# PLANNING COMMISSION SUMMARY

**ITEM:** Use by Special Review (USR) for Oil and Gas Production Facility

in the H-A (Holding-Agriculture) Zoning District

FILE NUMBER: USR2022-0015

**PROJECT:** Denali Oil and Gas Use by Special Review

**LOCATION:** 27027 CR 25 - South of US Hwy 34 Bypass, West of 95<sup>th</sup> Avenue

and North of CR 56

**APPLICANT:** Darin Spitzer, on behalf of PDC Energy

CASE PLANNER: Darrell Gesick, Planner III

PLANNING COMMISSION HEARING DATE: January 10, 2023

# PLANNING COMMISSION FUNCTION:

Review the proposal for compliance with Section 24-1102, Oil and Gas Operations, and Section 24-206, Review Criteria/Uses by Special Review, of the City of Greeley Development Code and either approve, approve with conditions, or deny the request.

#### **EXECUTIVE SUMMARY**

The City of Greeley is considering a request by Darin Spitzer, on behalf of PDC Energy, for approval of a Use by Special Review (USR) to allow for up to 23 horizontally drilled oil and gas wells and other associated equipment needed for supporting drilling, completion, and production operations, on a property located south of US Highway 34 Bypass, west of 95<sup>th</sup> Avenue, and north of CR 56 (see Attachments A, B, and C). The operation would occur on a 16.21-acre area which is located on an overall 253-acre site. The subject site is zoned H-A (Holding Agriculture).

# A. REQUEST

The applicant is requesting approval of a USR to allow for an oil and gas operation for up to 23 horizontally drilled oil and gas wells and other associated equipment (see Attachment C).

#### **B. STAFF RECOMMENDATION**

Approval.

# C. LOCATION <u>Current Zoning:</u>

H-A (Holding Agriculture)

# **Abutting Zoning:**

North: H-A (Holding Agriculture)

South: H-A (Holding Agriculture) and Weld County A (Agricultural)

East: H-A (Holding Agriculture)
West: H-A (Holding Agriculture)

# **Surrounding Land Uses:**

North: Farming, Oil and Gas, and Residential

South: Farming, and Oil and Gas

East: Farming, Oil and Gas, and Public Utilities West: Farming, Oil and Gas, and Residential

## **Site Characteristics:**

The site is primarily utilized for farming with one single-family residential use. There are six plugged and abandoned wells in addition to a few producing wells on the subject site.

#### D. BACKGROUND

The subject site was annexed into the City of Greeley and zoned H-A, in 2001, as part of the Lundvall Annexation (File No. A 35:00 and Z 8:01). The subject site has been used as farming, with some oil and gas operations on the site, and with one single-family residential use.

#### E. OPERATION PLAN

The Operating Plan is divided into the Drilling Phase and Protection of Water Formations, the Completion Phase, the Production Phase, and the Plugging and Abandonment Phase.

All phases of operations, including drilling, completion, production, abandonment, and reclamation are designed to adhere to the Rules and Regulations of the COGCC, especially COGCC 300 Series (Permitting Process), 400 Series (Operations and Reporting), 600 Series (Safety and Facility Operations), 900 Series (Environmental Impact Prevention), 1000 Series (Reclamation), 1100 Series (Flowlines), and 1200 Series (Protection of Wildlife Resources). Enclosed flares would be utilized during the drilling, completion, recompletion, reworking, production, repair, and maintenance of the pad site. PDC would use Best Management Practices during all phases of operations.

PDC Energy intends to horizontally drill 23 proposed wells on approximately 253 acres of land, with a footprint for the drilling operation on approximately 16.21 acres for the operation (see Attachment C).

