Docket DC-12-0003: Amendments to Oil and Gas Development Regulations
Public Hearing for the Planning Commission to consider proposed Land Use Code amendments addressing oil and gas development within the Boulder County Land Use Code

Coordinating Staff: Kimberly Sanchez, Planning Division Manager (Land Use Department)
Jeff Robbins, Outside Counsel on Oil and Gas Issues

AGENDA:

1. COUNTY STAFF PRESENTATION
   a. Kim Sanchez / Jeff Robbins – Revisions to Draft Regulations
   b. David Haines (Land Use Department, GIS) - Maps
2. PUBLIC COMMENT (3-min. allowance per individual speaker**) All public comment received to date is available on the County’s oil and gas website at: http://www.bouldercounty.org/dept/landuse/pages/oilgas.aspx
3. PLANNING COMMISSION DISCUSSION/ACTION/DIRECTION TO STAFF
   ** Time may be pooled (up to 12 minutes maximum) provided all individuals who are donating time are present. Anyone wishing to exceed 12 minutes must contact the Land Use Department with a request for consideration prior to the hearing.

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SUMMARY
On September 24th staff introduced the Planning Commission to the proposed revisions to Boulder County Land Use Code Article 4-900, Development Plan Review for Oil and Gas Operations (Draft Regulations) and related provisions of the Land Use Code. The Planning Commission heard from staff, the County’s outside counsel and the County’s oil and gas technical consultant held a public hearing, and began to discuss their initial thoughts. The September 24th meeting was tabled to October 1 in order for Planning Commission to thoughtfully consider the materials presented and public comment and to continue the discussion and provide direction to staff after having time to digest the information and public comments. On October 1st Planning Commission provided its initial comments to Staff and the public.

Today’s public hearing is to consider the revised Draft Regulations, which were developed by Staff in response to the direction received from the Planning Commission on October 1. (See Planning Commission Motion – Attachment B.)

The specific items in Planning Commission’s October 1 motion are discussed in detail below, but in general the discussion revolved around whether the Expedited and Standard DPR processes were achieving the same outcomes. Planning Commission expressed that it was not clear that both processes were designed to accomplish similar results. They wanted a better understanding of how the Standard mitigation measures and impact plans might be embedded in the Expedited review and directed staff to examine what is not being directly addressed in Expedited review to make sure something is not unintentionally overlooked. Planning Commission stated they do not want to lose the protective measures that are thought to be important from the Standard DPR process, but it understood that there are certain tradeoffs between Expedited DPR review (accomplishing specific objective environmental protection) as compared with Standard DPR review (which uses subjective and context-based mitigation plans to achieve environmental and other protections).

To that point, discussion largely centered on what qualifies for Expedited review and there was concern expressed that the review criteria for Expedited might be too relaxed by not requiring the same mitigation plans that the Standard review does. Planning Commission saw the intent of Expedited to move ahead with projects that cause as little damage as possible, but without sacrificing the primary objective: protecting the public.

Staff is continuing to meet with and receive input from Industry and the Colorado Oil and Gas Commission (COGCC), as well as receive public comments. Staff met with the COGCC and has incorporated some changes into the Draft Regulations based on that discussion. Staff received comments from Encana the afternoon of October 9th but has not had sufficient time to contemplate any changes to the attached draft based off their comments.

ACTION REQUESTED FROM PLANNING COMMISSION:
In order to keep on schedule under the time constraints of the moratorium, staff requests that following today’s staff presentation and public testimony, the Planning Commission either (1) take final action (approve and recommend approval to the Board of County Commissioners) or (2) provide direction to staff on desired changes to the latest draft and table the subject docket to October 30, 2012 at 4:00 p.m. for final action at that time.
Anticipated Schedule for Board of County Commissioner’s Review of the Draft Regulations:

- **Tuesday November 13, 2012 at 4:00 P.M.** - Staff will present the Draft Regulations to the Board of County Commissioners (BOCC). The BOCC will take public comment and provide direction to staff concerning the Draft Regulations.

- **Wednesday November 14, 2012 at 11:00 A.M. (TBD)** – Follow-up meeting if additional BOCC discussion and direction to staff is necessary after the November 14 public meeting [no public comment would be taken at this session].

- **Meetings to follow will be posted on the County’s oil and gas website:**

PROPOSED REVISIONS

The following table breaks down the proposed revisions to the Draft Regulations pursuant to the motion made by Planning Commission at the October 1 public meeting. Each item in Planning Commission’s October 1 motion is summarized and staff’s response to the direction given is discussed accordingly. The proposed revisions are redlined in the revised Draft Regulations (Attachment A).

(Note: The Draft Regulations include the proposed creation of a new Article 12 for placement of the oil and gas development regulations in a discrete article in the Land Use Code. The number of the article has changed from Article 20 to Article 12 as had been originally proposed.)

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<td>1. Tables</td>
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| Consider inserting tables within the Regulations themselves (i.e., tables that break down the Standard and Expedited DPR processes, which were presented at October 1 Planning Commission) | ✓ Staff reviewed adding the tables to the Regulations. We find them very helpful in clarifying the requirements of the process but when added to the text it becomes redundant information that can make the regulations harder to follow. For that reason staff suggests:  
  - That tables be included in the handouts/application materials that will implement the Regulations.  
  ✓ Alternatively, tables could be included as an appendix to the Regulations. |
| 2. Public Notice to Neighbors | |
| • Notice should be sent to tenants as well as owners, if the parcel owner does not reside on the property  
  • Expand notice area based off potential impact and bump from 1500 feet to ½ mile (2,640 feet)  
  • Add more details on exactly what activity will be happening in the description provided at the pre-application notice phase | ✓ New language addressing residents added to Section 12-400(H)(2)(d): where physical address is different from the Assessor’s address for owner, mail to both.  
  ✓ Notice area increased to ½ mile (Section 12-400(H)(1)).  
  ✓ Additional information included in notice that will be mailed at pre-application stage (Section 12-400(H)(3))  
  ✓ Deleted certified mailing requirement in Section 12-500.E |
<p>| 3. Show all closed and former wells | ✓ Requirement to show all producing, closed, abandoned, and shut-in wells on site plan added to Section 12-500(G). |</p>
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<tr>
<td>• Consider adding some of the mitigation plans required in Standard to Expedited process in order to ensure that the outcome of the two processes is the same</td>
<td>✓ Added language to Sections 12-602 and 12-703 making it clear that County is empowered to make the determination as to whether there are impacts and if they have been mitigated adequately.</td>
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<td>• Still want to keep Expedited DPR process expedited and viable for operators</td>
<td>✓ Agricultural Land Mitigation (Section 12-602(E)) and Land Disturbance (Section 12-602(F)) standards were brought into Expedited DPR process. Agricultural Land Mitigation is a placeholder for now; staff is working on drafting more precise language than what is in the Standard DPR process so that efficacy of the Expedited process will not be compromised with this addition.</td>
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<td>✓ Geologic hazards, natural resources, wetlands, surrounding land uses are addressed in the Expedited eligibility/siting criteria (Section 12-601(B)).</td>
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<td>✓ Scenic and rural character concerns are addressed, to some degree, in the Expedited siting setbacks from property lines and occupied structures although it is possible that these protective setbacks may cause the wellhead to be located in a more sensitive visual area; Staff considers this a trade-off in that more protective air and water quality measures will be obtained in exchange for a less desirable location from a visual aspect.</td>
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<td>✓ Cultural and historic resources are often clustered with the structures on a property so this, too, is to some degree covered in the Expedited process through the Expedited DPR’s siting criteria. Other cultural/archaeological sensitive areas are often found along stream corridors which are addressed by the increased setbacks from surface water.</td>
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<td>✓ Recreational activity is not directly addressed in Expedited but most recreational activity will occur or near open space lands so impacts on recreational activities can be addressed through surface use agreements between the County and the operator.</td>
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<td>✓ Staff accepts that there are clear trade-offs made in the Expedited review, in that air and water quality measures that the County could not otherwise require can be voluntarily gained through the Expedited process.</td>
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<td>✓ Both Expedited and Standard DPR processes require mitigation in the form of the General Conditions of Approval listed in Section 12-800.</td>
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<td>✓ Staff retains the ability to reclassify a proposed Expedited DPR application if application of Expedited criteria fails to adequately mitigate a proposed well.</td>
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<td><strong>5. Neighborhood Meetings</strong></td>
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<td>• Consider adding Neighborhood Meeting requirement to Expedited DPR process</td>
<td>✓ Given initial feedback from industry that even a 450-day process may not be viewed as “expedited” enough to be worth pursuing, staff incorporated a “neighborhood mailing” rather than a “neighborhood meeting” into the Expedited DPR at Section 12-400(H)(3)(A).</td>
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<td>• Refine outcomes / expectations of neighborhood meeting</td>
<td>✓ Section 12-601(C) was split to distinguish between referral to government agencies and notice to surrounding property owners and tenants (notice is now to people within 2,640 feet) and will include information regarding where they can access application materials</td>
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<td>• Consider additional information to neighbors through meetings vs. mailings</td>
<td>✓ For Standard DPR, the Neighborhood meeting is conducted by the applicant and is intended to be informational although it will allow neighbors to voice concerns</td>
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<td>✓ For Standard DPR, required applicant to provide a summary of the comments that were expressed at the neighborhood meeting (Section 12-702(A))</td>
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<td><strong>6. Water Quality - Sampling qualifications</strong></td>
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<td>Sampling should be done by professionally qualified third parties, not by operators</td>
<td>✓ New Section 12-602(C)(3) requires professional qualified independent contractor to evaluate water quality and abandoned well assessments instead of operator (in reality probably contracting this out to a 3rd party anyway)</td>
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<td><strong>7. Transportation requirements</strong></td>
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<td>• Add compliance with multi-modal standards to Expedited DPR process</td>
<td>✓ Staff is reworking the Transportation requirements with input from the Transportation Department. Changes may include: a) bringing in language to allow Transportation Department the ability to require off-site infrastructure improvements where necessitated by a proposed new well for both Expedited and Standard processes; and b) ability to provide a fee in lieu of off-site infrastructure for expedited</td>
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<td>• Are the Transportation mitigation measures different in the Expedited v. Standard processes?</td>
<td>✓ Idea is that there would be no practical difference between the impacts from the two processes; the fee that can be paid in Expedited will make that process more streamlined and certain for applicants who elect that option.</td>
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<td>• Provide an update regarding Transportation Impact Fee Study at October 17th hearing</td>
<td>✓ Update regarding Oil &amp; Gas Roadway Impact Study (see status memo from Transportation Department and Oil &amp; Gas Roadway Impact Study RFP – Attachment K)</td>
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| 8. Expedited DPR siting criteria | ✓ See attached maps (Attachments C, D, E, F, G, and H), which will be presented and discussed during the October 17th public hearing  
✓ Intent is for the setbacks to be protective but to allow enough area for Expedited to be viable for operators to take advantage of so the County can gain air and water quality protection that we would not be able to require otherwise  
✓ Note: Staff also included a map of existing well sites for comparison purposes. |

- Setbacks are too small in the Expedited DPR  
- At a minimum, staff should look at what is being proposed at the state level in current rulemaking (Existing COGCC setback of 150-350 ft, depending on characteristics of area well is located, and proposal for amended setback rules with a minimum of 350 ft statewide no matter where the well is located)  
- Present some scenarios for Expedited eligibility and show mapping of these on October 17th:  
  
**Scenario 1:** As proposed in Draft Regulations  
**Scenario 2:** 1500 ft setback from occupied structures (do not distinguish between residences and schools, hospitals, etc.)  
**Scenario 3:** Commissioner Young’s suggestion-  
1 football field from property line (300 ft)  
2 football fields from occupied structures (600 ft)  
3 football fields from water wells (domestic, commercial, irrigation) (900 ft)  
3 football fields from surface water bodies (900 ft)  

9. Air quality  
- Section 12-602.A.1 and A.2 should be squared up formatting-wise with Section 20-703.B.1 and B.2  
- Title of paragraph should be “general duty to minimize VOC emissions”  
- Consider whether regulations should allow for better than 98% VOC destruction or “best available practicable technology”  
- Are we adequately addressing non-VOC emissions? E.g., silica sand dust, other dust suppression  
  
✓ Made suggested edits and formatted Air Quality section consistently between Expedited and Standard DPR processes  
✓ Regarding why 98% is pushing the bar, Mike Matheson (County’s technical consultant) provided the following response: 98% VOC combustion destruction is no longer a “custom” technology. Rather, it is a “premium” level that can be readily purchased sometimes at extra cost. 95% is now rather standard combustion control technology. The industry is moving toward 98% + control. However, it is important to keep in mind that 98% is not always 98%. Upset conditions or maintenance problems can cause short term destruction efficiency to decrease all the way to zero. Machines break sometimes therefore it is possible that over a period of time these down periods will lead to an overall combustion destruction of less than 98%. Even machines with 100% VOC combustion destruction, which can be found for some applications, will break down.  
✓ General operation standard Section 12-800(G) is broad enough to address silica sand dust issue. Mike Matheson (County’s technical consultant) also notes that silica issue is most pressing to on-site operators, rather than neighbors, and is addressed through OSHA.
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<td><strong>10. Noise requirements</strong></td>
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| Add noise requirements to Expedited DPR process | ✓ Compliance with State regulations is required for noise  
|  | ✓ Removed from Standard DPR (only) and added to General Conditions of Approval (Section 12-800(O))  
|  | ✓ After consultation with COGCC, staff removed proposed residential designation language from noise standard |
| **11. Water quality** |  
| • Why 6-year cap on testing? | ✓ Staff will continue to monitor studies and information including EPA’s current Study on the Potential Impacts of Hydraulic Fracturing on Drinking Water Resources expected release for peer review in 2014, as well as continue to follow USGS and EPA’s Pavillion monitoring.  
|  | ✓ Added requirement to Section 12-602(2)(c) for follow-up sampling to be conducted at time of final reclamation of oil and gas location, similar to language in COGCC straw man.  
<p>|  | ✓ Director also has the discretion to require further water well sampling at any time in response to complaints from water well owners. |
| <strong>12. Emergency dispatch</strong> |<br />
| Make sure this means local dispatch, not company headquarters somewhere in another state | ✓ Made edit to require local contact in Section 12-703(D)(2)(a). |</p>
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| 13. Emergency Preparedness Plan Referrals Include Boulder County Sheriff, Office of Emergency Management (OEM), and local fire protection district | ✓ Made edit to require referrals to these agencies at Section 12-703(D)(2). ✓ Staff received the following input from OEM and is reviewing how best to incorporate it into the regulations: **Section 703(D) Edits for consideration** The plan shall meet the comprehensive emergency and recovery planning guidance standards as set forth by the Boulder Office of Emergency Management. The planning standards address the following sections:  
  a) Facility / Company Profile and mapping (GPS / Site Plot)  
  b) Hazard reporting: SARA Title III reporting Tier II and or Boulder County requirement to list all hazardous substances, extremely hazardous substances and compounds of concern as identified in this document.  
  c) Emergency response plan: Emergency notification procedures, emergency contact lists, threshold / trigger levels pre-identified as when an emergency state is determined or declared by site personnel.  
  d) All hazardous materials transportation shall met D.O.T. CFR 49 hazardous materials transportation standards and regulations.  
  e) Community engagement plan - Identified process to engage the community and educate on risks and benefits of the on-site activities and establish the process for community requests for information and meetings to address concerns.  
  f) Recovery plan: describes the process for determining recovery standards before operations are established, identify funding sources for the stated level of recovery (insurance / company), responsibility by agreement that the operator assumes for fiscal reimbursement and restoration of community infrastructure and the environment.  

The plan should be submitted electronically to the Boulder OEM and the fire department having jurisdiction for compliance processing and also record keeping. OEM has an established SARA Title III process and will need to create the Boulder Comprehensive planning guidance standards. Need to pre-identify reporting threshold levels. OEM can manage the reporting and distribution to the first responders. Also keep in mind that the Superfund Amendment and reauthorization act also has a community right to know piece included in the federal law.
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<td><strong>14. Emergency Plan</strong></td>
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<td>✓ Need more disclosure regarding toxic waste that might get spilled on the surface</td>
<td>✓ Added new provisions (i) and (j) regarding disclosure of chemicals to Section 12-703(D)(2).</td>
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<td>✓ Commissioner Blum’s comment: does section on chemical disclosure (Section 12-800(E)) mesh correctly with Emergency Preparedness Standards (Section 12-703(D))?</td>
<td>✓ Collapsed 20-800 (e) (former chemical disclosure general condition of approval) into emergency preparedness plan at Section 12-703(D).</td>
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<td>✓ Provide permanent record of what has been injected into well</td>
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<td><strong>15. Flammable material</strong></td>
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<td>Clarify 12-800.K - flammable material condition of approval</td>
<td>✓ Deleted specification that only land within 25 feet need be clear of flammable material.</td>
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<td><strong>16. Financial guarantees / enforcement</strong></td>
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<td>• Refine when financial guarantees are required and released</td>
<td>✓ Comprehensive edit to Enforcement provision in Section 12-1300)</td>
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<td>• Commissioner Cohen’s comments: financial security provisions good but need more details on intent and mechanisms</td>
<td>✓ Added Director discretion language covering release of financial security.</td>
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<td>• Commissioner Holwick’s comment on enforcement: Need to square these sections up so they work together, e.g., reclamation</td>
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<td>• Responsible party concerns</td>
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<td><strong>17. Duration of Approved DPR</strong></td>
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<td>✓ After consultation with the COGCC, Staff changed the effective approval period for a DPR in Section 12-1200(D) from two (2) years to three (3) years since this is the timeframe for the Oil &amp; Gas Location Assessment (OGLA – “Form 2A”). The timeframe in the regulations was always intended to sync with the approval period of the State’s permit.</td>
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<td><strong>18. Fees</strong></td>
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<td>• What fees will be required and when?</td>
<td>✓ Staff to implement fees once regulations become final.</td>
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<td>• Ensure applicant pays for any necessary consultants</td>
<td>✓ Fees will be based on the amount of staff time necessary to implement the reviews.</td>
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<tr>
<td>• Financial security</td>
<td>✓ Staff needs to evaluate resources that will be needed; will likely need assistance/consultants on Air Quality and Water Quality reviews</td>
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<td>• Possibility of passing the cost of baseline studies on to industry</td>
<td>✓ There is a consultant provision in the regulations (Section 12-702.C). The County will submit a RFP to have people in line to hire as consultants during the review.</td>
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<td><strong>19. Consider Commissioner Holwick and Commissioner Blaugrund’s submitted comments</strong></td>
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<tr>
<td>See emails dated Monday October 1, 2012 – Attachment J</td>
<td>✓ Incorporated some of the recommended edits</td>
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<tr>
<td><strong>20. Consider Commissioner Shanks comments (email dated Monday October 1, 2012)</strong></td>
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<tr>
<td>See email dated Monday October 1, 2012 – Attachment J</td>
<td>✓ Incorporated some of the recommended edits</td>
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TEXT AMENDMENT CRITERIA REVIEW
Pursuant to Article 16-100 of the Land Use Code, no text amendment shall be adopted by the Board of County Commissioners unless the Board has determined that:

1. the existing text is in need of the amendment;
2. the amendment is not contrary to the intent and purpose of this Code; and
3. the amendment is in accordance with the Boulder County Comprehensive Plan

The Planning Commission provides a recommendation to the Board of County Commissioners. The moratorium adopted by the Board of County Commissioners demonstrated the need for the amendments. The amendments are not contrary to the intent and purpose of the Code but update and revise the outdated DPR regulations that are currently in place. The amendments do not conflict with the Boulder County Comprehensive Plan (BCCP); they implement many of the BCCP policies adopted by the Planning Commission on August 15, 2012. Consequently, staff finds the criteria for text amendments in Article 16-100.B. of the Land Use Code are met.

STAFF RECOMMENDS THAT THE PLANNING COMMISSION APPROVE AND RECOMMEND TO THE BOARD OF COUNTY COMMISSIONERS APPROVAL of Docket DC-12-0003: Amendments to Oil and Gas Development Regulations and the official record of the Docket before the Commission with its staff comments, public testimony, and Commission discussion/action.
ATTACHMENT A.1

Proposed New Article 20-12
Development Plan Review for Oil & Gas Operations

**2012-100 Purpose**

A. Boulder County recognizes acknowledges the existence of oil and gas mineral property rights within its unincorporated areas. It is the County’s objective to exercise its fundamental duty to protect public health, safety, welfare, and the environment from potential adverse impacts of oil and gas exploration and development, and to minimize potential land use conflicts between those activities and current or planned land uses.

B. Development plan review is the permitting procedure for oil and gas operations. This process is in place to recognize because these operations involve industrial type activities which by their nature may occur in or near residential and rural areas. Traditional zoning would generally separate these types of uses to mitigate impacts but, since because this use must occur near the resource, separation of uses is not possible and, thus, this Article has been promulgated to address this incompatibility. The purpose is to provide a framework for the responsible exploration and production of oil and gas resources in a manner that is sensitive to surrounding current, planned or future land uses and that mitigates adverse impacts to and protects the public health, safety, welfare, and the environment of the County.

C. This Article is intended to be consistent with the extent of land use authority over oil and gas operations that the Colorado legislature has provided the County and as has been defined and clarified by Colorado courts. Boulder County recognizes that certain Colorado state agencies and the federal government also have authority to regulate certain aspects of oil and gas operations. The regulations of this Article over the land use aspects of oil and gas operations are intended to be consistent with and harmonized with this said authority. In particular, this Article is not intended to create and is not be applied so as to cause an operational conflict with the state’s exercise of its authority over oil and gas operations, which arises when the effectuation of a local interest materially impedes or destroys the state interest in its regulation of oil and gas operations.

**2012-200 Authority of Article**

This article is authorized by C.R.S. §§ 29-20-101 et seq., 30-28-101 et seq., 34-60-101 et seq., 25-7-101 et seq., and other authority as applicable.

**2012-300 Effective Date; Pre-Existing Uses**

A. This Article shall become effective on the date specified in the adopting resolution of the Board of County Commissioners. The provisions of this Article shall apply to all oil and gas operations for which a complete application for development plan review has not been accepted by the County as of the effective date.

