Walker, Samuel

From: Bill Fox

Sent: Thursday, February 15, 2024 3:16 PM

To: LU Land Use Planner

Subject: [EXTERNAL] Comments on SU-23-0016 from Bill Fox

Attachments: SU-23-0016 Tennis Center Comment Letter from Bill Fox.pdf

Hi Sam Walker,

I hope this file reaches you.

I would appreciate an email response so that I know you received it.

Thanks

Bill Fox

303 250-0227

Date: February 15, 2024

To: Boulder County Commissioners

Boulder County Planning Commission

Boulder County Staff Planner – Sam Walker

From: Bill Fox

5974 N. 79th Street Longmont, CO 80503 (303) 250-0227

Re: Docket #: SU-23-0016: Tennis Center of the Rockies - 5701 N. 79th Street – Applicant: Kendall Chitambar

I am a 35-year resident on N. 79th Street. My home has direct frontage on this narrow county roadway just north of the proposed tennis complex and I would like to offer my strenuous objection to this proposed land use in this location. The type and size of this proposed tennis complex is completely out of character with the adjacent land uses. The plan calls for:

- 26 courts
- two large (football field sized) tennis bubbles that are 50 feet tall
- a "stadium court" with seating for up to 200 spectators
- a clubhouse
- multiple swimming pools and amenity area
- a volleyball court
- 100 space parking lot

The impacts it will bring are unacceptable. I believe it violates both the spirit and detail of the Boulder County Comprehensive Plan and should not be considered by Boulder County. A quick review of the maps in the Comprehensive Plan indicate that this project will degrade a **View Protection Corridor**, **Significant Agricultural Land**, an **Environmental Conservation Area**, the adjacent **Critical Wildlife Habitat and Migration Corridor**, and is a missing piece in the network of **Open Space and Public Lands** that are immediately adjacent to the east and west of the site. In addition, the **traffic increases and related traffic safety concerns** are key considerations. In this context it is amazing that this use could even be considered. It is my understanding that the Boulder County Comprehensive Plan was, at least in part, written to maintain the rural character of sites like this and to prevent such a development.

I am told that a "membership tennis facility" is an allowable use for consideration in the Boulder County Land Use Code for a parcel with agricultural zoning. It is also my understanding that the proposed use is to include a "stadium court" to accommodate the University of Colorado's (CU) intercollegiate tennis matches and tennis activities, and that CU is a partner in the development of this project. I also understand that recent tennis tournaments at the Boulder facility drew between 150 and 200 participants from around the state. A tennis club is one thing, but a collegiate athletic facility and a tennis tournament venue is a whole different

consideration, and one that I suspect was never considered when the list of acceptable special uses in agricultural land was drafted.

All that said, the main focus of the rest of this letter is on the traffic volume and safety impacts that will occur. For context regarding my input and comments, and so that you will know that I speak with technical expertise, I am a recognized expert in the fields of traffic engineering and transportation planning with over 35 years of experience. I am a registered Professional Engineer (PE) in the State of Colorado and am the recipient of the Institute of Transportation Engineers Lifetime Achievement Award. I continue to provide traffic engineering expertise to communities throughout Colorado, in part reviewing and/or completing traffic studies just like the one prepared for this site. I have been a long-time consultant to the City of Boulder, many other communities in the County, and to Boulder County itself. As a result, I am very familiar with local transportation issues. Specifically, as a consultant to the Boulder County Transportation Department I have:

- helped develop a comprehensive county-wide Traffic Safety Study
- helped author the Boulder County Multimodal Transportation Standards (MTS)
- evaluated traffic safety issues at numerous intersections and corridors throughout the County
- served as a subconsultant on two iterations of Boulder County's Transportation Master Plan
- provided speed limit recommendations on numerous corridors in the County
- and recently developed a methodology to help quantify the mobile source emissions benefits of the County's master planned pedestrian, bicycle and transit improvements.

With this background I have reviewed the Traffic Impact Study (including the first revision) prepared by Galloway & Co. dated January 15th and February 9th, 2024. **Based on this review** (as detailed below) I believe the Traffic Impact Study does not comply with Boulder County requirements, has significant shortcomings, and needs to be expanded and redone. It is not in a form that can support a thorough review of the traffic impacts of this proposed tennis complex.

