



October 23, 2014

Mr. Jason Boal, Teton County Planning Administrator  
Teton County Planning  
150 Courthouse Drive, Suite 107  
Driggs, Idaho 83422

**RE: Amended Scenic Parkway Road Design Review**

Jorgensen Associates, PC (JA) has been retained by the Teton County Planning Department to review and comment on the proposed Scenic Parkway road design. This review is based on horizontal and vertical road design provided by Benchmark Land Surveying, correspondence between Jay Mazalewski and Jess Horton, various reports submitted to Teton County, and conversations with the Teton County Planning Department. Upon Review of the proposed Scenic Parkway Road Design, I have the following observations:

Design Parameters:

Local Road Classification  
25 mph design speed  
Structural Section = 4 inches of ¾“ crushed wearing coarse on 12 inches of Type A pit run

Design Observations:

Milk Creek road does not have an assigned designation on the Teton County Road Classification Map which means it is either currently classified as a Local Road or Recreational Access Road. **Currently the Scenic Parkway Road is being designed to meet the Local Road standard cross section.**

In a memorandum from Jay Mazalewski to Jess Horton dated June 12, 2014, Mr. Mazalewski provided 2 possible acceptable structural sections. **Design plans are compliant with Option 2 listed in the memorandum; 4 Inches of ¾“ crushed wearing surface on 12 inches of Type A pit run.**

Design speed for a Local Road classification is 25-35 mph. **The Scenic Parkway Road was designed using a 25 mph design speed.**

Design exceptions to the 25 mph design speed are as follows;

There are three locations that would be considered intersections where the change of direction occurs at 90°. Those instances occur at:

Station 86+65  
Station 171+92  
Station 242+69

Additional warning signage and possible stop signs would be necessary at these locations.

There are eight locations where design horizontal curves are non-compliant with the 25 mph design speed, 3 of which were deemed insignificant due to the short curve length. Those instances occur at;

Station 87+23, Radius = 50' (length = 50', insignificant) -This curve is at the intersection where there will be a stop sign.  
Station 127+38, Radius = 200' (length = 104', insignificant) -This curve will be changed to 250'  
Station 134+44, Radius = 100' (length = 73', insignificant) -This curve will be changed to 250'  
Station 158+50, **Radius = 65'** -We would like to widen the inside travel lane as recommended below.  
Station 226+79, Radius = 200' -This curve will be changed to 250'  
Station 231+10, Radius = 137' -We would like to widen the inside travel lane as recommended below.  
Station 238+85, Radius = 100' -We would like to widen the inside travel lane as recommended below.  
Station 241+23, Radius = 100' -This curve is at the intersection where there will be a stop sign.

Minimum horizontal curve for a 25 mph design speed is 250'. Based on the ASSHTO Design manual, 2011 Edition, JA is recommending widening the inside lane by the following:

Station 158+50, Widen inside travel lane 6'  
Station 226+79, Widen inside travel lane 2'  
Station 231+10, Widen inside travel lane 2'  
Station 238+85, Widen inside travel lane 4'  
Station 241+23, Widen inside travel lane 4'

Recommended lane widening does not include the 2' shoulder design. Widening the lanes as recommended will allow for farm equipment and recreational vehicles to navigate the curves traveling at low speeds but not in both directions at the same time.

All vertical grades are all under 8%. Teton County Standard maximum grade is 10%. However, K-values are not listed on the road design. Engineer should calculate K-values to confirm compliance with the design standards. Minimum K-values for 25 mph design are 12 for crest curves and 26 for sag curves. We will provide these values with our updated plan set.

Culvert sizes are not called out on the design plans. Minimum size required must accommodate a 10 year flood event. Please see the Culvert Table on sheet 2. We will provide the additional supporting documents with the updated plan set.

Recommended Action Items:

Consider widening non-compliant vertical curves as recommended.

Require engineer to revise plans to include K-value on plans and confirm compliance to Teton County Design Standards.

Require revised plans to include design criteria and be stamped by engineer.

The memorandum from Jay Mazalewski to Jess Horton dated June 12, 2014 includes the statement “*Areas of poor subgrade, pumping or wet materials may need additional base or geotextile fabric*”. Teton County should conduct periodic site visits to inspect native material and existing conditions to determine where additional base and/or fabric is necessary.

The contractor should submit material test results to ensure the ¾” wearing course meets County standards.

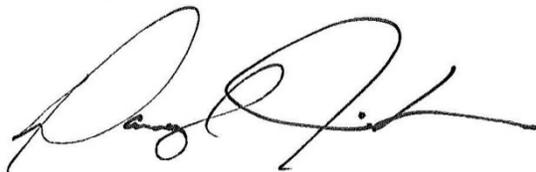
Teton County should conduct random compaction tests on all materials to ensure material is compacted to 95% AASHTO T-99 Proctor Density per County design standards.

Driveway access points are not shown. It is recommended that the applicant identify any access points to ensure all County requirements are met. *We will provide this in the updated plans.*

Advisory signs will be required for non-compliant curves and intersections. The County should consider requiring a sign plan be submitted by the applicant and also consider having all signage installed by applicant prior to acceptance.

This review was conducted based on Teton County development standards, the Scenic Parkway ROW Permit Application, the Scenic Parkway stormwater flow calculations, the Scenic Parkway road design plans, various correspondence and conversations with the Teton County Planning Department.

Sincerely;



Jorgensen Associates  
Darryl Johnson, P.E., P.L.S.

*We agree with the above recommendations and will provide Teton County with the appropriate documentation.*

*Thank you for your review, T. Drew Meppen*