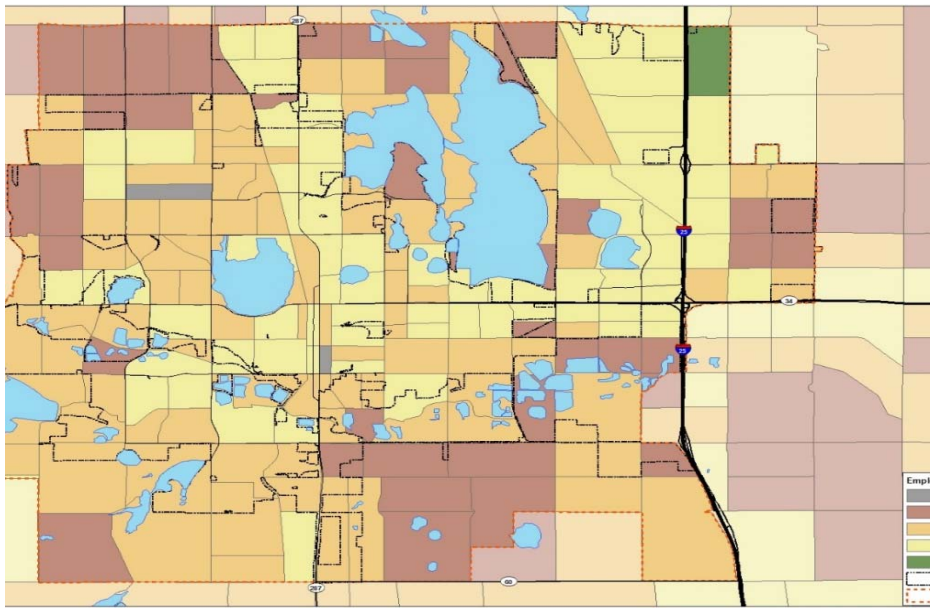
# LOVELAND 2014 DEMOGRAPHICS




## Household Growth by 2040

*Existing*: 75,000 residents
*2040*: 108,000 residents



## Employment Growth by 2040

*Existing*: 42,000 jobs
*2040*: 74,000 jobs

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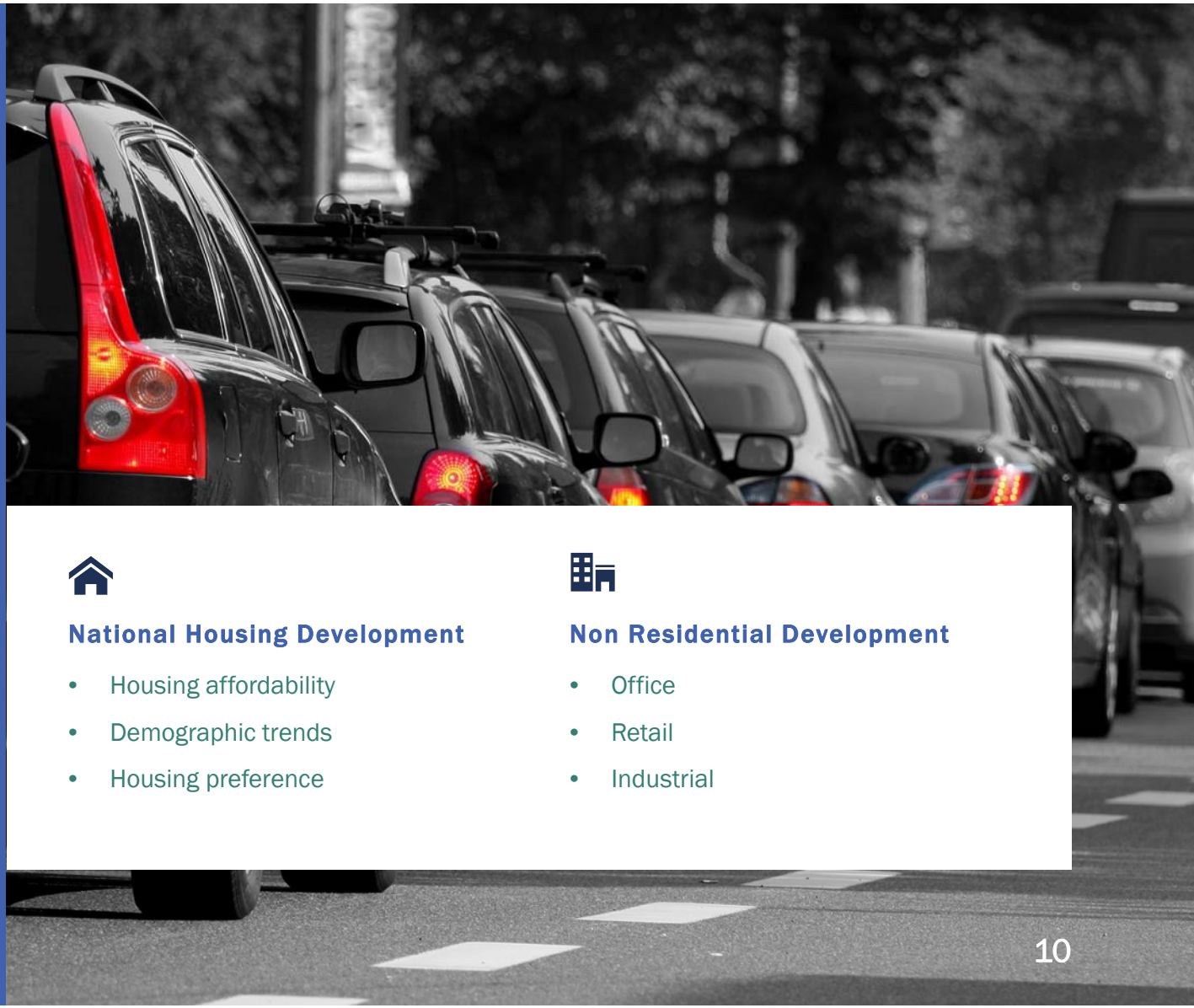
# FUTURE TRENDS IMPACTING LOVELAND



### National Housing Development

- Housing affordability
- Demographic trends
- Housing preference

### Non Residential Development

- Office
- Retail
- Industrial

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# FUTURE OF TRANSPORTATION

### Vehicle travel

- Vehicle miles traveled (VMT) to increase by 70% between 2012 and 2040

### Transit

- Decrease in ridership between 2013 and 2018
- *Increase* in ridership after route restructure in late 2018

### Biking and Walking

- Continues, connected and high comfort pedestrian and bicycle networks
- Regional trails, polices and programs

### Emerging Trends

- Shared mobility
- Curbside management
- Electric vehicles
- Autonomous and connected vehicles
- Mobility as a service

# PUBLIC INVOLVEMENT / OUTREACH

City of Loveland

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# PUBLIC INVOLVEMENT AND OUTREACH

- Throughout the life of *Connect Loveland*
- *Connect Loveland* Stakeholder Committee (CLSC)
- *Connect Loveland* Focus Group (Expanded City Staff)
- TAB Monthly Updates (with "Connectors" every other month)
  - "Connectors": Board and Commission liaisons to TAB and process
- Open City Hall
- Online platforms (website, social media)
- Topic-specific workshops (Boards or Community Groups)
- Intercept events
  - Transportation Fair (Foundry Plaza) – July 31 – 120 full participants
  - Other events
- Online questionnaire
- City Council study sessions / regular meetings

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# SURVEY RESULTS

## 62%

### PRIORITIZING TRANSPORTATION

Residents listed Reducing traffic congestion as the most important factor in prioritizing transportation

## 79%

### DRIVING

Drive every day in Loveland

People feel safer driving and riding when:

- Bikes are separated from traffic
- Speed limits are enforced

## 53%

### TRANSIT

Would use transit, or use it more frequently if buses ran more often

## 68%

### BIKING

Have a bike in good condition

Lack of bike paths/lanes and too much traffic prevent residents from riding more

## 85%

### WALKING

Have sidewalks in their neighborhood, and of those 85%, 60% said the sidewalks are in good condition

# VISION, GOALS, AND OBJECTIVES

# VISION / GOALS / OBJECTIVES APPROACH

- Started with items included in previous documents
- Additional items identified to:
  - Fill in gaps
  - Factor in rapidly evolving changes in population and demographics
  - Include items related to new and emerging technology
  - Provide a detailed look at Loveland as part of the bigger region
- *Connect Loveland* Stakeholder Committee devoted their July meeting to refine the information
- Final stage will fine tune and ensure critical items are included

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# GOAL TOPIC AREAS

- Multimodal Connectivity
- Aligning Land Use and Development with Transportation
- Trails/Recreation
- Environment
- Health and Safety
- Policies and Programs
- Implementation/Funding
- Equitable Access
- Regional Coordination
- Innovation

# ALTERNATIVES DEVELOPMENT AND TESTING

# SCENARIO 1: BASE CASE/CONSTRAINED

- Funding – Constrained
  - Current levels + inflation
- Policy
  - Implement Downtown parking policies
- Community health
  - Assess areas of high-crash rates and plan countermeasures
  - set air quality targets
  - Conduct public health audit
- Land use
  - Per Comp Plan
- Vehicle
  - Current rate, Per 2035 Transportation Plan
- Transit
  - Increase frequency, mixed traffic
  - Increase frequency of existing regional transit
- Bicycle
  - Develop level of comfort criteria
- Pedestrian
  - Develop level of comfort criteria

# SCENARIO 2: ENHANCED

- Funding – Enhanced
  - Increase vehicular by 20%;
  - Increase investment for bicycle and pedestrian facilities - 25%
  - Increase Transit funding by 100%
- Policy
  - Voluntary TDM
- Community health
  - Identify safety improvement for high crash rate corridors
  - Develop air quality targets to prioritize
  - Conduct public health audit
- Land use
  - 20% increase of mixed use development
- Vehicle
  - Minimal expansion
  - Consider road diets
- Transit
  - Increase frequency, coverage with 4 new buses
  - Expand regional transit
  - Introduce electric buses
- Bicycle
  - Prioritize on-street bike lanes and access to bike trails and transit
- Pedestrian
  - Focus on priority corridors/areas

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# SCENARIO 3: ENHANCE NETWORK/REDUCE SINGLE VEHICLE OCCUPANCY TRAVEL

- Funding – Enhanced
  - Vehicular = current levels + inflation
  - Increase investment for bicycle and pedestrian facilities - 50%
  - Transit funding increases by 200%
- Policy
  - Mandatory TDM
- Community health
  - Implement Vision Zero program
  - Develop air quality and public health targets that inform project priorities
- Land use
  - High Density near transit hubs
  - 20% increase mixed-use development along major corridors
  - 40% increase mixed-use development along corridors with high-frequency transit
- Vehicle
  - Minimal expansion
  - Consider road diets
  - Focus on maintenance
- Transit
  - 15 minute frequency on core routes
  - On-demand routes in low-density areas
  - Consider exclusive transit lanes
  - Convert to electric buses
  - Increase investment in regional transit
- Bicycle
  - Completion of low-stress network
  - Prioritize off-street trails and access to transit
- Pedestrian
  - Completion of low-street sidewalk and crossing network

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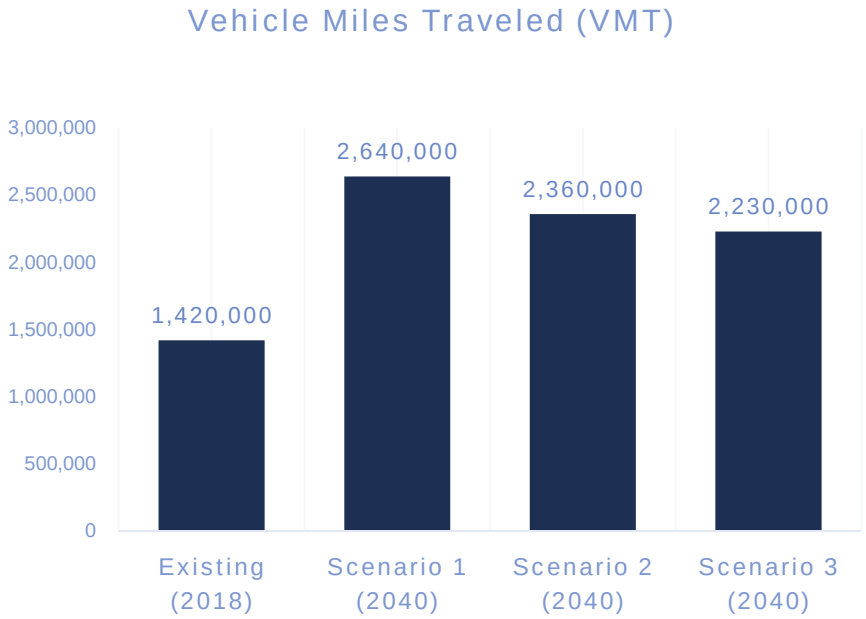
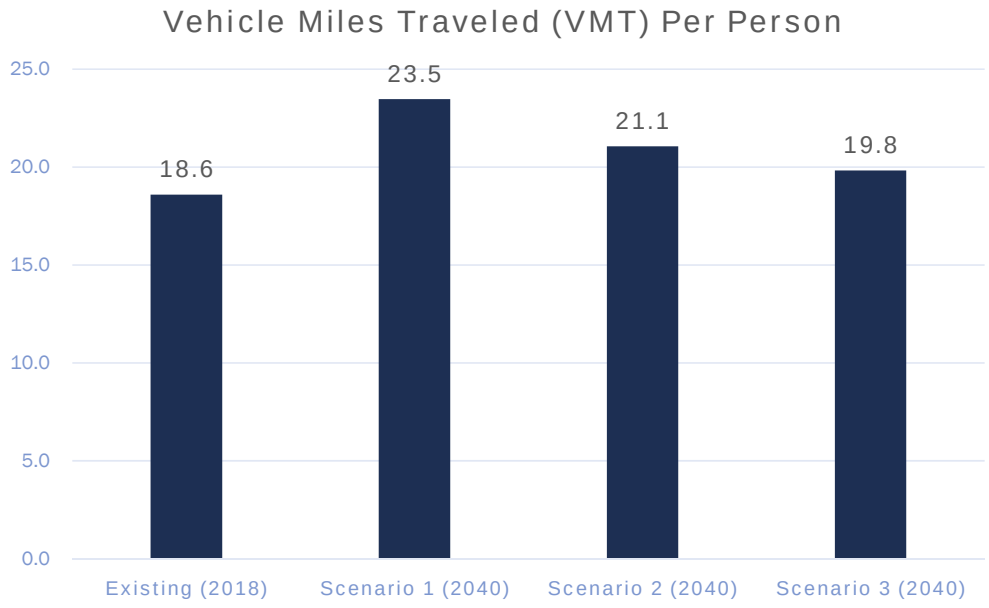
# PRELIMINARY RESULTS: HOW MUCH WILL WE DRIVE?

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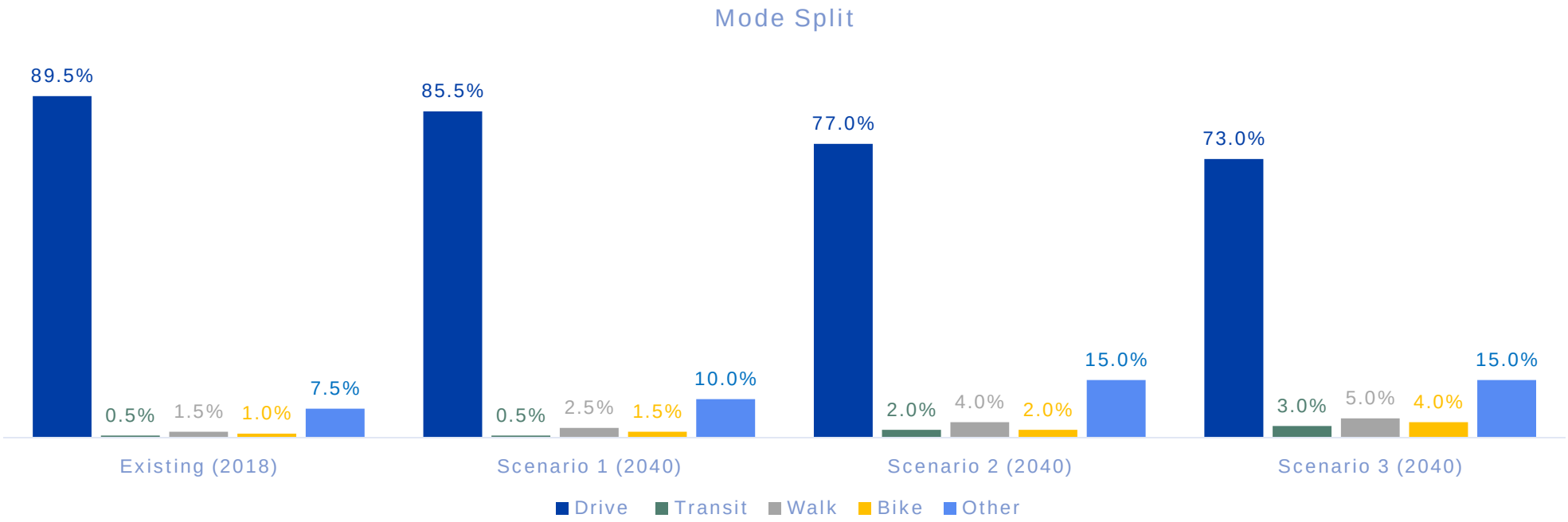
# PRELIMINARY RESULTS: HOW WILL WE TRAVEL?

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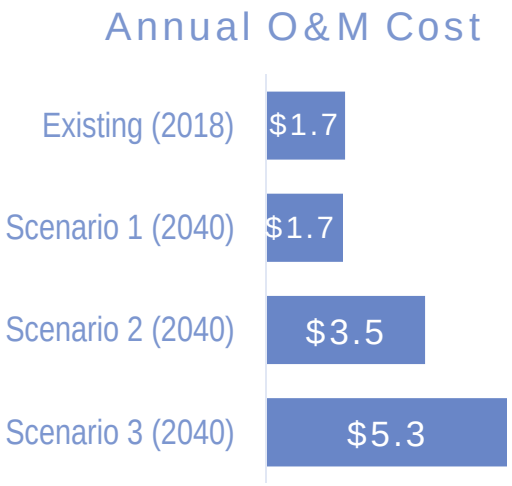
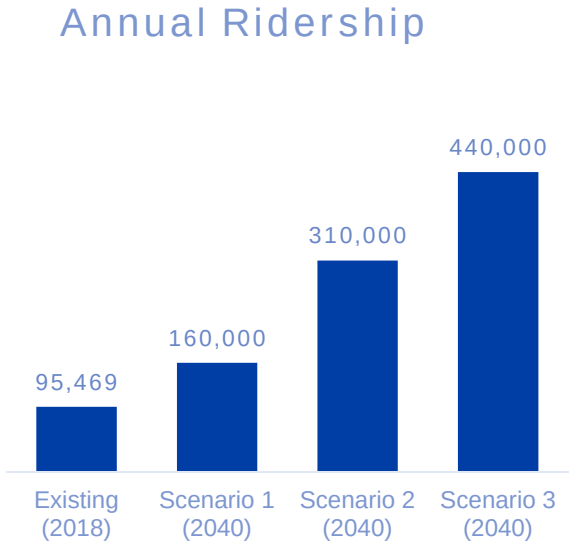
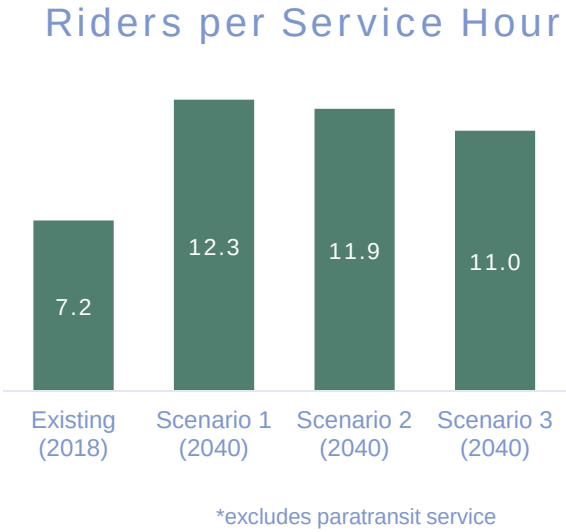
# PRELIMINARY RESULTS: HOW MANY WILL USE TRANSIT?

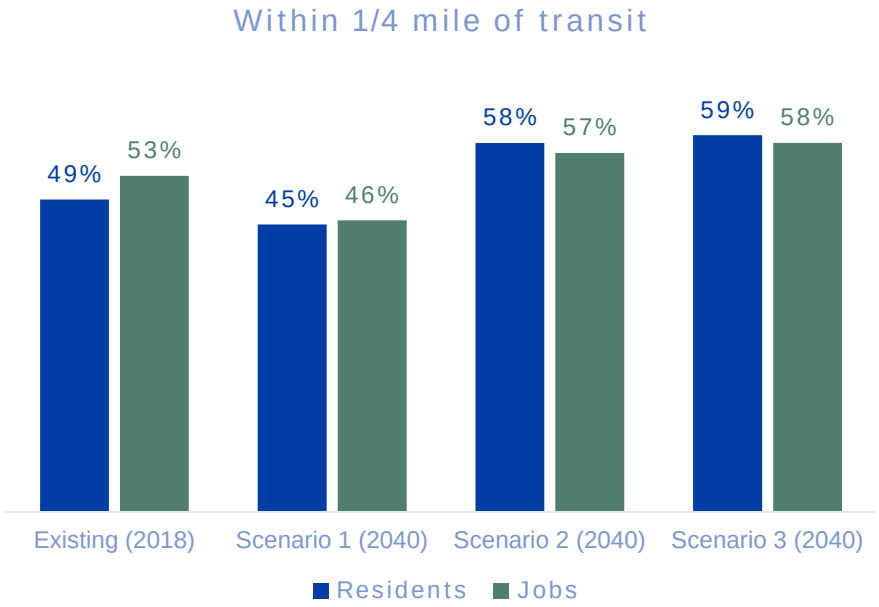


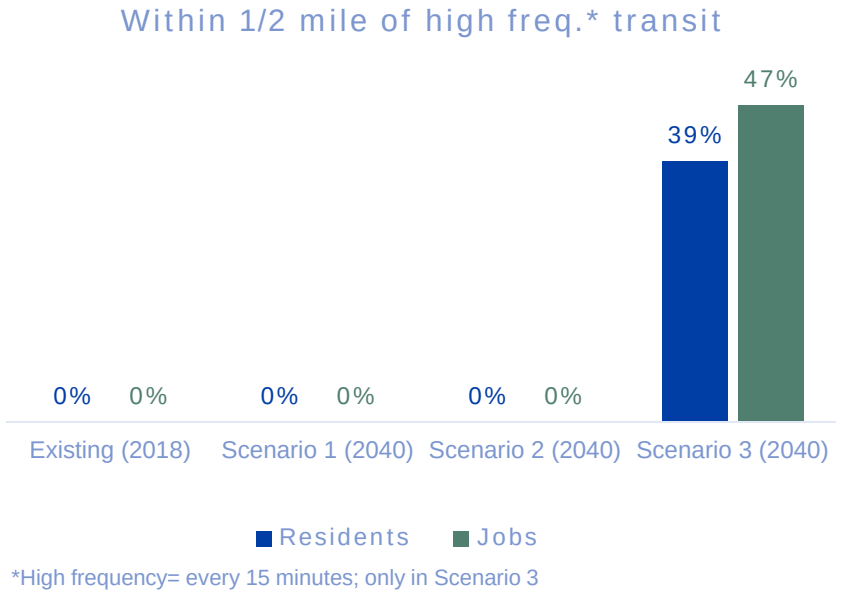




*excludes paratransit service

# PRELIMINARY RESULTS: HOW CLOSE TO TRANSIT?




*High frequency= every 15 minutes; only in Scenario 3

# SCHEDULE / NEXT STEPS

# SCHEDULE

NEXT STEPS ARE TASKS 5 AND 6

| Task | Description | Status / Timeframe | CLSC Meeting |
|---|---|---|---|
| Task 1 | Project Kickoff and Work Plan Finalization | Complete | |
| Task 2 | Loveland 2018, Policy and Plan Review, Coordination with Travel Behavior, Community Values Survey | Underway | May 2019 |
| Task 3 | Future Loveland | March to May, 2019 | |
| Task 4 | Goals, Objectives and Vision Statement(s) Development | June to July, 2019 | July 2019 |
| Task 5 | Alternatives Development and Testing | September 2019 | October 2019 |
| Task 6 | Draft Plan(s) Development | October to December, 2019 | January 2020 |
| Task 7 | Final Plan(s) | January to February, 2020 | |
| Task 8 | Adoption | March / April 2020 | March 2020 |

City of Loveland

CONNECT LOVELAND

# COMMENTS AND QUESTIONS

# *Connect Loveland*

# Vision, Goals and Objectives
# Final Draft

**September 2019**

CONNECT LOVELAND

City of Loveland

# Connect Loveland: Vision, Goals, and Objectives

The following document outlines a draft vision along with a set of proposed goals and objectives for the Connect Loveland Transportation Master Plan. Goals and corresponding objectives have been divided into topic areas that will ultimately represent different sections of Connect Loveland.

Many elements in this draft are adopted from previous planning efforts in Loveland and some pieces have been drafted specifically for Connect Loveland, based on more recent changes in the rapidly evolving transportation landscape and Loveland's growing population. Input from the Connect Loveland Stakeholder Committee (CLSC) and other Loveland stakeholders were critical for determining the final shape these critical planning elements take.

To help provide a framework for this document, please refer to the following definitions:

**Vision:**

Thinking about the future with wisdom and/or imagination. Something to be pursued, **the end result.**

**Goals:**

The desired end result of any number of efforts. A goal **defines the direction and destination,** changes the direction of the City toward the end result.

**Objectives:**

All about the tactics. Objectives are **action items** to get from where we are to where we want to be. A goal defines the direction and destination, but the road to get there is accomplished by a series of objectives.

## Connect Loveland Vision

***Loveland's multimodal transportation network will be safe, accessible, regionally connected, and user-friendly, providing reliable and convenient access to everyday destinations for all ages and abilities.***

## Topic Areas

The goals and objectives have been organized by 10 topic areas, which are as follows:

1. Multimodal Connectivity
2. Aligning Transportation and Land Use and Development
3. Trails/Recreation
4. Environment
5. Health and Safety
6. Policies and Programs
7. Implementation/Funding
8. Equitable Access
9. Regional Coordination
10. Innovation

## 1. Multimodal Connectivity

### Bicycle Goal:

Create a safe and connected bicycle network that is reliable and accessible to community members across a range of bicycling interests, skills, and abilities.

### Pedestrian Goal:

Create a low stress network of pedestrian facilities that are accessible and efficient to community members of all ages and abilities.

### Bicycle Objectives

#### Connect Loveland New Objectives

- Create a layered network of bicycle facilities that adheres to local, state and national design standards.
- Create bicycle level of service guidelines to evaluate facilities based on their directness, continuity, intersection crossings, visual interest, amenities, and security.
- Provide safe intersection crossings for people on bicycles.
- Provide bicycle connectivity to everyday destinations (i.e., work, school, transit, retail, parks, activity centers and public activities) so that people have travel options.

#### Connect Loveland Objectives Adopted from Previous Planning Efforts

- Prioritize the completion of missing segments of the low stress bicycle network.
- Coordinate the provision of bicycle facilities among various City departments, local governments, state and federal agencies, and special districts, as appropriate.
- Coordinate with the school district to prioritize safe biking routes to schools.
- Provide infrastructure to make bicycling convenient and viable for all types of trips and for all ages, abilities, and income levels, with an emphasis on bridging first/last mile gaps.

## Pedestrian Objectives:

### Connect Loveland New Objectives

- Create a layered network of pedestrian facilities that adheres to local, state and national design standards.
- Create pedestrian level of service guidelines to evaluate facilities based on their directness, continuity, street crossings (at intersections?), visual interest, amenities, and security.
- Provide safe intersection crossings for people walking.
- Provide pedestrian connectivity to everyday destinations (i.e., work, school, transit, retail, parks, activity centers and public activities) so that people have travel options.

### Connect Loveland Objectives Adopted from Previous Planning Efforts

- Evaluate the established street levels of service standards to ensure that they meet the needs of the community and do not hamper walkability and quality neighborhood design.
- Create a walkable environment in commercial (retail) and office locations by designing pedestrian access that is safe, direct, and comfortable.
- Prioritize the completion of missing segments of the low stress pedestrian network.
- Coordinate the provision of pedestrian facilities among various City departments, local governments, state and federal agencies, and special districts as appropriate.
- Work with the school district to prioritize safe walking routes to schools.
- Provide infrastructure to make walking convenient and viable for all types of trips and for all ages, abilities, and income levels, with an emphasis on bridging first/last mile gaps.

## Transit – Goal:

Enhance the transit system to provide an equitable, reliable, convenient and user-friendly travel option.

## Transit – Objectives:

### Connect Loveland New Objectives

- Transit stops and transfer centers will be improved to enhance customer experience and safety.
- Pilot innovative mobility options like on-demand transportation or micro-transit, for serving lower-density communities and connecting communities where wider transit coverage is difficult to achieve.
- Implement an integrated fare payment and trip planning application to connect COLT, the regional transit system, and first/last mile solutions.

### Connect Loveland Objectives Adopted from Previous Planning Efforts

- The City's public transit system will be expanded in phases to provide integrated, high-frequency, productivity-based transit service along major transportation corridors, feeding regional transit service and connecting major district destinations, consistent with adopted transit plans.
- Provide adequate funding to expand transit into a more convenient and attractive travel option.
- Encourage higher density development in strategic locations along corridors that are or could be served by frequent transit.

## Driving – Goal:

Ensure driving is a reliable option.

### Driving – Objectives:

#### Connect Loveland New Objectives

- Where possible, create separate travel facilities for bicyclists, pedestrians, and vehicle/truck routes. Where modes need to share corridors, ensure appropriate treatment types are selected for each user.
- Ensure travel time reliability and roadway optimization through improvements like traffic signal retiming and implementing Intelligent Transportation System (ITS) technologies.

#### Connect Loveland Objectives Adopted from Previous Planning Efforts

- Maintain the overall ease of travel as the city grows.
- Provide a connected street network that meets the future needs of the community.
- Use the 2019 Congestion Management Process (CMP) to actively reduce congestion. CMP strategies include Transportation Demand Management and Incident Management programs.
- Close gaps on transportation corridors to help multimodal travelers overcome barriers like waterways, railroads, and I-25.

## 2. Aligning Transportation and Land Use and Development

### Goal:

Ensure transportation and land use decisions are mutually supportive in order to reduce per capita vehicle miles traveled.

### Objectives:

#### Connect Loveland New Objectives

- Coordinate with City of Loveland Development Services to ensure any land use plan revisions, prioritize density where well connected, multimodal transportation options exist or are planned.
- When planning improvements and expansions of the transit network, ensure projects are prioritized in sections of Loveland that are planned for high-density residential or mixed-use.
- Coordinate with City of Loveland Development Services to ensure development standards require that new commercial and residential developments incorporate bicycle, pedestrian, transit, and off-site improvements that support completing the modal networks defined in Connect Loveland.

#### Connect Loveland Objectives Adopted from Previous Planning Efforts

- Coordinate bicycle and pedestrian planning and implementation with other infrastructure projects and land use decisions. Specifically, ensure coordination between land use decisions and the implementation of Connect Loveland.
- Require well-connected streets, pedestrian-friendly block sizes, sidewalks, bike facilities, and connections to existing neighborhoods in new developments and redevelopment areas.

## 3. Trails and Recreation

### Goal:

Ensure that the City's Recreation Trail system serves as both a recreation amenity and a core component of the larger mobility network for people of all ages and abilities.

### Objectives:

#### Connect Loveland New Objectives

- Update the 2014 Parks and Recreation Master Plan to reflect changes in the trail network that have been made since 2014 and identify additional areas for network expansion.
- Identify and determine solutions to barriers and safety concerns for Recreation Trail connectivity and access, including improvements to the City's on-street networks for bicyclists and pedestrians.
- Collaborate with City of Loveland Parks and Recreation Department to seek opportunities for providing additional trail right of way near new developments.
- Improve on-street connections to the Recreation Trail.

#### Connect Loveland Objectives Adopted from Previous Planning Efforts

- Close key gaps in the local and regional trail system, prioritizing access to the Recreation Trail from key destinations, like schools, shopping, parks, recreation centers, and open spaces.
- Emphasize trail access for users inside the City's Growth Management Area. Future connections to regional or statewide trail systems will be done in cooperation with public and private entities.
- Trails will be designed and developed to reflect the character of surrounding corridors, parks, or open lands. The Recreation Trail system will be designed as an off-street, non-motorized, urban recreation trail system that offers bicycle and pedestrian separation where possible.
- Trailheads will be developed where feasible, with priority for locations that are more easily accessible by transit, walking, or biking. New community parks or open lands will include trailheads where these sites connect to the trail system.
- Acquire parkways or greenways for trail development.

