## Kimley»)Horn

MEMORANDUM

To: Forrest Hancock Development Director - Montava<br>From: Jeff Planck, P.E. and Mary Gormley, P.E. Kimley-Horn and Associates<br>Date: $\quad$ August 1, 2023<br>Project: Montava Master Plan<br>Subject: Master Street Plan Amendment

The purpose of this memorandum is to amend the City of Fort Collins Master Street Plan adopted in April 2020 and printed in January 2023 for the Timberline Road section between Mountain Vista Drive and Country Club Road in association with the Montava Master development. The overall Montava development is planned to include approximately 4,300 homes, 300,000 square feet of office, 200,000 square feet of retail, and almost 900,000 square feet of industrial uses north of Vine Drive, south of Richards Lake Road, east of Turnberry Road, and west of Interstate 25 (I-25) in Fort Collins, Colorado.

## MASTER STREET PLAN

Timberline Road between Mountain Vista Drive and Country Club Road is identified as a two-lane arterial roadway (See Master Street Plan for City of Fort Collins Clipping below). From the City's Master Street Plan, the yellow identifies a two-lane arterial whereas the green identifies a two-lane collector. Montava is requesting an amendment to the City of Fort Collins Master Street Plan for the segment of Timberline Road from Mountain Vista Drive to County Club Road to be reclassified from a two-lane arterial street to a two-lane collector street. It is believed that this section of Timberline Road will serve mostly Montava traffic and will not be used as a regional connector and will see minimal cut-through traffic. Therefore, the arterial roadway classification is no longer recommended.


Existing Master Street Plan for City of Fort Collins

## Kimley»Horn

The Larimer County Urban Area Street Standards provides Fort Collins and Loveland street standards. The site is located within Fort Collins; however, the street standard guidelines for Fort Collins do not provide average daily traffic (ADT) volume thresholds for guidance in determining appropriate street sections. Therefore, the average daily traffic thresholds from the Larimer County Urban Area Street Standards referencing City of Loveland street standards were utilized in determination of the appropriate cross section for Timberline Road. The long-term 2045 ADT projection along Timberline Road between Mountain Vista Drive and County Club Road was determined by the full buildout of the Montava development as identified in the Montava Master Development Long-Term 2045 Horizon Traffic Study - Supplement to Master Traffic Study dated April 25,2023. Applicable documents are attached for reference. An average daily traffic volume of 5,300 vehicles per day is projected along Timberline Road north of Mountain Vista Drive for the long-term 2045 horizon. The following table identifies the projected average daily traffic (ADT) compared to the Larimer County Street Standard (applicable documents are attached for reference).

| Roadway | Projected ADT | Larimer County |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Fort Collins ${ }^{1}$ |  | Loveland ${ }^{2}$ |  |
|  |  | ADT | Roadway Type | ADT | Roadway Type |
| Timberline Road Between Mountain Vista Drive and Country Club Road | 5,300 | Not Provided |  | $\begin{gathered} 7,001 \text { to } \\ 16,000 \\ \hline \end{gathered}$ | Minor Arterial (2-lane) |
|  |  |  |  | $\begin{gathered} 3,001 \text { to } \\ 7,000 \end{gathered}$ | Major Collector |

1Table 7-1 Fort Collins (GMA and City Limits) Street Standards
${ }^{2}$ Table 7-2 Loveland (GMA and City Limits) Street Standards
As shown in the table above, the projected ADT closely matches the characteristics for a twolane collector roadway with a lower speed limit and lower traffic volume projection threshold. The roadway is not planned to be a major thoroughfare for regional traffic north of Mountain Vista Drive and will serve the internal traffic volumes associated with the Montava development. Therefore, the roadway segment of Timberline Road between Mountain Vista Drive and Country Club Road is recommended to be identified as a 2-Lane Collector in the Master Street Plan as shown below.


Proposed Master Street Plan for City of Fort Collins

## Kimley»Horn

## CONCLUSION

As summarized in the memorandum, the Montava Master Plan development is recommending to amend the classification of Timberline Road in the City of Fort Collins Master Street Plan. Timberline Road is identified as a two-lane arterial roadway from Mountain Vista Drive to County Club Road in the most recent Master Street Plan. However, due to the lack of through connectivity with Timberline Road north of Mountain Vista, the inter-Montava connectivity street plan, the projected daily traffic volumes, and the multimodal and traffic calming visions for the roadway, it is believed that Timberline Road north of Mountain Vista Drive meets characteristics of a collector roadway. Therefore, it is respectfully requested that the City of Fort Collins consider amending the Master Street Plan to classify Timberline Road as collector street from Mountain Vista Drive to Country Club Road. Please feel free to call me if you have any questions or require anything further.