- The traffic impact study does not meet the criteria for studies as detailed in the Boulder County Multimodal Transportation Standards (MTS) as noted by section below:
 - Section 4.7 Requirements Transportation System Impact Study A pre-application methodology statement does not appear to have been done (or referenced) as required in Section 4.7 of the MTS

- <u>Section 4.7.1 Project Description</u> The adjacent street cross-section details required in the MTS have not been provided. Had they been provided it would be obvious that N. 79th Street has narrow travel lanes and does not have any walkable or bikeable shoulders in the vicinity of this site. Even pedestrians need to walk partially within a narrow travel lane (see Photos 5 and 6).
- There is also no mention in the study (as required) about how bicycle, pedestrian and transit access will be provided to the site.
- Section 4.7.2 Study Area This section of the MTS requires a one-mile radius study area to identify strategic intersections. The unsignalized intersection of Lookout Road and N. 75th Street falls within this distance but has not been included. This intersection has historically been discussed by Boulder County and City of Boulder staffs as being on the verge of needing to be signalized. The Tennis Center will add significant traffic to this intersection, and a traffic signal warrant study should have been included in the study.
- The study area should also have referenced schools (as required by Section 4.7.2), such as the private school on the north side of Lookout Road just west of 75th Street which is planning an expansion.
- Section 4.7.3 Existing Conditions This section of the MTS requires an inventory of existing multimodal transportation facilities and services (or the lack thereof). If this had been provided it would have been obvious that this site is not served by any non-motorized transportation modes.
- Average daily traffic (ADT) in the study area should have been included but was not. The Boulder County Traffic Volume Map indicates that 79th Street has a daily traffic volume of 1,700 vehicles. This should have been included for context given the projected daily increase of over 700 vehicles on non-event days.
- This section also identifies the need to provide adjacent neighborhood and stakeholder public input about transportation-related issues. This has not been done.
- <u>Section 4.7.7 Trip Distribution and Assignment</u> This section of the MTS requires assigning all vehicle trips to the transportation network in the study area. This has not been done in the vicinity of the Lookout Road and N. 75th Street intersection as noted above.

- Section 4.7.8 Future Conditions Analysis This section of the MTS requires consideration of new pedestrian and bicycle safety concerns. This significant issue has been ignored on a roadway with no walkable or bikeable shoulders and numerous locations of limited sight distance given the extreme vertical curvature along 79th Street which makes it difficult and unsafe for motorists to pass bicycles and pedestrians traveling along 79th Street in the vicinity of these vertical curves (See attached Photos 1 4). A motorist hurrying along 79th Street to access the tennis center for a specific court time may make an unsafe passing maneuver when overtaking a bicyclist approaching a crest vertical curve and on-coming traffic cannot be seen.
- This section also requires consideration of traffic signal warrants as appropriate. This study should have included traffic signal warrant evaluations at both Lookout Road and N. 79th Street, and Lookout Road and N. 75th Street. No signal warrant evaluations have been included.
- This section also requires a discussion of safety issues in the study area. There has been no mention of the safety issues related to limited sight distance at the Lookout Road and N. 79th Street intersection (see Photo 7) where westbound vehicles traveling at or above 50 miles per hour cannot be seen for very long in advance of arriving at the intersection, making it extremely difficult for southbound traffic on 79th Street to turn out onto Lookout Road. The site driveway will also have sight distance issues on 79th Street (see Photo 8).
- Section 4.7.9 Conclusions and Mitigation Recommendations
 There has been no mention in the study report of the potential mitigation measures for the above referenced issues and their costs, not only to the developer, but also to the residents of Boulder County.

2. Additional technical comments on the Galloway Traffic Impact Study Report

- The <u>Site Location and Study Area</u> section mentions the project will include 26 courts. It fails to mention a "stadium court" for tennis matches with up to 200 spectators, multiple swimming pools, a clubhouse, a volleyball court, etc. that have been included in the project's description, and will influence the site's trip generation and resulting traffic impacts.
- It is worth mentioning that Boulder County has been working hard to identify ways to minimize the impact of automobile travel and the greenhouse gas emissions that

they generate. In this context this tennis complex could not have been located in a worse area. It is located halfway between Boulder and Longmont and many miles from the other areas of population density in Boulder County. It assures that virtually all access to the site will be made by automobile. It is not located at a walkable or bikeable scale from the communities it will serve and will not be accessible by transit. Approving this use in this location will be contrary to the multimodal efforts of Boulder County's Transportation Masterplan.

