

February 28, 2025

Minturn Town Council
PO Box 309
Minturn, CO 81645

Re: Taylor Avenue Reconstruction
Main Street Pedestrian Improvements
Design Criteria Recommendations
Project No. 24-0060

This letter is an update to Town Council for the Taylor Avenue capital improvement project. Two meetings were held to allow the Taylor Street residents the opportunity to discuss concerns regarding the resurfacing of Taylor Avenue. The first was the September 18, 2024 Town Council Meeting and an Open House held at Town Hall on January 9, 2025. There were approximately 15 residents who attended the open house and Cindy Krieg (Economic Development/Deputy Clerk) heard from several residents after the Open House meeting.

Our notes from the Town Council and the Open House meetings (including the subsequent comments) are attached. Our letter is our understanding of neighborhood concerns and will provide a framework for the Council to direct final design parameters.

Northern Extent of Taylor Avenue Reconstruction:

The southeast limit of the Taylor Avenue reconstruction is the intersection with Minturn Road in front of the Minturn Towne Homes. Our understanding was to end construction at the north end of the Taylor Avenue public right of way. The right of way ends at the north property line of Lot 12 of the Taylor Addition (568 Taylor). Please refer to the partial plan below. At public meetings, several property owners spoke up and said public access extends beyond this point and feel road improvements should extend further uphill to the limits of public access (beyond the right of way).



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Action Item:

The Town needs to confirm the northerly extent of the repaving project.

Paving Private Driveways:

Several residents asked if the Town would pay for, facilitate, or provide incentives for paving private driveways. At the neighborhood meeting, we informed residents the current plan only included paving within the Taylor Avenue right of way, and suggested the Town could facilitate a meeting with the selected contractor and interested neighbors to negotiate private contracts for private driveway construction while the Taylor construction is underway. This approach would keep the Town's contracted scope of work under its insurance liability and may reduce costs for each owner by eliminating additional contractor mobilization and taking advantage of bulk pricing.

Action Item:

The design will include paving a five foot (5.0) asphalt apron at each driveway to facilitate blending the new roadway to existing driveways. Additional pavement and associated costs beyond that would be an additional cost and Town decision.

Taylor/Minturn Road Intersection:

Residents noted the Taylor Avenue intersection with Minturn Road is steep and skewed. It should be noted the skew angle was established with the Final Plat of the Taylor Addition in the 1900's.

- The skew angle of this intersection is approximately 42 degrees, which does not meet design standards. The American Association of State Highway and Transportation Officials (AASHTO), which is considered the industry standard guideline, recommends a maximum skew angle of 75 degrees. The smaller angle restricts a southbound driver from seeing and reacting to approaching vehicles coming from the north along Minturn Road.
- AASHTO recommends existing intersections with an acute skew (less than 75 degrees) should ideally have the skew angle corrected. If improving the skew is not possible, alternative measures should be considered such as modifying the intersection to right in right out access on the skewed leg.
- The existing slope of Taylor Street is about 7.0% coming into the intersection. To meet design requirements the road should be no more than 4.0% (flatter) at the intersection for the first forty-feet (40.0'). If the intersection approach is reduced to 4.0% the balance of Taylor Street coming into the intersection will exceed Minturn Municipal Code (MMC) requirements and the road surface will not align with existing driveways.

Minturn North studied the relocation of Taylor to correct both the slope and skew angle (below). This requires the intersection at Minturn Road to be raised approximately six (6) feet, which will create access issues with connecting driveways at the Minturn Towne Homes.



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Neighbors asked if something could be done on a smaller scale such as restriping to improve the intersection. The existing asphalt does not have sufficient width to effectively restripe the existing lines to straighten the intersection. Improving Taylor Avenue will require relocating the intersection with Minturn Road. We looked briefly at straightening Taylor Avenue for a short distance at the intersection. This appears possible but will require right of way to be taken from the Ton Tract C, placing considerable fill material and extensive utility relocation.

Action Item:

The Town needs to decide if there will be additional investigation of the Taylor Avenue/Minturn Road intersection.

Realign Taylor Avenue away from Building C of the Minturn Towne Homes.

Residents pointed out Building C of the Minturn Towne Homes is too close to the Taylor Avenue pavement. The driveways are short and large vehicles parked in the driveway encroach into traveled way. They suggested moving the pavement north into the Town's Parcel C to be able to lengthen the driveways.

- Relocating the asphalt will require widening the right of way into Parcel C. The ground surface falls off steeply at the edge of the pavement and moving the roadway will require extensive fill material and regrading.

