BRIAN W. BENNION, M.P.A., L.E.H.S. Health Officer/Executive Director

July 12, 2018



Weber County Planning Commission 2380 Washington Blvd. Ogden, UT 84401

RE:

Preliminary Subdivision Determination

Sunshine Valley Estates, 9 lots

Parcel # Soil # 14658

## Gentlemen:

The soil and percolation information for the above-referenced subdivision has been reviewed. Culinary water will be provided by individual private wells. The placement of the wells are critical so as to provide the required 100 foot protection zone. The well will need to be dug, tested and the water supply approved prior to issuance of a wastewater disposal permit.

## DESIGN REQUIREMENTS

<u>Lot1:</u> Anticipated ground water tables not to exceed 24 inches (based on FEMA flood zone overall covering the majority of this lot), and soil classified as Type 1, fall within the range of acceptability for the utilization of a <u>Packed Bed Media Treatment System</u> as a means of wastewater disposal followed by a conventional trench with a maximum trench depth limited to 12 inches. The absorption system is to be designed using a maximum loading rate of 0.9gal/sq. ft. /day as required for a coarse loamy sand, single grained structure soil horizon.

<u>Lots 2-4:</u> Anticipated ground water tables not to exceed 30 inches, and soil classified as Type 1, fall within the range of acceptability for the utilization of a <u>Packed Bed Media Treatment System</u> as a means of wastewater disposal followed by a conventional trench with a maximum trench depth limited to 18 inches. The absorption system is to be designed using a maximum loading rate of 0.9gal/sq. ft. /day as required for a coarse loamy sand, single grained structure soil horizon.

Lots 5 & 7: Anticipated ground water tables not to exceed 30 inches, and soils classified as Type 3 and Type 4 observed to a depth of 48 inches but not to a depth of 60 inches plus, fall within the range of acceptability for the utilization of an At-Grade wastewater system as a means of wastewater disposal with a maximum trench depth limited to 0 inches. The absorption system is to be designed using a maximum loading rate of 0.65 gal/sq. ft. /day as required for the sandy loam, granular structure soil horizon.

Lots 6&8: Anticipated ground water tables not to exceed 30 inches, and soils classified as Type 3 and Type 4 observed to a depth of 48 inches but not to a depth of 60 inches plus, fall within the range of acceptability for the utilization of an a Mound Wastewater Disposal System as a means of wastewater disposal. Maximum trench depth is limited to 18 inches. The absorption system is to be designed using a maximum loading rate of 0.4 gal/sq. ft. /day as required for a clay loam, granular-massive structure soil horizon.

<u>Lot 9:</u> Anticipated ground water tables not to exceed 30 inches, and soil classified as Type 1, fall within the range of acceptability for the utilization of a <u>Packed Bed Media Treatment System</u> as a means of wastewater disposal followed by a conventional trench with a maximum trench depth limited to 18 inches. The absorption system is to be designed using a maximum loading rate of 0.9gal/sq. ft. /day as required for a coarse loamy sand, single grained structure soil horizon.

The acceptable onsite wastewater system type for lots 1-4 &9 are based on the consistent classification of the soils found on these lots as being a TYPE 1 soil, highly permeable soil with limited ability to renovate wastewater effluent, as classified in the Utah Administrative Code Onsite Wastewater Systems R317-4 Table 6 Minimum Hydraulic Loading Rates for Soil Classification, and the submission of varying percolation rates, including rates as low as 1.3 minute per inch which exceed the acceptable range for utilization of a conventional onsite wastewater system in the Upper Ogden Valley, and the Submodel Empower

**Engineering consideration** 

A large portion of the subdivision is included within the FEMA flood zone map. This must be represented in all individual onsite wastewater plans. Additionally any above ground system would require that fill material extends a minimum of 25 feet from the top of the drainfield cover before sloping back to natural grade (4:1 slope for At-grade 3:1 slope for mounds) as protection from erosion. All system must be shown to meet the minimum separation distance to open water. The set back from the river would be considered to be to the high water line.

Plans for the construction of any wastewater disposal system are to be prepared by a Utah State certified individual and submitted to this office for review prior to the issuance of a Wastewater Disposal permit.

The following items are required for a formal subdivision review; application, receipt of the appropriate fee, and a full sized copy of the subdivision plats showing the location of exploration pits and percolation tests as well as the documented soil horizons and percolation rates. A subdivision review will not occur until all items are submitted. Mylars submitted for signature without this information will be returned

Each on-site individual wastewater disposal system must be installed in accordance with R317-4, Utah Administrative Code, Individual Wastewater Disposal Systems and Weber-Morgan District Health Department Rules. Final approval will be given only after an on-site inspection of the completed project and prior to the accomplishment of any backfilling.

Please be advised that the conditions of this letter are valid for a period of 18 months. At that time the site will be re-evaluated in relation to rules in effect at that time.

Sincerely,

Summer Day, LEHS

Environmental Health Division

801-399-7160