B. Boulder County recognizes acknowledges that there are oil and gas operations that were legally established prior to the effective date of this Article that do not conform to this Article. These non-conforming operations shall be allowed to continue provided the post effective date
operation remains consistent with its use prior to the effective date of this Article. A nonconforming operation shall not be extended, expanded, or altered in a manner that would otherwise categorize a substantial modification under Section 2012-1200(E) of this Article. Any substantial modification to a non-conforming use shall require a new approval under this Article.

C. Section 2012-400(D)(1) of this Article provides that the expedited development plan review for new oil and gas operations is not available for applications where the applicant fails to conduct the pre-application conference with the County at least thirty (30) days prior to filing for an Application for Permit to Drill (APD) from the Colorado Oil and Gas Conservation Commission (COGCC). The County recognizes, however, that proposed new oil and gas operations have received APD approval from the COGCC during the development of and prior to the effective date of this Article. The For these applications, the County encourages the use of the expedited development plan review process. Accordingly, oil and gas operations with APD approval prior to the effective date of this Article that otherwise qualify for expedited development plan review may be processed as expedited development plan review applications.

2012-400 General Application Procedure for Expedited DPR and Standard DPR

A. Development Plan Review Required. All oil and gas operations on public and private land within the unincorporated areas of Boulder County shall comply with this Article. Prior to the commencement of any oil and gas operations in the unincorporated County, a development plan review application must be submitted and approved in accordance with this Article. No other form of discretionary land use review under this Code is required for oil and gas operations covered by this Article 2012. Development plan review approval is also required prior to the issuance of any County building permits, or associated grading, access, floodplain, or other County permits necessary for the oil and gas operation. Oil and gas operations which may not require a building or other associated County permit must still obtain development plan review approval under this Article.

B. Expedited Development Plan Review Process. The expedited development plan review process is the County’s process for applicants who voluntarily choose to meet its objective criteria and to engage in most effective performance technologies and practices in the planning, development and operation of new or substantially modified oil and gas operations. The process identifies specific objective criteria for oil and gas operations. The expedited development plan review process is optional and, while applicants are encouraged to use it, this Article contains also offers a standard development plan review process for proposed operations that cannot meet the expedited development plan review criteria or for applicants who choose the standard development plan review process. The expedited development plan review process is an administrative process requiring that only requires review and approval by the Director.

C. Standard Development Plan Review Process. The standard development plan review process is a regulatory process based on more-primarily upon subjective or content specific criteria for new or substantially modified oil and gas operations. The standard development plan review process is available for applicants who choose it, and for applications that do not qualify for or which for expedited Development Plan Review, or for applications that are reclassified from expedited development plan review to standard development plan review. Such applications shall be classified as standard development plan review applications and shall be reviewed by the County and shall require review, public hearing, and decision by the Board of County Commissioners.
D. **Pre-Application Conference.** Boulder County requires applicants to engage with local communities, residents and other stakeholders at each phase of an oil and gas operation, starting prior to exploration or development activity, in order to provide sufficient opportunity for comment on plans, operations and performance, and to listen to concerns of the community, and to address all reasonable concerns as a result of its proposed operation. The pre-application conference will be used to meet this requirement.

1. **Timing.** A pre-application conference as defined in Article 3-201 of this Code shall be held at least thirty (30) days prior to the applicant applying for a COGCC APD and prior to the submission of an application for development plan review. The timing provision for the pre-application conference is intended to allow the County to harmonize concurrently carry out its regulatory procedures with those of the COGCC. Except for Applications under Section 2012-300(c), if the pre-application conference is not conducted at least thirty (30) days prior to the applicant applying for the APD, the application cannot qualify for expedited development plan review.

2. **Conference.** At the pre-application conference, the Director and the applicant will discuss the points contained in Article 3-201 of this Code and review the County’s development plan review process so that the applicant can plan its proposed oil and gas operation in a manner that ensures compliance with the development plan regulations and applicable state and federal regulations. The pre-application conference will also inform the applicant about the benefits of the expedited development plan review process. The pre-application conference also allows the applicant and Director to explore site-specific concerns and issues that relate to the development plan review process, to discuss project impacts and potential mitigation methods, to discuss coordination of the County process with the state permitting process, and to allow the applicant to preliminarily raise any potential operational conflict concerns. Based upon the foregoing, applicants are encouraged to conduct the pre-application conference with the County prior to completing well siting decisions. Completion of the pre-application conference qualifies the applicant to submit an application for a development plan review provided the application is filed within six (6) months of the pre-application conference.

3. **Site Visit.** At the discretion of the Director after consultation with the surface owner, the County may require a site visit as part of the pre-application conference with the applicant to evaluate well locations, compliance with this Article, or mitigation measures that may be required to adequately ensure compliance with this Article.

E. **Classification of Oil and Gas Operation Application.** As part of the completeness determination, the Director shall also determine whether the application initially qualifies for the expedited development plan review process or whether the application is a standard development plan review application. Boulder County encourages applicants to make use of the expedited development plan review process.

F. **Application Submission.** The application shall include documentation establishing that the proposed operation is in compliance with all applicable requirements of this Article. Boulder County encourages the submission of the application and supporting documentation in an electronic format. If not electronically submitted, then the applicant shall submit three (3) copies of the proposed development plan with the completed application form to the Land Use Department. The application shall contain a certification from the applicant that the proposed facility complies with all applicable provisions of this Article, and that the information in the application, as well as in any accompanying documentation, is true and accurate. The application shall be signed by the same person or entity who will sign the corresponding application to be submitted to the COGCC. The Director shall determine whether an expedited development
plan review application is complete within ten (10) days after receipt of the application or twenty (20) days if outside consultants or staff other than the Land Use Department assist the Director with the completeness determination. The Director shall determine whether a standard development plan review application is complete within twenty (20) days after receipt of the application or forty (40) days if outside consultants or staff other than the Land Use Department assist the Director with the completeness determination.

1. **Application Deemed Incomplete.** If the application is found to be incomplete, the Director shall inform the applicant in writing of the deficiencies. No further action shall be taken on an application determined to be incomplete until the specified deficiencies have been addressed to the satisfaction of the Director. If the applicant fails to address the deficiencies within thirty (30) days after the notice of incompleteness, the application shall be deemed withdrawn, unless the applicant notifies the Department in writing of the need for additional time. Notwithstanding the foregoing, upon the request of the applicant, the County will process an application that has been deemed incomplete, however, the expedited development plan review application will be denied by the director and the standard development plan review application will receive a recommendation of denial at any hearing before the Board of County Commissioners.

2. **Application Deemed Complete.** If the application is found to be complete, containing all documentation required by this Article, the Director shall date the application, inform the applicant of the finding of completeness, classify the application, and then review the application for compliance with the applicable standards and requirements of this Article.

F. **Classification of Oil and Gas Operation Application.** As part of the completeness determination, the Director shall also determine whether the application initially qualifies for the expedited development plan review process or whether the application is a standard development plan review application. Boulder County encourages applicants to make use of the expedited development plan review process.

G. **Re-Classification.** At any time prior to administrative action on the expedited development plan review application, the Director may adjust the review process classification for an application. If an application is classified standard development plan review, at any point prior to the time the Department calendars the public hearing before the Board of County Commissioners for the standard development plan review application, the applicant may tender supplemental information and documentation and request the Director reconsider the classification decision for the application.

H. **Pre-Application Notice to Surface Owners and Surrounding Landowners.**

1. **The Applicant shall mail Notice to surface owners, to surrounding landowners, and to residents as identified in this section shall be mailed no less than ten (10) days prior to the application being submitted to the Department.**

1.2. Notice of the application shall be made as follows:

a. To the surface owners of the parcels of land on which the oil and gas operation is proposed to be located;

b. To the surface owners of the parcels of land within five hundred (500) feet of a proposed gathering line; and
c. To the surface owners of the parcels of land within fifteen hundred-one-half mile (1,5002.640 feet) of the parcel on which the oil and gas operation is proposed to be located; and

d. To the physical address of all parcels within one-half mile (2,640 feet) of the parcel on which the oil and gas operation is proposed to be located if Boulder County Assessor’s records indicate a mailing address for the parcel owner that is different than the physical address.

The County Land Use Department shall provide the list of property owners within one-half mile (2,640 feet) of the parcel on which the oil and gas operations is proposed to be located to the individuals to whom notice shall be sent to the applicant at the pre-application conference.

2.3. The notice shall contain the following:

a. A description of the proposed operation site location, including a legal description, as well as a street address for the site, if available from the County’s rural addressing system; the identification of the applicant for the application; the current business address, telephone number, and email address for the applicant; a vicinity map; and a brief description and overview of the proposed operation including details of the drilling techniques (i.e., whether the operation will include hydraulic fracturing).

b. Information concerning the facilities and equipment proposed to be located at the site when operational, including proposed access roads and gathering lines. As well as details of the drilling techniques (i.e., whether the operation will include hydraulic fracturing).

c. The anticipated submittal date of the application to the Department.

d. A statement that public comments on the application may be submitted to the County Land Use Department after the application submittal date.

e. A statement concerning the County’s right to enter property that is the subject of the application as follows: “For the purpose of implementing and enforcing the County’s development plan review for oil and gas operation regulations, County staff may from time to time need to enter onto the property that is the subject of a development plan review application.”

f. A statement that the applicant will be contacting any entities that maintaining any road used for access to the proposed operation should contact the applicant to discuss the applicant’s transportation needs and to discuss the applicant sharing in road improvement and maintenance through an agreement between the entity and the applicant.

g. A statement informing the recipients of the notice that they may request written notification by the operator of the commencement of construction and commencement of drilling operations (provided the application is approved).

h. The current mailing address, website address, and telephone number for the County Land Use Department and the COGCC, as well as a statement that additional information on the application is available from the County Land Use Department.
I. **Posting Sign On Site.** The Applicant shall post a sign on the site in a location visible to the public (i.e., visible from a public road) stating that a development plan review application has been applied for and providing the phone number of the County Land Use Department where information regarding the application may be obtained. The sign shall be provided to the applicant by the County and shall be posted within five (5) days after the application has been deemed complete.
2012-500 General Application Submittal Requirements

The following information must be submitted with an expedited development review plan application or a standard development review plan application:

A. County Application Form.

B. Mineral Owner. Certification by the applicant that it is either the owner of the mineral estate or that it has all necessary lease interests in the mineral estate.

C. Date of APD Filing. The applicant shall provide the anticipated or actual date of its APD filing with the COGCC.

D. Pre-application Conference Checklist.

E. Proof of Notice. The applicant shall present proof of notice as required by Section 2012-400(H) by submitting a copy of the notice letter and a list of the land owners notified, and certified mail receipts.

F. Verification of Legal Access and Use of Private Roads. Information demonstrating that the applicant has the right to use private access roads which are necessary for the operation and that the applicant has entered into an agreement with the private road owner regarding maintenance and reimbursement for damages. Recorded or historically used easements providing access to or across the parcel(s) shall be provided.

G. Proximity of Other Wells and Other Oil and Gas Operations. A map showing the location of other producing, closed, abandoned, and shut-in wells and other oil and gas operations within one (1) mile of the site.

H. Site Plan. A map with north arrow and appropriate scale for the parcel on which the operation is proposed, indicating the following:

1. Well Siting. The location of wellhead, pumping units, tanks, and treaters. Expedited development plan review applications shall also include information establishing compliance with the well siting criteria of Section 2012-601(B).

2. Dimensions of the Site. Dimensions of the site, indicating area in square feet and acres, and the area of the site to be disturbed for permanent operations and temporary operations.


4. Improvements. Existing improvements within 1,500 feet of the location on which the operation is proposed.

5. Existing and Proposed Facilities. Existing and proposed facilities such as structures, pipelines, tanks, wells, gathering lines, flow lines, staging and storage areas, equipment, temporary use area and permanent well pads.

6. Existing and Proposed Roads. Existing and proposed roads within the site as well as ingress and egress from public and private roads.
7. **Site Features.** Site features such as floodplains, water bodies, drainage patterns, ditches, wetlands or aquatic habitat, vegetative cover, wildlife habitat and wildlife migration routes, and geologic features as defined in the Comprehensive Plan or identified onsite and within 1,500 feet of the location on which the operation is proposed.

8. **Topography.** Existing and proposed topography at five-foot intervals to portray the direction and slope of the area affected by operation within 1,500 feet.

I. **Agricultural Land Mitigation Plan.** An assessment of any agricultural lands potentially impacted by the proposed oil and gas operation and a plan for mitigating said impacts in compliance with Section 12-602(E) herein.

I-J. **Air Quality Plan.** A plan establishing compliance with the air quality provisions of either Section 2012-602(A) (for expedited development plan review applications) or Section 2012-703(B) (for standard development plan review applications).

I-K. **Emergency Response Standard and Emergency Preparedness Plan.** A plan establishing compliance with the Emergency Response provisions of either Section 2012-602(B) (for expedited development plan review applications) or Section 2012-703(D) (for standard development plan review applications).

I-L. **Land Disturbance Mitigation Plan.** An assessment of areas of land disturbance, landscaping and revegetation, an analysis of the species, character and density of existing vegetation on the site, a summary of the potential impacts to vegetation as a result of the proposed operation, and a plan demonstrating compliance with the standards of Section 12-602(F).

I-M. **Operation Plan.** A plan including the method and schedule for drilling, completion, transporting, production and post-operation.

I-N. **Transportation, Roads, Access Standards, and Fees.** A plan establishing compliance with the transportation provisions of either Section 2012-602(D) (for expedited development plan review applications) or Section 2012-703(K) (for standard development plan review applications).

O. **Water Quality Plan.** A plan establishing compliance with the water quality provisions of either Section 2012-602(C) (for expedited development plan review applications) or Section 2012-703(L) (for standard development plan review applications).
2012-600 Expedited Development Plan Review

2012-601 Process Specific to Expedited DPR

A. Administrative Action. An application that qualifies for the expedited development plan review process shall be reviewed and acted upon by the Director.

B. Eligibility for Expedited Development Plan Review. A proposed operation will qualify for the administrative expedited development plan review process based upon a determination by the Director that it is located in a manner that meets the following siting criteria:

1. The wellhead, pumping units, tanks, and treaters are at least 500 feet from any occupied structure.

2. The wellhead, pumping units, tanks, and treaters are at least 150 feet from any property line, unless verified written consent is obtained from affected property owners.

3. The wellhead, pumping units, tanks, and treaters are at least 500 feet from any surface water body including, but not limited to, ditches and reservoirs as identified and mapped on the County's Ditch and Reservoir Directory.

4. The wellhead, pumping units, tanks, and treaters are at least 500 feet from any domestic or commercial water wells or irrigation wells.

5. The wellhead, pumping units, tanks, and treaters are not located within a platted subdivision or mapped townsites.

6. The wellhead, pumping units, tanks, and treaters are not located within a high hazard geologic area as defined in the Comprehensive Plan.

7. The wellhead, pumping units, tanks, and treaters are not located within a floodway as defined in Article 4-400.

8. The wellhead, pumping units, tanks, and treaters are not located within wetlands areas.

9. The wellhead, pumping units, tanks, and treaters are not located within mapped significant natural communities, natural landmarks and natural areas, rare plant areas, significant riparian corridors, or critical wildlife habitat as each is defined in the Comprehensive Plan.

C. Referral by Director.

1. Following determination that an application for expedited development plan review is complete, the Director shall promptly forward one copy to: the County Transportation, and Parks and Open Space Departments; Boulder County Public Health; the appropriate fire district or County Sheriff; and any appropriate municipality for comment. The Director may also refer the application to other government agencies or entities for review and comment. Referral comments on the proposed development plan shall be returned to the Director within fifteen (15) days from the date of transmittal of the referral.

2. In addition, the Director shall notify the adjacent properties as identified in 12-400(H)(2)y owners within 1,500 feet of the proposed oil and gas operation of the receipt of the
complete application. The notice shall also identify the classification of the application. The notice shall indicate that a complete development plan review application has been made, and include the phone number of the Land Use Department where information regarding the application may be obtained, and include a link to the County website for access to the complete application.

D. Review by Director.

1. The Director shall administratively review and make a determination on an application that qualifies for the expedited development plan review process within forty-five (45) days after it is deemed complete. The applicant shall have the ability to extend the foregoing time period. Failure to make a determination on the application within this time period shall result in the application being approved subject to the general oil and gas facility operation requirements and standard conditions of approval contained within this Article at Section 2012-800.

2. As part of the review, the Director may conduct a site visit. Following review of the completed application within the time period in Section 2012-601(D)(1), the Director may approve, approve with conditions necessary to ensure compliance with this Article, or deny the application based upon noncompliance with the expedited development plan review standards at Section 2012-602. The Director shall provide its determination to the applicant in writing. The Land Use Department shall also provide public notice of the Director’s decision by posting the Director’s determination on the Boulder County website.

3. After approval of a development plan review application, the applicant shall comply with the provisions of Section 2012-1200(C), Effect of the Approved Development Plan Review.

2012-602 Review Standards Specific to Expedited DPR

All expedited development plan review applications shall be reviewed in accordance with the following standards which the Director has determined to be applicable based on the nature and extent of the proposed development. All applications for oil and gas facilities that demonstrate compliance with the following standards shall be approved under the expedited development plan review process.

A. Air Quality Standards. Air emissions from wells shall be in compliance with the permit and control provisions of the Colorado Air Quality Control Program, Title 25, Section 7, C.R.S., and the fugitive dust regulations administered by Boulder County Public Health. In addition, proposed oil and gas operations shall implement an air quality mitigation plan which establishes compliance with the following mitigation measures of this Section.

1. General Duty to Minimize VOC Emissions. All continuously operated equipment, including but not limited to, storage vessels, tanks, separators, pneumatic pumps, dehydrators, and compressors, shall route all natural gas and VOC vapors to a capture or control device with at least a 98% VOC destruction efficiency. The Applicant shall submit to the County manufacture test or other data demonstrating a 98% VOC destruction or control efficiency. Any flare, auto ignition system, recorder, vapor recovery device or other equipment used to meet the 98% VOC destruction or control efficiency requirement shall be installed, calibrated, operated, and maintained in accordance with the manufacturer’s recommendations, instructions, and operating manuals.

2. Flares and Combustion Devices. All flares shall be designed and operated as follows:
a. The flare shall be fired with natural gas and shall be operated with a 98% VOC destruction efficiency.

b. The flare shall be designed and operated in a manner that will ensure no visible emissions, pursuant to the provisions of 40 CFR 60.18(f), except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.

c. The flare shall be operated with a flame present at all times when emissions may be vented to it, pursuant to the methods specified in 40 CFR 60.18(f).

d. The flare shall comply with the specifications detailed in 40 CFR 60.18(c)(3)-(6).

e. An automatic flame ignition system shall be installed.

f. If using a pilot flame ignition system, the presence of a pilot flame shall be monitored using a thermocouple or other equivalent device to detect the presence of a flame. A pilot flame shall be maintained at all times in the flare’s pilot light burner. If the pilot flame goes out and does not relight, then a visible alarm shall be activated.

g. If using an electric arc ignition system, the arcing of the electric arc ignition system shall pulse continually and a device shall be installed and used to continuously monitor the electric arc ignition system.

h. Any flare, auto ignition system, and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer’s recommendations, instructions, and operating manuals.

3. Fugitive Emissions. The operator will develop and maintain a leak detection and component repair program, such as a Leak Detection and Repair program or a Directed Inspection and Maintenance program, using most effective performance technologies and practices for equipment used on the well site for permanent operations.

4. Use of Closed Loop Pitless Systems for the Containment and/or Recycling of Drilling and Completion Fluids. Wells will be drilled, completed and operated using closed loop pitless systems for containment and/or recycling of all drilling, completion, flowback and produced fluids.

5. Green Completions. For each well completion operation with hydraulic fracturing, the operator must control emissions by the operational procedures set forth below.

a. For the duration of flowback, route the recovered liquids into one or more storage vessels or re-inject the recovered liquids into the well or another well, and route the recovered gas into a gas flow line or collection system, re-inject the recovered gas into the well or another well, use the recovered gas as an on-site fuel source, or use the recovered gas for another useful purpose that a purchased fuel or raw material would serve, with no direct release to the atmosphere.

b. If compliance with the prior paragraph is infeasible the operator must capture and direct flowback emissions to a completion combustion device equipped with a reliable continuous ignition source over the duration of flowback, except in conditions that may result in a fire hazard or explosion, or where high heat emissions from a completion combustion device may negatively impact waterways.
or nearby structures. Non-flammable gas may be vented temporarily until flammable gas is encountered where capture or combustion is not feasible. Completion combustion devices must be equipped with a reliable continuous ignition source over the duration of flowback.

c. Operators have a general duty to safely must maximize resource recovery and minimize releases to the atmosphere during flowback and subsequent recovery / operation.

d. For wildcat or delineation wells in a location without a pipeline, each well completion operation with hydraulic fracturing at a gas wellhead affected facility must reduce emissions by using a completion combustion device equipped with a reliable continuous ignition source over the duration of flowback.

e. The operator must maintain a log for each well completion operation at each gas wellhead affected facility. The log must be completed on a daily basis and must contain the records specified in 40 C.F.R. § 60.5420(c)(1)(iii).

f. The operator of a well must notify the County at least 2 days prior to the commencement of well drilling and completion. The notification shall include contact information for the operator; the API well number; the latitude and longitude coordinates for each well in decimal degrees to an accuracy and precision of five (5) decimals of a degree using the North American Datum of 1983; and the planned date of the beginning of drilling and completion / flowback. The notice may be submitted in writing or in electronic format.

6. Capture of Produced Gas from Wells. Gas produced during production shall be captured and not flared or vented.

7. Pneumatic controllers. The operator shall use only no bleed pneumatic controllers.

8. Maintenance During Well Blowdowns. The operational plan shall require technologies or practices which minimize or eliminate natural gas emissions during well maintenance or blowdowns.

9. Maintenance of Gathering Lines and Pipelines. The operational plan shall require technologies or practices which minimize or eliminate emissions or spills during maintenance of pipelines.

10. Rod-Packing Replacement. Operators shall replace rod-packing from reciprocating compressors every 26,000 hours or 36 months, whichever comes first.

11. Certification. An authorized representative for the operator must submit annual reports to the Director certifying compliance with these air quality requirements and documenting any periods of non-compliance, including the date and duration of each deviation and a compliance plan and schedule to achieve compliance. The reports must contain a certification as to the truth, accuracy and completeness of the reports.

