

USE BY SPECIAL REVIEW MAJOR PERMIT AMENDMENT APPLICATION

Arapahoe County Pre-submittal USAI23-002
(Amendment to UASI21-002)

Secret Stash Well Connect Project

Prepared for:



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List of Abbreviations and Acronyms

AQCR	air quality control region
ASME	American Society of Mechanical Engineers
ATWS	additional temporary workspace
BWFD	Bennet-Watkins Fire District
CAA	Clean Air Act
CCR	Code of Colorado Regulations
CDNR	Colorado Department of Natural Resources
CDWR	Colorado Division of Water Resources
CDPHE	Colorado Department of Public Health and Environment
CFR	Code of Federal Regulations
CM	construction control measure
CO	carbon monoxide
CPW	Colorado Parks and Wildlife
ECD	erosion control device
EPA	U.S. Environmental Protection Agency
FEMA	Federal Emergency Management Agency
GESC	Grading, Erosion, and Sediment Control
GHG	greenhouse gas
GMT	GMT Exploration Company LLC
HAP	hazardous air pollutant
HPH	High Priority Habitat
LDAR	leak detection and repair
MP	milepost
NAA _s	nonattainment areas
NAAQS	National Ambient Air Quality Standards
NHPA	National Historic Preservation Act
NO _x	nitrogen oxide
NO ₂	nitrogen dioxide
NRCS	Natural Resources Conservation Service
O ₃	ozone
Pb	lead
PEM	palustrine emergent
Project	Secret Stash Well Connect Project
PSS	Palustrine scrub shrub
PHMSA	Pipeline and Hazardous Materials Safety Administration
PM	respirable particulate matter
PM _{2.5}	particulate matter sized 2.5 microns or smaller
PM ₁₀	particulate matter sized 10 microns or smaller
RC	Radio Control
ROW	right-of-way
SCADA	supervisory control and data acquisition
SIP	State Implementation Plan
SO ₂	sulfur dioxide

SPRP	Spill Prevention and Response Procedures
The Applicant	Tenderfoot Pipeline Company LLC
UDP	Unanticipated Discoveries Plan
USACE	U.S. Army Corps of Engineers
USGS	U.S. Geological Survey
USR	Use by Special Review
VOC	volatile organic compounds
WSS	Web Soil Survey

1.0 INTRODUCTION

This proposed amendment to the Tenderfoot Pipeline Project Use by Special Review (USR) Permit Application, assigned with Arapahoe County Case No. UASI21-002, is submitted in accordance with the Regulations in Arapahoe County (USR Regulations and 1041 Regulations) and pursuant to Sections 29-20-108, 24-65.1-101 *et seq.* and other applicable sections of the Colorado Revised Statutes.

Tenderfoot Pipeline Company, a Colorado Corporation (the Applicant), met with Arapahoe County Public Works and Development personnel at a pre-submittal meeting held November 2, 2023, to determine permit amendment requirements for the Secret Stash Well Connect Project. The Tenderfoot Pipeline Project was constructed and placed in service in 2022. This amendment does not propose to alter the information presented in UASI21-002 regarding the Tenderfoot Pipeline Project. This amendment proposes the addition of the Secret Stash Well Connect Project to UASI22-002. All information presented in the following document and the associated appendices pertains only to the Secret Stash Well Connect Project (Project).

1.1 PROJECT DESCRIPTION

The Project consists of the installation of approximately 5.10 miles of 8-inch diameter natural gas gathering pipeline, 6-inch diameter oil pipeline, and up to 8-inch diameter fresh/produced water pipeline originating at the proposed Secret Stash Well Pad in S35 T5S R65W, which will tie-in to the previously permitted Tenderfoot Pipeline Project (UASI21-002) in S33 T5S R64W in Arapahoe County. The purpose of the Project is to transport natural gas and oil, and in the future, water, produced from the proposed Secret Stash Well Pad operated by the Applicant's parent company, GMT Exploration Company LLC (GMT). Drilling of the Secret Stash Well Pad would begin following receipt of all necessary permits and authorizations. The pipeline easement is intended to allow for installation of a produced water line, and above ground freshwater lines in the future, all within a 50-foot-wide permanent easement. The typical horizontal spacing between each pipeline will be 12.5 feet, as depicted on the Easement Configuration Typical (Appendix U).

Natural Gas Pipeline

The Applicant plans to install the 8-inch diameter natural gas gathering pipeline in Q3 2024 upon approval by Arapahoe County. The natural gas gathering pipeline will be commissioned and put into service immediately after construction.

Oil Pipeline

The Applicant plans to install the 6-inch diameter oil pipeline in Q3 2024, upon approval by Arapahoe County. The oil pipeline will be commissioned and put into service immediately after construction.

Water Pipeline

The Applicant is also seeking approval for the installation and operation of an up to 8-inch diameter fresh/produced water pipeline with this application. The water pipeline may not be installed at the time the natural gas and oil pipelines are installed. Infrastructure does not currently exist to deliver fresh water for hydraulic fracturing to GMT's proposed Secret Stash Well Pad, or to deliver produced water from the proposed Secret Stash Well Pad to Weld County for disposal at approved facilities; therefore, both fresh and produced water would have to be transported via temporary lay flat pipelines (fresh water) and via truck (produced water). If GMT drills additional wells in the area, and/or sufficient produced water volumes are generated, a produced water line may be justified. The water line may be used initially to transport fresh water from commercially

available sources to the proposed Secret Stash Well Pad to support hydraulic fracturing, reducing the need for water trucking or lay flat lines. If the line is used for fresh water, all fresh water transported by the Project would be solely for the Applicant's use, and not for public distribution. The water line may also be used to gather produced water from the proposed Secret Stash Well Pad and deliver it to a future water pipeline system, a temporary water storage facility or water injection facility. However, GMT and Tenderfoot do not have any plans for such a facilities within Arapahoe County. If additional produced water infrastructure is planned, permitted, and constructed, these systems would reduce water disposal costs and reduce traffic volumes from trucking.

No permanent impacts are anticipated as a result of the Project, as further discussed in Section 3.0.

Construction of the Project is estimated to impact a total of 49.26 acres within Arapahoe County. Following the completion of construction, there will be no operational impacts on land use, except the occasional mowing of the pipeline right-of-way (ROW) and there will be no proposed change to the existing zoning (A-1, Agricultural – One).

The Applicant intends to begin construction in Q3 2024. Construction will be scheduled to minimize impacts on sensitive wildlife species within the Project area to the maximum extent possible. The Applicant has initiated consultation with Colorado Parks and Wildlife (CPW) regarding impacts to sensitive wildlife species. Copies of correspondence to date are provided in Appendix K. The Applicant will provide updated correspondence records upon receipt. Construction is estimated to last six to eight weeks.

1.1.1 APPLICATION SUBMITTAL REQUIREMENTS

This application includes a narrative addressing the approval criteria, required topics, along with supporting documents as referenced herein. The cost to construct this Project will be entirely financed with funds provided by the Applicant or an affiliated company. The Project is expected to create benefits by providing an underground system to transport natural gas, oil, and water in a safe, reliable, quiet, and largely unseen method. The pipeline will be designed and constructed to meet the American Society of Mechanical Engineers (ASME) B31.8 – Gas Transmission and Distribution Piping Systems Codes and Standards.

The pipelines will be designed and constructed under federal safety regulations set forth in 49 Code of Federal Regulations (CFR) 192, 49 CFR 195 and the Colorado Oil and Gas Pipeline Safety Regulations (Series 1100), and other rules and regulations as applicable.

2.0 PERMITTEE COMPLIANCE WITH APPROVAL CRITERIA

2.1 GENERAL APPROVAL CRITERIA

This section identifies how the Project complies with the Approval Criteria outlined in Section V Part A of the Arapahoe County 1041 Regulations or identifies where within this application, additional information demonstrating compliance with the Approval Criteria is located. Based on correspondence received from the Arapahoe County Public Works and Development Department, the proposed Project qualifies for a "Major Amendment". The Applicant has provided as much information as possible to assist Arapahoe County in review of this application. Approval criteria from Section 5-3.4 of the Arapahoe County Zoning Procedures are provided in a separate document as Appendix C.

2.1.1 DOCUMENTATION THAT APPLICANT CAN AND WILL OBTAIN ALL NECESSARY PROPERTY RIGHTS, PERMITS AND APPROVALS.

The Applicant will obtain permits and approvals for installation of the three co-located pipelines (natural gas, oil, and water). The proposed pipelines which will tie-in to the previously permitted Tenderfoot Pipeline Project (UASI21-002 approved by the Board of County Commissioners on 3/3/2022) in S33 T5S R64W in Arapahoe County.

The purpose of the Project is to transport natural gas, via an up to 8-inch-diameter pipeline, and oil via an up to 6-inch-diameter pipeline, and in the future, produced and/or fresh water to and from the proposed Secret Stash Well Pad. Currently, infrastructure does not exist that can be utilized to transport natural gas and oil from the planned Secret Stash Well Pad to the existing Tenderfoot Pipeline Project. The Applicant intends to initially construct the 8-inch-diameter natural gas pipeline and the 6-inch-diameter oil pipeline, with the water pipelines to be constructed in the future, if needed. A list of all required permits and approvals for the Project is included in Section 3.4.1.

The Applicant has secured an easement (“Right of Way Contract No. 116219”) from the State Land Board, the sole property owner crossed by the Project. The agreement provides for a permanent 50-foot pipeline easement and 25-foot temporary use areas for construction operation and construction of the Project, respectively. Additional temporary workspace (ATWS) has been identified and secured to facilitate specialized construction techniques (e.g., horizontal directional drill [HDD]). Documentation of the easement agreement with the State Land Board is provided in Appendix D.

2.1.2 THE APPLICANT CONSIDERS THE RELEVANT PROVISIONS OF THE REGIONAL WATER QUALITY PLANS.

The Project area lies within the South Platte River Basin and is subject to the South Platte Basin Implementation Plan. The Project is also subject to the State Designated Basin Rules; however, the Project is not within a Designated Basin.

The Applicant will comply with the State of Colorado and Arapahoe County’s Stormwater Management Manual, employing the construction control measures (CMs) detailed in the Grading, Erosion, and Sediment Control (GESC) Plan (Appendix F). CMs will be constructed in accordance with Arapahoe County’s GESC Manual. Therefore, the Project is, and will be in compliance with the regional water quality management plan.

2.1.3 APPLICANT HAS EXPERTISE AND FINANCIAL CAPABILITY TO DEVELOP AND OPERATE THE PROJECT CONSISTENT WITH ALL REQUIREMENTS AND CONDITIONS.

The Applicant formed in July 2021 for the purpose of installing, constructing and operating pipelines for the conveyance of gas, water and/or oil and of installing, constructing and operating facilities related to the pipelines, such as pump stations, storage tanks, compressors and other facilities necessary for the business of the Applicant.

The Applicant is a wholly owned subsidiary of GMT. GMT is a privately held independent oil and natural gas company engaged in the generation, operation and development of oil and natural gas properties in Alaska and Wyoming and currently pursuing new opportunities in Alberta, Canada and the DJ Basin in Colorado. GMT is a limited liability company formed in January 2005

as successor to GMT Energy Corp. GMT has historically built, operated and sold significant exploration and production positions in Colorado, East Texas, Alaska, and the Delaware Basin in New Mexico. GMT currently owns and operates 11 wells in Elbert County.

The Applicant is financially capable to develop this Project which will be fully financed using funds that are available in the Applicant's or GMT's accounts, as further discussed in Section 3.6. As the parent company, GMT stands behind all financial and other obligations of the Applicant in connection with County requirements related to this application.

The Applicant possesses the technical capabilities to oversee the construction and operation of the Project and is fully responsible for the Project. Only contractors with experience and expertise to construct this Project will be pre-qualified to bid on this Project.

2.1.4 THE PROJECT IS TECHNICALLY AND FINANCIALLY FEASIBLE.

The Applicant has reviewed this Project for purpose, need, and technical viability and has determined that the Project is necessary and feasible. The Applicant intends to proceed with construction of the Project upon receipt of required permits and approvals from federal, state, and local jurisdictions.

The Applicant is financially capable to develop this Project which will be fully financed using funds that are available in the Applicant's or GMT's accounts, as further discussed in Section 3.6. As the parent company, GMT stands behind all financial and other obligations of the Applicant in connection with County requirements related to this application.

2.1.5 THE PROPOSED PROJECT IS NOT SUBJECT TO SIGNIFICANT RISK FROM NATURAL HAZARDS.

Based upon a review of available sources, including Colorado Geological Survey and U.S. Geological Survey (USGS) data on karst formations, peak ground accelerations, faults, landslides, and Federal Emergency Management Agency (FEMA) floodplain maps, the Applicant has determined that there are no significant risks from natural hazards associated with this Project (Colorado Geological Survey, 2024; USGS, 2015, 2004, 2023 a, 1982; FEMA, 2023), as further described in Section 3.12.8.

2.1.6 THE PROPOSED PROJECT IS IN GENERAL CONFORMITY WITH THE APPLICABLE COMPREHENSIVE PLANS.

The Applicant has reviewed the Arapahoe County Comprehensive Plan adopted in June 2018 and has found the Project is considered an allowable use within the land use designations. The Project is located on land designated as agricultural/Use by Special Review in the Arapahoe County Comprehensive Plan. The Applicant has also reviewed the Arapahoe County Lowry Range Sub-Area Plan and determined that the Project is also in compliance with the policies included in this plan. The Arapahoe County Lowry Range Sub-Area Plan does not designate specific land use categories to the land covered under the plan, but instead designates land into two major categories: conservations areas and urban development areas. All 49.26 acres of the Project are located on land within a conservation area, where conservation uses or resource-based improvements, such as recreation, water resource development, and resource-based commercial activities, should occur. Following construction, all temporarily disturbed areas will be returned to preexisting conditions, and the land can continue to be conserved in accordance with the Arapahoe County Lowry Range Sub-Area Plan. Additionally, there will be no impacts to riparian areas or the floodplain, as described in the Floodplain Delineation Study (Appendix O).

2.1.7 THE PROJECT WILL NOT HAVE A SIGNIFICANT ADVERSE EFFECT ON THE CAPABILITY OF LOCAL GOVERNMENT TO PROVIDE SERVICES AND WILL NOT EXCEED THE CAPACITY OF SERVICE DELIVERY SYSTEMS.

The Project will not require additional local government services beyond those currently provided in the area. The Project creates no additional demand for transportation infrastructure, educational facilities, housing, water (other than trucked-in water during construction), wastewater treatment, or public transportation. Portable restrooms with hand washing supplies will be on-site during construction.

The Applicant will establish and maintain a liaison with local fire, police, Arapahoe County Office of Emergency Management, and other appropriate governmental officials to determine the availability of emergency response resources in the event of an accident or emergency involving the pipelines and to establish an effective means of communicating with local emergency response officials. The Project is located within the service area of the Bennett-Watkins Fire District (BWFD). BWFD will respond to calls on the property crossed by the Project. If, during review of this amendment, BWFD desires to enter into a will serve letter, the Applicant will work with BWFD to secure a will serve letter. During construction, the Applicant will implement the emergency response procedures identified in Tenderfoot Pipeline Company's Emergency Response Plan (Appendix R). Information in the plan includes specific steps for controlling potential releases of hazardous liquids by means of shutting down the pipeline segments, evacuation plans, notifying local officials of incidents, and coordinating preplanned and actual responses necessary in the case of an emergency. In addition, aboveground markers identifying the pipelines will be installed at regular intervals that will provide contact information and notice of existing lines. A copy of the Emergency Response Plan is provided as Appendix R.

The maximum anticipated traffic loading during construction is estimated to be 30 to 40 round trips per day for a duration of 6 to 8 weeks. This traffic estimate includes four to five round trips per day for heavy haul equipment to cover equipment mobilization, pipe delivery, and mobilization of bore equipment. Traffic for the rest of the construction window will be minimal, consisting primarily of commuting vehicles. Therefore, construction of the Project will not impact the existing transportation network within Arapahoe County. One roadway will be crossed by the Project, County Line Road. The roadway will be crossed via HDD; therefore, construction will not interrupt traffic. The Applicant will notify the Arapahoe County Planning and Engineering Services departments prior to heavy haul equipment deliveries commencing.

Traffic after construction and during normal pipeline operation will not impact the current County traffic loads; therefore, operation of the Project will not impact the existing transportation network in Arapahoe County.

2.1.8 THE PROJECT WILL NOT CREATE AN UNDUE FINANCIAL BURDEN ON EXISTING OR FUTURE RESIDENTS OF THE COUNTY.

The Project is a capital project, the cost for which will be fully financed with funds provided by the Applicant or an affiliated entity. No public funds will be used for the Project. The Project will result in increased tax revenues for the State and County. Construction of the Project will also provide sales tax revenue to Arapahoe County. Workers will be provided with a per diem allowance, and it is reasonable to assume that a portion of those funds will be spent on goods and services, such as meals, lodging, and groceries, within Arapahoe County for the construction period of 6-8 weeks.

2.1.9 THE PROJECT WILL NOT SIGNIFICANTLY DEGRADE ANY SUBSTANTIAL SECTOR OF THE LOCAL ECONOMY.

In addition to providing tax revenues to Arapahoe County, the Project will benefit Arapahoe County's economy through the jobs that are created during construction and the increased revenues to local businesses that provide goods and services to the Applicant and its contractors and employees. The pipeline construction contractor has not been selected at the time of submitting this Application. The Applicant will undertake a competitive bid process to select the most qualified contractor among a short list of candidates. Due to the highly specialized nature of pipeline construction, many of the potential contractors have a national footprint, with offices in Colorado. Certain tasks associated with pipeline construction may be performed by subcontractors that are based locally. These tasks and subcontractors will not be determined until after a contractor has been selected. The Applicant estimates that between 55 and 60 workers will be employed over the approximate 6–8-week construction period. The ultimate number of construction personnel will be determined by the contractor prior to construction. Wherever possible, The Applicant and its contractor(s) will purchase materials locally. Additionally, workers will be provided with a per diem allowance, and it is reasonable to assume that a portion of those funds will be spent on goods and services within Arapahoe County for the construction period of 6-8 weeks. Following completion of construction, the Applicant will operate the Project with either new or existing employees or contractors. These employees will monitor the pipelines to ensure smooth operation of the Project and maintain ROW markers. It is reasonable to assume operational staff will reside in the Denver Metro area; however, where workers choose to reside is out with the control of the Applicant. No manned facilities are proposed as part of the Project.