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Street would move
into Tract C



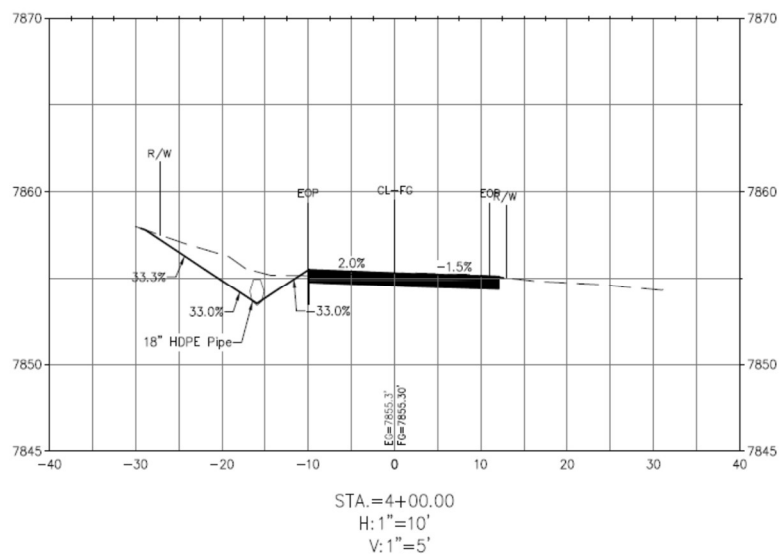
Action Item:

The Town needs to decide if they want to allow the encroachment into Parcel C and incur the additional reconstruction costs.

Drainage Considerations:

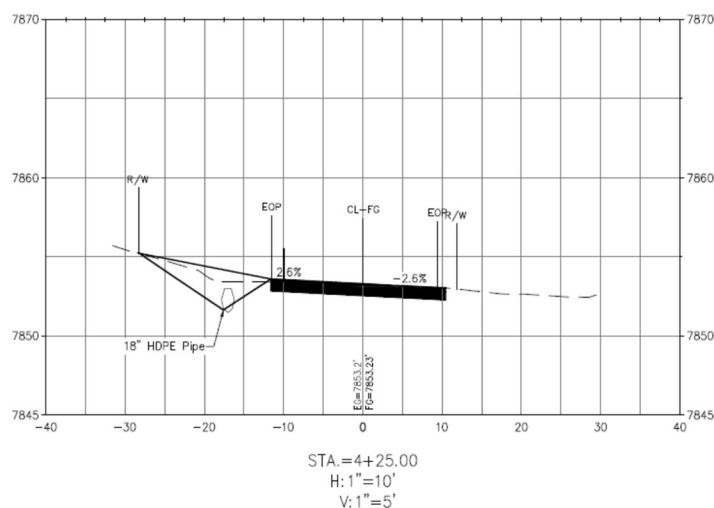
The mountain hillside above Taylor Avenue produces significant runoff, with both surface and subterranean flow, particularly during spring runoff. The existing street slopes to the west and water is allowed to flow over the street. There are a few culverts which collect water and direct drainage under the road. Water damages asphalt paving through frost action and damaging the subgrade. The typical design for a road in a similar location would include a roadside ditch to collect water with culverts to control the flow of water below the roadway.

Residents would like to preserve on-street parking on the east side of Taylor and felt a ditch or shallow swale would preclude parking. A drainage ditch will preclude parking and require culverts to be installed under each driveway. A sample cross section is shown below.



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Taylor Avenue residents would prefer the drainage to continue to sheet flow across the surface of the Taylor Avenue roadway. This would be accomplished by sloping the roadway to the west and bringing the adjoining grading up to the surface of the road. If this alternative is selected, we recommend thickening the east edge of the asphalt to stiffen and minimize water from entering the roadbase. Existing culverts and storm sewer crossings will be inspected and repaired or replaced. Additional inlets and culverts will be added at locations necessary to promote drainage flow.



Action Item:

We need guidance from the Town on the preferred roadway section and drainage improvements.

Width of the roadway:

Residents would like the road to remain in its current location on the west side of the right of way to preserve on-street parking in front of the existing homes. The existing asphalt is approximately 25 feet wide, and the neighborhood would like to maintain the 25 foot width.

- The Town has approved narrowing travel lanes to 10 feet to promote traffic calming. The approval for Minturn Road is 22 feet of asphalt with 10 foot travel lanes.

Action Item:

Please provide guidance for the width of the roadway.

Traffic Calming.

There is concern for slowing traffic and the neighborhood would like to see speed dips installed at the locations where dips in the road already exist. Locations identified include 484 Taylor (Sta 6+50); 392 Taylor (Sta 10+50); 292 Taylor (Sta 15+50); and 232 Taylor (Sta 18+25).

A "speed dip" is a depression in the road and a "speed hump" is a raised section of pavement. Both are typical additions used to control speed, with the key difference being that a dip forces drivers to slow down by going through a low point, and a hump forces drivers to slow down driving over a raised obstacle. "Speed humps" are generally considered the preferred method for traffic calming as they are less

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jarring to vehicles and easier to see than dips. The residents feel the speed dips are more appropriate and will help transmit drainage across Taylor. Speed dips will lose effectiveness when they fill with ice and snow. The difference can be seen in the pictures below:



Speed Dip



Speed Hump

Action Item:

Please provide direction on the use of speed dips.