Sincerely,
KIMLEY-HORN AND ASSOCIATES, INC.

Jeffrey R. Planck, P.E. Project Traffic Engineer


## City of Fort Collins Master Street Plan



## Larimer County Urban Area Street Standards Excerpts

Table 7-1
Fort Collins (GMA and City Limits)Street Standards - General Parameters


Table 7-2
Loveland (GMA and City Limits) Street Standards - General Parameters

| Street Classification: |  | Major Arterial (4-6 Lanes) | Minor Arterial (2 Lanes) | Major Collector | Minor Collector | Local Com/Ind | Local Resid | Lane | Alley |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Functional Parameters | No. of Dwelling Units Served | NA | NA | >300 | 101-300 | NA | 21-100 | <50 | -- |
|  | Average Daily Traffic At Build-out | 16,001-48,000 | 7,001-16,000 | 3,001-7,000 | 1,001-3,000 | 201-1,000 | 201-1,000 | Max. 200 | Max. 200 |
|  | Access | See Table 7-4 | See Table 7-4 | 1 forward access per lot (if access cannot be provided from a lower classification | Max. 2 per Street Frontage | No limit | No limit | No limit | No limit |
|  | Continuity (see definitions) | Unlimited | Unlimited | 2 miles 2640' Max |  | 660' Max | 660' Max | 660' Max | 660' Max |
| Land Use Requirements | Min. right-of-way | 120' or 140' 5 ,11 | 100' |  <br> 80 <br> 1 |  | 60' | 58' | 50' | 16'-20' |
|  | $\left.\begin{array}{l}\text { Min. Utility (Each } \\ \text { Easement }\end{array}\right]$ | 14' | 14' | 14' ${ }^{\prime}$ |  | $14^{\prime}$ | 14' | 14' | 10' |
| Geometric Parameters | Minimum Street Width (Flowline to flowline) | 80'-116' ${ }^{\text {4,12 }}$ | 40'-56' ${ }^{\prime}$ | $48^{\prime}$ (w/parking) $38^{\prime}$ ( w/parking) <br> $38^{\prime}$ (no parking) $36^{\prime}$ (no parking) |  | $\begin{aligned} & 38 \prime \\ & (\text { w/parking }) \end{aligned}$ | $\begin{aligned} & 34^{\prime} \\ & \text { (w/parking) } \end{aligned}$ | $\begin{aligned} & 34^{\prime} \text { (w/parking) } 28^{\prime} \\ & \text { (restricted parking }{ }^{7} \text { ) } \end{aligned}$ | $\begin{aligned} & 16^{\prime}-20^{\prime}\left(\text { in } 16^{\prime}-20^{\prime}\right. \\ & R^{\prime} W^{8} \text { ) } \end{aligned}$ |
|  | Min. Lane Width ${ }^{\text {9 }}$ | 12' | 12' | 12' | 11' | -- | - | -- | -- |
|  | Turn Lanes | Required ${ }^{3}$ | Required ${ }^{3}$ | Not Req. | Not Req. | Not Req. | Not Req. | Not Req. | Not Req. |
|  | Bicycles | 5'-7' lane | 5'-7' lane ${ }^{2}$ | 5'-7' lane ${ }^{2}$ | 5'-7' ${ }^{\text {lane }}{ }^{2}$ | $\begin{aligned} & \text { Share } \\ & \text { Street } \end{aligned}$ | Share Street | Share Street | Share Surface |
|  | Sidewalk Width ${ }^{1}$ | 6' min. | 6' min. | 6' min. | 6' min. | 5' min. | 5' min. | 5' min. | NA |
|  | Sidewalk Location | $\begin{array}{\|l\|} \hline \text { Detached } \\ \text { by 10' } \\ \text { min. } \\ \hline \end{array}$ | Detached by 10 ' min. | Detached by 6 min. | Detached by 6' min. | Detached by 6 ' min . | Detached by 6 ' min . | Detached by 5' min. | NA |
|  | Curb Type | Vertical | Vertical | Vertical Vertical, Drive over <br> or Rollover |  | Vertical, Drive over or Rollover | Vertical, Drive over or Rollover | Vertical, Drive over or Rollover |  |
| 1 Sidewalk may not be required in industrial zones with initial development <br> 2 $5^{\prime}$ width exclusive of gutter <br> 3 Left turn lanes always required, right turn lanes required if TIS indicates need. <br> 4 Minimum widths must be increased to provide auxiliary turn lanes where needed <br> 5 Required on Taft Ave., Wilson Ave., Eisenhower Blvd., Hwy 287, and 14th St. SW <br> 6 Sidewalks may only be attached when adjacent to single family residential homes through a <br>  formal variance per LCUASS Section 1.9.4. <br> 7 One side only |  |  |  | 8 May be reduced to 16 ' when necessary due to existing obstructions (power poles, etc.) <br> 9 Lane width is measured from lip of gutter to center of lane stripe. <br> 10 Commercial / Industrial area <br> 11 This width includes turn lanes and minimum right-of-way at the intersection <br> 12 This width includes turn lanes and double lefts at the intersection |  |  |  |  |  |