Following construction, the Project area will be restored to pre-existing conditions. Agricultural activities currently practiced in the Project area will continue; therefore, the Project will not degrade any sector of the local economy.

2.1.10 THE PROJECT WILL NOT UNDULY DEGRADE THE QUALITY OR QUANTITY OF RECREATIONAL OPPORTUNITIES AND EXPERIENCE.

There are no hiking or biking trails located in the Project area. The Crosswinds Radio Control (RC) Club is located 0.14 mile north of the Project at mile post (MP) 1.8, and the access road to the club will be crossed by the Project. The access road for the Crosswinds RC Club will be crossed via HDD; therefore, access to the facility will not be impacted during construction. It is reasonable to assume activities associated with the club would occur north of the facility on the open land associated with the State Land Board property, as opposed to south of the facility over County Line Road and into the residential area south of County Line Road. As such, activities associated with the club are not likely to extend into the active construction areas; therefore, impacts on the business and their clientele would be limited to construction related dust and noise. No significant sources of noise, dust, glare, fumes, vibration, or odors are anticipated to be caused by the Project. During construction, dust will be controlled by watering roads and other disturbed areas. Although certain heavy equipment is required, noise and fumes will be minimized to the extent possible. Potential impacts associated with exhaust emissions from diesel- and gasoline-fueled construction equipment and vehicle engines will be minimized by federal design standards imposed at the time of manufacture of the vehicles and will comply with EPA mobile and non-road emission regulations (40 CFR Parts 85, 86, and 89). Emissions will also be controlled by purchasing commercial gasoline and diesel fuel products, specifications of which are controlled by federal and state air pollution control regulations applicable to fuel suppliers and distributors. Where practicable, the Applicant will implement the following procedures to mitigate exhaust

emissions and noise from construction equipment. An anti-idling policy for equipment and vehicles not in use or unmanned; use of ultra-low sulfur fuel in on-road vehicles, where available and accessible. The noise impacts associated with construction activities would be temporary in duration and limited primarily to daytime hours. Should there be any landowner concerns with construction activities, the Applicant will work with the landowners to address their concerns.

Due to the short-term nature of Project activities and the proposed mitigation measures discussed above, any effects of these nuisances will be minimal. The Applicant will notify the club prior to the commencement of construction to identify any potential conflicts and applicable mitigation measures.

2.1.11 THE PLANNING, DESIGN AND OPERATION OF THE PROJECT WILL REFLECT PRINCIPLES OF RESOURCE CONSERVATION, ENERGY EFFICIENCY AND RECYCLING OR REUSE.

The Project will allow the transport of natural gas and oil from the proposed Secret Stash Well Pad to the existing Tenderfoot Pipeline Project. If the natural gas and oil pipelines are not constructed, the Applicant would be unable to transport natural gas and oil produced at the Secret Stash Well Pad to the existing Tenderfoot Pipeline Project. Natural gas is cleaner burning than many traditional fuel sources such as coal and is considered a “bridge” fuel between coal and renewable energy sources (e.g., wind and solar resources) that are currently unable to meet demand without supplementing other energy sources. Further, the Project will promote resource conservation by reducing the amount of gasoline or diesel used in transporting oil and water via truck (as compared to the use if the pipeline system is built).

The use of reused or recycled materials is not currently anticipated for construction of the Project; however, the Project has been designed to minimize scrap materials to the maximum extent possible and any scrap materials remaining following construction will be recycled or reused where possible.

2.1.12 THE PROJECT WILL NOT SIGNIFICANTLY DEGRADE THE ENVIRONMENT.

The Project will not significantly degrade the environment. Following construction, disturbed areas will be restored to pre-construction contours as closely as practicable. Construction debris and organic refuse unsuitable for distribution over the ROW will be disposed of at appropriate facilities in compliance with applicable regulations. Permanent erosion and sediment control measures will be installed as appropriate, and the Project area will be revegetated using a seed mix approved by the State Land Board. Further, the Applicant will employ the use of CMs throughout construction and restoration to minimize impacts to the environment.

A detailed environmental impact analysis is provided in Section 3.12.

2.1.13 THE PROJECT WILL NOT CAUSE A NUISANCE.

The Project will cause limited nuisances, such as increased traffic, dust, and noise, during construction. No significant sources of noise, dust, glare, fumes, vibration, or odors are anticipated to be caused by the Project. During construction, dust will be controlled by watering roads and other disturbed areas. Although certain heavy equipment is required, noise and fumes will be minimized to the extent possible. All construction, including conventional bore and HDD activities, will occur during daytime hours. There is a rural low-density residential development

located in the vicinity of the Project, with the nearest residence located 279 feet south of the Project workspace at MP 1.7. The nearest residence to the HDD crossing of County Line Road is located approximately 3,076 feet southeast of the Project workspace at MP 5.04. To minimize the impacts of construction noise to nearby residences, the Applicant will limit HDD activities to daytime hours.

The Project's construction emissions will be localized, temporary, and of limited duration, and are not anticipated to significantly increase ambient air pollutant concentrations. Further, potential impacts associated with exhaust emissions from diesel- and gasoline-fueled construction equipment and vehicle engines will be minimized by federal design standards imposed at the time of manufacture of the vehicles and will comply with Environmental Protection Agency (EPA) mobile and non-road emission regulations (40 CFR Parts 85, 86, and 89). Emissions will also be controlled by purchasing commercial gasoline and diesel fuel products, specifications of which are controlled by federal and state air pollution control regulations applicable to fuel suppliers and distributors.

Construction activities in proximity to residences will be completed as quickly and safely as practicable to minimize disturbances to residents, and the Project will not impact access to the residences during construction. Temporary safety fences will be erected along the construction ROW in areas where construction activities will occur within proximity to residences. Following the completion of construction activities, all debris will be removed, and residential areas will be restored to pre-construction conditions. The Applicant will coordinate with the State Land Board to meet any special requests concerning restoration. The Applicant has secured an easement ("Right of Way Contract No. 116219") from the State Land Board, the sole property owner crossed by the Project. The agreement provides for a permanent 50-foot pipeline easement and 25-foot temporary use areas for construction operation and construction of the Project, respectively. ATWS has been identified and secured to facilitate specialized construction techniques (e.g., HDD). Documentation of the easement agreement with the State Land Board is provided in Appendix D. Due to the short-term nature of Project activities and the proposed mitigation measures discussed above, any effects of these nuisances will be minimal.

2.1.14 THE PROJECT WILL NOT SIGNIFICANTLY DEGRADE AREAS OF PALEONTOLOGICAL, HISTORIC, OR ARCHAEOLOGICAL IMPORTANCE.

No areas of paleontological, historic, or archaeological importance will be impacted by the Project. Cultural resource surveys conducted in May 2023 resulted in the documentation of 11 cultural resources, including six newly recorded sites and five isolated finds. These sites consist of lithic scatters and five are not recommended eligible for listing under the National Historic Preservation Act (NHPA). One potentially eligible site was documented within the Project workspace; however, this site will be avoided via HDD and will not be impacted by the Project. A copy of the Class III Cultural Resources Report and associated mapping depicting the locations of the cultural resources are included in Appendix G. A copy of concurrence with the findings of the Class III Cultural Resources Report from the Colorado Office of Archaeology and Historic Preservation is provided in Appendix K. The Applicant will implement their Plan for the Unanticipated Discovery of Historic Properties and Human Remains during Construction (UDP) in the event that historic properties and/or human remains are encountered during construction. A copy of the UDP is provided in Appendix G.

2.1.15 THE PROJECT WILL NOT RESULT IN UNREASONABLE RISK OF RELEASES OF HAZARDOUS MATERIALS.

The Applicant will implement its Spill Prevention Response and Procedures (SPRP) Plan during construction to minimize the potential for releases of hazardous materials (i.e., fuel) (Appendix H). Minor refueling of equipment may occur within the Project workspace with minor volumes of fuel available. All fuel will be stored with secondary containment at least 100 feet from any waterbody or floodplain. Refueling will not occur within 100 feet of a waterbody or floodplain and spill kits will be available if needed for a response and clean-up.

The potential for releases of hazardous materials during operation of the pipelines will be minimized by constructing the Project in accordance with all applicable federal and state safety regulations for pipelines, as discussed in Section 1.1.1.

2.1.16 THE BENEFITS ACCRUING TO THE COUNTY AND ITS CITIZENS FROM THE PROJECT OUTWEIGH THE LOSSES OF ANY RESOURCES WITHIN THE COUNTY, OR THE OPPORTUNITY TO DEVELOP SUCH RESOURCES.

The Project will allow for the safe and efficient transport of natural gas and oil, and for the transport of produced and/or fresh water in the future, if needed. Fresh water transported by the Project would be solely for the Applicant's use, and not for public distribution. While this application contemplates the potential for a water line, the need for one has not yet been determined. Infrastructure does not currently exist to deliver fresh water for hydraulic fracturing to GMT's proposed Secret Stash Well Pad, or to deliver produced water from the proposed Secret Stash Well Pad to Weld County for disposal at approved facilities; therefore, both fresh and produced water would have to be transported via truck and temporary lay flat pipelines. If GMT drills additional wells in the area, and/or sufficient produced water volumes are generated, a water line may be justified. The Project will have no significant negative or long term impact on resources within the County and it will help generate directly or indirectly employment opportunities, ad valorem taxes, and sales taxes.

2.1.17 THE PROJECT IS THE BEST ALTERNATIVE AVAILABLE BASED ON CONSIDERATION OF NEED, EXISTING TECHNOLOGY, COST, IMPACT AND APPLICABLE REGULATIONS.

The design and installation of the Project have been analyzed, reviewed and approved by the Applicant and represents the use and application of best technology and industry standards for pipelines. A key consideration to Arapahoe County should be that this Project is the best alternative when the positive effects on tax revenues are considered. Additionally, transportation of produced and/or fresh water via pipeline, if needed, as an alternative to trucking will have fewer impacts on traffic and air quality within the county, as impacts on air quality from the Project will be limited to construction emissions. A detailed analysis of Project alternatives is presented in Section 3.3.4. The Tenderfoot Pipeline system has been constructed to support development within the Niobrara formation within Arapahoe and Elbert Counties by GMT. However, Tenderfoot has the capability to gather production from other operators in the vicinity of the Project, which would reduce the need for additional pipeline construction in the future.

2.1.18 THE PROJECT WILL NOT UNDULY DEGRADE THE QUALITY OR QUANTITY OF AGRICULTURAL ACTIVITIES.

The Project will be constructed entirely within an area zoned for agriculture. Following the completion of construction, the temporary workspace and permanent easement will be reseeded

and allowed to revert to pre-construction conditions. The pipeline ROW will be periodically mowed to prevent the establishment of woody vegetation and allow for access to the ROW for periodic inspection, as discussed in the Weed Management Plan (Appendix T). Pipeline inspections are occurring quarterly using visual, and thermal imaging for leak detection and repair (LDAR) quarterly, as required by all applicable Federal and State regulations, and in accordance with Tenderfoot Pipeline Company policies and procedures. The Applicant is required to file annual reports for gathering systems with Pipeline and Hazardous Materials Safety Administration (PHMSA), pursuant to US DOT regulations. Pipeline operations are monitored by Tenderfoot and GMT personnel on a daily basis using wireless and cellular connections. The Applicant utilizes a supervisory control and data acquisition (SCADA) system to set programming for alarms, which allows for manual and/or automatic shutdown of equipment if certain thresholds are exceeded. The Tenderfoot Pipeline system is typically operated at pressures below 175 psi. If pressures exceed this threshold, notifications are automatically generated, up to and including automatic shut-in of the system. In the event of an emergency, all sources into the pipeline may be shut down remotely through the SCADA system, as well as manually by field personnel that will be in the area daily while there is oil and gas production at the proposed Secret Stash Well Pad, and flow through the Project. No permanent impacts on agricultural activities will occur as a result of the Project and the Project will not unduly degrade agricultural activities.

2.1.19 THE PROJECT WILL NOT SIGNIFICANTLY INTERFERE WITH THE PRESERVATION OF CULTURAL RESOURCES, INCLUDING HISTORICAL STRUCTURES AND SITES, AGRICULTURAL RESOURCES, THE RURAL LIFESTYLE AND THE OPPORTUNITY FOR SOLITUDE IN THE NATURAL ENVIRONMENT.

As discussed in Section 2.1.14, no cultural or historic resources will be impacted by the Project. As discussed in Section 2.1.18, impacts on agriculture will be negligible. Further, the Project will not interfere with the rural lifestyle or the opportunity for solitude in the natural environment, as there are no recreational areas within proximity of the Project and all temporarily disturbed areas will be returned to preexisting conditions.

2.1.20 THE PROJECT WILL NOT CAUSE SIGNIFICANT DEGRADATION OF LAND USE PATTERNS IN THE AREA AROUND THE PROPOSED PROJECT.

As discussed in Section 2.1.18, the entirety of the Project area is zoned for agricultural use and there will be no change in land use as a result of the Project.

2.1.21 THE APPLICANT HAS COMPLIED WITH ALL APPLICABLE COUNTY REGULATIONS AND HAS PAID ALL APPLICABLE FEES.

The Applicant has complied with all applicable regulations and has paid all applicable fees.

2.2 ADDITIONAL CRITERIA FOR MAJOR FACILITIES OF A PUBLIC UTILITY (FOR A PRIVATE COMPANY PER USR1041 REQUIREMENTS)

2.2.1 AREAS AROUND THE FACILITIES SHALL BE ADMINISTERED SO AS TO MINIMIZE DISRUPTION OF ANY ACTIVITIES CURRENTLY PROVIDED BY THE APPLICANT.

Since this is a new system there will not be any disruptions of activities currently provided by the Applicant. In addition, since this is not a public utility, service disruptions have no impact to the public.

2.2.2 AREAS AROUND THE FACILITIES SHALL BE ADMINISTERED SO AS TO PRESERVE DESIRABLE EXISTING COMMUNITY AND RURAL PATTERNS.

The Project will be constructed in a manner so as to be non-intrusive and will not impact existing community patterns, including access to the Crosswinds RC Club.

2.2.3 WHERE FEASIBLE, THE PROJECT SHALL BE LOCATED SO AS TO AVOID DIRECT CONFLICT WITH ADOPTED LOCAL COMPREHENSIVE, STATE AND REGIONAL MASTER PLANS.

The Project is not in conflict with any adopted local, state, or regional master plans.

2.2.4 WHERE FEASIBLE, THE PROJECT SHALL BE LOCATED SO AS TO MINIMIZE DEDICATION OF NEW RIGHT-OF-WAY AND CONSTRUCTION OF ADDITIONAL INFRASTRUCTURE.

It is not possible to locate the Project without new pipeline easements, as the purpose of the Project is to construct pipelines to transport natural gas and oil, and potentially water in the future. Additionally, the Project route was developed in coordination with, and with the approval of, the State Land Board. While the route was chosen to minimize the dedication of new ROW to the maximum extent possible, the preferred route was ultimately chosen based on the State Land Board's preference for placement on their property. The Project does not require the construction of additional permanent infrastructure such as roads, power lines, municipal water, or telecommunications facilities.

3.0 SUBMITTAL REQUIREMENTS

3.1 APPLICATION FEE

The Applicant's deposit of \$10,000 has been submitted. As previously agreed, the County will bill the Applicant for its time and costs associated with the review and processing of this permit.

3.2 DESCRIPTION OF APPLICANT

Applicant Contact Information

Tenderfoot Pipeline Company
Attn: Philip G. Wood, Vice – President
4949 S. Niagara St, Suite 250, Denver CO 80237

(720)-946-3028

Contact Information for Individuals Constructing and Operating the Project

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DJ Basin Land Manager of GMT Exploration Company LLC
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Agent Contact Information if Different than Applicant

Environmental Consultant:

Jess Watson
Environmental Project Manager for Perennial Environmental Services, LLC
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Project Surveyor:

Heath Smith
Project Director for Encompass Energy Services
10901 W. 120th Ave
Broomfield, CO 80021
(303)-955-6080

Project Engineer:

Robert Ferrera, P.E.
Director of Project Management for Kahuna Ventures LLC
11400 Westmoor Circle, Ste. 325
Westminster, CO 80021-2579
(303)-451-7374

Documentation that the Agents listed above are authorized by the Applicant to prepare and submit the materials presented herein is provided in Appendix I.

3.2.1 DOCUMENTATION OF APPLICANT'S FINANCIAL AND TECHNICAL CAPABILITIES

The Applicant is a wholly owned subsidiary of GMT, a privately held independent oil and natural gas company engaged in the generation, operation and development of oil and natural gas properties in Alaska and Wyoming and currently pursuing new opportunities in Alberta, Canada and the DJ Basin in Colorado. GMT's fundamental strategy is to identify, acquire and build large, operated resource style plays. GMT takes a full cycle long term approach and is designed to maximize returns on invested capital through a build, develop and selectively sell strategy. The Company has historically built, operated and sold significant positions in Colorado, East Texas, Alaska, and the Delaware Basin in New Mexico.

As a member of the communities where it operates, the Applicant strives to minimize environmental impacts and focuses on the safety and well-being of the public, employees and contractors. In an effort to create long-term value for those they work with and in the communities where they live, the Applicant strives to operate with the highest technical standards by ensuring that best practices are used in all aspects of projects.