## 4. Environment

### Goal:

Develop a multimodal transportation system that protects the natural and built environment while providing access and reducing the overall carbon footprint of Loveland.

### Objectives:

#### Connect Loveland New Objectives

- Prioritize transportation policies and projects that will have positive outcomes for the environment, resiliency, sustainability and the well-being of future generations.
- Play a key role in meeting and exceeding the NFRMPO region's air quality goals by reducing vehicle-miles traveled.
- New transportation projects should complement the management of open lands, minimize wildlife disturbances and provide multimodal access to recreation areas.
- Grow a transportation system that conserves energy and resources by creating reliable walking, biking, and transit networks, while reducing the share of trips taken in single-occupancy vehicles.
- Add infrastructure to support transportation modes that are energy efficient and/or environmentally friendly.

## 5. Health and Safety

### Goal:

Support the physical, social, and mental health of Loveland's community members by developing a safe and connected multimodal transportation network.

### Objectives:

#### Connect Loveland New Objectives

- Encourage active modes of transportation by using national best practices and safety standards for bicycle and pedestrian infrastructure improvements.
- Make using active transportation comfortable through providing a variety of pedestrian amenities such as wayfinding, shade, and benches.
- Create safe and comfortable multimodal connections to the City's Recreation Trail, Recreation Center(s), and Open Lands/Natural Areas.

#### Connect Loveland Objectives Adopted from Previous Planning Efforts

- Implement educational and outreach programs to promote active living and increase bike and pedestrian safety.
- Enforce existing codes and ordinances that require property owners to maintain their sidewalks in good condition.
- Work towards eliminating all traffic-related fatalities and severe injuries by adopting a Vision Zero policy.
- Prioritize pedestrian and cyclist safety when making land use and capital improvement decisions.
- Site new community facilities (such as schools, health services, libraries, and recreational sites) in a way that maximizes mobility options for accessing those amenities.
- Promote traffic calming on local streets through elements such as street trees, detached sidewalks, and other features that reduce traffic speeds while increasing pedestrians' and cyclists' comfort and safety.
- In collaboration with City of Loveland Development Services, promote land use decisions that locate stores offering healthy foods alongside easy-to-access destinations for all community members.
- Ensure the transit, bicycle, and pedestrian network offers connections to health care service providers.

## 6. Policies and Programs

### Goal:

Policies and programs will be developed to reduce vehicle-miles traveled, improve safety, encourage the use of active forms of transportation and reduce single-occupancy vehicle trips.

### Objectives:

#### Connect Loveland New Objectives

- Engage a Transportation Demand Management (TDM) coordinator to help institutionalize TDM programs city-wide by educating area employers on the benefits of TDM.
- Evaluate the feasibility of mandating TDM programs in the future.
- Support motor vehicle, transit, bicycle and pedestrian safety, awareness, and encouragement through education programs for all levels and abilities for bicyclists, pedestrians and motorists.
- Promote the appropriate use of traffic and code enforcement.

- Encourage participation in active modes of transportation through a variety of programs including community events, partnering with schools and employers, and educational materials.
- Research, development, adopt and implement a Local Road Safety Plan in conjunction with other City divisions and departments.
- Implement policies outlined in the 2019 Downtown Parking Plan.

### Connect Loveland Objectives Adopted from Previous Planning Efforts

- Encourage and support voluntary employer-based TDM programs in the short term.
  Engage in coordinated regional TDM marketing and education campaigns with neighboring communities to ensure workers commuting to and from Loveland have access to non-driving travel options.

## 7. Implementation/Funding

### Goal:

Implement Connect Loveland through a strategy that recognizes current funding realities and limitations and prioritizes projects based on relevant criteria, such as equity, cost-effectiveness, available funding, community values, and health outcomes.

### Objectives:

### Connect Loveland New Objectives

- Establish a viable and reliable source of funding to fully implement Connect Loveland.
- Create trackable performance metrics for all modes.
- Demonstrate accountability by monitoring performance metrics for each mode and reporting performance to the community annually.
- Integrate multimodal infrastructure improvements and maintenance with ongoing capital improvement projects such as pavement rehabilitation projects.

### Connect Loveland Objectives Adopted from Previous Planning Efforts

- Balance constructing new infrastructure with maintenance, operations activities, cost, and investment in other modes.
- Maintain transportation infrastructure and facilities to minimize the need for replacement or rehabilitation.
- Consider a range of different funding sources and leveraging opportunities including proactively pursuing grants and state and federal funding available through the NFRMPO, Colorado Department of Transportation (CDOT), Federal Highway Administration (FHWA), and Federal Transit Administration (FTA), and by exploring collaborations like Public-Private Partnerships.

## 8. Equitable Access and Mobility

### Goals:

Prioritize transportation infrastructure and networks to meet the needs of populations with limited transportation options and focus on areas and that are currently underserved with transportation options.

### Objectives:

#### Connect Loveland New Objectives

- Ensure recommended projects are informed by comprehensive, neighborhood-level outreach efforts that include meaningful engagement of populations underserved by the current multimodal transportation network.
- Identify dedicated funding for paratransit and non-emergency medical transportation that increase mobility options for older adults and people with disabilities.
- Prioritize transportation projects that bring transit, bicycle, and pedestrian infrastructure into neighborhoods that currently lack mode choice.
- Prior to construction/during CIP planning, develop criteria that will be used to evaluate the benefits and impacts of transportation projects to assess whether vulnerable communities are disproportionately affected or excluded from benefiting from the project.

## 9. Regional Coordination

### Goal:

Loveland will continue to support and collaborate with regional partners to develop a seamless regional multimodal transportation system.

### Objectives:

#### Connect Loveland New Objectives

- Partner with county, region, and state-wide agencies on regional transit, non-motorized corridors, and roadway/transportation projects, policies, and programs.
- Designate a City of Loveland representative to support and engage with the NoCo Bike and Pedestrian Collaborative.

#### Connect Loveland Objectives Adopted from Previous Planning Efforts

- Anticipate the revenues available to the area through the Federal Highway Administration (FHWA), Federal Transit Administration (FTA) and Colorado Department of Transportation (CDOT) requirements and seek partnerships for pursuing those funds.
- Participate in the North Front Range Metropolitan Planning Organization's (NFRMPO) and CDOT's plans to implement regional transportation projects on major corridors like I-25, US-34, US-287, and SH-402.
- Recommend mitigation measures on congested corridors as required in the Congestion Management Process (CMP).
- Work cooperatively with regional partners to identify opportunities to provide interregional transit connectivity along the Front Range.

## 10. Innovation

### Goal:

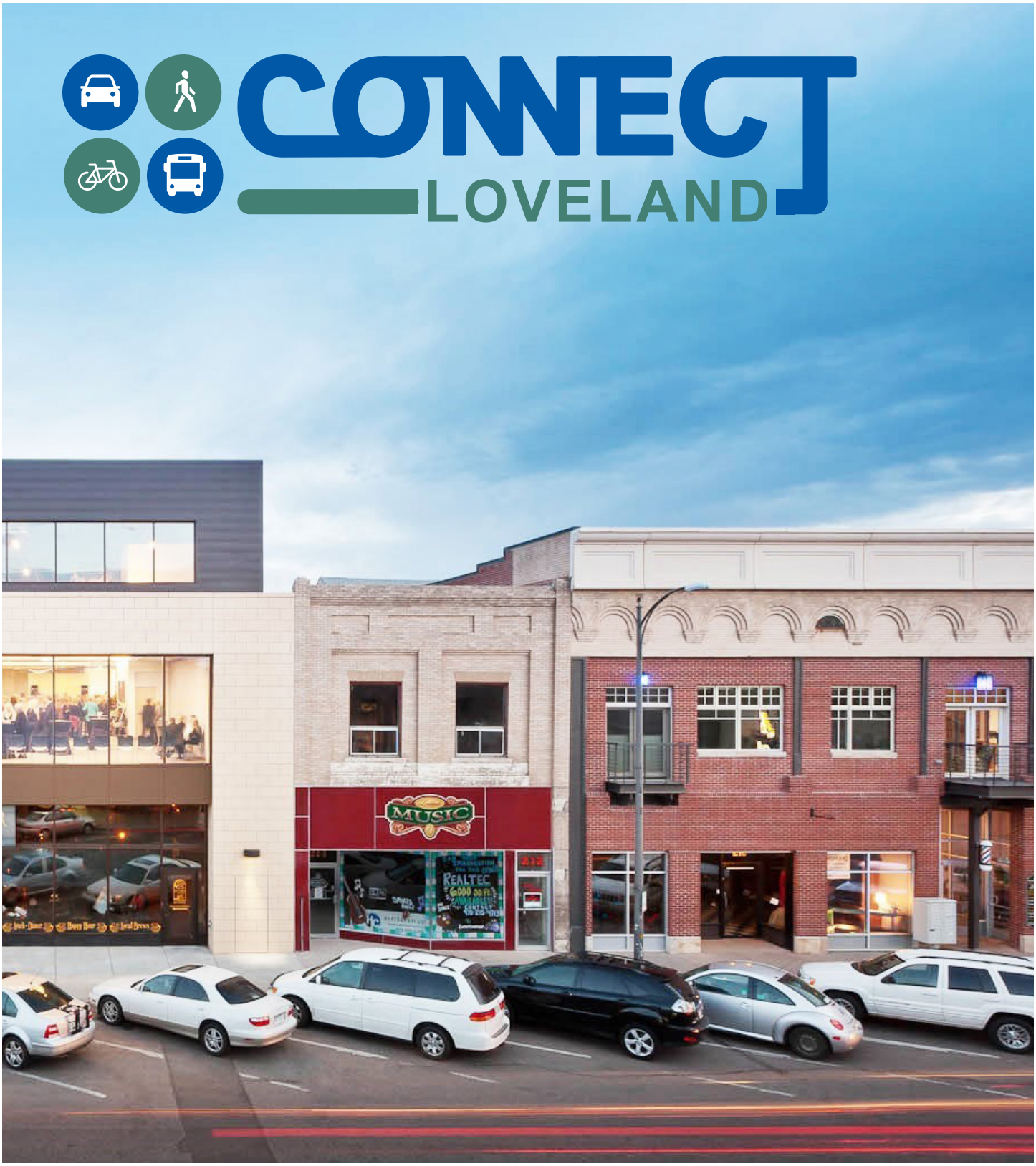
Loveland will build tomorrow's transportation network by constantly exploring and investing in proven technologies that facilitate improved mobility.

## Objectives:

### Connect Loveland New Objectives

- Ensure City design standards and local policies are flexible and compatible with emerging technologies.
- Ensure Loveland's transportation data is featured on applications that improve access to non-driving modes through features such as transit fare payment or on-demand transportation.
- Plan for infrastructure that will support connected and autonomous vehicles.
- Leverage City resources to facilitate shared mobility options.
- Establish a role within the Public Works Department that tracks innovation initiatives and ensures new technologies, like autonomous vehicles, are incorporated into transportation planning.
- Adopt policies that manage anticipated travel behavior changes due to autonomous vehicles. These could include coordinating with service providers to create first/last-mile connections to transit, prioritizing vehicles shared or operated as a fleet, and by disincentivizing zero-occupancy vehicles.

# CONNECT LOVELAND




# EXISTING CONDITIONS

FEHR & PEERS | APRIL 2019

City of Loveland

# TABLE OF CONTENTS


01 Where We Are Today 01

02 Existing Plans And Policies 03

03 Demographic  Conditions and Trends 13

04 Employment Conditions and Trends 19

05 Roadway Network 29

06 Bicycle and Pedestrian Network 39

07 Transit 41

08 Safety 49

09 Environment 53

# 01 WHERE WE ARE TODAY

Founded along the Colorado Central Railroad and namesake of the Railroad president, the City of Loveland has deep roots as a transportation hub for northern Colorado. Nearly 150 years later, the transportation network in the City has evolved to include major roadways and to host crossroads that serve the mobility and commerce needs of the wider region. Locally, Loveland has enjoyed decades of growth; City boundaries have expanded to form a community that blends historic character with new development.

CONNECT LOVELAND

Connect Loveland, a multifaceted effort to update the City's street network, transit system, and bicycle and pedestrian facilities, must be underpinned by a thorough understanding of the current transportation network and how it serves both Loveland and connects to the surrounding region. This summary, as well as Connect Loveland, addresses all modes operating within the City—vehicles, bicyclists, pedestrians, and transit. This existing conditions summary also details all aspects of the transportation network, including recent shifts in traffic volumes, safety concerns, the existing bicycle and pedestrian network, and transit service as well as demographic indicators, land use trends, and economic data.

The existing conditions summary:

- Highlights where Loveland's transportation system is today by describing the existing multimodal networks
- Identifies opportunities for Loveland to offer improved mobility and access for residents and visitors
- Reviews recent City and regional plans that Connect Loveland will update
- Builds off the established policies, goals, objectives, and public input from recent plans
- Analyzes data of the existing state and historical trends of the transportation system including demographics, employment, land use, bicycle and pedestrian facilities, crashes, transit services, and vehicle performance
- Informs key gaps or inefficiencies

Connect Loveland will build on the analysis of existing conditions, to offer a complete vision for what mobility and accessibility in the City will look like in 2040 along with a roadmap for achieving the planned networks. This summary will be a single chapter in the Connect Loveland final document.

# 02 EXISTING PLANS AND POLICIES

Connect Loveland will update and build off the recommendations, goals, objectives, and vision set by existing plans for all transportation modes. Connect Loveland will identify accomplishments from previous planning efforts, highlight any actions not yet taken, and provide new opportunities for improving local and regional transportation options in Loveland. These existing Plans also included extensive public outreach and stakeholder engagement efforts in order to establish visions for the community, policies and goals. It is important that Connect Loveland considers and is consistent with the priorities and values identified in these planning efforts while also performing its own comprehensive outreach effort acknowledging that these values evolve over time. The City has also grown and implemented a number of recommendations since the adoption of these plans; Connect Loveland will provide updates that reflect these changes and progression. In order to show the progress made since the adoption of these Plans, Connect Loveland will utilize previously applied performance measures to track implementation and successes for each mode.

A summary of the 2035 Transportation Plan, the 2012 Bicycle and Pedestrian Plan, and the 2009 Transit Plan Update is provided. For each Plan, applications to Connect Loveland are identified, major goals are highlighted, along with recommendations, and proposed performance measures.

In addition, this review of existing plans and policies also summarizes additional local and regional plans, listed below, that have relevance to Connect Loveland:

- 2015 Create Loveland Comprehensive Plan
- 2014 Parks and Recreation Master Plan
- 2009 Transfort Strategic Plan
- 2016 Non-Motorized Plan (NFRMPO)
- 2040 Regional Transportation Plan (NFRMPO)
- 2040 Regional Transit Element (NFRMPO)

# 2035 TRANSPORTATION PLAN

The 2035 Transportation Plan was adopted in 2012 and served as an update to the 2030 Transportation Plan that had been completed in 2007. The stated goals of this Plan were to: develop policies that recognize the connection between land use and transportation; plan a safe, efficient and continuous multimodal network; develop a transportation plan that respects the physical environment; sustain the economic vitality of the community; balance property access with safety, mobility, and street capacity; maintain acceptable level of service through transportation demand management policies; and consider all reasonable current and future funding sources. Connect Loveland will consider these goals and update them as determined through public outreach and the planning process.

## STREETS

The 2035 Plan includes a Street Plan that was assembled with the primary goal of ensuring that any improvements maintain ease of travel while not exceeding an LOS threshold of C (D on State Highways). The Plan sought to achieve this goal by proposing new streets, widening some existing streets, adding through lanes, and adding both center and intersection turn lanes (**Figure 1**). In addition, the Plan recommended more funding for the Pavement Management Program in order to maintain a state of good repair on existing and new facilities.

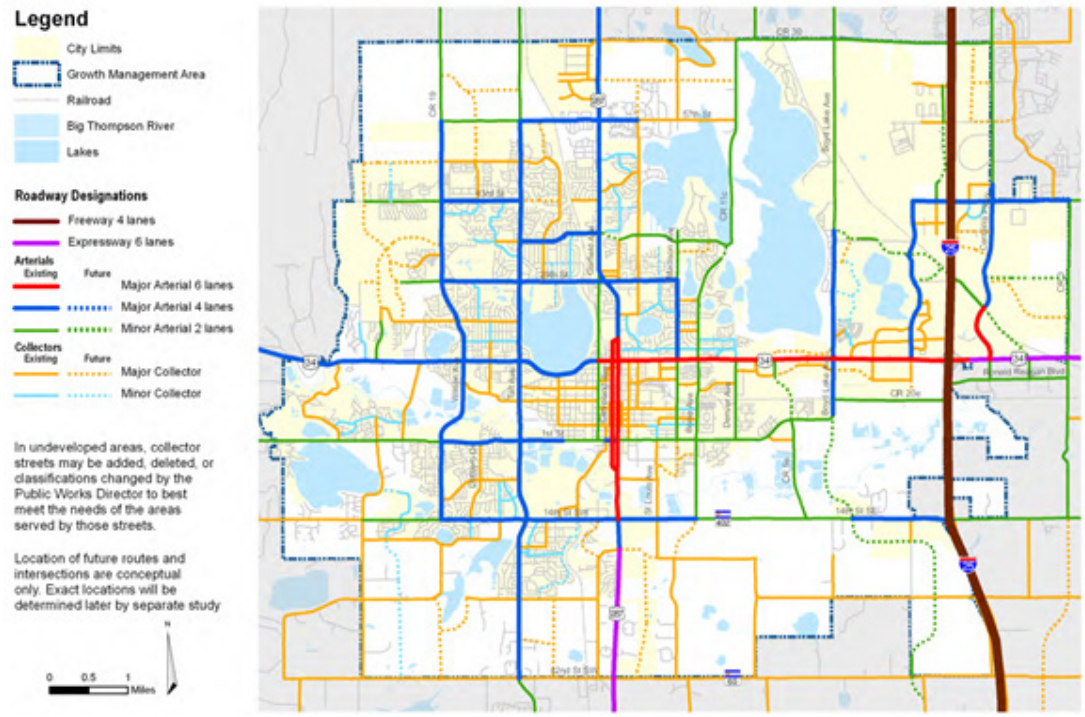



**Figure 1.** 2035 Loveland Street Plan

### MULTIMODAL

The 2035 Transportation Plan primarily refers to the recommendations for additional services and facilities made in the 2009 Transit Plan and 2012 Bicycle and Pedestrian Plan.

### EVALUATION

The 2035 Transportation Plan listed performance measures that could be used to evaluate progress towards achieving Plan goals. Performance measures were divided into evaluations for Intelligent Transportation Systems, Travel Demand Management, Transit, Bicycle/Pedestrian improvements, and Street Maintenance. Connect Loveland will work to apply these performance measures as closely as possible, to track progress consistently and transparently over time.

The 2035 Plan applied the following measures to track:

- Overall progress (such as total lane miles, average travel times, total traffic signals)
- Intelligent Transportation (such as total signals served with fiber, visual camera data stations)
- Travel Demand Management (such as SmartTrips participation, vehicle miles avoided)
- Transit (such as passenger ridership, cost per trip, fare revenue)
- Bike/pedestrian (such as total bike facilities, gaps in system percentage, total pedestrian facilities)
- Street maintenance (such as cost per mile to maintain, cost per mile to construct)

## 2012 BICYCLE AND PEDESTRIAN PLAN

The Loveland 2012 Bicycle and Pedestrian Plan was undertaken to foster quality of life improvements, increase access to transportation for non-drivers, meet latent demand for walking and biking, leverage Loveland's favorable weather and topography, providing better access to a low-cost transportation, and improving economic vitality. Planning efforts were geared towards achieving the following plan goals:

- Provide a safe multimodal network to access destinations.
- Fill in the missing bicycle and pedestrian segments and provide for safe intersection crossings.
- Design and develop a "complete streets" bicycle and pedestrian system that adheres to local, state and national codes.
- Instill bicycle and pedestrian safety, awareness and encouragement through education programs for all levels and abilities for bicyclists, pedestrians and motorists, and promote the appropriate use of traffic and code enforcement.
- Develop a sustainable and reliable source of bicycling and pedestrian funding.

With these goals, the proposed bicycle and pedestrian networks shown in **Figures 2** and **3** were developed.

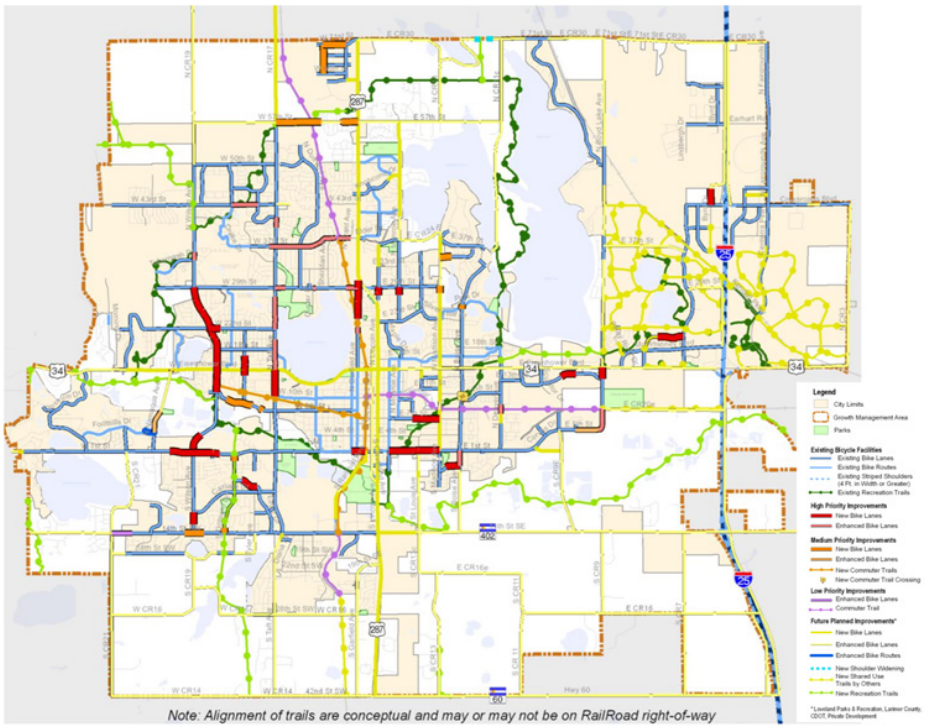



**Figure 2.** Loveland 2012 Proposed Bicycle Facility Network

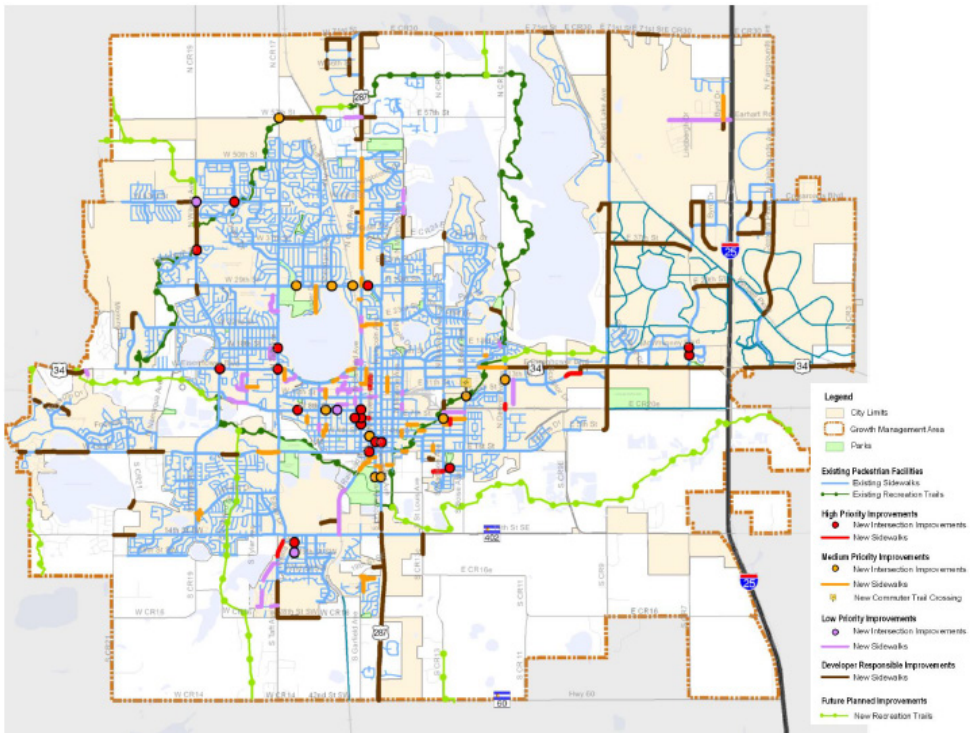


**Figure 3.** Loveland 2012 Proposed Pedestrian Facilities

In addition to a list of projects, the plan included the following policy recommendations for achieving improvements in the bicycle and pedestrian networks:

1. Code enforcement – by emphasizing enforcement of existing rules, like requiring new developments provide bicycle and pedestrian facility improvements, Loveland can ensure that ongoing efforts to improve multimodal facilities are successful.

2. Coordination – With the 2009 reorganization of the Loveland Public Works Department, a Bicycle and Pedestrian Program Manager position was added. This individual was to be responsible for ensuring bicycle and pedestrian projects came to fruition and was also to be responsible for coordinating planning efforts with other local, regional, and state agencies.

3. Beyond just providing new bicycle and pedestrian facilities, the plan called for placing greater emphasis on the 5 E's: Engineering, Education, Enforcement, Encouragement, and Evaluation.

To evaluate progress on plan goals, the following performance measures were slated to be tracked by the Public Works Department:

- Total bicycle facilities
- Percent change in bicycle facilities
- System missing link percentage
- Total pedestrian facilities
- Percent change in pedestrian facilities
- Percent pedestrian facilities that are ADA-compliant

Connect Loveland will update the 2012 Bicycle and Pedestrian Plan by considering updating goals, policies, and performance measures. It will also determine the facilities implemented since the 2012 Plan in order to inform recommendation and priorities for creating low-stress and connected bicycle and pedestrian networks moving forward.

## 2009 TRANSIT PLAN UPDATE

The 2009 Transit Plan process was a partnership effort between City of Loveland Transit (COLT), Transfort (the City of Fort Collins transit provider), and the Poudre School District to update the 2004 COLT Transit Plan. The Plan identified five goals:

1. Develop an expanded transit system focused on productivity and performance to serve the Loveland area.

2. Provide enhanced mobility for seniors, youth, disabled, and transit dependent.

3. Develop a public transportation system that reduces roadway related costs for maintenance, right-of-way acquisition, and construction.

4. Provide funding recommendations to fully implement the Transit Plan update.

5. Stimulate the local economy through investment in public transportation infrastructure and operations.

Three phases for transit improvements were recommended. The recommendations highlighted a need to improve both local and regional service by adding routes, facilities, and expanding service span (**Figure 4**). The 2009 Transit Plan included capital and operating expense needs to fulfill the

recommendations of each phase. The implementation timeline was envisioned to take place over seven years and to be monitored using trend analyses and peer system comparisons. The following measures would be used to analyze trends:

- Vehicle hours of service operated
- Vehicle miles of service operated
- Passenger boardings or unlinked trips
- Passenger fares collected
- Operating expenses
- Maintenance road calls
- Incidents
- Passenger complaints

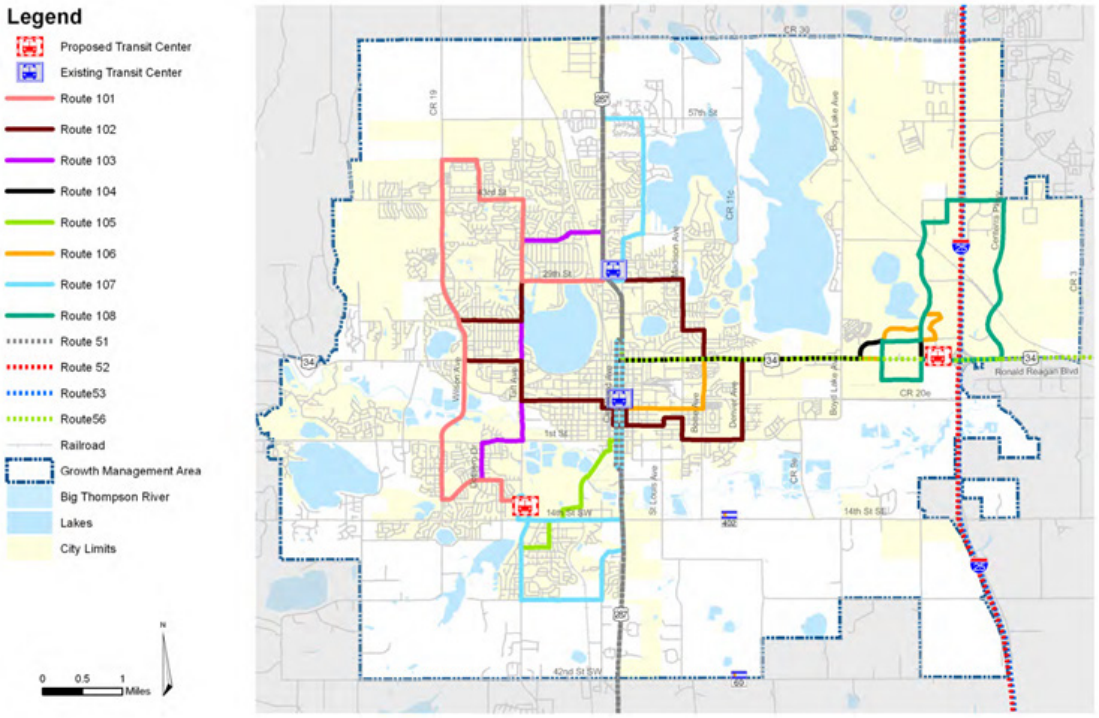



**Figure 4.** Three phases of improvements in the 2009 Transit Plan Update

A lot has changed in the local and regional transit system over the last decade. Connect Loveland will reassess goals, performance measures, and recommended service improvements in the context of new regional routes, emerging mobility options, and growth of the community.

## 2015 CREATE LOVELAND COMPREHENSIVE PLAN

The 2015 Comprehensive Plan, entitled "Create Loveland," considered all aspects of community living in the City of Loveland and was divided into nine plan elements that collectively advance land use practices, planning for strategic areas, market-supported development opportunities, health and safety of the built environment, and a City that is resilient and fiscally successful. Three of the elements, "A Commitment to a Downtown Renaissance," "Revitalize our Corridors and Gateways," and "Create a Connected and Accessible Community" all have supporting policies that involve the transportation network.

The policies that are most closely related to the Connect Loveland planning effort are listed below. These policies are applied to Connect Loveland by informing recommendations and priorities of transportation infrastructure programs and policies.

1. Plan a safe, efficient, coordinated and convenient multimodal transportation system.

2. Provide infrastructure to make walking and bicycling convenient and viable for all types of trips and for all ages, abilities, and income levels.

3. Make the COLT bus system a convenient, efficient and functional choice.

4. Establish and maintain convenient connections between neighborhoods and to local destinations.

5. Establish a sustainable financing foundation for a transportation system that provides dependable mode options with the ability to accommodate Loveland's growth.

There is deep connection between land use and transportation. It is important therefore that Connect Loveland refers to Create Loveland to ensure that the transportation network adequately serves area of growth and instills a focus on community vitality, safety, health, and equity.

## 2014 PARKS AND RECREATION MASTER PLAN

The 2014 Parks and Recreation Master Plan effort provided a framework for the growth, management, and development of parks, open lands, public grounds, golf courses, recreation facilities, trails, and programs. An analysis of community desires for parks and recreation facilities found certain concerns that overlap with transportation planning efforts:

- Loveland provides fewer trails and pathways than Fort Collins, Longmont, and Boulder
- The community needs an additional 75 miles of trails to support recreation, connectivity, and better access to City parks and community destinations

As a result, the Parks and Recreation Master Plan identified an interconnected trail system that moves beyond the single loop trail towards creating a trail network that provides local and regional access as a key policy initiative. The Master Plan includes a list of policies for advancing trail access like establishing service level guidelines for trails provision (one mile of hard-surfaced trails for every 3,000 residents and one mile of soft-surfaced trails for every 5,000 residents) and constructing trail underpasses at all state/federal highways within the City. Recommendations in Connect Loveland work to reach the targets identified in this Plan, as well as to create a multimodal network

that provides comfortable access to parks and on-street connections to trails.

## 2009 TRANSFORT STRATEGIC PLAN

Done in collaboration with the City of Loveland Transit agency, the City of Fort Collins Transfort Strategic Plan represented a coordinated effort to update the 2002 Transfort Strategic Operating Plan. Development of the Plan was guided by six goals:

1. Develop an expanded transit system focused on productivity and performance to meet the Transportation Master Plan and City Plan Policies.

2. Meet and exceed the 2008 Climate Action Plan Goal for Transportation CO2 reductions by 2020.

3. Provide enhanced mobility for seniors, youth, disabled, and transit dependent.

4. Develop a public transportation system that reduces roadway related costs for maintenance, right-of-way acquisition, and construction.