## FORT COLLINS ONLY



ROADWAY WIDTH: 52
RIGHT OF WAY WIDTH: 84' (min.), plus 18' (min.) utility easement.
TRAVEL LANES: Three lanes, (2) 11 ' wide and a 10' center lane.
LEFT TURN LANES: 10' wide provided in center lane
BIKE LANES: Two lanes, 7 ' wide lane, 3 ' wide painted buffer.
BIKE LANE OPTION: Striped bike lane and protected bike lane options will require City Engineer approval.
PARKING: None
PARKWAY: $10^{\prime}$ (min.) width. Additional width optional.
SIDEWALK: 6' (min.) wide. Additional width may be required for higher pedestrian traffic in and leading to activity areas.
MEDIAN: Not required, except where necessary to control access and/or to provide pedestrian refuge or where developer requested medians are approved by the local entity. Additional roadway and right of way width may be required
WHERE USED: These specifications shall apply as required by the Local Entity when a Collector street is shown on the Master Street Plan.
DESIGN SPEED: 50 MPH
SPEED LIMIT: 30-45 MPH
ACCESS: Access will be limited. Points of access must be approved by the Local Entity.
CONTINUITY: Unlimited
FENCES: Fences shall be setback a minimum of $2^{\prime}$ from back of sidewalk on the property line, whichever is greater. CURB AND GUTTER: Vertical.

2-LANE ARTERIAL STREET

## LARIMER COUNTY <br> URBAN AREA

| REVISION NO: |
| :--- |
| DATE: $07 / 01 / 21$ |

## LOVELAND ONLY

Landscape Yard Buffer


Bike lane with 2 ' buffer option

* Continuous left turn lane as determined by the Local Entity. Additional auxiliary lanes may be needed as determined by the Local Entity. Raised median may be required.

ROADWAY WIDTH: 56' (min.) (Widen where a right turn lane is required).
RIGHT OF WAY WIDTH: 100 ' (min.) plus $28^{\prime}$ (min.) utility easement.
TRAVEL LANES: Two lanes, 13' wide. 12' wide with Buffered Bike Lane option.
LEFT TURN LANES: 12 ' wide, required at intersection.
BIKE LANES: Two lanes, 5 ' wide (exclusive of gutter).
BUFFERED BIKE LANE OPTIONS: Options will vary depending on the project and will require Engineer approval. PARKING: None

PARKWAY: 10' (min.) width. Additional roadway and right of way width optional.
SIDEWALK: $6^{\prime}$ (min.) wide if detached by at least 10'. Additional width may be required for higher pedestrian traffic in and leading to activity areas.

MEDIAN: $14^{\prime}$ (min.) Painted median if required or $16^{\prime}$ (min.) raised median if required.
WHERE USED: These specifications shall apply as required by the Local Entity when a Collector street is shown on the Master Street Plan or when the traffic volume on the street is anticipated to be 7,000 to 16,000 vpd.
See Table 7-2
DESIGN SPEED: 45 MPH
POSTED SPEED: 40 MPH
ACCESS: No primary access to individual lots. See Table 7-2.
CONTINUITY: Unlimited
FENCES: Fences shall be placed outside of the landscaped buffer yard.
LANDSCAPING: Tree, Lawn, Median, and Buffer Area landscaping maintenance shall be the responsibility of the adjacent property owner, HOA or Metro Districts.

CURB AND GUTTER: Vertical.