The Applicant is financially capable to develop this Project which will be fully financed using funds that are available in the Applicant's or related entity's capital funds. GMT's 2021 Financial Report and 2022 Financial Report are included as Appendix J. The Applicant possesses the technical capabilities to oversee the construction and operation of the Project, as demonstrated by the successful construction and operation of the Tenderfoot Pipeline Project and Tenderfoot North Expansion Project within Arapahoe County, and is fully responsible for the Project. Only contractors with the experience and expertise to construct this Project will be pre-qualified to bid on this Project.

3.3 INFORMATION DESCRIBING THE PROJECT

3.3.1 PROJECT AREA

The Project is located in Arapahoe County, Colorado within Sections 36 and 35 Township 5 South Range 65 West and 31, 32, and 33 Township 5 South Range 64 West, as presented on the mapping exhibits provided in Appendix A.

3.3.2 PROJECT BACKGROUND

As presented in Section 1.1, the Project consists of the installation of approximately 5.10 miles of 8-inch diameter natural gas gathering pipeline, 6-inch diameter oil pipeline, and an up to 8-inch diameter fresh/produced water pipeline, originating at the proposed Secret Stash Well Pad in S35 T5S R65W, which will tie-in to the previously permitted Tenderfoot Pipeline Project in S33 T5S R64W in Arapahoe County. The purpose of the Project is to transport natural gas and oil, and in the future, produced and/or fresh water, to and from the proposed Secret Stash Well Pad operated by the Applicant's parent company, GMT. The pipeline easement is intended to allow for installation of a produced water line, and above ground freshwater lines in the future, all within a 50-foot-wide permanent easement. The Applicant will construct the Project entirely within property owned by the Colorado State Land Board (refer to Appendices A and B for mapping exhibits of the Project area). There are no proposed aboveground facilities associated with the Project. The proposed 50-foot-wide permanent easement is intended to allow for future installation of an up to 8-inch-diameter produced and/or fresh water line, if needed. The need for the produced water line will be dependent on the productivity of the proposed Secret Stash Well Pad. Fresh water transported by the Project will be solely for the Applicant's use and not for public distribution. Following the completion of construction, there will be no operational impacts

on land use, except the occasional mowing of the pipeline right-of-way and no proposed change to the existing zoning.

Construction of the Project is estimated to impact 49.26 acres within Arapahoe County, all of which is considered temporary and restricted to construction. There will be no operational impacts on land use, except the occasional mowing of the pipeline ROW and no proposed change to the existing zoning (agriculture).

3.3.3 DETAILED MAPS AND PLANS

Mapping exhibits are included in Appendix A and detailed pipeline alignment sheets are included in Appendix B. These plans indicate construction workspace, topographical lines, land use, and environmental resources present in the Project area.

3.3.4 DESCRIPTION OF ALTERNATIVES TO THE PROJECT THAT WERE CONSIDERED BY APPLICANT.

Alternative 1 - No Action Alternative

Under the No Action Alternative, the Applicant would not construct the proposed Project. If the proposed facilities were not constructed, the short-term construction impacts identified herein would be avoided and the beneficial impacts of implementing the Project would not occur, including increasing employment, income, and tax revenues. However, if the Project is not constructed, the Project purpose and need would not be fulfilled, and the Applicant would have no way of transporting natural gas and oil generated at the proposed Secret Stash Well Pad to the existing Tenderfoot Pipeline Project. Therefore, the No-Action Alternative was not considered a feasible alternative to the proposed Project.

Route Alternatives

When selecting a Project route, the Applicant prioritized avoidance of sensitive environmental features (e.g., wildlife habitat, wetlands, and waterbodies) and residences. The start, end, and various other points of the Project were fixed, as the purpose of the Project is to transport natural gas and oil (and potentially water in the future) produced by the proposed Secret Stash Well Pad, as well as any potential future wells to the existing Tenderfoot Pipeline Project in Arapahoe County. A map depicting the Project route and the alternative routes considered, is included as Appendix I.

The proposed Project route is the route presented throughout this Application. Alternative routes that were considered and ultimately dismissed are described below.

Alternative Route 1

Alternative Route 1 follows the same general path as the proposed route for the first 0.36 miles starting at the proposed Secret Stash Well Pad. However, Alternative Route 1 then continues south for an additional 0.07 miles into Elbert county before turning east and following a parallel path to the proposed route along the County Line Road to the Project terminus at the Tenderfoot Pipeline Project.

The total length of Alternative Route 1 is comparable to the proposed Project route. However, Alternative Route 1 would result in construction impacts to more landowners than the proposed route. The proposed Project route is located within 660 feet (the buffer utilized by PHMSA to determine safety class locations of pipelines based on population density) of 24 residences. A

class location unit is an onshore area that extends 660 feet on either side of the centerline of any continuous 1-mile length of pipeline, as defined in 49 CFR 192.5. Regulations for natural gas pipelines establish pipe strength requirements based on population density within 660 feet of either side of the pipeline centerline. Locations along gas pipelines are divided into classes from 1 (rural) to 4 (densely populated) and are based upon the number of buildings or dwellings for human occupancy. Allowable pipe stresses, as a percentage of specified minimum yield strength, decrease as class location increases from Class 1 to Class 4 locations. When pipelines change class locations the operator must either reduce the pipe's operating pressure or replace the pipe with a pipe that has thicker walls or higher yield strength to ensure compliance with PHMSA's allowable pipe stresses expressed as specified minimum yield strength (Federal Register, 2013). Alternative Route 1 would be located within 660 feet of 46 residences; 22 additional residences compared to the Project route, resulting in greater possible nuisances to landowners than the Project route.

Because Alternative Route 1 would result in construction impacts to more landowners than the Project route, Alternative Route 1 was dismissed from further consideration.

Alternative Route 2

Alternative Route 2 starts from the proposed Secret Stash Well Pad and proceeds north for 1.31 miles before turning east and travelling along a parallel path north of the Project route, terminating 1.83 miles north of the Project route terminus at the Tenderfoot Pipeline Project.

Similar to Alternative Route 1, Alternative Route 2 is comparative length to the Project route; however, Alternative Route 2 crosses Coal Creek at a wider location (424 feet greater). Additionally, Alternative Route 2 would cross into mule deer severe winter range, designated a High Priority Habitat (HPH) by CPW, which the Project route would avoid. Therefore, Alternative Route 2 was dismissed from further consideration.

3.3.5 SCHEDULES FOR DESIGNING, PERMITTING, CONSTRUCTING, AND OPERATING THE PROJECT, INCLUDING THE ESTIMATED LIFE OF THE PROJECT

Permitting and design for the Project is scheduled for completion by Q4 2024. Construction on the natural gas and oil pipelines will begin upon receipt of all required permits. Construction will be scheduled to minimize impacts on sensitive wildlife species within the Project area to the maximum extent possible. The Applicant has initiated consultation with CPW regarding impacts to sensitive wildlife species. Copies of correspondence to date are provided in Appendix K. The Applicant will provide updated correspondence records upon receipt. The purpose of the Project is to transport natural gas, via an up to 8-inch-diameter pipeline, and oil via an up to 6-inch-diameter pipeline, and in the future fresh and/or produced water from the proposed Secret Stash Well Pad. Currently, infrastructure does not exist that can be utilized to transport the natural gas and oil from the planned Secret Stash Well Pad to the existing Tenderfoot Pipeline Project. The Secret Stash Well Pad will produce both oil and gas until the wells' economic lives end, at which time the wells will be plugged and abandoned. The Secret Stash Well Pad is anticipated to produce natural gas for approximately 30 years; therefore, the Project design life is 30 years. However, the pipeline can be maintained indefinitely utilizing a robust Operations and Maintenance (O&M) program, modern inspection techniques, and cathodic protection. For example, pigging operations can clean the pipe and identify damaged sections that may need to be replaced, should the need for the pipeline exceed the anticipated duration of production. When the pipeline is no longer needed, it will be abandoned in place, in accordance with federal, state,

and local regulations, as well as landowner agreements. The workforce is expected to peak at approximately 55 to 60 workers during initial construction of each of the proposed pipelines.

3.3.6 THE NEED FOR THE PROJECT, INCLUDING EXISTING/PROPOSED FACILITIES THAT PERFORM THE SAME RELATED FUNCTION; AND POPULATION PROJECTIONS OF GROWTH TRENDS THAT FORM THE BASIS OF DEMAND PROJECTIONS JUSTIFYING THE PROJECT

The purpose of the Project is to transport natural gas, via an up to 8-inch-diameter pipeline, oil, via an up to 6-inch-diameter pipeline, and in the future fresh and/or produced water from the proposed Secret Stash Well Pad. Currently, infrastructure does not exist that can be utilized to transport the natural gas or oil from the planned Secret Stash Well Pad to the existing Tenderfoot Pipeline Project. Residential and electric power sectors are the largest consumers of natural gas in Colorado, with approximately seven out of ten households using natural gas as the primary source to heat their homes. Consumption of natural gas for electricity generation in Colorado has been steadily increasing and reached an all-time high in 2020 (U.S. Energy Information Administration, 2023); therefore, all gas transported by the Project will be consumed. The natural gas liquids (NGLs) will also be utilized for a multitude of uses including, but not limited to plastics, fertilizers, home heating, and artificial rubber. Additionally, according to the Code of Colorado Regulations (CCR) (2 CCR 404-1-903), venting and flaring of natural gas that cannot be transported via pipeline is prohibited (CCR, 2023). Without the proposed Project, the Applicant would not be able to transport materials produced from the proposed Secret Stash Well Pad to the existing Tenderfoot Pipeline Project. The Applicant has designed the Project to accommodate the maximum anticipated volumes of materials (natural gas, oil, and water) produced.

3.3.7 DESCRIPTION OF ALL CONSERVATION TECHNIQUES TO BE USED IN THE CONSTRUCTION AND OPERATION OF THE PROJECT.

All facilities associated with the Project will be designed, constructed, tested, operated, and maintained in accordance with the ASME B31.8 - Gas Transmission and Distribution Pipeline Systems Codes and Standards, and applicable federal and state regulations. The Project will be constructed via a combination of conventional and specialized construction procedures, as the Tenderfoot Pipeline Project and Tenderfoot North Expansion Project were. These conventional and specialized construction procedures are described below.

Conventional open-cut pipeline construction techniques will be used for the majority of the Project. Construction of the Project will require one construction spread (crew) and will consist of phased construction conducted in a sequential manner. The entire process will be coordinated in such a manner as to minimize the total time a tract of land is disturbed and therefore exposed to erosion and/or temporarily precluded from its normal use. General construction and installation procedures and conservation techniques are described in the following sections. Construction techniques for the future oil pipeline and water line will be similar to that described below for the natural gas pipeline.

Clearing and Grading

Prior to commencement of ground disturbing activities, a standard survey and stakeout will be conducted to identify ROW and workspace boundaries and to locate existing foreign utility lines within the construction ROW. The Applicant will also require its contractor to make notifications to foreign utility line operators through the "One Call" locate services to assist in locating and marking of all belowground utility lines. Following the completion of the surveys, the construction ROW will be cleared of vegetation and debris. Clearing and grading is a process necessary for

the establishment of the ROW. Vegetation will only be cleared where necessary and will be reseeded once construction is complete. Cleared vegetation and debris will be disposed of in accordance with federal, state, and local regulations. Where necessary, to contain disturbed soils during clearing and grading in upland areas, and to minimize potential erosion and sedimentation of waterbodies, temporary erosion control devices (ECDs) will be installed prior to initial ground disturbance and will be maintained throughout construction in accordance with the Project-specific GESC Plan. Adherence to the GESC Plan will minimize erosion, and in turn conserve land in the Project area.

Horizontal Directional Drill

The HDD method will be utilized to cross Coal Creek, located north of County Line Road at MP 1.7, as depicted on the Plan Set (Appendix B). The HDD method allows for construction across a sensitive resource without the excavation of a trench, by drilling a hole significantly below conventional pipeline depth, and pulling the pipeline through the pre-drilled hole.

To facilitate the proposed HDD installations, the Applicant will hand clear two paths of sufficient width, not to exceed 5 feet wide, to allow placement and surveying of an electric guide wire coil (closed loop system) along the ground surface between the HDD entry point and exit point, where possible. This coil is used to facilitate tracking of the location of down hole drilling equipment and to determine steering inputs during advancement of the pilot bore. Wireline guidance systems typically require two guide wires for each crossing. The guide wires are placed parallel to the centerline of an installation.

Following the completion of the pilot hole, reaming tools will be utilized to enlarge the hole to accommodate the pipeline diameter. The reaming tools will be attached to the drill string at the exit point and will then be rotated and drawn back to incrementally enlarge the pilot hole. During this process, drilling mud consisting of bentonite clay, water, will be continuously pumped into the pilot hole to remove cuttings and maintain the integrity of the hole. The Applicant will not utilize any additional additives in the drilling mud. When the hole has been sufficiently enlarged, a prefabricated segment of pipe will be attached behind the reaming tool on the exit side of the crossing and pulled back through the drill hole towards the drill rig.

Conventional Bore

The conventional bore method will be used for crossing waterbodies and drainages crossed by the Project. To complete a conventional bore, a pit on either side of the road will be excavated to provide a working area for the equipment. A boring machine will be lowered into one pit, and a horizontal hole will be bored to a diameter slightly larger than the diameter of the pipe (or casing, if required) at the depth of pipeline installation. The pipeline section and/or casing will then be pushed through the bore to the opposite pit. If additional pipeline sections are required to span the length of the bore, they will be welded to the first section of the pipeline in the bore pit prior to being pushed through. ATWS will be required on both sides of the road in order to complete the bore at crossings.

Trenching

Trenching involves excavation of a ditch for pipeline placement and is accomplished through the use of a trenching machine, backhoe, or similar equipment. Trench spoil will be deposited adjacent to the trench within the construction work areas with topsoil segregation utilized where necessary to prevent the mixing of topsoil with subsoil. In standard conditions, the trench will be excavated to a depth of approximately 6 feet to ensure a minimum of 5 feet of cover over the pipe, or 10 feet beneath roadways which exceeds the requirements of 49 CFR Part 192. Installation depths beneath drainageways are provided in Table 3.12-8 below. Typically, the bottom of the

trench will be cut at least 12 inches wider than the width of the pipe. The width at the top of the trench will vary to allow the side slopes to be adapted to local conditions at the time of construction.

Pipe Stringing, Bending and Welding

Following preparation of the trench, the new pipe will be strung and distributed along the ROW parallel to the trench. Depending on the available workspace, some pipe may be fabricated off-site and transported to the ROW in differing lengths or configurations. Pipe will be bent by hydraulic bending machines, as necessary, to conform the pipe to the trench. Once in place along the ROW, pipe lengths will be aligned, bends fabricated, and joints welded together. Welding will be performed in accordance with the American Petroleum Institute Standard Number 1104 and company welding specifications. All welds will be coated for corrosion protection and visually and radiographically inspected to ensure there are no defects. Additionally, the entire pipeline will be visually inspected prior to lowering-in.

Pipeline Installation and Trench Backfilling

Completed sections of pipe will be lifted off the temporary supports by side boom tractors or similar equipment and placed into the trench. Prior to lowering-in, the trench will be visually inspected to ensure that it is free of rock and other debris that could damage the pipe or the coating. Additionally, the pipe and the trench will be inspected to ensure that the configurations are compatible. Tie-in welding and pipeline coating will occur within the trench to join the newly lowered-in section with the previously installed sections of pipe. Following this activity, the trench will be backfilled with the previously excavated material and crowned to approximately 6 inches above its original elevation to compensate for subsequent settling. Typical pipeline construction involves laying the pipe directly in the trench and backfilling it with native soil. If excessive rocks are encountered during excavation of the trench, additional measures may be taken to protect the pipe coating. The most common approach is to mechanically screen the native soil on site, to limit the amount of rock that comes into contact with the pipe. The need to screen the backfill soil will be determined in the field at the time of construction. In the unlikely event that additional soil is required due to excessive rocks or settling greater than six inches, the Applicant would purchase additional soil from a nearby landowner or yard.

The pipeline will be protected by a fusion bond epoxy coating to limit corrosion. A cathodic protection system (induced current on the pipe) will also be installed to ensure pipeline integrity for the life of the Project.

Hydrostatic Testing

Following backfilling of the trench, the pipeline will be hydrostatically tested to ensure that the system is free from leaks and is capable of safely operating at the design pressure. Sections that are installed via HDD will be hydrostatically tested to prove the integrity of the pipe prior to installation. Hydrostatic testing will be conducted in accordance with the requirements of company testing specifications and applicable state general discharge permits (Permit No. COR400000).

Environmental impacts from discharge of test water will be minimized through the application of measures outlined below:

- Locating hydrostatic test manifolds outside of wetlands or waterbodies;
- Complying with all appropriate permit requirements;
- Anchoring the discharge pipe for safety;

- Discharging test water through an energy dissipating and/or filtration device to minimize flooding and erosion, as well as reduce velocities, spread water flow, and promote ground penetrations; and
- Discharging test water only in well vegetated upland areas.

During testing, the water in the pipe will be pressurized above the maximum operating pressure and held for a minimum of eight hours. Any loss of pressure that cannot be attributed to other factors, such as temperature changes, will be investigated. In the event that a loss of pressure is detected, the pipeline will be repaired, and the segment retested.

Restoration and Clean-up

Following pipeline installation and backfilling, disturbed areas will be restored to pre-construction contours as closely as practicable. Construction debris and organic refuse unsuitable for distribution over the ROW will be disposed of at appropriate facilities in compliance with applicable regulations. Permanent erosion and sediment control measures will be installed as appropriate, and the Project area will be revegetated using a seed mix approved by the State Land Board. Scrap materials remaining after construction will be recycled or reused, where possible.

