



**COMMUNITY AND ECONOMIC DEVELOPMENT
DEPARTMENT
STAFF REPORT**

Administrative Review Memo

04/03/2019

CASE No.: USR2018-00011	CASE NAME: Great Western– Brant
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Owner’s Name:	Wayne & Patricia Medlin
Applicant's Name:	Great Western Operating
Applicant's Address:	1801 Broadway Suite 500, Denver, CO, 80202
Location of Request:	15655 Riverdale Road, Section 11, Township 1S, Range 67W Parcel number 0156715400001
Nature of Request:	A Use by Special Review Permit to allow up to Thirty (30) horizontal wells and one (1) production facility on one (1) well pad for the production of oil and gas, and one (1) access road.
Zone District:	Agriculture - 3 (A-3)
Site Size:	Approximately 3 acres (67.3-acre parcel)
Proposed Uses:	Multi-well pad for the production of oil and gas
Existing Use:	Agriculture
Report Date:	04/03/2019
Case Manager:	Christine Dougherty
Director Options:	Approval with 4 Findings of Fact, 5 Conditions Precedent, and 19 Conditions; Denial; or Referral to the Board of County Commissioners
Staff Recommendation:	Approval with 4 Findings of Fact, 5 Conditions Precedent, and 19 Conditions

SUMMARY OF APPLICATION

Background:

Great Western Operating (Great Western), the applicant, engages in exploration and development of oil and natural gas, primarily in the Denver-Julesburg Basin. The applicant has proposed an oil and gas well pad location in unincorporated Adams County. The proposed project, Brant, consists of constructing one well pad with up to thirty (30) horizontal wells, equipment, a production facility, and one access road.

The proposed well pad is located on a 67.3-acre parcel, southwest of the intersection of East 160th Avenue and Riverdale Road. Access to the site is proposed to be from Riverdale Road, located on the eastern boundary of the property. A residential structure and several out buildings are currently located on the west/southwest portion of the parcel.

Summary of Application:

The project proposed by Great Western consists of thirty (30) wells, one (1) production facility, and one (1) access road to accommodate all traffic throughout construction, production, and long-term maintenance. The project has three primary phases: construction, drilling/completions, and production. Construction of the well pad may take up to thirty (30) days to complete. The drilling period is expected to last up to six (6) days per well, with up to an additional twelve (12) days for completion of each well. In total, the drilling and completion phase will take approximately 540 days if all wells are drilled consecutively.

The pad size throughout the drilling and completion phases will be approximately nine and eight tenths (9.8) acres. After the completions phase, the site will undergo interim restoration, which will reduce the site to three (3) acres. During interim restoration, landscaping will be installed to reduce the overall visual impacts of the facility. Final reclamation will occur when the wells are plugged and abandoned.

The on-site production facility will include twelve (12) oil tanks, three (3) produced water tanks, ten (10) separators, two (2) heaters, three (3) Vapor Recovery Units (VRUs), three (3) gas scrubbers, four (4) Emission Control Devices (ECD's), one (1) gas meter, one (1) free water knock out, two (2) Vapor Recovery Towers (VRT), and two (2) Lease Automated Control Transfer units (LACT).

The mitigation measures that have been proposed by Great Western include the following:

- **Planning:** Great Western has obtained an Oil and Gas Location Assessment permit (Form 2A) for a multi well pad through the Colorado Oil and Gas Conservation Commission (COGCC). Utilizing a multi well pad will eliminate the need for multiple single well pads, which would spread out the impacts over more surface area increasing the overall footprint of the project.
- **Pipelines:** Great Western intends to construct and utilize pipelines to transfer oil and gas off site in place of onsite storage of the product. This will greatly reduce truck traffic in and out of the location for the lifetime of the well. The utilization of pipelines also ensures a safer operation as it greatly reduces the number of tanks that are required on location.
- **Traffic Controls:** Great Western evaluated four (4) route options as part of their Traffic Study from which they indentified one (1) primary route and two (2) alternative routes that they will use if the primary route is inaccessible for any reason.
- **Noise:** Great Western will abide by COGCC rule 604.c.(2)A noise standards for all activities, and post a 24-hour, 7 days a week, contact information to address all noise

complaints that arise from the oil and gas facility. In addition, Great Western will conduct an Ambient Sound Study, no sooner than, three weeks prior to site occupancy in order to establish a baseline noise survey and receive recommendations for noise mitigation.