B. Emergency Response. Oil and gas operations shall not cause unreasonable risks of emergency situations such as explosions, fires, gas, oil or water pipeline leaks, ruptures, hydrogen sulfide or other toxic gas or fluid emissions, and hazardous material vehicle accidents or spills. Each operator with an operation in the County is required to implement an emergency preparedness plan as described in Section 2012-703(D).
C. Water Quality Monitoring and Well Testing. Proposed oil and gas operations shall implement a water quality monitoring and well testing plan which establishes compliance with the criteria of this Section.

1. Abandoned Well Assessment. Assessment and monitoring of plugged and abandoned and dry and abandoned wells (abandoned wells) within one-quarter (1/4) mile of the projected track of the borehole of a proposed well.

   a. Based upon examination of COGCC and other publicly available records, operators shall identify all abandoned wells located within one-quarter (1/4) mile of the projected track of a borehole of a proposed well. The operator shall assess the risk of leaking gas or water to the ground surface or into subsurface water resources, taking into account plugging and cementing procedures described in any recompletion or P&A report filed with the COGCC. The operator shall notify the Director and COGCC of the results of the assessment of the plugging and cementing procedures.

   b. Operators shall use reasonable good faith efforts to obtain access to all abandoned wells identified under Section 2012-602(C)(1)(a) above to conduct a soil gas survey at all abandoned wells located within one-quarter (1/4) mile of the projected track of the borehole of a proposed well prior to production from the proposed well and again one (1) year and thereafter every three (3) years after production has commenced. Operators shall submit the results of the soil gas survey to the Director and the COGCC within three (3) months of conducting the survey or advise the Director that access to the abandoned wells could not be obtained from the surface owner.

2. Water Well Sampling. Based upon records from the Colorado Division of Water Resources, the operator will identify and offer to sample all water wells located within one quarter mile (¼) mile of the projected track of the borehole of a proposed well. If a well owner desires the well be tested, the operator shall test the well prior to the start of heavy equipment operations at the site. The water well testing described in this Section shall include testing for the analytes listed in Table 1.

   Field observations such as damaged or unsanitary well conditions, adjacent potential pollution sources, odor, water color, sediment, bubbles, and effervescence shall also be included. The location of the water well shall be surveyed using a sub-meter GPS with sub-meter resolution.

   a. If free gas or a dissolved methane concentration level greater than two (2) milligrams per liter (mg/l) is detected in a water well, gas compositional analysis and stable isotope analysis of the methane (carbon and deuterium) shall be performed to determine gas type. If the test results indicate biogenic gas, no further isotopic testing shall be done. If the test results indicate thermogenic or a mixture of thermogenic and biogenic gas, then the operator shall submit to the Director and COGCC an action plan to determine the source of the gas. If the methane concentration increases by more than five (5) mg/l between sampling periods, or increases to more than ten (10) mg/l, the operator shall notify the Director, the COGCC and the owner of the water well immediately.

   b. If BTEX and/or TPH are detected as a result of testing the operator will notify the Director, the COGCC and the owner of the water well immediately.
c. Operators shall make a good faith effort to conduct initial baseline testing of the identified water wells prior to the start of heavy equipment operations at the site; however, not conducting baseline testing because access to water wells cannot be obtained shall not be grounds for denial of an Application. Within one (1) year after completion of the proposed well, a “post-completion” test shall be performed for the same analytical parameters listed above and repeated three (3) and six (6) years after the completion of the well. If no significant changes from the baseline have been identified after the third test (i.e. the six-year test), no further testing shall be required, however, a final well test shall be conducted at time of final reclamation of oil and gas location. Additional “post-completion” test(s) may be required if changes in water quality are identified during follow-up testing. The Director may require further water well sampling at any time in response to complaints from water well owners.

d. Copies of all test results described above shall be provided to the Director, the COGCC and the water well owner within three (3) months of collecting the samples. The analytical data and surveyed well locations shall also be submitted to the Director and COGCC in an electronic data deliverable format.

3. Qualified Independent Professional Consultant. All abandoned well assessments and water well testing required herein shall be conducted by a qualified independent professional consultant or engineer approved by the Director.

D. Transportation, Roads, Access Standards, and Fees. Access roads on the site and access points to public roads as identified in the application materials shall be reviewed by the County Transportation Department and shall be built and maintained in accordance with the Transportation Standards. All proposed transportation routes to the site shall also be reviewed and approved by the County Transportation Department to minimize traffic hazards and adverse impacts on public roadways. Existing roads shall be used to minimize land disturbance unless traffic safety, visual or noise concerns, or other adverse surface impacts clearly dictate otherwise. All applicable transportation fees shall be paid prior to issuance of a development plan permit which fee shall be in lieu of the applicant having to create a public road transportation impact study and mitigation plan.

E. Agricultural Land Mitigation. [placeholder]

F. Land Disturbance Standards. The following mitigation measures shall be used to achieve compatibility and reduce land use impacts:

1. Pad dimensions for a well should be the size necessary to accommodate operational needs while minimizing surface disturbance.

2. Oil and gas operations should use structures and surface equipment of the minimal size necessary to satisfy present and future operational needs.

3. Oil and gas operations shall be located in a manner that minimizes the amount of cut and fill. A.

B.G. General Oil and Gas Facility Operational Requirements. The general oil and gas facility operational requirements set forth at Section 2012-800 shall apply to each approved development plan in the form of conditions of approval.
Planning Commission Draft
October 17, 2012 – Public Hearing

C.H. Pipelines. Any newly constructed or substantially modified pipelines on site must meet the Additional Provisions listed at Article 4-514(E)(5)(a) – (f). Note: Any newly constructed or substantially modified pipelines off site may, at discretion of the Director, need to comply with all of Article 4-514(E).

2012-603 Reclassification of Expedited DPR Application to Standard DPR Application Following Administrative Denial or Conditional Approval

Should the Director deny administrative approval or conditionally approve the application in a manner unacceptable to the applicant, upon written request of the applicant the Director shall reclassify the application as a standard development plan. The applicant must pay the additional fees associated with a standard application and file the additional application submittal requirements necessary for standard development plan review with the County. If the applicant fails to pay the additional fees and file the additional application submittal requirements with the County within ninety (90) days of the Director’s determination, the application will be deemed withdrawn. The applicant has no right of judicial review of a denied or conditionally approved expedited development plan review and must exhaust the administrative remedy of processing the proposed operation through the standard development plan review process as a condition precedent to judicial review pursuant to Section 2012-1100.
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<td>BTEX compounds</td>
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<tr>
<td>(Benzene, Toluene, Ethylbenzene, Xylene)</td>
</tr>
<tr>
<td>Total Petroleum Hydrocarbons (TPH)</td>
</tr>
<tr>
<td><strong>OTHER</strong></td>
</tr>
<tr>
<td>Water Level</td>
</tr>
<tr>
<td>Stable isotopes of water, carbon and sulfur, (Oxygen-18 and Deuterium)</td>
</tr>
</tbody>
</table>
2012 Standard Development Plan Review

2012-701 Application Requirements Specific to Standard DPR

A standard development plan review application shall contain all the general application requirements for the development plan review application at Section 2012-500 plus the following assessment and mitigation plans. The assessment and mitigation plans shall be developed based upon the standards in Section 2012-703 below and by reference to the Boulder County Comprehensive Plan.

A. Agricultural Land Mitigation Plan. An assessment of any agricultural lands potentially impacted by the proposed oil and gas operation and a plan for mitigating said impacts in compliance with Section 2012-703(A) herein.

B. Cultural and Historic Resources Mitigation Plan. A cultural, historical and archeological survey of the parcel or parcels to be used for the proposed oil and gas operation which demonstrates compliance with the standards of Section 2012-703(C).

C. Geologic Hazard Area Mitigation Plan. A geologic area mitigation plan which demonstrates compliance with the standards of Section 2012-703(E).

D. Land Disturbance Mitigation Plan. A plan showing areas of land disturbance, landscaping and revegetation. The plan shall include an analysis of the existing vegetation on the site to establish a baseline for re-vegetation upon temporary or final reclamation or abandonment of the operation. The analysis shall include a written description of the species, character and density of existing vegetation on the site and a summary of the potential impacts to vegetation as a result of the proposed operation. The plan shall demonstrate compliance with the standards of Section 2012-703(F).

E. Natural Resources Mitigation Plan. Information demonstrating compliance with Section 2012-703(G).

F. Recreational Activity Mitigation Plan. Information establishing any potential impacts to recreational activities by the proposed oil and gas operation and a plan which demonstrates compliance with the standards of Section 2012-703(H).

G. Scenic Attributes and Rural Character Mitigation Plan. An assessment of scenic attributes and rural character potentially impacted by the proposed oil and gas operation and a plan for mitigating said impacts in compliance with Section 2012-703(I).

H. Surrounding Land Uses Mitigation Plan Information establishing surrounding land uses to the proposed oil and gas operation, an assessment of any potential impacts to the adjacent and near land uses, and a plan mitigating said impacts in compliance with Section 2012-703(J) herein.

I. Transportation Plan. Information establishing compliance with the transportation standards of Section 2012-703(K).

J. Water Quality Plan. A plan establishing compliance with the water quality provisions of Section 2012-703(L). The plan may include details such as the applicant’s plans for water quality testing, prevention of stormwater discharge, containment of pollutants, and spill notification as
required by federal and state agencies. The provisions of Article 2012-602(C) may also be considered and used in the implementation of the plan.

K. **Wetlands Protection Plan.** Information demonstrating compliance with the standards of Section 2012-703(M).

### 2012-702 Process Specific to Standard DPR

Upon determination that an application is a standard permit review process and that the application is complete, the Director shall begin review of the application for compliance with this Article.

**A. Applicant Neighborhood Meeting.** The applicant will be required to conduct a neighborhood meeting at a convenient public location with adjacent and surrounding land owners and other interested parties. The meeting must occur no earlier than 30 days in advance of an application being filed and must be held prior to the scheduling of the Board of County Commissioners’ public hearing. The neighborhood meeting shall be noticed to the County and to all individuals entitled to notice pursuant to Section 12-400(H)(2) property owners within 1,500 feet of the parcel(s) on which the operation will occur at least ten days prior to the meeting. At the neighborhood meeting, the applicant shall provide an overview of its proposed oil and gas operation and allow those in attendance to provide input as to the proposed operation, including, but not limited to, well siting and well locations, issues that arise from application of this Article to the proposed operation, and suggested mitigation to adequately ensure compliance with this Article. A summary of the neighbor comments shall be provided with the application.

**B. Referral Agency Comments.** Following determination that an application is complete, the Director shall promptly forward one copy to the County Transportation and Parks and Open Space Departments; Boulder County Public Health; the appropriate fire district or County Sheriff; and any appropriate municipality for comment. The Director may also refer the application to other government agencies or entities for review and comment. Referral comments on the proposed development shall be returned to the Director no later than thirty-five (35) days from the date of application.

**C. Consultant Review.** The Director may submit the application for review and recommendation by consultants retained by the County with the necessary expertise to review technical or other aspects of the application which are outside the expertise of the Land Use Department. The applicant shall reimburse the County any costs associated with this consultant review.

**D. Site Visit.** The Department will conduct a site visit for standard development plan applications to allow the Director to determine compliance with these standards. When possible this site visit will be coordinated with site visits required by other governmental agencies.

**E. Notice of Board of County Commissioner’s Hearing.** Not less than fourteen (14) days prior to the public hearing on the standard permit review, a legal notice of the public hearing before the Board shall be published in a newspaper of general circulation within the County, and written notice to the surface owner and adjacent property owners of the time and place of the Board’s public hearing shall be provided pursuant to Article 3-205(C) herein.

**F. Decision by Board of Commissioners.** The Board of Commissioners shall conduct a noticed public hearing(s) for review of a standard development plan review application. Any action taken by the Board of County Commissioners will be based on the entire record of proceedings on the matter, as that record is maintained by the Land Use Department Director and/or the Clerk of the Board of County Commissioners, including but not limited to: tape recordings or true
transcripts of public hearings where the proposal was discussed; all written comments of referral agencies; the review and recommendations of the Land Use Department; and all written commitments, statements, or evidence made or submitted by or in behalf of the applicants, landowners or interest holders or their agents, and interested members of the public. The applicant shall have the burden of proof to show that the applicable criteria for approval have been met. On the basis of the evidence received at such public hearing(s), the Board shall make its determination to approve, approve with conditions necessary to ensure compliance with this Article, or deny the application. The Board’s action shall contain appropriate findings or reasons in support of its decision. The Board shall render its decision on the proposed development plan in writing as soon as practical following conclusion of the public hearing.

| 2012-703 Review Criteria and Standards Specific to Standard DPR |

All standard development plan review applications shall be reviewed in accordance with the following standards which the Board, based upon advice of the Director, has determined to be applicable based on the nature and extent of the proposed development. When two or more of the standards listed below conflict, the Board, based upon advice of the Director, shall evaluate the applicability and importance of each of the conflicting standards under the facts of the specific application and make a reasonable attempt to balance the conflicting standards in reaching a development plan decision. The Board’s decision on a standard development plan review application for an oil and gas operation will be based upon its compliance with all development plan standards.

A. Agricultural Land Standards

1. **Loss of Agricultural Land.** Oil and gas operations shall be located and conducted so as to use only as much of the surface as is reasonably necessary for the operation of the facility and to avoid the unreasonable loss of agricultural land, including farm or ranch land, or any other vegetated land.

2. **Impact on Agricultural Operations.** Oil and gas operations shall be located and conducted in a manner to minimize the impact to agricultural operations.

3. **Impact on Grazing.** Oil and gas operations shall be located and conducted in a manner so as to not cause significant impact to livestock, grazing permits or leases, or grazing permittees or lessees.

B. Air Quality Standards. Air emissions from the wells shall be in compliance with the permit and control provisions of the Colorado Air Quality Control Program, Title 25, Section 7, C.R.S., and the fugitive dust regulations administered by the Boulder County Public Health Department.

1. **General Duty to Minimize VOC Emissions.** All continuously operated equipment, including but not limited to, storage vessels and tanks, separators, pneumatic pumps, dehydrators, and compressors, shall route all natural gas and VOC vapors to a capture or control device with at least a 98% VOC destruction efficiency. Operators shall submit to the County manufacture test or other data demonstrating a 98% VOC destruction or control efficiency. Any flare, auto ignition system, recorder, vapor recovery device or other equipment used to meet the 98% VOC destruction or control efficiency requirement shall be installed, calibrated, operated, and maintained in accordance with the manufacturer’s recommendations, instructions, and operating manuals.
2. Flares and Combustion Devices  All flares shall be designed and operated as follows:
   
a. The flare shall be fired with natural gas and shall be operated with a 98% VOC 
destruction efficiency.
   
b. The flare shall be designed and operated in a manner that will ensure no visible 
emissions, as determined by 40 CFR 60.18(f), except for periods not to exceed a total 
of 5 minutes during any 2 consecutive hours.
   
c. The flare shall be operated with a flame present at all times when emissions may be 
vented to it, as determined by methods specified in 40 CFR 60.18(f).
   
d. The flare shall comply with the specifications detailed in 40 CFR 60.18(c)(3)-(6).
   
e. An automatic flame ignition system shall be installed.
   
f. If using a pilot flame ignition system, the presence of a pilot flame shall be monitored 
using a thermocouple or other equivalent device to detect the presence of a flame. 
A pilot flame shall be maintained at all times in the flare’s pilot light burner. If the 
pilot flame goes out and does not relight, then a visible alarm shall be activated.
   
g. If using an electric arc ignition system, the arcing of the electric arc ignition system 
shall pulse continually and a device shall be installed and used to continuously 
monitor the electric arc ignition system.
   
h. Any flare, auto ignition system, and recorder shall be installed, calibrated, operated, 
and maintained in accordance with the manufacturer’s recommendations, 
instructions, and operating manuals.

3. Fugitive Emissions. The operator will develop and maintain a leak detection and component 
repair program, such as a Leak Detection and Repair program (LDAR) or a Directed 
Inspection and Maintenance program, using most effective performance technologies and 
practices for equipment used on the well site for permanent operations.

4. Certification. An authorized representative for the operator must submit annual reports to 
the Director certifying compliance with these air quality requirements and documenting any 
periods of non-compliance, including the date and duration of each deviation and a 
compliance plan and schedule to achieve compliance. The reports must contain a 
certification as to the truth, accuracy and completeness of the reports.

C. Cultural and Historic Resources Standards. The installation and operation of any oil and gas 
operation shall not cause significant degradation of cultural or historic resources, of sites 
eligible for County landmarking, or the National Historic Register.

D. Emergency Response Standards.

1. In General. Oil and gas operations shall not cause unreasonable risks of emergency 
situations such as explosions, fires, gas, oil or water pipeline leaks, ruptures, hydrogen 
sulfide or other toxic gas or fluid emissions, and hazardous material vehicle accidents or 
spills.
2. Emergency Preparedness Plan. Each operator with an operation in the County is required to implement an emergency preparedness plan for each specific facility-operation site. The plan shall be referred to and approved by the appropriate emergency management official (either the Boulder County Sheriff, the Office of Emergency Management, or any other applicable fire district) and filed with the County and updated on an annual basis or as conditions change (responsible field personnel change, ownership changes, etc.). The emergency preparedness plan shall consist of at least the following information:

a. Name, address and phone number, including 24-hour emergency numbers for at least two persons located in or near Boulder County who are responsible for emergency field operations.

b. An as-built facilities map in a format suitable for input into the County’s GIS system depicting the locations and type of above and below ground facilities including sizes, and depths below grade of all oil and gas gathering and transmission lines and associated equipment, isolation valves, surface operations and their functions, as well as transportation routes to and from exploration and development sites, for emergency response and management purposes. The information concerning pipelines and isolation valves shall be held confidentially by the County’s Office of Emergency Management, and shall only be disclosed in the event of an emergency. The County shall deny the right of inspection of the as-built facilities maps to the public pursuant to C.R.S. § 24-72-204.

c. Detailed information addressing each potential emergency that may be associated with the operation. This may include any or all of the following: explosions, fires, gas, oil or water pipeline leaks or ruptures, hydrogen sulfide or other toxic gas emissions, or hazardous material vehicle accidents or spills.

d. The plan shall include a provision that any spill outside of the containment area or which has the potential to leave the facility or to threaten a water body of the state shall be reported to the emergency dispatch and the Director immediately.

e. Detailed information identifying access or evacuation routes, and health care facilities anticipated to be used.

f. Project specific emergency preparedness plans are required for any project that involves drilling or penetrating through known zones of hydrogen sulfide gas.

g. The plan shall include a provision that obligates the operator to reimburse the appropriate emergency response service providers for costs incurred in connection with any emergency.

h. Detailed information that the operator has adequate personnel, supplies, and funding to implement the emergency response plan immediately at all times during construction and operations.

i. The plan shall include a provision that obligates the operator to disclose to the County in table format the name, CAS number, volume, storage, containment and disposal method for all chemicals associated with the proposed well site. The plan shall include a provision that obligates the operator to keep on each site and immediately available current Material Safety Data Sheets (MSDS) for all chemicals used or stored on a site. The MSDS sheets shall be provided
immediately upon request to the Director, a public safety officer, or a health
professional.

The plan shall include a provision requiring the operator to have readily
available information onsite identifying the chemicals used in hydraulic fracturing
fluids to inform, if necessary, emergency providers of the chemicals in case of a spill
requiring emergency response.

E. Geologic Hazard Area. To the maximum extent practicable, the installation and operation of
any oil and gas operation shall not be located in geologic hazard areas as mapped in the
Comprehensive Plan. If an operation is located within a geologic hazard area, the applicant shall
take all reasonable actions to mitigate impacts to the geologic hazard area.

F. Land Disturbance Standards. The following mitigation measures shall be used to achieve
compatibility and reduce land use impacts:

1. Pad dimensions for a well should be of the minimum size necessary to accommodate
operational needs while minimizing surface disturbance.

2. Oil and gas operations should use structures and surface equipment of the minimal size
necessary to satisfy present and future operational needs.

3. Oil and gas operations shall be located in a manner that minimizes the amount of cut
and fill.

4. Oil and gas operations should use and sharing of existing infrastructure, minimizing the
installation of new facilities, and avoiding additional disturbance to lands in a manner that reduces the introduction of significant new land use impacts to the
environment, landowners and natural resources.

5. Landscaping plans should include drought tolerant species that are native and less
desirable to wildlife and suitable for the climate and soil conditions of the area. Where
buffering is accomplished with vegetation, an irrigation plan shall be required, for the
first two years after establishment of the vegetation and the operator shall agree to
provide a financial guarantee compliant with Section 2012-1200(A) or otherwise
acceptable to the Director.

6. The application shall include an analysis of the existing vegetation on the site to
establish a baseline for re-vegetation upon temporary or final reclamation or
abandonment of the operation. The analysis shall include a written description of the
species, character and density of existing vegetation on the site and a summary of the
potential impacts to vegetation as a result of the proposed operation. The application
shall include any COGCC required interim and final reclamation procedures, and any
measures developed from a consultation with the County Land Use Department staff
regarding site specific re-vegetation plan recommendations.

G. Natural Resource Standards. The installation and operation of any oil and gas operation shall
not cause significant degradation to mapped significant natural communities, natural
landmarks and natural areas, rare plant areas, significant riparian corridors, or critical wildlife
habitat as defined in the Comprehensive Plan or identified on site. Among other mitigation
measures to achieve compliance with this standard, proposed oil and gas operations shall use
the compatibility siting criteria of Section 2012-703(J)(1) to prevent degradation of these
important County attributes.
H. **Recreational Activity Standards.** The installation and operation of any oil and gas operation shall not cause significant degradation to the quality and quantity of recreational activities in the County. Methods to achieve compliance with this standard include, but are not limited to, locating operations away from trails and from property used for recreational purposes.

I. **Scenic and Rural Character Standards.** The installation and operation of any oil and gas operation shall not cause significant degradation to the scenic attributes and rural character of Boulder County. The following standards are methods to prevent degradation to the scenic attributes and rural character of Boulder County:

1. **Buffering from Sensitive Visual Areas.** The operation should be buffered from sensitive visual areas (i.e., roads, property lines, or residences) by providing landscaping along the perimeter of the site between the surface equipment and the sensitive visual area.