5. Provide funding recommendations to fully implement the Transit Strategic Plan.

6. Stimulate the local economy through investment in public transportation infrastructure and operations.

The Transfort Plan shares the same goals as the 2009 Loveland Transit Plan Update, with the added goal of meeting the Fort Collins Climate Action Plan goal for reducing carbon dioxide emissions. Recommended regional transit connections identified in the Loveland 2009 Transit Plan Update are also included in the 2009 Transfort Strategic Plan.

Fort Collins City Council approved an update to the Transfort Strategic Operating Plan and the proposed Transit Plan Update is scheduled to go before City Council for approval in April 2019. If approved, there will be a new set of recommended Transfort service updates that may impact Loveland and should be considered in the Connect Loveland process.

## 2016 NON-MOTORIZED PLAN (NFRMPO)

The North Front Range Metropolitan Planning Organization (NFRMPO) Non-Motorized Plan, a federally required Regional Transportation Plan, provides a summary of the existing bicycle and pedestrian facilities, design standards, and data in the region. This Plan calls out the 12 Regional Bicycle Corridors, six of which have segments in Loveland. The identified Big Thompson River Trail, Great Western Railroad and rail to trail, the North Loveland/Windsor network, Front Range Trail, Little Thompson River Trail, and the US-34 Trail provide important, key regional connections. They are backed politically and some corridors have dedicated funding sources. In addition to these regional corridors, this plan identifies potential funding sources, equity considerations, and emerging technology and trends in the region.

Connect Loveland should build on these recommendations by working to implement regional trail connections as well on-street facilities that provide comfortable access to these trails.

## 2040 REGIONAL TRANSPORTATION PLAN (NFRMPO)

The North Front Range Metropolitan Planning Organization (NFRMPO) Regional Transportation Plan serves as one of the 15 federally required Regional Transportation Plans in Colorado. It is the transportation plan for the cities of Evans, Fort Collins, Greeley, and Loveland; the towns of Berthoud, Eaton, Garden City, Johnstown, LaSalle, Milliken, Severance, Timnath, and Windsor; and portions of unincorporated Larimer and Weld counties.

The Plan has four main goals:

1. Foster a transportation system that supports economic development and improves residents' quality of life.

2. Provide a transportation system that moves people and goods safely, efficiently, and reliably.

3. Provide a multimodal system that improves accessibility and transportation system continuity.

4. Optimize operations of transportation facilities.

The Plan includes recommendations that have impacts on Loveland including changes to I-25, US-34, US-287, and improved regional trail connections that serve Loveland, specifically the Big Thompson River trail.

## 2040 REGIONAL TRANSIT ELEMENT (NFRMPO)

As part of the broader Regional Transportation Plan effort, the NFRMPO also develops a Regional Transit Element. The 2040 Transit Element identified nine corridors for future transit service. The following projects would directly impact Loveland:

- Regional bus route between Loveland and Greeley along US-34
- New Bustang route along US-34 through Loveland
- Commuter rail line along I-25 between Fort Collins and Longmont that would serve Loveland

EXIT 255
WEST
402
Loveland
1 MILE

# 03 DEMOGRAPHIC CONDITIONS AND TRENDS

## DEMOGRAPHIC TRENDS

Demographic and housing conditions and trends are summarized in this section to understand the composition of the City's resident base and how recent trends may impact transportation needs. The major demographic findings are:

- The City of Loveland grew in population significantly over the past 40 years, increasing by an average of 1,260 residents per year since 1980. While population growth in the past 10 years has been steady, it has not matched the rate of new residents per year as experienced in the 1990s and early 2000s.

- The composition of the City's population and households has shifted since 2000. The City's residents are now much older on average, and are also older than the Countywide population average. The number of family households and households with children have decreased significantly over this time.

- The composition of the City's housing stock has not changed as much as the household and family composition. The mix of housing types has only changed slightly, with an increase in attached and multifamily housing units. While the mix of new residential construction has become more evenly split between single family and multifamily since 2010, there has been a concurrent decrease in attached housing development.

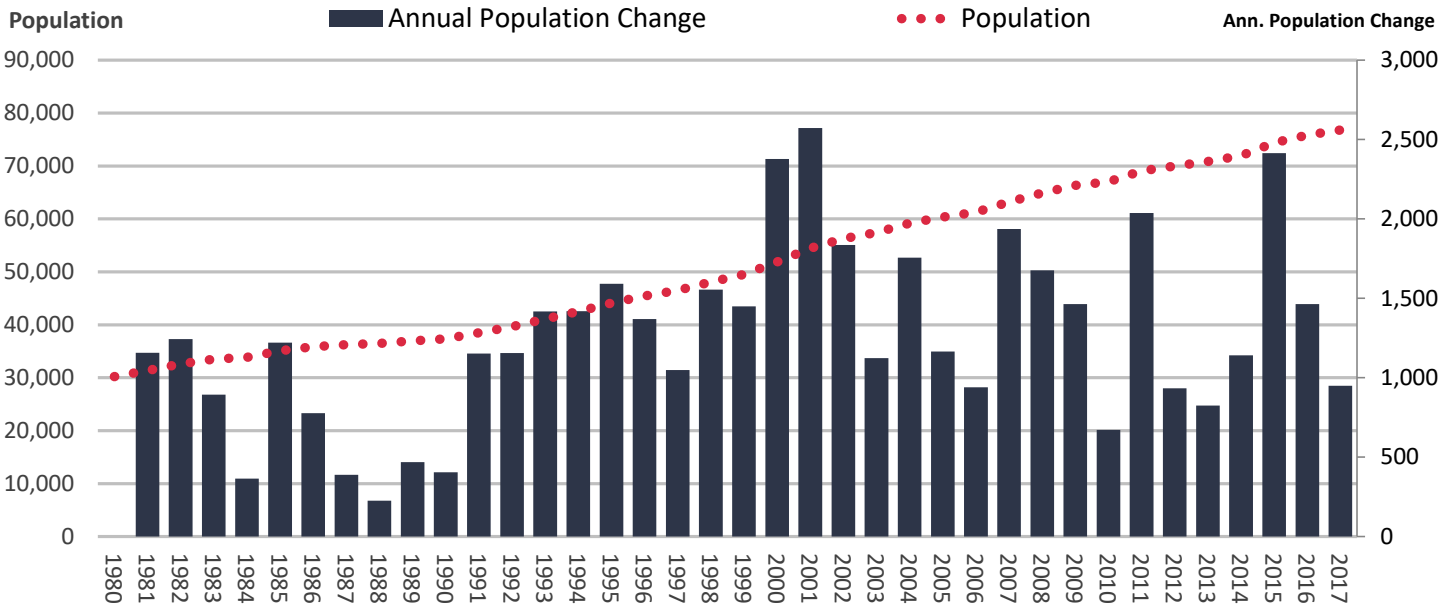
## POPULATION AND HOUSEHOLDS

The City of Loveland has a population of 76,700 residents and continues to grow steadily. The City's

population has increased by 46,580 since 1980 - an average of 1,260 new residents per year. The largest period of population growth for the City over this time occurred in the 1990s and early 2000s, as shown in **Figure 5.**

The City of Loveland accounts for 22 percent of Larimer County's population, as shown in **Table 1.** Loveland's share of the County population has remained consistent over the past two decades; however, the City has captured a greater share of County households over this time. The City now has 25 percent of all County households, an increase from 20 percent in 2000. Since 2000, Loveland has captured 28 percent of the population growth and 36 percent of household growth in the County. The City's population has grown at an annual rate of 1.9 percent since 2010, a decrease from the 2.5 percent growth rate from 2000 to 2010. Current annual growth in the City matches the County's rate of 1.9 percent.

### LOVELAND POPULATION, 1980 TO 2017




Source: CO State Demographer

**Figure 5.** Loveland Population, 1980 to 2017

### LOVELAND POPULATION AND HOUSEHOLDS, 2000 TO 2017

| | 2000 | 2010 | 2017 | Change 2000-2017 Total | Change 2000-2017 Ann.# | Change 2000-2017 Ann. % | Change 2010-2017 Total | Change 2010-2017 Ann.# | Change 2010-2017 Ann. % |
|---|---|---|---|---|---|---|---|---|---|
| Population | | | | | | | | | |
| Loveland | 50,608 | 67,100 | 76,702 | 26,094 | 1,535 | 2.5% | 9,602 | 1,372 | 1.9% |
| Larimer County | 251,494 | 300,637 | 343,976 | 92,482 | 5,440 | 1.9% | 43,339 | 6,191 | 1.9% |
| % of County | 20% | 22% | 22% | 28% | | | 22% | | |
| Households | | | | | | | | | |
| Loveland | 19,741 | 27,153 | 33,384 | 13,643 | 803 | 3.1% | 6,231 | 890 | 3.0% |
| Larimer County | 97,164 | 123,581 | 134,709 | 37,545 | 2,209 | 1.9% | 11,128 | 1,590 | 1.2% |
| % of County | 20% | 22% | 25% | 36% | | | 56% | | |

Source: US Census Decennial Census and ACS 1-Year; Economic & Planning Systems

**Table 1.** Larimer County and Loveland Population and Households, 2000 to 2017

# INCOME

The average household income in the City of Loveland is $73,834, lower than the Countywide average of $89,304. The median household income in the City is shown in **Figure 6.**

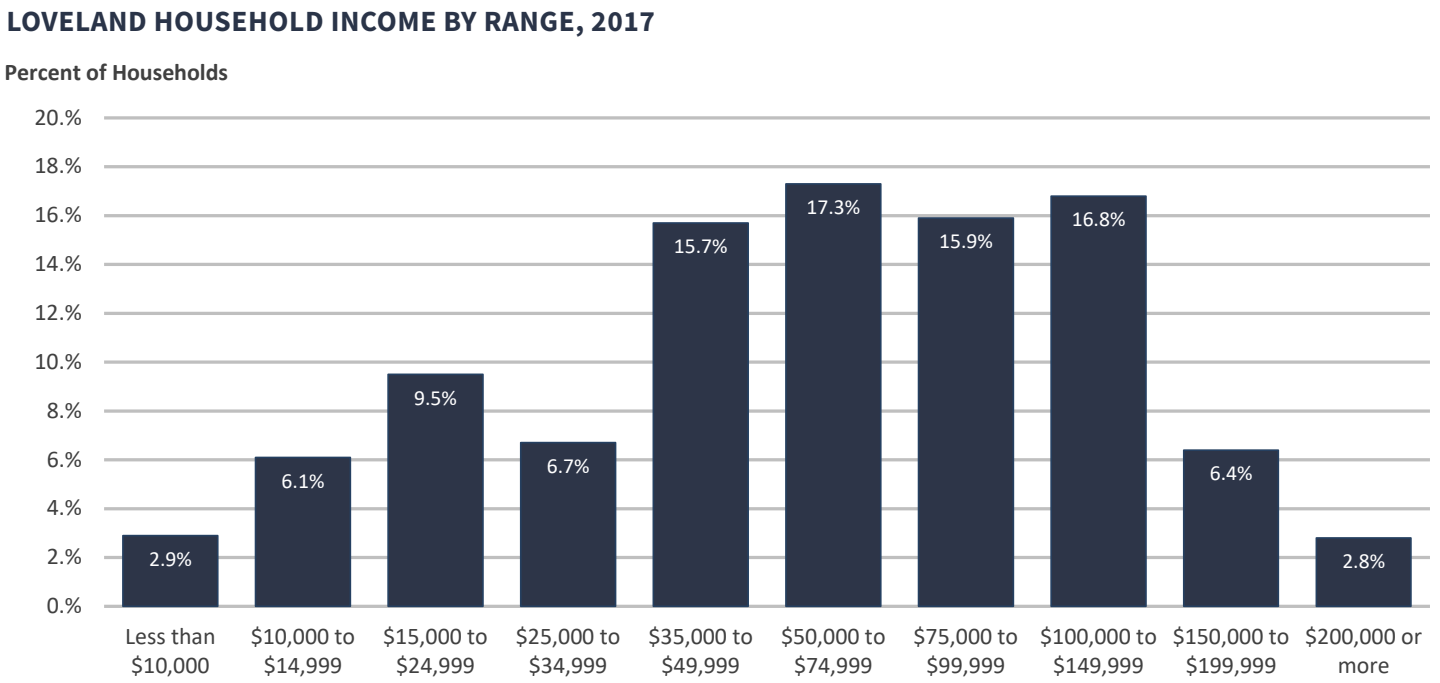
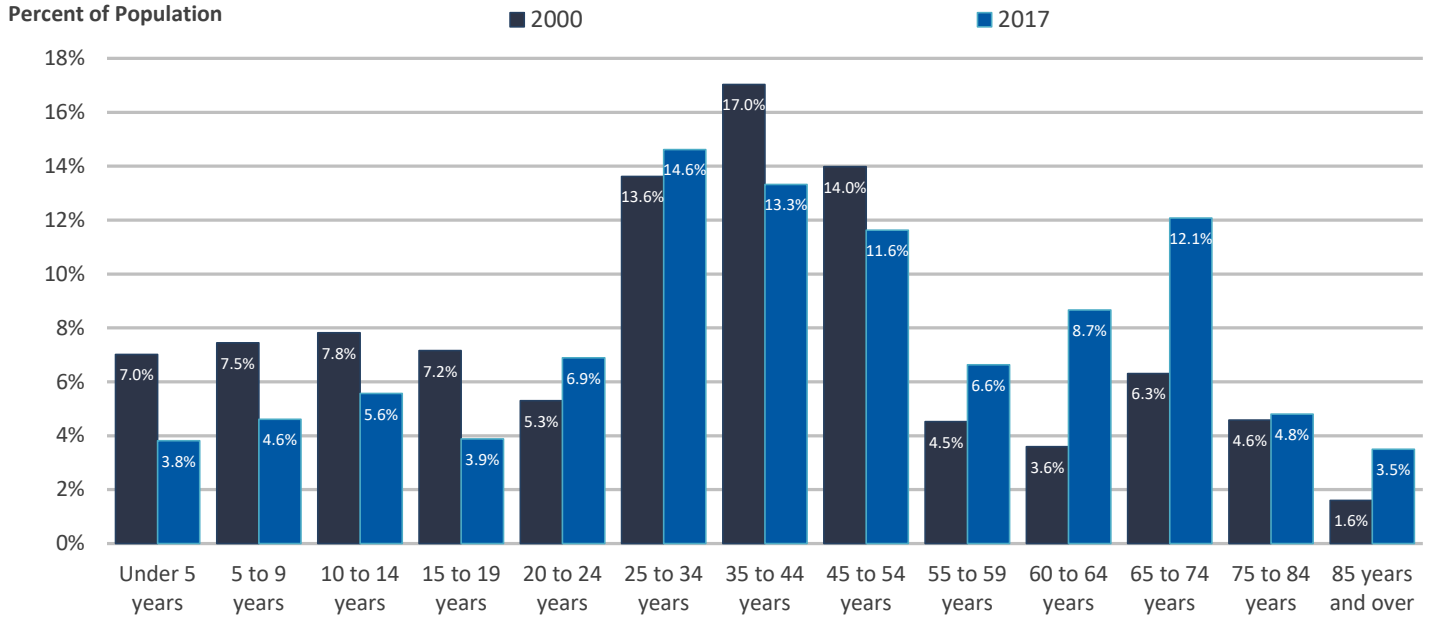



**Figure 6.** Loveland Household Income by Range, 2017

# AGE

The age of Loveland's residents has shifted significantly since 2000. The median age of residents in Loveland today is 43 years; in 2000, the median age was 36 years. Compared to 2000, the City of Loveland has significantly fewer residents under the age of 24 (25 percent of the population today, compared to 35 percent in 2000), and has experienced a similar increase in residents age 45 to 75 years old (39 percent today compared to 28 percent in 2000), as shown in **Figure 7** on the next page.

**LOVELAND AGE BY RANGE, 2000 TO 2017**




Source: U.S. Census; Economic & Planning Systems

**Figure 7.** Loveland Age by Range, 2000 to 2017

# HOUSING TRENDS

Housing patterns have substantial influence on how people travel. Higher population-density areas that add housing quickly experience different impacts on the transportation network than rural areas. Household composition also makes a difference; non-family households make direct trips from home to their destination, while families need to take trips that involve multiple destinations. Examining housing trends in Loveland can help inform decisions that will be made about transportation during the Connect Loveland process. The City of Loveland had a slightly higher percentage of renter households in 2017 than in 2000, with this figure increasing modestly from 31 percent in 2000 to 33 percent in 2017, as show in Figure 8. Owner-occupied households still represent the majority of households in Loveland.

**LOVELAND HOUSING TENURE, 2000 TO 2017**

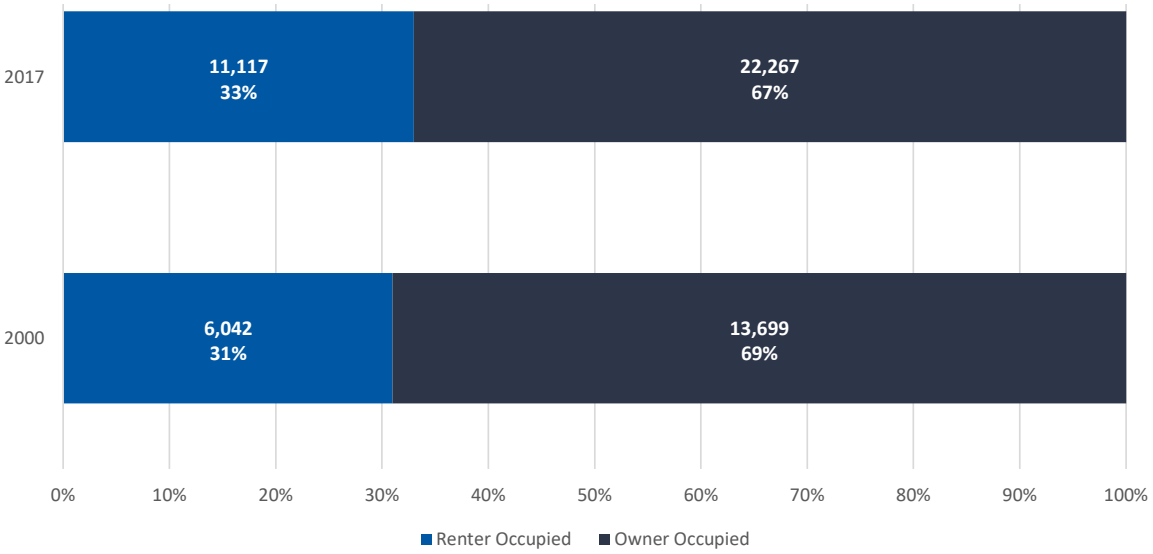



**Figure 8.** Loveland Housing Tenure, 2000 to 2017

# HOUSING COMPOSITION

The average household size in the City of Loveland has decreased significantly since 2000. The average household size was 2.55 persons per household in 2000 and has decreased to 2.28, as shown in **Table 2**. In 2000 the City had a larger average household size than the County, however the average household size in Loveland is now lower than the County average size of 2.48.

**LOVELAND HOUSEHOLD SIZE, 2000 TO 2017**

| Description | 2000 | 2017 |
|---|---|---|
| Loveland | 2.55 | 2.28 |
| Larimer County | 2.52 | 2.48 |

Source: US Census; Economic & Planning Systems

**Table 2.** Loveland Household Size, 2000 to 2017

The split between family and non-family households in Loveland has changed over the past 17 years. In 2000, 71 percent of households were considered family households (2 or more related people in same household). This percentage has decreased to 60 percent, as shown in **Table 3.**

**LARIMER COUNTY AND LOVELAND HOUSEHOLD COMPOSITION, 2000 TO 2017**

| Description | 2000 | | 2017 | | 2000-2017 Total | 2000-2017 Ann. # | 2000-2017 Ann. % |
|---|---|---|---|---|---|---|---|
| **Loveland** | | | | | | | |
| Family Households | 14,037 | 71% | 19,907 | 60% | 5,870 | 345 | 2.1% |
| Non-Family Households | 5,704 | 29% | 13,477 | 40% | 7,773 | 457 | 5.2% |
| Households with Individuals under 18 | 7,377 | 37% | 6,578 | 20% | -799 | -47 | -0.7% |
| **Larimer County** | | | | | | | |
| Family Households | 63,197 | 65% | 80,859 | 60% | 17,662 | 1,039 | 1.5% |
| Non-Family Households | 33,967 | 35% | 53,850 | 40% | 19,883 | 1,170 | 2.7% |
| Households with Individuals under 18 | 32,451 | 33% | 32,091 | 24% | -360 | -21 | -0.1% |

Source: US Census; Economic & Planning Systems

**Table 3.** Larimer County and Loveland Household Composition, 2000 to 2017

The mix of housing in the City of Loveland has changed slightly since 2000. Multifamily and single family attached housing units now make up a slightly greater share of the overall housing mix, accounting for 31 percent of all housing units compared to 27 percent in 2000, as shown **Table 4.** Examples of attached housing units are apartment style homes where multiple households have adjoining walls. This contrasts with detached housing, which is a single home on a parcel of land. The housing mix in Loveland is similar to the overall mix in the County.

**LARIMER COUNTY AND LOVELAND HOUSING STRUCTURE BY UNITS, 2000 TO 2017**

| Description | 2000 | | 2017 | | 2000-2017 Total | 2000-2017 Ann. # | 2000-2017 Ann. % |
|---|---|---|---|---|---|---|---|
| **Loveland** | | | | | | | |
| Single Family Detached | 14,250 | 70% | 24,290 | 67% | 10,040 | 591 | 3.2% |
| Single Family Attached | 2,244 | 11% | 4,577 | 13% | 2,333 | 137 | 4.3% |
| Multifamily (3+ units) | 3,303 | 16% | 6,698 | 19% | 3,395 | 200 | 4.2% |
| Mobile Home, Boat, RV, Van, etc. | 524 | 3% | 614 | 2% | 90 | 5 | 0.9% |
| **Total** | **20,321** | **100%** | **36,179** | **100%** | **15,858** | **933** | **3.5%** |
| **Larimer County** | | | | | | | |
| Single Family Detached | 69,824 | 66% | 100,652 | 68% | 30,828 | 1,813 | 2.2% |
| Single Family Attached | 9,557 | 9% | 12,944 | 9% | 3,387 | 199 | 1.8% |
| Multifamily (3+ units) | 19,450 | 18% | 28,610 | 19% | 9,160 | 539 | 2.3% |
| Mobile Home, Boat, RV, Van, etc. | 6,561 | 6% | 6,346 | 4% | -215 | -13 | -0.2% |
| **Total** | **105,392** | **100%** | **148,552** | **100%** | **43,160** | **2,539** | **2.0%** |

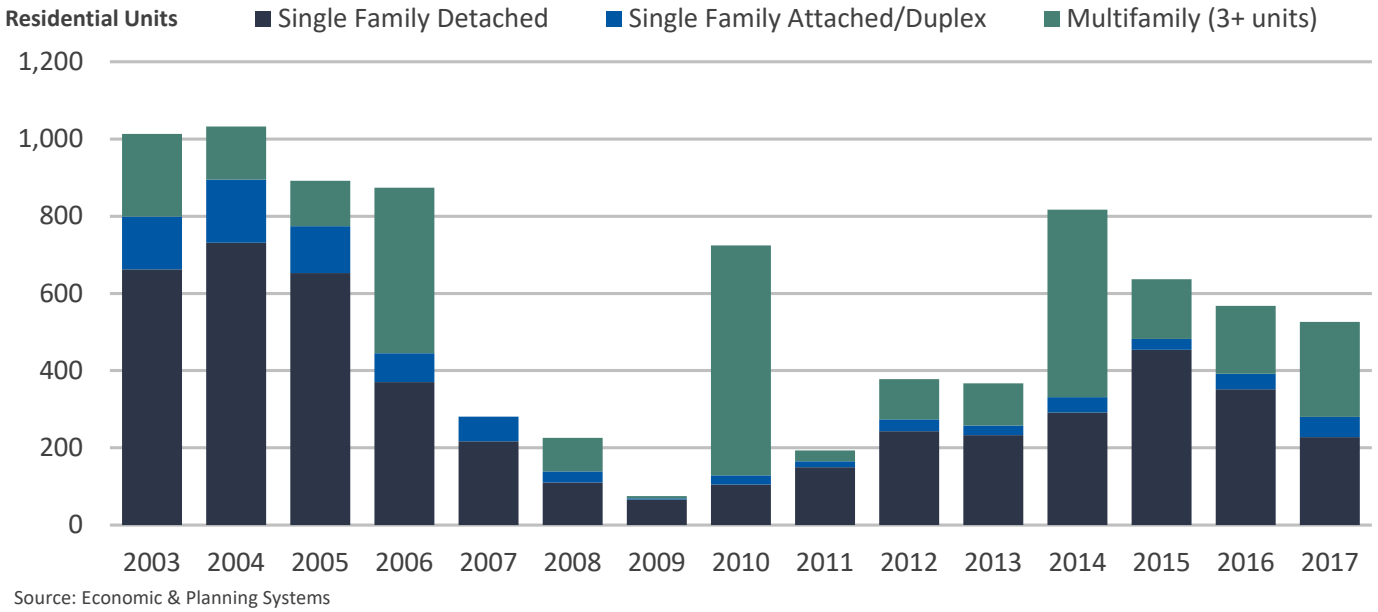
Source: US Census; Economic & Planning Systems

**Table 4.** Larimer County and Loveland Housing Structure by Units, 2000 to 2017

# HOUSING DEVELOPMENT TRENDS

Housing development in Loveland decreased significantly in 2007 due to the national economic recession, as shown in **Figure 9**. Housing construction has increased since 2014, but sill significantly less than experienced prior to 2007. Single family homes have accounted for 57 percent of the permitted units in the City of Loveland since 2003. Despite recent recovery, the rate of housing development in the City is still lower than the rate experienced in the early 2000s. From 2003 to 2006 the City of Loveland permitted an average of over 950 units per year, however since 2014 the average has been only 637 units per year.

**RESIDENTIAL BUILDING PERMITS, 2003 TO 2017**




Source: Economic & Planning Systems

**Figure 9.** Residential Building Permits, 2003 to 2017

# 04 EMPLOYMENT CONDITIONS AND TRENDS

The economic and employment conditions and recent trends in the City of Loveland and Larimer County are summarized below. The major findings from analysis of the economic base, employment trends, and non-residential development trends are:

- The Larimer County economy is growing at a strong rate. Larimer County has added nearly 5,000 jobs per year since 2010. The amount of annual job growth is greater than that experienced in the 1990s.

- Loveland is a major retail and health care hub serving northern Colorado. Employment is in these industries is growing at greater rates than other industries. Loveland also has a large concentration of manufacturing jobs.

- The I-25 Corridor has become the center of economic activity within the Larimer and Weld County region. The portions of Loveland along I-25 have become a major economic center for the northern Colorado region. The intersection of I-25 and US-34 has become a major attractor of retail and industrial space as the area is the most attractive location for businesses serving the region. The region has increased in logistics and distribution-oriented uses and development types as the region. The I-25 corridor provides the major link between communities and has attracted more development activity. Northern Loveland has also attracted additional industrial and retail development serving both the Loveland and Fort Collins communities.

# REGIONAL ECONOMIC BASE

The Fort-Collins-Loveland Metropolitan Statistical Area (MSA) had 173,000 jobs as of the end of 2018. Employment in the MSA (which consists of Larimer County) has grown quickly at 3.3 percent annually since 2010, adding nearly 5,000 jobs per year over this time as shown in **Figure 10**. While the rate of employment growth from 2010 to 2018 is lower than the MSA experienced in the 1990s, the annual amount of new jobs added to the MSA over this time is greater than job growth in the 1990s. Employment growth has outpaced housing growth in the County since 2010, indicating that employees of new jobs are living outside of the County .

**FORT COLLINS-LOVELAND MSA EMPLOYMENT CHANGE, 1990 TO 2018**

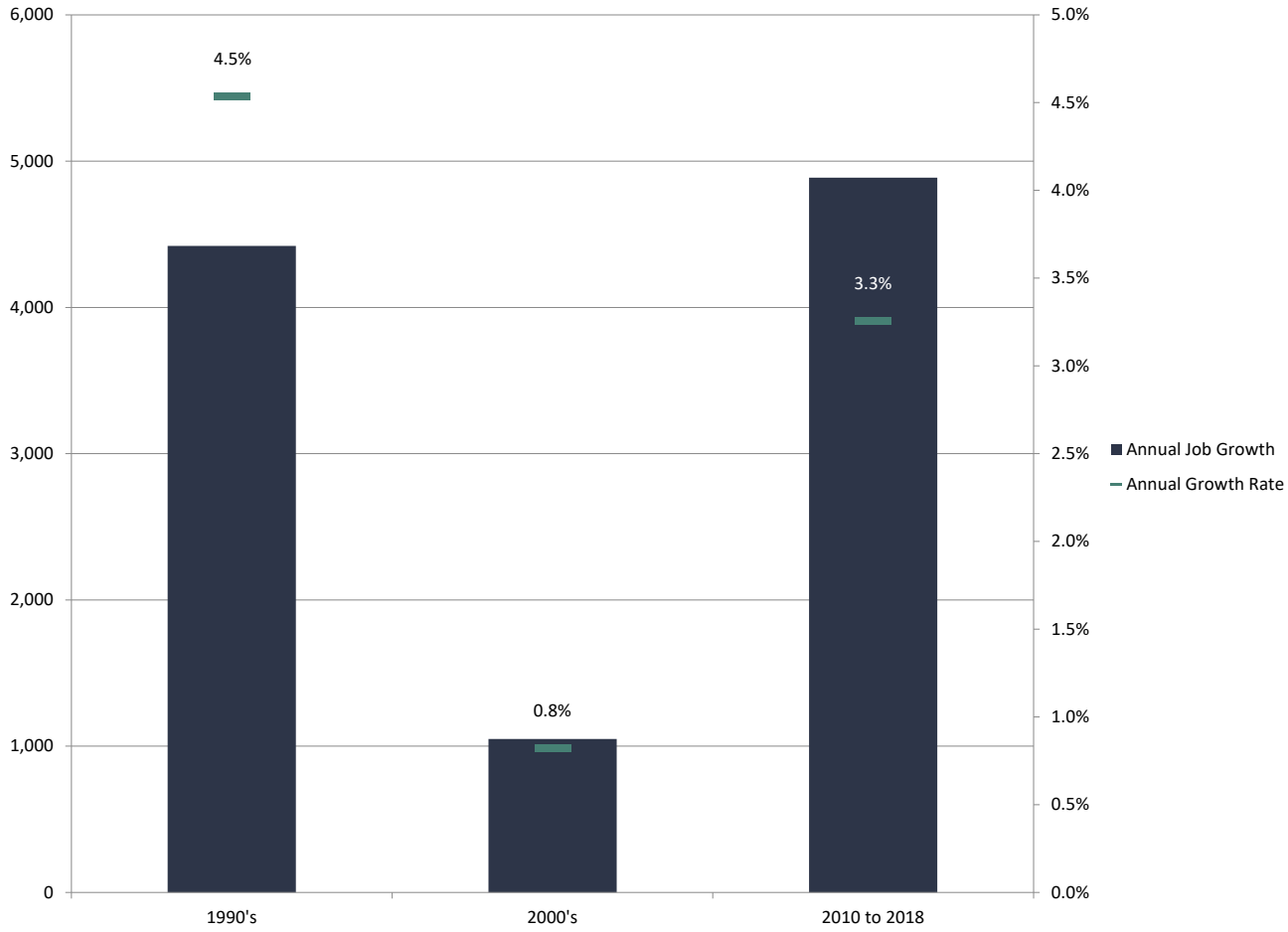



**Figure 10.** Fort Collins-Loveland MSA Employment Change, 1990 to 2018

The largest employment industries in the MSA are health care, retail trade, accommodations and food service, education, and manufacturing, as shown in **Figure 11** on the next page. The Fort Collins and Loveland area is a major health care, retail, and service hub for northern Colorado and southern Wyoming.