# Drilling Phase and Protection of Water Formations:

The proposed drill site would be approximately 16.21 acres in size, and construction of this site would include leveling the pad to accommodate the drilling rig. Sound walls to mitigate sound and light would be installed after the pad is constructed, prior to the commencement of drilling. Once the pad is completed, a small surface drilling rig would be brought onto location to drill the surface portion for the 23 wells on the pad and take approximately 24 hours per well. Drilling operations, which run twenty-four (24) hours a day until completed, would commence after the rig is "rigged up". A 13-1/2-inch surface hole would be drilled to approximately 1,750 feet using fresh water. Surface casing 9-5/8 inches in diameter would then be run and cemented to surface to protect any shallow freshwater zones. Surface casing setting depth is determined from subsurface ground water maps prepared by the State Engineer and supplemented by the latest data available from offsetting wells. A baseline water sample would be obtained from water wells within 1/2 mile of the proposed location to ensure water quality. When all 23 wells have surface casing set, the surface rig would move off the subject site. It is estimated to take one day per well to drill and set surface casing.

Once the location is clear from the surface rig, a liner is set on the pad where the drilling rig would be rigged up to contain and prevent any potential fluid from hitting the ground. In addition, wooden matting boards would be placed over the liner as a secondary containment for fluids and stability for the drilling rig. Once the location is prepped, the drilling rig would move in and rig up on the first well on location. The Blowout Preventer Equipment (BOPE) would be installed and tested prior to drilling. After testing, the drilling of the production hole would commence. A bit and directional tools comprise the bottomhole assembly (BHA) (see Attachments C, D, and E).

The directional tools are placed behind the bit to steer the assembly, and continuously survey and send data to the surface to monitor the wellbores 3D position spatially, and to track in the targeted formation. The 8-1/2-inch bit and BHA would drill-out of the surface casing shoe and drill the "vertical" portion of the hole in which angle is built to separate wells into their planned slots. Once the vertical portion of the hole is drilled, the curve would be initiated. The curve would take approximately 1,000 feet to drill and would then place the wellbore at approximately 90° in order to enter the targeted hydrocarbon bearing zone. The wells would be drilled horizontally or parallel to the surface for approximately 1.5 miles at a vertical depth of 6,800-7,200 feet below the ground. The total Measured Depth (MD) for the proposed wells is approximately 15,000 feet.

Once the horizontal section of the wellbore is drilled, a string of production casing would be run into the wellbore. This casing would be 5-1/2 inches in outer diameter and weigh 20 pounds per linear foot. The cement sheath would isolate the entire casing string from the total depth of the well back to surface.

# Completion Phase:

The completion phase typically begins when the drilling equipment is transported off the location. There would be no intentional rest period between drilling and completion operations. Lag time could be encountered dependent on vendor availability. Completion operations are conducted twenty-four (24) hours per day intermittently over a period of several weeks. The site may be regraded to accommodate the completion operations and anchors may be set for the completion operations. For horizontal wells, multiple fracture stages are induced along the length of the wellbore in the respective formation that the well has been drilled.

During hydraulic fracturing, water and some additives are pumped at high rates and pressures that exceed the minimum in-situ rock stresses and hydraulically fracture the formation. Sand is then pumped into the created fracture to allow gas and oil to flow freely from the formation into the well bore. The fracturing equipment would consist of one Modular Large Volume Tank (MLVT) for freshwater storage that would fully comply with COGCC's MLVT policy, multiple flowback tanks, pressure pumps, blending and bulk material trucks with other necessary equipment. After fracturing is completed, the mobile equipment is removed, excluding tanks that are used to retain the water that is produced during flowback and testing operations. No water is allowed to accumulate or be disposed of on the surface. All water is hauled to approved disposal sites or recycled for stimulation use. The flowback tanks would remain on location until the well is rerouted through standard production equipment.

It takes approximately 2-3 days to hydraulically fracture each well for a total of 45-60 days on this location COGCC regulations give the operator three months to complete restoration activities, but restoration may occur sooner than three months (see Attachments C, D, and E).