2. **Existing Vegetation.** The operation should be located in areas that maximize the amount of natural screening available for the facility. Natural screening includes, but is not limited to, the use of existing vegetation as a background, the construction of the operation near screening stands of vegetation, or placement in valleys allowing topographic screening. The operation should be constructed in a manner to minimize the removal of and damage to existing trees and vegetation. If the operation requires clearing trees or vegetation, the edges of the cleared vegetation should be feathered and thinned and the vegetation should be mowed or brush-hogged while leaving root structure intact, instead of scraping the surface.

3. **Compatibility Siting Criteria.** Use of the compatibility siting criteria of Section 2012-703(J)(1) will also prevent degradation to the scenic attributes and rural character of Boulder County.

4. **Low Profile.** To the maximum extent practicable, oil and gas operations should use low profile tanks or less intrusive equipment.

J. **Surrounding Land Uses Standards.** Oil and gas operations shall be sited and operated in a manner so that the operation is compatible with surrounding land uses to the maximum extent practicable. The following techniques or actions shall be used in order to achieve compatibility between the proposed oil and gas operation and surrounding land uses. **Compatibility Siting Criteria.** Distance from surrounding land uses shall most effectively ensure compatibility between proposed oil and gas operations and existing land uses. In addition, locating the operation based upon the following site-specific characteristics will assist in creating a compatible operation:

1. Oil and gas operations shall be located as far as possible from surrounding land uses.

2. Oil and gas operations shall be sited away from prominent natural features such as distinctive rock and land forms, vegetative patterns, river and streams and other landmarks or other identified visual or scenic resources, designated environmental resources, trails, or distinctive vegetative patterns as identified in the Comprehensive Plan, or identifiable on or near the site.

3. Oil and gas operations shall be located with consideration being given to prevailing weather patterns, including wind directions to mitigate compatibility concerns.

4. Oil and gas operations shall avoid being located on or across hilltops and ridges, shall avoid silhouetting, and, where possible, should be located at the base of such slopes.
5. Oil and gas operations should use acoustically insulated housing, a cover to enclose the motor or engine, or an acoustically insulated building to enclose the installation.

   i. Any equipment used in drilling, completion, or production of an oil and gas operation must comply with the maximum permissible noise levels set forth at C.R.S. § 25-12-103 for residential zones (all unincorporated areas of Boulder County are residential zones).

K. Transportation.

1. **Transportation Standards, Roads and Access Standards.** Access roads on the site and access points to public roads as identified in the application materials shall be reviewed by the County Transportation Department and shall be built and maintained in accordance with the Transportation Standards. All proposed transportation routes to the site shall also be reviewed and approved by the County Transportation Department to minimize traffic hazards and adverse impacts on public roadways. Existing roads shall be used to minimize land disturbance unless traffic safety, visual or noise concerns, or other adverse surface impacts clearly dictate otherwise. All applicable transportation fees shall be paid prior to issuance of a development plan review construction permit.

2. **Multi-Modal Transportation Standards and Applicable Fees.** The installation and operation of any oil and gas operation shall not cause significant degradation to the public roads within Boulder County and shall comply with the Multi-modal Transportation Standards.

L. **Water Quality Standards.** The installation and operation of any oil and gas operation shall not cause significant degradation to surface or ground waters within Boulder County.

M. **Wetlands Protection Standards.** The installation and operation of any oil and gas operation shall not cause significant degradation to wetlands within Boulder County.

N. **General Oil and Gas Facility Operational Requirements.** The general oil and gas facility operational requirements set forth at Section 2012-800 shall apply to each approved development plan in the form of conditions of approval.

O. **Pipelines.** Any newly constructed or substantially modified pipelines on site must meet the Additional Provisions listed at Article 4-514(E)(5)(a) – (f). Note: Any newly constructed or substantially modified pipelines off site may need to comply with all of Article 4-514(E).
2012-800 Standard-General Conditions of Approval

The following general oil and gas facility operational requirements shall apply to all oil and gas facilities in the form of conditions of approval applicable to each approved development plan review permit:

A. Anchoring. All mechanized equipment associated with oil and gas operations shall be anchored so as to minimize transmission of vibrations through the ground.

B. Applications and Permits. Copies of local, state and federal applications required for the operation, and permits, when issued shall be provided to the County.

C. Burning of Trash. No burning of trash shall occur on the site of any oil and gas operation.

D. Chains. Chains from heavy equipment shall be removed before entering a County road.

E. Chemical Disclosure. Disclosure to the County in table format of the name, CAS number, volume, storage, containment and disposal method for all drilling and completion chemicals (solids, fluids, and gases) used on the proposed well site.

F. Color. Facilities shall be painted in a uniform, non-contrasting, non-reflective color, to blend with the surrounding landscape and, with colors that match the land rather than the sky. The color should be slightly darker than the surrounding landscape.

G. Discharge Valves. Open-ended discharge valves on all storage tanks, pipelines and other containers shall be secured where the operation site is unattended or is accessible to the general public. Open-ended discharge valves shall be placed within the interior of the tank secondary containment.

H. Dust Suppression. Dust associated with traffic on access roads and the site shall be suppressed throughout construction, drilling and operational activities such that there are no visible dust emissions from access roads or the site to the extent practical given wind conditions.

I. Electrification. All permanent operation equipment shall be electrified.

J. Exhaust. The exhaust from all engines, motors, coolers and other mechanized equipment shall be vented up or in a direction away from the closest existing residences.

K. Fencing. Onsite fencing shall consist of basic, two-rung fence of welded iron pipe around the wellheads unless safety or agricultural concerns require additional fencing around the operation.

L. Flammable Material. All land within twenty five (25) feet near any tank, pit or other structure containing flammable or combustible materials shall be kept free of dry weeds, grass or rubbish or other flammable materials.

M. Lighting. Except during drilling, completion or other operational activities requiring additional lighting, down-lighting is required, meaning that all bulbs must be fully shielded to prevent light emissions above a horizontal plane drawn from the bottom of the fixture. A lighting plan shall be developed to establish compliance with this provision. The lighting plan must indicate the location of all outdoor lighting on the site and any structures, and must include cut sheets (manufacturer’s specifications with picture or diagram) of all proposed fixtures.
Maintenance of Machinery. Routine field maintenance of vehicles or mobile machinery shall not be performed within three hundred (300) feet of any water body.

M. Mud Tracking. Tracking of mud or debris onto roads is prohibited.

O. Noise. Any equipment used in drilling, completion, or production of an oil and gas operation must comply with the maximum permissible noise levels set forth at C.R.S. § 25-12-103 for residential zones (all unincorporated areas of Boulder County are residential zones).

P. Reclamation Plan. Any application for an oil and gas operations shall include any COGCC required interim and final reclamation procedures.

Q. Removal of Debris. When an oil and gas operation becomes operational, all construction-related debris shall be removed from the site for proper disposal. The site shall be maintained free of debris and excess materials at all times during operation. Materials shall not be buried on-site.

R. Removal of Equipment. All equipment used for drilling, re-drilling and maintenance of the facility shall be removed from the site within thirty (30) days of completion of the work, unless otherwise agreed to by the surface owner. Permanent storage of equipment on well pad sites shall not be allowed.

S. Spills. Chemical spills and releases shall be reported in accordance with applicable state and federal laws, including the Emergency Planning and Community Right To Know Act, the Comprehensive Environmental Response, Compensation and Liability Act, the Oil and Pollution Act, and the Clean Water Act, as applicable. Spills that have the potential to threaten waters of the state or residences must be reported immediately to the Director and Emergency Dispatch.

T. Stormwater Control Plan. A stormwater control plan that establishes that all operations shall use most effective performance techniques and practices and best management practices to minimize impacts to surface waters from erosion, sediment, and other sources of nonpoint pollution. The stormwater control plan required by COGCC Rule 1002(f) may be provided to establish compliance with this provision.

U. Temporary Access Roads. Property subject to temporary access roads associated with oil and gas operations shall be reclaimed and re-vegetated to the its original state within sixty (60) days of discontinued use of the temporary access roads.

V. Transportation Permits. Applicant shall obtain all applicable transportation permits, including but not limited to County access, driveway, utility construction, oversize and overweight permits, as well as all appropriate Colorado Department of Transportation (CDOT) access permits pursuant to the CDOT State Highway Access Code.

W. Traffic Control Plan. A Traffic Control Plan shall be provided to the County Transportation Department prior to facility pad construction, drill rig movement commencement of construction, mobilization, demobilization, or any other disruption of two-way traffic.

X. Weed Control. The applicant shall be responsible for ongoing weed control at oil and gas operations, pipelines, and along access roads during construction and operation, until abandonment and final reclamation is completed per County or other applicable agency regulations. The appropriate weed control methods and species to be controlled shall be determined through review and recommendation by the County Weed Coordinator by reference to the Boulder County Noxious Weed Management Plan and in coordination with the requirements of the surface owner.
Y. **Well Abandonment.** The operator shall comply with any COGCC rules regarding well abandonment. Upon plugging and abandonment of a well, the operator shall provide the County with surveyed coordinates of the abandoned well and shall leave onsite a physical marker of the well location.

Z. **Representations.** The approved development plan review application shall be subject to all conditions and commitments of record, including verbal representations made by the applicant, and in the application file, including without limitation compliance with all approved mitigation plans.

### 2012-900 Operational Conflict Waiver

**A.** Boulder County recognizes that the COGCC regulates oil and gas operations and that Colorado courts have determined that a County regulation must yield to a state regulation where the application of the County regulation to the oil and gas operation would conflict with a state statute, regulation or other requirement and where the conflict results in the material impediment or destruction of the state's interest in the responsible, balanced development, production and utilization of oil and gas consistent with protection of public health, safety, and welfare, including protection of the environment and wildlife resources. Accordingly, if an operational conflict would arise by application of this Article and upon request of the applicant, the County will waive application of the operationally conflicting standard.

**B.** The applicant may make a written request to the Land Use Department for an Operational Conflict Waiver hearing before the Board of County Commissioners at any time during the development plan review process, but no later than ten (10) days following a final decision on the development plan review application. An Operational Conflict Waiver application shall be heard in a noticed public hearing by the Board of County Commissioners. Notice of the hearing shall be in accordance with Section 3-205(C). The hearing shall allow the applicant the opportunity to develop a full evidentiary record concerning the alleged operational conflict between the County regulation and the state regulation. The County shall also provide notice of the hearing to the COGCC and request it to provide information to the Board relative to its position as to the alleged operational conflict. At the hearing, the applicant shall have the burden of pleading and proving an actual operational conflict between the requirements of these regulations and those of the COGCC in the context of the specific application. If the Board determines that an operational conflict exists, it will waive the County requirement or standard to the extent necessary to negate the operational conflict. The Board may also condition the approval of the Operational Conflict Waiver as necessary to protect the public health, safety and welfare by mitigating any adverse impacts arising from the grant of approval. Any such condition shall be designed and enforced so that the condition itself does not operationally conflict with the requirements of the COGCC. If aggrieved by the decision of the Board on the Operational Conflict Waiver request, the applicant may seek review of that decision based upon the fully developed evidentiary record pursuant to Rule 106 (a)(4) of the Colorado Rules of Civil Procedure.

### 2012-1000 Other Waivers

**A.** At any time during the application process, the Director may waive one or more of these regulations if the applicant demonstrates to the satisfaction of the County one of the following:
1. **No Economical Technology.** There is no economical technology commercially available to
conduct the oil and gas operation in compliance with the standard(s);

2. **Protection of Public Health, Safety, Welfare and the Environment.** Waiving the standard
will not result in unreasonable damage to public health, safety, welfare and the
environment; or

3. **Alternate Approach Preferable.** Protection of public health, safety, welfare and the
environment will be enhanced by an alternate approach not contemplated by the standard.

2012-1100 Judicial Review

A final decision by the Board of County Commissioners on a development plan is subject to judicial review
pursuant to Rule 106(a)(4) of the Colorado Rules of Civil Procedure.

2012-1200 Procedures Following Approval of Permit

**A. Financial Guarantees.** With regard to each specific oil and gas operations, if the applicant shall
provide one (1) form of the following security (bond, irrevocable letter of credit or equivalent
financial security acceptable to the County) to ensure compliance with this Article in an amount
equal to the actual or estimated cost plus ten percent (10%) to implement the operation consistent
with the requirements of this Article and any applicable conditions of approval. In the discretion
of the Director, operations may be released from the performance security requirement
provided after the applicant demonstrates to the Director’s satisfaction that all conditions of
approval have been met and the operation is in compliance with this Article. If the installation of
plant and landscape materials is required as mitigation measures under this Article, the
performance security for these measures shall remain in place for two years after installation.

This Section is not meant to address COGCC Application for Permit to Drill permitting
requirements (including, but not limited to, COGCC reclamation requirements) nor does it
replace the COGCC’s financial assurance requirements.

**B. Right to Enter.** The applicant shall provide the telephone number of a contact person who may
be reached twenty-four (24) hours a day for purposes of being notified of any proposed County
inspection under this Section. Any site under an approved development plan may be inspected
by the County at any time, to ensure compliance with the requirements of the approved
development plan, provided that twenty-four (24) hours prior notice is given to the contact
person at the telephone number supplied by the applicant. Each approved development plan
shall contain the following statement: “Applicant hereby consents to allow the County the right
of inspection of this approved operation provided the County contacts the operator with twenty-
four (24) hours prior notice of such inspection.”

**C. Effect of the Approved Development Plan.** After approval of a development plan and following
compliance with any applicable conditions of approval, the County Land Use Department shall
issue a development plan review construction permit for the proposed oil and gas operation.
Following receipt of the development plan review construction permit, the applicant shall be
entitled to have processed any necessary building, grading, access, floodplain, or other County
permits and is authorized to otherwise proceed with the proposed oil and gas operation. The
approval of a development plan review under this Article does not result in the vesting of
development rights, nor does it permit the violation of any County or state regulations or
preclude the County Building Official or Transportation Department from refusing to issue a
permit if the plans and specifications do not comply with applicable County regulations.
D. **Duration of the Approved Development Plan.** An approved development plan shall remain effective for a period of **two-three** (23) years. If the operation is not commenced within the effective period of the development plan, the permit shall expire and the applicant will have to reapply for a new permit prior to undertaking operations.

E. **Amendments to Development Plan.** Any proposal to change an approved development plan shall require an application to the Land Use Department to determine whether the proposed change constitutes a substantial modification to the approved development plan.

1. In determining whether the proposed modification to a development plan approval is substantial, the Director shall consider the record of the development plan approval, including any express conditions, limitations, or agreements governing the approved development plan and the nature, character, and the extent of additional land use impacts of the proposed modification. The addition of a new well on an existing pad shall be considered a substantial modification to the entire pad and the entire pad shall be required to come into compliance with this Article, to the extent practical. Other changes shall be considered substantial if they significantly alter the nature, character, or extent of the land use impacts of the development plan approval.

2. If the Director determines that the change constitutes a substantial modification, no such change shall be allowed to proceed until an application to amend the approved development plan is filed with the Director and approval granted in accordance with this Article. The applicant or its successor may appeal the Director's decision to require an amended development plan to the Board of County Commissioners, provided that any such appeal shall be in writing and shall be filed with the Director no later than thirty (30) days following the date of the Director's decision to require a development plan amendment.
2012-1300 Enforcement

If the County determines at any time that there is a violation of an approved development plan permit, the Director shall be entitled to commence one or more of the following enforcement measures and remedies.

A. Written Order Suspending Development Plan. The Director may issue a written order identifying the violation and suspending the development plan and all activity otherwise allowed by the development plan. If the violation presents an immediate threat to the health, safety or welfare of the public, the Director may immediately issue the written order to the applicant in writing and, upon receipt, the applicant shall cease all activities and operations immediately until the violation is remedied. In all other instances, prior to issuing a written order, the Director shall provide written notice to the applicant describing the violation, and stating a reasonable time within which the violation must be corrected. If, within that time period, the applicant has not either corrected the violation or filed a written appeal with the Board of County Commissioners, the written order shall be delivered to the applicant in writing and, upon receipt, the applicant shall cease all activities and operations immediately until the violation is remedied. Any appeal to the Board of County Commissioners of the threatened or actual issuance of the written order shall be acted upon pursuant to Section 12-1300(c) below.

A.B. Draw Against Financial Guarantee. In addition to any other remedy authorized under this Resolution to enforce the provisions of this Article, if the Director shall be entitled to draw upon any financial guarantee provided by an applicant pursuant to enforce the provisions of this Article, if the applicant violates any term or condition of an approved development plan, if the Director has reason to believe that a violation of an approved development plan for which a financial guarantee has been provided has occurred, Prior to drawing upon a financial guarantee, the Director shall provide written notice to the applicant describing the violation, and stating a reasonable time within which the violation must be corrected. If, within that time period, the applicant has not either corrected the violation or filed a written appeal with the Board of County Commissioners, the Director shall be entitled to enter upon the site to take any reasonable measures to correct the violation, and may draw on the financial guarantee to cover the costs of corrective measures.

A.C. Appeal Hearing Before Board of County Commissioners. If the applicant files a timely appeal with the Board of County Commissioners of the Director’s determination to issue a written order suspending the development plan or to draw upon a financial guarantee, the Board shall schedule a hearing on the appeal at the soonest possible time of which the applicant shall receive reasonable prior notice. If the Board confirms at the hearing that the violation has occurred and has not been corrected, the Board in its discretion may confirm issuance of a written order suspending the development plan or the determination to draw upon the financial guarantee. The Board, in its discretion, may also give the applicant additional time to correct the violation, or may specify the time at which the Director may take appropriate action to have the violation corrected and draw on the financial guarantee to cover the costs of corrective measures.

A.D. Timing of Release of Financial Guarantees. To insure the Director’s ability to enforce the provisions of any approved development plan, the Director shall not release any financial guarantee provided under this Article for an individual development plan, until the Director confirms that all operations have been completed and all provisions of the plan complied with. The Director shall not release any blanket bond or other blanket financial guarantee provided under this Article unless he is satisfied that the person providing the bond has adequately declared its intention to conduct no further oil and gas operations in Boulder County in the
The Director shall also be empowered to release a financial guarantee if a successor to an applicant provides satisfactory guarantees in accordance with this Article.

D.E. Other Enforcement Remedies. In addition to the foregoing enforcement measures, Boulder County has the right to any and all other enforcement measures and remedies provided by law.
2012-1400 Definitions

Terms used herein are defined below. Any terms not specifically defined herein may be defined in Article 18.

Abandonment. The permanent abandonment of a well, which shall be determined at the time of the operator’s filing of the appropriate abandonment form with the COGCC.

Agent. One authorized to make binding representations on behalf of the applicant.

Adverse Effect or Adverse Impact. The impact of an action, after mitigation, that is considerable or substantial, and unfavorable or harmful; includes social, economic, physical, health, aesthetic, historical impact, and/or biological impacts, including but not limited to, effects on natural resources or the structure or function of affected ecosystems.

Applicant. Person, corporation or other legal entity possessing the legal right to develop the mineral resource who has applied for an oil and gas operation permit.

BTEX and/or TPH. Benzene, Toluene, Ethylbenzene, Xylene and Total Petroleum Hydrocarbons.

Chemical(s). Any element, chemical compound or mixture of elements and/or compounds.

Closed Loop Drilling Process or System. A closed loop mud drilling system typically consists of steel tanks for mud mixing and storage and the use of solids removal equipment, which normally includes some combination of shale shakers, mud cleaners and centrifuges sitting on top of the mud tanks. This equipment separates drill cutting solids from the mud stream coming out of the wellbore while retaining the water or fluid portion to be reused in the continued drilling of the well bore. The solids are placed in containment provided on location. The system differs from conventional drilling where a reserve pit is used to allow gravitational settling of the solids from the mud which can then be reused. A Closed Loop Drilling System does not include use of a Conventional Reserve Drilling Pit.

Completion combustion device. Any ignition device, installed horizontally or vertically, used in exploration and production operations to combust otherwise vented emissions from completions.

Corridor. Tracts of land within which a pipeline right-of-way is located.

County. Boulder County, Colorado, its officers, staff, employees and agents.

Degradation. Lowering in grade or desirability; lessening in quality.

Delineation well. A well drilled in order to determine the boundary of a field or producing reservoir.

Department. Boulder County Land Use Department.

Drilling Operation. Any work or actual operation undertaken for the purposes of carrying out any of the rights, privileges or duties of a lessee for drilling of an oil well, gas well, or cathodic protection well, including but not limited to the actual operation of drilling in the ground.
Equipment. Machinery or structures located on well pads or rights-of-way including, but not limited to, wellheads, separators, dehydration units, heaters, meters, storage tanks, compressors, pumping units, internal combustion engines, and electric motors.

Exploration and Production Waste or “E and P Waste”: Wastes associated with Oil and Gas Operations to locate or remove oil or gas from the ground or to remove impurities from such substances and that are uniquely associated with and intrinsic to oil and gas exploration, development or production operations that are exempt from regulation under the Resource Conservation and Recovery Act (RCRA).

Flow Line. Pipeline connecting individual well sites to gathering lines.

Gas Well. Well capable of producing natural gas.

Gathering Line. Pipeline transporting produced gas, oil, or water from multiple well sites to a centralized facility.

Grading Plan. Plan view and cross-section of existing and proposed contours, cuts and fills, topsoil storage location and stabilization methods, and maximum slopes.

Ground Water. Subsurface waters in a zone of saturation.

Heavy Equipment. Drilling rigs, completion rigs, construction equipment, and individual truck/trailer combination vehicles with a gross vehicle weight exceeding five tons.

Improvement. Any new construction activity or addition of equipment or materials to a site.

Mitigation. One or more of the following actions which are prioritized in order of preference:

Avoiding Impacts. Avoiding an impact by not taking a certain action or parts of an action; or

Minimizing Impacts. Limiting the degree or magnitude of the action or its implementation, or by changing its location; or

Rectifying Impacts. Repairing, rehabilitating, or restoring the impact area, facility or service; or

Reducing or Eliminating Impacts. Reducing or eliminating the impact over time by preservation and maintenance operations; and

Other Provisions for Addressing Impacts. Using alternative means not contemplated by this Article to provide equivalent biological, social, environmental and/or physical mitigation actions.

Most Effective Performance Techniques and Practices. The application of proven and emerging techniques, technologies or other Best Management Practices used in conducting oil and gas exploration and development which avoid, neutralize, exclude, eliminate, mitigate or minimize adverse on and off-site impacts to public health and the environment, landowners, and natural resources, and which may reduce conflicts between potentially impacted landowners and the oil and gas industry.