Conservation Techniques

The Applicant will implement CMs to minimize erosion and sedimentation during construction of the Project. The following guidelines will be used in the selection, design, and implementation of CMs:

- The construction-phase CMs will be designed to retain sediment onsite to the extent practicable and to ensure that no significant changes occur in the volume or characteristics of stormwater runoff to receiving waters.
- All CMs will be properly selected, installed, and maintained in accordance with the manufacturer's specifications and good engineering practices.
- If sediment is conveyed beyond the construction site, controls will be used to minimize off-site impact.
- Litter, construction debris, and construction chemicals exposed to stormwater will be prevented from becoming a pollutant source.

CMs that will be implemented include the following:

- Inlet protection;
- Riprap;
- Trash racks;
- Check dams;
- Sediment control logs; and
- Erosion control blankets.

To minimize impacts from land disturbance and storage of soils, the CMs listed above will be installed immediately following land disturbance where needed.

To minimize impacts from vehicle tracking, road surfaces will be periodically inspected and, if necessary, cleaned of any soil and other debris, in addition to implementation of the CMs listed above.

All loading and unloading operations will be conducted within the approved Project workspace. CMs as described herein will be utilized to ensure that all impacts are contained within the workspace and sediment does not leave the Project site.

Erosion and sediment controls that will be implemented will include the following protections:

- **Erosion Controls** (primary protection)
 1. Minimize disturbed areas and protect natural features
 2. Phase construction activities to limit exposure period
 3. Control stormwater flowing onto and through the Project area
 4. Stabilize soils promptly with seed, mulch, etc.
 5. Protect slopes to prevent gullyng
- **Sediment Controls** (secondary protection)
 1. Protect storm drain inlets
 2. Establish perimeter controls
 3. Retain sediment on-site and control dewatering practices
 4. Establish stabilized construction exits
 5. Inspect and maintain controls

Peripheral or border CM's to control runoff from disturbed areas will be installed or marked for preservation before general site clearing is started. Note that this requirement does not apply to earth disturbances related to initial site clearing and entry establishment, exit and access of the site, which may require that CMs be installed immediately after the earth disturbance. Storm water discharges from disturbed areas which leave the site, will pass through an appropriate impediment to sediment movement, such as a sedimentation basin, sediment traps, etc., prior to leaving the land disturbance site.

All erosion control measures identified in this application, the GESC Report and the GESC Plan will be maintained in effective operating condition. Routine inspections will be performed to confirm that the CMs are effective, to identify problems with existing CMs, and to identify the need for changes in CMs. Maintenance activities will be performed as needed.

Properly operating CMs will be maintained to ensure continued effectiveness. When CMs are not operating properly, maintenance will be performed within 24 hours, if practicable, or at least before the next storm event, as necessary to maintain the continued effectiveness of stormwater controls.

3.4 PROPERTY RIGHTS, PERMITS, AND OTHER APPROVALS

3.4.1 A LIST AND COPIES OF ALL OTHER FEDERAL, STATE, AND LOCAL PERMITS AND APPROVALS THAT HAVE BEEN OR WILL BE REQUIRED FOR THE PROJECT, TOGETHER WITH ANY PROPOSAL FOR COORDINATING THESE APPROVALS WITH THE COUNTY PERMITTING PROCESS

1. Land Use permits (USR) required by Arapahoe County are coordinated and processed by the County
2. GESC Permit (Arapahoe County)
3. State of Colorado (Colorado Department of Public Health and Environment [CDPHE]) Construction Stormwater General Permit
4. State of Colorado (CDPHE) General Permit for Discharges Associated with Hydrostatic Testing of Pipelines, Tanks, and Similar Vessels (Permit No. COR400000)
5. U.S. Army Corps of Engineers (USACE) Nationwide Permit 12 (without pre-construction notification)

6. Floodplain Development Permit (Arapahoe County)
7. Oversize/Overweight Vehicle Permit (Arapahoe County)
8. Street Cut-ROW Use Permit (Arapahoe County)
9. Street Cut- ROW Use Permit (Elbert County)
10. Oversized/Overweight Vehicle Permit (Elbert County)

A list of required permits and approvals for construction of the Project is presented above. The Applicant will submit a Notice of Intent to CDPHE to obtain a construction stormwater permit 48 hours to commencement of construction activities.

Two ephemeral waterbodies, totaling 150 feet, one palustrine emergent (PEM) wetland, totaling 0.09 acre, and one palustrine scrub shrub (PSS) wetland, totaling 0.03 acres, will be crossed by the Project. One of the ephemeral waterbodies and the PEM wetland will be open-cut to allow installation of the pipelines. All impacts to these features will be short-term and temporary, and both features will be restored to pre-construction conditions following the completion of the Project. The other ephemeral waterbody will be crossed with conventional bore, and the PSS wetland will be completely avoided via HDD. Impacts to waterbodies and wetlands are discussed further in sections 3.12.3 and 3.15.5, respectively. The Project qualifies for coverage under the USACE's Nationwide Permit 12 without the submittal of a pre-construction notification. The Applicant is required to adhere to the general and regional conditions of Nationwide Permit 12.

The Applicant will provide preconstruction and post-construction profiles of the ROW to Arapahoe County in accordance with Floodplain Development Permit requirements.

The Applicant has secured an easement ("Right of Way Contract No. 116219" [Appendix D]) from the State Land Board, the sole property owner crossed by the Project. The agreement provides for a permanent 50-foot pipeline easement and 25-foot temporary use areas for construction operation and construction of the Project, respectively. ATWS has been identified and secured to facilitate specialized construction techniques (e.g., HDD). Documentation of the easement agreement with the State Land Board is provided in Appendix D.

3.4.2 COPIES OF ALL OFFICIAL FEDERAL AND STATE CONSULTATION CORRESPONDENCE PREPARED FOR THE PROJECT; A DESCRIPTION OF ALL MITIGATION REQUIRED BY FEDERAL, STATE AND LOCAL AUTHORITIES; AND COPIES OF ANY DRAFT OR FINAL ENVIRONMENTAL ASSESSMENTS OR IMPACT STATEMENT REQUIRED FOR THE PROJECT

Copies of all agency correspondence are provided in Appendix K.

3.4.3 DESCRIPTION OF THE WATER TO BE USED BY THE PROJECT AND ALTERNATIVES INCLUDING THE SOURCE, AMOUNT, THE QUALITY OF SUCH WATER, THE APPLICANT'S RIGHT TO USE THE WATER, INCLUDING ADJUDICATED DECREES, APPLICATIONS FOR DECREES, PROPOSED POINTS OF DIVERSION, AND THE EXISTING USES OF THE WATER. IF AN AUGMENTATION PLAN HAS BEEN FILED IN COURT, THE APPLICANT MUST SUBMIT A COPY OF THAT PLAN

The Applicant will perform hydrostatic testing of the new pipeline segments prior to placing the Project facilities into service to ensure pipeline integrity. All water utilized during the hydrostatic tests and for dust control will be obtained from a Pure Cycle source near the Project area. Where

possible, water will be delivered to the Project via temporary above-ground or “lay-flat” pipe, or water will be trucked as an alternative to lay-flat lines. The Applicant estimates that 26,400 gallons of water will be necessary for hydrostatic testing.

Following testing, each test section will be depressurized, and the water will pass through an energy-dissipation and/or filtration device before being discharged into a well-vegetated, upland area. This will allow dual-action dissipation, one from the dissipation device itself and the other from the vegetated area. This method will minimize the potential for erosion and is in compliance with applicable federal and state regulations. The pipe will be new, internally coated, and clean, and hydrostatic test water will not come into contact with hydrocarbons; therefore, discharge of hydrostatic test water into upland areas will not introduce any pollutants to the existing environment. Additionally, the Applicant will follow all federal, state, and local permit requirements with regard to water discharge.

In addition to the water required for hydrostatic testing, the Applicant will utilize water, as needed during construction to control fugitive dust emissions. Water utilized for dust control will be acquired from the same sources as hydrostatic test water. The Applicant will only apply water for dust control when necessary; thereby, minimizing potential impacts on water quality.

3.5 REGIONAL WATER QUALITY MANAGEMENT PLAN

The Project area lies within the South Platte River Basin and is subject to the South Platte Basin Implementation Plan. The Project is also subject to the State Designated Basin Rules but is not within a State Designated Basin. The South Platte Basin Implementation Plan has been reviewed and the Project is compliant with both, as groundwater resources will not be impacted.

The Applicant will comply with the State of Colorado and Arapahoe County's Stormwater Management Manual, employing the CMs detailed in the GESC Plan (Appendix F). CMs will be constructed in accordance with Arapahoe County's GESC Manual. Therefore, the Project is, and will be in compliance with the regional water quality management plan.

3.6 FINANCIAL FEASIBILITY OF THE PROJECT

3.6.1 THE ESTIMATED CONSTRUCTION COSTS AND PERIOD OF CONSTRUCTION FOR EACH DEVELOPMENT COMPONENT

The total estimated costs for this Project within Arapahoe County are \$7 million, which is inclusive of all materials, construction labor and equipment, and support labor (permitting, engineering, design, etc.).

The anticipated construction duration of the Project with Arapahoe County is 6 to 8 weeks from mobilization to restoration of the pipeline ROW. Construction is anticipated to begin in Q3 2024.

3.6.2 REVENUES AND OPERATING EXPENSES FOR THE PROJECT.

Revenues will be generated from the Project by gathering and transporting natural gas and oil from the proposed Secret Stash Well Pad, which will be operated by GMT. Water will consist of wastewater and will not generate any revenue. All operating expenses for the Project will be borne by the Applicant.

The revenues generated from the Project will be managed by private contracts and between the Applicant, GMT, and the Applicant's product purchasers. A significant number of third-party services will be needed to design and construct the Project and will also be managed via private agreements and documents.

3.6.3 THE AMOUNT OF ANY PROPOSED DEBT AND THE METHOD AND ESTIMATED COST OF DEBT SERVICE

Not Applicable. The Applicant intends to fully finance the Project with cash.

3.6.4 DETAILS OF ANY CONTRACT OR AGREEMENT FOR REVENUES OR SERVICES IN CONNECTION WITH THE PROJECT

Construction of the Project will provide a path of delivery for resources in Colorado to market. Contracts or agreements with third parties for services to design and construct will be managed via private documents.

3.6.5 DESCRIPTION OF THE PERSON OR ENTITY(IES) WHO WILL PAY FOR OR USE THE PROJECT AND/OR SERVICES PRODUCED BY THE DEVELOPMENT AND THOSE WHO WILL BENEFIT FROM ANY AND ALL REVENUES GENERATED BY IT.

The Applicant will fully fund the Project. The benefit would be directly to the Applicant and its related entities and indirectly to the public through tax revenues.

3.6.6 COST OF ALL MITIGATION MEASURES PROPOSED FOR THE PROJECT.

The costs of mitigation measures for the Project are estimated to be \$38,382. The Applicant will bear 100 percent of the mitigation costs for the completion of the Project.

3.6.7 DETAILED DESCRIPTION AS TO HOW THE PROJECT WILL BE FINANCED TO SHOW THAT THE APPLICANT HAS THE ABILITY TO FINANCE THE PROJECT.

As described in previous sections, the Applicant is a wholly owned subsidiary of GMT. GMT is a privately held independent oil and natural gas company engaged in the generation, operation and development of oil and natural gas properties in Alaska and Wyoming and currently pursuing new opportunities in Alberta, Canada and the DJ Basin in Colorado. GMT is a limited liability company formed in January 2005 as successor to GMT Energy Corp. GMT has historically built, operated and sold significant exploration and production positions in Colorado, East Texas, Alaska, and the Delaware Basin in New Mexico. GMT currently owns and operates 11 wells in Elbert County, Colorado.

The Applicant is financially capable to develop this Project which will be fully financed using funds that are available in the Applicant's or GMT's accounts. GMT's 2021 Financial Report and 2022 Financial Report are included as Appendix J. As the parent company, GMT, stands behind all financial and other obligations of the Applicant in connection with County requirements related to this application.

The Applicant possesses the technical capabilities to oversee the construction and operation of the Project and is fully responsible for the Project.

3.7 LAND USE

3.7.1 DESCRIPTION OF EXISTING LAND USES WITHIN AND ADJACENT TO THE PROJECT IMPACT AREA

The Project is located entirely within property owned by the Colorado State Land Board, on land currently zoned for agricultural uses. Installation of pipelines for oil and gas are allowed uses and no change in zoning is required.

3.7.2 DESCRIPTION OF PROVISIONS FROM LOCAL LAND USE PLANS THAT ARE APPLICABLE TO THE PROJECT AND AN ASSESSMENT OF WHETHER THE PROJECT WILL COMPLY WITH THOSE PROVISIONS

The proposed pipeline route was developed in coordination with, and with the approval of, the State Land Board to ensure the Project complies with the State Land Board's plan for the property.

This Project falls under authority and guidance of the Arapahoe County Comprehensive Plan. The Project has been designed to be in compliance with the Comprehensive Plan as it pertains to utilities, including pipelines. The Applicant has also reviewed the Arapahoe County Lowry Range Sub-Area Plan and determined that the Project is also in compliance with the policies included in this plan. Following construction, all temporarily disturbed areas will be returned to preexisting conditions, and the land can continue to be conserved in accordance with the Arapahoe County Lowry Range Sub-Area Plan. Additionally, there will be no impacts to Coal Creek or the floodplain.

3.7.3 DESCRIPTION OF IMPACT AND NET EFFECT THIS PROJECT WOULD HAVE ON LAND-USE PATTERNS.

The Project will impact 49.26 acres within Arapahoe County. Following the completion of construction there will be no operational impacts on land use.

3.8 LOCAL GOVERNMENT SERVICES

3.8.1 DESCRIPTION OF EXISTING CAPACITY OF AND DEMAND FOR LOCAL GOVERNMENT SERVICES INCLUDING ROADS, SCHOOLS, WATER AND WASTEWATER TREATMENT, WATER SUPPLY, EMERGENCY SERVICES, TRANSPORTATION, INFRASTRUCTURE, HOUSING LAW ENFORCEMENT, AND OTHER SERVICES NECESSARY TO ACCOMMODATE DEVELOPMENT

The Project will not require additional local government services beyond those currently provided in the area. The Project creates no additional demand for transportation infrastructure, educational facilities, housing, water (other than trucked-in water during construction), wastewater treatment, or public transportation. In the event of an incident during construction, the Applicant may require emergency services including emergency medical services, fire services, or the Sheriff to assist with worker injuries, materials theft, or vandalism. During operations of the Project, the Applicant may require emergency services in the unlikely event of an emergency.

3.8.2 DESCRIPTION OF THE IMPACT AND NET EFFECT OF THE PROJECT ON THE DEMAND FOR LOCAL GOVERNMENT SERVICES AND THE CAPABILITY OF LOCAL GOVERNMENTS TO PROVIDE SERVICES

The Applicant will establish and maintain a liaison with local fire, police, and other appropriate governmental officials to determine the availability of emergency response resources in the event of an accident or emergency involving the pipelines and to establish an effective means of communicating with local emergency response officials. The Project is located within the service area of the BWFD. BWFD will respond to calls on the properties crossed by the Project. If, during review of this amendment, BWFD desires to enter into a will serve letter, the Applicant will work with BWFD to secure a will serve letter. During construction, the Applicant will implement the emergency response procedures identified in Tenderfoot Pipeline Company's Emergency Response Plan. Information in the plan includes specific steps for controlling potential releases of hazardous liquids by means of shutting down the pipeline segments, evacuation plans, notifying local officials of incidents, and coordinating preplanned and actual responses necessary in the case of an emergency. In addition, aboveground markers identifying the pipelines will be installed at regular intervals that will provide contact information and notice of existing lines. A copy of the Emergency Response Plan is provided as Appendix R. The maximum anticipated traffic loading during construction is estimated to be 30 to 40 round trips per day for a duration of 6 to 8 weeks. This traffic estimate includes four to five round trips per day for heavy haul equipment to cover equipment mobilization, pipe delivery, and mobilization of bore equipment. Traffic for the rest of the construction window will be minimal, consisting primarily of commuting vehicles. Therefore, construction of the Project will not impact the existing transportation network within Arapahoe County. One roadway will be crossed by the Project, County Line Road. The roadways will be crossed via HDD and construction will typically be conducted within one day at crossings to minimize the interruption of traffic. Traffic after construction and during normal pipeline operations will not impact the current County traffic loads.

Construction and operation of the Project is not anticipated to impact the demand for local government services or the capability of local governments to provide services.

3.9 FINANCIAL BURDEN ON COUNTY RESIDENTS

3.9.1 DESCRIPTION OF THE EXISTING TAX BURDEN AND FEE STRUCTURE FOR GOVERNMENT SERVICES INCLUDING BUT NOT LIMITED TO ASSESSED VALUATION, MILL LEVY, RATES FOR WATER AND WASTEWATER TREATMENT, AND COSTS OF WATER SUPPLY.

This Project will not negatively impact the existing tax burden or fee structure for government services or for government services applicable to Arapahoe County residents and property owners. The Project is not relying on any public funding, and will be financed entirely by the applicant. Outside of the permitting process, paid for through permitting fees, the Project will not rely on any government services; therefore, a description of the existing tax burden and fee structure is not needed. Nevertheless, the additional infrastructure created by this Project will result in increased tax revenues for Arapahoe County through ad valorem taxes on the pipeline.

3.9.2 DESCRIPTION OF IMPACTS AND NET EFFECT OF THE PROJECT ON EXISTING TAX BURDEN AND FEE STRUCTURE FOR GOVERNMENT SERVICES APPLICABLE TO COUNTY RESIDENT AND PROPERTY OWNERS.

The Project will not negatively impact the existing tax burden or fee structure for government services or for government services applicable to Arapahoe County residents and property owners. The Project creates no additional demand for water (other than minor volumes of trucked-in water during construction) or wastewater treatment. However, additional infrastructure will result in increased ad valorem tax revenues for Arapahoe County.

3.10 LOCAL ECONOMY

3.10.1 DESCRIPTION OF THE LOCAL ECONOMY INCLUDING BUT NOT LIMITED TO REVENUES GENERATED BY THE DIFFERENT ECONOMIC SECTORS, AND THE VALUE OR PRODUCTIVITY OF DIFFERENT LANDS.