- This section indicates that "no hazardous features or constraints" were identified in the vicinity of the site. It is curious that there is no mention of the multiple crest vertical curves that limit sight distance along N. 79th Street (**see Photos**) and at the Lookout Road / 79th Street intersection, the complete lack of walkable and bikeable shoulders along N. 79th Street, or the significant bicycle traffic that already exists in this corridor that will be impacted by the additional traffic.
- The study identifies that the Boulder County Road Map classifies N. 79th Street as a Collector roadway. But for the purposes of this study and the site review I would maintain that N. 79th Street is part of Boulder County's "arterial" roadway network and is part of the grid of streets that provides mobility in this part of the County. It serves more as a conduit for intercity travel than "collecting" local traffic. Most of the traffic on N. 79th Street is traveling between towns and cities. This distinction affects how some potential mitigation measures are considered.
- The <u>Site Description</u> describes the site as "level", where in reality it is a hillside with a 45 foot drop across the site (see topo lines on site plan) which will require extensive earthwork to develop 26 flat courts. The result will be a huge number of large trucks on N. 79th Street, which at the least will exacerbate traffic and accelerate deterioration of the paved roadway surface.
- <u>Figure 1-2 Site Plan</u> illustrates two points of access onto N. 79th Street. One is a new access, and one is a shared access with the adjacent church property. Yet the traffic study only depicts and evaluates a single access serving the site. This issue should be clarified and adjusted as appropriate.
- The report text often uses "City of Boulder" and "Boulder County" interchangeably.

 This can create confusion about which jurisdiction is being considered.

- The <u>Study Area</u> only includes two existing intersections on N. 79th Street. As noted above, this does not meet the Boulder County MTS requirements. It should have included the Lookout Road and 75th Street intersection.
- The Existing Roadway Network section does not adequately describe the narrow section on N. 79th Street with no walkable or bikeable shoulders. This is a significant issue when considering potential bicycle access to/from the site and the impact on existing bicycle traffic.
- Table 5-1 Site Trip Generation projects that the site will generate 720 new weekday trips on 79th Street. For context, it should be noted that N. 79th Street currently only has 1,700 trips per day, and this is a significant increase in traffic. I suspect that there will be many days (say during tournaments, etc.) when this site generates many more trips than estimated.
- <u>Table 5-1</u> should include the actual trip rates utilized so that the math can be checked without having to access the ITE document cited.
- It should be noted that the trip generation rates used in this analysis are based on only two studies that were completed in the 1980s and 1990s in Canada and California, and the average number of tennis courts in those studies was only 9 (per the ITE Trip Generation Manual). The ITE Manual cautions against using trip generation data from such a small sample size. I believe that the trip rates used have underestimated the amount of traffic that will be generated by this site, particularly in a location where virtually all participants will arrive by automobile. At the very least, trip data from comparable existing tennis facilities in Colorado should be compiled to estimate appropriate trip generation estimates and the related traffic impacts.
- The study has not mentioned any traffic impact during the AM peak hour, yet it is my understanding that this site will be open for use at 7:00 AM. This issue should be addressed as the morning traffic will overlap with the AM commute along N. 79th and along Lookout Road.
- For comparison, even if the current trip generation rates are appropriate, it would take **72 single family dwelling units** generating the standard trip rate of 10 trips per day each to equal the projected daily traffic increase (720 daily trips) of the tennis center. This is striking since the agricultural zoning of the area would not allow more than a single residential unit on this site, and it would generate only 10 daily trips.

