

February 23, 2021

Ms. Madison Harris Town of Minturn PO Box 309 Minturn CO 81645 Via email: <u>planner1@minturn.org</u>

RE: Belden Place Preliminary Plan – Completeness review Project No. 19-0008

Dear Madison:

We reviewed the January 25, 2021 Belden Place Preliminary Plan submittal and offer the following comments:

## Survey:

- 1. Final Plat (Preliminary)
  - a. Date must appear through the Surveyor's Seal on every sheet.
  - b. Sheet 3: Lines through text diminish clarity. A larger scale would be better on the Final Plat.
  - c. The land plan and PUD Guide standards for setbacks and lot coverage for duplex, tri-plex and townhome lots is based on subdivision of duplex, tri-plex and townhome lots now, rather than waiting until the party walls are constructed. Minturn Municipal Code provides for an administrative replat once the foundations have been poured. The applicant needs to follow the process described under the Code. Please remove General Note 8.
  - d. New easements need to clearly identify their use, purpose and dimension.
  - e. There is a dashed line around the perimeter of the lots (width varies). Does this identify an easement or a setback? Please identify and label the purpose on the plat.

- f. The blanket utility easement note does not work as stated. It identifies an exception as the "...building site areas as depicted on the Timberline Engineering site plan dated January 15, 2021...". The Timberline site plan is not a recorded document. These easements need to be clearly dimensioned on this plat or established on a subsequent plat amendment creating the individual lots after the foundations are in place.
- g. The Plat does not identify pre-existing easements. Existing easements must be shown. If they are to be abandoned by virtue of this plat, proper labeling and certificates must be included.
- h. The Surveyor must Provide closure and area calculations for each LOT and PARCEL.
- i. The legal title description is based on the previous plats, but the boundary is shown on the drawing with surveyed bearings and distances based on found monuments accepted by the Surveyor. Please include a detailed legal description with surveyed bearings and distances in the Certificate of Dedication and Ownership following the title description.
- j. The legal description is a chore to match up with the four title commitments. If possible, please provide a combined commitment with the final plat submittal.
- 2. Topographic Map
  - a. The northern portion of lot 29 does not reflect the recent construction, and is not a true representation of existing conditions.
  - b. Contour 7924 dies out in the middle of the project.

## **Engineering Documents:**

- 1. Demolition Plan (Sheet C.101):
  - a. General note says all onsite utilities to be abandoned unless otherwise noted.
    - i. The overhead power line on the north is labeled to be abandoned; the one along the south property line is not labeled. Are these utility lines necessary to serve adjacent properties? If they are necessary, appropriate easements are required.
    - ii. Please label the specific utilities to be abandoned.
    - iii. Easements are required for all utilities that are to remain.
  - b. Existing water taps must be abandoned at the main please provide details.
  - c. The note "Additional services are likely to exist" is of concern please provide details of the risk and how this is to be dealt with.
- 2. Snow removal & storage plan (C.111):
  - a. Snow storage equal to approximately 10% of the road surface area is proposed. The HOA needs to be prepared to dispose of snow off-site should it become necessary.
- 3. Proposed Easements (Sheet C.133 & C.134):
  - a. The separate, overlapping easements for water, sewer and shallow utilities are confusing and cumbersome please clearly identify the use, purpose and dimensions or consider combining these into a single utility easement.

- b. The blanket easements should be created after the foundations are in place.
- c. Belden Way & Silver Loop are shown as road rights of way. These streets do not meet municipal requirements, and as such, should be private streets maintained by the homeowner's association. Public access easements must be provided over & across all streets.
- d. A 20-foot-wide utility easement suitable for future water main connections must be extended from the proposed water easement to the south and west property lines.
- 4. Fire Hydrant Locations (sheet C.201)
  - a. The location of the hydrants as well as the distance from the hydrants to structures must be approved by the Fire Marshal.
  - b. The fire flow calculations should be based on the total square footage under a single roof, including garages, not the square footage allocated to single units.
- 5. Utility Plans:
  - a. Please provide an Overall Utility Plan:
  - b. Please clarify the plan view on the plan & profile drawings by shading back all but the pipeline in the profile.
  - c. All utilities should be shown on all utility plans, both in plan & profile to identify conflicts.
  - d. Water taps are to be constructed as "Wet Taps" and coordinated with Public Works"
  - e. Please provide copies of the sewer plans approved by the ERWSD.
- 6. Grading & Drainage Plans:
  - a. The drainage plan shows drainage being directed to three ponding areas, two retention ponds on the north and a stormwater management pond at the southeast corner of the development.
    - i. The retention ponds do not drain, but rather rely on evaporation & percolation to empty. Because the ponds will collect silt and debris, regular maintenance by the homeowner's association will be required.
    - ii. The storm management pond will be used to settle contaminants prior to discharge. This pond would discharge through a proposed culvert crossing US 24 and continuing in a drainage swale to the Eagle River at the northeast end of the Boneyard property.
    - iii. Design details for the discharge structure need to be provided.
    - iv. Detention ponds are not being proposed for the PUD as a result of the significant reduction in storm-water drainage impacts to neighboring properties.
  - b. The Minturn Master Drainage Plan calls for the future construction of a drainage diversion channel across Forest Service Property at the base of the mountain. The drainage swale would flow both north & south to new culvert crossings of US 24 roughly 2000 feet north and 1600 feet south of Belden