## FORT COLLINS ONLY



ROADWAY WIDTH: $42^{\prime}$ (Widen to 50' where a left turn lane is required).
RIGHT OF WAY WIDTH: 69' (min.) (Widen to $777^{\prime}$ where a left turn lane is required.) plus $18{ }^{\prime}$ (min.) utility easement.
TRAVEL LANES: Two lanes, 11 ' wide
LEFT TURN LANES: 12 wide at intersection where needed.
BIKE LANES: Two lanes, 7 ' wide lane, 3 ' wide painted buffer.
PARKING: None. Parking must be provided off street for any development adjoining the street.
PARKWAY: 8' (min.) width. Additional width optional.
SIDEWALK: $5^{\prime}$ (min.) width. Additional width may be required for higher pedestrian traffic within and leading to activity areas.
MEDIAN: Not required, except where necessary to control access and/or to provide pedestrian refuge or when requested by the Developer and approved by the Local Entity. Additional roadway and right of way width may be required.
WHERE USED: These specifications shall apply as required by the Local Entity, when a Collector street is shown on the Master Street Plan.

DESIGN SPEED: 40 MPH
SPEED LIMIT: $30-35 \mathrm{MPH}$
ACCESS: Access will be limited. Points of access must be approved by the Local Entity
CONTINUITY: The street shall be continuous for no more than 1320 feet.
FENCES: Fences shall be setback a minimum of 2 ' from back of sidewalk or on the property line, whichever is greater. CURB AND GUTTER: Vertical curb and gutter.


## LOVELAND ONLY



ROADWAY WIDTH: 48' with parking. 36 ' without parking. 50 ' without parking but with left turn lane RIGHT OF WAY WIDTH: 80' (min.) plus 14' (min.) utility easement each side.

TRAVEL LANES: Two lanes, 11 ' wide.
BIKE LANES: Two lanes, 5 ' wide when adjacent to a parking or turn lane, 7 ' wide when adjacent to the curb.
PARKING: Developer needs to demonstrate a need for parking if to be installed (No parking within 200' of intersections) PARKWAY: 6' (min.) width.

SIDEWALK: 6' (min.) width, detached.
Additional width may be required for higher pedestrian traffic in and leading to activity areas.
MEDIAN: None. Additional width would be required for development requested medians.
WHERE USED: These specifications shall apply as required by the Local Entity, when a Collector street is shown on the Master Street Plan or when the traffic volume on the street is anticipated to be in the range of 3,001 to 7,000 vehicles per day.

DESIGN SPEED: 35 MPH - If intersections are greater or equal to $1 / 2$ mile spacing the City can increase the Posted Speed.

ACCESS: 1 forward-direction access per lot (if access cannot be provided from a street of lower classification.

CONTINUITY: 2 miles
FENCES: Fences shall be placed outside of the landscaped buffer yard.
PARKWAY LANDSCAPING: Tree Lawn, Median, and Buffer Area landscaping shall be the responsibility of the adjacent property owner, HOA or Metro Districts.

CURB AND GUTTER: Vertical.
STRIPING: The centerline and separate bike and parking lanes shall be marked on the pavement in conformance with the requirements of Chapter 14 Traffic Control Devices and CONST. DWG. 1408L.

| MAJOR COLLECTOR/COMMERCIAL COLLECTOR |  |  |  |  | STREET |
| :---: | :---: | :--- | :--- | :---: | :---: |
| LARIMER COUNTY | DESIGN | REVISION N0: | 1 |  |  |
| URBAN AREA | FIGURE |  |  |  |  |
|  | STREET STANDARDS | FIGURE | DATE: |  |  |
|  | $07 / 01 / 21$ | $7-4 L$ |  |  |  |

## FORT COLLINS ONLY



ROADWAY WIDTH: 54'
RIGHT OF WAY WIDTH: 81' (min.) plus 18 (min.) utility easement.
TRAVEL LANES: Two lanes, 81' (min.) plus 18 ' (min.) utility easement.
LEFT TURN LANES: 12 ' wide at intersections where needed.
BIKE LANES: Two lanes, 5' or 6' wide lane, 3' wide painted buffer.
PARKING: Two lanes, 8 ' wide; parking may be removed at certain locations to provide a left turn lane at intersections where needed.
PARKWAY: 8' (min.) width. Additional width optional.
SIDEWALK: 5' (min.) width. Additional width may be required for higher pedestrian traffic within and leading to activity areas or as required by Area Plans.
MEDIAN: Not required, except where necessary to control access and/or to provide pedestrian refuge. additional roadway and ROW width may be required.

WHERE USED: These specifications shall apply as required by the Local Entity, when a Collector street is shown on the Master

DESIGN SPEED: 40 MPH
SPEED LIMIT: $25-30 \mathrm{MPH}$
ACCESS: Access will be limited. Points of access must be approved by the Local Entity.
CONTINUITY: The street shall be continuous for no more than 1320 feet.
FENCES: Fences shall be setback a minimum of 2 ' from back of sidewalk or on the property line, whichever is greater.
CURB AND GUTTER: Vertical curb and gutter.