- Figure 5-2 Site Trips (revised version) illustrates 28 new southbound right turns into the site and 23 new northbound left turns into the site during the PM peak hour. It should be noted that Section 5.3.5.5 Speed Change Lanes of the Boulder County Multimodal Transportation Standards requires the use of the Colorado Department of Transportation warrants for providing left and right auxiliary turn lanes at site access intersections. These volumes would require the construction of a southbound right turn deceleration lane (greater than 25 vehicles per hour) and a northbound left turn lane (greater than 10 vehicles per hour) on N. 79th Street at the site access (using Category R-B Rural Highway criteria in the State Highway Access Code). At the very least, the issue of providing auxiliary turn lanes at the site access points should be evaluated and discussed. No mention was included in the study report.
- The addition of spectator viewing of tennis tournaments or specialty matches (up to 200 spectators detailed in the site description information) will add an additional 150 to 200 vehicle trips to the daily traffic discussed above (assuming 2.5 spectators per vehicle). The impact of tournament traffic on top of typical daily and peak hour traffic has yet to be considered in the traffic evaluations to date.
- The <u>Site Trip Distribution</u> section projects that only 5% of the traffic accessing the site will be to/from Lookout Road east of N. 79th Street. This seems low given that the site will have a regional draw and Lookout Road connects to the north/south corridors of 95th Street and US 287, providing the most direct access routes for the communities of Erie, Lafayette, Louisville, and anyone accessing the rest of the Denver region. Anyone returning to these locations from the site will be making a southbound left turn from 79th Street onto eastbound Lookout Road. This is the turn where sight distance is limited along Lookout Road and turns are most dangerous (see Photo 7).
- The <u>Site Trip Distribution</u> section also estimates that 50% of the site trips will access to/from the north on N. 79th Street, and 50% will access to/from the south. I believe that the trips to/from the south will be much higher given that Boulder, Louisville, Lafayette, Erie, Superior and the rest of the Denver region are all south of the site, and anyone accessing the site from Boulder using the Diagonal to CO 52 would need to travel a mile farther than if they used the Diagonal to Lookout Road. This will result in much higher traffic impacts on the intersections to the south of the site along Lookout Road. This issue should be addressed.

- The analysis fails to consider the potential need for a traffic signal at the intersection of Lookout Road and N. 79th Street. The Manual on Uniform Traffic Control Devices (MUTCD) provides traffic signal warrant criteria for considering the need for a traffic signal. One of the warrants is Warrant 3, Peak Hour which is useful when considering the impact of future traffic growth. The attached Figure 4C-4 Warrant 3, Peak Hour (70% Factor) that I prepared illustrates the projected peak hour traffic at Lookout Road and N. 79th Street with and without the tennis center traffic. It can be seen that the existing traffic falls below the warrant while the addition of site traffic will trigger the peak hour warrant for a traffic signal at this location, even when using the study's peak hour traffic estimates which I believe to be low. This issue should be detailed and discussed in the traffic study. To date it has been totally ignored.
- As noted above, the traffic signal warrant status at the Lookout Road and 75th Street intersection should be evaluated.
- In summary, the traffic study in its current form is inadequate and needs to be updated to allow a more thorough consideration of the traffic impacts of the proposed Tennis Center of the Rockies. The issue is much bigger than simply saying that the "level of service" at the study area intersections is going to be OK. When all of the traffic impacts of this site are considered, I believe that it will be obvious that locating a tennis complex like this on N. 79th Street is inappropriate.

3. Parking Considerations – (the Traffic Impact Study did not include any information or analysis about parking)

- The Site Plan illustrates a parking lot with approximately 100 spaces. This parking supply will not likely accommodate the typical peak period demand, let alone the addition of tournament spectator parking, collegiate tennis matches, and tennis class activities given the following:
 - Assume all courts are occupied on busy days (given the demand implied by the site developers)
 - The parking demand of the current tennis players on a court will overlap with the parking demand of the players with the next reservation, so the automobiles from two tennis matches per court will be parked at the same time.
 - Assume some matches are singles and some are doubles. Therefore, it is likely that there will be an average of at least 3 parked vehicles for the players using each court. The next round of players will add another 3 vehicles. Under peak utilization there could be 6 vehicles per court times 26 courts.

6X26=156 parked vehicles at one point in time. Much greater than the 100 space supply.