Occupied Structure. Any building or structure that requires a certificate of occupancy or building or structure intended for human occupancy.
Oil and Gas Facilities.

Site and the equipment associated with a site used for the production, transportation, treatment, and/or storage of oil and gas and waste products; or

An individual well pad built with one or more wells and operated to produce liquid petroleum and/or natural gas, including associated equipment required for such production; or

Gathering lines, and ancillary equipment including but not limited to drip stations, vent stations, pigging facilities, chemical injection stations and valve boxes; or

Temporary storage and construction staging yards in place for less than six months; or

Any other oil and gas operation which may cause significant degradation.

Oil and Gas Operations. Exploration for oil or gas, including but not limited to conventional oil and gas; the siting, drilling, deepening, recompletion, reworking, refracturing, closure or abandonment of an oil and gas well; production facility and operations including the installation of flow lines and gathering lines; construction, site preparation, reclamation and related activities associated with the development of oil and gas resources.

Oil Well. Well capable of producing crude petroleum oil.

Operation. Oil and Gas Operations.

Owner or Operator. Person who has the right to drill into and produce from a pool and to appropriate the oil or gas produced either for such owner or operator or others.

Permanent Equipment. Equipment located onsite for a duration of time greater than six months effective one year after the drilling and completion of a well.

Person. Any individual, partnership, corporation, association, company, or other public or corporate entity, including but not limited to the State or Federal governments, and any of their political subdivisions, agencies, or instrumentalities.

Pit. Any natural or man-made depression in the ground used for oil or gas exploration or production purposes; a pit does not include steel, fiberglass, concrete or other similar vessels which do not release their contents to surrounding soils.

Platted Building Envelope. Area of land within a buildable lot within which all site structures, buildings and other hardscape elements shall be contained, except driveways.

Regulation(s). Article 2012 of the Boulder County Land Use Code.

Referral Agency. An agency, organization, or technical consultant deemed appropriate and necessary, by the County, to review an application and provide professional analysis and recommendations, including without limitation other County offices and departments, municipal, state, or federal agencies having an interest in or authority over all or part of the application or permit and legal consultants.

Residential. All property within unincorporated Boulder County, Colorado.
Right-Of-Way. The legal right to pass through grounds or property owned by another, or land, property or interest therein usually in a strip, acquired for or devoted to transportation purposes.

Security Fencing. Six-foot chain link fence topped by three strands of barbed wire, or the equivalent, with a gate that can be secured.

Setback. Distance between the following, including but not limited to, a wellhead, intermediate line, gathering line or major facility structure boundary and the closest projection of a residential, commercial, or industrial building structure, a lot or property line, a permitted facility, or a platted building envelope in a platted subdivision.

Significant. Of considerable or substantial consequence.

Site. Lands, including the surface of a severed mineral estate, on which exploration for, or extraction and removal of oil or gas is authorized under a lease.

Surface Owner. Owner of the surface property on which the facility will be constructed.

Surrounding. Within one-half mile of a proposed oil and gas operation.

Temporary Use Area. Disturbed lands immediately adjacent to the well pad or right of way used by an operator during the construction or maintenance of a well, pipeline or other facility that will be reclaimed for permanent operations.

Transmission Line. Pipeline transporting oil, natural gas or any other products derived from oil and gas production, which is defined as a transmission line by the U.S. Department of Transportation regulations under the Natural Gas Pipeline Safety Act of 1968, as amended.

VOC. Volatile organic compounds.

Water or Water Body. A water body is any surface waters which are contained in or flow in or through Boulder County, but does not include ephemeral streams, roadway ditches, water in sewage systems, water in treatment works of disposal systems, water in potable water distribution systems, stock ponds or irrigation ditches not discharging to live streams, and all water withdrawn for use until use and treatment have been completed.

Well or Wellhead. Equipment attached to the casing of an oil, gas or injection well above the surface of the ground.

Well Blowdown. Maintenance activity designed to remove unwanted fluids from mature wells during which time gas is often vented to the atmosphere.

Well Completion. The process that perforates well casing, stimulates the reservoir using various techniques including but not limited to acid treatment and hydraulic fracturing, allows for the flowback of petroleum or natural gas from wells to expel drilling and reservoir fluids, and tests the reservoir flow characteristics, which may vent produced hydrocarbons to the atmosphere via an open pit or tank.

Well Pad. Area in which permanent operations for the well takes place and shall always include, at a minimum, that portion of the pad area occupied by permanent production equipment. Well pads may contain one or more wellheads and associated equipment.
Wildcat or Delineation Well. A well outside known fields or the first well drilled in an oil or gas field where no other oil and gas production exists.
ATTACHMENT A.2

Proposed Amendments to Article 4-500 (use definitions)

1. Amend Article 4-506 Industrial Uses to add new use category:

   D. Major Oil and Gas Operations
      1. Definition: Water injection wells and facilities, centralized water transfer stations,
         centralized water pump stations, storage yards and construction staging yards in place
         for longer than six months, and any other oil and gas operation the location of which is
         not dependent upon development of the mineral resource or subject to Article 2012.
      2. Districts Permitted: By Special Review in GI
      3. Parking Requirements: None
      4. Loading Requirements: None
      5. Additional Provisions: None

Re-order remaining items and update cross-references as needed.

2. Amend Article 4-508 Mining Uses by deleting current Sections 4-508(B) and 4-508(C) and replacing
   with new Section 4-508(B):

   B. Oil and Gas Operations
      1. Definition: See Article 2012-1400
      2. Districts Permitted: By development plan review for oil and gas operations in all districts
         (Article 2012)
      3. Parking Requirements: None
      4. Loading Requirements: None
      5. Additional Provisions: None

Re-order remaining items and update cross-references as needed.

3. Amend Article 4-514 Utility and Public Service Uses:

   Add a new use “Gas and/or Hazardous Liquid Pipelines”:

   E. Gas and/or Hazardous Liquid Pipelines
      1. Definition: Pipelines for the collection and transmission of natural gas or other
         hazardous liquids.
      2. Districts Permitted: In all districts by Limited Impact Special Review, or review under
         Article 8 (areas and activities of state interest), as applicable. Gathering lines and flow
         lines which are part of new oil and gas development and which are located on the same
         parcel or parcels as the well head, pumping units, tanks and/or treaters will be subject
         to Development Plan Review under Article 2012 of this Code.
      3. Parking Requirements: None
      4. Loading Requirements: None
      5. Additional Provisions:
         a. This use is not required to be located on a building lot, or comply with the
            minimum lot size requirement for the district in which it is located.
         b. Flow lines, gathering lines, and transmission lines shall be sited a minimum of
            fifty (50) feet away from general residential, commercial, and industrial
            buildings, as well as the high-water mark of any surface water body. This
distance shall be measured from the nearest edge of the pipeline. Pipelines and
gathering lines that pass within 150 feet of general residential, commercial, and
industrial buildings or the high water mark of any surface water body shall
incorporate leak detection, secondary containment, or other mitigation, as
appropriate.
c. To the maximum extent practicable, pipelines should be aligned with
established roads in order to minimize surface impacts and reduce habitat
fragmentation and disturbance.
d. To the maximum extent practicable, operators shall share existing pipeline
rights-of-way and consolidate new corridors for pipeline rights-of-way to
minimize surface impacts.
e. Operators shall use boring technology or alternative director-approved most
effective performance techniques and practices when crossing streams, rivers or
irrigation ditches with a pipeline to minimize negative impacts to the channel,
bank, and riparian areas.
f. During pipeline construction for trenches that are left open for more than five
(5) days and are greater than five (5) feet in width, install wildlife crossovers and
escape ramps where the trench crosses well-defined game trails and at a
minimum of one-quarter (1/4) mile intervals where the trench parallels well-
defined game trails.
g. The Department may require an applicant for a pipeline to provide a risk-based
engineering study for all or part of its proposed pipeline right of way that may
require the implementation of more stringent construction or operation
standards or space between the pipeline and other structures.

Re-order remaining items and update cross-references as needed.

Modify current section 4-514(P) “Utility Service Facility” as follows:

P. Utility Service Facility
1. Definition: Any electrical distribution lines, natural gas distribution lines, minor gas
regulator stations, cable television lines, telegraph and telephone lines, and gathering
lines, or other minor service facilities.
2. Districts Permitted: By right in all districts
3. Parking Requirements: None
4. Loading Requirements: None
5. Additional Provisions:
   a. This use is not required to be located on a building lot, or comply with the
minimum lot size requirement for the district in which it is located.
   b. No buildings shall be associated with this use.
   c. This use is limited to the following sizes:
      i. gas lines less than 12 inches; and
      ii. electric lines of less than 115,000 volts.
ATTACHMENT A.3

Proposed Amendment to Board of Adjustment provisions

Add New Section 4-1205 as follows:

No appeals to the Board of Adjustment or requests for variances before the Board of Adjustment are permitted for any matters under Article 2012, Development Plan Review for Oil and Gas Operations.
ATTACHMENT A.4
Proposed Amendments to Article 18 (Land Use Code Definitions)

1. Replace current text of 18-181 with the following:

“Oil and Gas Operations. Exploration for oil or gas, including but not limited to conventional oil and gas; the siting, drilling, deepening, recompletion, reworking, refracturing, closure or abandonment of an oil and gas well; production facility and operations including the installation of flow lines and gathering lines; construction, site preparation, reclamation and related activities associated with the development of oil and gas resources.”

2. Delete 18-196 “Site (Oil & Gas)” due to new definition of same in Article 2012.

3. Amend any other definitions as necessary (e.g., 18-166 “Gas Transmission Pipeline”).
ATTACHMENT A.5

Clerical changes necessary to conform rest of Land Use Code to DC-12-0003

1. Delete Article 4-900 (current “Development Plan review for Oil and Gas Operations”)

2. Update Table of Contents and associated cross-references in Code as necessary.

3. Update use tables as necessary.

4. In all of the Article 4 zoning district regulations, for each district, under the listed Mining Uses: substitute “Oil and Gas Operations” for the two uses currently listed (Oil and Gas Drilling and Production, on subdivided land, and Oil and Gas Drilling and Production, on unsubdivided land).


6. All other clerical amendments necessary to conform entire Land Use Code to primary text amendments approved in DC-12-0003 (Article 2012, etc.).
BOULDER COUNTY PLANNING COMMISSION

DATE: October 1, 2012

MOTION: Pat Shanks: MOVED that the Boulder County Planning Commission provide direction to staff on Docket DC-12-0003: Amendments to Oil and Gas Development Regulations, as set forth below.

SECOND: Gail Hartman

VOTE: Motion PASSED Unanimously {5 to 0}

1. Consider more graphics within regulations. We like the tables.
2. Neighborhood meetings – consider adding to Expedited as well as Standard DPR
   a. Refine outcomes/expectations of neighborhood meeting
   b. Consider providing additional information to neighbors through meetings or mailings
3. Transportation Standards compliance
   a. Consider adding to Expedited Process as well as Standard
   b. Consider whether mitigation measures should be different under each process
   c. Bring update on status of transportation consultant’s work to 17 Oct hearing
4. Mitigation plans – consider adding some or all to Expedited DPR
   a. Goal is to ensure outcome of two processes is the same
5. Notice to neighbors
   a. Should include residents as well as owners
   b. Bump up to ½ mile from 1,500 feet
   c. Page A-5 to A-6 (pre app notice): need to add more details on exactly what activity will be happening, as much as is known at pre-app stage
6. Consider whether Expedited criteria are too relaxed. In particular, consider whether setbacks should be increased. Request staff bring back maps showing the following for the next hearing:
   i. Existing COGCC setbacks
   ii. Proposed changes to COGCC setbacks
   iii. 1,500 foot setback from all occupied structures
   iv. Commissioner Young’s “football fields” suggestion
      1. One football field from property line (300 ft)
      2. Two from occupied structures (600 ft)
      3. Three from water wells – domestic, commercial, irrigation – and from surface water bodies (900 ft)
   v. Setbacks proposed by staff in Draft 1
7. Consider Commissioner Holwick’s and Commissioner Blaugrund’s comments
8. Consider Nancy Hall’s comments
9. Consider Commissioner Shanks’s written comments
10. Page A-13 – sampling should be done by professionally qualified third parties
11. 20-500.G – should show all closed and former wells as well as current wells
12. Air quality
   a. 20-602.A.1 and A.2 should be squared up in terms of formatting with 20-703.B.1 and B.2
   b. Title of paragraph should be “general duty to minimize VOC emissions”
   c. Consider whether we can require greater than 98% VOC destruction
   d. Consider whether we are adequately addressing non-VOC emissions (e.g., silica sand dust, other dust suppression)
13. Noise requirements should be same for both processes
14. Water quality – why 6 year cap on testing?
15. Financial guarantees / enforcement
   a. Need to refine when financial guarantees are required and when released
   b. 20-1200.A – does 2 year release make sense? Prefer longer if reasonable.
   c. Look at 20-1200 and 20-1300 – need to square these up so they work together
16. Clarify 20-800.L on flammable material as needed
17. Emergency dispatch – clarify that this means local dispatch.
18. Referrals – need to include Sheriff, Office of Emergency Management, as well as agency of jurisdiction (FPD, etc.)
19. Emergency Plan
   a. Would like to see more disclosure requirements as to all hazardous materials on surface
   b. Look at 20-703.D.2.i – clarify whether this includes hazardous materials on site during well completion, or only afterward, during production
   c. 20-800.E – does this section mesh correctly?
   d. Would like to see permanent record of what has been injected into well
20. Would like more information on fees, whether for application processing, transportation related, construction permit related, etc.
Attachment C
Existing COGCC Rule 603 Setbacks

| 248 Quarter-Sections Available With Rule 603 Setbacks (99%)* |
| 3 Quarter-Sections Not Available with Rule 603 Setbacks (1%) |

* The quarter-section contains one or more Greater Wattenberg Drilling Windows (COGCC Rule 318A) that are eligible for expedited development plan review.

Hatching shows areas under 603 b. High density area rules for building units

603: Drilling and Well Servicing Operations and High Density Area Rules
603 a. (1). 150' from building unit*, public road, or railroad.**
603 a. (2). 150' from property line
603 e. (2)  Within high density area, wellhead setback of 350' from building unit, education facility, assembly building, hospital, nursing home, board and care facility, or jail.
603 e. (3)  Within high density area, production equipment setback of 350' from building unit; and 500' from educational facility, assembly building, hospital, nursing home, board and care facility, or jail.

* As defined in the Rules
** Major above ground utility lines were not included in this analysis, but are a required setback in the Rules

C

Wattenberg Field
Municipalities

0 6,000 Feet
1 inch = 6,000 feet
1 inch = 2,000 yards
6 Football Fields
Attachment D
Straw Man Proposed COGCC Setback Rules

239 Quarter-Sections Available With Rule 603 Setbacks (95%)*

6 Football Fields

10/5/2012

1 inch = 6,000 feet
1 inch = 2,000 yards

12 Quarter-Sections Not Available with Rule 603 Setbacks (5%)

* The quarter-section contains one or more Greater Wattenberg Drilling Windows (COGCC Rule 318A) that are eligible for expedited development plan review.

Hatching shows areas under 603 b. High density area rules for building units

Zone 1 - 350' from building unit
High Occupancy Building - 750' setback from schools, hospitals, nursing homes

All other COGCC setbacks remain the same.

Wattenberg Field
Municipalities

239 Quarter-Sections Available With Rule 603 Setbacks (95%)*

6 Football Fields

10/5/2012

1 inch = 6,000 feet
1 inch = 2,000 yards

12 Quarter-Sections Not Available with Rule 603 Setbacks (5%)

* The quarter-section contains one or more Greater Wattenberg Drilling Windows (COGCC Rule 318A) that are eligible for expedited development plan review.

Hatching shows areas under 603 b. High density area rules for building units

Zone 1 - 350' from building unit
High Occupancy Building - 750' setback from schools, hospitals, nursing homes

All other COGCC setbacks remain the same.

Wattenberg Field
Municipalities
Attachment E
Existing Wells

- Well: Producing (243)
- Well: Permit Location (38)
- Directional Well

Number of wells includes only those wells located in unincorporated Boulder County and within the Wattenberg Field as retrieved from the COGCC website on 10/6/2012.
Attachment F
Scenario 1: Development Review Process as Proposed in Draft Regulations

171 Quarter-Sections Eligible for Expedited Review (68%)*

80 Quarter-Sections Standard Development Review Process (32%)

* The quarter-section contains one or more Greater Wattenberg Drilling Windows (COGCC Rule 318A) that are eligible for expedited development plan review.

20-601 B: Eligibility for Expedited Development Plan Review Siting Criteria Summary:

1. 500' from occupied structures
2. 150' from property lines
3. 500' from surface water
4. 500' from water wells
5. Not within platted subdivisions
6. Not within high hazard geologic area
7. Not within floodway
8. Not within wetlands
9. Not within natural communities, natural landmarks and natural areas, rare plant areas, significant riparian corridors, or critical wildlife habitat

This map is for illustrated purposes only, it is not proposed as a regulatory map.
20-601 B: Eligibility for Expedited Development Plan Review Setback Criteria Summary:

1. 1500' from occupied structures
2. 150' from property lines
3. 500' from surface water
4. 500' from water wells
5. Not within platted subdivisions
6. Not within high hazard geologic area
7. Not within floodway
8. Not within wetlands
9. Not within natural communities, natural landmarks and natural areas, rare plant areas, significant riparian corridors, or critical wildlife habitat

* The quarter-section contains one or more Greater Wattenberg Drilling Windows (COGCC Rule 318A) that are eligible for expedited development plan review.

Every 6,000 feet is approximately 1 inch on the map.

This map is for illustrated purposes only, it is not proposed as a regulatory map.

88 Quarter-Sections Eligible for Expedited Review (35%)*

163 Quarter-Sections Standard Development Review Process (65%)
Scenario 3: Increased Occupied Building, Property Line, Surface Water and Water Well Setback

20-601 B: Eligibility for Expedited Development Plan Review Setback Criteria Summary:

1. 600' from occupied structures
2. 300' from property lines
3. 900' from surface water
4. 900' from water wells
5. Not within platted subdivisions
6. Not within high hazard geologic area
7. Not within floodway
8. Not within wetlands
9. Not within natural communities, natural landmarks and natural areas, rare plant areas, significant riparian corridors, or critical wildlife habitat

* The quarter-section contains one or more Greater Wattenberg Drilling Windows (COGCC Rule 318A) that are eligible for expedited development plan review.

Wattenberg Field
Municipalities

This map is for illustrated purposes only, it is not proposed as a regulatory map.
Conceptual Overview of Amended Setback Rules

I. Setbacks from Occupied Buildings

a. Establish three new setback zones, based on the distance from a wellhead or production facility to the nearest occupied building (referred to as Building Units in COGCC 100 series Rules).

   i. Zone 1: a Building Unit is located within 350 feet of wellhead or production facility.

      1. Wells and production facilities are prohibited within 350 feet of a Building Unit absent written consent of all owners of surface property and Building Units within 350 feet.

         a. A drilling permit or location assessment will not be considered complete, and will not be approved, without the requisite consent.

      2. Detailed notice of proposed oil and gas operations to be provided to all owners of surface property or Building Units within 700 feet of proposed wellhead or production facility, as well as local government designee.

      3. Comment period extended from 20 days to 40 days.

      4. Mitigation measures to include:

         i. Restrictions on operating hours;
         ii. Restrictions on, or prohibitions of, pits
         iii. Restrictions on allowable noise levels
         iv. Development of traffic plan
         v. Green completions required
         vi. Emissions control devices required
         vii. Operations and facilities consolidated where possible
         viii. Blowout preventers
         ix. Others
ii. Zone 2: a Building Unit is located more than 350 feet, but not more than 700 feet, from a wellhead or production facility.

1. Good faith consultation with owners of surface property or Building Units within 700 feet of any proposed wellhead or production facility, as well as local government designee.

   a. Form 2 or Form 2A will not be approved until Applicant certifies consultation was held.

2. Detailed notice of proposed location to be provided to all owners of surface property or Building Units within 700 feet of proposed wellhead or production facility, as well as local government designee.

3. Comment period extended from 20 days to 40 days.

4. Mitigation measures to include:
   i. Restrictions on operating hours;
   ii. Restrictions on, or prohibitions of, pits
   iii. Restrictions on allowable noise levels
   iv. Development of traffic plan
   v. Green completions required
   vi. Emissions control devices required
   vii. Operations and facilities consolidated where possible
   viii. Blowout preventers
   ix. Others

iii. Zone 3: a Building Unit is located more than 700 feet, but not more than 1200 feet, from a wellhead or production facility.

1. Good faith consultation with owners of surface property or Building Units within 1200 feet of any proposed wellhead or production facility, as well as local government designee.

   a. Form 2 or Form 2A will not be approved until Applicant certifies consultation was held.

2. Surface owners and Building Unit owners invited to attend public meeting(s) to be held at convenient times and locations.

3. Comment period remains at 20 days.

4. Mitigation measures similar to Zones 1 and 2.
b. **High Occupancy Buildings**: buildings such as schools, hospitals, nursing homes, with sensitive populations or identifiable difficulties with ingress or egress.
   
   i. Locating a wellhead or production facility within 750 feet of a High Occupancy building requires Commission approval following a full public hearing.
   
   ii. The Director may approve a proposed wellhead or production facility located more than 750 feet, provided consultation with owners within 1200 feet is conducted.

c. **Designated Outside Activity Areas.** Retain concept of DOAA, which requires Commission Hearing, and Commission has discretion to establish setback, with minimum of 350 feet.

II. **Other Setbacks.** Except as modified by requirements for Building Units, High Occupancy Buildings, and DOAAs, setbacks from buildings, public roads, major above ground utility lines or railroads to be increased from 150 to 200 feet.