## Production Phase:

The production equipment for the proposed operation would be located adjacent to the wells. The equipment on this site would consist of the following components: 6 temporary oil tanks, 6 temporary water tanks, 2 permanent maintenance tanks, 2 permanent steel water tanks, 1 permanent partially buried water vault, 8 combustors, 1 temporary water tank combustor, 3 tank/surge vapor recovery unit, (2) 2-phase vertical separator, 1 unloading separator, 3 separator LP vapor recovery units, (1) 2-phase separator, 1 communication tower, 3 instrument air skids, 3 surge vessels, 3 oil LACT, 2 water LACT, 23 production separators, 1 meter area.

If needed, a temporary generator would be used before connecting to electric lines; a short noise control fence would be installed or other agreeable measures to mitigate the noise from this generator. Tanks and facilities shall be painted per COGCC Rules. The steel berm ring around the facility would hold 150% of the capacity of the largest tank within the berm. Flowlines would be installed but would not leave the oil and gas operations area. Additionally, all flowlines would be pressure tested at least annually to verify integrity and would remain in full compliance with COGCC 1100 Series Rules.

Connecting the well pad to pipeline is anticipated by 3rd quarter 2025. An PDC employee or contractor called a "lease operator," then begins monitoring the well on a scheduled basis. The lease operator reports the tank measurements of the oil, gas sales, and pressure readings. Much of this production information is compiled and submitted to the COGCC monthly. In addition, the lease operator would inspect the site for hazards and weed control, maintaining the appearance of the subject operation. For the first few months, water and oil would be hauled daily from the location. As volumes decline, water and oil hauling would also decline (see Attachments C, D, and E).

#### Plugging / Abandonment Phase:

At the time the wells become sub-economic to operate, PDC or PDC's successors would engage the services of a plugging rig to remove production equipment from the wellbores and plug the productive zones with a combination of bridge plugs and cement plugs in accordance with COGCC Rules and Regulations. If the separators and tanks on the surface of the land are no longer needed for other wells, they would be removed. Surface restoration would involve removal of any above-ground casing and the installation of regulation markers that would not interfere with subsequent surface use.

After all production equipment is removed, the surface would be restored to the original grade with reseeding in accordance with COGCC Rules and Regulations. This may be waived with the permission of the surface owner at the time of final restoration if there has been further land engineering that would conflict with the drill site being restored as described herein.

All transmission and/or flow lines shall be completely removed from the ground upon entering the abandonment phase. No underground lines that can or may contain any flammable product shall remain in the ground after the facility is abandoned (see Attachments C and E).

#### APPROVAL CRITERIA

<u>Use by Special Review:</u> Uses by Special Review possess characteristics which require a public hearing to determine if a proposed use has the potential to adversely affect other land uses, transportation systems, public facilities, or the like in the surrounding neighborhood. The Planning Commission may require conditions of approval necessary to eliminate or mitigate, to an acceptable level, any potentially adverse effects of the proposed use.

Section 24-206.b of the Development Code contains eight criteria that are used to evaluate Uses by Special Review:

# 1. All criteria for site plan review in Section 24-207

Staff Comment: The proposed project satisfies the requirements of Section 24-207

of the Development Code. The applicant has addressed all staff comments and included all required materials to satisfy the criteria

for a Site Plan Review and for the Use by Special Review.

The proposal complies with this criterion.

2. The application furthers the intent of the proposed zoning district, does not conflict with the intent of any abutting districts, and is otherwise determined to be consistent with the Comprehensive Plan.

The following Imagine Greeley Comprehensive Plan policies apply to this request:

#### NR-3.6 Resource Extraction

To the extent possible, minimize negative impacts from the extraction of sand, gravel, oil and gas, and other natural resources on the environment and surrounding land uses. Encourage the thoughtful reclamation of land that has been mined.

# NR-3.11 Oil and Gas Operations

Encourage the co-location of oil and gas facilities, where possible, to minimize the overall footprint of affected areas and impacts on adjacent land uses and the environment.

# ■ TM-4.1 Truck Impacts

Establish and enforce appropriate truck routes to and through the city, including for hazardous materials. Encourage the co-location of oil and gas facilities in order to minimize impacts of transporting these resources on the community.