The primary land use in this area is production agriculture, including livestock grazing and dry-land farming. Following the completion of construction, agricultural activities currently practiced in the Project area will continue. Based on a review of property values and sales on properties both with and without pipelines across Ohio, Virginia, New Jersey, Pennsylvania, Mississippi, and California, the presence of a pipeline on a property has no impact on the sales frequency, sales price, the ability to obtain or cost of insurance or the ability to secure a loan on a property (INGAA, 2016, Wilde et. al, 2012). The Project will have a negligible impact on the underlying land value, and could increase property values by providing opportunities for mineral development on properties. The Applicant has secured an easement (“Right of Way Contract No. 116219” [Appendix D]) from the State Land Board, the sole property owner crossed by the Project. The agreement provides for a permanent 50-foot pipeline easement and 25-foot temporary use areas for construction operation and construction of the Project, respectively. ATWS has been identified and secured to facilitate specialized construction techniques (e.g., HDD). Documentation of the easement agreement with the State Land Board is provided in Appendix D.

3.10.2 DESCRIPTION OF IMPACTS AND NET EFFECT OF THE PROJECT ON THE LOCAL ECONOMY AND OPPORTUNITIES FOR ECONOMIC DIVERSIFICATION, INCLUDING THE NUMBER AND TYPES OF JOBS CREATED.

The Project will increase the property tax revenue on the property. In addition to providing tax revenues to Arapahoe County, the Project will have a small benefit to Arapahoe County's economy through the jobs that are created during construction and the increased revenues to local businesses that provide goods and services to the Applicant and its contractors and employees. The Applicant estimates that 55 and 60 workers will be employed over the approximate 6–8-week construction period. The ultimate number of construction personnel will be determined by the contractor prior to construction. The pipeline construction contractor has not been selected at the time of submitting this Application. The Applicant will undertake a competitive bid process to select the most qualified contractor among a short list of candidates. Due to the highly specialized nature of pipeline construction, many of the potential contractors have a national footprint, with offices in Colorado. Certain tasks associated with pipeline construction may be performed by subcontractors that are based locally. These tasks and subcontractors will not be determined until after a contractor has been selected. Wherever possible, the Applicant and its contractor(s) will purchase materials locally. Following completion of construction, the Applicant will operate the Project with either new or existing employees or contractors. It is reasonable to assume operational staff will apply from and reside in the Denver

Metro area; however, where workers apply for operational roles from, or choose to reside in, is out with the control of the Applicant. No manned facilities are proposed as part of the Project.

Following construction, the Project area will be restored to pre-existing conditions. Agricultural activities currently practiced in the Project area will continue; therefore, the Project will not degrade any sector of the local economy.

3.11 RECREATIONAL OPPORTUNITIES

3.11.1 DESCRIPTION OF PRESENT AND POTENTIAL RECREATIONAL USES, INCLUDING THE NUMBER OF RECREATIONAL VISITOR DAYS FOR DIFFERENT RECREATIONAL USES AND THE REVENUE GENERATED BY TYPES OF RECREATIONAL USES.

There are no hiking or biking trails located in the Project area. The Crosswinds RC Club is located 0.14 mile north of the Project at MP 1.8, and the access road to the club will be crossed by the Project. Additional information on how disruptions will be minimized is provided in Section 3.11.3. The Crosswinds RC Club is a private club that is open to members throughout the year, and generates revenue through membership fees.

3.11.2 MAP DEPICTING THE LOCATION OF RECREATIONAL USES SUCH AS FISHERY STREAM SEGMENTS, ACCESS POINTS TO RECREATIONAL RESOURCES, AND HIKING AND BIKING TRAILS.

A map depicting the location of the Crosswinds RC Club is provided in Appendix A.

3.11.3 DESCRIPTION OF IMPACTS AND NET EFFECT OF THE PROJECT ON PRESENT AND POTENTIAL RECREATIONAL OPPORTUNITIES AND REVENUES TO THE LOCAL ECONOMY DERIVED FROM THOSE USES.

The access road for the Crosswinds RC Club will be crossed via HDD; therefore, access to the facility, and the ability of the facility to generate revenue through the sale of memberships, will not be impacted during construction. It is reasonable to assume activities associated with the club would occur north of the facility on the open land associated with the State Land Board property, as opposed to south of the facility over County Line Road and into the residential area south of County Line Road. As such, activities associated with the club are not likely to extend into the active construction areas; therefore, impacts on the business and their clientele would be limited to construction related dust and noise. No significant sources of noise, dust, glare, fumes, vibration, or odors are anticipated to be caused by the Project. During construction, dust will be controlled by watering roads and other disturbed areas. Although certain heavy equipment is required, noise and fumes will be minimized to the extent possible. Potential impacts associated with exhaust emissions from diesel- and gasoline-fueled construction equipment and vehicle engines will be minimized by federal design standards imposed at the time of manufacture of the vehicles and will comply with EPA mobile and non-road emission regulations (40 CFR Parts 85, 86, and 89). Emissions will also be controlled by purchasing commercial gasoline and diesel fuel products, specifications of which are controlled by federal and state air pollution control regulations applicable to fuel suppliers and distributors. Where practicable, the Applicant will implement the following procedures to mitigate exhaust emissions and noise from construction equipment. An anti-idling policy for equipment and vehicles not in use or unmanned; use of ultra-low sulfur fuel in on-road vehicles, where available and accessible. The noise impacts associated

with construction activities would be temporary in duration and limited primarily to daytime hours. Should there be any landowner concerns with construction activities, the Applicant will work with the landowners to address their concerns. Due to the short-term nature of Project activities and the proposed mitigation measures discussed above, any effects of these nuisances will be minimal. The Applicant will notify the club prior to the commencement of construction to identify any potential conflicts and applicable mitigation measures.

3.12 ENVIRONMENTAL IMPACT ANALYSIS

This section provides a description of the existing natural environment and an analysis of the impact of the Project to the natural environment. Description in this section is limited to the impact area within Arapahoe County and includes an analysis of existing conditions supported with data, and a projection of the impacts of the Project in comparison to existing conditions.

3.12.1 AIR QUALITY

Description of the airsheds to be affected by the Project, including the seasonal pattern of air circulation and microclimates.

An air quality control region (AQCR), as defined in Section 107 of the Clean Air Act (CAA) is a federally designated area in which federal ambient air quality standards must be met. An implementation plan, describing how ambient air quality standards will be achieved and maintained, is developed for each AQCR. The Project is located within the Metropolitan Denver Intrastat AQCR, which includes Adams County, Arapahoe County, Boulder County, Clear Creek County, Denver County, Douglas County, Gilpin County, Jefferson County (EPA, 2023b).

Map and description of the ambient air quality and State air quality standards of the airshed to be affected by the Project including particulate matter and aerosols, oxides, hydrocarbons, oxidants, and other chemicals, temperature effects, and atmospheric interactions.

The CAA requires the EPA to establish ambient air quality standards for certain compounds based upon the identifiable effects the compounds may have on public health and welfare. Subsequently, the EPA promulgated regulations that set National Ambient Air Quality Standards (NAAQS) for seven criteria pollutants, including carbon monoxide (CO), sulfur dioxide (SO₂), nitrogen dioxide (NO₂), respirable particulate matter (PM) (i.e., PM sized 10 microns and smaller [PM₁₀]), fine PM matter (i.e., PM sized 2.5 microns and smaller [PM_{2.5}]), lead (Pb), and ozone (O₃). Two classes of ambient air quality standards have been established: (1) primary standards defining levels of air quality that the EPA has judged as necessary to protect public health, and (2) secondary standards defining levels for protecting soils, vegetation, wildlife, and other aspects of public welfare. Table 3.12-1 below lists the NAAQS for criteria pollutants.

Pollutant [final rule citation]	Primary or Secondary	Averaging Time	Level	Form
Carbon monoxide [76 FR 54294, Aug 31, 2011]	Primary	8-hour	9 ppm	Not to be exceeded more than once per year
		1-hour	35 ppm	

Table 3.12-1 NAAQS for Criteria Pollutants					
Pollutant [final rule citation]	Primary or Secondary	Averaging Time	Level	Form	
Lead [73 FR 66964, Nov 12, 2008]	Primary and Secondary	Rolling 3- month average	0.15 µg/m ³ ^a	Not to be exceeded	
Nitrogen Dioxide [75 FR 6474, Feb 9, 2010] [61 FR 52852, Oct 8, 1996]	Primary	1-hour	100 ppb	98 th percentile of 1-hour daily maximum concentrations, averaged over 3 years	
	Primary and Secondary	Annual	53 ppb ^b	Annual Mean	
Ozone [80 FR 65292, Dec 28, 2015]	Primary and Secondary	8-hour	0.070 ppm ^c	Annual fourth-highest daily maximum 8-hr concentration, averaged over 3 years	
Particle Pollution Dec 14, 2012	PM _{2.5}	Primary	Annual	12 µg/m ³	Annual mean, averaged over 3 years
		Secondary	Annual	15 µg/m ³	Annual mean, averaged over 3 years
		Primary and Secondary	24-hour	35 µg/m ³	98 th percentile, averaged over 3 years
	PM ₁₀	Primary and Secondary	24-hour	150 µg/m ³	Not to be exceeded more than once per year on average over 3 years
Sulfur Dioxide [75 FR 35520, Jun 22, 2010] [38 FR 25678, Sept 14, 1973]	Primary	1-hour	75 ppb ^d	99 th percentile of 1-hour daily maximum concentrations, averaged over 3 years	
	Secondary	3-hour	0.5 ppm	Not to be exceeded more than once per year	
^a In areas designated nonattainment for the Pb standards prior to the promulgation of the current (2008) standards, and for which implementation plans to attain or maintain the current (2008) standards have not been submitted and approved, the previous standards (1.5 µg/m ³ as a calendar quarter average) also remain in effect. ^b The level of the annual NO ₂ standard is 0.053 ppm, equal to 53 ppb. It is shown here in terms of ppb for the purposes of clearer comparison to the 1-hour standard level. ^c Final rule signed October 1, 2015, and effective December 28, 2015. The previous (2008) O ₃ standards additionally remain in effect in some areas. Revocation of the previous (2008) O ₃ standards and transitioning to the current (2015) standards will be addressed in the implementation rule for the current standards. ^d The previous SO ₂ standards (0.14 ppm 24-hour and 0.03 ppm annual) will additionally remain in effect in certain areas: (1) any area for which it is not yet 1 year since the effective date of designation under the current (2010) standards, and (2) any area for which implementation plans providing for attainment of the current (2010) standard have not been submitted and approved and which is designated nonattainment under the previous SO ₂ standards or is not meeting the requirements of a State Implementation Plan (SIP) call under the previous SO ₂ standards [40 CFR 50.4(3)]. A SIP call is an EPA action requiring a state to resubmit all or part of its State Implementation Plan to demonstrate attainment of the require NAAQS. (Source: EPA, 2023a) ppm – parts per million ppb – parts per billion µg/m ³ – micrograms per cubic meter					

The NAAQS are expressed in terms of a concentration level and an associated averaging period. States are required to implement and enforce the NAAQS through State Implementation Plans (SIPs), which must be approved by the EPA. Colorado's SIP is managed by the Colorado Department of Public Health & Environment and is reviewed by Region VIII of the EPA. Generally,

the SIPs are composed of air quality rules that are applicable to stationary sources that may emit criteria and/or hazardous air pollutants (HAPs). Under the provisions of the CAA, any state can have requirements that are more stringent than those of the national program and that are not addressed nationally. The national requirements still apply, but the state's requirements are added.

An AQCR, as defined in Section 107 of the CAA, is a federally designated area in which federal ambient air quality standards must be met. An implementation plan, describing how ambient air quality standards will be achieved and maintained, is developed for each AQCR. The Project is located within the Metropolitan Denver Intrastat AQCR (EPA, 2023b).

The EPA designates the attainment status of an area for each criteria pollutant based on whether an area meets the NAAQS. Areas that meet the NAAQS are termed "attainment areas." Areas that do not meet the NAAQS are termed "nonattainment areas" (NAAs). Areas for which insufficient data are available to determine attainment status are termed "unclassified areas;" these areas are treated as attainment areas for air permitting purposes. Areas formerly designated as nonattainment areas that have subsequently reached attainment are termed "maintenance areas."

The attainment status designations are found in 40 CFR Part 81, Subpart C. The attainment status of the region, in addition to the projected emission rates, determines the regulatory review process for each project.

Arapahoe County is designated as nonattainment for 8-hour Ozone, and maintenance for CO, and attainment for all remaining criteria pollutants.

Descriptions of the impacts and net effect that the Project would have on air quality during both construction and operation under both average and worst-case conditions.

Air quality impacts associated with construction of the Project will include emissions from fossil-fueled construction equipment. All air quality impacts will generally be temporary and localized. Large equipment and other vessels that are powered by diesel or gasoline engines are sources of combustion-related emissions including greenhouse gases (GHGs), nitrogen oxides (NO_x), CO, volatile organic compounds (VOCs), SO₂, PM₁₀, and small amounts of HAPs, such as formaldehyde.

Exhaust emissions of NO_x, CO, VOCs, SO₂, PM₁₀, GHGs, and HAPs from construction equipment and vehicle engines used during Project construction have been estimated based on the anticipated types of equipment as well as the frequency, duration, and levels of use. To calculate the exhaust emissions of NO_x, CO, VOCs, SO₂, and PM₁₀, emission factors for diesel equipment and vehicles were obtained using the EPA's Tier 3 Off-Road Standards and AP-42 Compilation of Air Pollutant Emission Factors (AP-42) (EPA, 2009). Emission factors found within Table 3.3- 2 of AP-42 were used to calculate exhaust emissions for HAPs from construction equipment and vehicle engines, while emission factors obtained from 40 CFR 98 (Tables A-1, C-1, and C-2) were used to estimate exhaust emissions of GHGs (EPA, 2023c, 2009). A summary of the potential emissions associated with construction of the Project are provided in Table 3.12-2. The detailed construction emission calculations, including assumptions used, are provided in Appendix M.

**Table 3.12-2
Construction Emission Estimates Associated with the Secret Stash Well Connect Project**

Source	NO_x (tons)	CO (tons)	SO₂ (tons)	PM₁₀ (tons)	VOC (tons)	CO₂e (tons)	Formaldehyde (tons)	Total HAP (tons)
330 Trackhoes (4)	1.164	1.009	0.002	0.058	0.116	201.593	1.5E-03	4.7E-03
D6 Dozer (2)	0.372	0.080	0.0001	0.026	0.030	27.490	2.0E-04	6.4E-04
Forklifts (1)	0.062	0.065	0.000	0.005	0.006	9.163	6.6E-05	2.1E-04
Welding Rigs (6)	0.356	0.260	0.000	0.029	0.036	32.988	2.4E-04	7.6E-04
Generators (1)	0.099	0.072	0.000	0.008	0.010	9.163	6.6E-05	2.1E-04
Light Plants (2)	0.011	0.008	0.000	0.001	0.001	1.031	7.4E-06	2.4E-05
X-ray Truck (1)	0.317	0.275	0.001	0.016	0.032	54.980	4.0E-04	1.3E-03
Commuter Vehicles (10)	2.183	1.892	0.0036	0.109	0.218	377.987	2.7E-03	8.8E-03
Diesel Pickup Trucks (10)	3.175	2.751	0.005	0.159	0.317	549.800	4.0E-03	1.3E-02
Heavy Duty Semi Truck (5)	0.794	0.688	0.0013	0.040	0.079	137.450	9.9E-04	3.2E-03
HDD Drilling Rig (1)	1.058	0.573	0.0011	0.033	0.106	114.542	8.3E-04	2.7E-03
Side by Side UTV (2)	0.139	0.147	0.0002	0.012	0.014	20.617	1.5E-04	4.8E-04
Side Boom (1)	1.116	0.240	0.0004	0.079	0.089	82.470	5.9E-04	1.9E-03
Small Skid Steers (2)	0.093	0.098	0.0001	0.008	0.009	13.745	9.9E-05	3.2E-04
Water Truck (1)	0.159	0.138	0.0003	0.008	0.016	27.490	2.0E-04	6.4E-04
Trencher - Vermeer (1)	0.198	0.172	0.0003	0.010	0.020	34.362	2.5E-04	8.0E-04
Motor Grader 12M (1)	0.20	0.043	0.0001	0.014	0.016	14.661	1.1E-04	3.4E-04
TOTALS (tons)	11.49	8.51	0.02	0.61	1.11	1709.53	0.01	0.04

^a Numbers have been rounded for presentation purposes; therefore, the total may not equal the sum of the addends.

As described above, construction will generate potential air pollutant emissions of PM₁₀, NO_x, CO, SO₂, VOC, GHG, and HAP emissions. These emissions will be localized, temporary, and of limited duration, and are not anticipated to significantly increase ambient air pollutant concentrations. As displayed in Table 3.12-4, the total Project Emissions are approximately one percent or less of allowable emissions per year for each pollutant. In addition, potential impacts associated with exhaust emissions from diesel- and gasoline-fueled construction equipment and vehicle engines will be minimized by federal design standards imposed at the time of manufacture of the vehicles and will comply with EPA mobile and non-road emission regulations (40 CFR Parts 85, 86, and 89). Emissions will also be controlled by purchasing commercial gasoline and diesel fuel products, specifications of which are controlled by federal and state air pollution control regulations applicable to fuel suppliers and distributors. Emissions from equipment will be short-term and localized at each of the Project work areas. Where practicable, the Project will implement the following procedures to mitigate exhaust emissions from construction equipment. An anti-idling policy for equipment and vehicles not in use or unmanned; use of ultra-low sulfur fuel in on-road vehicles, where available and accessible. Additionally, transportation of oil and water via pipeline, if needed, as an alternative to trucking will have fewer impacts on air quality within the county, as impacts on air quality from the Project will be limited to construction emissions.