III. **Statewide Groundwater Sampling and Monitoring**
   
   a. Collect initial groundwater samples from 2 closest water wells, springs, or surface water features within 1 mile of proposed location prior to beginning construction of location.
   
   b. If drilling is delayed for more than one year following location construction, or if well is re-stimulated more than one year after initial sampling event, a new sampling event is required.
   
   c. A follow-up sampling event is to be conducted not less than 12 months, nor more than 18 months, following an initial sampling event.
   
   d. A follow-up sampling event to be conducted at time of final reclamation of oil and gas location.
   
   e. Follow up sampling may be required in response to changes in water quality documented by analytical data, or in response to complaints from water well owners at Director’s discretion.
   
   f. Constituents to tested for to be determined.
   
   g. Copies of all test results obtained as a result of sampling program will be provided to the Commission and the water well owner. The analytical data and surveyed well locations will be publicly available through COGCC website database.
Sanchez, Kimberly

From: Pat Shanks <wcpatshanks@gmail.com>
Sent: Monday, October 01, 2012 1:35 PM
To: Scott E. Holwick
Cc: Ben Blaugrund; Sanchez, Kimberly; Daniel Cohen; Doug Young; Gail Hartman; John Gerstle; Meg Blum; Natalie Feinberg-Lopez; Case, Dale; Doyle, Ben; Robbins, Jeff; Andrews, Barbara; Webster, James B.
Subject: Re: comments for Mon Oct 1 PC

Here are my comments on the draft regs-

Pat

Shanks comments on Article 20 draft-

p.A-2, Art. 20-100 A., line 8- change ‘mineral property rights’ to ‘development and production.’

p.A-2, Art. 20-100 B., line 15-change ‘to recognize’ to ‘because,’ delete ‘by their nature’
line 17- change ‘since’ to ‘because.’ Add commas after ‘but’ and ‘resource.’
line 18- change ‘promulgated’ to ‘prepared.’
line 19- delete ‘the responsible.’
line 20- delete ‘surrounding.’
line 21- delete ‘and protects.’

p.A-2, Art. 20-100 C., line 24- delete ‘intended to be’ and ‘extent of.’
lines 28-29- change to ‘....oil and gas operations are consistent with state and federal regulations.’
lines 28-32- delete- ‘In particular, this Article.......oil and gas operations.’ (entire sentence)

p.A-3, Art. 20-400 B., line 34- change ‘contains’ to ‘also offers’
line 38- change ‘requiring’ to ‘that only requires’

p.A-3, Art. 20-400 C., line 41- replace ‘subjective’ with some other word, maybe ‘detailed’ or ‘specific’ or ‘context sensitive’
line 43- add comma after ‘it’, delete ‘and’, change ‘for or which’ to ‘for expedited review, or for applications that’
line 45- delete ‘classified as’, capitalize ‘Standard’ and delete ‘and’

p.A-3, Art. 20-400 D.1., line 11- replace ‘harmonize’ with ‘concurrently carry out’

p.A-3, Art. 20-400 E., lines 37-41- this is section is out of place because ‘completeness determination’ and the process to determine this has not yet been defined. I suggest including the text in this section under Section G.

p.A-5, Art. 20-400 H., lines37, 40, 43 and 46- add after ‘owners’, ‘and residents’ in each case. In c., line 43, change ‘1,500’ to ‘2,640’

p.A-6, Art. 20-400 H.2.a., line 4- add after ‘operational’, ‘, including access roads and gathering lines.’
p.A-7, Art. 20-500, line 8-m ‘it’ is bad English. ‘The applicant’ is not an ‘it’

p. A-9, Art. 20-601, line 12- change ‘500’ to ‘2,640’
line 41-44- Why aren’t other referrals like ‘cultural and historic resources’ included here?

p.A-10, Art. 20-602 A.1., lines 35-43- Why has 98% efficiency been designated here??

p.A-12, Art. 20-602 A.5.c., line 4-change ‘have a general duty to safely maximize resource recovery and’ to ‘must’

p.A-13, Art. 20-602 B.2., lines 30-31- change ‘If a well owner desires the well be tested, the operator shall’ to ‘The operator shall contact all well owners and offer to’
line 37- change ‘sub meter GPS’ to ‘GPS with sub-meter resolution’

p.A-14, Art. 20-602 F., line 35- change ‘may need to’ to ‘shall’

p.A-14, Art. 20-603, line 47- What are the implications when an application is ‘deemed withdrawn’? Explain here.

p. A-15- add ‘Stable isotopes of carbon and sulfur’ to Table 1 under ‘OTHER’

P. A-16- Why are these mitigation plans not included in the Expedited application??

p.A-17, Art. 20-702, line 11- after ‘owners’ add ‘, residents, ‘
line 15- change ‘1,500’ to ‘2,640’
line 42- after ‘owners’ add ‘, residents, ‘

p. A-24, Art. 20-800- some ‘Noise’ standards should be included here.

p. A-25, Art. 20-800, lines 19-20- delete ‘of the state’ unless it has some special meaning that is required here.

p. A-26, Art. 20-900, lines 14-16- delete the sentence starting with ‘Accordingly…..’ This sentence is premature because the Operational Conflict Waiver hearing is explained in the next paragraph.

p. A-26, Art. 20-1000 A.1., line 45- What is the meaning of ‘economical technology’ here? It’s not in the definitions. How would it be decided if something is ‘economical’ or not?

On Mon, Oct 1, 2012 at 8:13 AM, Scott E. Holwick <SHolwick@lgkhlaw.com> wrote:

I agree wholeheartedly with Ben’s comments re: aggressively looking beyond the text amendments. I also concur with his text comments. I think that Nancy Hall’s comments are, for the most part, spot on as well. In addition to what I noted last Wednesday, please consider the following additional comments:

20-100(A) – Boulder County acknowledges (instead of recognizes)....

20-300(B) – These non-conforming operations shall be allowed to continue provided the post-effective date operation remains consistent with the pre-effective date operation.
20-300(C) - 2\textsuperscript{nd} to last sentence: For these applications, the County encourages the applicant to use the expedited .... 

20-400(B) -- general question: does (D), (E), (F), (G), (H) and (I) apply to the expedited process? If not, please insert some language in (B) that states expressly that the expedited process requirements are contained entirely within 20-600; otherwise, it appears that everything that follows in 20-400 applies to both processes.

20-400-(H)(2)(e) – this requirement appears to shift the burden from the operator to the landowner – it is absolutely the operator’s burden to contact the owner of the access road (whether owner of the property or easement owner such as a ditch company since many O&G operators try to use existing ditch access roads that are not suitable for the operator’s equipment) to obtain permission to use it (this is critical whether private or public entity owner).

20-400(I) – is “public” road from which to view the posting defined anywhere???

20-500(F) – this seems different and more appropriate than 20-400-(H)(2)(e) on which I commented above.

20-500(H)(6) – again, “public” and “private” – defined???

20-500(H)(7) – is there definition re: “floodplains”, “water bodies”, etc – tied to the Comp Plan (and if so, at what citation)???

20-601(B)(3) – “surface water body” – defined???

20-601(B)(4) – what about irrigation wells (not just domestic or commercial)???

20-601(B)(7) and (8) – tie “floodway” and “wetland areas” to “as defined in the Comp Plan” as you did in (6)....

20-601(B)(9) – last phrase should be “as each is defined in the Comp Plan.”

20-602 – All applications for oil and gas facilities that demonstrate compliance – initial compliance only or is there substantial “stick” to insure ongoing and continual compliance???

20-602(A) – citation needed to Public Health’s “fugitive dust regulations”

20-602(A)(2)(e) (f) (g) and (h) – is there a CFR citation as in (b), (c) and (d) – if so, state it.

20-602(A)(3) – why are “Leak Detection and Repair” and “Directed Inspection and Maintenance” programs capitalized? Have they been defined somewhere? If so, link it.

20-602(A)(10) – where does this standard come from? If there is a technical basis for it, shouldn’t it be stated 26,000 hours of operation or 36 months whichever occurs first?

20-602(C)(2) – put the trigger limits represented in (a) and (b) in the Table – it is much easier to understand.

20-602(D) – do all existing roads that will be used (by agreement with their owner(s)) need to meet the Transportation Standards? The burden to make this happen should be solely on the operator as many entities that own/operate such roads will not have the means to meet those standards....

20-703(A) – I really hate the language in (1), (2) and (3) – “unreasonable” loss of ag land, “minimize” the impact to ag operations, etc.... Whose definition are we using – the farmer’s?????? or the Operator’s?????
20-703(D)(2)(a) – the contacts should be locally available.

20-1200(A) – 3rd line: “in an amount equal to the ‘actual’ [OR] ‘estimated’ cost”…. (should not be both)

20-1200(A) – 3rd line from bottom: Section not Section….

20-1400 – “Water Body” – just because such other structures do not discharge to live streams does not mean that they are not hydrologically connected to live streams (or for that matter, groundwater). If contamination is the concern, all of the other bodies of water will transport contaminants to live streams and/or the groundwater table, which in many places is nearly at the surface)….

Good luck tonight!

Best regards,

Scott

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Hi Kim and fellow commissioners,

I am sorry I will miss Monday's meeting. Per Kim's request, below are my comments regarding the proposed text amendments.

First, though, a note that the state of NY appears to be taking a more cautious approach to permitting fracking: http://www.nytimes.com/2012/10/01/nyregion/with-new-delays-a-growing-sense-that-gov-andrew-cuomo-will-not-approve-gas-drilling.html?hp&_r=0. As I mention below, I encourage the County to think beyond simple text amendments and consider lobbying or otherwise challenging the state/COGA regarding its own regulations and meeting its obligation to protect the environment and the health and welfare of its citizens.

Two-Tiered SDR

I like the two-tiered approach to SDR. I believe an expedited DPR can serve as a useful tool for both industry and the county. It's a vehicle by which the County may be able to exact better standards and compliance that might otherwise be considered potentially an "operational conflict." (Incidentally, I disagree with COGA's letter in which it asserts that the two-tiered program would breach the operational conflict test, because applicants can, under the proposed amendments, choose the Standard DPR or fall back to the DPR in the event they fail the expedited DPR.) And as Mr. Matheson, the County's expert, discussed, industry can benefit from an expedited DPR because of the certainty it provides. But, in that same vein, the County should draft the expedited SPR language to ensure certainty that the public's concerns are addressed. Therefore, I recommend keeping the structure of the proposed expedited DPR amendment, but adding stronger standards to address the concerns raised by the public at our last hearing. For example, increase the setback distance numbers in the proposed amendment.
Brain storming beyond text amendments: what if the state fails its mandate to protect "the environment and public health, safety and welfare in overseeing the orderly and efficient development of oil and gas"?

The public testimony last Monday had a recurring theme of urging the County to be bold in its approach to oil and gas regulations in the face of health and environmental concerns and technological, geological and environmental uncertainty surrounding new drilling procedures. Perhaps the County should research the possibility of the County challenging the adequacy of COGA and the State's fulfillment of its obligation to protect CO's environment and public health, safety and welfare. There was testimony involving COGA data showing numerous spills, not to mention a seemingly ineffectively small number of inspectors. If COGA/the state can't enforce its own regulations, might the county be able to go beyond its traditionally limited authority that is otherwise restricted from developing land use regulations that operationally conflict from the ineffective or unenforced state regulations?

And if a full-scale challenge to COGA/the state's enforcement and/or its meeting its obligations to protect health, environment and welfare is too off-the-wall, perhaps the County should look for legal opportunities to push back the definition of "operational conflict" and expand the scope of a county's permissible land-use regulatory authority.

Specific textual comments

- add a severability clause
- change "will" to "shall" at A-14, line 47
- clarify 20-602.A.10: rod-packing replacement timing. E.g., add "whichever comes first to the end of that subsection's sentence"
- be more aggressive (erring higher) on all setback numbers
- more emphasis on noise regulations; land use policy and regulations in this County emphasize visual restrictions and overlook the contaminating effect of noise. A-22, J1(i) - (vi).
- require professional wetland consultation/environmental impact statement to A-23, line 13-14 (20-703.M)
- add timing requirement to temp access roads, 20-800.U
- strongly agree with Nancy's Hall's written and spoken comments in favor of adding a Well Abandonment Plan, re: A-25; post drilling operations should arguably be an area where the County can exact land-use regulations since post-drilling measures seem less directly subject to operational conflict limits.
Public safety/Emergency Response plan language: might more detail and reliance on the County's need and ability to provide emergency response services give the County a hook for more aggressive regulations?

Sorry I'll miss tomorrow's hearing.

All my best,

Ben

On Tue, Sep 25, 2012 at 1:15 PM, Sanchez, Kimberly <ksanchez@bouldercounty.org> wrote:

Dear Planning Commissioners:

Thank you for your participation at last night’s meeting. The oil and gas project is complex and there is a lot of information to consume so we thank you for your time and steadfastness to see things through.

Those of you who are not able to attend the follow-up meeting and continued discussion on Mon Oct 1 at 4pm, we are asking that you please submit your comments / direction to us in written form by Mon Oct 1 at noon so they can be considered at the 4pm hearing (and posted on the website). You can either reply to this email or email your comments to me directly (ksanchez@bouldercounty.org).

Thanks,

Kim Sanchez

__________________________________________________________

KIM SANCHEZ | PLANNING DIVISION MANAGER
boulder county | land use department
2045 13th street | boulder, co 80302
303.441.3930 | ksanchez@bouldercounty.org
MEMORANDUM

October 10, 2012

To: Kim Sanchez, Planning Division Manager, Land Use Department

From: Mike Thomas, P.E., County Engineer / George Gerstle, Director, Transportation Department

Subject: Oil and Gas Development – Status of Transportation Fee Technical Investigation

The Transportation Department began working with Felsburg, Holt and Ullevig in July on developing an approach to financial mitigation of impacts to the county road system in the vicinity of potential Oil and Gas well sites. This study will look at existing road use, potential use by the Oil and Gas industry, and the possible resulting impacts to the road system. From there, a fee structure may be developed to offset the impacts. The primary purposes of the study include:

- Developing a reasonable range of oil and gas development scenarios for Boulder County’s emerging industry.
- Determining the effects of the development scenarios on Boulder County’s road system.
- Identifying and estimate the costs of roadway improvements needed (safety, maintenance, and capacity) to mitigate oil and gas development impacts.
- Identifying roadway improvement financing alternatives, including districts, fees, charges and other methods.
- In coordination with the County Attorney’s office, designing a cost recovery impact fees as a prospective road system improvement financing mechanism.

It is anticipated that the technical review and evaluation should be wrapped up by the end of November, with a final report and recommendations to be completed in mid-to-late December.

Let me know if you have any questions.
REQUEST FOR PROPOSAL
ROADWAY IMPACT FEE DEVELOPMENT

RFP # 5651-12

SUBMITTAL DUE DATE
Wednesday, May 16th
2:00 p.m. MST

BOULDER COUNTY PURCHASING

2025 14TH STREET
BOULDER CO 80302

Purchasing@bouldercounty.org
REQUEST FOR PROPOSAL

Boulder County is seeking proposals from interested firms to undertake a study to determine the cost of incremental impacts to county roads that may result from future Oil and Gas (O&G) drilling and other activities that generate significant heavy truck traffic in the county and determine the appropriate level and type of fee to offset such impacts.

Specifications and a sample contract are attached.

Written Inquiries

All inquiries regarding this RFP shall be submitted via e-mail to the Boulder County Purchasing Office at purchasing@bouldercounty.org on or before 4:00 p.m. MST Tuesday, May 8th. A response from the County to all inquiries shall be posted and sent via email no later than Friday, May 11th.

Submittal Instructions:

Submittals are due at the Administrative Services Reception Desk or the email box (preferred) listed below, for time and date recording on or before 2:00 p.m. MST on Friday, May 18th.

Your response can be submitted in the following ways. Please note that e-mail responses to this solicitation are preferred, but are limited to a maximum of 25MB capacity. Electronic Submittals must be received in the e-mail box listed below. Submittals sent to any other box will NOT be forwarded or accepted. This e-mail box is only accessed on the due date of your questions or proposals. Please use the Delivery Receipt option to verify receipt of your email.

E-Mail purchasing@bouldercounty.org; identified as RFP # 5651-12 in the subject line.

-OR-

US Mail Two (2) unbound copies of your submittal, printed double-sided, 11 point, on at least 50% post-consumer, recycled paper must be submitted in a sealed envelope, clearly marked as RFP # 5651-12, to the Administrative Services Reception Desk at 2025 14th Street, Boulder, CO 80302. Please allow at least 2 days for delivery of USPS Priority and Express Mail.

All RFPs must be received and time and date recorded by authorized county staff by the above due date and time. Sole responsibility rests with the Offeror to see that their RFP response is received on time at the stated location(s). Any responses received after due date and time will be returned to the offeror.

The Board of County Commissioners reserves the right to reject any and all responses, to waive any informalities or irregularities therein, and to accept the proposal that, in the opinion of the Board, is in the best interest of the Board and of the County of Boulder, State of Colorado.

Americans with Disabilities Act (ADA): If you need special services provided for under the Americans with Disabilities Act, contact the ADA Coordinator, or the Human Resources office at (303) 441-3525 at least 48 hours before the scheduled event.
TERMS AND CONDITIONS

1. Proposers are expected to examine the drawing, specifications, schedule of delivery, and all instructions. Failure to do so will be at the proposer’s risk.

2. Each proposer shall furnish the information required in the proposal.

3. The Contract/Purchase Order will be awarded to that responsible proposer whose submittal, conforming to the Request for Proposals, will be most advantageous to the County of Boulder, price and other factors considered.

4. The County of Boulder (Office of Purchasing) reserves the right to reject any or all proposals and to waive informalities and minor irregularities in proposals received, and to accept any portion of or all items proposed if deemed in the best interest of the County of Boulder to do so.

5. No submittal shall be withdrawn for a period of thirty (30) days subsequent to the opening of RFPs without the consent of the County Purchasing Agent or delegated representative.

6. A signed purchase order or contract furnished to the successful proposer results in a binding contract without further action by either party.

7. Late or unsigned RFPs will not be accepted or considered. It is the responsibility of proposers to insure that the RFP arrives in the office of the County Purchasing Agent prior to the time indicated in the “Request for Proposal.”

8. The proposed price shall be exclusive of any Federal or State taxes from which the County of Boulder is exempt by law.

9. Any interpretation, correction or change of the RFP documents will be made by Addendum. Interpretations, corrections and changes of the RFP documents made in any other manner will not be binding, and proposer shall not rely upon such interpretations, corrections and changes. The County’s Representative will not be responsible for oral clarification.

10. Confidential/Proprietary Information: RFPs submitted in response to this “Request for Proposal” and any resulting contract are subject to the provisions of the Colorado Public (Open) Records Act, 24-72-201 et.seq., C.R.S., as amended. Any restrictions on the use or inspection of material contained within the proposal and any resulting contract shall be clearly stated in the RFP itself. Any restrictions on the use or inspection of material contained within the RFP and any resulting contract shall be clearly stated in the RFP itself. Confidential/proprietary information must be readily identified, marked and separated/packaged from the rest of the proposal. **Co-mingling of confidential/proprietary and other information is NOT acceptable. Neither a proposal, in its entirety, nor proposed price information will be considered confidential.** Any information that will be included in any resulting contract cannot be considered confidential.

11. Boulder County promotes the purchase/leasing of energy efficient, materials efficient and reduced toxic level products where availability, quality and budget constraints allow. Bidders are expected whenever possible to provide products that earn the ENERGY STAR and meet the ENERGY STAR specifications for energy efficiency with power management features enabled. Bidders are encouraged to offer products and equipment with post-consumer recycled-content materials. Products should be packaged and delivered with a minimum amount of recycled packaging that adequately protects the product, but is not excessive.
SPECIFICATIONS
RFP # 5651-12
Roadway Impact Fee Development

Background
One of Colorado’s largest oil and gas producing shale formations is the Niobrara, which extends into the eastern portion of Boulder County. The Niobrara basin has been a highly productive source of oil and gas in Colorado’s northern Front Range, most notably in Weld County. While to date there has been relatively little oil and gas drilling activity in Boulder County compared to other Front Range counties, a recent surge in oil and gas drilling in Weld County, has made it important that the County understand the potential impacts to the roadway and transportation system that could result from oil and gas development and production.

Over 1,800 wells can legally be drilled in unincorporated Boulder County. Additional wells will also likely be placed within incorporated towns and cities in the county and may also be serviced using unincorporated county roads. Should additional wells be developed in the county, truck traffic could increase by many orders of magnitude over current volumes on county roads. These roads are not presently designed to safely accommodate the weight and volume of vehicles associated with oil and gas development. The impacts of the heavy trucks necessary to serve potential oil and gas development on Boulder County roads could be equivalent to the wear and tear of hundreds of millions of passenger vehicles, would increase conflicts with other vehicles and bicyclists, and would place significant new demands for road infrastructure and safety investments on the County, without additional revenue to address the potential needs.

In addition, other activities that have the potential to generate significant heavy truck traffic that may impact the county transportation system are under consideration.

Potential Demand
Relatively little information is currently available regarding forecast demand for oil and gas development or plans for drilling in unincorporated Boulder County; however the Boulder County Land Use Department has completed an initial analysis that indicates over 1,800 wells could be drilled within existing regulatory limits under current state regulations. These development forecasts will help indicate the number of potential trips that may be placed on county roads as a result of oil and gas activity.

Boulder County has consulted a study conducted by Douglas County as a starting point for estimating potential trip generation from oil and gas development activity. The consultant team for Douglas County estimated trip generation rates based on an analysis completed by MIT and subsequent adjustments based on local industry interviews. Based on the MIT study, the Douglas County study forecasts truck traffic to average 11,040 vehicle trips to develop each pad site (with each pad accommodating six wells) for pad construction, drilling, well installation, and well completion. Once a well is fully operational, trip generation is substantially reduced to approximately 730 vehicle-trips per year (two trips per day). The time period for development of a pad/well site is 45-60 days, with production lasting for up to 15 – 20 years. The timeframe over which these wells could be developed is unknown, and would be largely a function of global oil/natural gas demand.

Based on the assumptions from the Douglas County study and the Land Use Department forecast of potential wells (1,800 wells, 6 wells per pad site and 11,040 trips per pad site) over 3,300,000 vehicle trips could use east Boulder County roads to install and service potential oil and gas development. It should also be noted that this analysis only reflects potential wells in unincorporated Boulder County. Trucks serving wells in the incorporated cities and towns in the County would also likely use Boulder County roads.

Most of the vehicles servicing these wells would be heavy trucks. Heavy trucks have a much greater impact on roads than do lighter weight passenger vehicles, and therefore cause more wear and damage than do passenger vehicles. According to the Douglas County study the load impact of oil and gas trucks on roads can be in the range of 5,000 to 30,000 times (depending on the weight and number of axles on each vehicle) greater than a passenger car. In sum,
the impacts of oil and gas development on Boulder County roads could be equivalent to the wear and tear of many millions of passenger vehicles.