Staff Comment: The Comprehensive Plan encourages the colocation of oil and

gas well facilities. PDC Energy proposes to cluster 23 wells onto one pad site, complying with co-location standards of item NR-3.11. Both the cluster concept and the horizontal drilling, allow the operator to reach resources desired, while reducing the

oil and gas footprint on the surface. The drilling operations would allow the owner or lessee of the mineral estate to recover hydrocarbons prior to surface development. This site, because of horizontal drilling, has the potential to reduce the cumulative number of smaller independent sites and plug and abandon sites throughout the area. The proposal allows for access to belowgrade mineral rights in a larger geographic area where surface development has already been completed.

PDC would utilize access road, 95<sup>th</sup> Ave/County Road 25, off US Highway 34 Bypass for all traffic associated with construction and production of the wells proposed for the subject site. The access roads would be constructed to accommodate local emergency vehicles. The drill pad would have one access road during drilling and completion phases of the project. The access would be constructed as shown on the construction plans. The road would be required to be maintained for access.

The proposal complies with this criterion.

3. Any associated site development or construction complies with requirements of this code, including any conditions or additional requirements identified for the particular use.

Staff Comment:

The proposed project complies with all development code requirements for site development and construction standards. Additional requirements, such as visual, noise, air quality, environmental, etc. mitigation have been provided within the narrative, operation plans, and submitted studies. Various city departments, external agencies, and abutting municipalities have reviewed the project proposal and have expressed no concern with the proposal as it meets all requirements for site design, site construction, and production of oil and gas goods.

The proposal complies with this criterion.

4. Compatibility with the area in terms of operating characteristics such as hours of operation, visible and audible impacts, traffic patterns, intensity of use, and other potential impacts on adjacent property. The cumulative impact of a concentration of similar existing uses may be considered as part of the impact of a particular use.

Staff Comment:

The operating characteristics of the proposed project are within normal standards for the site location and abutting properties. The surrounding uses of crop farmland, oil and gas production, create similar impacts to the proposed project and are not unusual for this area of the city.

PDC Energy has conducted several studies and submitted each to the city for review, such as an Emergency Action Plan (EAP and Tactical Response Plan (TRP), Traffic Study, Final Drainage and Erosion Control Reports and Plans, Light Mitigation Plan, and Environmental Study. PDC Energy must continuously monitor conditions of the site to comply with various mitigation standards. Upon review, city staff found all submitted mitigation and response plans to be in compliance with City, County, State, and COGCC requirements.

Traffic impacts would be the greatest during the construction and drilling phases. PDC Energy would utilize the lease access road, 95<sup>th</sup> Avenue and US Highway 34 Bypass for all traffic associated with construction and production of the wells proposed for the project. Ninety-fifth Avenue is design for oil and gas production traffic, as well as farming equipment traffic. US Highway 34 Bypass is equipped for large travel volumes and truck travel. PDC Energy is required to obtain all required Colorado Department of Transportation (CDOT) permits. One hundred percent (100%) of the incoming traffic would be from US Highway 34 split 50% coming from the east and 50% coming from the west. The same goes for outgoing traffic, 50% would be routed north to US Highway 34 and 50% would be routed south on 95th Avenue. The project does not propose any traffic impacts unusual to the site and abutting properties

The proposal complies with this criterion.

5. The site is physically suitable for the proposed use, and whether any additional site specific conditions are necessary for the use to be appropriate and meet these criteria.

**Staff Comment:** 

The subject site has one single-family use and is used as crop farmland. There are some oil and gas wells and storage tank facilities on the subject site as well. The site is adjacent to unoccupied parcels to the east, west, and south, that have recently had approvals for other oil and gas operations. To the north of the subject site, there are two single-family dwellings that are on agricultural farmland. The closest structure is approximately 2,000 feet from the pad site.