**FORT COLLINS-LOVELAND MSA PERCENT EMPLOYMENT BY INDUSTRY**

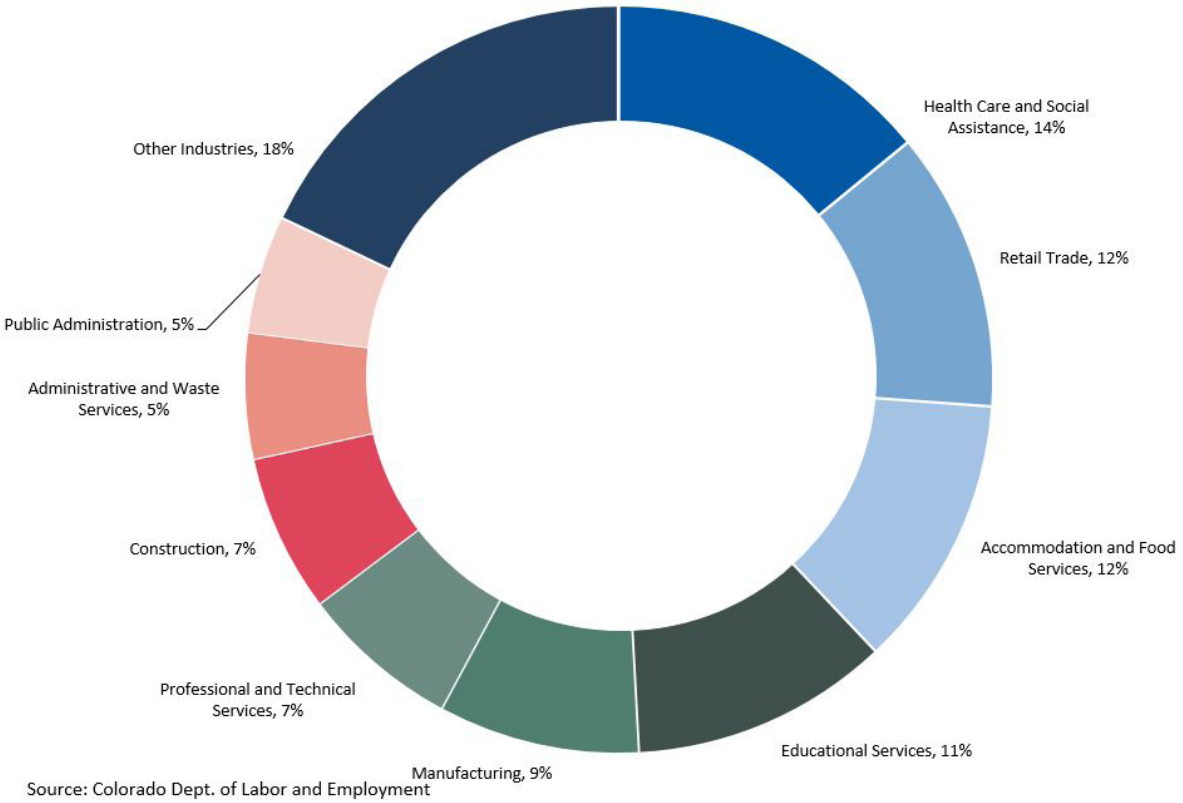



**Figure 11.** Fort Collins-Loveland MSA Percent Employment by Industry

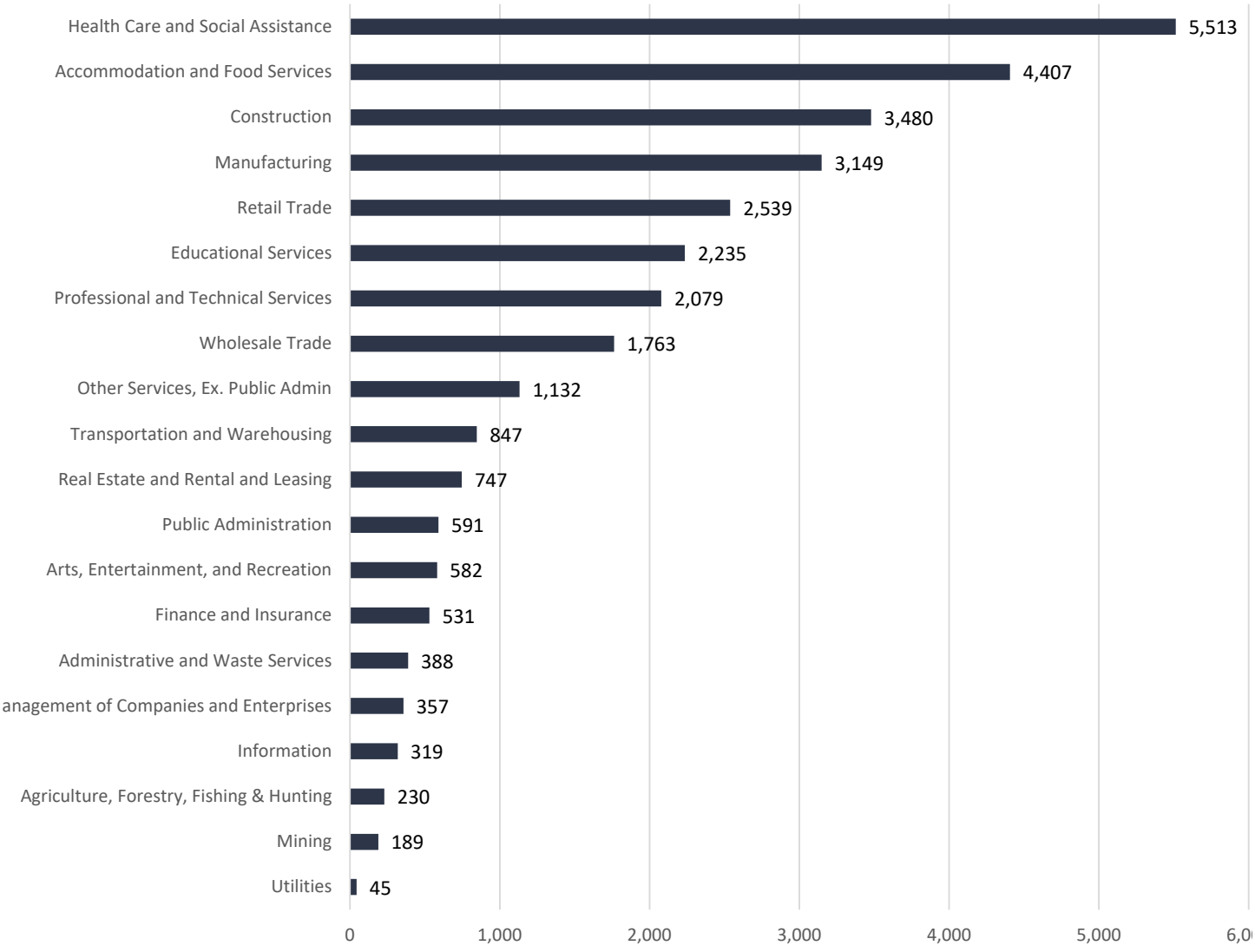
The average annual wage in Larimer County was $50,236 in 2017. The economic base in the County has relatively evenly distributed wages. The average annual wages of the County's major industries are shown in **Figure 12.**

**FORT COLLINS-LOVELAND MSA AVERAGE ANNUAL WAGES BY INDUSTRY, 2017**

**Figure 12.** Fort Collins-Loveland MSA Average Annual Wages by Industry, 2017

The change in employment by industry in Larimer County from 2010 to 2017 is shown in **Figure 13**. The health care industry grew the most since 2010, adding over 5,500 new jobs. There was continued growth in the retail and service sectors (retail trade and accommodations and food service), with these two sectors combined adding nearly 6,950 new jobs.

### LARIMER COUNTY EMPLOYMENT CHANGE BY INDUSTRY, 2010 TO 2017




Source: Colorado Dept. of Labor and Employment

**Figure 13.** Larimer County Employment Change by Industry, 2010 to 2017

# LOVELAND ECONOMIC BASE

Loveland's employment base is similar to the larger Larimer County economy. Retail trade and health care are the largest industries and each account for 15 percent of employment in the City, as shown in **Figure 14.** These industries are anchored by large concentrations of employment along I-25 developed over the past 10 years including the UC Health Hospital and Shops at Centerra regional shopping center. Manufacturing and Accommodation and Food Services are the next largest industries in the City, each accounting for 11 percent of total employment.

**CITY OF LOVELAND PERCENT EMPLOYMENT BY INDUSTRY, 2018**

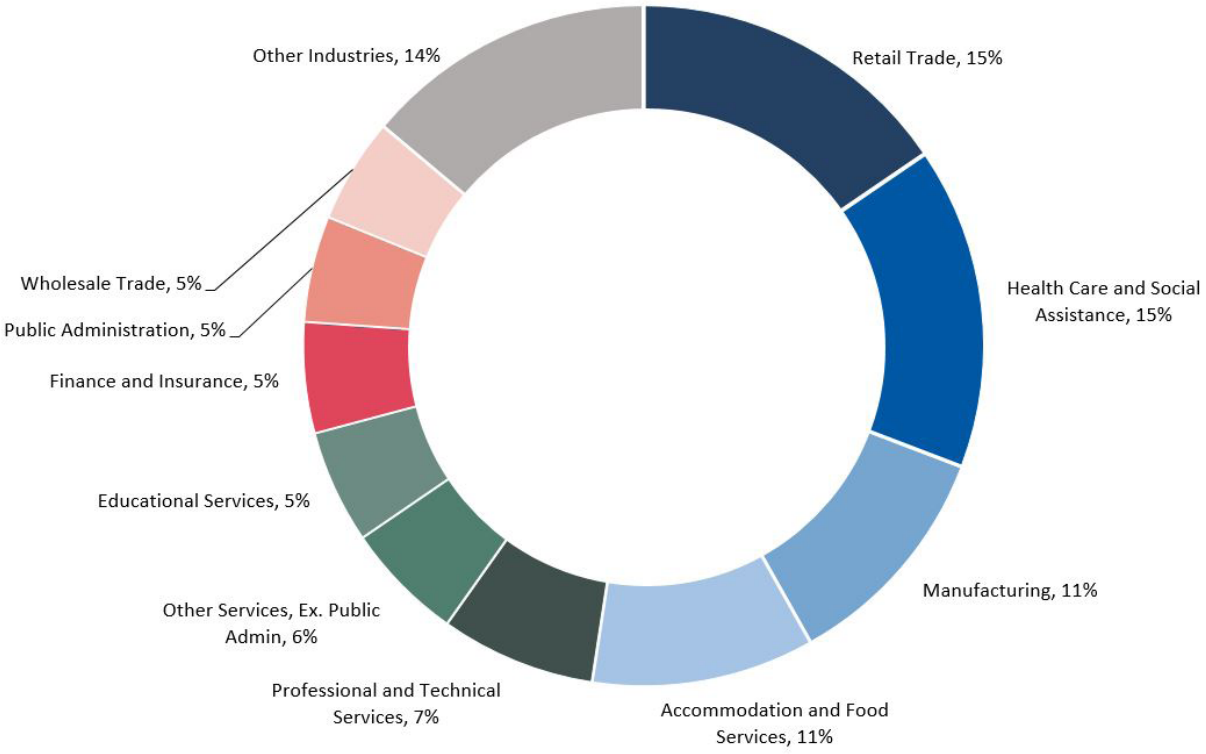
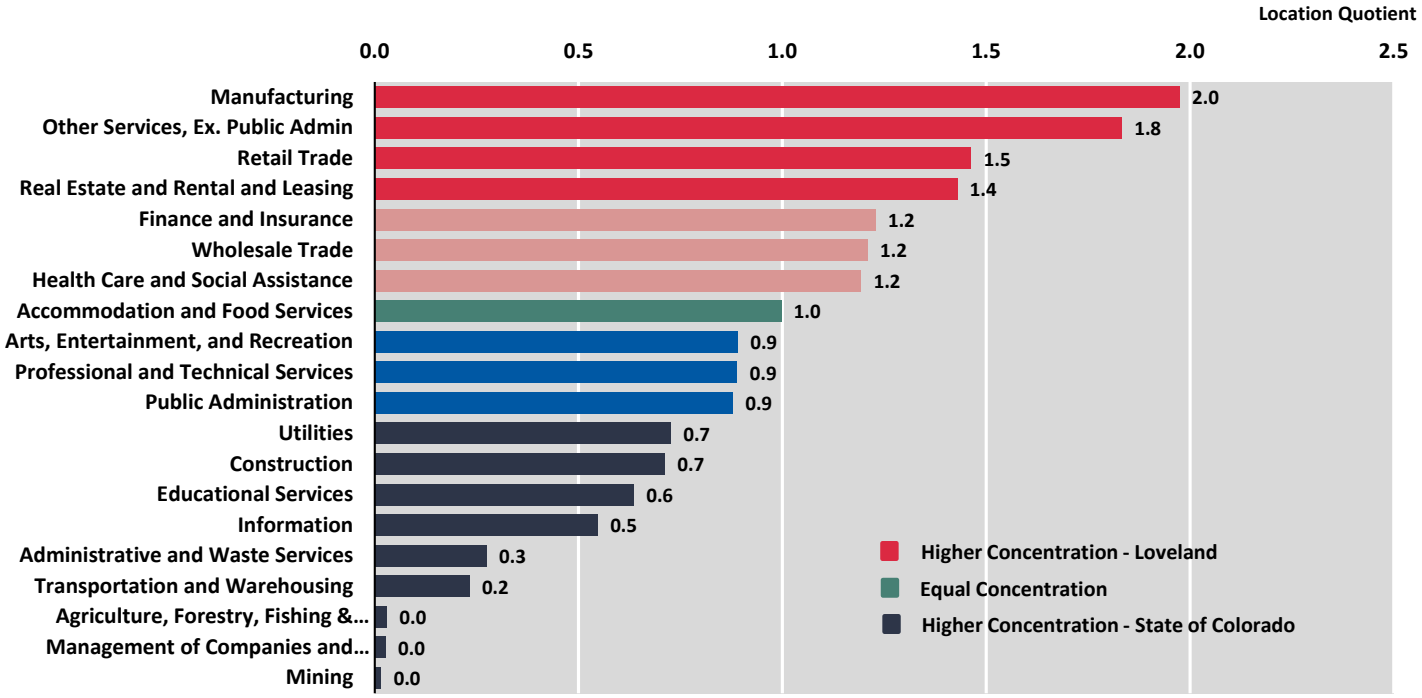



**Figure 14.** City of Loveland Percent Employment by Industry, 2018

The City of Loveland has higher than average concentrations of employment in manufacturing, retail trade, and other services industries. The proportion of manufacturing jobs in Loveland is twice the proportion found in the State of Colorado as whole, as illustrated by the manufacturing industry's 2.0 location quotient shown in **Figure 15**. A location quotient shows how concentrated an industry is in a particular area relative to the national average.

### LOVELAND LOCATION QUOTIENT BY INDUSTRY, 2018




Source: ESRI

**Figure 15.** Loveland Location Quotient by Industry, 2018

## NON-RESIDENTIAL DEVELOPMENT TRENDS

Loveland has 2.9 million square feet of office space, which is about 25 percent of Larimer County's total office inventory, as shown in **Table 5**. Between 2008 and 2018, Loveland added over 700,000 square feet of new office development, accounting for 44 percent of Countywide development. Loveland contains about 32 percent of total retail space in Larimer County, with 6.5 million square feet. From 2008 to 2018 Loveland added 390,000 square feet of new retail development – 15 percent of Countywide growth. Loveland's average retail vacancy rate is slightly lower than the county at 3.9 percent.

The City has 8.4 million square feet of industrial and flex space, approximately 38 percent of the total inventory in Larimer County. In the 10-year time period from 2008 to 2018, Loveland added about 800,000 square feet of new industrial and flex development, accounting for 40 percent of Countywide growth. In 2018, the average vacancy rate for industrial and flex space was 13.2 percent, over twice as high as the County, which had an average vacancy rate of 6.4 percent. The higher vacancy rate corresponds with new industrial development increasing in Loveland, likely reflecting new space being absorbed by the market.

### COMMERCIAL INVENTORY SUMMARY, 2018

| Description | Loveland | % of County | Larimer County |
|---|---|---|---|
| **Office** | | | |
| Inventory (sq. ft.) | 2,909,272 | 25% | 11,601,842 |
| New Development (2008-2018) | 716,989 | 44% | 1,633,656 |
| Average Rental Rate | $16.47 | | $16.19 |
| Average Vacancy Rate | 6.8% | | 3.7% |
| **Retail** | | | |
| Inventory (sq. ft.) | 6,525,175 | 32% | 20,091,719 |
| New Development (2008-2018) | 390,214 | 15% | 2,659,733 |
| Average Rental Rate | $17.00 | | $19.67 |
| Average Vacancy Rate | 3.9% | | 4.3% |
| **Industrial/Flex** | | | |
| Inventory (sq. ft.) | 8,396,343 | 38% | 22,029,227 |
| New Development (2008-2018) | 862,000 | 40% | 2,135,683 |
| Average Rental Rate | $9.85 | | $10.04 |
| Average Vacancy Rate | 13.2% | | 6.4% |

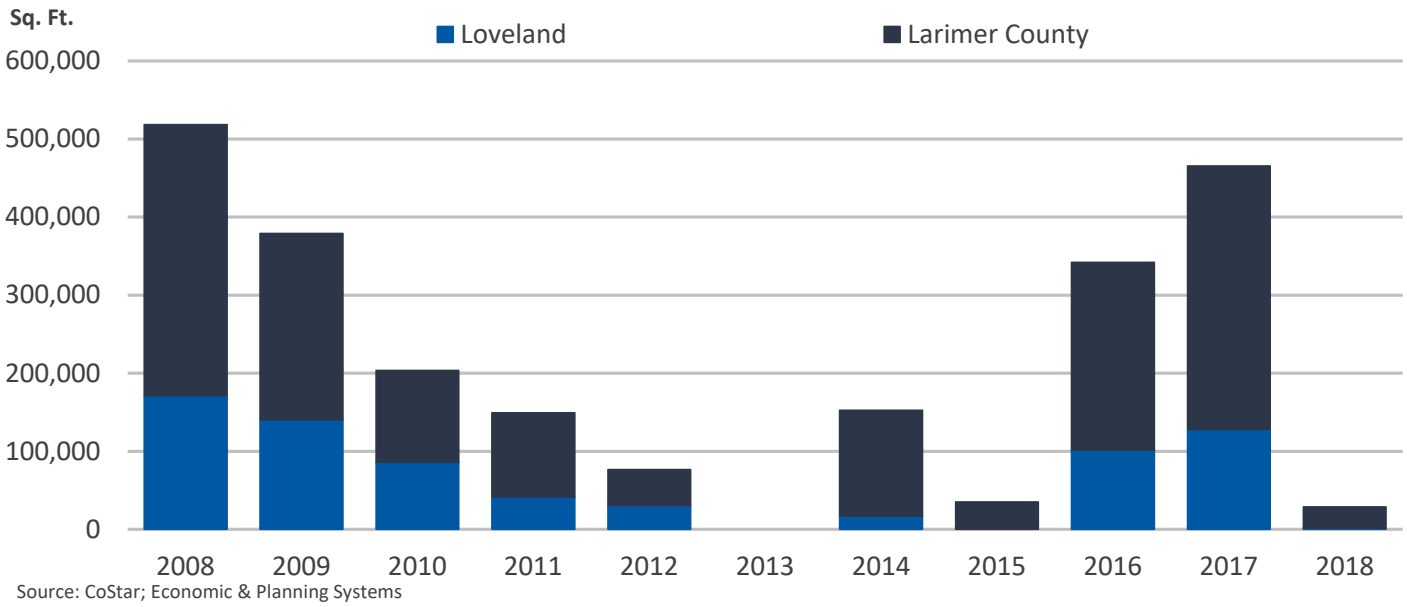
Source: CoStar; Economic & Planning Systems

**Table 5.** Commercial Inventory Summary, 2018

# OFFICE DEVELOPMENT

From 2008 to 2018, Loveland added 716,989 square feet of office space, an annual average of 65,181 square feet of new inventory, as shown in **Figure 16**. Larimer County added 1,633,656 square feet of office space over this time - an annual average of 148,514 square feet of new space. While office construction has decreased annually since the peak of development in 2008, in 2016 and 2017 development began to increase again, reaching similar levels to 2008 and 2009 construction. New office development in the region has clustered around the I-25 and US-34 interchange. Since 2008, the City added 33 new office developments, the majority of which were less than 50,000 square feet.

**OFFICE CONSTRUCTION, 2008-2018**



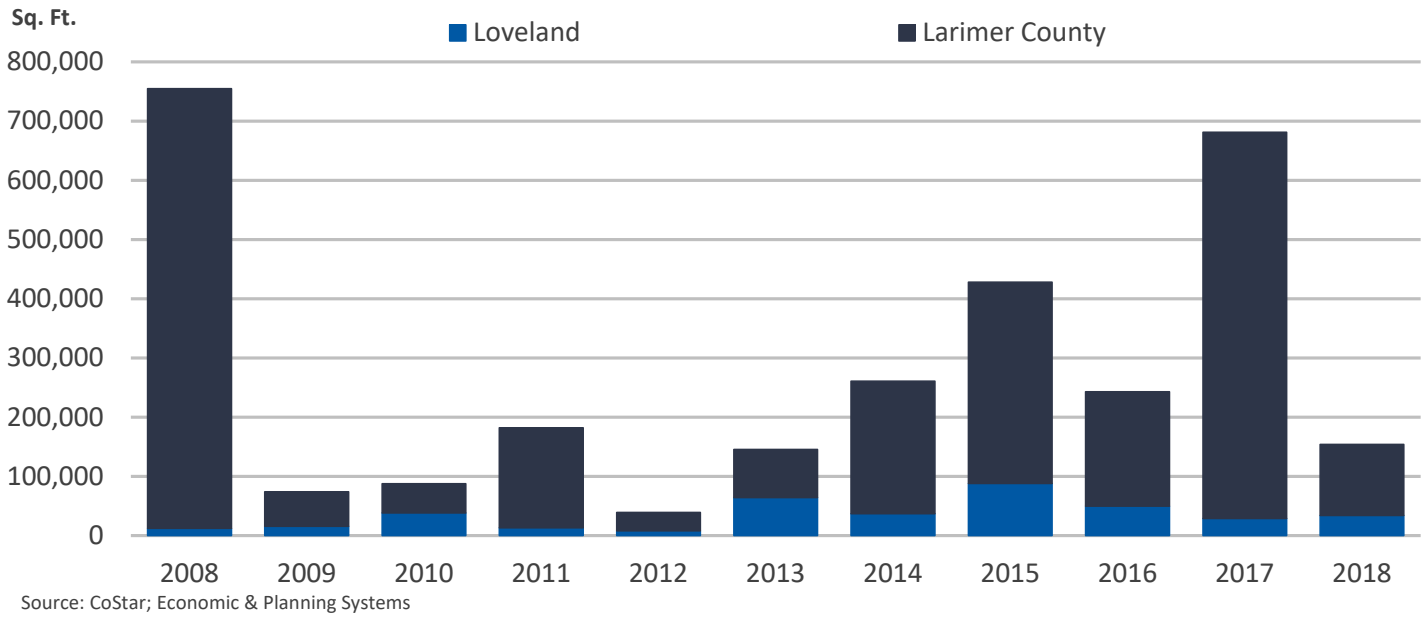

Source: CoStar; Economic & Planning Systems

**Figure 16.** Office Construction, 2008-2018

# RETAIL DEVELOPMENT

From 2008 to 2018, Loveland added 390,214 square feet of new retail development, an annual average of 35,474 square feet, as shown in **Figure 17**. Over this same time Larimer County added 2.6 million square feet of new retail space, an annual average of 241,794 square feet of development. Since 2013, Loveland has consistently been adding about 50,000 square feet of retail annually. New retail space in Loveland has been built primarily along the corridors of US-34 leading to I-25 and along US-287 leading to Fort Collins. Since 2008, Loveland has added 36 new retail developments, most of which are smaller developments of around 20,000 square feet each.

**RETAIL CONSTRUCTION, 2008-2018**



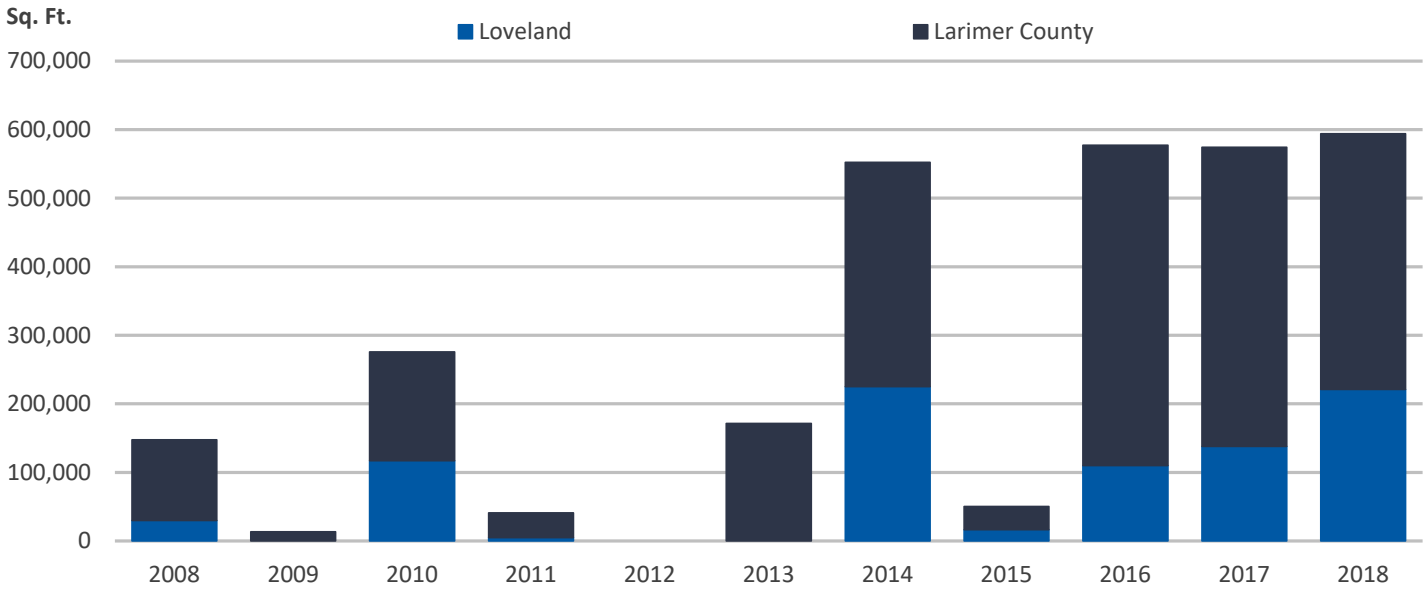

Source: CoStar; Economic & Planning Systems

**Figure 17.** Retail Construction, 2008-2018

# INDUSTRIAL DEVELOPMENT

Between 2008 and 2018, Loveland added 862,000 square feet of industrial space, an annual average of 78,364 square feet, as shown in **Figure 18.** Most of Larimer County and Loveland's industrial development is clustered near I-25. Since 2008, Loveland has added 20 industrial developments, the largest being approximately 212,000 square feet.

### INDUSTRIAL CONSTRUCTION, 2008-2018




Source: CoStar; Economic & Planning Systems

**Figure 18.** Industrial Construction, 2008-2018

# 05 ROADWAY NETWORK

Loveland has 525 total miles of roadway. I-25 , US-34, and US-287 provide regional connections to nearby cities while a network of arterials and collector streets serve local mobility needs. **Figure 19** shows the City's roadway classifications.

### LOVELAND EXISTING ROADWAY CLASSIFICATIONS

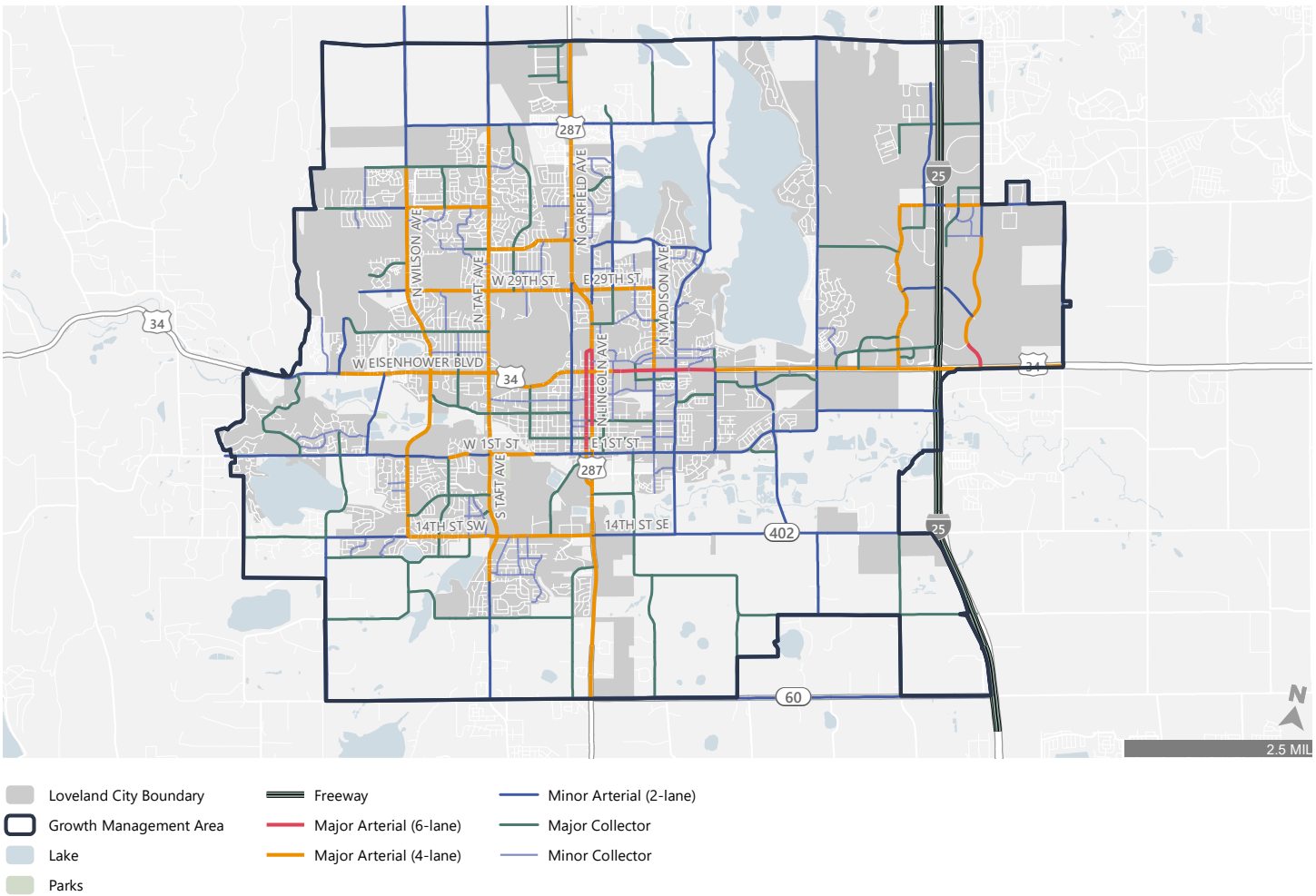



**Figure 19.** Existing Roadway Classifications

# TRAFFIC VOLUMES

Traffic volumes in Loveland have shifted in the last few years. Traffic count data shows that traffic volumes grew by an average of 13 percent between 2012 and 2017, the most recent year traffic count data was collected (**Figure 20**).

### CHANGE IN VEHICLE VOLUMES BETWEEN 2012 AND 2017

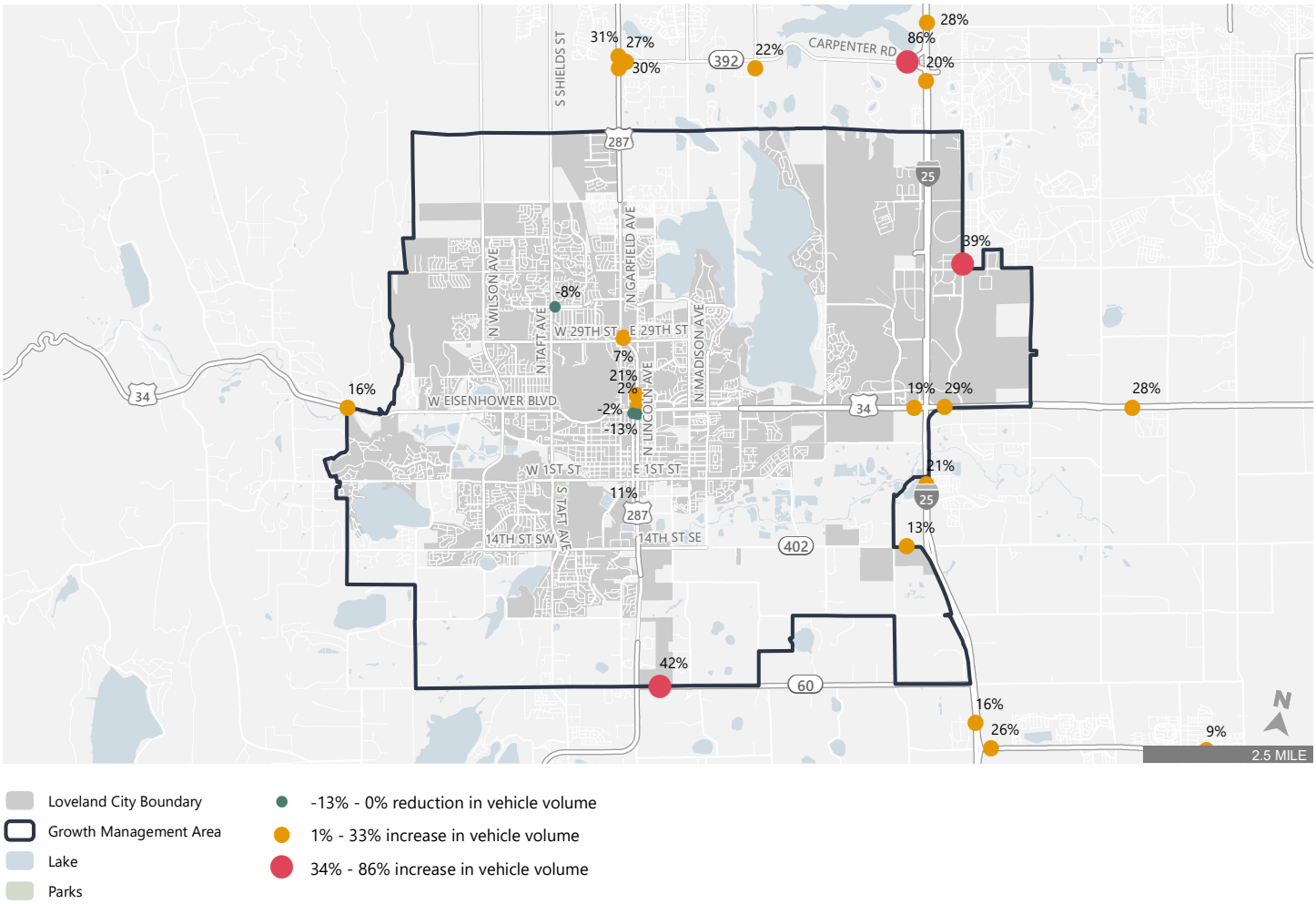



**Figure 20.** Change in Vehicle Volumes Between 2012 And 2017

The change in traffic volumes has differed throughout the City. Some major roadways like Cleveland Avenue and 37th Street witnessed a decrease in vehicle trips. Modest increases in volume of up to 20 percent more vehicles were primarily seen on north-south arterials like Lincoln Avenue. Significant increases of over 20 percent were see on I-25 and State Highway 60.