> Place. As a result of this diversion channel not being available, the Belden Place drainage plan calls for the construction of a new culvert crossing US 24. Belden Place suggests the new US 24 crossing as an alternative to the drainage diversion channel. With proper planning of the drainage west of US 24, it may be possible to direct drainage from the properties in this area to this single crossing and eliminate the drainage diversion channel. They are requesting Minturn pay for this culvert. This idea could be mutually beneficial and merits consideration. We recommend the Town consider this alternative.

- c. The new culvert across US 24 could be utilized to improve the design of Belden Place. It appears the culvert crossing could be lowered allowing a storm sewer connection to be extended to the two retention ponds, limiting their use to storm water management. The design would have to be completed in detail all the way to the river.
- d. The underground parking garage at the rear of the property does not drain. The garage floor elevation is above the bottom of the retention pond and needs to be addressed.
- 7. Roadway Plans:
  - a. The 10-foot lane widths proposed are narrower than the typical 11 feet. The National Association of City Transportation Officials suggests that travel lane widths of 10 feet generally provide adequate safety in urban settings while discouraging speeding.
  - b. The pavement section should be increased to 3 ½ inches of asphalt over 8 inches of aggregate base as recommended in the geotechnical report.
  - c. Sidewalks are proposed as 3-feet wide. Section 1.01 of the Town Roadway Design Standards require 5-foot walks. ADA compliant ramps must be provided at cross walks and any other locations required to meet ADA requirements.
  - d. Turning Movements (Sheets C.404& C.405). Both the fire and trash truck movements track onto and over the curbs. Roadways must be revised such that these vehicles stay inside of the roadway without tracking onto curbs or landscaping.
  - e. Garage ramp (sheet C.403).
    - i. The ramp into the garage shows a 16% grade with steep breakover angles. Please demonstrate the break over angles are suitable for passenger vehicles.
    - ii. A 16% grade the ramp needs to be heated to assure year-round access.
  - f. Please note that the final approved and signed CDOT Access Permit will be required prior to Final Plat Approval.
  - g. A sidewalk along US 24 adjacent to the development is required. The walk is to be in accordance with the Town Master Plan for South Minturn. As the walk would not be connected to an existing walk at this time, a cash in lieu contribution may be appropriate.

- h. We understand you approached CDOT regarding a cross walk on US 24. A safe cross walk from Belden Place to the other side of US 6 should be provided and the Town will support this request to CDOT.
- 8. Construction Cost Estimate:
  - a. Cost Estimate. Several unit prices used in the estimate appear lower than current market prices. A few examples follow:
    - i. 8" DIP water main is estimated at \$68/LF; current bids are coming in at \$91/LF.
    - ii. 8" Sewer main is estimated at \$56/LF; current bids are coming in at \$69/LF
    - iii. Mountable Curb is estimated at 20/LF; current bids are coming in at \$27/LF
    - iv. Please provide the basis for the estimate.
  - b. Phasing:
    - i. Belden Place appears to be eligible for 18 water taps under the current moratorium.
    - ii. If the development is to be phased, the cost estimate will need to be revised to reflect the phasing and a phasing plan will be required.
- 9. Construction Requirements & Specifications are incomplete:
  - a. Please provide general requirements for construction i.e., hours of work, limits of construction, inspection requirements, safety requirements; etc.
  - b. Please provide roadway construction specifications.
  - c. Minturn requires water line construction to conform to ERWSD standards. Please revise the water construction specifications accordingly.

Thank you for the opportunity to review this plan – we are excited to be a part of this project.

Sincerely, Inter-Mountain Engineering

Jeffery M. Spanel PE

CC: Michelle Metteer; Michael Sawyer, Scot Hunn, Brad Stempihar, Jim Kunkel