- **Odor Mitigation:** All drilling, completions, and production activities will comply with Colorado Department of Public Health and Environment Air Quality Control regulations. During drilling operations, a closed loop system will be used to reduce odor and emissions. During the production phase, Emission Control Devices (ECD's) and pipelines will be used to mitigate emissions.
- **Visual Mitigation:** Sound walls will be erected that will reduce visual impacts during the drilling and completion phases, and landscaping will reduce visual impacts during the production phase. In addition, pursuant to COGCC Rule 804, the tank battery will be painted in uniform, non-contrasting, non-reflective color tones with the colors matched to (but slightly darker than) the surrounding landscape. After the development phase there will be no permanently installed lighting on site.
- **Landscaping:** A landscape plan has been provided and will serve as interim restoration for the site. The interim landscape plan will consist of a perimeter fence bordered with a mixture of native grasses, shrubs, and plants along the perimeter of the facility to reduce visual impacts. Final reclamation will involve returning the area to pre-disturbance conditions by removing all equipment and landscaping.

Development Standards and Regulations Requirements:

In order to obtain an Administrative Use by Special Review approval, an Oil and Gas Facility must satisfy certain criteria.

1. Memorandum of Understanding (MOU)

Great Western signed the standard County MOU, which was executed by Adams County Board of County Commissioners on January 6, 2015.

2. Satisfy Submittal Requirements

The applicant has satisfied all required submittal items as outlined in the Development Standards and Regulations. These include:

- Conceptual Review Meeting – Great Western attended a Conceptual Review Meeting with the Adams County Development Review Team to discuss their proposed site on July 16, 2018.
- Neighborhood Meeting – Great Western notified property owners within one-half (1/2) mile of the parcel boundary of the proposed oil and gas facility and invited them to an open house neighborhood meeting where residents could ask the applicant questions directly. The Neighborhood Meeting was held on October 10, 2018, at the

Todd Creek Golf Club, 8455 Heritage Drive, Thornton, CO, 80602. At the meeting, Great Western provided an overview of the project, operation timeline, and proposed mitigation measures outlined in this report.

- Application Form and Fees – Great Western submitted the required applications and paid the applicable permit fees. A traffic impact fee will be assessed according to the application and the Oil and Gas Traffic Impact Fee Schedule. The operator may also be required to obtain a Right-of-Way permit, Access Permit, and/or an Oversize Load Permit before starting construction activities.
- Oil and Gas Operations Plan – Great Western submitted an Oil and Gas Operations Plan, an Impact Area Map showing all oil and gas wells and water wells within one half (1/2) mile, a Construction Plan, and a Sign Plan.
- Emergency Preparedness Plan – The applicant submitted a site-specific Emergency Preparedness Plan that has been reviewed and approved by the Adams County Office of Emergency Management.
- Engineering Documents – Great Western provided a Grading, Erosion, and Sediment Control Report & Plan, as well as a Traffic Impact Plan, in accordance with the Development Standards and Regulations.
- Surface Owner Documentation – Great Western provided a Memorandum of Surface Use Agreement to show the proposed oil and gas facility is authorized by the surface owner.

3. Compatibility / Land Use Impacts

The subject site is approximately sixty-seven and three tenths (67.3) acres, of which three (3) acres are proposed to be used for the development of a thirty (30) well oil and gas well pad, associated production facility, and access road. Currently, the parcel is occupied by a residential structure and several outbuildings. The parcel is bordered on all sides by parcels zoned Agriculture 1 (A-1). The purpose of the Agricultural-1 District is to provide rural single-family dwellings on lots with a minimum of two and one-half (2.5) acres and to provide a rural living experience. The parcels located to the west of the proposed facility have been subdivided and are currently occupied by residential structures consistent with the design requirements for the A-1 zone district. The parcels to the east are restricted from development due to the presence of the South Platte River and two reservoirs located on the City of Brighton's property.