Traffic volumes on roadways just north of Loveland have increased between 17 percent and 86 percent. Employment growth in Loveland and nearby cities can help explain the increase in traffic volumes. An analysis of commute trends can be found on **page 36**.

# TRAVEL TIME

Vehicle travels times are tracked on US-34, US-287, and Taft Avenue (**Figure 21**). These roadways tend to provide stable travel times throughout the day. **Tables 6, 7, and 8** show peak vs. off-peak travel times. A southbound vehicle on US-287 will experience the same approximately the same travel time during peak and off-peak hours. Meanwhile, a northbound trip on Taft Avenue is 20 percent faster during off-peak times.

## CORRIDORS MEASURED FOR TRAVEL TIME

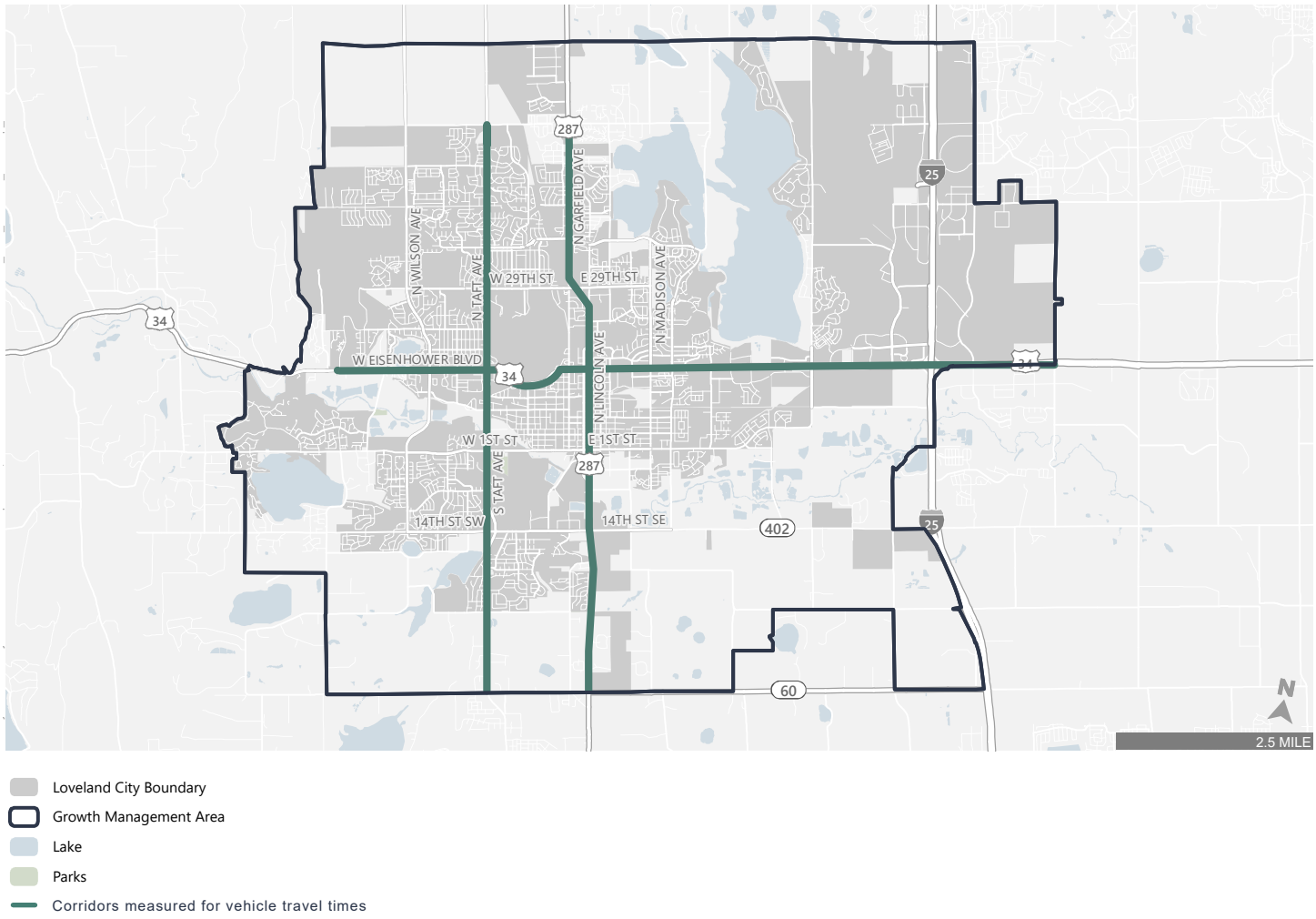



**Figure 21.** Corridors Measured for Travel Time

| TABLE 6: US-34 (EASTBOUND) | |
|---|---|
| Peak | Off-Peak |
| 11 minutes AM | 9.25 minutes AM |
| 12 minutes PM | 9.5 minutes PM |
| **US-34 (WESTBOUND)** | |
| Peak | Off-Peak |
| 13 minutes AM | 11.5 minutes AM |
| 15.5 minutes PM | 11.25 minutes PM |

| TABLE 7: US-287 (NORTHBOUND) | |
|---|---|
| Peak | Off-Peak |
| 11.5 minutes AM | 11 minutes AM |
| 12.5 minutes PM | 12 minutes PM |
| **US-287 (SOUTHBOUND)** | |
| Peak | Off-Peak |
| 12.5 minutes AM | 12.5 minutes AM |
| 13 minutes PM | 12.5 minutes PM |

| TABLE 8: TAFT AVENUE (NORTHBOUND) | |
|---|---|
| Peak | Off-Peak |
| 10 minutes AM | 8 minutes AM |
| 10 minutes PM | 8 minutes PM |
| **TAFT AVENUE (SOUTHBOUND)** | |
| Peak | Off-Peak |
| 10 minutes AM | 8 minutes AM |
| 11 minutes PM | 9 minutes PM |

# LEVEL OF SERVICE

Each intersection in the City of Loveland is monitored for its ability to efficiently move vehicles through the City. Intersections are assigned an A through F Level of Service designation with A being an intersection that moves all vehicles at free flow speeds while F is an intersection that experiences congestion and queues that fail to clear (**Figure 22**).

The City has a minimum Level of Service standard of C for all major intersections. Most intersections in Loveland perform at an acceptable LOS **(Figure 23**). Some intersections like 14th Street and US-287 perform at Level of Service D, which is just below City standards, but still permits vehicles to move through the corridor. None of the major intersections in Loveland fall below a LOS D.

**LOS A - Free flow traffic**

**LOS C - Stable flow**

**LOS D - Traffic speed begins to decrease as volumes increase, approaching unstable flow**

**LOS F - Breakdown in traffic flow that results in traffic jams, forced flow**

**Figure 22.** Level of Service Designations

## EXISTING PM PEAK HOUR INTERSECTION LEVEL OF SERVICE

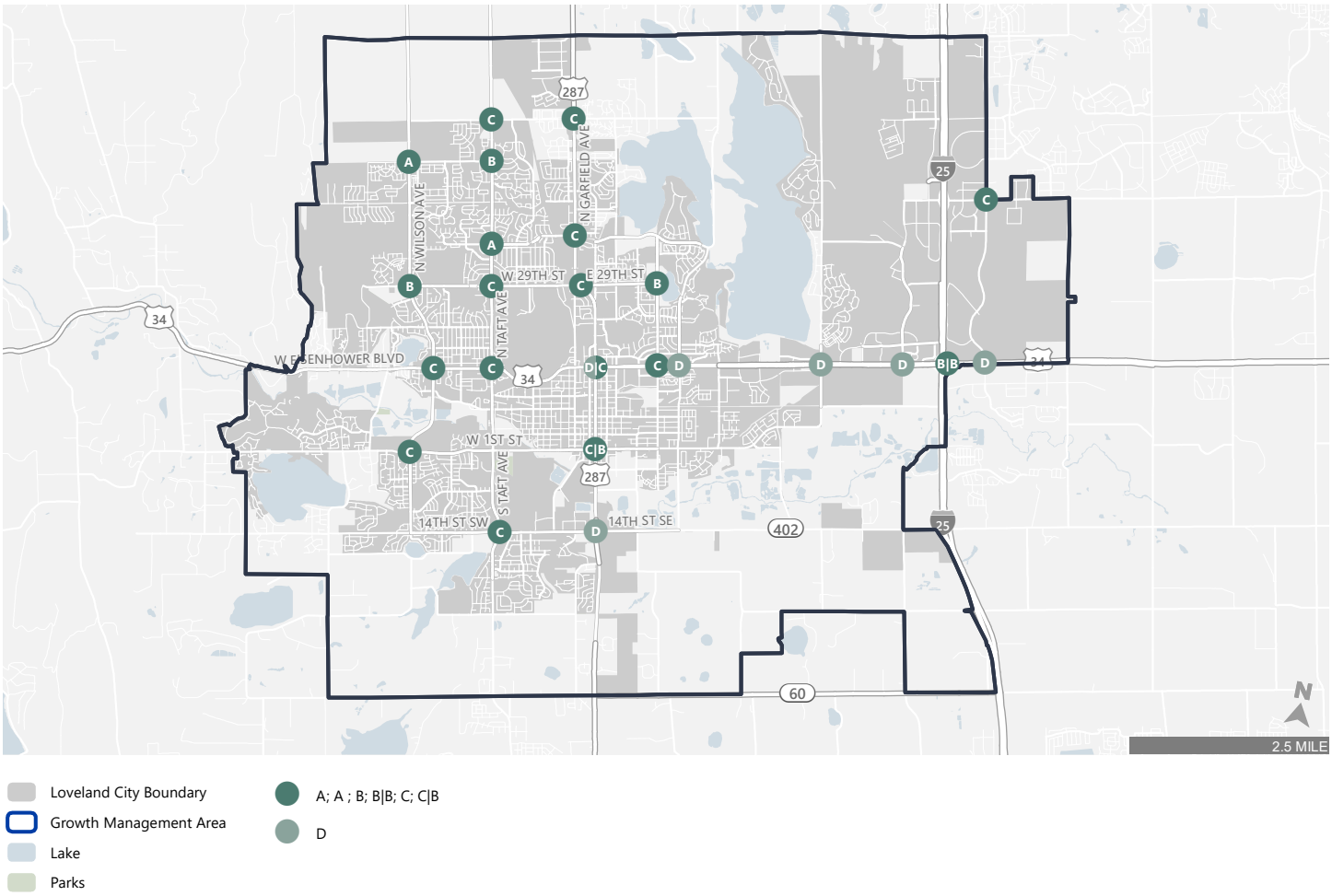



**Figure 23.** Existing PM Peak Hour Intersection Level of Service

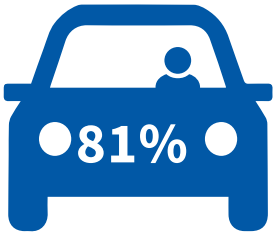
# VEHICLE MILES TRAVELED (VMT)

Everyday there are approximately 1.6 million vehicle miles traveled (VMT) on Loveland roadways. This figure excludes I-25, where many vehicle trips pass through the City. On average, every Loveland residents drives approximately 21 miles per day. Half of daily VMT occurs during the AM and PM peak periods, with the afternoon peak accounting for 35 percent of daily VMT.

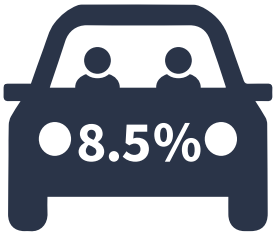
Loveland has slightly lower per capita VMT than the Denver region (25.5 daily VMT) and significantly higher VMT than the Northern Colorado region average (approximately 10 daily VMT). The Northern Colorado region has a low per capita VMT in part because Fort Collins is a large population center for the region and has actively pursued raising the share of residents who walk, bike, and take transit, while also reducing vehicle trips.

**MODE SPLIT**

According to American Community Survey estimates, the majority of Loveland residents commute by driving alone. The way people travel has remained largely consistent; in 2000 Loveland residents reported driving alone and carpooling at slightly higher rates than today, but fewer people took transit or worked from their homes.




**DRIVE ALONE**




**CAR POOL**

**PUBLIC TRANSIT**

**WALK**

**BICYCLE**

**OTHER (WORK FROM HOME)**

# COMMUTE PATTERNS

**LOVELAND, 2015**

Loveland is home to 30,564 jobs (2015 LEHD data). 7,608 people live and work in Loveland, the remaining 23,000 workers commute in on a daily basis (**Figure 24**). In addition, nearly 23,000 workers live in Loveland but leave the City to work in neighboring communities (**Figure 25**).

### WHERE PEOPLE WHO WORK IN LOVELAND ARE COMING FROM

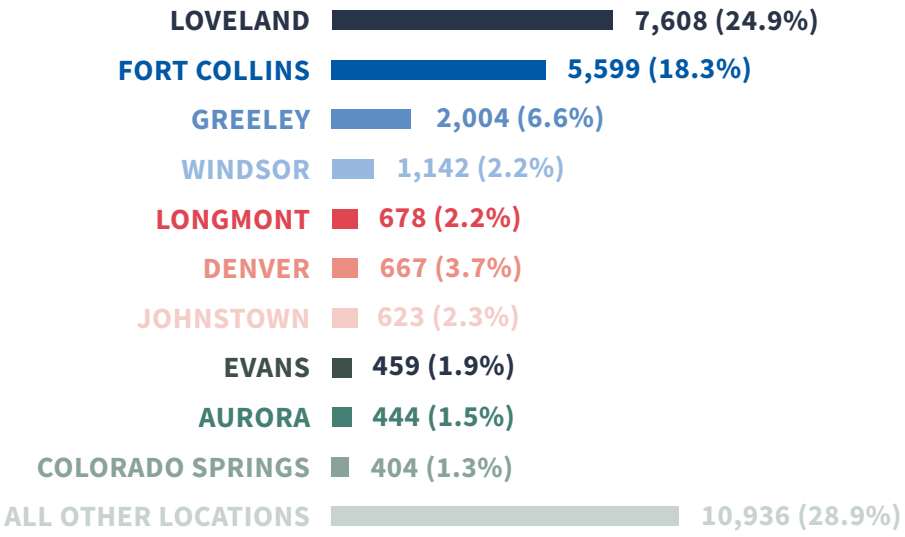



**Figure 24.** Where People Who Work in Loveland Are Coming From

### WHERE PEOPLE WHO LIVE IN LOVELAND WORK

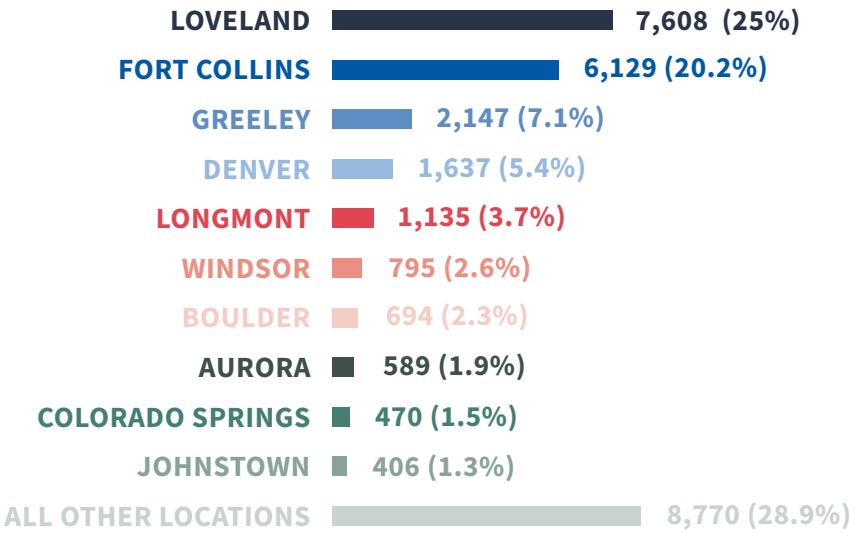
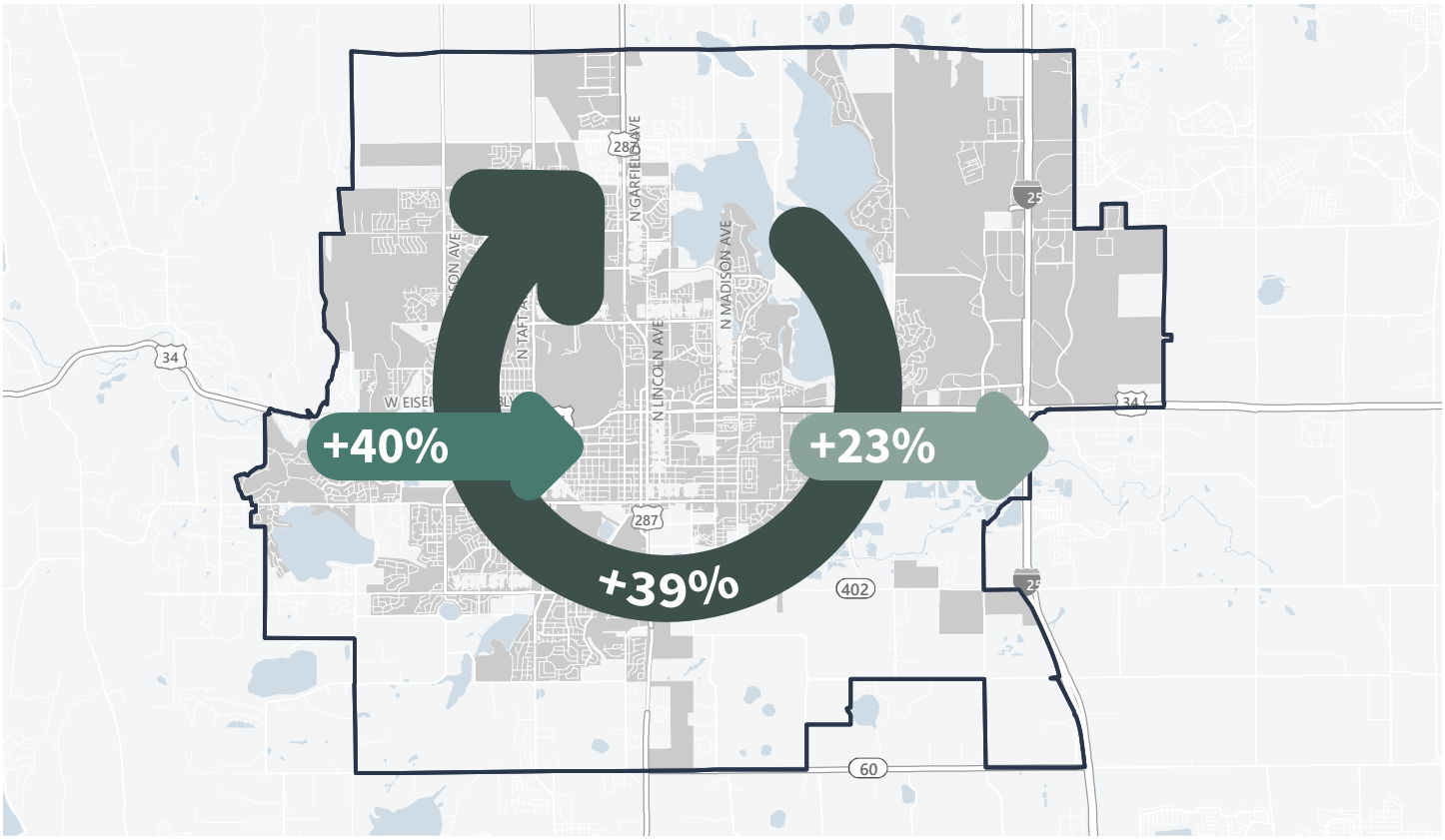



**Figure 25.** Where People Who Live in Loveland Work

Both Loveland and the surrounding region have witnessed substantial employment growth since the great recession (**Figure 26**). Loveland saw a 40 percent increase in people commuting into the City for work from 2010 to 2015. During the same time period there was a 23 percent increase in Loveland residents commuting outside the city for work. The increased employment base has also lead to a 39 percent increase in the number of people both living and working in Loveland.

### JOB GROWTH, 2010-2015




Coming into Loveland for Work
Leaving Loveland for Work
Both Live and Work in Loveland

**Figure 26.** Job Growth, 2010-2015

# 05 BICYCLE AND PEDESTRIAN NETWORK

## EXISTING BICYCLE FACILITIES

Loveland has bikeways on 90 miles of roadways (**Figure 27**). In addition, Loveland has 22 miles of recreational trails.

### EXISTING BICYCLE FACILITIES

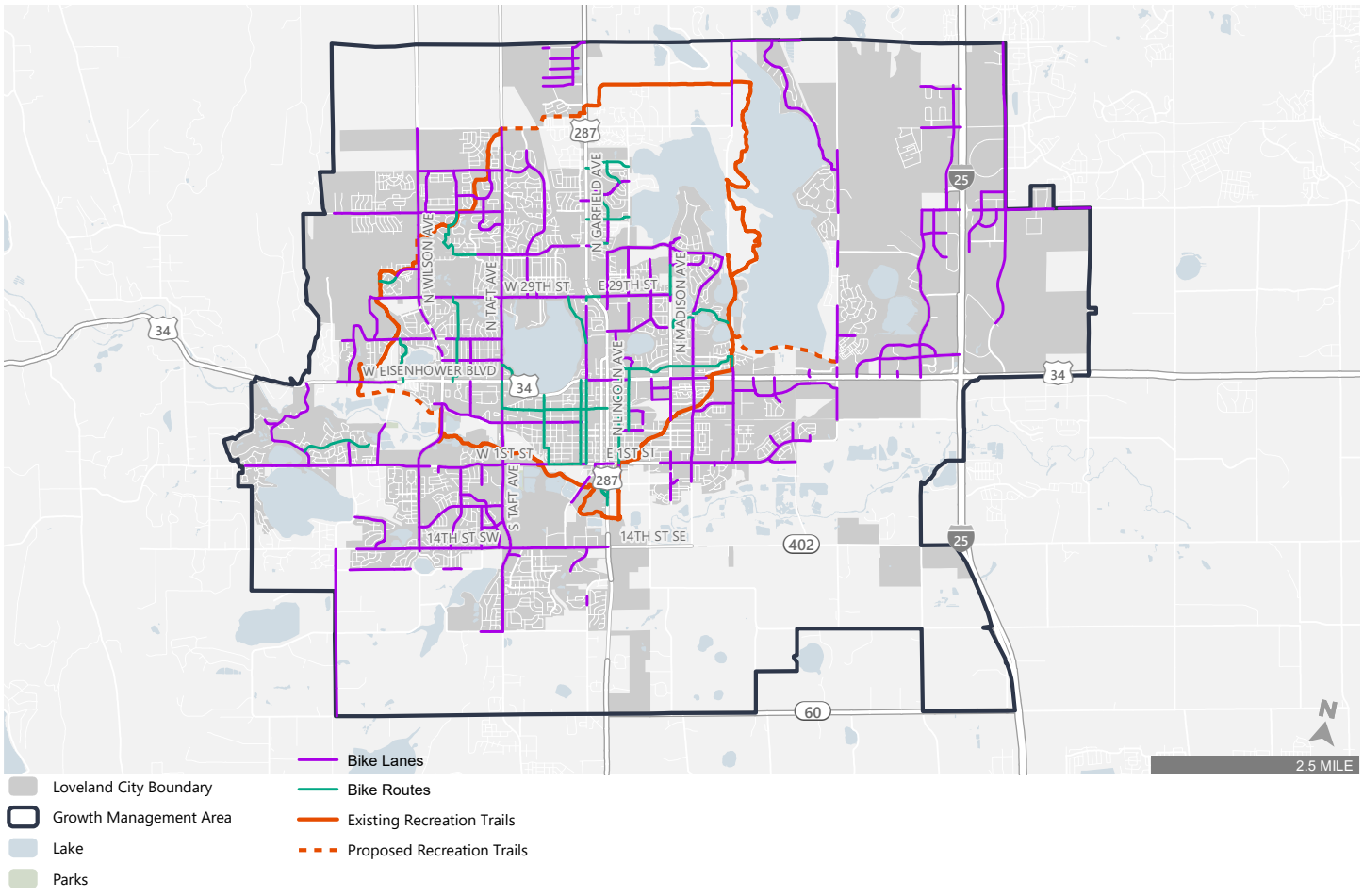



**Figure 27.** Existing Bicycle Facilities

# EXISTING PEDESTRIAN FACILITIES

The City has 563 total miles of sidewalks. 142 miles of sidewalk gaps have been identified (**Figure 28**). Sidewalk gaps exist along roadway segments that are less pedestrian friendly and in areas of the City that were recently annexed from Larimer County.

## EXISTING PEDESTRIAN FACILITIES

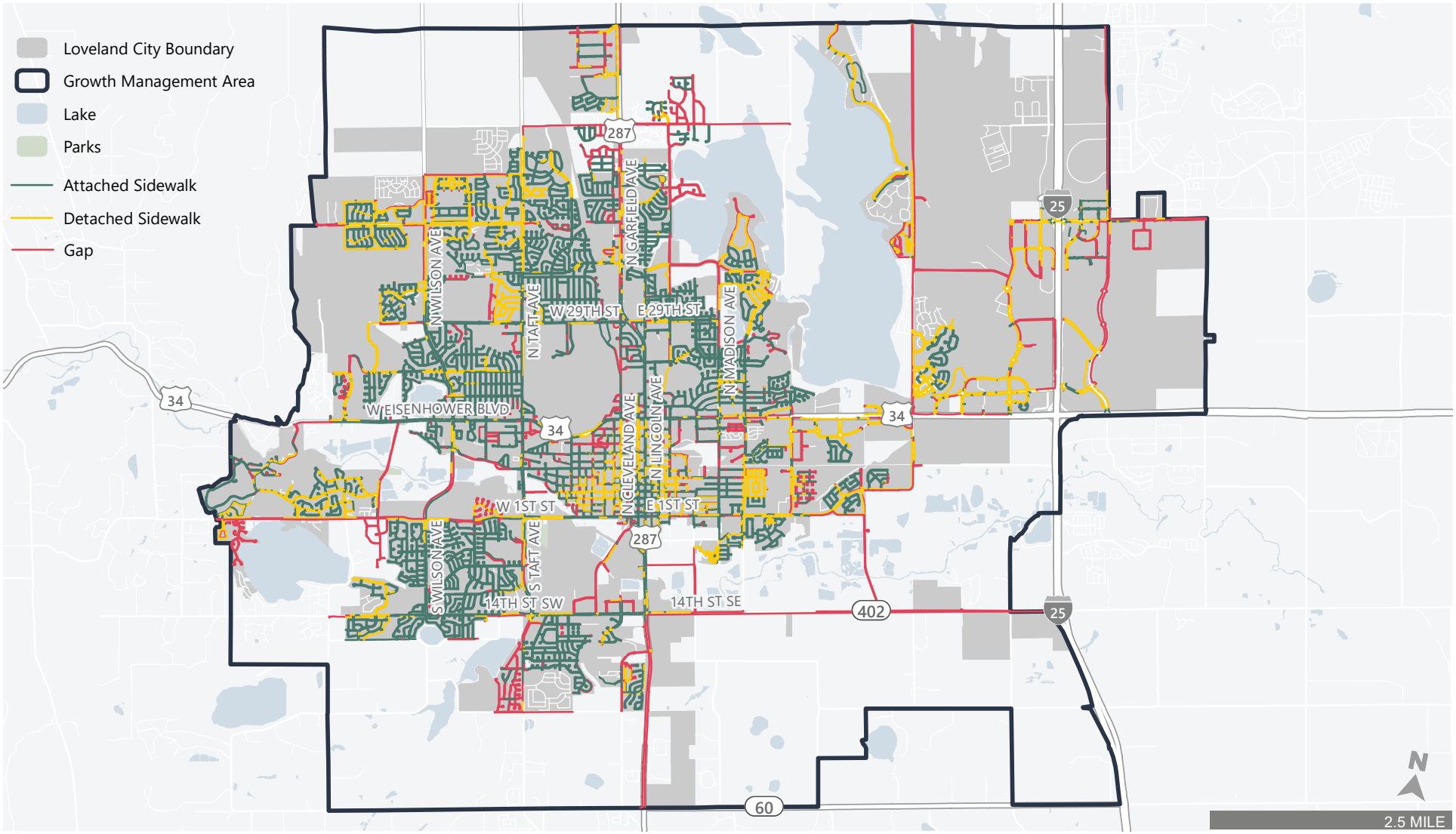



**Figure 28.** Existing Pedestrian Facilities

# 07 TRANSIT

City of Loveland Transit (COLT) is Loveland's transit provider. COLT began operation in 1993 and fixed-route service began in 1997. In 2008, COLT expanded from two to three routes. In April, 2018 the City added an east-west express route on US-34. At the time all four routes operated at 60-minute frequencies. In November, 2018 the system was restructured to increase frequency and improve rider convenience. COLT now operates two routes at 30-minute frequencies and three routes at 60-minute frequencies throughout the day, but continuing to use four buses. No evening or Sunday fixed-route service is provided.

## COLT CONTRACTS WITH A PRIVATE OPERATOR FOR PARATRANSIT

In 2017 about 18% of total operating expenses were used for paratransit. In April, 2018 COLT contracted out paratransit service to a private provider freeing up fleet capacity to expand fixed-route service. In addition, through a partnership with Fort Collins, paratransit users can utilize Dial-a-Taxi during hours paratransit does not operate or for destinations outside the service area. Dial-a-Taxi service is provided by a private taxi company, with up to $20 of the trip subsidized by COLT.

