John Lewis Legacy Mountain Estates 3718 N Wolf Creek Drive Eden, Utah 84310

# RE: LAKE VIEW WATER SYSTEM REPORT LEGACY MOUNTAIN ESTATES – APPROVAL LETTER

Dear Mr. Lewis

The Lakeview Water Corporation operates a water system that serves the Ski Lake Resort Area, which includes Edgewater Beach Resort, as well as existing homes and condominiums in Valley Lake Estates, Ski Lake Estates, and The Summit at Ski Lake, Lakeside Village, a Catholic Church, The Chalets at Ski Lake and connects to the Langeland, Schlaf and Samarel properties. The current water system consists of the following:

449,000 gallon concrete reservoir (2003)
52,200 gallon concrete reservoir (1982 +/-)
52,200 gallon concrete reservoir (1966 +/- not in service - needs some repairs)
2 Culinary Water Wells (Well #1 – Mitchell -- approved at 245 gpm)
(Well #2 – Bowden -- approved at 310 gpm)
Distribution System including 4". 6", 8" and 10" PVC pipe, Fire
Hydrants, Pressure Reducing Stations, Service Laterals and Meters.

Lakeview Water Company also has water rights to 303 acre-feet of water approved by The Utah State Engineer (Division of Water Rights) through Weber Basin Water Conservancy District.

Lakeview Water Company is currently serving  $\underline{347.25}$  equivalent residential connections and providing irrigation to  $\underline{26.214}$  acres of landscaping. Total Source available is two-thirds the approved test pump rates of the wells – 555gpm times 0.667 equals 370gpm and 501,200 gallons of active water storage.

## **Source Requirement**

Legacy Mountain Estates has 48 single family lots, with each lot having a maximum irrigated landscape area of 5000 square feet per unit equaling 5.51 irrigatable acres. Each residential connect will require a residential use of 800 gallons per day (gpd) equaling 0.556 gallons per minute (gpm). The 48 lots at 0.556gpm, will require a source of 26.69gpm. The 5.51 acres of landscaped area requires a source of 3.39gpm per irrigatable acre or 18.68gpm. Utah State DEQ Division of Drinking Water, allows two-thirds of the developed source to be used in determining the number of connections the source can sustain. Total developed water source required for the 48 lots is 45.37gpm / 0.6667 equals 68.052gpm.

## **Storage Requirement**

Storage requirements for Legacy Mountain Estates is 400 gallons per lot and 2528 gallons per irrigatable acre. The 48 lots at 400 gallons equals 19,200 gallons and the 5.51 acres of irrigatable landscaping at 2528 gallons per acre equals 13,929 gallons. Additionally, 180,000 gallons of Fire protection storage is needed.

The existing reservoirs have adequate capacity to serve Legacy Mountain Estates, but because of the elevation difference with the existing water system, a new reservoir will be required to store the needed potable water, irrigation and provide fire protection to the lots and future homes.

However, a new enclosed, culinary water reservoir of a minimum size of 213,129 gallons is required. A new 250,000 gallon reservoir has been designed and has sufficient capacity to meet the design requirements.

# Water Rights Requirement

Additional Water Rights are required from Legacy Mountain Estate to cover their culinary and irrigation needs as this project is added to the Lakeview Water Company. The Culinary requirements from Utah DEQ Division of Water Rights is 146000 gallons of water per year which equates to 0.446 acre-feet per connection totaling 21.50 acre-feet. The irrigation requirements from the Utah DEQ Division of Drinking Water, are 1.66 acre-feet per irrigatable acre. At 5000 sq ft of irrigatable landscaping per lot equals 5.15 acres at 1.66 acre-feet per acre totals 6.81 acre-feet. However, the Utah State Division of Water Rights recommends 3.0 acre-feet per irrigatable acre in Area 35 – which includes the upper Ogden Valley. (5.15 acres at 3.0 acre-feet per acre is 15.45 acre-feet

Minimum water rights required to transfer to Lakeview Water company is 36.95 acre-feet of water. If addition irrigatable landscaping is needed, additional water rights will be required, based on the above-mentioned Division of Water Rights requirements.

#### Fees

The water connection fees will be paid to the Lakeview Water Company upon Final Approval of Legacy Mountain Estates from the Weber County Commissioners. This connection fee is \$3500.00 per unit connection.

Monthly service fees will be charged to each unit upon recording of the final plat at the Weber County Recorder's Office. The base monthly fee is \$35.00 for 0 to 12,000 gallons of water per month, with an increasing rates for increased usage for active connections (See attached rate schedule) and \$10.00 per month for approved dormant connections. Connection Fees and monthly usage fees were established by the Utah Public Service Commission.

### **Memo of Understanding**

Based on the Memo of Understanding between Ray Bowden (L and M) and John Lewis (LME), Lakeview Water Company, , is willing to provide usage of a the "Stoddard" well located in the Chalets at Ski Lake to meet the additional source demand generated by Legacy Mountain Estates. This well has been test pumped at 300gpm, but has arsenic levels higher than allowed by EPA and the Utah DEQ Division of Drinking Water and requires treatment for the partial removal of arsenic to meet Drinking Water Requirements. It is estimated that to equip this well with a submersible pump, control panel and piping at a minimum pump rate of 70gpm (require source is 45.37gpm /0.667 = 68.05gpm) would cost about \$45,000. The Cost to treat the arsenic through the use Media Arsenic Adsorption Pressurized Tanks Systems for a 75gpm system is

estimated at \$1250 per gpm treated or approximately \$94,000. A 12-foot by 16-foot Structure should be large enough to house the pressure tanks, pump and controls. Structure will need to be insulated, have heat and power. Estimated cost for structure is cost about \$11,000. Total estimate cost of equipping well, providing arsenic treatment and constructing a building is anticipate being about \$150,000. (\$3125 per lot based on 48 lots – which will need to be escrowed to ensure treatment system is constructed).

Also based on the Memo of Understanding Legacy Mountain Estates has agreed to give one-third (1/3) of its water shares to Lakeview Water Company. This equates to 44 shares of water will be transferred to Lakeview Water Company at the time the development is approved (verification needs to be made that 1 share of water equals 1.0 acre-feet of culinary water).

Legacy Mountain Estates PRUD will be responsible for the costs to supply and construct all of the water system piping, pressure reducing stations, booster pump station, storage reservoir and water system appurtenances within the boundaries of Legacy Mountain Estates, together with the connection into the existing Lakeview Water Company's water system in the Chalet of Ski Lake. These materials and installation will ne required to meet Weber County Standards and the Standards of Lakeview Water Company. After installation is complete and the water system has been tested and approved, the developer will provide a one-year guarantee on the water system within the boundaries of Legacy Mountain Estates. Lakeview Water Company will begin to maintain these water system improvements upon final acceptance of the water system.

Lakeview Water Company has adequate connections available to serve the 48 lots in Legacy Mountain Estates from the existing Lakeview Water Company System, which can allow Legacy Mountain to move forward with their development prior to development of an additional source of water.

Please contact me if you have any questions or need further information.

Sincerely,

Mark E. Babbitt, PE / PLS Great Basin Engineering, Inc. Water System Engineer

Ray Bowden, Pres. Lakeview Water Company