Parking for the Minturn Mile:

The Minturn North development agreed to construct 54 perpendicular parking spaces between Fourth Street and the northerly limit of Taylor Avenue. Construction has started and the parking is in use. Residents are concerned there are too many spaces, many are too steep, with vehicles getting stuck regularly. Residents would also like the spaces restricted to daytime use for recreation activities.

- Residents suggest limiting the perpendicular parking area from roughly 564 Taylor to 560 Taylor; switching to parallel parking to 534 Taylor. The limits are marked on the map included with the Neighborhood Meeting Notes.

Action Item:

Does the Town wish to make changes to the parking for the Minturn Mile?

Drainage and Grade at Minturn Town Homes

The residents are concerned about the profile of Taylor Avenue near the intersection of Lions Lane. There is a roadway crest ("hump") in the road at the intersection that reduces the driver's sight distance. It was suggested to either lower or raise Taylor Avenue north of this area. Lowering the roadway crest will increase the slope of Lions Lane and is not a good solution. We are told vehicles slide through their stop sign at Taylor Avenue now and a steeper slope will exacerbate the current problem. Neighbors suggested adding fill to the north side of the crest area. The placement of additional fill material would need to be analyzed to assure it does not interfere with access to existing driveways.

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"Hump" is located
at the Lions Lane
intersection.



Action Item:
The Town needs to consider the request and provide direction.

Minturn Towne Home Drainage

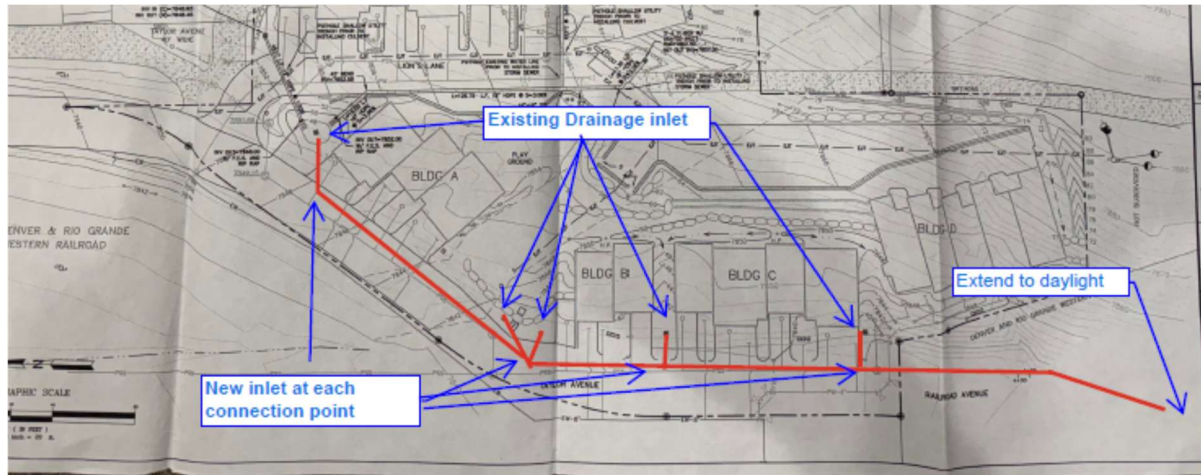
We met with representatives of the Minturn Towne Homes HOA to discuss drainage concerns. The existing storm sewer backs up and they are requesting a larger public storm sewer be constructed as a part of the Taylor Avenue improvements. The request can be summarized as follows:

- Replace the private storm sewer with a new, larger diameter storm sewer Mainline from the retention pond at the corner of Lions Lane and Taylor Avenue to the point of discharge of the existing storm sewer near the Railroad signal on the east side of the Railroad Avenue crossing. (The actual location would need to be located after the snow melts).
- The new storm sewer would have inlets along the edge of the existing road to collect water flowing along the roadway. These inlets will not collect all the water shown in the example photographs below. These are often caused by small ice dams during freeze/thaw events or pavement irregularities and would require a heated concrete pan to eliminate them.



- The new public storm sewer would be connected to new, larger inlets at the location of the existing inlets.

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Action Item:

The Town needs to decide if the storm sewer improvements will be added to the scope of the Taylor Avenue roadway improvements and incur the associated construction costs

We are requesting direction for these action items to proceed with preparing the design, cost estimates for budget, and construction documents.

Thank you,
Inter-Mountain Engineering

Jeffery M. Spanel PE

CC: Katie Sickler, Cindy Krieg, Madison Harris, Brad Stempihar