## EXISTING TRANSIT SERVICE

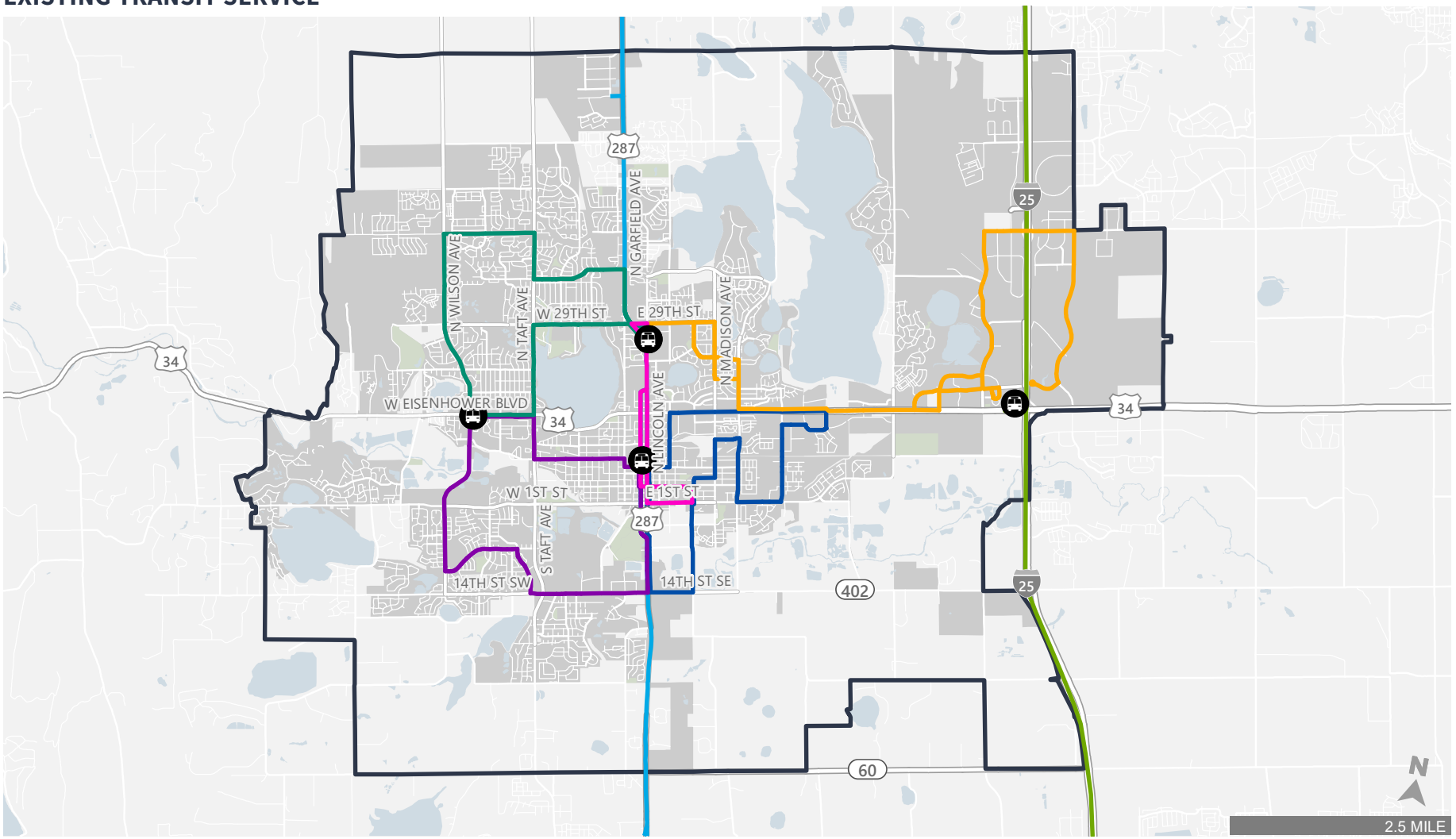



**Figure 29.** Existing Transit Service

# THE TRANSIT NETWORK WAS RESTRUCTURED IN 2018 TO ADD FREQUENCY

In an effort to grow ridership, COLT completely restructured the City's local routes in November 2018, eliminating the poorly performing US-34 Express Route, reducing overlap between routes, streamlining routes, increasing bi-directional operations, shortening route lengths and introducing 30-minute frequencies. Frequencies were increased without additional service hours or buses. Schedules are also timed to provide convenient transfers between routes at the North, South, and West Transfer Stations. **Figure 30** illustrates the transit network prior to the restructure with several looping routes all operating at 60-minute frequencies. **Figure 31** shows the network after the restructure in November, 2018 with more direct alignments and the addition of 30-minute frequencies.

## 2018 LOVELAND TRANSIT NETWORK BY FREQUENCY, PRIOR TO NETWORK RESTRUCTURE

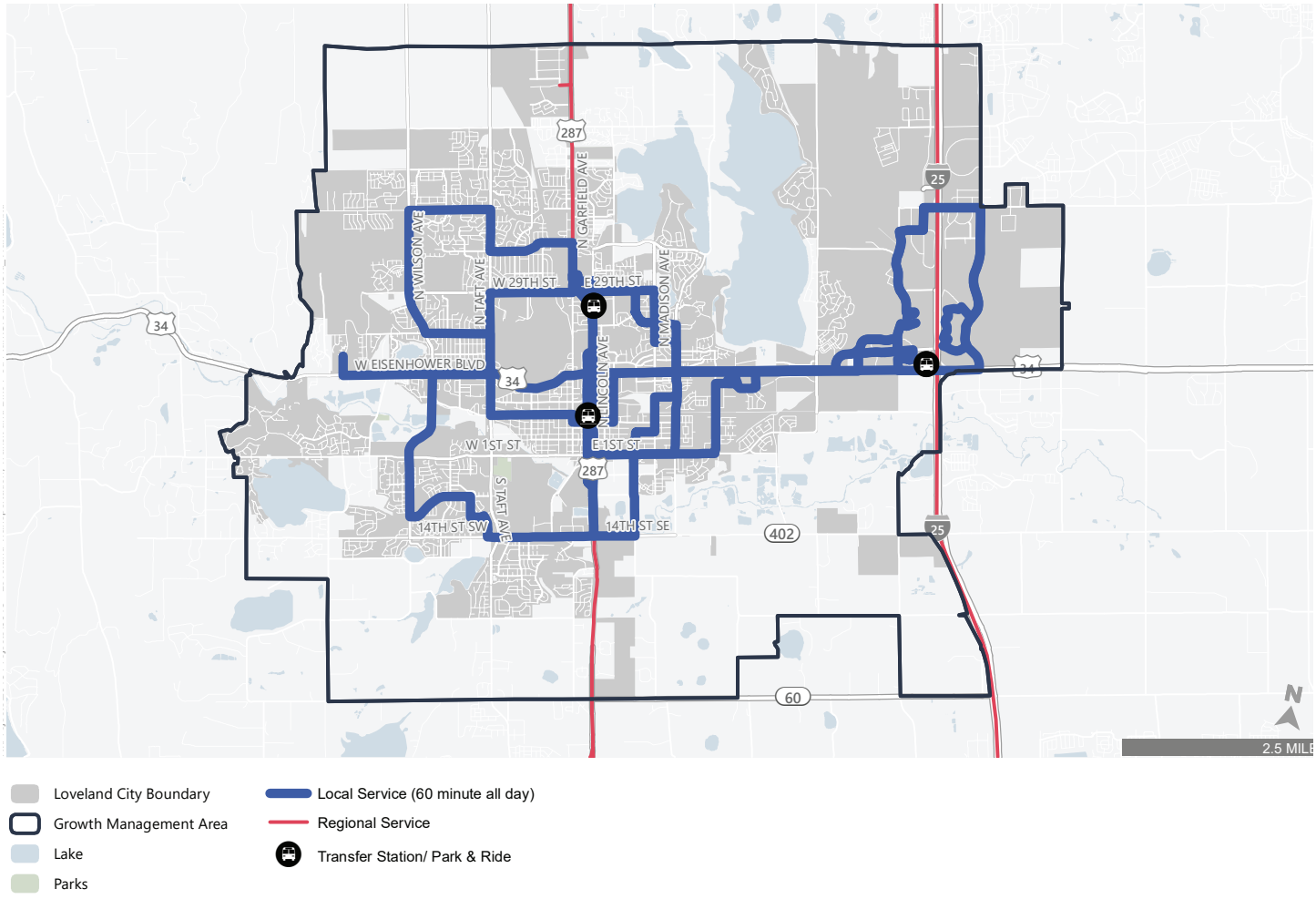



**Figure 30.** 2018 Loveland Transit Network by Frequency, Prior to Network Restructure

## 2019 LOVELAND TRANSIT NETWORK BY FREQUENCY, AFTER NETWORK RESTRUCTURE

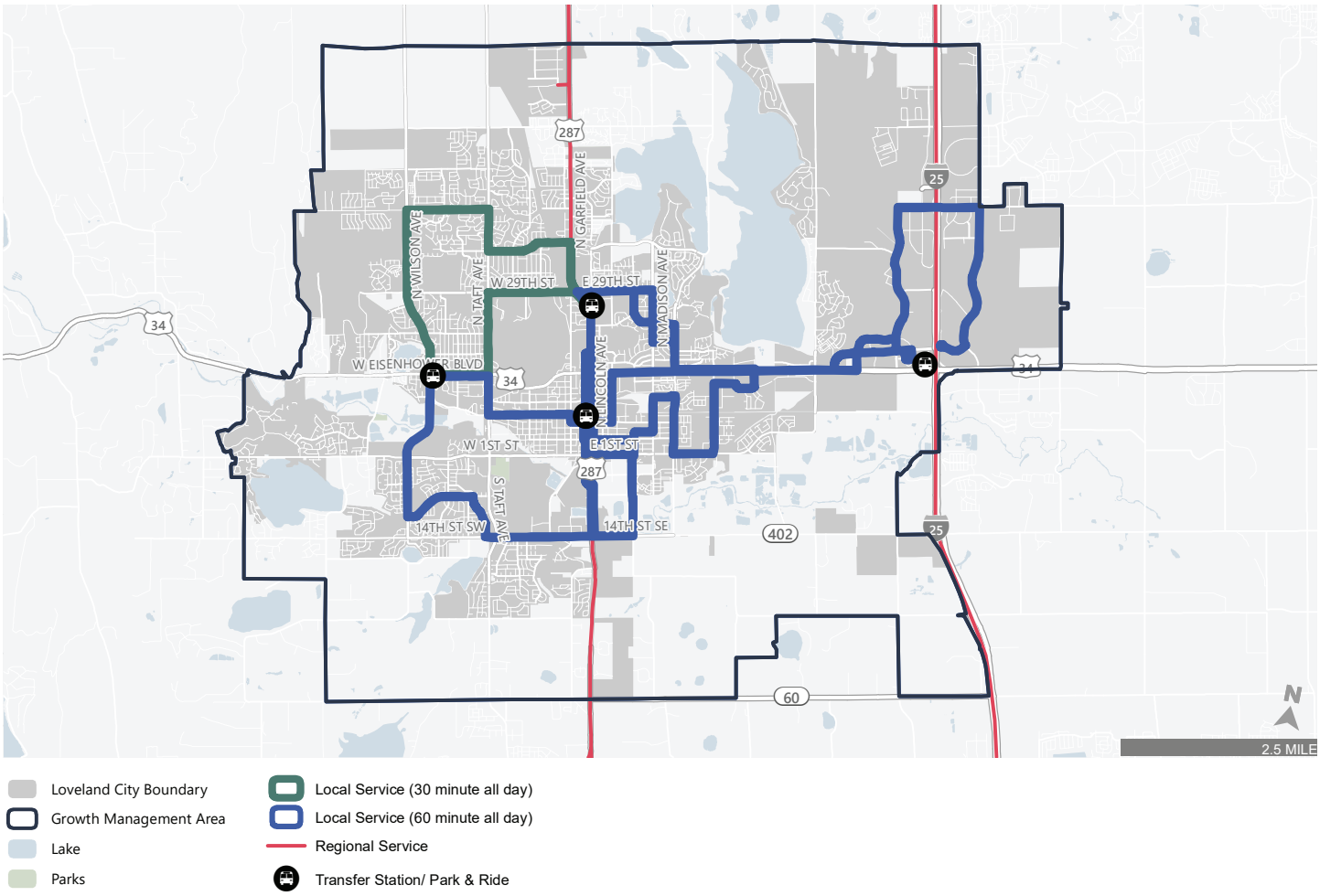
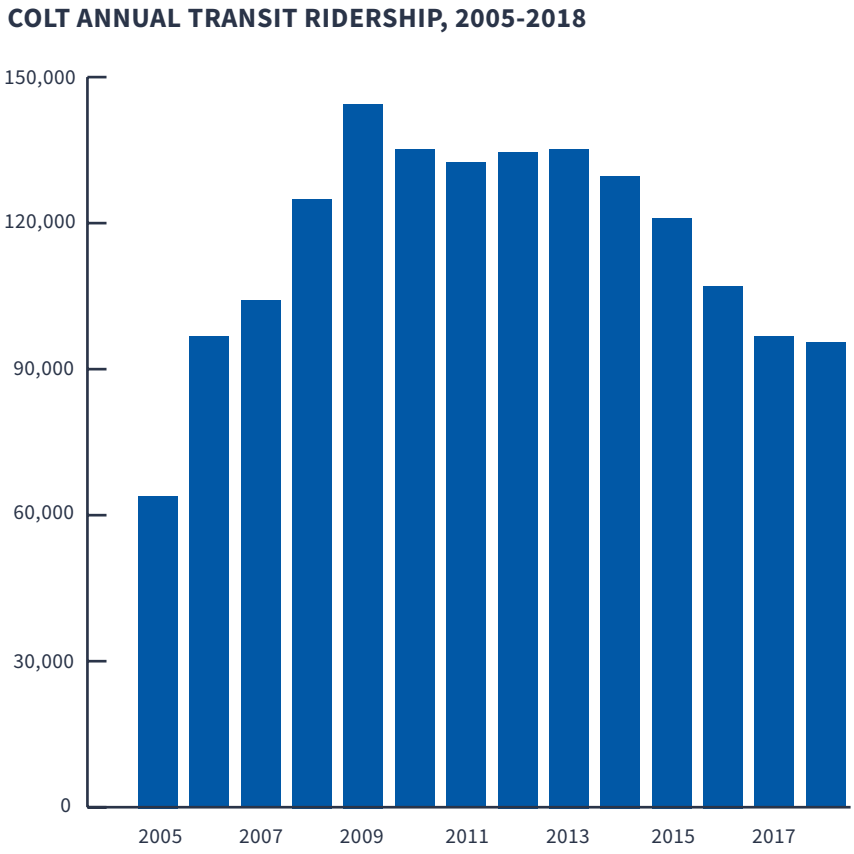



**Figure 31.** 2019 Loveland Transit Network by Frequency, After Network Restructure

# TRANSIT RIDERSHIP DROPPED EVERY YEAR FROM 2013 TO 2018

Ridership on COLT more than doubled between 2005 and 2009. However, similar to national trends, citywide transit ridership on COLT declined 29 percent from 135,000 annual riders in 2013 to 95,000 annual riders in 2018, as shown in **Figure 32**. During the same time, the City's population increased by 9 percent (from 71,000 to 78,000) and annual transit service hours increased by 27 percent (from 14,000 to 18,000). It should be noted that annual service hours remained relatively flat from 2013 to 2017 and increased 19 percent in 2017-2018 when an additional bus was added to the fixed-route network.

Ridership trends mimic national ridership trends, which peaked in 2008 when gas prices were high, declined during the recession before rebounding 2012-2014 and have declined about 5 percent from 2014 to 2017 despite population growth. However, the decline in transit ridership in Loveland over the last five years is generally steeper than national trends. This recent decline is likely attributed in part to national trends of increasing affordability and accessibility of cars (influenced by a strong economy and low gas prices) combined with minimal changes made to the local transit network during that time (prior to 2018).




Source: National Transit Database

**Figure 32.** COLT Annual Transit Ridership, 2005-2018

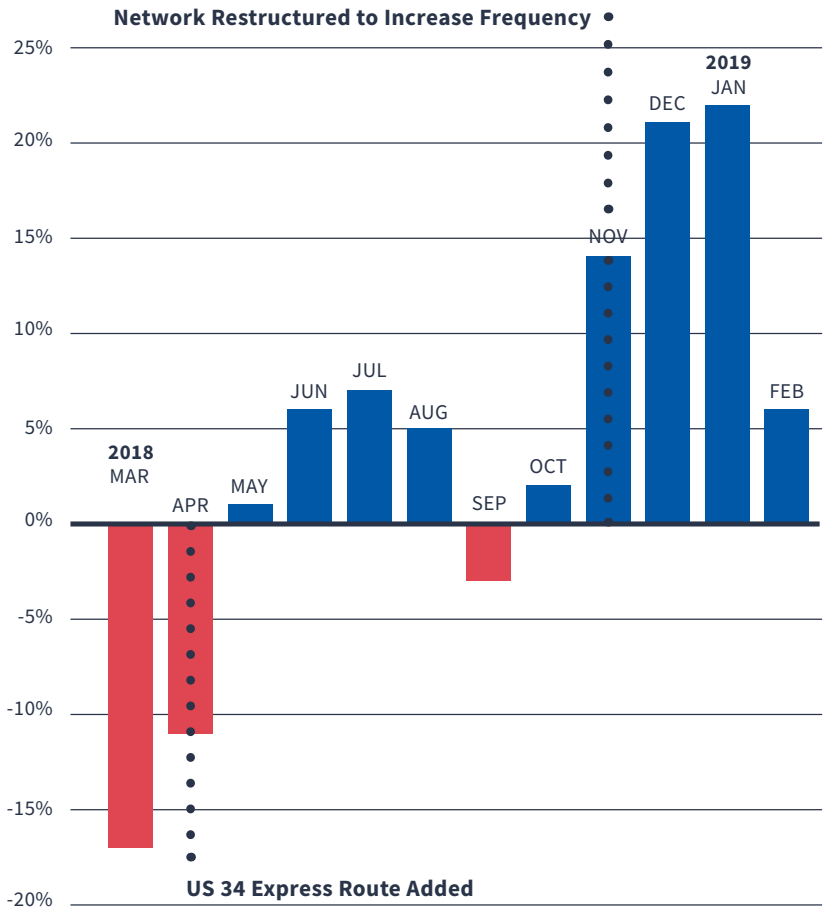
## TRANSIT RIDERSHIP HAS INCREASED SINCE THE ROUTE RESTRUCTURE IN 2018

Since COLT restructured routes in November, 2018 to provide more frequent and direct service transit ridership has increased 21 percent in December, 22 percent in January and 6 percent in February when compared to the same months of the previous year. Note: These trends are preliminary given there is only three months of data and should be revisited once at least a full year of data is available.

## ROUTE 1 HAS THE HIGHEST PRODUCTIVITY

Productivity is a measure of passengers per service hour and is a good indicator of the cost efficiency achieved. Route 1 is one of only two routes in Loveland with 30-minute frequency (the other being Route 2) and connects the North and South Transit Centers, including downtown, Civic Center, and core commercial areas along US-287 (Lincoln Avenue and Cleveland Avenue) with a direct route alignment (as shown in **Figure 29**). Not surprisingly, this route also has the highest productivity, as shown in **Figure 34**. Note: given the recent route restructure, productivity is based on data just from December, 2018. This metric should be revisited once at least a full year of data is available.

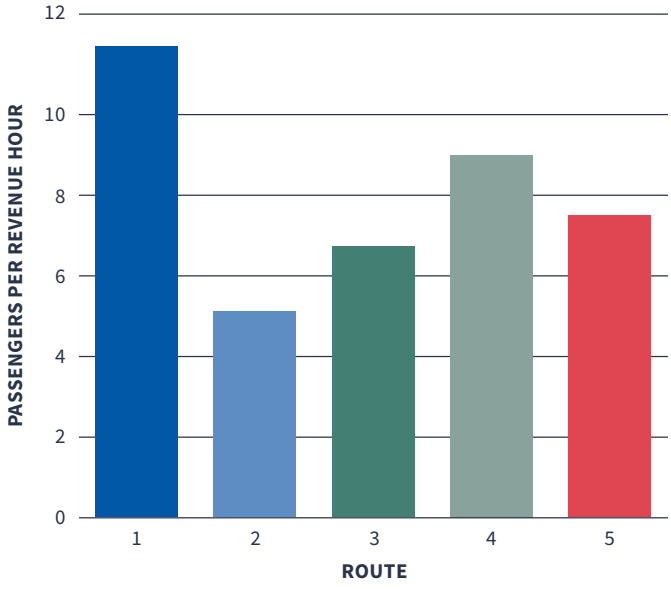
**COLT YEAR-OVER-YEAR MONTHLY RIDERSHIP CHANGE**




Source: National Transit Database

**Figure 33.** COLT Year-Over-Year Monthly Ridership Change

**COLT PRODUCTIVITY, DECEMBER 2018**



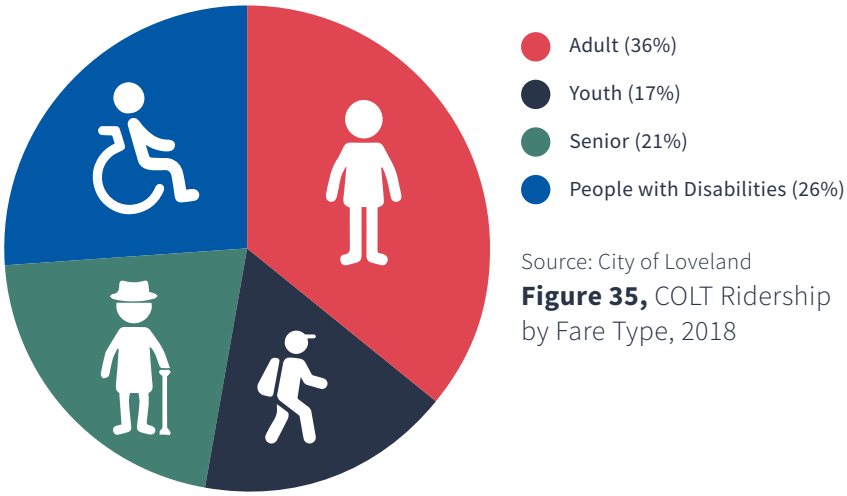

Source: City of Loveland

**Figure 34.** COLT Productivity, December 2018

## COLT IS DISPROPORTIONATELY USED BY SENIORS AND PEOPLE WITH DISABILITIES

Excluding transfers, about 26 percent of COLT users qualify for the reduced fare program offered to riders with disabilities, while only about 12 percent of the resident population in Loveland has a recognized disability. Similarly, about 29 percent of riders without disabilities are seniors (60 years and older), while seniors represent only 23 percent of the population.

**COLT RIDERSHIP BY FARE TYPE, 2018**




Source: City of Loveland

**Figure 35,** COLT Ridership by Fare Type, 2018

## TRANSIT IS FUNDED PRIMARILY THROUGH THE CITY GENERAL FUND

Nearly two thirds of funding for COLT is provided from the general fund, with about 7 percent of revenue from fares. About 82 percent of the 2017 COLT operating budget of $1.379 million was used to provide fixed-route transit (the remaining allocated to paratransit). This equated to an average cost per passenger of $11.70 in 2017.

## PARK & RIDES AND TRANSIT CENTERS

COLT does not formally own any park & rides. Passengers have access to parking lots privately owned by adjacent businesses at both the North and South Transfer Centers along US-287, which are primarily used by FLEX patrons for regional trips. The location of these transfer centers are mapped in **Figure 29**. COLT recently purchased land near US-287 and 37th Street to relocate and upgrade amenities at the North Transfer Center. Additionally CDOT operates the Loveland-Greeley Park & Ride near US-34 & I-25, which is primarily used by Bustang patrons commuting to Denver. This park & ride will be relocated to the median of I-25 at Kendall Parkway in 2021 or 2022 as part of the I-25 North expansion project.

## REGIONAL TRANSIT SERVICE

Transfort, Fort Collins' transit provider, operates the FLEX regional route connecting Loveland with Fort Collins, Berthoud, Longmont, and Boulder. Nearly a quarter of COLT users transfer to or from the FLEX. FLEX operates on US-287 through Loveland with stops at both the North and South Transfer Centers in addition to several other stops on the north and south end of town along US-287. Hourly service is provided to Fort Collins during the day and 30-60 minute service during peak hours, with peak period only service south of Loveland. CDOT also operates Bustang, which provides mostly peak period, peak direction service (at 30 minute frequencies) to Denver via I-25 from the Loveland-Greeley Park & Ride at US-34 and I-25.

## ADDITIONAL MOBILITY SERVICES

Several other mobility services are also offered in Loveland. VanGo is a vanpooling service provided by the North Front Range Metropolitan Planning Organization that matches participants with similar commute patterns and provides a van. VanGo is most commonly used by people with longer commutes between cities along the Front Range. Senior Alternatives in Transportation (SAINT) is a local non-profit that provides prescheduled door-to-door personal transportation for seniors 60 years and older and adults with disabilities. Service is provided on weekdays during normal business hours. Groome (previously named GreenRide) is a privately operated shuttle service between Loveland and Denver International Airport (DIA). Groom provides regularly scheduled hourly service to DIA from the Northern Colorado Regional Airport (used as a park & ride) and an on-street stop on Stone Creek Circle (near I-25 and US-34) as well as prescheduled home pick-up/drop-off locations.

# 08 SAFETY

The number of total crashes and severity of crashes has increased steadily over the last five years, as shown in **Figure 36**. From 2016 to 2018, there were 14 total fatalities. The majority of injuries and fatalities occurred on large arterials, with US-287 having a majority of the fatalities. **Figure 37** shows the main types of crashes. Rearends were the most common types of crashes, at 40 percent of all recorded crashes, with broadside as the next most common at 15 percent of all crashes.

**CRASH SUMMARY**

**Figure 36.** Summary of All Crashes

## TYPES OF CRASHES

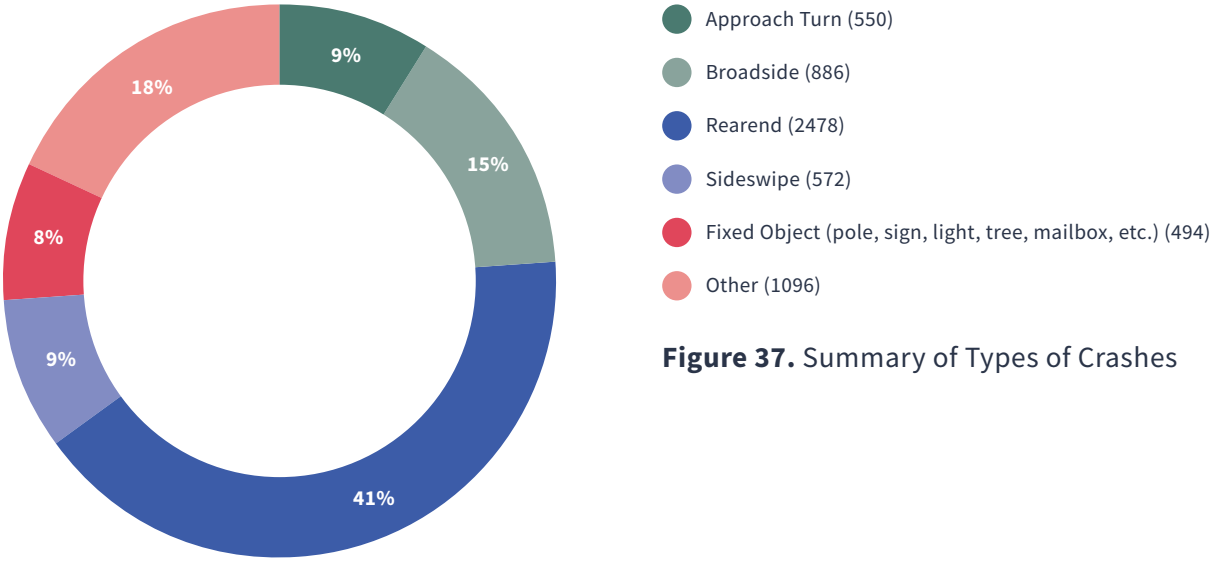



**Figure 37.** Summary of Types of Crashes

The map in **Figure 38** shows the areas with the highest density of crashes, weighted by severity (i.e. fatalities get more weight that injuries, which get more weight than Property Damage Only (PDO)). This map shows that the majority and most severe crashes are along arterial roadways—US-34 and US-287 in particular. There is a high density of crashes at the intersections of US-287 and 1st Street as well as US-287 and US-34. This concentration of crashes along these roadways is likely due to high speeds and traffic volumes.

## TRAFFIC CRASHES, 2013 - 2017

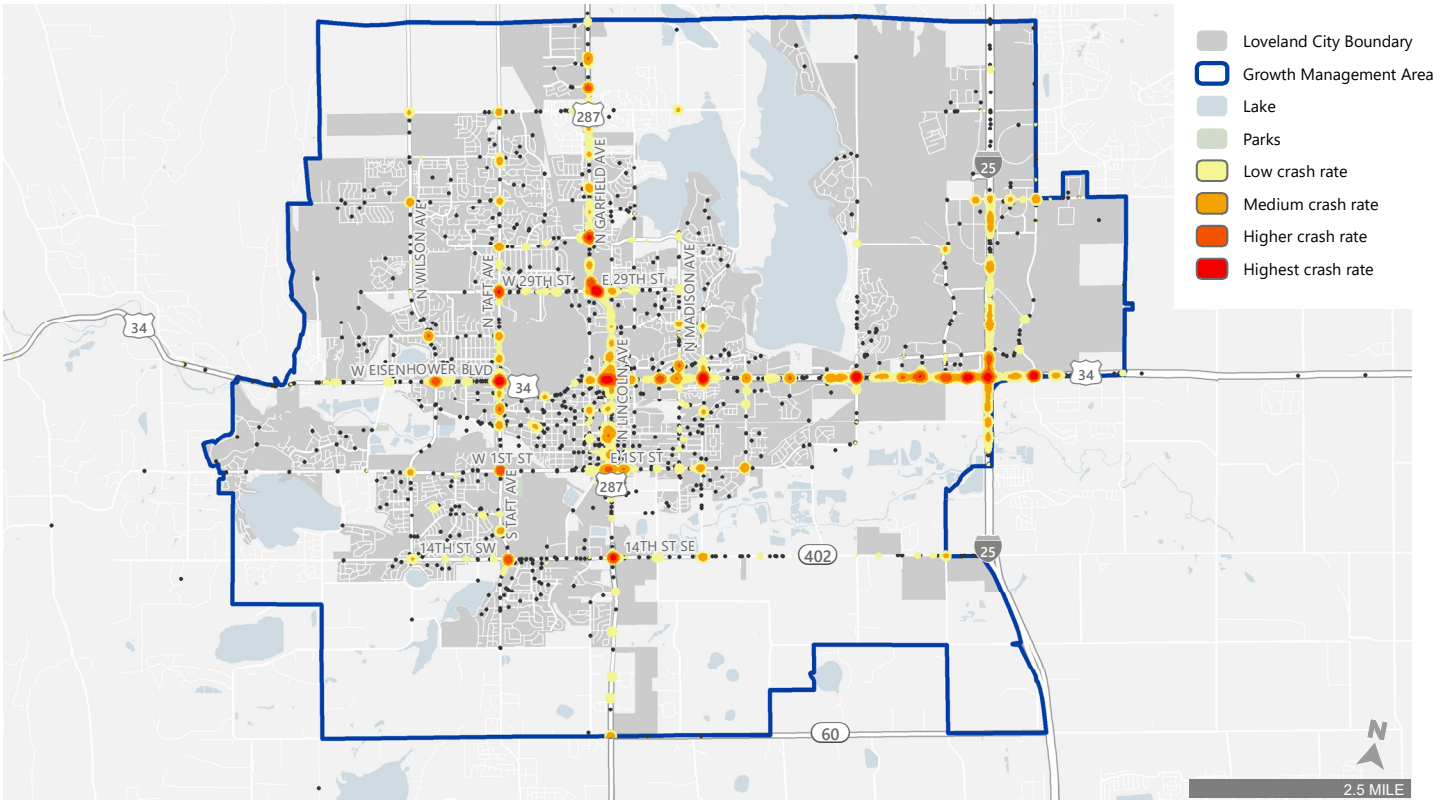



**FIGURE 38:** Traffic Crashes, 2013 - 2017

Between 2013 and 2018 there were 59 pedestrian-involved crashes and 179 bicyclist-involved crashes. Three of the pedestrian crashes and one bicycle crash resulted in fatalities. Pedestrian crashes have been steadily on the rise for the past six years, with a total of 5 pedestrian-related crashes in 2013 to a total of 20 crashes in 2018. The severity of crashes has also increased from 2013 to 2018. While greater in overall number, bicycle crashes consistently occur, with approximately 30 crashes per year. **Figure 39** shows the trends of bicycle and pedestrian crashes by severity from 2013 to 2018.

**BICYCLE & PEDESTRIAN CRASHES**

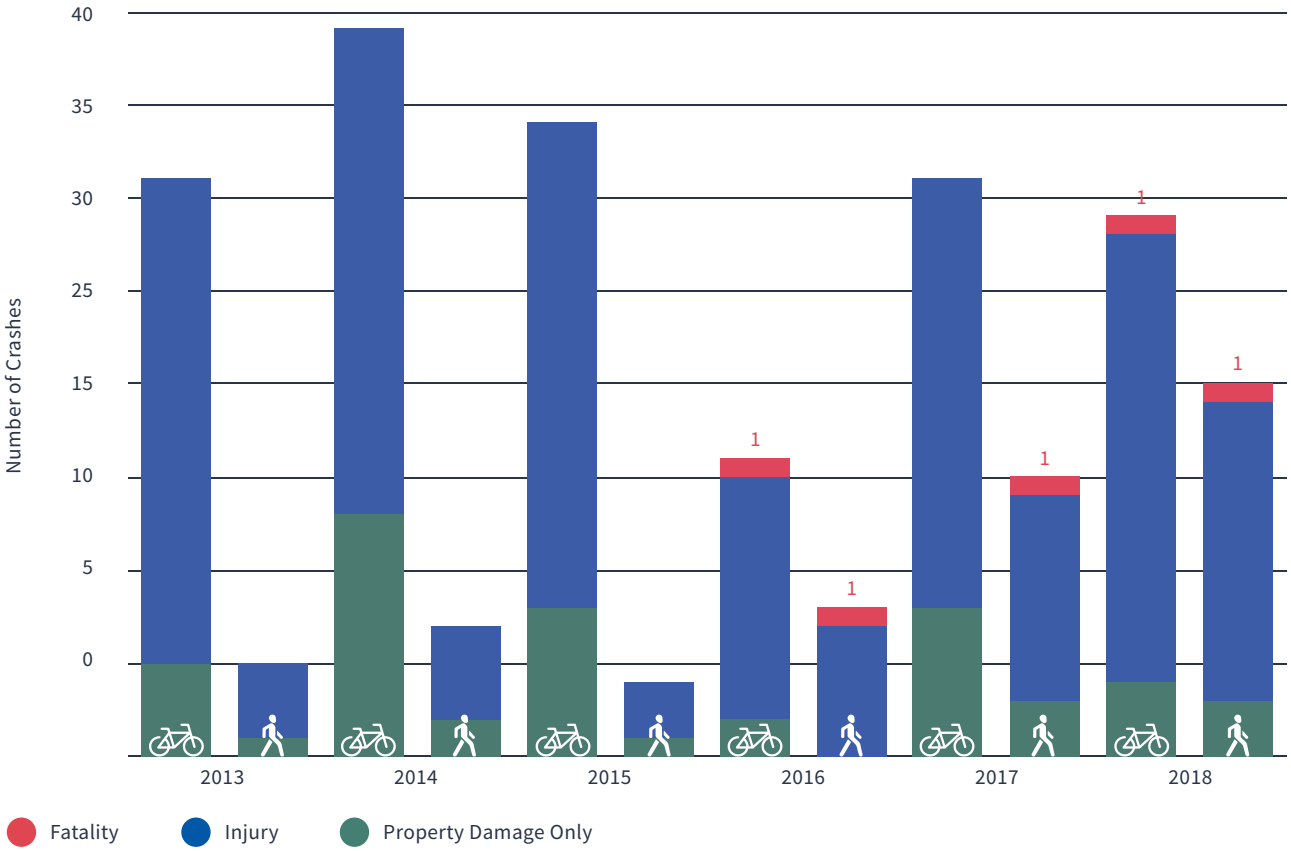



**Figure 39.** Summary of Bicycle and Pedestrian Crashes

SALE
15%

# 09 ENVIRONMENT

Natural features and their prospective impacts to the transportation system will be considered as part of the Connect Loveland planning process. Areas of concern include Boyd Lake and the Big Thompson River, both of which are adjacent to shared-use transportation facilities that could be impacted in the event of flooding.

