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Engineering • Surveying • Planning

The View from Andy's Desk

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September 28, 2012-Andrew R. Cassano is a City/Regional Planner and Professional Land Surveyor with over 43 years of experience in Northern California. He is CEO of Nevada City Engineering, Inc., a firm offering regional planning, surveying, and civil engineering consulting to the private and public sector since 1978.

Rural Residential's Essentials

Whether buying a rural lot, home, or creating new lots by land division, there are some bare essentials to keep in mind. These musts, along with other information, originated in my 1996 pamphlet California Rural Homesite sponsored by some colleagues and intended to be a helpful guide, as well as a low key promotional piece for it's sponsors. You can view the full updated text on our website www.nevadacityengineering.com.

Access:

You have to be able to get there. **Legal** access means you have the right to traverse the roads or routes to get there. If the land does not front on a County or State road, then easements are generally needed to provide legal access. **Physical** access means that the road is drivable, or if not yet built, can be constructed to be drivable, without being too steep or twisty. **Safe** access means that the access road and driveway can be used without undue hazard, such as a driveway entering the main road at a blind spot. **Emergency** access means that there could be more than one way to enter/exit the land in case of a forest fire or other emergency.

Water:

Rural water supplies are generally either piped treated water from the local utility district or a ground water well that provides potable water in sufficient amounts for consumptive use and ideally, irrigation use. Surface water and springs may be a grandfathered source of

water, but may not be acceptable water sources for new home construction. Water quality can be tested, if needed, using an approved laboratory service. Wells vary greatly in the mountains, in terms of depth, yield, and sustainability. Depth and yield can be tested by a qualified well and pump service.

Sewage Disposal:

Unless the property has access to a public sewer system, sewage disposal will likely be provided through a septic tank-leach field system. The septic tank captures solids and must be pumped every 5-10 years. The leachfield distributes the liquid wastewater to underground trenches where it is absorbed into the ground. Septic system feasibility is demonstrated through percolation (perc) and mantle testing. Percolation tests measure how quickly the ground can absorb water. Mantle testing looks at the depth and quality of soil, checking for shallow bedrock or groundwater. There are other wastewater disposal systems such as gray water and composting systems, but check with your local environmental health department to see if any alternative are approved for use in your area.

Our Help:

We provide a wide variety of technical services from informal building site evaluation to detailed planning and design of any size development, residential or otherwise. Some services include corner searches, access evaluation, topographic maps, grading plans, boundary surveys, lot line adjustments, land divisions, code violation remediation, agency permits, and planning entitlements.