According to the Adams County Comprehensive Plan, the future land use designation for this parcel is Agriculture. The Agricultural designation is intended for areas that are not expected to develop, except for limited areas of very low residential density of one (1) dwelling per thirty-five (35) acres. Secondary uses for this zoning may include open space, and other non-urban uses incidental to agriculture. Multi-well oil and gas facilities can provide alternative means of income for landowners while preserving the agricultural uses of the land, which contributes the compatibility of this use.

Industrial impacts inherent to large-scale oil and gas development require significant mitigation from residential and commercial developments. The most significant long-term oil and gas production impacts are the daily truck trips and the number of tanks required for on-site storage of oil. Taking into consideration the compatibility requirements of the Adams County Development Standards and Regulations, Great Western plans to construct a pipeline for transporting produced oil from the Brant facility to the Baseline facility (USR2018-00010) which is located less than two (2) miles north. After connecting to the Baseline facility the produced oil will then be transferred to the Shook facility which is located less than two (2) miles to the west and transferred again to the Discovery Boardwalk Brighton West Interconnect Pipeline (RCU2017-00019) which is located west of the Shook facility. The produced oil will then be transferred north to a processing facility located in Weld County.

The Discovery Boardwalk Brighton West Interconnect Pipeline was presented to the Adams County Planning Commission on September 28, 2017. A recommendation of approval was forwarded to the Board of County Commissioners for a hearing on October 17, 2017. After approval, the pipeline was constructed and is currently in operation. Connection to the pipeline will reduce truck traffic, reduce on-site storage, and reduce the facilities surface area, all of which supports compatibility with the current and planned future land uses in the area.

Existing land uses in the area include large tracts of dry farmland and residentially occupied parcels. The applicant has thoughtfully considered the impacts to the surrounding properties, future land use, and local roadways. These impacts have been mitigated through a combination of site planning decisions, traffic and access management, and the utilization of a pipeline for all products. Long-term compatibility is addressed through the requirement for reclamation upon conclusion of surface operations. It is staff's recommendation that this criterion has been satisfied by the applicant's proposal and through the recommended conditions of approval within this staff report.

4. Emergency Service Providers

The applicant provided the required 'will serve' letter from the Brighton Fire District, the emergency service provider for that area.

Staff Recommendation:

Based upon the application, the criteria for an Administrative Use by Special Review permit, and a recent site visit, staff recommends approval of this request with 4 findings-of-fact, 5 conditions precedent, and 19 conditions.

Findings of Fact:

1. The applicant and the County have executed a Memorandum of Understanding (MOU) that is currently in full force and effect, and the oil and gas facility is in compliance with the provisions of the MOU.

2. The applicant has satisfied the submittal requirements for an Administrative Use by Special Review application, as outlined in the Development Standards and Regulations.
3. Based upon compliance with the recommended conditions of approval, the oil and gas facility is compatible with the surrounding area and does not create any site specific or material impacts to nearby land uses.
4. The applicant has provided a commitment to serve the facility from the authority having jurisdiction for providing emergency services.

Recommended Conditions of Approval:

Conditions Precedent:

1. Pad construction and/or drilling shall not commence until combined State approval of Colorado Oil and Gas Conservation Commission (COGCC) Form 2 and 2A and County approval of AUSR permit. Drilling shall only occur during the COGCC Form 2 permit validity timeframe.
 - a. Per section 4-10-02-03-03-07-10 of the Adams County Development Standards and Regulations, proposed changes to the plans, including but not limited to, any changes in the source or location of water to be used by the Oil and Gas Facility, shall be submitted as amendments to the Administrative Use by Special Review application, reviewed by staff, and approved by the Director or BOCC (if the BOCC approved the original application).
2. Adams County has determined that noise mitigation measures will be required to provide compatibility with the surrounding area. A Sound Impact Assessment must be conducted and the operator will be required to implement the best management practices identified by the study in order to meet COGCC rule 802 Noise Abatement and the MOU section 9.
3. A traffic impact fee in the amount of \$634,113.00 for the construction and production of thirty (30) oil and gas wells using fresh water and product pipelines is due prior to ground disturbing activities.
4. Provide Brighton Fire Rescue District with the requested site summary card.
5. The applicant shall receive a “Notice to Proceed” from the Department of Community and Economic Development. Written proof that all of the conditions precedents have been satisfied shall be required prior to receiving this notice.