The various bodies of water throughout Loveland create natural barriers to travel and present challenges for connecting a growing community, as shown in **Figure 40**. Loveland cannot create a true street grid due to these barriers. Some major roadways dead end at bodies of water, creating indirect travel routes. In addition, Loveland is crossed by US-34 and US-287, which bisect the city into four quadrants.

Loveland's location on the eastern edge of the Rocky Mountain foothills provides favorable topography for walking and bicycling. Bicycle trips throughout the city involve minimal elevation change, making Loveland an ideal cycling environment for a range of riders.

## LAKES AND RESERVOIRS

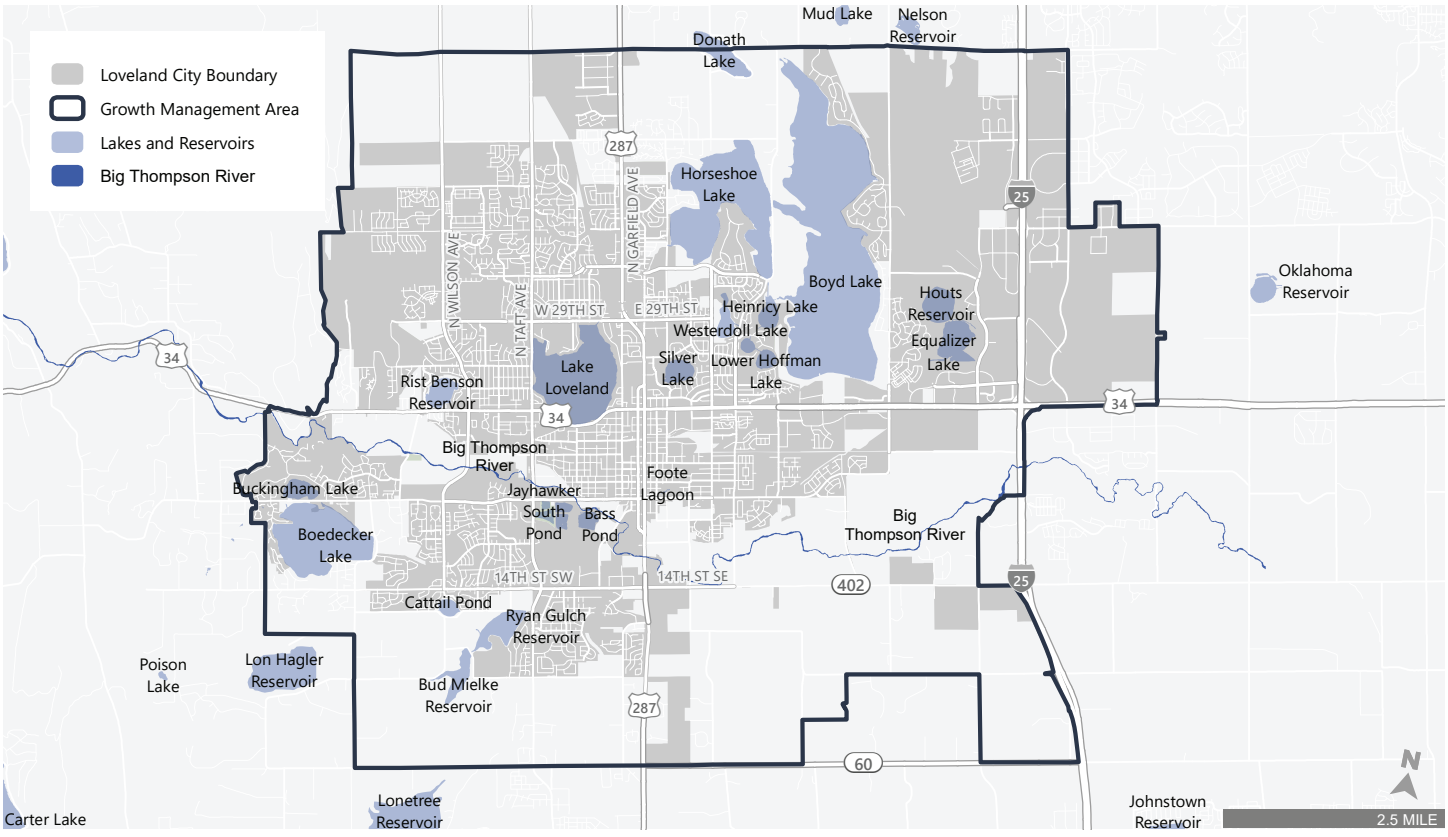



**Figure 40.** Lakes and Reservoirs

April 2019
Existing Conditions
Fehr & Peers

# Future Loveland

## Introduction

*Connect Loveland* provides guidance for meeting the future travel needs of residents and visitors. *Connect Loveland* has its origins in existing city and regional plans but expands on those efforts to consider new trends, technologies, and travel. *Connect Loveland* will address a variety of factors, including:

- Ensuring the transportation system supports forecasted population and employment growth.
- Enhancing the biking, walking, and transit experience.
- Reducing the number of miles driven by each resident (this concept is referred to throughout as VMT or Vehicle Miles Traveled).
- Prioritizing transportation investments.
- Ensuring transportation in Loveland is equitable by providing comfortable, safe, and accessible options for all users.

The existing transportation planning efforts Loveland has undertaken and the range of emerging trends that will influence the transportation network will help shape *Connect Loveland* into an actionable plan for Loveland's transportation future. *Connect Loveland* will validate whether existing City policies, programs, and planned projects still have value for the City and identify new projects to adapt to a changing transportation environment.

This report outlines expected changes for Loveland by 2040 in the areas of land use, demographics, employment, and travel trends. The report summarizes the currently planned projects and describes how they do or do not align with land use, demographic, economic, and travel trends. Additionally, the report describes new trends and technologies that will influence the ways Loveland residents and visitors travel.

# 1. Loveland 2040 Demographics

The North Front Range Metropolitan Planning Organization (NFRMPO) produces demographic forecasts for the region. These forecasts are developed for transportation planning purposes to help estimate impacts of forecast growth on roadway capacity and needs. The NFRMPO's 2012 forecasts were used as a base forecast for the City and total growth control totals for the City and its Growth Management Area. Adjustments to the traffic analysis zone (TAZ) level estimates were made for the transportation plan to reflect development trends and conditions that have changed since the forecasts were developed. As well, adjustments to TAZ level estimates were utilized to help test scenarios for potential transportation options analyzed during the plan process.

## Population and Households

The population of the City of Loveland is expected to grow over the next two decades. The City's population of approximately 75,000 residents is forecast to grow to 108,000 residents by 2040 (**Figure 1**). It is estimate that the City's growth management will grow to 49,400 total households in 2040. The forecast growth in households is approximately 16,000 new households by 2040, which is an average of 700 households per year. The forecasted rate of household growth for the GMA is slight decrease in the annual amount of growth for the community, as the City of Loveland grew by an average of 800 households per year from 2000 to 2017.

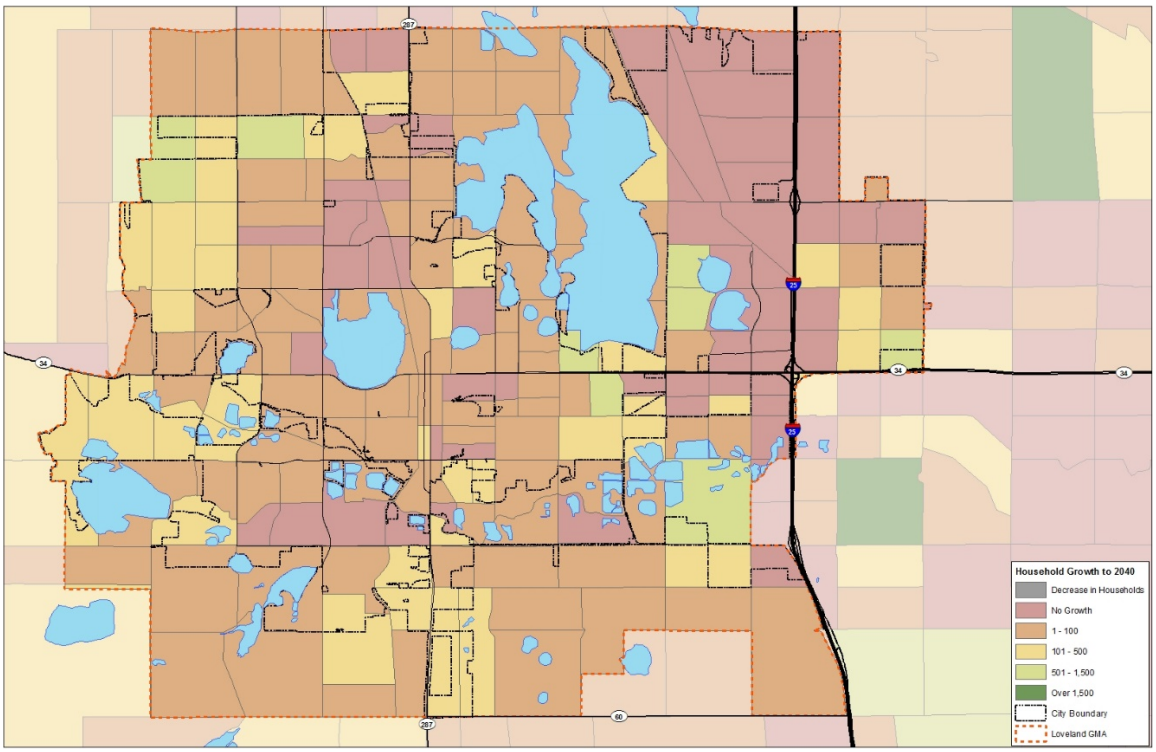



**Figure 1: Forecasted Household Growth by 2040**

## Employment

The City of Loveland has an estimated employment base of nearly 42,000 jobs. The City's growth management area is estimated grow to a total of 74,000 jobs the year 2040, which is an increase of 32,000 jobs by 2040 (**Figure 2**). The NFRMPO forecast annual job growth of 1,300 jobs from 2012 to 2040 for the City's GMA. Employment growth in the City of Loveland has been over 1,500 new jobs per year from 2010 to 2015 according to the US Census Longitudinal Employer-Household Dynamics (LEHD) data.

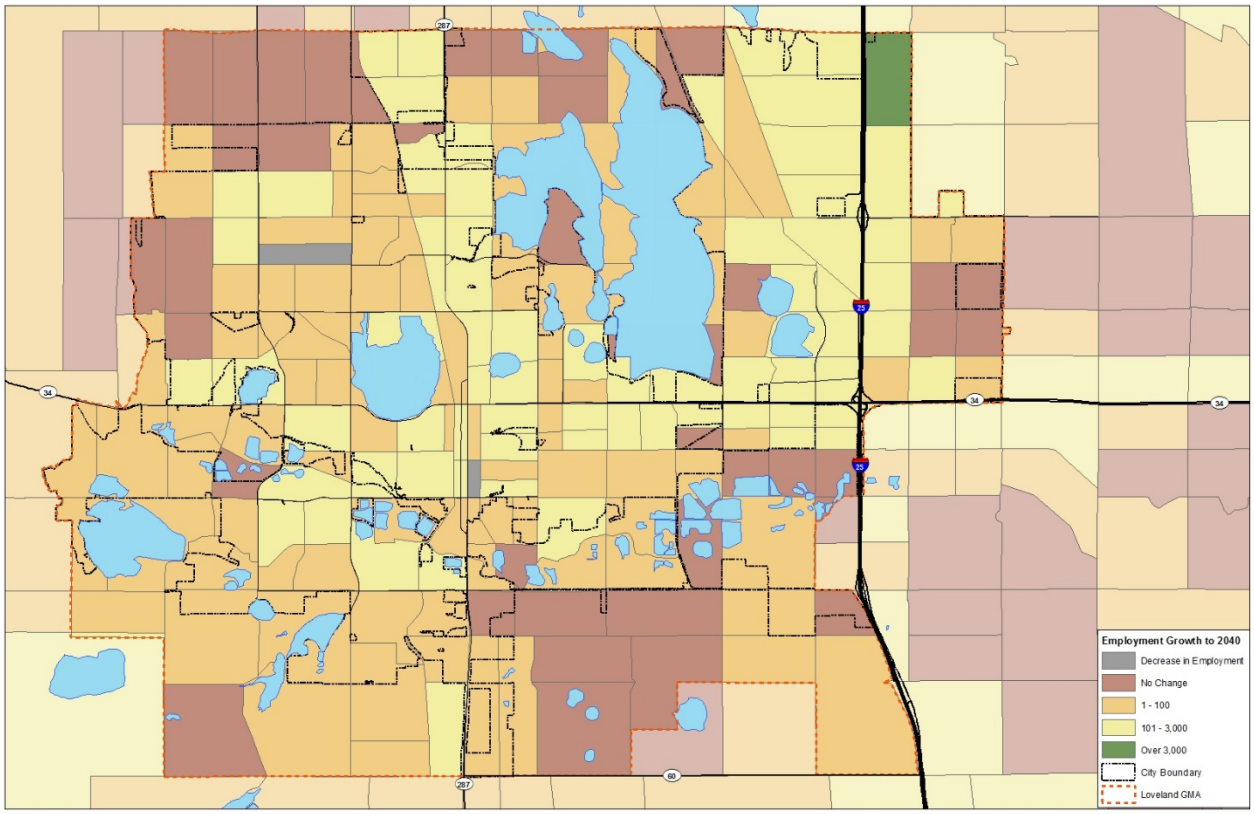



**Figure 2: Employment Growth by 2040**

# 2. Future Trends Impacting Loveland

There are a number of national trends that are likely to impact future land development in Loveland. Land development and growth patterns influence travel choices, traffic patterns, transit ridership, and bicycle and pedestrian activity. These changing trends require a fresh look at planned transportation projects and new ideas to accommodate future travel demands.

## National Housing Development Trends

The U.S. housing market is changing as a result of broad demographic and economic shifts. The main factors highlighted in this section relate to housing affordability, demographic trends, and housing preferences.

### Household Affordability

The cost of living is becoming an issue of increasing concern for most communities throughout the US. Housing costs, driven by increases in the cost of land, materials, and labor, have grown by 63% since 2000 while the median household income has only grown by 35%, which is slower than the rate of inflation. Many American households have to pay more for housing with declining income. As a result, consumer preferences and choices are changing based on a necessity for affordable housing types and locations. This affordability trend is most pronounced in rapidly growing areas, such as the Colorado Front Range.

### Demographics Trends

The Baby Boom and Millennial generations are the two largest demographic segments influencing the housing market, accounting for 41% of the U.S. population. In Colorado, the Millennial generation is the largest generation and makes up a larger proportional share of residents than found nationally.

#### Baby Boom Generation Travel and Community Preference Survey

As Baby Boomers reach retirement and enter the senior age group, their housing preferences and transportation needs are shifting. A notable trend nationally for Baby Boomers is aging in place. Since the Baby Boomer generation was a primary driver of major suburban expansion between the 1980s and 2000s, many of these aging-in-place seniors will be in low-density single-family neighborhoods that have sparse transit coverage. As Baby Boomers transition into retirement, surveys have identified a number of travel and community preferences that are relevant to *Connect Loveland*:

- Safe and Well-Maintained Streets and Sidewalks – Based on an AARP survey, seniors place a high value on their community having maintained streets and sidewalks that are easy to navigate and safe for use as a driver, pedestrian, or bicyclist.
- Community Features – Seniors highlight the desire for convenient access to quality hospitals and health facilities, parks, and shopping destinations (e.g. grocery stores).
- Shared Mobility – Seniors cited a general awareness of new transportation technologies and services, such as ride-hailing companies, and a desire for services to help them access day-to-day goods and services. However, many seniors either have feel no immediate need for these services

or have concerns about security related to these services. In addition, this cohort may be slow adaptors to new technology or mobility services.

### Housing Preferences

At least two national housing surveys indicate a likely shift in demand toward denser single household attached housing types, such as townhomes and row houses, in walkable, bikeable, or transit-accessible locations. This change in demand is a shift away from lower density single-family neighborhoods. These preferences contrast with the trends in housing development for much of the last half of the 20th Century and more reflect the preferences of Millennials.

In 2011, EPS and the Sonoran Institute completed a study titled *Reset: Assessing Future Housing Markets in the Rocky Mountain West*. A major finding was that buyers would pay more per square foot to live in neighborhoods built in a style defined as compact walkable development (CWD), 18% more on average before the recession. These areas also held their value better than conventional neighborhoods during the recession, with prices per square foot 12.5% higher on average (**Figure 3**).

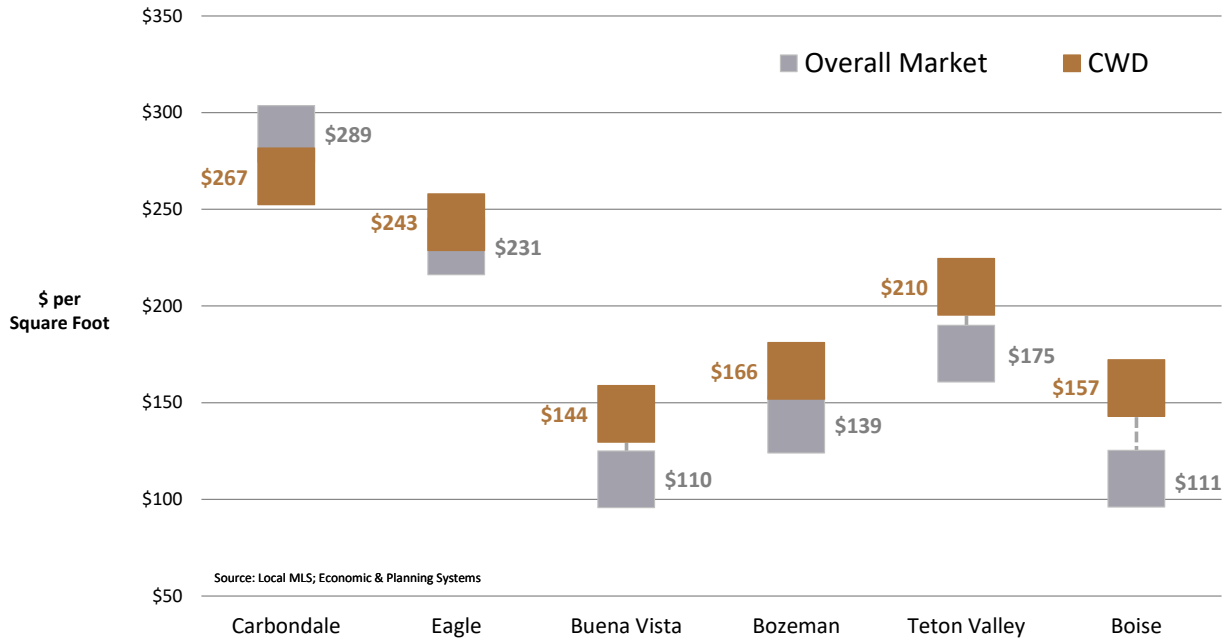



**Figure 3: Price per square foot for compact walkable development, 2011**

## Non-Residential Development Trends Conditions and Trends

National trends impacting the growth and development of employment spaces are summarized in this section. Specifically, trends related to office, retail, and industrial space are documented.

### Office Development

The following trends related to office development are summarized to illustrate future impacts on Loveland.

- Office Park Evolution - Nationally, office development is moving away from the single use, suburban office park or corporate campus to more mixed use, centrally located, and often transit-accessible locations in the core cities of major urban areas.
- More Efficient Office Space - Businesses are leasing less office space per person than in past years. Technology has reduced the need for space, and new workplace designs are more efficient. This slows the construction of office space even if office employment is increasing, compared to years past.
- Co-Working Space - Co-working space is a new type of office in which tenants rent desk space in an area shared with other workers and firms. They are popular with small new firms, which can be in any field including professional services, creative industries, and technology. These office formats are also attractive to larger employers that set up "remote desks" to accommodate the desire for shorter commutes while still maintaining an office setting. Co-working spaces are becoming more common in major and mid-sized cities and are being created Loveland given its attractive location within the greater Front Range area. These spaces are still a small portion of the overall office market.
- Loveland is increasingly becoming a hub of medical services in the Larimer and Weld County area. Medical uses are concentrating in particular around the I-25 and US-34 intersection. As the Baby Boomer generation ages, the demand for medical office space is expected to increase, and medical facilities tend to cluster together around major transportation facilities.

## Retail Development Trends

The commercial retail industry has shifted greatly over the last 10 to 15 years, impacted by the growth of internet shopping, declining brick and mortar store sales, retail chain consolidations, and changing consumer preferences. Collectively, these trends are impacting store sizes and reducing the overall demand for new retail space locally and nationally. The following trends are likely to impact Loveland in the future:

- The Rise of E-Commerce - Between 2001 and 2015, total online retail purchases (excluding auto related) grew from approximately $29 billion to $310 billion, an 18.4% annual growth rate.
- Diverging Retail Demand - Changes in spending patterns are also affecting the amount and mix of retail space. Consumer spending is split between low-cost, high convenience retail options—where the internet is making significant impacts—and more experience, community, locally oriented retail options—where brick and mortar stores still have an edge.
- Store and Chain Consolidation - Over the past five years, there have been nearly 200 retail chain bankruptcies. In 2017, CNN Money reported that there were 5,300 store closing announcements through June 20 compared to 6,200 (through the same period) in 2008 during the Great Recession—the worst year so far for store closings. There are fewer stores in the market now, making it more difficult to find tenants for new retail developments, as well as increasing vacancies in existing centers as large blocks of space are vacated by store brands that no longer exist. Remaining chain

stores are concentrating around areas with convenient auto access and high visibility, like the I-25 corridor.

## Industrial Development Trends

The industrial development patterns are shifting significantly in reaction to increase in technology and the internet. The shifts are having both positive and negative impacts on the economic health of communities. The following trends were identified:

- Growth of Logistics - As e-commerce has driven down demand for retail space, it has at the same time driven up demand for industrial development supporting its growth. Logistics and distribution-oriented employment sectors (transportation and warehousing, wholesale trade) and industrial development are the largest drivers of new industrial development. Logistics facilities tend to cluster on major highways at the periphery of the major metro areas. The I-25 corridor south of Loveland has seen rapid growth in these uses in recent years.
- Middle Skill Jobs - Traditionally, jobs within industrial oriented businesses are an important source of "middle skill" jobs—jobs that don't require a college degree but rather some form of specialized training. Automation is reducing employment in industrial oriented employment sectors and leaving fewer middle skill jobs. Loveland has traditionally had a concentration of middle skill jobs in manufacturing. These employers will look for centralized locations with the greatest access to the workforce in the future, which will increase the importance of access of residents to major employment hubs.

## Impacts on the Future of Loveland

The economic, demographic, and land use changes occurring in Loveland and Larimer County mirror many of the changes occurring nationally. Some national housing trends indicate an increasing preference for compact, walkable communities, which could help reduce the need for driving. However other trends, like the sharply increasing cost of housing and the increasingly regional nature of the Northern Colorado economy, suggest personal vehicles will continue playing a significant role. So, what does this mean for the future of transportation in Loveland? As land use development patterns change both in terms of where development occurs and the types of development being built, the travel patterns of residents, visitors, and employees in Loveland will also change.

Additionally, changing preferences in how and where people shop has a strong influence on travel. Several key transportation implications for Loveland are:

- The City's residents are older on average compared to the State and Countywide population average. The numbers of family households and households with children have decreased significantly over the past two decades, illustrating the aging in place of many existing residents of Loveland, especially in older portions of the community. As Baby Boomers continue to age in place, their ability to operate a car will decrease over time. While future technologies like autonomous vehicles could mitigate the inability for seniors to drive, there is likely to be increasing demand for senior mobility services in low density areas, which tend to have low service levels and high operating costs.

- Aging and retiring Baby Boomers will tend to reduce AM and PM peak hour commute trips as they remain in their homes and are not replaced by younger working-age households. Midday travel could increase with this age group. Overall, seniors tend to have lower VMT per capita than younger households.
- The mix of new residential construction in Loveland in recent years has become more evenly split between single-family and multifamily. However, there has been a concurrent decrease in townhomes and "middle density" construction types that offer an in-between option. An increasing desire and financial need for more multifamily housing is evident in construction trends. A greater diversity of housing types will likely be desired by older residents who want to remain in the community and from new, younger residents moving to Loveland for work or for the quality of life. Lack of diversity may also exacerbate housing affordability, which tends to push lower-wage workers farther from their jobs, increasing VMT and traffic congestion in Loveland.
- There has been an increase in housing development in the community in recent years as the region has recovered from the Great Recession and is growing economically. However, the rate of housing production in the City of Loveland is still lower than experienced in the late 1990's and early 2000's. Reduced housing development in an area that is otherwise increasing in population will tend to result in less-affordable housing and increases in VMT and traffic congestion caused by employees who must commute further between available jobs and affordable homes.
- The regionalization of the northern Colorado economy has led to more residents living in one community and working in another community in the Larimer and Weld County area. As employment opportunities grow in the region while housing costs continue to increase, there will be increasing demand for people to live in Loveland and commute to major job centers to the south. This trend could increase demand for regional transit services, VMT, and potentially, traffic congestion in Loveland.
- The regionalization of the economy is also impacting many other communities in the North Front Range. This pattern will result in additional traffic and transit trips along the I-25 corridor. The growing logistics industry could also increase truck traffic on I-25. As this regional traffic grows, some local and even regional trips throughout the entire network, increasing traffic congestion in Loveland.
- Growth in e-commerce will reduce overall travel to retailers, which could reduce VMT. However, as traditional brick and mortar stores tend to be drawn to the I-25 corridor, travel to these stores from existing residences in Loveland could increase travel on the US-34 corridor as well as overall VMT.
- E-commerce growth may also result in less PM peak hour travel as deliveries tend to occur during the midday, however it is increasing the number of trips at non-traditional times including evenings and weekends.
- As offices add more workers per square foot, they will tend to generate more vehicle trips and parking demand per building than in the past. This trend could be offset by an increasing tendency for younger workers to commute by transit, bike, or walking, but these modes are only viable where adequate infrastructure and service exists resulting in the need of non-automobile infrastructure and services in both residential and employment areas.

# 3. Future of Transportation in Loveland

The existing conditions analysis for *Connect Loveland* found that the majority of trips in the City are taken by single occupancy vehicles, vehicle travel times are relatively stable throughout the day on major corridors and increases in traffic volumes over the past few years have been localized. Additionally, signalized intersections across Loveland operate without significant delays. However, public perception does not necessarily align with this finding. Nearly 40% of the 2018 Quality of Life survey respondents indicated they cannot travel by car to locations in Loveland with minimal delays.

*Connect Loveland* will face the challenge of bringing a more robust multimodal network to a community where car travel is currently predominant. However, as the region grows and develops further, single occupancy vehicle travel may not continue being reliable and community attitudes towards car travel may grow more negative.

The following section on the future of transportation in Loveland discusses planned projects for improving multimodal connectivity, how transit service locally and regionally might shift, and emerging trends that will influence the *Connect Loveland* planning effort.

## Vehicle Travel

### Traffic Growth

The North Front Range Metropolitan Planning Organization (NFRMPO), in consultation with member communities, maintains a travel model for the region. Based on land use growth forecasts (including assumptions about where new jobs, housing, and commercial development will occur) as well as planned transportation investments, the model forecasts total vehicle miles traveled (VMT) in Loveland to increase by 70% between 2012 and 2040. Not all traffic growth can be attributed to population growth alone. VMT per capita is expected to *increase* by 16% over the same time in response to more spread-out land uses and longer trips. This assumption is consistent with the land use and demographic trends described in Chapter 1. Without interventions in land use and transportation planning, this growth will increase congestion on the City's street network.

It should be noted that the model assumes mode share will remain about the same in the future. The model also does not account for emerging technologies and other trends affecting travel behavior as well as more recent plans and polices put forth by the City that may have a significant impact on mode choice and VMT in the future. These factors were explored with stakeholders part of a workshop in July 2019 to better understand how they will impact future VMT in Loveland. More is discussed in the TrendLab+ Section.

### Regional Travel Patterns

Land use growth, transit investments, demographic changes, and the regionalization of the area economy (as discussed earlier) also impact regional travel patterns. Overall growth will contribute to an increase in regional trips into and out of Loveland, with traffic volumes increasing in some locations more than others. The NFRMPO model projects that between 2012 and 2040 there will be a 60%

increase in trips between Loveland and Fort Collins, more than doubling of trips between Loveland and Greeley, and a three-fold increase in trips between Loveland and the Central I-25 sub-region (defined as east of I-25 and west of Greeley between Mead and SH 14).

# Future of Biking and Walking

## Trends

Nationally, the amount of biking and walking has generally stayed level as a share of overall travel for the past five years. However, areas that are investing in walking and biking infrastructure are seeing increases in these types of activities while areas that are not are seeing decreases, in part because of an increase in auto ownership in lower income neighborhoods.

While biking and walking mode shares have not changed substantially over the past several years, the number of crashes involving people who walk and people who bike resulting in serious injury or fatality has increased. While further study is needed, distracted driving and distracted walking are often cited as potential reasons for the increase in the serious crash rates.

As described earlier, the NFRMPO model does not predict major changes in walking and biking in the future. However, it should be noted that the model is not detailed enough to identify how improvements in biking and walking infrastructure or how land use density patterns could influence people's choice to walk or bike. It is well documented that a robust network of connected bicycle facilities and compact development with grid-like pedestrian networks increase the likelihood that people will bike and walk to work, shopping, and for recreation or exercise.

## Vision and Goals

The vision for the 2012 Bicycle and Pedestrian Plan is to *"plan a safe, efficient, continuous, coordinated and convenient multi-modal transportation system that serves the needs of the community now and establishes the foundation for a transportation system that is sustainable for future generations.*" The 2012 Plan works to do that by identifying strategies and activities that increase the use, safety, and convenience of biking and walking within and around the City of Loveland. Similarly, the vision of the NFRMPO's 2016 Non-Motorized Plan is to achieve a fully connected trail network that "*provides additional transportation choices, enhances access to transit, complements community centers, and empowers people who do not have access to or cannot operate a motor vehicle*."

Given the trends described earlier, Loveland and the region's active transportation visions continue to be relevant from both a quality of life perspective and when considering the potential to provide options and reduce reliance on automobile travel. *Connect Loveland* will refine these previously adopted visions based on public and stakeholder input, changes to the community, and forecasted growth. This new vision will play a valuable role in guiding project recommendations and prioritization.

There are a number of benefits to investing in a multimodal network that have guided the goals from previous planning efforts. Some of the goals from the 2012 Bicycle and Pedestrian Plan and NFRMPO's 2016 Non-Motorized Plan, like promoting bicycle and pedestrian safety, will be carried forward into *Connect Loveland* since efforts in areas like roadway safety will never lose importance. Other goals, like developing a "complete streets" network will be updated to reflect the more recent concept of a "layered network," which views active transportation planning more holistically. Rather than ensuring

individual streets are safe for bicycling and walking, layered network planning focuses on identifying low-cost interventions that can make a set of local streets serve a variety of walking and biking trips. Layered network planning also allows for easier integration with updated goals for transit and vehicle travel by helping to categorize some streets as bicycle and pedestrian focused while other streets can prioritize targeted transit improvements.