- This analysis is supported by data in the <u>Institute of Transportation Engineers</u>

 <u>Parking Generation Manual</u> that indicates that tennis/racquet courts can generate between 4 and 7 parked vehicles per court.
- If a tournament (collegiate or otherwise) with 200 spectators (2.5 spectators per vehicle assumed = 80 additional vehicles) overlaps with peak regular site use, then the combined parking demand would be over 230 vehicles.
- Group tennis class activities, youth or adult, will likely result in more intensive parking demand per court than normal activities.
- Use of the pools and volleyball court will add parking demand.
- There is no overflow parking potential along the shoulders of N. 79th Street.
- A shared parking agreement with the adjacent church may mitigate some of the overflow but may not be available on a Sunday when church is in session and, cannot be counted on if the church site changes hands (which has been rumored lately).
- At the very least, a detailed parking assessment should be included.

In closing I am strongly opposed to the construction of the proposed Tennis Center of the Rockies. I believe it violates both the intent and specifics of the Boulder County Comprehensive Plan and will result in unacceptable traffic increases and unsafe traffic conditions.

At the very least, the Traffic Impact Study prepared for the project does not comply with Boulder County's Multimodal Transportation Standards. In my professional opinion I believe it has underestimated the amount of traffic it will generate, has not considered the need for and cost of off-site improvements that will likely be needed (turn lanes and traffic signals), and has not considered the very real safety concerns, particularly for the bicyclists using N. 79th street. Lastly, the study has not considered the parking impacts at all.

Thank you for your time and consideration on these significant issues. I look forward to discussing this project with you in more detail if it moves forward in the special use review process.

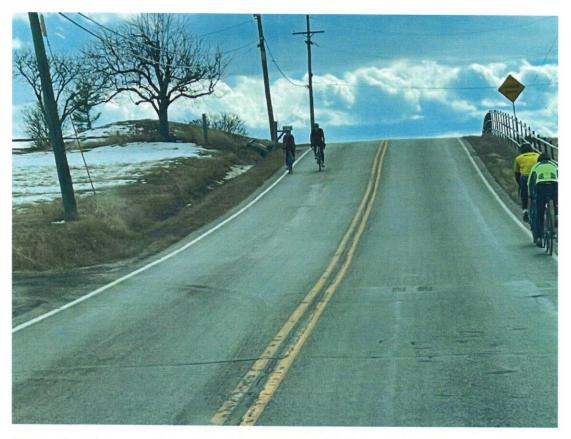
Sincerely,

Bill Fox 5974 N. 79th Street (303) 250-0227



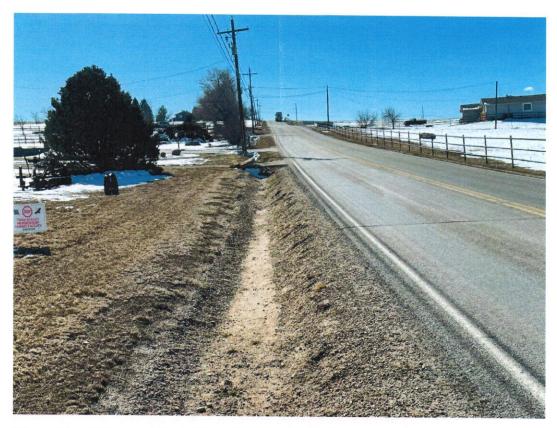
Photos 1 and 2: Very dangerous to pass a bicyclist with limited sight distance when you cannot see oncoming traffic





Photos 3 and 4: Very dangerous to pass a bicyclist in numerous locations





Photos 5 and 6: No shoulders. Even pedestrians have to walk in the road





Photo 7: Poor sight distance for southbound vehicles on 79th Street when turning out onto Lookout Road. Cars coming westbound over this hill are traveling at 50 mph or more. Does not meet recommended minimum intersection sight distance in AASHTO design guide.



Photo 8: Approximate location of Tennis driveway. Note poor view of southbound traffic coming over the hill on 79th Street when vehicles turn out of the tennis complex.



Photo 9: Very steep grade on 79th Street approaching CO 52. Problematic in winter months.



Photo 10: N. 79th Street is regularly used for training rides, even with the multiple locations of poor sight distance due to vertical curvature. Unfamiliar motorists accessing the tennis center may not appreciate the danger of passing bicyclists with the limited sight distance of oncoming traffic.