**Potential Implications to Boulder County Transportation System**

The impacts to specific county roads will not be known until the level of activity and truck routes used to access each well pad or other specific use are known; however, potentially significant road reconstruction and maintenance costs and safety concerns exist based on the potential number of associated heavy truck trips.

**Road Reconstruction and Maintenance:** The potential impact of increased truck traffic on both paved and unpaved roads would be significant. Roadway segments experiencing oil and gas, or other heavy vehicle traffic will decrease the overall pavement service life, resulting in the need for more frequent, and thicker, overlays and reconstruction sooner than would be expected under current use. For unpaved roads, the improvements needed to offset the impacts of heavy trucks include more frequent dust suppressant application, grading, graveling, and paving where the truck volume is expected to significantly increase over an extended period of time.

The County conducts a pavement quality survey every three years, with the last one completed in 2009/10. Based on this survey, 36% of unincorporated, non-subdivision, paved roads were in fair or poor condition. Particularly in eastern Boulder County, many of the lower volume roads do not have a significant (or any) road base since they were developed informally over time, and cannot withstand heavy truck traffic. The impact of thousands of heavy trucks on these roads would be substantial.

**Roadway Safety:** Increased truck traffic would have significant safety impacts to both drivers and bicyclists using Boulder County roads. Many roads in the eastern portion of the County do not have shoulders or safe passing areas that would be necessitated by the increased demand by cars to pass slow moving heavy trucks, or trucks entering or leaving the roads to access the well sites. Additional turn lanes, shoulders, or other improvements may be needed to ensure the safety of the traveling public. In addition, eastern Boulder County experiences high volumes of bicycle usage. Conflicts between bicyclists and heavy trucks, especially on roads without shoulders, would likely increase with increased heavy truck traffic.

**Potential Financial Impacts**

The potential financial impacts of the oil and gas and other heavy development on the County transportation system are unknown without further detailed analysis, but have the potential to be significant. The Douglas County study estimated the range of costs of oil and gas development to their County roads from $13.8 million and $135.9 million between 2015 and 2030, depending on different oil and gas development scenarios. To put this in perspective, the current Boulder County Road and Bridge Fund revenue that can be used for road maintenance and resurfacing is approximately $11-12 million annually.

Road costs associated with oil and gas drilling occur largely in the early well development period when truck traffic is greatest. The development of oil and gas has the potential to require substantial front-end, capital investments in order to maintain, expand and improve affected road infrastructure in advance of, or at least concurrent with, drilling activity.

The Transportation Element of the Comprehensive Plan provides guidance on how to fund County transportation needs, and may be useful in evaluating approaches to addressing the costs of oil and gas development in the county. This direction includes:

```markdown
TR7.01: “Allow for special assessments to fund transportation improvements that specially benefit from such improvements,… and that funding mechanisms may include special assessments or other appropriate revenue-generating programs.”
```
TR7.03: “Explore appropriate user fee programs that take into account the full costs of travel, including immediate and long-term impacts to facilities and the environment, to help fund transportation enhancements.”

TR7.04: “Require property owners or developers to provide appropriate off-site transportation improvements that are necessitated by or reasonably related to the impacts of new development.”

Options available to offset the projected transportation funding shortfall include:

- Public improvement district(s);
- Impact/permit fees;
- Direct contributions from oil and gas producers; and
- Property tax reallocation.

Conclusion
Statutory authority currently exists for counties to implement an impact fee to offset impacts from new oil and gas and other development that generate heavy truck traffic. Additional analysis is necessary to understand and document the roadway, safety, and financial impacts to the transportation system (and appropriate mitigation strategies) to Boulder County.

Scope Of Work
Boulder County is seeking proposals from interested firms to undertake a study to determine the cost of incremental impacts to county roads that may result from future Oil and Gas (O&G) drilling and other activities that generate significant heavy truck traffic in the county and determine the appropriate level and type of fee to offset such impacts.

The general scope of the study is outlined below. Respondents should feel free to recommend different approaches that would accomplish the goals in a more cost effective and efficient manner.

Task 1: Review other agency studies and fee mechanisms that are applicable to Boulder County’s situation; provide a summary report to guide development of a transportation impact fee for Boulder County.

Deliverable 1: Report summarizing findings from review of available agency studies and examples.

Task 2: Describe assumed oil and gas development scenario. Analyze and identify likely well locations in Boulder County (and adjacent Weld County) and routes necessary to access the wells that could impact the County transportation system, using available information to the extent possible.

Task 3: Analyze and identify current and forecast traffic volumes and traffic characteristics on routes identified in Task 2.

Task 4: Determine applicable trip generation rates and volumes by type of vehicle/ESAL/other metrics as appropriate from each well type (traditional hydraulic fracturing, horizontal drilling, etc.).

Task 5: Estimate current and future traffic volumes by type of vehicle/ESAL for county transportation facilities with and without forecasted O&G development.

Deliverable 2: Summary report/map identifying potential well locations, access routes and additional traffic volumes on county transportation system associated with anticipated O&G development.

Task 6: Compare current anticipated transportation system safety/roadway impacts to potential incremental impacts/deterioration from anticipated well development.

- Determine surface conditions of potentially impacted Boulder County roads using available Pavement Management System and other relevant roadway information including overlay and chip-seal history.
- Using existing traffic data and deterioration curves provided by county and/or as appropriate from other sources to determine expected future transportation system/roadway conditions without anticipated oil and gas development.
- Determine transportation system safety impacts of projected trip generation associated with potential new O&G well development.
• Determine financial costs of transportation system safety/road maintenance and rehabilitation necessary to offset impacts from anticipated oil and gas development.

**Deliverable 3: Report documenting transportation system impacts/roadway deterioration and associated financial implications of anticipated oil and gas development.**

Task 7: Assign costs of maintenance, safety and other impacts/surface deterioration by appropriate metrics (per axle, per vehicle, per ESAL, etc) to determine a fee structure/schedule.

Task 8: Develop a spreadsheet that identifies the costs per unit of activity (ie per well, per ESAL, etc) to aid in application of recommended fee schedule. Include discussion of how costs per unit of activity may be applicable to other land uses that generate large numbers of heavy truck vehicle trips on the county road system.

**Deliverable 4: Report documenting recommended fee structure that equitably allocates transportation system costs to the associated impacts from O&G development and other potential land uses that generate heavy vehicle trips.**

**Schedule of Work**

Boulder County would like to complete necessary rulemaking to implement impact fees by February 4, 2013. Responses should include a proposed schedule that completes Deliverable 4 by December 1, 2012.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Date</th>
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<tbody>
<tr>
<td>Request for Proposals sent out</td>
<td>May 1, 2012</td>
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<tr>
<td>Proposals Due</td>
<td>May 18, 2012</td>
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<tr>
<td>Notice to Proceed</td>
<td>June 4, 2012</td>
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<tr>
<td>Initial Meeting</td>
<td>June 4, 2012</td>
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<td>Deliverable 1:</td>
<td>To Be Determined</td>
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<td>Deliverable 2:</td>
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<td>Deliverable 3:</td>
<td>To Be Determined</td>
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<tr>
<td>Deliverable 4:</td>
<td>December 1, 2012</td>
</tr>
</tbody>
</table>
SUBMITTAL SECTION
RFP # 5651-12
Roadway Impact Fee Development

Please submit the following information in the order listed below:

1. Name of your company / organization
2. Type of organization: (Corporation, Partnership, etc.)
3. Address
4. Names and Address of the Partners and Subcontractors if applicable
5. Contact Person(s)
6. Telephone, Fax, e-mail
7. A detailed project schedule to include total proposed cost
8. Information on the relevant experience of key personnel
9. Please submit a copy of any contract you would require to be executed in this process.
10. Submit three references for similar projects your company has completed within the last three years and contact information
SIGNATURE PAGE
RFP # 5651-12
Roadway Impact Fee Development

Failure to complete, sign and return this submittal page with your proposal may be cause for rejection.

<table>
<thead>
<tr>
<th>Contact Information</th>
<th>Response</th>
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<tbody>
<tr>
<td>Company Name</td>
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<td>Name and Title of Primary Contact Person</td>
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<td>Company Address</td>
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<td>Email Address</td>
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<td>Company Website</td>
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I certify that I am authorized to bid on my company’s behalf and that I am not currently an employee of Boulder County and to the best of my knowledge, none of my employees or agents are currently employees of Boulder County. I also certify that I am not related to any Boulder County employee or Elected Official.

*Signature of Person Authorized to Bid on Company’s Behalf*  
Date

Note: If you cannot certify the above statements, please explain in the space provided below.
SAMPLE CONTRACT

BOULDER COUNTY (name of service contracting for) CONTRACT

THIS CONTRACT ("Contract") is entered into between the County of Boulder, State of Colorado, acting by and through its Board of County Commissioners ("County") and (name of company) ("Contractor").

In consideration of the rights and obligations specified below, the County and the Contractor agree as follows:

1. Incorporation into Contract: The Invitation for Bid and Bid Specifications of Boulder County Bid No., together with any alterations and/or modifications to these Specifications (the "Bid Documents"), are expressly incorporated into this Contract by this reference.

2. Work to be Performed: The Contractor will, in a good and workmanlike manner and at its own cost and expense, furnish all labor and equipment and do all work necessary and incidental to performing (specify type of work) as specified in the Bid Documents and this Contract (the "Work"). The Contractor shall perform the Work in strict accordance with the Bid Documents and this Contract.

3. Term of Contract: This Contract shall begin and become effective on the date of execution by the parties, which date is the date specified on the signature page of this Contract. Under this Contract, the Contractor shall begin Work on (date) and shall continue through (date).

4. Payment for Work Performed: In consideration of the Work to be performed by the Contractor, and subject to paragraph 14, the County shall pay to the Contractor, in accordance with the Bid Documents, $ (contract price).

5. Extension and/or Renewal of Contract Term:

a. The County, in its sole discretion, may elect to extend the term of this Contract. In the event the County elects to exercise this right, it shall send written notice to Contractor, pursuant to paragraph 15, of its intent to extend the term of the Contract. The notice shall set forth the length of the extension.

b. Upon mutual agreement by the parties, this Contract may be renewed for two additional one-year periods through (date) during which time this Contract shall be in full force and effect, subject to the termination provisions of paragraph 14. If this option to renew is exercised, the parties shall execute a written agreement no later than thirty (30) days before the expiration of this Contract.

c. All of the provisions of this Contract shall remain in full force and effect during any extension or renewed term except that the scope of services and compensation to be paid to Contractor...
during any extension or renewed term shall be mutually agreed upon prior to the commencement of any extension or renewed term. The agreed upon scope of services and compensation shall be reduced to writing, signed by both parties, and attached to this Contract.

d. **TEN CALENDAR DAYS BEFORE THE COMMENCEMENT OF ANY EXTENDED TERM THE CONTRACTOR SHALL SUBMIT TO THE COUNTY PROOF OF INSURANCE AS REQUIRED IN PARAGRAPH 9.**

e. Should the parties fail to agree upon the scope of services or compensation to be paid to Contractor for any extension or renewed term, or should Contractor fail to submit the required documents within the time period specified in paragraph 5(d), then this Contract shall terminate at the end of the then current term and no extension or renewal of the term of the Contract shall occur.

6. **Quality of Performance:** The Contractor shall perform the Contract in a manner satisfactory and acceptable to the County. The County shall be the sole judge of the quality of performance.

7. **Schedule of Work:** The Contractor shall perform the Work during the hours designated by the County so as to avoid inconvenience to the County and its personnel and interference with the County's operations.

8. **Indemnity:** The Contractor shall be liable and responsible for any and all damages to persons or property caused by or arising out of the actions, obligations, or omissions of the Contractor, its employees, agents, representatives or other persons acting under the Contractor's direction or control in performing or failing to perform the Work under this Contract. The Contractor will indemnify and hold harmless the County, its elected and appointed officials, and its employees, agents and representatives (the "indemnified parties"), from any and all liability, claims, demands, actions, damages, losses, judgments, costs or expenses, including but not limited to attorneys' fees, which may be made or brought or which may result against any of the indemnified parties as a result or on account of the actions or omissions of the Contractor, its employees, agents or representatives, or other persons acting under the Contractor’s direction or control. Nothing in this indemnification agreement shall be construed in any way to be a waiver of the County's immunity protection under the Colorado Governmental Immunity Act, C.R.S. § 24-10-101, et seq., as amended.

9. **Insurance Requirements:** The Contractor shall procure and maintain at its own expense, and without cost to the County, the following kinds and minimum amounts of insurance for purposes of insuring the liability risks which the Contractor has assumed until this Contract has expired or is terminated:

a. **Commercial General Liability.** This coverage should be provided on an ISO 1998 Form or most current with minimum limits of $600,000.00 combined single limit for each occurrence.

b. **Automobile Liability.** Minimum limits are required to be $600,000.00 for each occurrence. Coverage must include:
- All vehicles owned, non-owned, and hired to be used on the Contract

c. Workers' Compensation and Employer's Liability. Workers’ Compensation must be maintained with the statutory limits. Employer's Liability is required for minimum limits of $100,000.00 Each Accident/$500,000.00 Disease-Policy Limit/$100,000.00 Disease-Each Employee.

The Contractor shall provide Certificates of Insurance to Boulder County demonstrating that the insurance requirements have been met prior to the commencement of Work under this Contract. The Commercial General Liability certificate shall indicate Boulder County as an ADDITIONAL INSURED.

The Additional Insured wording should be as follows: County of Boulder, State of Colorado, a body corporate and politic, is named as Additional Insured.

These Certificates of Insurance shall also contain a valid provision or endorsement that these policies may not be canceled, terminated, changed or modified without thirty (30) days written notice to the County, pursuant to paragraph 15.

The certificate holder is: Boulder County
Attn: Pam Stonecipher, Risk Manager
Boulder County
P.O. Box 471
Boulder, CO 80306

Please forward certificates to the above certificate holder.

10. Nondiscrimination: The Contractor agrees to comply with the letter and spirit of the Colorado Anti-Discrimination Act, C.R.S. § 24-34-401, et seq., as amended, and all applicable local, state and federal laws respecting discrimination and unfair employment practices.

11. Nondiscrimination Provisions Binding on Subcontractors: In all solicitations by the Contractor for any Work related to this Contract to be performed under a subcontract, either by competitive bidding or negotiation, the Contractor shall notify each potential subcontractor of the Contractor's obligations under this Contract, and of all pertinent regulations relative to nondiscrimination and unfair employment practices.

12. Information and Reports: The Contractor will provide to authorized governmental representatives, including those of the County, State and Federal Government, all information and reports which they may require for any purpose authorized by law. The Contractor will permit such authorized governmental representatives access to the Contractor's facilities, books, records, accounts, and any other relevant sources of information. Where any information required by any such authorized government representative is in the exclusive possession of a person other than the Contractor, then such Contractor shall so certify to the County, and shall explain what efforts it has made to obtain the information.
13. **Independent Contractor:** The Parties recognize and agree that the Contractor is an independent contractor for all purposes, both legal and practical, in performing services under this Contract, and that the Contractor and its agents and employees are not agents or employees of Boulder County for any purpose. As an independent contractor, the Contractor shall be responsible for employing and directing such personnel and agents as it requires to perform the services purchased under this Contract, shall exercise complete authority over its personnel and agents, and shall be fully responsible for their actions.

Contractor acknowledges that it is not entitled to unemployment insurance benefits or workers’ compensation benefits from Boulder County, its elected officials, agents, or any program administered or funded by Boulder County. Contractor shall be entitled to unemployment insurance or workers’ compensation insurance only if unemployment compensation coverage or workers’ compensation coverage is provided by Contractor, or some other entity that is not a party to this Contract. Contractor is obligated to pay federal and state income tax on any monies earned pursuant to this Contract.

14. **Termination and Related Remedies:**

a. The other provisions of this Contract notwithstanding, financial obligations of Boulder County payable after the current fiscal year are contingent upon funds for that purpose being appropriated, budgeted and otherwise made available. Boulder County is prohibited by law from making financial commitments beyond the term of its current fiscal year. The County has contracted for goods and/or services under this Contract and has reason to believe that sufficient funds will be available for the full term of the Contract. Where, however, for reasons beyond the control of the Board of County Commissioners as the funding entity, funds are not allocated for any fiscal period beyond the one in which this Contract is entered into, the County shall have the right to terminate this Contract by providing seven (7) days written notice to the Contractor pursuant to paragraph 15, and will be released from any and all obligations hereunder. If the County terminates the Contract for this reason, the County and the Contractor shall be released from all obligations to perform Work and make payments hereunder, except that the County shall be required to make payment for Work which has been performed by the Contractor prior to the effective date of termination under this provision; and, conversely, the Contractor shall be required to complete any Work for which the County has made payment prior to providing written notice to the Contractor of the termination.

b. The preceding provisions notwithstanding, the County may terminate this Contract, either in whole or in part, for any reason, whenever the County determines that such termination is in the County’s best interests. Such termination shall be effective after the County provides seven (7) days written notice to the Contractor pursuant to paragraph 15.

c. In the event the County exercises either of the termination rights specified in paragraphs 14(a) or 14(b), this Contract shall cease to be of any further force and effect,
with the exception of all Contract remedies which are specified herein and may otherwise be available to the parties under the law, and with the exception of any rights or liabilities of the parties which may survive by virtue of this Contract.

15. Notices: For purposes of the notices required to be provided under paragraphs 5, 9, and 14, all such notices shall be in writing, and shall be either sent by Certified U.S. Mail - Return Receipt Requested, or hand-delivered to the following representatives of the parties at the following addresses:

For the County: (enter DH/EO’s name, Department, and Mailing Address)

For the Contractor: (enter Contractor’s name and Mailing Address)

In the event a notice is mailed pursuant to the provisions of this paragraph, the time periods specified in paragraph 14 shall commence to run on the day after the postmarked date of mailing.

16. Statutory Requirements: This Contract is subject to all statutory requirements that are or may become applicable to counties or political subdivisions of the State of Colorado generally. Without limiting the scope of this provision, the Contract is specifically subject to the following statutory requirement:

Contract payments may be withheld pursuant to C.R.S. § 38-26-107 if the County receives a verified statement that the Contractor has not paid amounts due to any person who has supplied labor or materials for the project.

17. Prohibitions on Public Contract for Services:

Pursuant to Colorado Revised Statute (C.R.S.), § 8-17.5-101, et seq., as amended 5/13/08, the Contractor shall meet the following requirements prior to signing this Agreement (public contract for service) and for the duration thereof:

A. The Contractor shall certify participation in the E-Verify Program (the electronic employment verification program that is authorized in 8 U.S.C. § 1324a and jointly administered by the United States Department of Homeland Security and the Social Security Administration, or its successor program) or the Department Program (the employment verification program established by the Colorado Department of Labor and Employment pursuant to C.R.S. § 8-17.5-102(5)) on the attached certification.

B. The Contractor shall not knowingly employ or contract with an illegal alien to perform work under this public contract for services.

C. The Contractor shall not enter into a contract with a subcontractor that fails to certify to the Contractor that the subcontractor shall not knowingly employ or contract with an illegal alien to perform work under this public contract for services.
D. At the time of signing this public contract for services, the Contractor has confirmed the employment eligibility of all employees who are newly hired for employment to perform work under this public contract for services through participation in either the E-Verify Program or the Department Program.

E. The Contractor shall not use either the E-Verify Program or the Department Program procedures to undertake pre-employment screening of job applicants while this public contract for services is being performed.

F. If Contractor obtains actual knowledge that a subcontractor performing work under this public contract for services knowingly employs or contracts with an illegal alien, the Contractor shall: notify the subcontractor and the County within three days that the Contractor has actual knowledge that the subcontractor is employing or contracting with an illegal alien; and terminate the subcontract with the subcontractor if within three days of receiving the notice required pursuant to the previous paragraph, the subcontractor does not stop employing or contracting with the illegal alien; except that the contractor shall not terminate the contract with the subcontractor if during such three days the subcontractor provides information to establish that the subcontractor has not knowingly employed or contracted with an illegal alien.

G. Contractor shall comply with any reasonable requests by the Department of Labor and Employment (the Department) made in the course of an investigation that the Department is undertaking pursuant to the authority established in C.R.S. § 8-17.5-102(5).

H. If Contractor violates any provisions of this Section of this Agreement, the County may terminate this Agreement for breach of contract. If the Agreement is so terminated, the Contractor shall be liable for actual and consequential damages to the County.

18. Amendments: This Contract may be altered, amended or repealed only on the mutual agreement of the County and the Contractor by a duly executed written instrument.

19. Assignment: This Contract shall not be assigned or subcontracted by the Contractor without the prior written consent of the County.

20. Benefit to Successors and Assigns: This Contract shall be binding upon the successors and assigns of the parties.

21. Governing Law: The laws of the State of Colorado shall govern the interpretation and enforcement of this Contract. Any litigation that may arise between the parties involving the interpretation or enforcement of the terms of this Contract shall be initiated and pursued by the parties in the Boulder Courts of the 20th Judicial District of the State of Colorado and the applicable Colorado Appellate Courts.

22. Breach: Any waiver of a breach of this Contract shall not be held to be a waiver of any other or subsequent breach of this Contract. All remedies afforded in this Contract shall be taken and construed as
cumulative, that is, in addition to every other remedy provided herein or by law.

23. **Termination of Prior Agreements:** This Contract cancels and terminates, as of its effective date, all prior agreements between the parties relating to the services covered by this Contract, whether written or oral or partly written and partly oral.

24. **Severability:** If any provision of this Contract is found to be invalid, illegal or unenforceable, the validity and enforceability of the remaining provisions shall not in any way be affected or impaired thereby.

25. **Third Party Beneficiary:** The enforcement of the terms and conditions of this Contract and all rights of action relating to such enforcement shall be strictly reserved to the County and the Contractor, and nothing contained in this Contract shall give or allow any claim or right of action whatsoever by any other or third person. It is the express intent of the parties to this Contract that any person receiving services or benefits under this Contract shall be deemed an incidental beneficiary only.

**IN WITNESS WHEREOF,** the parties hereto have set their hands and seals this __________________ day of ______________, ______.

