

Tuesday, May 31, 2022

Santaquin City Planning and Engineering

Scenic Ridge Estates

Re: Preliminary Subdivision Submittal #4

Summary

The proposed development, Scenic Ridge Estates, seeks to add 8 single-family residential homes along the eastern bench of Santaquin City. This development will connect two existing stub roads, 1200 East and 430 South and provide 1 stub road for future development along the eastern side of the debris channel. A debris channel was installed in 2002/2003 and bisects the overall property. All development will be on the western side of the debris channel. This preliminary submittal seeks to address all the County codes and requirements for development. The following brief explanations can be further examined in the submitted design package and supporting documentation.

History

This property has been subject to several conceptual developments, and two preliminary submittals over the years and this proposed development seeks to meet the unique challenges that this lot presents. Throughout the scoping process of this application, several key factors were discussed that brought up concerns. We have sought to address those concerns as explained below.

Geotechnical Hazards

In order to understand the geotechnical hazards that exist in this area, a full fault stability study was conducted on the property, including 5 fault trenches on the hillside. The fault stability study was written as a stand-alone assessment and has been included with this submittal.

In addition to the fault stability study, a full preliminary geotechnical report was completed with 8 test pits distributed throughout the property. This preliminary geotechnical report will be finalized with the percolation testing that was performed in conjunction with the proposed storm drain system. The preliminary geotechnical report has been included in this submittal.

As discussed in the summary, the property is bisected by a debris channel that was installed in 2002/2003 to protect the residents of Santaquin City following the fires that ravaged the hillside. As part of this development, we will develop a trail on the downhill side of the debris channel. Existing vegetation will be preserved to protect the integrity and functionality of the debris channel. In areas where necessary, we propose flexamat or equal riprap to stabilize the bottom and sides of the debris channel. Please see Trail section, it is the developer's intent to bond or enter into an agreement for the timing of the trail work.

Debris Basin

In future development a debris basin will likely be located on the eastern side of the property, as the location of this basin has not been finalized and will not affect this phase of development, it is not shown on our proposed development. This will be addressed in future phases of development.

Debris Channel

The existing debris channel will be protected and preserved to promote public safety. A trail is proposed as discussed below. We propose to bond or enter an agreement with the City to perform the work on the trail once the debris basins are constructed.

Fire

The addition of a paved trail to the existing debris channel will provide a fire break for the development and residents around the development. In addition, we are dedicating a 50' wide strip including the trail and debris channel that can be further maintained by the Fire Department to ensure extra fire precautions. Fire flows have been a concern in the area, our proposed development will add 4 fire hydrants to the area. These fire hydrants will be fed by a booster station (see Water below). These 4 additional fire hydrants have been designed to meet the Santaquin City code for fire flows and pressures.

Water

Residents in the area have voiced concern over water pressures and the effect that the proposed development will have on their water pressure. To prevent any negative affects to existing water pressures, our development has been reduced to 8 lots that all meet the City's level of service (LOS) for both culinary and pressure irrigation. In addition to these 8 lots, dry culinary and pressure irrigation lines will be installed to facilitate connection to higher pressures (be it tank or pump) with future development.

Traffic

A traffic analysis has been conducted to assess the existing roadway network and infrastructure in comparison to Santaquin City's Transportation Masterplan, and the existing and planned Level of Service. The proposed development will add 8 single-family residences distributed across two roadways. These roadways, 1200 E and 430 S will connect to existing stub roads from the previous subdivision our property shares borders with.

The proposed roadways are designed to Santaquin City codes, with 430 E at a maximum of 10% and 1200 E at a maximum of 11%. 1200 E is allowed to be steeper due to its westerly aspect. All roadways meet code for slope, no variance is necessary. See Hillside Overlay Code.

Construction Traffic

In an effort to control and mitigate traffic concerns raised by the City and Citizens, we have included a construction traffic map that will be dispersed to contractors and sub-contractors. This routing will allow construction traffic to take a route with less turns. We invite the City to provide additional

comment on this routing. We would also like to encourage citizens to call the police immediately if they witness any unsafe or dangerous situations.

Storm Drain

This proposed development is located in an area that does not have regional detention capacities. As such, per Santaquin City code, our development will consist of underground infiltration galleries that have been oversized to safely detain the entire 100-year storm event plus a factor of safety. This initial system will handle the majority of the storm events the development will see. In the event of a large event, the major system will consist of roadways and curb and gutter to direct storm water. Please see the storm drain report and calculations.

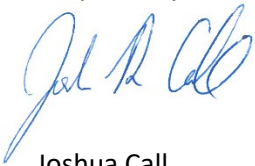
Trails

As mentioned above, a trail will be constructed and dedicated to the City. This trail is in line with the City's recreational trail master plan and will also provide safety in the form of a fire break as explained above. This trail will run parallel to the existing debris channel and the debris channel will be preserved.

Lot Size

All 8 single-family residential lots will have at least 12,000 square feet as indicated on the plat. The booster pump station lot will be smaller than 12,000 square feet, however, this lot will be dedicated to the City with the booster pump station installed. As it is not a developable lot, this size should not cause any issues.

Respectfully,

A handwritten signature in blue ink, appearing to read 'Joshua Call'.

Joshua Call

Epic Engineering, P.C.

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