All wellheads and on-site production equipment are required to be at least 150 feet from any rights-of-way and other wells or associated production equipment in the low-density areas of the city and at least 200 feet from any occupied building. The proposed wells are located at least, if not more than, 150 feet from any occupied building. The proposed project complies with the COGCC regulations. Staff has not received any

concerns from the property owner regarding the proposed project. There is other existing oil and gas operations nearby, so this proposal does not alter the site suitability. The site is physically suitable for oil and gas operation and the proposed development meets or exceeds the setback requirements required by the City and the COGCC

The proposal complies with this criterion

6. Whether a limited time period for the permit is reasonably necessary to either limit the duration of the use, assess the use against changing conditions in the area, or ensure periodic reporting and ongoing enforcement of the permit.

Staff Comment:

It is not necessary to limit the duration of the use. A limited time period for the permit operation is not proposed, other than the natural timeline proposed for the project. After the production phase begins, wells and production equipment would likely continue to operate until deemed economically unviable. At such time, the wells would be plugged and abandoned as appropriate. Once all wells are plugged and abandoned, including flowline abandonment, permanent and final reclamation of the land shall take place. Currently, there are no development plans in this area that would propose changing conditions in the area.

Periodic reporting and ongoing enforcement are required to be provided by PDC Energy to agencies such as the COGCC for compliance with mitigation regulations. If necessary, the City of Greeley Fire Department shall work with the applicant to address any issues violating municipal requirements for oil and gas operations. PDC Energy must continuously monitor the project site. A PDC Energy employee is required to visit the site daily. PDC Energy staff shall address any aspects of the project that may fall out of compliance to meet regulatory requirements at the local, state, and federal levels.

The proposal complies with this criterion.

7. The long-range plans for the surrounding area are not negatively impacted considering the permanence of the proposed use, the permanence of existing uses in the area, and any changes in character occurring in the area.

Staff Comment:

The subject area is proposed as a suburban use intensity area, surrounded by mixed-use and community separator land according to Greeley's Land Use Guidance Map within the Imagine Greeley Comprehensive Plan. At this time, there are not any anticipated development plans that would occur in this area to cause changing conditions. Existing uses in the area are

similar and suitable for oil and gas development, including dry crop farmland, vacant land, and other existing oil and gas operations. Mitigation measures are proposed to reduce impacts, or the cumulative effects associated with continuous oil and gas development within the area.

In general, staff has seen an increase in oil and gas activity on the western and southern sides of the city as operators look to identify locations that support multiple wells, meet COGCC setback and spacing requirements, and provide accessibility to resources located under the developed portions of the city. As these sites would operate for several years, staff has encouraged operators to locate away from tracts with potential for residential development and provide some improvements based on the nexus of rough proportionality for each site, which staff finds to be applicable for the subject project.

The proposal complies with this criterion.

# 8. The recommendations of professional staff or other technical reviews associated with the application.

Staff Comment:

The City of Greeley sent out referrals to potentially impacted agencies and did not receive any concerns or comments regarding the proposal. CDOT has no objections or concerns regarding the proposed development.

Various agencies and city departments have been involved in the review of the proposed project as planned due to compliance with required standards of local, state, and federal policies for oil and gas development and production. The proposed project has been submitted to the COGCC for review and hearing approval.

The Colorado Department of Parks and Wildlife (CPW) does have a concern about an eagles nest, located within an approximate half-mile buffer, as identified by CPW. The applicant is working with the CPW to determine mitigation methods to not disturb the nest during the operation.

The proposal complies with this criterion.

# **Oil and Gas Operations**

Applications for Uses by Special Review for oil and gas operations are subject to the provisions of Section 24-1102, Oil and Gas. Sections 24-1102.c through Section 24-1102.h address well and production facility setbacks, disposal of production waste, seismic operations, signage, access roads, environmental requirements, recordation of flow lines, reclamation of the site, abandonment and plugging of wells, well operations in high density areas, compliance with COGCC review criteria, and inspection requirements.