Conditions:

1. Great Western is required to provide notice to parcel owners and occupants located within a one-half (1/2) mile radius of the parcel boundary on which the well pad is located at least 14 days prior to the commencement of any drilling or completions operations.
2. As referenced in 8.(c.) of the Great Western Oil and Gas/Adams County MOU the applicant agrees to conduct a baseline test of any registered water well requested by the owner, on a one-time basis, if such well is within a ½ mile radius of the new oil and gas facility.
3. The applicant or the applicant's subcontractors may be required to obtain Oversize Load Permits, and/or Access Permits, and/or a Right-of-Way Construction Permit. These permits may be obtained through the Adams County One-Stop permit center.
4. Per Section 12 of the executed MOU, Great Western will construct the lease/access road to be capable of supporting a 75,000-pound emergency response vehicle. The access road to this site shall be outfitted with a vehicle-tracking pad.
5. The applicant shall be responsible for the cleanliness and safety of all roadways adjacent to this site. If at any time, Adams County staff determines these roadways to be dangerous or not passable due to debris or mud, the applicant will cease use of the roadways until the roadway conditions have improved and are deemed acceptable by the County. If the contractor/applicant fails to keep the adjacent roadways clean and free from debris, Adams County has the option to complete the required clean up and bill the charges directly to the applicant, Great Western.
6. Per Section 14 of the executed MOU, fresh water as referenced in the COGCC's rules and Regulations, or another source as approved by the County on a case by case basis, may be applied to roads and land surfaces for purpose of dust mitigation. Absolutely no other liquid or substance generated by the production of the operator's facility, including, but not limited to, exploration and production waste (as defined by the COGCC) or any other application of liquids that would have negative impact to natural resources, shall be permitted to be applied to roads and land surfaces.
7. Per Section 5 of the executed MOU, in an effort to reduce truck traffic, where feasible, the Operator will identify a water source close to the facility location that is lawfully available for industrial use, including oil and gas development, to be utilized by the operator and its suppliers. The Operator will comply with the Colorado Department of Public Health and Environment requirements and Tri-County Health Department (TCHD) regulations that address water quality. With respect to wastewater treatment, the Operator agrees to comply with TCHD's Regulations, NO. O-14 (On-site Wastewater Treatment Systems), as adopted or modified. The Operator agrees to contact TCHD in a

timely manner to arrange for the processing of necessary applications and required inspections.

8. The approved traffic route for travelling to and from the site will be as follows:

Primary Route (To Site)

1. Direct access off of I-25 to Highway 7.
2. East on Highway 7 to Riverdale Road
3. South on Riverdale Road to the access road.

* Egress from the site will be the same route in reverse order

Alternative Route #1 (To Site)

1. E-470 to Quebec Street
2. North on Quebec Street to Highway 7
3. East on Highway 7 to Riverdale Road
4. South on Riverdale Road to the access road

* Egress from the site will be the same route in reverse order

Alternative Route #2 (To Site)

1. Highway 85 to 168th Avenue
2. West on 168th Avenue to Tucson Street
3. South on Tucson Street to Highway 7
4. West on Highway 7 to Riverdale Road
5. South on Riverdale Road to access road

* Egress from the site will be the same route in reverse order

9. Great Western intends to transport oil from the Brant well pad via pipeline. Connection to the pipeline is planned to be completed by a 3rd party prior to production of oil. In the event that the 3rd party produced oil pipeline is temporarily out of service, Great Western is permitted to store produced oil on site. Under these circumstances Great Western may truck oil from the site for a short period of time. If it is estimated that the pipeline downtime will be less than 7 calendar days, Great Western will provide Adams County with a written notice which includes an estimate of the number of trucks, length of time trucking will occur, and the truck route that will be required for transporting the produced oil prior to trucking operations beginning. If it is estimated that pipeline downtime will go beyond 7 calendar days, Great Western will provide Adams County with a written notice which includes an estimate of the number of trucks, length of time trucking will occur, and the truck route that will be required for transporting the produced oil. Adams County agrees to provide a written decision no later than 72 hours after receipt of a request for the use of trucks for the transportation of oil for more than 7 calendar days. Adams County cannot deny the request without reasonable cause. Adams County reserves the right to re-evaluate the Traffic Impact and Maintenance Fee based on the information provided by Great Western if the estimated trucking time is more than 30 calendar days when requesting to transport produced oil via trucks.
10. Prior to initiation of production, the applicant will submit to the county written certification that the facility is connected to a pipeline for the transfer of product off-site.