The CAA mandates the General Conformity Rule to ensure that actions taken by federal agencies in non-attainment areas and maintenance areas do not interfere with a state's plans to meet attainment of the NAAQS (EPA, 2023c). The General Conformity provisions apply in all criteria pollutant non-attainment and maintenance areas and apply to all federal actions, which must conform to an applicable implementation plan. The General Conformity Rule divides the air conformity process into two parts, including applicability analysis and determination. The applicability analysis process (40 CFR Section 93.153) requires federal agencies to determine if proposed actions within non-attainment areas and maintenance areas will increase emissions of criteria pollutants above preset threshold levels (EPA, 2022d). The applicability thresholds vary based on the severity of the non-attainment area. *De minimis* levels are the minimum threshold for the rates of total direct and indirect emissions of a criteria pollutant by a federal action in a non-attainment area or maintenance area which require conformity determination. These thresholds are presented in Table 3.12-3.

Pollutant / Area Type	Tons/Year
Ozone (VOC or NO _x):	
<i>Serious NAAs</i>	50
<i>Severe NAAs</i>	25
<i>Extreme NAAs</i>	10
<i>Other ozone NAAs outside an OTR</i>	100
Ozone (NO _x , SO ₂ , or NO ₂):	
<i>Marginal and moderate NAAs inside an OTR</i>	100
<i>Maintenance</i>	100
Ozone (VOC):	
<i>Marginal and moderate NAAs inside an OTR</i>	50
<i>Maintenance within an OTR</i>	50
<i>Maintenance outside an OTR</i>	100
CO, SO ₂ , and NO ₂ :	

Table 3.12-3 De Minimis General Conformity Thresholds	
Pollutant / Area Type	Tons/Year
<i>All NAAs and maintenance</i>	100
PM ₁₀ :	
<i>Moderate NAAs and maintenance</i>	100
<i>Serious NAAs</i>	70
PM _{2.5} (Direct emissions, SO ₂ , NO _x , and VOC):	
<i>Moderate NAAs and maintenance</i>	100
<i>Serious NAAs</i>	70
Lead (Pb):	
<i>All NAAs</i>	25
Source: 40 CFR §93.153 (EPA, 2023d)	
VOC – volatile organic compound NO _x – nitrogen oxides NAA – non-attainment area OTR – Ozone Transport Region	

General Conformity is applicable to a new source within an O₃ maintenance area if emissions of NO_x, SO₂, NO₂, or VOCs exceed 100 tons per year (for O₃ maintenance areas outside an Ozone Transport Region). General Conformity is applicable to a new source in CO and PM₁₀ maintenance areas if emissions of each pollutant exceeds 100 tons per year. As previously discussed, the Project is in areas classified as attainment/unclassifiable (considered attainment) for all criteria pollutants, with the exception of 8-hour Ozone, PM₁₀, and CO. Arapahoe County is designated as nonattainment for 8-hour ozone and maintenance for PM₁₀ and CO. Project construction emissions are potentially subject to General Conformity; therefore, the Applicant has conducted a General Conformity applicability analysis for the Project.

The estimated construction emissions from the Project facilities were aggregated to compare against the General Conformity *de minimis* emission thresholds. As shown in Table 3.12-4 below, the Project is not anticipated to result in emissions of O₃ precursors (NO_x, SO₂, and VOC), PM₁₀, or CO during construction that would exceed General Conformity applicability thresholds or cause a new NAAQS violation or significantly contribute to a NAAQS violation.

Table 3.12-4 Comparison of Emissions for the Secret Stash Well Connect Project to General Conformity Thresholds					
Air Pollutant	NO _x (tons)	CO (tons)	SO ₂ (tons)	PM ₁₀ (tons)	VOC (tons)
Construction Emissions ^a	11.49	8.51	0.02	0.61	1.11
Total Project Emissions	11.49	8.51	0.02	0.61	1.11
General Conformity Threshold	100	100	100	100	100
<i>De Minimis</i>	Yes	Yes	Yes	Yes	Yes

3.12.2 VISUAL QUALITY

Map and description of ground cover and vegetation, forest canopies, waterfalls and streams or other natural features.

The Project is located entirely on land zoned as agricultural. Dominant vegetation within the Project area consists of herbaceous non-woody vegetation. For detailed information regarding vegetation in the Project area, refer to Section 3.12.7 - Terrestrial and Aquatic Plant Life.

Description of viewsheds, scenic vistas, unique landscapes or land formations.

The viewshed surrounding the Project is open, with flat to gently rolling hills and sparsely distributed residences and agricultural buildings. The Project will not adversely impact any federal, state, or locally designated scenic areas, such as National Wild and Scenic Rivers and scenic roads/highways. There is one riparian area, associated with Coal Creek, that is crossed by the Project, which will be completely avoided via HDD.

Map and description of buildings, structure design and materials to be used for the Project. Include elevations of proposed building and other structures.

Not Applicable. The Project does not include the construction of new buildings or structures.

Description of the impacts and net effects that the Project would have on visual quality.

Impacts on visual and/or aesthetic resources associated with the Project will only occur during construction as a result of the presence of construction equipment. Following construction, all temporarily disturbed areas will be returned to preexisting conditions. Therefore, the Project will not impact visual or aesthetic resources in the area.

3.12.3 SURFACE WATER QUALITY

Map and description of all surface waters, including applicable State water quality standards, to be affected by the Project.

According to the CCR (5 CCR 1002-31), surface waters in Colorado are classified by the following designated uses (CCR, 2021):

- Recreation
- Agriculture
- Aquatic Life
- Domestic Water Supply
- Wetlands

The Project is located within the South Platte River Basin, which is not a Colorado Division of Water Resources (CDWR) Designated Basin (CDWR, 2023a, 2023b). Based on field surveys conducted in May 2023, there are two ephemeral streams, that are either crossed or impacted by the Project. Mapping exhibits identifying the location of surface waterbodies crossed by the Project are provided in Appendix A.

Table 3.12-5 below summarizes each waterbody impacted by the Project and includes the approximate milepost, feature ID, waterbody name, state water quality classification, flow regime, approximate waterbody width, and proposed method of crossing.

Feature ID	Approximate Milepost	State Water Quality Classification	Flow Regime	Approximate Waterbody Width (feet)	Easement Crossing Length (feet)	Proposed Crossing Method
SP12001 (Unnamed Tributary)	0.8	Agriculture, Cold Water Aquatic Life, Primary Contact Recreation, Domestic Water Supply	Ephemeral	36.4	16	Bore
SP12002 (Unnamed Tributary)	1.04	Agriculture, Cold Water Aquatic Life, Primary Contact Recreation, Domestic Water Supply	Ephemeral	3.54	134	Open-cut

Further, based on field surveys conducted in May 2023, one PEM wetland and one PSS wetland were identified within the Project area. For detailed information regarding wetlands in the Project area, refer to Section 3.12.5.

Description of the immediate and long-term impact and net effects that the Project would have on the quantity and quality of surface water under both average and worst-case conditions.

Water quality will be maintained during construction through implementation of CMs described in the Applicant's Stormwater Management Plan prepared in accordance with CDPHE's Colorado Discharge Permitting System Permit and Arapahoe County's GESC Manual (provided in Appendix F). Erosion and sediment control will include temporary and permanent CMs. Temporary CMs include straw bale barriers/check dams, temporary water bars, and straw fiber rolls/wattles. There are no permanent CMs proposed for Project. One waterbody will be avoided via bore (SP12001) and other will be open-cut (SP12002). If possible, construction at the open-cut crossing of SP12002 will be limited to a few days and conducted during low-flow periods to minimize sedimentation and turbidity, stream bank disturbances, and limit the time it will take to complete in-stream construction. As a best management practice during construction, the Project team will monitor weather forecasts and daily weather conditions in the Project area. If a severe weather pattern is forecasted, or develops during construction, the Applicant can and will adjust the construction schedule to minimize potential impacts to the entire project area, with particular attention to sensitive resources such as surface streams and wetlands. To further minimize sedimentation during construction, CMs will border spoil piles near waterbodies to prevent the spoil from flowing into the waterbody. Once the pipelines have been placed into the trench, excavated material will be immediately replaced and the stream banks and stream bed will be restored to pre-construction contours to the maximum extent practicable. The duration of in-stream construction activities will be limited to 24 to 48 hours to minimize impacts. The stream banks will be revegetated with a seed mix approved by the State Land Board. All of the CM's are meant to prevent sediment runoff from stormwater. With implementation of these measures, impacts to surface water quantity and quality will be minor and short-term. Project impacts on waterbodies will be minor, temporary and short-term, and are not anticipated to impact the meandering characteristics and limits of the streambeds. All applicable State Dewatering Permits will be obtained, if necessary for trench dewatering.

3.12.4 GROUNDWATER QUALITY AND QUANTITY

Map and description of all groundwater including any and all aquifers that are affected by the proposed Project. At a minimum, the description should include:

- Seasonal water levels in each subdivision of the aquifer affected by the Project;
 - No impact from Project.
- Artesian pressure in aquifers;
 - No impact from Project.
- Groundwater flow directions and levels;
 - No impact from Project.
- Existing aquifer recharge rates and areas and the methodology used to calculate recharge to the aquifer from any recharge sources;
 - No impact from Project.
- For aquifers to be used as part of a water storage system, methodology and results of tests used to determine the ability of aquifer to impound groundwater and aquifer storage capacity;
 - There is no water storage. No impact from Project
- Seepage losses expected at any subsurface dams and at stream-aquifer interfaces and methodology used to calculate seepage losses in the affected streams, including description and location of measuring devices;
 - No impact from Project.
- Existing groundwater quality and classification. (See below)
- Location of all water wells and their uses. (See below)

The Project is underlain by the Denver Basin aquifer system. The Denver Basin aquifer system underlies approximately 7,000 square miles from Greeley south to Colorado Springs and from the Front Range east to near Limon. This aquifer system consists of four aquifers, the Dawson, Denver, Arapahoe, and Laramie-Fox Hills aquifers, that are present in five geologic formations (USGS, 2023b). The Project is not underlain by any Sole Source Aquifers (EPA, 2023e).

Recharge of the Denver Basin aquifer system occurs through precipitation and water moving between confining units between the aquifers. Locally, precipitation moves from highland recharge areas through sandstone beds, and discharges into nearby valleys. On a regional scale, precipitation moves from highland recharge areas into deeper part of the aquifer where it can travel great distances before discharging. Withdrawals from wells and inter-aquifer movement of water from bedrock to overlying alluvial aquifers are the primary means of discharge from the Denver Basin aquifer system (USGS, 2023b).

Water in the Denver Basin aquifer system has a low dissolved solids concentration in most areas, with concentrations ranging from less than 100 milligrams per liter to 2,000 milligrams per liter, and meets EPA established drinking water thresholds (USGS, 2023b)

Based on a review of the Colorado Department of Natural Resources (CDNR) Decision Support Systems Mapper, there are seven water wells located within 400 feet of the Project (CDNR, 2023).

Table 3.12-6 below summarizes the wells located within 400 feet of the Project and includes the approximate milepost, well permit number, well applicant, distance and direction from the workspace, distance from the pipeline centerline, status, and use.

Approximate Milepost	Well Permit Number	Well Applicant	Distance and Direction from Project Workspace (feet) ^a	Distance from Easement Centerline (feet)	Status	Use	Static Water Level (feet)
3.21	82937-F	Blue Eyes LLC (Hughes, Kurt)	95.7 S	170 S	Well Constructed	Commercial, Irrigation	525
3.21	231052-	Carlson, Dan	237.4 S	171 S	Permit Expired – Not Drilled	Domestic	IU
3.95	231053-	Carlson, Dan	233.6 S	155 S	Permit Expired– Not Drilled	Domestic	IU
3.54	231054-	Kenny, Scott	235.4 S	109 S	Permit Expired– Not Drilled	Domestic	IU
4.84	196715-	Wasson Brian L & Dixie A	282.8 S	133 S	Well Constructed	Domestic, Stock	567
1.23	93556-	Scott, Linden	340.2 S	343 S	Permit Canceled	Domestic	218
1.00	85535-F	Linden H Scott Sr Family Trust (Sprecher, Alicia)	336.9 S	255 S	Well Constructed	Domestic	IU
N/A – Not applicable IU – information unavailable ^a Distance from the Project to the water well is measured from the center point of the well to the edge of the nearest temporary workspace or ATWS. Source: CDNR, 2023							

Description of the impacts and net effects of the Project on groundwater.

The pipeline will be buried a minimum of 5 feet below the ground surface (10 feet beneath roadways or “mechanically protected” if such burial depth is not feasible). As the pipeline trench is excavated, there is potential for minor disturbance of the water table along the construction corridor; however, these impacts would be highly localized and temporary. If shallow groundwater is encountered and personnel need to access the trench, the trench may need to be dewatered. If trench dewatering is necessary, the water will be pumped and discharged to a well vegetated upland area, in accordance with the Applicant’s construction stormwater discharge permit, Permit No. COR400000. Appropriate CMs will be utilized to mitigate potential for erosion.

If necessary, the Applicant’s trained contractors will install trench breakers (constructed of either sand bags or polyurethane foam) in the trench to ensure that seasonal high water tables do not lead to the diversion of flow down the pipeline trench.

Groundwater quality could be impacted by spills of fuel during construction. The Applicant will follow measures described in their SPRP Plan to reduce or eliminate potential impacts from spills during construction and operation of the Project.

The Applicant will coordinate with private landowners and utilize the CDWR data base to ensure that existing water wells are avoided and that groundwater quality is not affected by construction or operation of the Project. If, during construction, a well has been determined to have been impaired, the Applicant will compensate the landowner for the repair of the well, installation of a new well, or otherwise arrange for a suitable water supply.

While not anticipated, in the event that an unknown well is identified within the Project workspace, the Applicant will contact the well owner and/or the CDWR as applicable, to determine the type of well and its status (active or inactive). If the well is determined to be an active water well, the Applicant would implement measures to ensure the well is not impacted during construction.

3.12.5 WETLANDS AND RIPARIAN AREAS

Map and description of all floodplains, wetlands, and riparian areas to be affected by the Project, including a description of each type of wetlands, species composition, and biomass.

A wetland and waterbody delineation was conducted in accordance with the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Great Plains Region (Version 2.0) and the routine determination guidelines provided in the USACE Wetland Delineation Manual (Technical Report Y-87-1) (USACE, 1987). According to the Manual, an area is a wetland if positive indicators for the three mandatory wetland criteria are identified in a given area, with special exceptions. These criteria include the presence of hydrophytic vegetation, wetland hydrology, and hydric soils. The results of the wetland delineations conducted for the Project are documented in the Wetland Delineation Report provided in Appendix N.

Based on field surveys conducted by Perennial in May 2023 and review of desktop resources, including National Wetland Inventory maps, one PEM wetland and one PSS wetland, Coal Creek, were identified within the Project area. Dominant vegetation associated with the PEM wetland consists of Virginia wild rye (*Elymus virginicus*), round-fruited rush (*Juncus Compressus*), curlytop knotweed (*Persicaria lapathifolia*), common cottonwood (*Populus deltoides*), wild black currant (*Ribes americanum*), sandbar willow (*Salix exigua*), common cocklebur (*Xanthium strumarium*). Dominant vegetation associated with the PSS wetland consist of sandbar willow, seashore saltgrass (*Distichlis spicata*), and needle-and-thread grass (*Hesperostipa comata*). WP12002_PEM will be crossed via open-cut. Impacts from the open-cut crossing of WP12002_PEM are discussed further below. WP12001_PSS, associated with the riparian area at Coal Creek, will be crossed via HDD and therefore, will not be impacted as a result of the Project. Mapping exhibits identifying the location of wetlands crossed by the Project are provided in Appendix A.

Table 3.12-7 below summarizes each wetland impacted by the Project and includes the approximate milepost, feature ID, wetland type, proposed method of crossing, and acreage.

Feature ID	Approximate Milepost	Wetland Type	Proposed Crossing Method	Acreage
WP12001_PSS	1.7	PSS	HDD	0.03
WP12002_PEM	2.9	PEM	Open-cut	0.09
PEM – Palustrine emergent PSS – Palustrine scrub shrub				

According to the FEMA National Flood Hazard Layer Viewer (2023), approximately 0.10 miles of the Project is located within a 100-year floodplain associated with Coal Creek (Zone AE); however, the floodplain will be crossed via HDD and all trenching will occur outside the floodplain. Therefore, no impacts on the 100-year floodplain are anticipated as a result of the Project.

Additionally, the Projects crosses four drainages that meet Arapahoe County’s definition of a floodplain. The crossing method and installations depth beneath each of these drainages are provided in Table 3.12-8 below.

Drainage ID	Approximate Milepost	Proposed Crossing Method	Installation Depth (feet)	Crossing Length (feet)
Drainage Basin 1	1.14	Open-cut	6	40
Drainage Basin 2	1.70	Open-cut	6	99
Coal Creek	2.48	HDD	30	260
Drainage Basin 4	4.65	Open-cut	6	79
Drainage Basin 5	4.94	Open-cut	6	114

The Applicant will obtain a Floodplain Development Permit, requiring an engineer’s Certification of No Impact, for Project activities located within these floodplains prior to construction. A copy of the Floodplain Delineation Study and Certification of No Impact are provided as Appendix O and Appendix P, respectively.

ATWS located within county floodplains will be limited in use, per the Arapahoe County Floodplain Management Regulations. No spoil will be placed within the floodplain, all fuel will be stored at least 100 feet from any floodplain, refueling will not occur within 100 feet of a floodplain, and all boring equipment, stationary equipment, and any equipment carrying more than 115 gallons of

fuel will be equipped with spill kits. Further, the Applicant will implement its SPRP Plan during construction to minimize the potential for releases of hazardous materials (Appendix H).

Description of the source of water interacting with the surface systems to create each wetland (i.e., side-slope runoff, over-bank flooding, groundwater seepage, etc.).