Staff Comment: A review of information submitted by the applicant indicates

compliance with Sections 24-1102.c through 24-1102.h. These design and operational requirements are reflected in the site plan, landscape

plan and standards attached for potential approval.

This proposal complies with this criterion.

#### F. PHYSICAL SITE CHARACTERISTICS

# 1. SUBDIVISION HISTORY

The subject site is not part of any formal subdivision at this time.

## 2. HAZARDS

There are two existing oil and gas wells on the subject parcel. Staff is unaware of any additional hazardous conditions or events that have occurred on the site to date.

#### 3. WILDLIFE

The subject site is not within the City's Ecological Significance Areas. For this reason, the applicant was not required to submit an Environmental Report of the site; however, the applicant did submit an Environmental Study for review. The applicant has been in contact with the Colorado Department of Parks and Wildlife (CPW) regarding a nearby eagle nest to determine if the nest is occupied and/or active. The CPW indicated that there should be no surface occupancy (NSO) and no ground disturbance (NGD) year-round within 0.25 miles of an active nest. The proposed project site is beyond the 0.25-mile buffer of a nesting site and causes no disturbance to the nest. CPW is also requesting that no permitted or authorized human activities within 0.5 miles of an active nest from December 1st, through July 31st. Pre-construction surveys would be conducted by the applicant (oil and gas operator in this case) prior to any surface disturbance/occupancy.

The Development Code indicates that if there are black-tailed prairie dogs inhabiting portions of the site, they must be properly removed as indicated in Section 24-1102 (e) (2) and destruction of prairie dog towns many do not occur during the nesting season (May 15 – September 15) due to the potential presence of the burrowing owl. If burrowing owls are actively nesting on the site or brood-rearing is present, a plan shall be developed by the applicant, approved by the City and/or the Colorado Division of Wildlife, and implemented before development occurs. Staff finds the applicant has worked with appropriate agencies and coordinated strategies for ecological mitigation. No activity for the proposed project shall disturb any ecologically significant lands nearby. The applicant shall work to mitigate against any impacts to ecologically significant areas.

# 4. FLOODPLAIN

The subject site is not located in the floodplain or floodway according to Federal Emergency Management Administration (FEMA) flood data.

# 5. DRAINAGE AND EROSION

A drainage report was submitted by the applicant and reviewed by the Engineering Development Review Division, which indicates Changes in natural drainage patterns are not anticipated. The well site would be monitored during the drilling and completion phases for any stormwater erosion or sedimentation concerns. Necessary measures would be required to be taken to correct any problems, immediately in most cases. Once the drilling and completion phases are complete, the drill site is required to be restored as near as practical, to its original grade and vegetation planted as required by COGCC regulations and surface use agreements. PDC must continue to monitor the site until all applicable regulatory requirements for revegetation have been met. PDC uses a closed loop or "pitless" system for drilling and fluid management and does not construct a reserve pit. The drilling company would actively manage the area around the rig equipment such that any minor fluid spills would be diverted and drained to small pumps strategically located and from there, if only water, would be pumped into the drilling fluid system. If the fluid is contaminated by fluids other than water, it would be required to be pumped into a separate container and removed from the site to an approved disposal facility.

# 6. TRANSPORTATION

PDC would utilize access road, 95<sup>th</sup> Ave/County Road 25, off US Highway 34 Bypass for all traffic associated with construction and production of the wells proposed for the Bypass State Pad. The access road must be constructed at a minimum of 30 foot wide, with a minimum 13.5 feet of overhead clearance. All access roads are required to be constructed of 1 and ½ in crushed road base over 6 inches of 95% compacted subgrade and aggregate base course. The access roads would be properly graded for adequate drainage and maintained to prevent dust and mud; culverts shall be utilized where necessary. PDC has submitted an access permit application to CDOT and is working through the permit requirements. A transportation study/memo has been prepared by a traffic consultant (see Attachment F).

