

November 10, 2021

Lewis Homes
Attn: John Lewis
3718 North Wolf Creek Drive
Eden, Utah 84310

Subject: Pavement Design Recommendations
Osprey Ranch Development
Approximately 2050 Highway 150
Eden, Utah
CG Project No.: 133-021

Mr. Lewis,

At your request, Christensen Geotechnical has prepared this letter to present pavement design recommendations for the proposed Osprey Ranch Development which is located at approximately 2050 Highway 150 in Eden, Utah. Based on a concept plan provided to us by Lewis Homes, we understand that the proposed development is to consist of a 60-lot residential subdivision approximately 632 acres in size. The proposed structures within the development are to consist of single-family residences that are one to two stories in height with basements. We are currently working on completing a geotechnical investigation for the proposed development. Sixty-six test pits have been excavated for the geotechnical investigation within the development and laboratory testing is in progress for the completion of the investigation. We are currently finishing laboratory testing and engineering analyses for the investigation.

As requested, we have prepared pavement sections for roadways within the proposed development using the PAS computer program (prepared by the American Concrete Pavement Association) and an assumed CBR value of 3 percent. No traffic information was available at the time this letter was prepared; Christensen Geotechnical has therefore assumed a traffic load for the roadways based on our experience with similar projects. We have assumed that traffic will consist of 300 passenger cars per day, 4 medium trucks per day and 4 heavy trucks per day. We have further assumed no increase in traffic over the life of the pavement. Based on this information, we recommend a pavement section consisting of 3 inches of asphalt over 14 inches of untreated base. As an alternative, a pavement section of 3 inches of asphalt, 6 inches of untreated base, and 9 inches of granular borrow may be used.

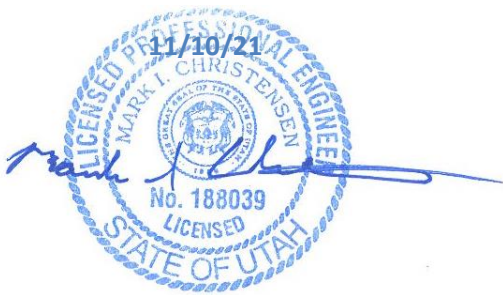
The asphalt should consist of a high-stability plant mix and should be compacted to at least 96 percent of the Marshall maximum density. The untreated base should meet the material requirements for Weber County or UDOT. The granular borrow should consist of a relatively well-graded granular soil with a maximum particle size of 4 inches, with a maximum of 50 percent passing the No. 4 sieve and with a maximum of 30 percent passing the No. 200 sieve.

The liquid limit of the fines (material passing the No. 200 sieve) should not exceed 35 and the plasticity index should be less than 15. The untreated base and granular borrow should be compacted to at least 95 percent of the maximum dry density as determined by ASTM D 1557.

This letter was prepared in accordance with the generally accepted standard of practice at the time this letter was written. No other warranty, expressed or implied, is made.

We appreciate the opportunity of providing our services on this project. If we can answer questions or be of further service, please call.

Sincerely,
Christensen Geotechnical



Mark I. Christensen, P.E.
Principal