Source water for the one PEM wetland identified within the Project area consists of overland flow from precipitation and input from a nearby intermittent stream. Source water input for the PSS wetland identified within the Project is from Coal Creek.

Description of the impacts and net effect that the Project would have on the floodplains, wetlands, and riparian areas.

Two wetlands will be crossed by the Project, one will be avoided via HDD (WP12001_PSS) and the other via open-cut (WP12002_PEM). Regarding the minor (62 foot) open-cut crossing of WP12002_PEM, prior to any construction, erosion controls will be placed as required to minimize impacts on adjacent wetlands, any impacts associated with the crossing will be short-term and minor, and the feature will be restored to pre-construction conditions following completion of the Project, as described further below. Erosion and sedimentation barriers will be properly installed and maintained throughout construction to prevent disturbed soils and sediment from migrating into adjacent undisturbed wetland areas. Where practicable, topsoil will be segregated along the full length of the trench, up to 12 inches in depth within wetlands where hydrologic conditions permit this practice. Segregated topsoil will be placed in the trench following subsoil backfilling. The primary means the Applicant will use to minimize impacts to WP12002_PEM include: limiting the amount of equipment and use of ATWS in and adjacent to the wetland; using equipment stabilization such as timber mats within the wetland; restoring wetland contours; and conducting follow-up monitoring to ensure the wetland becomes re-established successfully. Additionally, the Applicant will adhere to all applicable federal, state, and local regulations and permit requirements regarding wetland impacts. Therefore, no permanent impacts to wetlands are anticipated as a result of the Project. One riparian area, associated with Coal Creek and WP12001_PSS, will be crossed by the Project; however, this area will be crossed via HDD and completely avoided. The Applicant will obtain a Floodplain Development Permit, requiring an engineer's Certification of No Impact (Appendix P), for Project activities located within county floodplains prior to construction. Additionally, ATWS located within county floodplains will be limited in use. Therefore, there will be no impacts or net effects to floodplains as a result of the Project.

3.12.6 TERRESTRIAL AND AQUATIC ANIMALS AND HABITAT

Map and description of critical wildlife habitat and livestock range to be affected by the Project including migration routes, calving areas, summer and winter range, and spawning beds.

0.15 mile of the Project is located within a mule deer winter concentration area, which CPW has designated a HPH with an associated restriction on all human activities within this area from December 1 – April 30. 3.50 miles of the Project are located within a pronghorn winter concentration area, which CPW has designated a HPH with an associated restriction on all human activities within this area from January 1 – April 30. Pending receipt of all necessary permits and authorizations, The Applicant intends to begin construction within the for the portions of the Project within HPH in Q3 2024 in order to complete construction outside of the seasonal restrictions associated with the HPHs. Prior to submittal of this application in December 2023, the Applicant consulted with CPW regarding impacts to sensitive wildlife species and HPH, and

the need for a site visit to the Project area with both The Applicant and CPW. The Applicant has since received correspondence from CPW stating that the Project will have minimal impacts on wildlife, and that further consultation or a site visit are not necessary. Copies of correspondence to date are provided in Appendix K. The Applicant will provide updated correspondence records and update this document with CPW's recommendations following the site visit. Mapping exhibits identifying HPH crossed by the Project are presented in Appendix A.

Description of the impacts and net effect that the Project would have on terrestrial and aquatic animals, habitat and food chain.

Threatened and Endangered Species

A total of eight federally listed and one state listed threatened or endangered species, the gray wolf (*Canis lupus*), Preble's meadow jumping mouse (*Zapus hudsonius preblei*), burrowing owl (*Athene cunicularia*), piping plover (*Charadrius melodus*), whooping crane (*Grus americana*), pallid sturgeon (*Scaphirhynchus albus*), Ute ladies'-tresses (*Spiranthes diluvialis*), and Western prairie fringed orchid (*Platanthera praeclara*), were identified as having the potential to occur in the Project area (U.S. Fish and Wildlife Service, 2023; CPW, 2023). The gray wolf only needs to be considered if the Project includes a predator management program. Predator management programs are a wildlife management policy that can be utilized to control predators that may threaten declining species or livestock. The Project does not include a predator management program; therefore, this species will not be impacted and is not discussed further. The piping plover and pallid sturgeon only need to be considered if the Project includes water-related activities and/or use in the North Platte, South Platte, and Laramie River Basins which may affect listed species in Nebraska. The Project does not include water-related activities and/or water use; therefore, these species will not be impacted and are not discussed further. The common name, scientific name, federal status, state status, habitat description, habitat assessment, and determination of effect for the remaining listed species with potential to occur in the Project area are summarized in Table 3.12-8 below. As stated above, The Applicant has consulted with CPW regarding impacts to sensitive species, and CPW has concurred that the Project will have a minimal impact on wildlife and that no further consultation is required. Copies of this correspondence are provided in Appendix K.

Species	Federal Status	State Status	Preferred Habitat	Project Impact Assessment	Determination of Effect
Whooping Crane (<i>Grus americana</i>)	E	E	Whooping cranes utilize shallow, freshwater ponds, tidal flat, herbaceous wetlands, marshes and wet prairies as they migrate from their breeding grounds in Wood Buffalo National Park in Alberta, Canada to their wintering grounds in Aransas National Wildlife refuge on the Texas coast. Whooping cranes primarily rely on wetland mosaics, as well as riverine habitats, shallow, seasonally and semi-permanently flooded	There is no suitable stopover habitat within the Project area. Further, whooping cranes have not been documented in Colorado since 2010.	<i>No effect</i>

Species	Federal Status	State Status	Preferred Habitat	Project Impact Assessment	Determination of Effect
			palustrine wetlands for roosting and feeding.		
Preble's Meadow Jumping Mouse (<i>Zapus hudsonius preblei</i>)	T	T	In summer, occurs in riparian areas with un-grazed, dense shrub and grass cover, and adjacent wet meadows. From autumn through spring, hibernates in underground burrows at the base of vegetation.	No suitable habitat exists in the Project area.	<i>No effect</i>
Burrowing Owl (<i>Athene cunicularia</i>)	-	T	Found in dry, open habitats with short grasses and few trees. Nest in underground burrows created by prairie dogs.	Suitable habitat is present in the Project area. Mitigation measures will be implemented to minimize impacts. Mitigation measures are discussed further in the text following this table.	<i>Not likely to adversely affect. Any effects will be short-term and minimal.</i>
Ute Ladies'-tresses (<i>Spiranthes diluvialis</i>)	T	-	Occurs in wet meadows and riparian edges along perennial streams	No suitable habitat exists in the Project area.	<i>No effect</i>
Western Prairie Fringed Orchid (<i>Platanthera praeclara</i>)	T	-	Occurs in wet sedge meadows and tallgrass prairies.	No suitable habitat exists in the Project area.	<i>No effect</i>

As presented in Table 3.12-8, there is potentially suitable habitat for burrowing owl in the Project area, which cannot be avoided. Additionally, occurrence data obtained from the State Land Board indicates that burrowing owls are present in the Project vicinity. The Applicant consulted with CPW regarding burrowing owls and potential measures that can be implemented to minimize impacts during construction. Burrowing owls' nest from March 15 to August 31. CPW recommends no encroachment within 660 feet of a nest site during this time. The Applicant currently plans to begin construction in Q3 2024. In the event that Project construction commences before August 31, the Applicant will conduct surveys for burrowing owls prior to the mobilization of construction equipment, in accordance with CPW's Recommended Survey Protocols and Actions to Protect Nesting Burrowing Owls. If burrowing owls are observed in the Project area, the Applicant will notify CPW to identify the appropriate measure to take to protect the species during construction (e.g., visual barriers). Therefore, the Project is not likely to adversely affect burrowing owls.

Other Special Status Species

Based on a review of data obtained from CPW, there is the potential for nesting raptors (in addition to burrowing owls, discussed above) to occur in the Project area. CPW has established recommended seasonal and spatial buffers to minimize impacts on nesting raptors. Most raptors require trees or elevated structures (e.g., power poles, buildings, etc.) for nesting. The nesting season for these species vary, as does CPW's recommended buffer around active nests to avoid impacts. Generally, nesting activities begin in mid-February and extend through spring and into the summer. Buffers established by CPW to minimize impacts on nesting raptors range from 0.25 mile to 0.5 mile, depending on the species. While the project does cross a single riparian area, Coal Creek, this area will be completely avoided by HDD. Additionally, no raptor nests or raptors were observed during field surveys conducted in May 2023. The Applicant intends to begin construction in Q3 of 2024. If the start of construction occurs during the nesting season, the Applicant will conduct surveys prior to the start of construction to identify active nests within 0.50 mile of the Project workspace. In the event an active nest is discovered at the time of construction, the Applicant will notify CPW, and identify appropriate measures to implement to minimize impacts.

3.12.7 TERRESTRIAL AND AQUATIC PLANT LIFE

Map and description of terrestrial and aquatic plant life including the type and density, and threatened or endangered plant species and habitat.

Based on field surveys conducted by Perennial in May 2023, the dominant vegetation and within uplands of the Project Dominant vegetation associated with herbaceous uplands consists of crested wheatgrass (*Agropyron cristatum*), western ragweed (*Ambrosia psilostachya*), rough pricklypoppy (*Argemone hispida*), tarragon (*Artemisa dracunculoides*), white sagebrush (*Artemisia ludoviciana*), blue grama (*Bouteloua gracilis*), smooth broome (*Bromus inermis*), downy brome (*Bromus tectorum*), wavyleaf thistle (*Cirsium undulatum*), field bindweed (*Convolvulus arvensis*), curlycup gumweed (*Grindelia squarrosa*), rockyscree false goldenaster (*Heterotheca fulcrata*), perennial ryegrass (*Lolium perenne*), plains pricklypear (*Opuntia polyacantha*), common cottonwood (*Populus deltoides*), slimflower scurfpea (*Psoralea tenuiflora*), prairie coneflower (*Ratibida columnifera*), camphor daisy (*Rayjacksonia phyllocephala*), wildrose (*Rosa woodsia*), little bluestem (*Schizachyrium scoparium*), tall dropseed (*Sporobolus compositus var. compositus*), common wheat (*Triticum x gestivum*), common mullein (*Verbascum Thapsus*), and soapweed yucca (*Yucca glauca*). The estimated density of these dominant species ranges from 5 to 45 percent along the Project route. Project mapping is provided as Appendix A.

Following construction, disturbed areas will be restored to pre-construction contours as closely as practicable. Construction debris and organic refuse unsuitable for distribution over the ROW will be disposed of at appropriate facilities in compliance with applicable regulations. Permanent erosion and sediment control measures will be installed as appropriate, and the Project area will be revegetated using an approved seed mix.

Description of the impact and net effect that the Project would have on terrestrial and aquatic plant life.

The majority of impacts on vegetation and wildlife within the Project vicinity will be temporary and short term, and are not expected to be adverse. Construction of the Project will require a construction ROW width of 75 feet with ATWS needed in certain areas where specialized construction techniques will be implemented (e.g., conventional bore). Following construction, a

50-foot-wide permanent easement will be retained and periodically mowed, as needed to prevent the establishment of woody vegetation and allow visual inspection of the ROW.

Installation and construction of the Project will require clearing and grading. Clearing involves the removal of vegetative cover during construction activities. Areas disturbed by construction will be restored to pre-construction contours following the completion of construction activities and allowed to revert to previous conditions. As previously discussed, no trees will be cleared for the Project. CMs will be implemented during construction and restoration activities to stabilize the construction ROW until vegetation is re-established within the Project workspaces. All temporarily disturbed areas will be reseeded using an approved seed mix. Therefore, all impacts on vegetation will be short-term and temporary.

3.12.8 SOILS, GEOLOGIC CONDITIONS AND NATURAL HAZARDS

Map and description of soil, geologic conditions, and natural hazards including but not limited to soil types, drainage area, slopes, avalanche area, debris fans, mud flows, rock slide areas, faults and fissures, seismic history, and wildlife hazard areas.

The Project is located within the Colorado Piedmont Section of the Great Plains Physiographic Province (USGS, 2023c). The Great Plains Physiographic Province consists of horizontal beds of sandstones, shales, limestones, conglomerates, and lignite (National Park Service, 2018). The Colorado Piedmont Section is distinguished by having been stripped of the Miocene fluvial rocks, and consists of Upper Cretaceous deposits of shale, claystone, and siltstone (Madole, 1991). The Project crosses two geologic formations: Upper Part of Dawson Arkose, and Modern alluvium Formation or Group. The Upper Part of Dawson Arkose dates back to the Tertiary epoch and has primary lithology that consists of shale, conglomerate, and arkose (USGS, 2023d). Modern alluvium was formed in the quaternary and its major constituents are unconsolidated alluvial with no minor constituents (Green, 1992).

Detailed soil map units affected by the Project were identified and assessed using the Natural Resources Conservation Service (NRCS) Web Soil Survey (WSS) (2023a). Further information regarding these soils was obtained from the U.S. Department of Agriculture Official Soil Series Descriptions (NRCS, 2023b).

The WSS is a comprehensive digital version of the original soil surveys developed by the NRCS for use with geographic information systems. It provides the most detailed level of soil information for natural resource planning and management. The WSS is a mapping tool linked to an attribute database that gives the location of the component soils and their properties for each soil map unit (NRCS, 2023a). WSS attribute data apply to the whole soil (e.g., listed hydric, prime farmland soils, or slope class), as well as to the layer data for soil horizons (e.g., texture or permeability). The soil attribute data can be used in conjunction with spatial data to describe the soils in a particular area.

The Project crosses 12 soil map units in Arapahoe County, all of which will be restored to pre-existing conditions following the completion of construction. The discussion below provides general information about the nature and properties of the soil series identified in the Project area (NRCS, 2023a). Table 3.12-10 identifies the soil map units within the Project area and summarizes the acres impacted as well as the associated characteristics such as prime farmland, hydric soils, compaction potential, erosion potential, steep slopes, shallow bedrock, and revegetation potential. Maps depicting the limits of the soil map units that occur within the Project area are provided in Appendix A.

Bijou Series

The Bijou series consists of very deep, well to somewhat excessively drained soils formed in thick noncalcareous coarse to moderately coarse textured materials derived from granite or arkose deposits. Bijou soils are on terraces, alluvial fans, valley side slopes, and sandy uplands. Slopes range from 0 to 12 percent (NRCS, 2023b).

Bresser Series

The Bresser series formed in thick eolian material and noncalcerous coarse textured alluvial materials derived from arkosic deposits or granite. Bresser soils are very deep, well drained soils that are found on terraces and hillsides with slopes of 0 to 25 percent. Soils in the Bresser series are used as grazing and cropland. Native vegetation consists of blue grama, needle and thread grass, bluestems, and sand reed grass (NRCS, 2023b)

Buick Series

The Buick series consists of well drained soils that formed in poly lithologic parent materials consisting of a deposit of eolian sediments over relatively silty alluvial materials. Buick soils are found on gently to moderately sloping uplands (NRCS, 2023b).

Colby Series

The Colby series consists of very deep, well drained and somewhat excessively drained, moderately permeable soils that formed in loess. Colby soils are on plains and hillslopes on tableland with slopes range from 0 to 60 percent (NRCS, 2023b).

Deertrail Series

The Deertrail series consists of deep, well drained, slowly permeable soils that formed in eolian or alluvial material. These nearly level to gently sloping soils are on upland tablelands or intermediate areas between uplands and lower run-on areas with slopes ranging from 0 to about 6 percent (NRCS, 2023b).

Fondis Series

The Fondis series formed in thin eolian materials overlying coarser textured outwash materials derived from arkose deposits. Fondis soils are deep, well drained soils that are found on uplands with slopes ranging from 0 to 6 percent. Soils in the Fondis series are used as cropland or native pastureland. Native vegetation consists of short and tall grasses and shrubs (NRCS, 2023b).

Nunn Series

Nunn soils are very well drained, very deep soils with slopes that range from 0 to 25 percent. The Nunn series formed in loess and mixed alluvium and is found on terraces and drainageways. Soils in the Nunn series are primarily irrigated and used for alfalfa, sugar beets, potatoes, small grains, and corn. Native vegetation consists of blue grama, buffalograss, needlegrass, and wheatgrass (NRCS, 2023b).

Renohill Series

The Renohill series are well drained soils that are moderately deep to soft bedrock with slopes ranging from 0 to 30 percent. These soils formed in alluvium, colluvium, and residuum. These soils are used as rangeland and wildlife habitat. Native vegetation consists of western wheatgrass, green needlegrass, blue grama and scattered big sagebrush. (NRCS, 2023b).

Sandy Alluvial Land

Sandy alluvial land occurs as narrow areas along the major drainageways next to stream channels. Sandy alluvial land is droughty and unstable, subject to yearly flooding, deposition of sand, and soil blowing (NRCS, 2023b).

Stapleton Series

The Stapleton Series consists of well drained, rapidly permeable soils that formed in alluvial materials derived from arkose beds of the Dawson and Araphoe formations. Stapleton soils are found of gently to moderately sloping alluvial fans and valley side slopes and have slopes ranging from 1 to 30 percent (NRCS, 2023b).

Truckton Series

Soils in the Truckton series are very deep, well drained soils, with slopes ranging from 0 to 30 percent. Truckton soils formed in locally transported material derived from arkose beds and are found on terraces, valley side slopes, hills, and ridges. Soils in the Truckton series are primarily used for native pastureland. Native vegetation consists of short grass with some associated tall grass and annual weeds (NRCS, 2023b).

Weld Series

The Weld series consists of very deep, well drained soils that formed in thick calcareous loess, or from silty uniform alluvium or outwash. Weld soils are on hills, uplands, or smooth plains and interfluves and have slopes of 0 to 8 percent (NRCS, 2023b).