## Proposed Infrastructure

### Pedestrian Network

The 2012 Loveland Bicycle and Pedestrian Plan recommends a continuous and high comfort pedestrian network, shown in **Figure 4.** Pedestrian projects in the 2012 Plan include filling in missing sidewalk segments, intersection improvements, and widening of existing sidewalks. Building out the pedestrian network in Loveland should continue being a City priority. *Connect Loveland* will provide a revised and strategic set of sidewalk improvements that will focus on providing comfortable walking infrastructure that connects to areas of the City with high potential for more walking trips. *Connect Loveland* will update this map of existing and proposed pedestrian infrastructure in **Figure 4**, including both sidewalks and crossings.

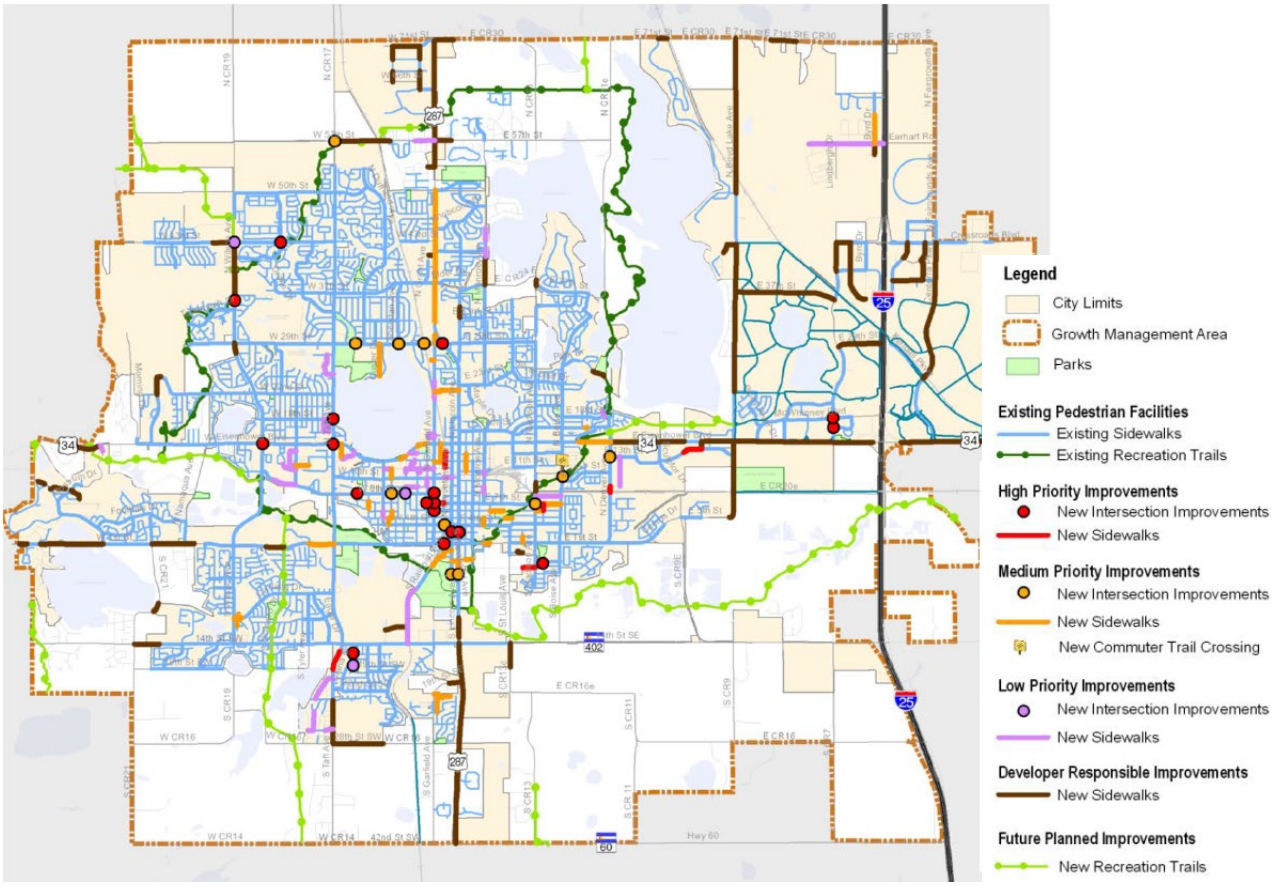



**Figure 4: 2012 Pedestrian and Bicycle Plan Proposed Pedestrian Map**

### Bicycle Network

The 2012 Loveland Bicycle and Pedestrian Plan recommends a connected and intuitive bicycle network, shown in **Figure 5.** The 2012 Plan emphasizes building on the existing trail network to provide increased

access to destinations, upgrading existing bike facilities, and adding on-street bike facilities on new streets to create a denser, more connected network. High priority biking projects provide access to schools, address safety challenges, and provide connections at key gaps. *Connect Loveland* will build upon these efforts and incorporate new approaches to bicycle planning. For example, planning low-stress facilities that riders feel comfortable and safe using has become prioritized over implementing bike lanes on the most direct route between major destinations. *Connect Loveland* will update the map of existing and proposed bicycle infrastructure in **Figure 5**, including both on-street facilities, trails, and crossings.

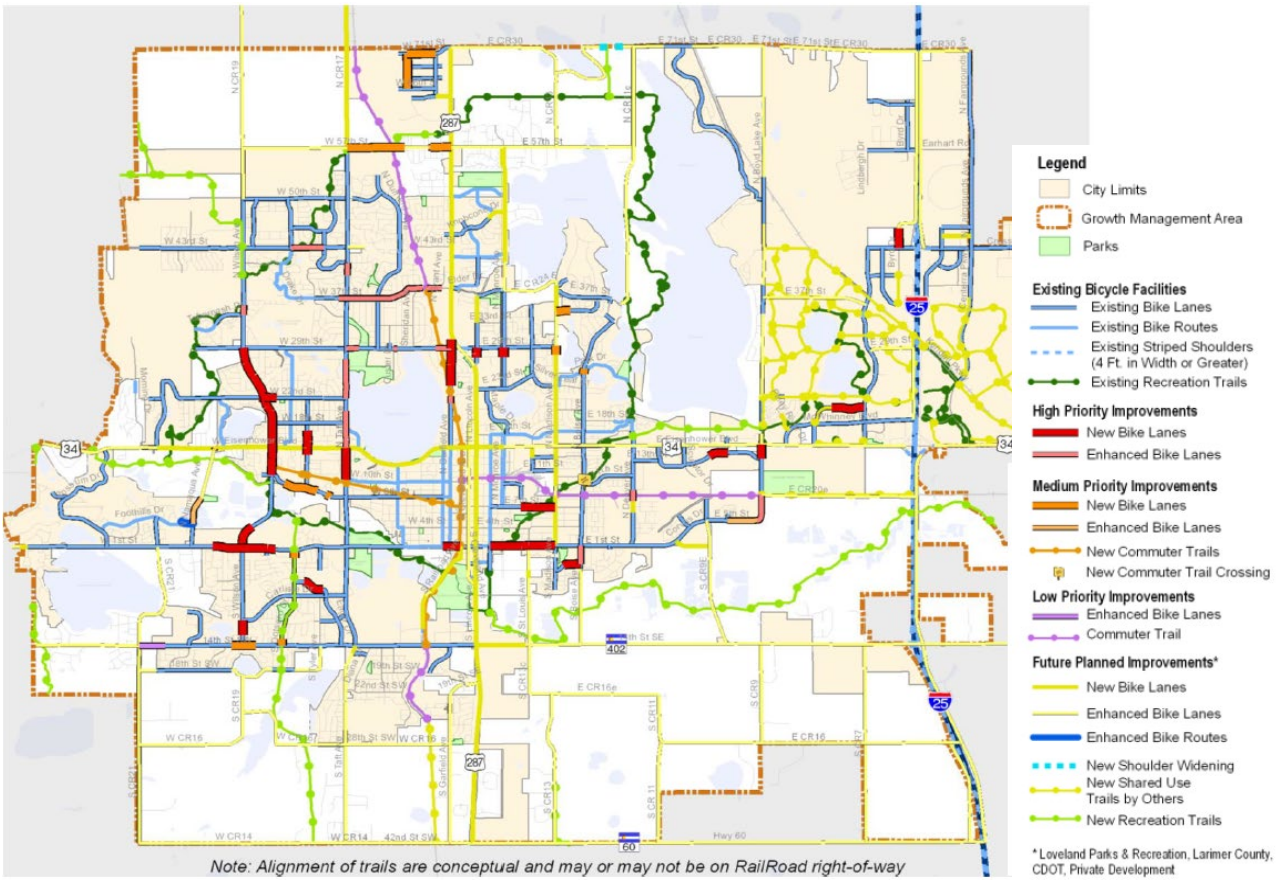



**Figure 5: 2012 Bicycle and Pedestrian Plan Proposed Bicycle Map**

## Regional Corridors

Of the 12 corridors featured in NFRMPO Non-Motorized Plan shown in **Figure 6**, six will enhance regional access for Loveland's active transportation users. Of the six, two have been completed through Loveland – the North Loveland/Windsor Trail (Corridor 5) and the Front Range Trail (Corridor 7). *Connect Loveland* will consider how to better integrate the following planned corridors with the City's bicycle and pedestrian network, and will consider which corridors should be prioritized to serve Loveland:

- The Big Thompson River trail (Corridor 2) will be a 35 mile, east-west facility connecting the existing Loveland Recreation Trail to communities like Milliken and Evans, and will ultimately serve 15 schools.

- The Great Western/Johnstown/Loveland Trail (Corridor 4) will run 25 miles from Loveland to Eaton. It will follow the alignment of the Great Western Railroad and will serve as a connector to the rural areas in the northeastern portion of the MPO region.
- A 24-mile facility is planned to run along the BNSF corridor south of Fort Collins (Corridor 8). This trail will connect the downtowns of Berthoud, Fort Collins, and Loveland.
- To improve east-west bicycle connections, a 21.5 mile facility is planned to run along US-34 (Corridor 11). This trail will connect Loveland to Greeley.

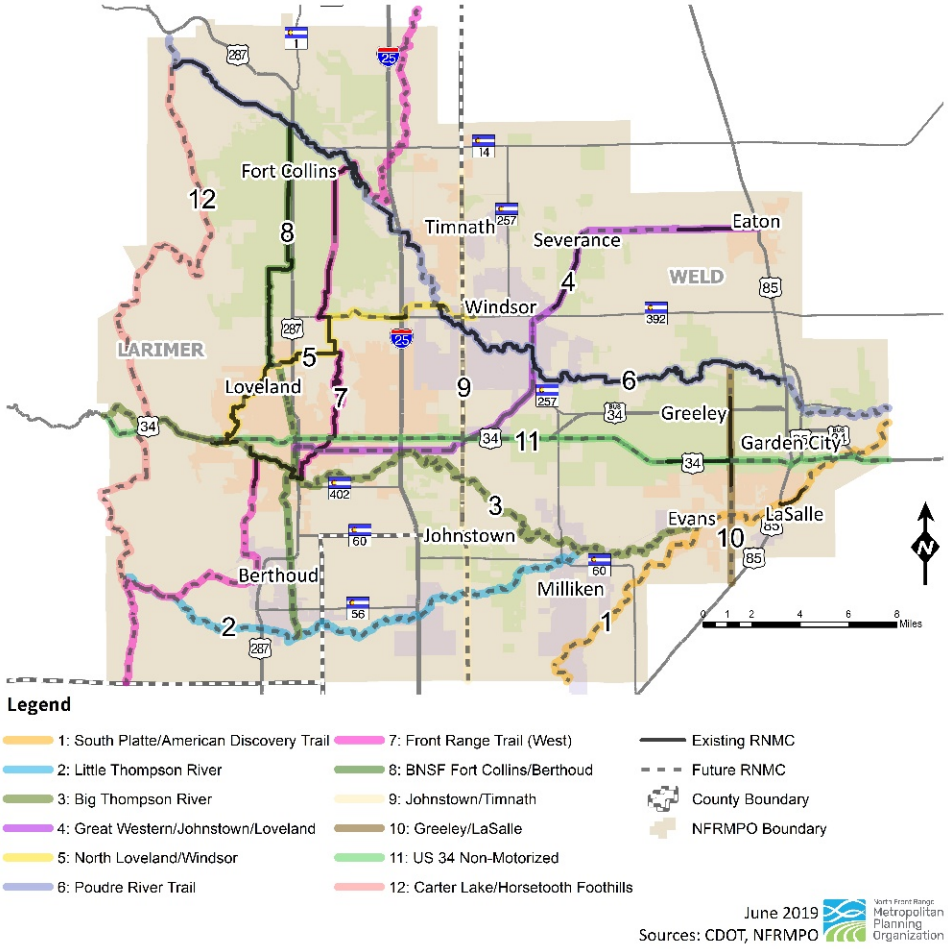



**Figure 6: NFRMPO Regional Non-Motorized Corridors**

## Proposed Policies and Programs

In addition to infrastructure improvements, previous plans recommend a number of policies and programs to promote biking and walking, educate on safe behavior, and provide low-cost supplements to improved infrastructure. These policies and programs range from increased code enforcement for sidewalk maintenance to educational programs. During the *Connect Loveland* process, existing policies will be reviewed and streamlined. The final plan will provide a compact set of policies designed to support Loveland's active transportation goals. The new policies will include corresponding performance measures for helping to monitor whether the new policies are meeting City goals. In addition, an updated set of programs will be included in *Connect Loveland*. These programs will reflect current best

practices for achieving higher mode shares for active transportation while also improving multimodal safety outcomes.

### Potential Barriers or Conflicts

Given the traditionally auto centric nature of Loveland, gaining community input and appetite for implementing active transportation projects will be critical to evolving Loveland's transportation system. Although infrastructure for biking and walking is traditionally less expensive than vehicular improvements, there is limited funding for transportation overall, so active transportation infrastructure will require a dedicated funding stream. Building on-street bicycle facilities may require additional right-of-way, narrowing vehicle travel lanes or reducing on-street parking. However, with the multitude of benefits that biking and walking offer—economic, environmental, and health—it is important for the City to prioritize these investments in infrastructure, policies, and programs in order to expand the transportation options for the community. *Connect Loveland* will graphically depict the benefits, costs, and potential trade-offs of an enhanced biking and walking system so that the public and decision makers can provide more informed input on this potential shift in how the City prioritizes transportation investments.

## Future of Transit

### Local Transit Ridership

Over the past five years, transit ridership has been on a steady decline nationally and in many Colorado communities. This trend in declining ridership was even more pronounced in Loveland with ridership decreasing by 29% between 2013 and 2018. However, ridership data from early 2019 shows that transit ridership on the City of Loveland Transit (COLT) may be starting to rebound in response to the route restructure made in late 2018 that increased frequencies and the directness of routes. The extent to which ridership on the COLT can continue to grow in the future (or starts to decline again) will depend largely on the following opportunities, challenges, and actions the City takes.

#### COLT Funding & Planned Investments

The 2009 Transit Plan outlined a phased approach to improving and aggressively increasing transit service levels over a 20-year period. The recent restructure followed some of the recommendations of that plan, including increasing frequencies and routes with two-way travel. The City also recently purchased land to construct a permanent North Transfer Center. Most of the recent improvements were made without increasing funding levels. Some level of increased investment will be needed over the next 20 years just to keep up with population growth. Fully implementing the 2009 Transit Plan will require a six-fold increase in transit funding or about four-fold increase in per capita transit investment (assuming population grows by about 50% as forecast).

*Connect Loveland* will verify whether the 2009 Transit Plan is still relevant, given the land use, demographic, and technological changes that will be influencing Loveland in the future. One point, however, is clear: incremental growth in transit funding will lead to incremental changes, or even a decrease, in transit ridership and mode share as disruptive technologies that fundamentally change travel behavior, like autonomous vehicles, become common. *Connect Loveland* will weigh the benefits of increased transit service (in terms of lower VMT, less traffic congestion, and greater mobility for those who can't drive or afford new transportation technologies) against the increased costs to provide this type of service.

## Land Use Growth Patterns

As new residential and commercial development occurs, particularly at infill sites along major corridors, new markets for capturing additional transit riders will emerge. There is clear research that shows the linkage between higher densities and increased transit ridership and lower VMT. *Create Loveland* envisions new commercial development concentrated at prominent intersections and nodes and along transit supportive corridors. Directing new and dense development along transit corridors (such as US-34, US-287, and SH-402) and allowing for higher density nodes will contribute to increased transit ridership. Low density developments on the edge of the City will be more challenging and less cost-effective to serve by transit, but *Connect Loveland* will explore emerging technologies to provide more cost-effective transit options for these parts of the City.

The success of transit in the future will heavily depend on investments to the pedestrian amenities, including walkways and street crossings within existing and future developments. *Connect Loveland* will align the transit network to the bicycle and pedestrian networks, which greatly expands the reach of transit to include areas beyond the core transit corridors.

## Changing Mobility

In the coming decade, a wider array of mobility choices will affect ridership on public transportation. Increased use of ride-hailing (Uber/Lyft) is having an impact on transit ridership in addition to driving. Upcoming technologies, such as autonomous vehicles, may also reduce ridership on public transportation while increasing traffic congestion. Without adaptation by the City, new technologies may further cut into the transit market, which will make it less cost-effective and therefore more challenging to provide public transit to those who cannot access these newer transportation technologies. On the other hand, leveraging autonomous vehicle technology in buses may also reduce the cost to provide transit by eliminating the need for drivers – as can leveraging ride-hailing services to provide transportation to low density neighborhoods or during non-peak hours. By supporting a variety of shared mobility options and innovations in transportation (see Emerging Transportation Trends discussion below), and strategically integrating new technologies with traditional transit, the City can continue to provide public transportation while increasing mobility options, particularly for those who do not have the financial or physical means to drive alone. The bottom line is that changing transportation technology will impact public transit, and cities must adapt to leverage these changes in the most positive ways. Public transit will continue to be the most energy and space efficient way to move large numbers of people, even with autonomous vehicles. *Connect Loveland* will identify where the primary public transit corridors should be located and identify where other technologies can be integrated to enhance mobility for Loveland residents, visitors, and employees.

## School Bus Changes

The Thompson School District recently cut back on the number of students eligible for school bus service. If this trend continues, more and more students will rely on public transit to get to and from school and this may affect COLT route planning and service levels during morning and afternoon school commuting hours. Additionally, students who shift to cars to get to school may increase congestion and parking challenges in and around schools.

## External Factors

External factors that have more to do with national trends will continue to impact transit ridership locally. The most prominent factors include the cost of gas and affordability of operating a vehicle. While

the City has less control over these factors, the more Loveland addresses other opportunities and challenges (as identified in this plan), the more resilient the system will be to fluctuations in external factors. Potential strategies include: identifying a sustainable source for increased transit investments, focusing land use development and urban design in a transit supportive manner, and adapting the transit system to leverage new technology.

## Regional Transit Changes

Transit service between Loveland and surrounding communities has grown significantly in the last decade. Most notably this has included expansion of the FLEX service along the US-287 corridor to Fort Collins, Longmont, and Boulder as well as the introduction of (and growth of) Bustang service provided by CDOT along the I-25 corridor to downtown Denver. Regional transit service to Loveland is expected to continue to increase in the future and play a larger role in regional commuting patterns. The growth in regional transit is an important consideration given the increasing regionalization of the area economy, as described in the first chapter. The continued dispersal of workers relative to employment areas and housing affordability issues in certain areas will increase demand for regional trips both in cars and in transit. *Connect Loveland* will identify regional transit corridors that have particularly strong travel growth in the future.

### FLEX

The 2009 Loveland Transit Plan, the 2019 Fort Collins Transit Master Plan, and the 2045 Regional Transit Element (RTE) supports increasing FLEX service north to Fort Collins and south to Longmont and Boulder to capture a larger share of the growing commuting population between these nearby cities. Expansion will be achieved through collaboration with Fort Collins and other communities to fund increased frequency and span of service to more time of day and days of the week. Over the years, FLEX has seen strong ridership performance, and this trend is likely to continue given regional employment and housing trends.

### Bustang to Denver

As part of the ongoing I-25 North expansion project, CDOT is investing heavily in infrastructure for transit service along I-25 between Fort Collins, Loveland, and Denver. Investments include a new bus stop in the median of I-25 at Kendal Parkway in Loveland (including an expanded park-and-ride and local bus connections) and an express HOT (high-occupancy vehicle/toll) lane that will significantly improve transit travel time. It is expected that additional service will be added to this route in the future and *Connect Loveland* will put Bustang investments in relative priority to other potential regional transit investments.

### Intercity Rail

CDOT has studied and recommended commuter rail connecting Fort Collins, Denver, and other northern Colorado communities, including an alignment via the existing freight rail line through downtown Loveland. According to the Statewide Transit Plan: *an alignment for a North I-25 Commuter Rail line is part of the Preferred Alternative included in the North I-25 Environmental Impact Statement (CDOT, 2011). The alignment would start at the North Metro Commuter Rail end of line and travel primarily along US-287 to the transit center in downtown Fort Collins with stops in Erie, Longmont, north Longmont, Berthoud, downtown Loveland, north Loveland, south Fort Collins (South Transit Center), and Colorado State University.* CDOT is in the process of initiating a Front Range Passenger Rail Service Development Plan and NEPA Study. The goal is to bring passenger rail along the Front Range from

Pueblo to Denver in the future. Implementation is heavily dependent on funding. If implemented, Loveland may be served by an alignment recommended by the Front Range Passenger Rail Commission along either the existing BNSF rail line through downtown or the I-25 corridor. Implications on parking, local transit connections, and potential station locations of both options for passenger rail alignment through Loveland will be explored as part of *Connect Loveland*.

### Other Regional Markets

Two new regional routes will likely serve Loveland in the future, including a new route to Greeley and Estes Park. Service to Greeley is recommended in the 2009 Loveland Transit Plan and both routes are included as part of the 2015 Statewide Transit Plan and the 2045 RTE. *Connect Loveland* will verify the need and priority of these new regional routes relative to other regional transit investments.

## Emerging Transportation Trends

New technologies are emerging daily that are fundamentally changing the way people think about moving around the community. Most of the emerging trends and technologies listed here are so new they were not considered as part of recent planning efforts in Loveland. However, some have already started to manifest in Loveland and other places around the world. Others are still in early development but will likely impact Loveland as they are more fully integrated into day-to-day mobility over the next 10-20 years.

*Connect Loveland* will identify potential policies, infrastructure, and plans to leverage these emerging technologies so they support, as oppose to detract from, the City's future mobility goals.

### Shared Mobility

Shared mobility—the shared use of a motor vehicle, bicycle or other low-speed travel mode (such as a scooter)—is an innovative transportation strategy that enables users to have short-term access to a mode of transportation on an as-needed basis. Shared mobility also provides a broader set of transportation options for users that reduce reliance on the private automobile, therefore mitigating congestion and carbon emissions. Shared mobility is a key component of Mobility-as-a-Service (MaaS), described later in this section.

### Bike/Scooter-Share

Bike share systems for both traditional and electric bicycles, and more recently electric-scooter share, have been a rapidly evolving trend over the last decade and have gained traction in communities both large and small worldwide, shifting the way communities plan for and provide transportation. Bike share and scooter share have the potential to increase mobility options available in Loveland in the future and have been used in other places to improve access to transit, particularly to and from express and regional transit. While bike share and scooter share currently do not exist in Loveland, many of the nearby communities, including Boulder, Denver, Longmont, and Fort Collins, have bike and scooter share systems in place. If Loveland were to introduce a bike share or scooter share program, it would be important for the City to work closely with potential operators to design a program that supports the communities land use and transportation goals, while mitigating potential issues. For bike share and scooter share to be successful, Loveland should also continue to invest in and improve bicycle and pedestrian infrastructure as well as ensure policies are up to date and clear on where and how future

users are to use these vehicles within the public right-of-way. Thus, a clear linkage between bike share/scooter share policies and the *Connect Loveland* bicycle network will be important.

### Car-Share

Car-sharing is a model for car rental, similar to bike share or scooter share, which allows users to pay for access to vehicles for limited periods of time. Car-share systems tend to have vehicles dispersed throughout a service area, and can be reserved through a few clicks on a web page or smartphone app. Loveland can support car-share in the future by permitting on-street parking, dedicating parking spaces for car-share providers, and providing incentives or requirements for new developments to provide car-share or dedicate space for car-share parking. The market viability of introducing car-share to Loveland will depend on the extent to which people can get around the city by foot, bike and transit and therefore chose not to own a car. Cities with poor transit and limited walking and biking are not viable for car-share businesses to operate.

### Ride-hailing

Ride-hailing, provided primarily by Transportation Network Companies (TNC), i.e. Uber and Lyft, is a newer mobility service that has exploded in popularity over the past few years. At its most basic level, ride-hailing is simply the modern version of a taxi using a web-based platform that matches passengers with drivers in a simpler and more intuitive way. Uber and Lyft are currently the TNCs operating within Loveland and the surrounding region. Locally, riders can use a service called zTrip, which provides on-demand taxi style service in Northern Colorado using both sedans and wheelchair accessible vehicles. zTrip allows riders to book trips through an app.

Nationally, TNCs/ride-hailing represent the fastest growing transportation mode. Overall, ride-hailing presents some mixed opportunities for Loveland. Ride-hailing provides a niche in the travel market for many trips: evenings and weekends when transit does not operate; travel with bulky items; social travel; and more. Ride-hailing also can help to reduce the risk of impaired driving by providing an easy way home for people who shouldn't be driving. On the other hand, excessive use of ride-hailing can lead to increased VMT, energy use/greenhouse gas emissions, traffic congestion, and crowded curb spaces and loading zones. Ride-hailing is also not a viable transportation mode for some low-income households, outside of occasional/emergency use, so TNCs cannot be relied on for basic transportation services.

Because the vast majority of trips in Loveland today are made by driving, the risk for increased VMT from ride-hailing is small. However, as Loveland grows in the future and makes investments in the pedestrian, bike and transit network the City may need to work more closely with TNCs to ensure that ride-hailing is part of the mobility environment, and does not detract from investments in the multimodal network. Some potential future strategies to balance the pros and cons of ride-hailing are provided later in this document.

## Curbside Management

As TNC's and delivery trucks (driven by increases in e-commerce) increase in popularity, they also increase demand for curb space through pick-ups and drop-offs. Without designated curb space and enforcement of pick-up and drop-off zones, TNC and delivery vehicles can block travel lanes, conflict with bicyclists and pedestrians, double park, or block bus stops. This can result in safety conflicts and operational inefficiencies for private autos, freight, and transit. Curbside management may be something the City will need to consider downtown in the future and *Connect Loveland* will provide

guidance and policy templates that the City can implement when the timing is appropriate. Potential future considerations could include creating designated pick-up and drop-off zones, relocating curb space along a block and implementing flexible curb space that fluctuates throughout the course of a day or week.

## Electric Vehicles

Electric vehicle (EV) technology continues to advance at a rapid pace with increasing regulatory and financial incentives to encourage production and use at both the State and Federal level. The primary advantage at the City-level includes reduced vehicle emissions. Planning for future EV integration in *Connect Loveland* may include provision of on-street and off-street EV parking and charging stations on public property as well as incentives and requirements for provision of EV charging stations and infrastructure by developers. FTA grants for replacing the COLT bus fleet with diesel buses are increasingly hard to come by as incentives are geared toward electric buses. Given this trend the City should collaborate across departments to work toward modifying bus maintenance facility and major transit stations to support electric buses in anticipation of one day converting to an all-electric fleet. In addition, I-25 is a federally recognized alternative fuel corridor, where infrastructure upgrades are being made to supportive use of electric and other alternative fuel vehicles.

## Autonomous and Connected Vehicles

Autonomous and Connected Vehicles (AV/CV), are two vehicle technologies that are rapidly evolving with the potential to impact travel patterns and trip choices in the future. AVs are capable of sensing the environment and moving through the street network with little or no human input. CVs are vehicles that communicate with other vehicles on the road, as well as connected infrastructure, to improve roadway use and safety.

AVs may increase the demand for travel due to the decreased opportunity costs for travel and decrease the demand for parking. In addition, research on travel behaviors suggests that AVs may decrease transit usage except for high-frequency transit services like trains or bus rapid transit that operate on a dedicated facility. Some travel related to AVs has potential positive outcomes by providing elderly and youth populations with more mobility options and expected improvements in traffic safety. The final *Connect Loveland* Plan will feature a set of strategies for preparing for and managing AVs and CVs.

## Mobility as a Service

Mobility as a Service (MaaS) describes the shift away from privately owned automobiles and toward transportation that is offered as a service. This includes both public and private providers that can work together to provide a holistic landscape of transportation options either as a subscription or pay-as-you-go service. MaaS provides reliable and comprehensive transportation options and information that can reduce the reliance on or eliminate the need for private automobiles. The average car costs more than $8,800 per year to own and operate. By comparison, MaaS reduces costs for the user, decreases congestion, reduces emissions, increases the use of public infrastructure, and provides transportation providers with the data they need to be more cost-effective. MaaS can become increasingly appealing and viable through an integration of modes that includes payment integration, a trip-planning app and mobility hubs.

Loveland can encourage and facilitate MaaS by:

- Requiring open data from private providers to facilitate trip planning. This includes providing trip planning information and trip costs in a way that can be easily aggregated by a third party;
- Creating a platform for integrated payment that starts with COLT and later expands to include private providers. Ultimately, Loveland may seek to require that third parties participate in an integrated payment system as a condition of operating in the City; and
- Creating public-private partnerships that use private providers to complement and supplement public transit. These partnerships can also help improve human service transportation provision. Larimer County and the North Front Range MPO are currently collaborating on establishing a One-Call/One-Click center for connecting older adults and people with disabilities to transportation resources in the region.

*Connect Loveland* will provide guidance on how the City can prepare for and encourage MaaS through policies, City data management, and partnerships.

## New Technologies for Improving Transportation Networks

Intelligent Transportation Systems (ITS) are new technologies that are reshaping traveler experience on roadways. *Connect Loveland* will identify tools the City can use to make existing transportation infrastructure more efficient, user-friendly and safe. Some examples of ITS include:

- Adaptive Signal Control: Traffic signals that can automatically adjust traffic signal timing based on traffic conditions. These signals help reduce traffic congestion and pedestrian and bicycle crossing wait times.
- Transit Signal Priority (TSP): Adaptive signal technology that allows buses to communicate with a traffic light in order to extend green time. TSP helps transit vehicles run on schedule. Innovative new uses for traffic signal pre-emption are also emerging. For example, Los Angeles is testing traffic signal pre-emption to trigger red lights for speeding vehicles during off-peak hours of the day to improve traffic safety.
- Mobility Hubs: Centers that integrate various modes to allow users to make seamless connections between their origins and destinations. Often centered around transit stations, mobility hubs enable quick transfers from a bus onto a scooter or shared bike, and can also share real-time information on connecting buses, availability of shared-use mobility devices, and walking directions to nearby destinations.
- Connected Vehicles and Infrastructure: Whereas roadways were previously envisioned as a tool for enabling individual vehicles to move, new technologies are increasingly connecting vehicles with one another and with the roadway. By “connecting” vehicles and roads through wireless communication technologies, mobility improvements can be made without rebuilding roads or pursuing other costly upgrades. Instead, vehicles can communicate with one another to avoid collisions, reduce following distance, and monitor possible obstructions that may go unnoticed by drivers. Vehicles that communicate with roadway infrastructure can help planners and traffic engineers mitigate against congestion and reduce emissions. These new technologies are evolving and will become standard in private vehicles. *Connect Loveland* can include corresponding updates to the City’s roadway network, which will enable vehicles and roads to operate together more seamlessly.

## TrendLab+ Results

Placeholder to be updated after TrendLab+ workshop

## Conclusion

This future conditions analysis has found that Loveland will be a community where Baby Boomers will age in place while Millennials also begin to call the city home as they seek a high quality of life. Both groups will increasingly demand walkable neighborhoods and a greater range of mobility options. Meanwhile, Loveland's position in the North Front Range will contribute favorably to it becoming an employment hub for the region, but there is a trend toward less multi-family housing development, which could accelerate housing affordability issues and require more workers to make longer trips by car or transit to Loveland. Trends suggest that as Loveland grows, single occupancy vehicle travel could become less reliable as the City and region continue to expand in size, which will lead to an increased need for a robust biking, walking, and transit networks.

While the vision for future transportation in Loveland is for a city that provides strong regional connectivity using a variety of travel modes, potential barriers to adopting this vision exist. *Connect Loveland* will need to address several challenges in order to successfully balance mobility needs across many demographic groups and multiple modes. These include elevating the profile of multimodal transportation in a community where single occupancy vehicle travel has been the dominant mode choice for decades, identifying strategies for securing the right-of-way needed for active transportation and transit projects, identifying a desired level of transit service that the community can support financially, and determining how to fund projects that are both currently planned and will be featured in *Connect Loveland*.

The results of this future conditions analysis will be used to inform *Connect Loveland* and shape plans for a transportation network that serves the Loveland of 2040.