

weed control and riparian/wetland protection/buffer zones as appropriate. Information can be obtained from the Colorado Division of Wildlife.

Applicant is hereby on notice that the U.S. Army Corps of Engineers (COE) and the U.S. Fish and Wildlife Service (FWS) have regulatory jurisdiction over wetland and threatened and endangered species issues, respectively. It is the applicant's responsibility, and not El Paso County's, to ensure that the applicant is in compliance with all applicable county, state, and federal wetlands, threatened or endangered species, or wildlife conservation laws and regulations, including, but not limited to, the Clean Water Act, and the Endangered Species Act. Thus, it is strongly recommended that the applicant obtain the necessary approvals from the COE and/or FWS as part of their planning process.

COLORADO GEOLOGICAL SURVEY

In response to your request and in accordance with Senate Bill 35 (1972), CGS has performed a technical review concerning geologic hazards for the above-mentioned proposed development. The site consists of approximately 39.2 acres and is being platted to include 5 residential lots ranging from 6.8 – 7.6 acres in size. The lots will use individual well and septic systems. Included in the review package were: the submittal letter (3/25/10) by LDC, Inc., final plat (1/9/09) by LDC, Inc., and geology and soils study (11/14/08) by Kumar & Assoc. *No drainage report or grading plans were included for review by CGS.*

The site is located in a gently rolling area north of Brackett Creek. A tributary to Brackett Creek, and associated 100-year flood plain, runs through the eastern portion of the site. A secondary drainage is located in the central portion of the site. Even though the secondary drainage is not included on the FEMA flood maps, there is a physiographic flood plain associated with it, as shown in the Kumar report. Drainage is generally to the south toward Brackett Creek. The area is prone to seasonal flooding and shallow groundwater.

Primary geologic deposits include eolian and old alluvial soils overlying the Dawson Formation (interbedded claystones and sandstones). The test borings show varied depth to bedrock, ranging from 2 to greater than 20 feet below ground surface. Areas of low density soils may be present at depth, based on the reported blow counts. The Dawson is also known to have sporadic lenses of expansive clays. The alluvial soils likely contain lenses of clay and silt that may allow perched water to form seasonally, or resulting from irrigation and septic infiltration. Moderate erosion can be expected in these soils, especially if they are disturbed. Areas of accelerated erosion and gulleying are present near the drainages, as shown by Kumar.

The Kumar report does a good job identifying potential geologic conditions that may present problems to the proposed development and depicting mitigative strategies. Primary geologic concerns for the development of this property include flooding, shallow groundwater, erosion, and potentially water-sensitive soils and bedrock. CGS offers the following comments for County consideration:

1. Development and grading should not be permitted within the 100-year flood plain boundaries. It may be prudent to develop a setback from the FEMA flood plain, since it was developed on a 1:24000 scale and not a site-specific scale. FEMA maps should not be considered accurate at a site plan scale.
2. Areas of old fill and debris should be removed prior to development.
3. Kumar recommends using a 100-foot setback from the creek for erosion protection if the drainage banks are not reinforced. This should be indicated on the plat.

4. A design-level subsurface geotechnical investigation should be conducted at each building site prior to building. Foundation and septic designs may require mitigation based on the findings of this investigation.
5. A site-specific septic investigation should be conducted prior to building to determine design criteria, including depth to seasonal groundwater and percolation rates. Engineered septic systems may be required for some lots.
6. Seasonally shallow groundwater may be present in areas of this site. Appropriate subsurface drainage should be established for utility lines and subsurface construction expected within 5 feet of the seasonally high groundwater table.
7. The soils may be sensitive to moisture. Surface grading should work to prevent water from infiltrating soils around structures and prevent areas of standing water. Low-water usage landscaping should be used around structures.
8. Recommendations made by Kumar should be followed.

The following agencies have not provided review comments to-date:

EPC HEALTH DEPARTMENT (COMMENTS PENDING)
UPPER BLACK SQUIRREL CREEK GWMD
EPC SHERIFF'S DEPARTMENT
CALHAN SCHOOL DISTRICT NO. RJ1
COLORADO DIVISION OF WILDLIFE

Comments received from any of the above non-responding agencies following the issuance of this letter will be forwarded to the applicant/applicant's representative and will be added to the end of this letter for record keeping purposes.

Please address the comments as listed above. A detailed letter needs to accompany the revisions. The letter must include each comment listed above and, immediately thereafter, include a response from the applicant addressing the comment . If any department/division or review agency has an issue that needs resolution or a required revision you must provide the necessary documents, drawings, etc., to the Development Services Department. The Development Services Department will forward the revisions directly to the affected agency(s).

Due to the number of comments and necessary revisions to the plan(s) an additional detailed review will be necessary. **If you have any questions pertaining specific agency comments please contact the various departments or review agencies directly. PLEASE NOTE: The application cannot be scheduled for public hearing until and unless a final response has been received by Development Services from those agencies that are required (pursuant to state statute and the El Paso County Land Development Code) to provide such response (i.e.- State Engineer's Office, County Attorney's Office, County Health Department, etc).**

In order to be considered for the July 6, 2010, Planning Commission hearing, issues must be resolved no later than June 14, 2010. To give the reviewers time to confirm that those issues have been resolved; revisions with all issues resolved need to be submitted by May 20, 2010. Please contact me if you would like to schedule a meeting with myself or the multi-disciplinary team.

When all the comments have been addressed and corrections made please submit the required documents as requested on the attached resubmittal matrix.