## LOVELAND ONLY



ROADWAY WIDTH: 38 ' with parking: 36 ' without parking
RIGHT OF WAY WIDTH: 60' (min.) plus 28' (min.) utility easement.
TRAVEL LANES: Two lanes, 11 ' wide.
LEFT TURN LANES: 11' wide at intersections where needed.
BIKE LANES: Two lanes, $7^{\prime}$ wide. If parking approved on street sharrows as per MUTCD standard shall be installed PARKING: Developer needs to demonstrate a need for parking if to be installed (None provided at intersections)

PARKWAY: 6' (min.) width.
SIDEWALK: 6 ' (min.) width, detached.
MEDIAN: None. Additional roadway and right of way width would be required for development requested medians.
WHERE USED: These specifications shall apply as required by the Local Entity when a Collector street is shown on the Master Street Plan or when the traffic volume on the street is anticipated to be in the
range of 1,000 to 3,000 vehicles per day.
DESIGN SPEED: 30 MPH
POSTED SPEED: 25 MPH
ACCESS: Maximum of two (2) per lot per street frontage.
CONTINUITY: The street shall be continuous for no more than 2640 feet.
FENCES: Fences shall be placed outside of the landscaped buffer yard.
LANDSCAPING: Tree, Lawn, Median, and Buffer Area landscaping shall be the responsibility of the adjacent property owner, HOA or Metro Districts.

CURB AND GUTTER: Vertical, drive-over, or rollover (see in table 7-2).
STRIPING: Center line only.

| MINOR COLLECTOR STREET |  |  |  |  |
| :---: | :---: | :--- | :--- | :---: |
| LARIMER COUNTY | DESIGN | REVISION N0: 1 | FIGURE |  |
| URBAN AREA | FIGURE | DATE: $07 / 01 / 21$ | $7-5 \mathrm{~L}$ |  |

## Montava Master Development Long-Term Horizon Traffic Study Excerpts

# Kimley»Horn 

April 25, 2023

Mr. Max Moss
HF2M Colorado
430 North College Avenue
Suite 410
Fort Collins, Colorado 80524
Re: Montava Master Development
Long-Term Horizon Traffic Study Letter - Supplement to Master Traffic Study
Fort Collins, Colorado
Dear Mr. Moss,
This letter is a supplement to the Montava Master Transportation Impact Study (2018 Master Study) completed in October 2018 for the overall Montava development area. The purpose of this supplemental Traffic Study Letter is to provide a traffic analysis for the 2045 horizon with full buildout of Montava to account for changes to the development program and roadway infrastructure plan. The overall Montava project is a master planned mixed use development to be located north of Vine drive, south of Richards Lake Road, east of Turnberry Road, and west of Interstate 25 (l-25). The Montava Master Development includes single-family detached homes, single-family attached homes, multifamily low-rise housing, retail uses, office uses, and industrial uses. A conceptual phasing development plan is attached. Montava is a new urbanism complete community with walkable and bikeable blocks and streets incorporating housing, employment, and shopping in close proximity, intended to meet the needs of all residents to remain on site through integrated land use planning. A vicinity map is attached as Figure 1. This traffic study letter provided additional volumes and recommendations to the surrounding existing and proposed intersections for the Montava Master Development for the long-term 2045 horizon.

Regional access to Montava Master Development will be provided by Interstate 25 (I-25) and US-287. Primary access will be provided by Richards Lake Road, Mountain Vista Drive, and Turnberry Road. Direct access will be provided by accesses along Mountain Vista Drive, Country Club Road, Maple Hill Drive, Richards Lake Road, and Giddings Road.

The following existing intersections were analyzed into this traffic study:

- Richards Lake Road and Turnberry Road (Intersection \#1)
- Richards Lake Road and Giddings Road (\#2)
- Richards Lake Road and Busch Drive (\#3)
- Maple Hill Drive and Turnberry Road (\#4)
- Maple Hill Drive and Bar Harbor Drive (\#5)
- Country Club Road and Lemay Avenue (\#6)
- Country Club Road and Turnberry Road (\#7)
- Mountain Vista Drive and Turnberry Road (\#8)
- Mountain Vista Drive and Timberline Road (\#9)
- Mountain Vista Drive and Giddings Road (\#10)


|  | LEGEND |
| :--- | :--- |
| X | Existing External Key Intersection |
| $X$ | Proposed External Key Intersection |
| $X X X(X X X)$ | Weekday AM(PM) <br> Peak Hour Traffic Volumes |
| $X X, X 00$ | Estimated Daily Traffic Volume |