# **G. SERVICES**

### 1. WATER

All of the water used for drilling and completion operations would be fresh water. The optimum water source during drilling operations would be determined by PDC prior to drilling of the wells. It is anticipated that the water used during the completion operations for fracture stimulation would be provided by Noble Midstream Partners and would be transferred to location by means of pipes and pumps and not delivered from an offsite source by means of tanker trucks. It is estimated that for each of the horizontal wells, the estimated number of truckloads of water and associated truck traffic that can be eliminated by virtue of transferring water by pipe and pumps could be up to approximately 1,300 truckloads per well. If all 23 horizontal wells are drilled that could mean the elimination of over 30,000 truckloads.

#### 2. SANITATION

Portable sanitary facilities that comply with COGCC Rules and Regulations would be provided and maintained on the location during the drilling and completion phases of the operation. Because no personnel are on the location for an extended period of time, no city services or sanitary services of any kind would be required or provided after the well begins to produce. An PDC employee or contractor must visit the site every day and would be responsible for picking up and disposing of any debris.

# 3. EMERGENCY SERVICES

The property would be served by the City of Greeley's Police and Fire Departments. The nearest fire station to the site is Greeley Fire Department Station No. 6, approximately one (1) mile from the site. Additionally, an Emergency Response and Fire Protection Plan (ERFPP), also called a Tactical Response Plan, was reviewed by the Greeley Fire Department, and complies with City standards.

As the emergency response agency that would be called to mitigate an incident, the Greeley Fire Department has implemented strategies to mitigate the risks associated with potential incidents related to oil and gas facilities, just as they do with the vast array of other risks in the community. These strategies consist of identifying the hazards associated with oil and gas drilling/operations, developing a mitigation strategy, updating the strategy as the risks change, implementing the plan when necessary (response), and then reviewing and making corrections as necessary after an incident.

Some highlights of this strategy include the Greeley Fire Department being actively involved in the review and permitting of oil and gas operations; training and equipping members of their department to be prepared to fight flammable liquids fires; command staff attending courses on handling oil and gas well emergencies; incorporating oil and gas well response into the required training program for all firefighters; reviewing local incidents outside the Department's response area; and sharing critique information with all personnel. The Fire Department uses a fire suppression foam trailer to improve flammable liquid fire mitigation response time.

#### 4. PARKS/OPEN SPACES

The City of Greeley's *Parks*, *Trails*, *and Open Lands Master Plan* (PTOL) does not identify the area having any future parks or trails that would intersect the proposed project parcel or site. No open space or parks is required with this development; however, sufficient open space (not usable) would be present during the production phase.

# 5. SCHOOLS

This project would have no impact on area schools. No schools are proposed or located within the site.

## H. NEIGHBORHOOD IMPACTS

#### 1. VISUAL

The production facilities would be painted in accordance with the COGCC Rule 804 regarding Visual Mitigation, which states: "Production facilities, regardless of construction date, which are observable from any public highway shall be painted with uniform, non-contrasting, non-reflective color tones (similar to the Munsell Soil Color Coding System), and with colors matched to, but slightly darker than, the surrounding landscape". PDC has reduced the overall size of the disturbance, moving the location further away from both residential and highway sight lines. With the reduction in size and rural landscape of the surrounding area, PDC believes recontouring to natural grade and seeding with native grasses would adequately mitigate any potential visual impacts associated with the location. No additional landscaping is proposed due to the remoteness of the site location and visual mitigation efforts

During drilling, lighting would be utilized onsite to facilitate a 24-hour drilling schedule. A temporary sound wall would be installed around the northerly and westerly edges of the well pad. The walls are 32 feet high, with LED lights placed 8-10 feet below the top of the wall. These lights are placed every 200-300 feet along the wall, directed downward to mitigate any outside exposure to unwanted lighting. The drilling phase includes 8 lights around the walls while the completion phase would require 14 lights to be installed. These are only temporary and not permanent. During the drilling and completions phases lights would be pointed inward and downward and screened by sound walls. During the production phase, lights are required to be pointed inward and downward and would be switch-controlled and only in use while PDC personnel are present on location