**COUNTY OF BOULDER**

**STATE OF COLORADO**

**ATTEST:**

Administrative Assistant
Clerk to the Board of Commissioners
(seal)

By: __________________________
Chair, Board of County Commissioners

**CONTRACTOR:**

**ATTEST:**

By: __________________________
Title: __________________________

(If this Contract is executed on behalf of a corporation, it must be signed by an agent duly authorized by the corporation to execute such Contract, and if specified by the corporate by-laws, the corporate seal must be affixed to the Agreement by the Secretary of the corporation or other authorized keeper of the corporate seal.)
CONTRACTOR’S CERTIFICATION OF COMPLIANCE

Pursuant to Colorado Revised Statute, § 8-17.5-101 et seq., as amended 5/13/08, as a prerequisite to entering into a contract for services with Boulder County, Colorado, the undersigned Contractor hereby certifies that at the time of this certification, Contractor does not knowingly employ or contract with an illegal alien who will perform work under the attached contract for services and that the Contractor will participate in the E-Verify Program or Department program, as those terms are defined in C.R.S. § 8-17.5-101 et seq., in order to confirm the employment eligibility of all employees who are newly hired for employment to perform work under the attached contract for services.

CONTRACTOR:

________________________________________  __________________
Company Name      Date

________________________________________
Name (Print or Type)

________________________________________
Signature

________________________________________
Title

Note: Registration for the E-Verify Program can be completed at: https://e-verify.uscis.gov/enroll/.
Roadway Impact Fee Development
Boulder County RFP #5651-12
May 18, 2012
May 18, 2012

Boulder County
Administration Services Reception Desk
2025 14th Street
Boulder, CO 80302

RE: Roadway Impact Fee Development
Request for Proposal 5651-12

Dear Evaluation Committee Members:

Although Boulder County is home to one of the Colorado’s oldest oil fields, a new wave of oil and gas development is potentially on the horizon. The pace and location of future oil and gas drilling activity and associated transportation impacts are uncertain. We commend Boulder County on taking a proactive approach to understanding and documenting these potential impacts by initiating this study. We, Felsburg Holt & Ullevig (FHU), have chosen to partner with BBC Research & Consulting (BBC) for this effort. Felsburg Holt & Ullevig brings 28 years of transportation planning and engineering expertise, BBC is an economic, market and policy research firm with extensive knowledge of the oil and gas industry and significant experience designing impact fees and cost recovery charges for local government infrastructure.

As you know, the FHU/BBC team was recently engaged in Douglas County and is currently engaged with Arapahoe County completing similar studies. We used the scope of work for Douglas County as a starting point for the Boulder County scope provided herein, tailoring it to our understanding of Boulder County’s needs and supplementing it with additional tasks associated with the County’s desire to examine impact fees. In addition, we are able to take advantage of much of the research work that we completed for Douglas County to streamline the proposed work effort.

The association of our two firms creates a powerful team, and we believe that we are uniquely positioned to effectively and efficiently complete this study. We are excited about this project, and we appreciate the opportunity to submit this proposal. If you have questions regarding this submittal, please feel free to contact either of us. Thank you for your consideration.

Sincerely,

FELSBURG HOLT & ULLLEVIG

Elliot M. Sulsky, PE, AICP
Principal

Jenny A. Young, PE, PTP
Project Manager
Item 7  Detailed Project Schedule / Proposed Cost

As requested, the project schedule appears on page 6 of this proposal. The narrative below details the project understanding and approach, illustrated by the project graphic. The proposed cost is shown in the table on page 7.

Project Understanding
The primary purposes of the study will be to:

- Develop a reasonable range of oil and gas development scenarios for Boulder County’s emerging industry.
- Determine the effects of the development scenarios on Boulder County’s road system.
- Identify and estimate the costs of roadway improvements needed (safety, maintenance, and capacity) to mitigate oil and gas development impacts.
- Identify roadway improvement financing alternatives, including districts, fees, charges and other methods.
- In coordination with the County Attorney, design cost recovery impact fees as a prospective road system improvement financing mechanism.

In considering how to document the prospective impact of oil and gas field development, we offer the following observations that have shaped our approach:

- Boulder County has the benefit of multiple Colorado counties that have already dealt with the impacts of oil and gas development. There is a considerable body of information (including our team’s recent Douglas County work) about well field development practice and associated employment and traffic impacts now available that were not available a few years ago. We will make use of this experience in completing the Boulder County study.
- Well and rig employment and the nature of well service requirements will determine local traffic impacts. New drilling technology and changes in general drilling practices have significantly altered how gas and oil drilling influences local governments and the impacts on local road system infrastructure. For example, the number of wells typically drilled off of one drilling platform has increased dramatically in recent years, which lengthens the duration of each platform’s drilling activity and thus the length of employment associated with each rig. On the other hand, a single well platform with multiple bores is a far more efficient drilling practice, and requires fewer employees and support vehicles, than the same number of single bore individual wells.
- Drilling practices around Colorado are not uniform and can vary widely depending on the maturity of the field, the nature of the local geology and type of resource being extracted. Recent drilling along the Front Range provides a starting point to assess future drilling practices, but the nascent character of the Boulder County fields is a source of uncertainty.
- The Colorado Oil and Gas Conservation Commission (COGCC) regulates well field activity. Counties have limited ability to intervene or alter COGCC decisions or control the pace of drilling activity.
- Resource production can be lucrative for county governments. Under state law, a share of certain severance taxes is rebated to local governments to help cover the impact of resource development. Property taxes from oil and gas activity can be substantial. Although the request for proposals (RFP) did not refer to these revenues, they warrant attention when considering drilling impacts and cost recovery methods.
- Tax revenues are uncertain as both property taxes and severance taxes are tied to the value of the resource, which has varied widely from year to year.
Most socioeconomic disruption associated with resource extraction occurs in the early years of a field’s development, and the traffic impacts are most severe during initial drilling and well development. Property taxes and severance taxes usually lag one to three years behind drilling activity.

Operation of a well field, which can continue for decades after drilling completion, requires few services and produces only modest traffic impacts—although property taxes and severance taxes can continue for many years.

Boulder County’s situation presents an analytical challenge because the field’s productivity is uncertain. Our recommendation to test high, medium and low production variables is in response to this uncertainty.

The RFP only suggests a technical methodology for designing transportation impact fees related to oil and gas traffic. It is important that Boulder County also consider other county traffic generators and the requirement for equity and proportionality in imposing fees. In our experience, the greatest analytical challenge here in fee design will be in determining what is fair and proportional, and how to allocate responsibility among all applicable development categories.

Imposing impact fees on oil and gas development is a relatively new concept in Colorado. Currently, only Rio Blanco County imposes impact fees on oil and gas. As a result of past work for the Associated Governments of Northern Colorado (AGNC), our team is knowledgeable about the Rio Blanco fee system. We have suggested a task in this Boulder work scope offering a review of the Rio Blanco fee system and its applicability to Boulder County’s situation.

Our team’s approach has been shaped by these considerations and our experience in other oil and gas impact analyses around the state.

Project Approach

Task 1 Project Initiation and Research

Task 1.1 Project Kick-Off

To initiate the study, we suggest a targeted review of the legal and administrative ramifications of imposing impact fees on oil and gas development. It is difficult to address some of the complexity in each of the following tasks without some broader and mutual discussion of County aims and objectives. We will work with the County’s Project Manager to determine who from the County should attend a project kick-off meeting. We should expect a small contingent of key transportation staff but suggest County Attorney participation as well. We envision the following items for the project kick-off meeting:

- Conduct an information sharing session between the FHU/BBC team and appropriate County representatives. We see an early sharing of ideas, data, observations and history as an effective way to clearly define project objectives, design an appropriate study and effectively allocate project funds. The consultant team is uniquely armed with significant recent energy industry, transportation and impact fee experience and we would like to discuss how that experience applies to Boulder County’s present challenges.
- Solidify a formal client-consultant communication process.
- Prepare any work scope modifications that come out of this meeting for County approval.

The primary purpose of this meeting is to make sure that the work scope is well aligned with the County’s objectives and that we are producing a well tailored approach that ultimately serves the County’s most pressing needs. A frank discussion on impact fees and associated benefits and risks will be a particularly important part of this initial meeting.

Task 1.2 Review Case Studies

BBC has worked on similar oil and gas impact studies in multiple counties around the state and continues to work with Garfield County on energy impact related issues. In light of the rapid changes in drilling practices, it would be valuable to update our understanding of how energy affected counties are dealing with the economic
downturn, and what changes they may have witnessed in the effects of oil and gas development on county infrastructure and revenues. The BBC/FHU team's recent work in Douglas County and current work in Arapahoe County will provide efficiencies in completing this task.

We will interview our contact in Rio Blanco County about their impact fee system specifically targeting its application to Boulder County's more urban setting. The consultant team will also look elsewhere around the country to identify other local governments with fee systems that consider oil and gas development and determine applicability to the Boulder County situation. We are currently aware of two jurisdictions in Texas (DeWitt County and the City of Arlington) that impose fees on oil and gas development.

Task 2 Development Scenarios

Task 2.1 Research Industry Trends

Our team will research existing wells, applications and leases with the COGCC and Boulder County, interview applicants, discuss drilling trends with our contacts at the Western Energy Alliance (oil and gas industry lobbying group), and network through our existing oil and gas industry contacts to understand the nature of the Boulder County resource opportunity, the depth of the prospective resource, likely drilling and field development approaches and prospective schedule.

Task 2.2 Develop Oil and Gas Development Scenarios

Given what is likely a highly uncertain success ratio in this relatively new drilling field, BBC will develop three future scenarios, varying the intensity, schedule and nature of extraction activity in order to frame possible future conditions. BBC will quantify and characterize future conditions in terms of employment, rig service requirements, length of activity and likely number of wells. Annual projections will be provided to FHU for translation into traffic effects and road construction/maintenance requirements. Data obtained from the COGCC formed the basis of well development projections in our Douglas County study and we expect to use the same data as a starting point in this study. We expect to perform fee calculations on all three scenarios to provide the County with a range of estimates to inform county decision makers.

Task 3 Travel Route Identification and Inventory

Task 3.1 Identify Likely Travel Routes

Trips are made to and from the well sites during the development phase for a variety of purposes. Heavy trucks are needed to haul in gravel and other material for site preparation and drilling and hydraulic fracturing equipment and materials (water, sand, piping, etc.). Waste water and other waste materials also must be removed from the site. Our team will interview our contacts at COGCC, the Colorado Motor Carriers Association (CMCA), the Western Energy Alliance, as well as Boulder County staff to gain an understanding of the likely origins and destinations of these various trips.
Based on the lease locations and the origins and destinations, we will identify the likely routing of the various types of trips to and from the well sites based on a combination of the shortest path and the roadway functional classification. We will also consider any load limits or geometric considerations (such as vertical clearances) that may limit large trucks from using certain routes. GIS and other information developed for the Boulder County Transportation Plan will be supplemented as needed with field inspection to assemble information about the County roadway system. FHU will develop a travel route map that identifies all County roadways that are expected to be significantly impacted by energy development.

Task 3.2 Traffic and Vehicle Classification Data

Data will be collected on all County routes that have been identified on the travel routes map in Task 3.1. We will obtain available traffic count information on these routes from the County, CDOT, DRCOG and any other available sources. To supplement existing data, we will conduct 24-hour vehicle classification counts at up to 25 locations on the likely travel routes. These locations will be established in close coordination with County staff.

Task 3.3 Geometric Data and Pavement Conditions

Geometric data (including number of travel lanes, lane widths, and shoulder widths) for each travel route will be extracted from the County’s GIS database. Because Boulder County has a particularly high volume of bicycle use along County Roads, we will work with County staff to identify travel routes that may present a safety concern for bicyclists traveling alongside the heavily vehicles associated with the oil and gas industry. Depending upon the data availability from the County’s GIS database, this assessment could be based on a minimum four foot shoulder threshold, or it could be based on a minimum bicycle Level of Service threshold (using the 2010 Highway Capacity Manual methodology).

FHU will work with County staff to compile existing pavement conditions and gravel road conditions on the travel routes as well as bridge load carrying capacities. We will also request maintenance records and upcoming maintenance plans from the County. Where data is unavailable, we will supplement geometric and pavement condition data collection with windshield survey as needed. Based on information uncovered during this data collection phase and considering the oil and gas design vehicle (the largest vehicle needed at a well site), we may need to adjust some of the likely routing identified in Task 3.1.

Task 4 Trip Generation Rates

BBC developed an energy extraction economic and fiscal impact model for La Plata County in 2004 and expanded and revised that model in 2008 for Garfield, Rio Blanco and Mesa Counties. With FHU, we later made further changes for the models used by the Colorado Department of Transportation (CDOT) for statewide transportation impact evaluation purposes and for our recent study in Douglas County. The modeling process and assumptions developed for the Douglas County project will be used as a starting point and we will verify their applicability and make modifications as appropriate to reflect the unique conditions of Boulder County. Key assumptions include:

- Nature of resource and field development practices;
- Drilling characteristic assumptions;
- Rig and well employment assumptions (number of workers, length drilling activity); and
- Resource values.

FHU and BBC compiled information from several national sources and adapted the information to develop trip generation rate estimates per well for the Douglas County study in 2011. Those rates will be used as a starting point and will be adapted as needed to reflect characteristics of anticipated drilling activity in Boulder County. Trip generation rates vary over the life cycle of a well; the development phase involves a high intensity of heavy vehicles and generally lasts 30 to 60 days, whereas an operational well can produce oil or gas for about 10 to 30 years during which time the transportation demands are significantly less intense and more predictable than during the development phase. Trip generation rates will be applied to the resource extraction impact model on a year by year basis.
The vehicle classifications and Equivalent Single Axle Loads (ESALs) will be an important component of the trip generation module. As a part of the Douglas County study, we conducted research on the types of vehicles accessing oil and gas pad sites; our team will be able to make use of much of that research in equating oil and gas impacts to ESALs.

**Task 5** Travel Route Identification and Inventory

**Task 5.1 Travel Modal Development**

FHU will develop an oil and gas travel model which will serve to provide estimates of average daily traffic (ADT) demands and ESALs in five year increments from 2015 to 2035. The model will use a combination of Microsoft Excel and Traffix software packages.

**Task 5.2 Background Growth**

It will be important to understand the level of background growth (unrelated to energy development) that is expected on the travel routes in the future. The background growth will be estimated using information from the Boulder County Transportation Plan.

**Task 5.3 Trip Distribution and Assignment**

Using the origins and destinations identified in Task 3, the model will assign the trips to the various travel sheds. The result will be estimates of the total demand in five year increments (by number of trips and ESALs) on each travel route for each of three future scenarios. From this model, we will bracket the travel and loading demands on the County’s roadways between now and 2035.

**Task 6 Identify Improvement Needs**

FHU will collaboratively work with County staff to compare the estimated travel demands on the travel routes as defined in the travel model in Task 5 with the information obtained in the Inventory (Task 3). This comparison will take into consideration existing roadway conditions including surface material, surface condition (remaining service life), lane widths, roadway widths, shoulder widths, bicycle LOS, bridge capacities, traffic management devices, etc. and will result in the identification of future deficiencies on the County’s roads.

Based on the roadway analysis, roadway improvements will be identified to offset impacts associated with oil and gas travel demands and loads. These recommended improvements will be categorized by the recommended type of improvement, such as lane and/or shoulder widening, bridge replacement, reconstruction, paving, resurfacing, and structural overlay for the designated roadways. Improvements will be identified for each 5-year period based on traffic loads projected for the years 2015, 2020, 2025, 2030 and 2035. The roadway improvements will be graphically depicted on a County map and color-coded by the type of recommended improvement.

In addition to capital improvement cost, oil and gas traffic can increase the frequency and cost of required routine maintenance, particularly for unpaved roads. These incremental maintenance requirement will be identified again for 5-year periods to 2035.

**Task 7 Develop Roadway Cost Estimates**

Cost estimates will be developed in Microsoft Excel for the roadway improvements identified in Task 6. The cost estimates will be based on conceptual per-mile improvements costs for improvements needed in each 5-year period through 2035. The methodology for calculating roadway costs will be based on the existing roadway surface. Costs for unpaved roads will be based on routine County maintenance standards and, if travel demand warrants, road paving costs. Costs for asphalt pavements will be calculated based on the existing pavement condition, existing serviceability, the 1993 AASHTO Guide equation for flexible pavements and required overlays to maintain the existing structural number with oil and gas traffic loading. On concrete paved roadways, the existing service life will be established and the oil and gas traffic impact on the overall service life will be calculated as a percentage. The percentage will then be multiplied by the per-mile

improvement costs to fully reconstruct a concrete paved roadway. For all roadway surfaces, costs estimated for each 5-year period will be distributed on a year-by-year basis, resulting in projected annual incremental road improvement and maintenance costs to 2035.

Task 8 Calculate Fees

Based on the analyses described above, this Task will incorporate the capital cost data from Tasks 6 and 7 and the oil and gas related traffic volumes from Task 5 to calculate transportation cost allocations by type of land use and develop a corresponding cost recovery fee schedule. The consultants will present fee options by multiple demand units, i.e., fee per ESAL, fee per well, etc., for County review and discussion. We will also consider fee application to other land uses that generate heavy truck traffic.

In practice, we view this task as more than just the arithmetic calculation of impact fees. We believe that the County will find it useful to review potential cost recovery options and consider the benefits and drawbacks of cost recovery alternatives as applied to Boulder County's unique circumstances. Potential options may include improvement districts, impact fees, negotiated agreements with industry, or other applicable charges. The research completed in Task 1 and the calculations in this Task will be the basis of these discussions. We expect to include the County Attorney's Office in these discussions in order to ensure that the chosen methodology achieves county objectives and offers a fair and proportional allocation of costs.

Based on discussions with County representatives, we will finalize the fee schedule and provide a final report.

Schedule

By building upon our previous work in assessing the transportation impacts of the oil and gas industry, we believe that we can complete the scope of work described in our project approach within the six-month time frame specified in the RFP. The schedule below outlines the estimated duration for each task and specifies estimated dates for the project deliverables. The four summary reports will be compiled in a final report at the completion of the study. Additionally, the schedule notes five occasions when we believe a meeting with Boulder County will be needed. Time for these meetings has been built into the associated tasks in the budget.
Proposed Cost

We have estimated a total budget of $129,000 to complete the study; a work-hour estimate by task and personnel is shown below.

<table>
<thead>
<tr>
<th>Tasks</th>
<th>Felsburg Holt &amp; Ullevig</th>
<th>BBC Research &amp; Consulting</th>
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<td></td>
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<td>Identify Improvement Needs</td>
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Item 8  Project Team

Felsburg Holt & Ullevig (Prime Consultant)

Felsburg Holt & Ullevig (FHU) is a consulting firm specializing in transportation planning, traffic engineering, civil engineering design, and environmental services. The philosophy of the firm is to provide high quality professional services on a wide range of transportation and design projects, with emphasis on developing creative, cost-effective and environmentally sensitive solutions. The strength of our firm comes from a group of Principals with many years of technical and management experience who are actively involved in projects to assure the highest level of customer satisfaction. The entire staff is committed to conceiving the best project for the client and the community. The company adheres to the multi-disciplinary team concept and has extensive experience in managing complex endeavors as well as serving as a subconsultant.

Since its founding in 1984, the company's business plan has been to maintain a highly qualified professional and technical staff. Felsburg Holt & Ullevig has grown to a current full-time staff of nearly 90 people, including multi-modal transportation planners, traffic engineers, civil design engineers, structural engineers, environmental analysts, construction management specialists, GIS specialists, technicians, and graphic designers. Our award-winning staff includes almost 40 professional engineers registered in Colorado and several other states. Felsburg Holt & Ullevig has offices in Centennial and Colorado Springs, Colorado as well as Omaha and Lincoln, Nebraska, allowing us to serve both the Rocky Mountain region and the Midwest.
Our professional services encompass the spectrum of transportation and related civil engineering design. In addition to the technical and analytical skills necessary for successful project completion, we also provide supplementary support services essential for project implementation. Felsburg Holt & Ullevig provides community participation, public presentation, and governmental processing services as required by the project work program and the client’s objectives.

BBC Research & Consulting

BBC Research and Consulting (BBC) is a Denver-based consulting firm providing economic, financial, market and policy research and advisory services to business and governmental interests nationwide. BBC offers a variety of services, including market, economic, demographic and financial analyses, environmental economics, policy assessments, strategic planning and expert testimony. Our project experience is equally apportioned between the private and public sectors. BBC’s staff of 25 persons includes individuals trained and experienced in economics, urban planning, socioeconomic impact assessment, accounting, finance, business management, mathematics, and statistical analysis.

Since its founding in 1970, BBC has successfully undertaken and completed more than 5,000 engagements on a wide range of subjects, working in every state in the U.S. as well as a number of assignments overseas. BBC has worked with FHU on numerous transportation, economic, impact fee and energy development related projects in our 25 year collegial relationship.

BBC’s impact fee design methodology provides local governments with legally sound fees that produce sufficient revenues to recover the infrastructure costs imposed by new growth. Recent work has taken place in Arizona, Colorado, Idaho, Nevada and Utah, and our staff is quite familiar with the development fee statutes in each of those states. BBC has a wide range of experience conducting development fee design and other public finance projects. Since being awarded an American Planning Association award for a comprehensive fee system developed for Loveland, Colorado in 1985, BBC has designed development fee systems throughout the Mountain West. BBC and FHU have recently completed transportation impact fee projects in Gypsum and La Salle, Colorado.

In recent years, BBC has conducted a number of oil and gas related transportation studies with FHU, including the Douglas County study referenced in the RFP and a current Arapahoe County oil and gas transportation study. BBC and FHU also completed a statewide energy development transportation impact study for CDOT that examined oil and gas as well as renewable energy sources. BBC has studied the fiscal impacts of oil and gas development in Colorado in Garfield County, Mesa County, Rio Blanco County and Moffatt County. BBC is currently engaged with Williams County, North Dakota, the home of the Bakken Shale and the nation’s richest oil play, as part of their Comprehensive Plan. BBC was retained by Boulder County as part of the consultant team completing the county’s long range transportation plan.

No other consultant team offers a similar depth of experience in the transportation, land use and public finance issues that surround Colorado Front Range oil and gas development.

Key Personnel

Our project team reflects the personnel needs of the project to effectively and efficiently complete the study to determine the cost of incremental impacts to county roads that may result from future oil and gas drilling and any other activities that generate heavy truck traffic in the county and determine the appropriate level and type of fee to offset such impacts. The organization chart provides an at-a-glance overview of our proposed project team followed by the capsule biographies. Resumes of each individual included on our organization chart are located in the Appendix and summarize specific project experience, education, and technical certifications.