

## MEMORANDUM

**To:** Blaine Juchau  
Covell Village

**From:** Chuck Cunningham, Martin Lewis

**Date:** 23 May 2005

**Subject:** Response to Planning Commission Hearing of 18 May 2005

**Project No.:** 675.01

Cunningham Engineering is responding to four topics raised at the May 18 Planning Commission hearing.

- Waste Water Treatment Plant Capacity and Plant Improvements
- Domestic Water Wells
- Drainage and Stormwater Detention
- Traffic Level of Service (LOS)

### **Waste Water Treatment Plant Capacity and Improvements**

Several comments have been made about future costs related to the City's wastewater treatment plant. It is important to understand that wastewater demand for all of the alternatives analyzed in the EIR – Project, High Density and “1864” – can all be accommodated within the design capacity of the existing wastewater treatment plant. This assumes full build out of the current General Plan plus Covell Village.

Independent of the Covell Village project, the City has received new waste discharge requirements from the California Regional Water Quality Control Board that require improvements to the plant discharge quality. All current and future users of the wastewater system will pay for those improvements, the costs of which are currently under study by the City.

A specific question has to do with the sensitivity of using the factor of 2.39 people per market apartment unit. These 610 units could have up to 3.33 people per unit under the “1864” alternative without exceeding existing wastewater treatment plant capacity.

Finally, some concern has been expressed that rezoning of the Con Agra property would increase wastewater flows from what has currently been projected. Appendix G of the FEIR indicates that rezoning to a mixed use project would actually result in a noticeable reduction in assumed wastewater flow – 145,000 gpd vs. 190,000 gpd.

## **Domestic Water Wells**

A question has been raised as to whether one new deep aquifer well will be adequate to serve the project. The DEIR indicates in Section 4.12-5:

“The WSA (Water Supply Assessment) states that based upon the experience of the City and available evidence, one or two wells would provide adequate pumping capacity to serve the needs of the Proposed Project . . . The exact location of each well and whether one or two wells would ultimately be necessary to serve the project would depend on the results of test wells drilled as part of the well development process”

We would also note that the WSA does not take into account the possibility of meeting significant water demand due to irrigation from shallow or intermediate depth aquifers. If those water sources prove viable as irrigation supply sources, the demand on the deep aquifer will be reduced, and thus the need for a second deep aquifer well.

## **Drainage and Stormwater Detention**

Northstar and Wildhorse do not have the same flood plain issues as Covell Village, since neither have an on-site flood plain. The Covell Village drainage plan addresses the existing flood plain issue on site, and ensures no adverse downstream impacts. The Heidrick Pond is the key part of the flood mitigation. It will detain a portion of upstream flows from the Covell Drain. An improved Channel A will collect the Covell Village site runoff and channel it downstream, eventually to Willow Slough Bypass. When the Channel A waters have receded after a storm, then the Heidrick Pond will drain back into Channel A, releasing the water through the system at a slower rate. The system is designed to maintain the downstream pre-project conditions.

The Heidrick pond mitigates the current onsite flood plain conditions. After development, the 100-year flows will be confined to the improved Channel A, and there will be no floodplain on the site outside of the Channel A corridor. House pads will be elevated in order to drain to Channel A. The pads are not elevated to avoid the flood plain.

Cross section drawings of the Heidrick Pond have not been developed; however, the plan view in the DMP and EIR describes the features (trapezoid shape, slightly sloping but essentially flat bottom, approximately 90 surface acres and approximately 8' deep).

## **Traffic Level of Service**

Questions have been raised about Level of Service results presented in the EIR, based on Project development. It is important to distinguish between LOS for intersections and for roadway segments. **With mitigation, all study area intersections have better than**

**LOS F for the Project Plus Cumulative scenario.** All recommended mitigations can be accomplished.

It is correct that some Roadway segments will continue to operate at LOS F with the Project – specifically Pole Line Road south of Covell and Covell Boulevard between F and Pole Line (for the High Density Alternative). Widening of these segments is either not practical or contrary to General Plan policies. We would also note that some segments are projected to operate at LOS F **without** the Project.

It is important to note that Level of Service at intersections is more critical than roadway segments. Quoting from the DEIR, Study Intersections (Page 4.4-7):

“In general, **the operational characteristics of a roadway are defined by the operations of key intersections within the network. Intersections are typically considered to be the critical analysis locations**, because conflicting traffic movements at intersections impose capacity constraints on the overall roadway network.” [emphasis added].

While a lower LOS on a roadway segment may reduce travel speeds (not always a bad thing), the operation of intersections is the key. As noted above, all study area intersections operate above LOS F under all scenarios, with mitigation.

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