# 2. NOISE

Any operations involving the use of a drilling rig, workover rig, or fracking, and any equipment used in the drilling, completion, or production of a well are subject to, and must comply with, the noise regulations set forth by the City of Greeley, wherein compliance would be met by abiding by state environmental and noise requirements set forth in COGCC Rule 423. PDC's contract drilling company would comply with COGCC Rules and Regulations for noise abatement. In addition to following the COGCC Rules and Regulations, PDC, whenever possible, would schedule deliveries and construction traffic to and from the site during daylight hours. PDC would perform all of the following to mitigate noise from the operation:

- A noise model from a qualified third-party noise consultant would be conducted on the drilling and hydraulic fracturing equipment prior to commencing operations to determine potential sensitive areas, which includes an ambient survey. Additional source-based noise mitigation would be implemented as required to address the results of the model.
- Sound walls are required to be installed around the edges of the well pad in order to mitigate sound and light. Installation would be after the pad is constructed, prior to the commencement of operations. Sound walls would remain in place approximately eight (8) months, more or less, and taken down after the completion phase, prior to production.

- An internal process has been developed to quickly address any potential noise issues that arise during operations.
- In addition to sound walls, the operator would further reduce noise from completions operations by using a frac fleet consisting of the latest sound mitigation technology available to the operator. Containerized sand delivery and storage would also be used for further noise reduction.

Mitigation of potential impacts, such as noise, would be handled in accordance with COGCC regulations, along with applicable Municipal Code standards. Staff finds the project plans as proposed provide adequate noise mitigation in relation to the surrounding land uses and oil and gas development.

# I. PUBLIC NOTICE AND COMMENT

A neighborhood meeting took place on November 14, 2022, at 6:00 PM. The meeting was held virtually due to the remoteness of the proposed project site, existing land uses, and minimal impacts to the surrounding area. The virtual platform provides greater accessibility for public participation through flexibility of participation. No members of the community attended the meeting. No phone calls, emails, or letters were received by the City of Greeley or PDC Energy expressing concerns regarding the project.

Letters, per Development Code requirements, regarding the public hearing for the proposed Use by Special Review were mailed on December 14, 2022, to property owners within 1,000 feet of the site. Signs were posted on the site on December 14, 2022. No comments have been received (see Attachment H).

## J. MINERIAL ESTATE OWNER NOTIFICATION

Mineral notice is required for a public hearing. The applicant is the sole owner of the minerals for the subject site; therefore, a thirty (30) days' notice was not required.

# **K. PLANNING COMMISSION RECOMMENDED MOTION** Approval:

Based on the application received and the preceding analysis, the Planning Commission finds that the proposed Use by Special Review for an oil and gas operation that consists of 23 oil and gas wellheads and associated production facility equipment in the H-A (Holding Agriculture) zoning district is consistent with the Development Code criteria of Section 24-206 (Items 1-8) and the proposed oil and gas operations will meet the provisions contained in Section 24-1102, Oil and Gas; and therefore, approve the Use by Special Review.

# Denial:

Based on the application received and the preceding analysis, the Planning Commission finds that the proposed Use by Special Review for an oil and gas operation that consists of 23 oil and gas wellheads and associated production facility equipment in the H-A (Holding Agriculture) zoning district is not consistent with the Development Code criteria of Section 24-206 (Items 1-8) and the proposed oil and gas operations will not meet the provisions contained in Section 24-1102, Oil and Gas; and therefore, deny the Use by Special Review.

# **ATTACHMENTS**

Attachment A – Zoning and Vicinity Map

Attachment B – Photo Aerial Map

Attachment C – Narrative, Operations, and Safety Plan

Attachment D – Site Plan

 $Attachment \ E-Drilling, \ Completion, \ and \ Production \ Plans$ 

Attachment F – Traffic Impact Study

Attachment G – Tactical Response Plan

Attachment H – Noticing Boundary Area