



SUMMIT ENGINEERING INC.

707 . 527 . 0775 Phone

707 . 527 . 0212 Fax

805 . 549 . 0775 Central Coast

463 Aviation Blvd. Ste 200 Santa Rosa, CA 95403

October 14, 2011

John McDowell
Napa County Planning Department & Conservation Development
1195 Third Street, Room 210
Napa, CA 94559

Re: Aetna Springs
1600 Aetna Springs Road, Pope Valley
Project Number 2011084

Dear Mr. McDowell:

The owner of the Aetna Springs resort and golf course is planning to perform improvements to the facility. The majority of the proposed improvements are located within the parcel containing the historic resort buildings at 1600 Aetna Springs Road, Pope Valley (APN 018-300-017, -018). Summit Engineering was retained to review the proposed improvements and evaluate the feasibility of meeting Napa County standards for civil engineering related items in preparation of a Use Permit modification. Summit has reviewed the preliminary design work prepared for the project scope. The following are the results of our evaluation:

Emergency Vehicle Access & Circulation

Conceptual emergency vehicle access (EVA) paths were examined to determine if they can meet Napa County Public Works and Fire Department access requirements. Based on conceptual work completed, it was determined that road modifications could be designed to meet applicable County requirements identified in the project meeting with Gabrielle Avina (CDF, Napa County Fire Dept.) and Drew Lander (Napa County Public Works Dept.) on August 15, 2007. These parameters included:

1. 150' or less distance to perimeter of structure (hose pull distance), emergency vehicles circulation around the site, and pullouts at appropriate frequency
2. A road modification request will be submitted as necessary for any proposed exceptions to the Napa County Road and Streets standards. No exceptions have been identified.
3. EVA routes will be looped to avoid congestion wherever feasible
4. When EVA routes are not paved, the widths and identification of limits will be identified in a manner acceptable to CDF
5. Turnouts will be located at hydrants. Turnout dimensions would be approximately 30 feet long with 15' tapers

Site Fire Protection

Site improvements for fire protection were reviewed for conformance with requirements identified in the project meeting with Gabrielle Avina (CDF, Napa County Fire Dept.) and Drew Lander (Napa County Public Works Dept.) on August 15, 2007. It was determined that site fire protection requirements could be met including:

1. Fire protection yard piping serving hydrants would be looped, some dead-end distribution will be considered pending bridge locations over the creek

2. Water storage will be expanded on the hill above the clubhouse, see UP4.3 for locations. It is anticipated that one additional fire protection and one additional potable water storage tank will be located next to the existing hilltop tanks. One effluent storage tank will also be required and is proposed to be located nearby. The location of the fire protection tank allows for tank head pressure to feed the fire protection system. The fire protection consultant will provide calculations and a booster system if needed to feed high pressure fire flow needs.
3. Hydrants would be located roughly every 300 feet along EVA, with turnouts at every hydrant
4. Alarm scheme for rooms with smoke detection and water flow by unit with one notification zone to be provided at plan check review, if requested by the County
5. Any siding to be replaced on existing buildings should be ignition resistant to the extent possible consistent with the historical nature and reconstruction of the buildings
6. A Vegetation Management Plan will be submitted for review and comment prior to construction to determine if the plan is consistent with fire protection requirements

Grading and Utilities

Site grading and utility changes will be designed per Napa County standards. Conceptual improvements examined include road modifications, grading for the buildings and drainage, utility upgrades, and parking areas that have approved entitlement but not yet constructed. The Owner proposes to utilize as much of the existing infrastructure as possible to minimize disturbance at the site. Improvements to the project site are anticipated to include:

1. Redesign grading and drainage across the site. The design approach will be to exclusively utilize existing outfalls to the creek. If the existing outfalls are inadequate or if new outfalls are required they will be designed with coordination and permitting through the County and the department of Fish & Game.
2. Preparation and filing of a construction stormwater pollution prevention plan (SWPPP)
3. A grading plan will be submitted for plan check review. Grading is expected to be relatively minor to improve drainage.
4. The parking lot improvements will be submitted for plan check review and comment. Parking improvements shall be designed per Napa County standards for off-street parking. The Use Permit site plan show parking areas that have been approved previously.
5. Utility improvements were completed at the Aetna Springs site several years ago. Some utilities were stubbed for future use and improvements. Tie-in to these locations will be shown for plan check review and permitting.
6. If work within the creek is required, it will be submitted for appropriate permitting by regulatory agencies prior to construction. No work within the creek banks is anticipated.

Wastewater and Water

A separate wastewater feasibility and water availability package are prepared for inclusion in the Use Permit minor modification package per County request.

Conclusion

In conclusion, we found that site improvements can and will be designed to conform to Napa County requirements. If any deviations are requested from the standard requirements, they will be addressed during the permit plan check review process.

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Sincerely,



Jasper Lewis-Gehring, P.E.
CIVIL DIVISION MANAGER



cc: Mohammad Javanbakht – Aetna Preserve