11. The applicant has submitted a landscaping and screening plan for the site, which has been reviewed and approved by the Community & Economic Development Department staff. Screening of the site shall be provided through a combination of fencing and landscape materials. This plan shall serve as the interim restoration plan and it shall be implemented by the applicant within ninety (90) days of completion of the construction of the final well, if all thirty (30) wells are drilled and completed at the same time. If the applicant staggers the development of the wells (i.e., completes a lesser number of wells initially with plans to complete the remaining wells at a future date), then the interim restoration plan shall be implemented within 90 days of completion of the initial set of wells.
12. If requested by the surface owner, or practicable for site security, the fence shall contain a gate and the gate shall remain closed and locked when the well pad and associated facilities are not in use.
 - a. The local fire district shall have access to ALL gate key(s)/combination(s) at all times for use in case of emergency.
 - b. Adams County oil & gas inspector shall have access to ALL gate key(s)/combination(s) at all times for use in case of emergency.
13. Applicant is required to receive an approved waiver of responsibility/completion of reclamation from Adams County upon abandonment and reclamation of well pad and associated facilities.
14. Well pad, associated facilities, and access road shall be free of any county and state identified noxious weeds throughout the drilling, completion and production portions of operations.
15. At the request of the County's Local Government Designee, Emergency Manager, Local Emergency Planning Commission, Sheriff's Office, site-specific Fire District, or Transportation Department a tabletop exercise pertaining to the Emergency Response Plan will be required.
16. Per COGCC Section 604.c (4) B. IV. Zero Flaring or venting of gas upon completion of flowback, excepting upset or emergency, or with prior written approval from the COGCC Director for necessary maintenance operations.
 - a. The applicant shall provide a copy of written COGCC Director approval to the CEDD Director within 24 hours of flaring operations and/or approval, whichever occurs first.
17. All permanent lighting shall be directed downward and internally. Temporary lighting shall conform to COGCC Rule 803 and not adversely affect adjacent residential properties. Any complaints regarding lighting shall be communicated to the Adams County Oil & Gas Liaison in order to ensure resolution. Provided at least one well is drilled and completed within a three (3) year period following approval of a multi-well pad locations, such approval permanently vests the permitted location for the number of wells as contained within the initial permit approval. If additional wells are to be drilled following expiration of the initial three (3) year period, the permits for those wells shall

be revised pursuant to the Development Standards and Regulations section 4-10-02-03-03-07-07(3).

18. Provided at least one well is drilled and completed within a three (3) year period following approval of a multi-well pad locations, such approval permanently vests the permitted location for the number of wells as contained within the initial permit approval. If additional wells are to be drilled following expiration of the initial three (3) year period, the permits for those wells shall be revised pursuant to the Development Standards and Regulations section 4-10-02-03-03-07-07(3).
19. All representations and commitments of the applicant made during the AUSR process are incorporated herein as conditions of approval.

CITIZEN COMMENTS

Of the two hundred and ninety nine (299) referral notices sent to property owners and current residents located within one-half mile of the subject parcel boundary, six comments were received, three of which were in support or expressed no concerns. The application and Request for Comments were also posted on the Adams County website for review by the public. The concerns presented by the residents include health impacts, environmental impacts, safety, and property values. These concerns have been addressed by the applicant, the COGCC Rules, the Adams County Development Standards and Regulations, and the Conditions of Approval attached to this application.

Referral Notifications Sent	Referral Comments Received
299	6

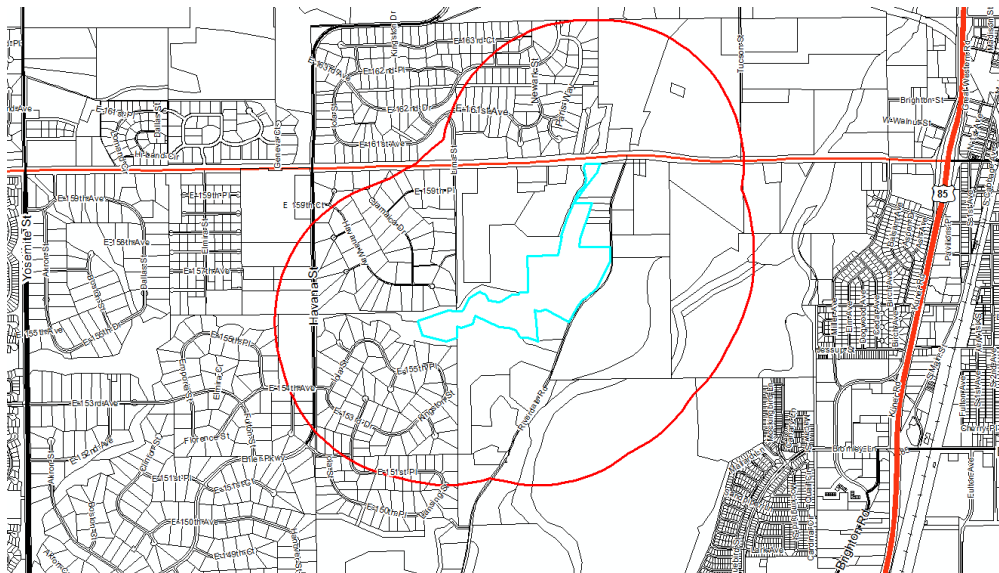


Figure 1. Map showing the 1/2 mile mailed referral radius from the parcel boundary.

COUNTY REFERRAL COMMENTS

The case manager requested additional information regarding any request for baseline water wells tests, information about remote shut in capabilities of the oil and gas wells, air quality controls, and mechanical integrity testing. Great Western responded, verifying that the facility will be equipped with remote shut in, that no water well owners have requested baseline tests, and that Audio, Visual, and Olfactory (AVO) test are routinely performed to monitor for leaks.

Additional information regarding the landscape plans was also requested. The information requested included a visual depiction of the lease area, setback distances of the well pad from all property lines, residential structures, and right-of-ways. A request for screen fencing and a watering plan was also requested. The applicant re-submitted documents reflecting the requested information and no additional request were made.

AGENCY REFERRAL COMMENTS

Responding with Concerns:

Brighton Fire and Rescue requested that the District's emergency phone number be updated by the applicant on their Emergency Response Plan. Brighton Fire and Rescue also requested that the applicant provide a summary card that can be housed at the responding fire apparatus. The applicant has updated the phone number for the Emergency Response Plan and has agreed to provide Brighton Fire and Rescue with the requested summary cards.

Colorado Department of Health and Environment (CDPHE) provided guidance on six (6) topics related to oil and gas development; electrical equipment, odor mitigation, waste management, use of pipelines, flaring, and plugging and abandoning of the well(s). Great Western has reviewed the Best Management Practices, and has agreed to implement them where it is feasible and/or required.

Colorado Parks and Wildlife (CPW) provided guidance on Best Management Practices when prairie dogs, raptors and /or migratory birds are present. CPW also provided guidance to minimize the spreading of noxious weeds. Great Western has agreed to follow the guidance and recommendations provided.

The Tri-County Health Department (TCHD) provided guidance for the applicant concerning on-site wastewater treatment systems if they will be implemented, notification to water well permit holders and water rights holders located within an one-half mile radius, and request to review

information regarding the source of water for workers. Great Western has provided responses to all of TCHD's comments.

Responded with no concerns

United Power

Notified but not Responding / Considered a Favorable Response:

Adams County Office of Emergency Management

Adams County Sheriff's Office

Brighton School District 27J

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- 2.3 Traffic Plan
- 2.4 Traffic Impact Fee Schedule

Exhibit 3- Referral Comments

- 3.1 Requests for Comments
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