Table 3.12-10
Soil Characteristics for Each Soil Map Unit within the Project Area

Map Unit Name	Map Unit Symbol ^a	Construction Impact Acreage ^b	Prime Farmland ^a	Hydric Soils ^a	Soil Rutting Hazard ^a	Compaction Potential	Water Erosion Potential (K Factor) ^c	Wind Erosion Potential ^d	Steep Slopes ^{a, e}	Shallow Bedrock ^{a, f}	Re-vegetation Potential
Bijou sandy loam, 0 to 3 percent slopes	BIB	0.96	Prime farmland if irrigated	No	Moderate	Moderate	Low	Moderate	No	No	Moderate
Bresser-Stapleton sandy loams, 9 to 20 percent slopes	BuE	21.75	No	No	Moderate	Moderate	Low	Moderate	Yes	No	Moderate
Bresser-Truckton sandy loams, 5 to 20 percent slopes	BvE	4.44	No	No	Moderate	Moderate	Low	Moderate	Yes	No	Moderate
Buick loam, 5 to 9 percent slopes	BxD	2.84	No	No	High	Moderate	High	Low	No	No	Moderate
Fondis silt loam, 1 to 3 percent slopes	FdB	6.52	Prime farmland if irrigated	No	High	Moderate	Moderate	Low	No	No	Moderate
Fondis silt loam, 3 to 5 percent slopes	FdC	2.48	Prime farmland if irrigated	No	High	Moderate	Moderate	Low	No	No	Moderate
Fondis-Colby silt loams, 3 to 5 percent slopes	FoC	0.47	Prime farmland if irrigated	No	High	Moderate	Moderate	Low	No	No	Moderate
Nunn loam, 1 to 3 percent slope	NIB	1.94	Prime farmland if irrigated	No	High	Moderate	Moderate	Low	No	No	Moderate

**Table 3.12-10
Soil Characteristics for Each Soil Map Unit within the Project Area**

Map Unit Name	Map Unit Symbol ^a	Construction Impact Acreage ^b	Prime Farmland ^a	Hydric Soils ^a	Soil Rutting Hazard ^a	Compaction Potential	Water Erosion Potential (K Factor) ^c	Wind Erosion Potential ^d	Steep Slopes ^{a, e}	Shallow Bedrock ^{a, f}	Re-vegetation Potential
Reno Hill-Buick loam, 3 to 9 percent slopes	RhD	<0.01	No	No	High	Moderate	Moderate	Low	No	No	Moderate
Sandy alluvial land	Su	2.79	No	No	Moderate	Moderate	Low	High	No	No	Moderate
Stapleton sandy loam, 9 to 30 percent slopes	SwE	4.56	No	No	Moderate	Moderate	Moderate	Moderate	Yes	Yes	Moderate
Weld-Deertrail silt loams, 0 to 3 percent slopes	WrB	0.51	No	No	High	Moderate	Moderate	Low	No	No	Moderate

^a As designated by the NRCS.

^b Consists of total land affected by Project, including temporary and new permanent impacts.

^c The K Factor is a measure of the susceptibility of soils to water erosion. K Factor values range from 0.02 to 0.69 with soils of 0.69 having the highest susceptibility to water erosion. Soils with a K factor value of 0.02 to 0.24 are considered to have “Low” susceptibility to water erosion; K Factor values of 0.25 to 0.47 are considered to have “Moderate” susceptibility to water erosion; K Factors of 0.48 to 0.69 a “High” susceptibility to water erosion.

^d Wind Erodibility Potential – Based on wind erodibility group classification: High (1.0-2.0), Moderate (3.0-4.0), Low (≥ 5.0)

^e Steep Slopes – Represents soils with slopes greater than 8 percent.

^f Shallow bedrock – Represents soils with unconsolidated rock 60 inches or less from the surface.

Source: NRCS, 2023a

Description of the risks to the Project from natural hazards.

The Project is not located over karst formations (USGS, 2004). Based on historical seismic activity in the area, the USGS estimates that the peak ground acceleration with a 10 percent probability of exceedance in 50 years would be 2 to 3 percent gravity (USGS, 2015). Peak ground accelerations between 0 and 4 percent gravity are associated with the lightest ground motions with no potential for damage (United Nations Office for the Coordination of Humanitarian Affairs, 2021). The nearest known fault, the Rampart Range, is located approximately 28 miles southwest of the Project (USGS, 2023a). Therefore, it is not anticipated that the Project will be impacted by seismic activity.

Landslides occur when unconsolidated soils and sediments located on steep slopes become saturated, usually from a flooding event. While the soils presented in Table 3.12-9 have the potential to occur on steep slopes, there are no steep slopes crossed by the Project. Additionally, according to the USGS Landslide Overview Map of the Conterminous United States, the Project area is located in an area with low landslide incidence (USGS, 1982). Therefore, the Project is not anticipated to be impacted by landslides.

As discussed in Section 3.12.5, the approximately 0.10 mile of the Project is located within a 100-year floodplain (Zone AE) (FEMA, 2023) and the Project crosses four tributaries that meet the Arapahoe County definition of a floodplain (tributaries draining greater than 130 acres). The FEMA-defined 100-year floodplain will be crossed via HDD and all trenching will occur outside the floodplain. Additionally, the Applicant will obtain a Floodplain Development Permit for Project activities located within the county floodplains prior to construction and ATWS located within county floodplains will be limited in use. The entirety of the Project workspace, including areas located within floodplains, will be returned to pre-existing conditions following completion of construction. Therefore, the Project is not expected to be impacted by flash flooding. A copy of the Certification of No Impact is provided in Appendix P.

Description of the impact and net effect of the Project on soil and geologic conditions in the area and their effect on streambed meander limits and aquifer recharge areas.

No significant impact to soils, geologic conditions, floodplains or natural hazards is anticipated from the Project.

3.13 NUISANCES, DESCRIPTIONS AND MAPS SHOWING THE RANGE OF NOISE, GLARE, DUST, FUMES, VIBRATION, AND ODOR LEVELS CAUSED BY THE PROJECT, ALONG WITH AN INDICATION OF THEIR SIGNIFICANCE.

The Project will cause limited nuisances, such as increased traffic, dust, and noise, during construction. No significant sources of noise, dust, glare, fumes, vibration, or odors are anticipated to be caused by the Project. During construction, dust will be controlled by watering roads and other disturbed areas. Although certain heavy equipment is required, noise and fumes will be minimized to the extent possible. All construction, including conventional bore and HDD activities, will occur during daytime hours. There is a rural low-density residential development located in the vicinity of the Project, with the nearest residence located 279 feet south of the Project workspace at MP 1.7. The nearest residence to the HDD crossing of County Line Road is located approximately 3,076 feet southeast of MP 5.04. To minimize the impacts of construction noise to nearby residences, the Applicant will limit HDD activities to daytime hours, beginning at

7 am. The State Land Board and abutting landowners will be notified prior to the commencement of Project activities. Residents of the Elkhorn Ranch Owners Association, located within 1 mile of the Project from MP 1.64 – 3.18 in Elbert County, will be notified via mail prior to construction of the Project.

The Project's construction emissions will be localized, temporary, and of limited duration, and are not anticipated to significantly increase ambient air pollutant concentrations. Further, potential impacts associated with exhaust emissions from diesel- and gasoline-fueled construction equipment and vehicle engines will be minimized by federal design standards imposed at the time of manufacture of the vehicles and will comply with EPA mobile and non-road emission regulations (40 CFR Parts 85, 86, and 89). Emissions will also be controlled by purchasing commercial gasoline and diesel fuel products, specifications of which are controlled by federal and state air pollution control regulations applicable to fuel suppliers and distributors.

Construction activities in proximity to residences will be completed as quickly and safely as practicable to minimize disturbances to residents, and the Project will not impact access to the residences during construction. Temporary safety fences will be erected along the construction ROW in areas where construction activities will occur within proximity to residences. Following the completion of construction activities, all debris will be removed, and residential areas will be restored to pre-construction conditions. The Applicant will coordinate with the State Land Board to meet any special requests concerning restoration. The Applicant has secured an easement ("Right of Way Contract No. 116219") from the State Land Board, the sole property owner crossed by the Project. The agreement provides for a permanent 50-foot pipeline easement and 25-foot temporary use areas for construction operation and construction of the Project, respectively. ATWS has been identified and secured to facilitate specialized construction techniques (e.g., HDD). Documentation of the easement agreement with the State Land Board is provided in Appendix D. Due to the short-term nature of Project activities and the proposed mitigation measures discussed above, any effects of these nuisances will be minimal. The Applicant will take aerial imagery of the entire route utilizing a drone to document pre-construction conditions.

3.14 AREAS OF PALEONTOLOGICAL, HISTORIC OR ARCHAEOLOGICAL

3.14.1 MAP AND DESCRIPTION OF ALL SITES OF PALEONTOLOGICAL, HISTORIC OR ARCHAEOLOGICAL INTEREST.

Cultural resource surveys conducted in May 2023 resulted in the documentation of 11 cultural resources, including six newly recorded sites and five isolated finds. These sites consist of lithic scatters and five are not recommended eligible for listing under the NHPA. One potentially eligible site was documented within the Project workspace; however, this site will be avoided via HDD and will not be impacted by the Project. A copy of the Class III Cultural Resources Report and associated mapping depicting the locations of the cultural resources are included in Appendix G.

3.14.2 DESCRIPTION OF THE IMPACTS AND NET EFFECT OF THE PROJECT ON SITES OF PALEONTOLOGICAL, HISTORIC OR ARCHAEOLOGICAL INTEREST.

No areas of paleontological, historic, or archaeological importance will be impacted by the Project. One potentially eligible site was documented within the Project workspace; however, this site will be avoided via HDD and will not be impacted by the Project. A copy of concurrence with the findings of the Class III Cultural Resources Report from the Colorado Office of Archaeology and Historic Preservation is provided in Appendix K. The Applicant will implement their Plan for the

Unanticipated Discovery of Historic Properties and UDP in the event that historic properties and/or human remains are encountered during construction. A copy of the UDP is provided in Appendix G.

3.15 HAZARDOUS MATERIALS DESCRIPTION

3.15.1 DESCRIPTION OF ALL HAZARDOUS, TOXIN, AND EXPLOSIVE SUBSTANCES TO BE USED, STORED, TRANSPORTED, DISTURBED OR PRODUCED IN CONNECTION WITH THE PROJECT, INCLUDING THE TYPE AND AMOUNT OF SUCH SUBSTANCE, THEIR LOCATION, AND THE PRACTICES AND PROCEDURES TO BE IMPLEMENTED TO AVOID ACCIDENTAL RELEASE AND EXPOSURE, AND ANY FORESEEABLE IMPACTS TO THE ENVIRONMENT OF SUCH SUBSTANCE.

Proposed storage yards associated with the Project are depicted on the Alignment Sheets provided as Appendix B. The Applicant will implement its SPRP Plan during construction to minimize the potential for releases of hazardous materials (Appendix H). Minor refueling of equipment may occur within the Project workspace with minor volumes of fuel available. All fuel will be stored with secondary containment at least 100 feet from any waterbody or floodplain. Refueling will not occur within 100 feet of a waterbody or floodplain and spill kits will be available if needed for a response and clean-up.

3.15.2 LOCATION OF STORAGE AREAS DESIGNATED FOR EQUIPMENT, FUEL, LUBRICANTS, CHEMICAL AND WASTE STORAGE WITH AN EXPLANATION OF SPILL CONTAINMENT MEASURES.

Designated storage areas for the Project are depicted on Alignment Sheets provided as Appendix B. The Applicant will implement its SPRP Plan during construction to minimize the potential for releases of hazardous materials (i.e., fuel) (Appendix H). Minor refueling of equipment may occur within the Project workspace with minor volumes of fuel available. All fuel will be stored with secondary containment at least 100 feet from any waterbody or floodplain. Refueling will not occur within 100 feet of a waterbody or floodplain and spill kits will be available if needed for a response and clean-up.

The potential for releases of hazardous materials during operation of the pipelines will be minimized by constructing the Project in accordance with all applicable federal and state safety regulations for pipelines, as discussed in Section 1.1.1.

As described in the SPRP Plan (Appendix H), immediately upon learning of any fuel, oil, hazardous material, or other regulated substance spill, or upon learning of conditions that will lead to an imminent spill, the person discovering the situation shall:

- Initiate actions to contain the fluid that has spilled or is about to spill, and initiate action to eliminate the source of the spill to the maximum extent that is safely possible.
- Notify the crew foreman and/or the Spill Coordinator and provide them with the following information:
 - Location and cause of the spill;
 - Type and estimated amount of material spilled; and
 - Determine whether the spill has reached or is likely to reach any surface water.

Upon learning of a spill or a potential spill the Spill Coordinator shall:

- Assess the situation and determine the need for further action.
- Coordinate subsequent activities and/or further assign responsibilities to other personnel.
- Notify the Applicant representative.

The Spill Coordinator shall mobilize on-site personnel, equipment, and materials for containment and/or cleanup commensurate with the extent of the spill. If the Spill Coordinator feels that a spill is beyond the scope of on-site equipment and personnel, the Spill Coordinator shall immediately notify the Construction Superintendent and the Applicant. The Spill Coordinator shall coordinate the resources necessary to monitor and contain the spill to ensure that the actions are consistent with the requirements of the SPRP Plan.

3.16 BALANCE BETWEEN BENEFITS AND LOSSES

3.16.1 DESCRIPTION OF FORESEEABLE BENEFITS OF NATURAL, AGRICULTURAL, RECREATIONAL, RANGE OR INDUSTRIAL RESOURCES WITHIN THE COUNTY AND OPPORTUNITIES TO DEVELOP THOSE RESOURCES IN THE FUTURE.

The Project will benefit industrial resources in Arapahoe County by enhancing the infrastructure available to deliver product to the marketplace. The Project is not expected to produce direct benefits to agricultural or recreational resources in Arapahoe County, but there would be indirect benefit by virtue of increased tax revenue to the County.

3.16.2 DESCRIPTION OF FORESEEABLE LOSSES OF NATURAL, AGRICULTURAL, RECREATION, RANGE OR INDUSTRIAL RESOURCES WITH THE COUNTY AND LOSS OF OPPORTUNITIES TO DEVELOP THOSE RESOURCES IN THE FUTURE.

The Project will be constructed entirely within an area zoned for agriculture. Following the completion of construction, the temporary workspace and permanent easement will be reseeded and allowed to revert to pre-construction conditions. The pipeline ROW will be periodically mowed to prevent the establishment of woody vegetation and allow for access to the ROW for periodic inspection. Pipeline inspections occur quarterly using visual, and thermal imaging for LDAR no less frequently than as required by all applicable Federal and State regulations, and in accordance with the Applicant's policies and procedures. The Applicant is required to file annual reports pursuant to US DOT regulations. Pipeline operations are monitored by the Applicant and GMT personnel on a daily basis using wireless and cellular connections. The Applicant utilizes a SCADA system to set programming for alarms, which allows for manual and/or automatic shutdown of equipment if certain thresholds are exceeded. In the event of an emergency, all sources into the pipeline may be immediately shut down remotely through the SCADA system, as well as manually by field personnel that will be in the area daily. No permanent impacts on agricultural activities will occur as a result of the Project and the Project will not unduly degrade agricultural activities.

The Project will not significantly degrade the environment. Following construction, disturbed areas will be restored to pre-construction contours as closely as practicable. Construction debris and organic refuse unsuitable for distribution over the ROW will be disposed of at appropriate facilities in compliance with applicable regulations. Permanent erosion and sediment control measures will be installed as appropriate, and the Project area will be revegetated using a seed mix

approved by the State Land Board. Further, the Applicant will employ the use of CMs throughout construction and restoration to minimize impacts to the environment. A detailed environmental impact analysis is provided in Section 3.12.

As stated in Sections 2.1.10 and 3.11, there are no hiking or biking trails located in the Project area. The Crosswinds RC Club is located 0.14 miles North from the Project at MP 1.8, and the access road to the club will be crossed by the Project. The access road for the Crosswinds RC Club will be crossed via HDD; therefore, access to the facility, and the ability of the facility to generate revenue through the sale of memberships, will not be impacted during construction. It is reasonable to assume activities associated with the club would occur north of the facility on the open land associated with the State Land Board property, as opposed to south of the facility over County Line Road and into the residential area south of County Line Road. As such, activities associated with the club are not likely to extend into the active construction areas; therefore, impacts on the business and their clientele would be limited to construction related dust and noise. No significant sources of noise, dust, glare, fumes, vibration, or odors are anticipated to be caused by the Project. During construction, dust will be controlled by watering roads and other disturbed areas. Although certain heavy equipment is required, noise and fumes will be minimized to the extent possible. Due to the short-term nature of Project activities and the proposed mitigation measures discussed above, any effects of these nuisances will be minimal. The Applicant will notify the club prior to the commencement of construction to identify any potential conflicts and applicable mitigation measures.

Based on the discussion above, the Project is not expected to impose direct or indirect losses on natural, agricultural, recreational, or industrial resources in Arapahoe County, or to preclude opportunities to develop such resources in the future.

3.17 MONITORING AND MITIGATION PLAN

3.17.1 DESCRIPTION OF ALL MITIGATION FOR THE PROJECT.

The following are mitigation measures that will be implemented during the construction of the Project:

- The movement of crews and equipment will be limited to the Project workspace, which was designed to be the minimum area necessary to safely and efficiently construct the Project. Only designated access routes will be used to access the Project workspace.
- The pre-construction contours will be restored in all workspace areas impacted by the Project.
- The PSS wetland will be completely avoided by HDD. Temporary erosion control measures will be applied to protect off-site areas from increased sedimentation. Protection in these areas will include the use of CMs as defined in the SWMP and GESC Plan to contain any eroded material. Once soil stabilization is complete, these devices will be removed.
- Construction activities will be performed by methods that will prevent collapse of open trenches, entrance or spillage of solid matter, contaminants, debris, and other possible pollutants and wastes into surface waters and groundwater.

- All work areas will be re-vegetated using top soil from the excavation (top-soil segregation) as soon as practical, using an approved seed mixture and inspected to ensure revegetation is successful.
- The need for mitigation of sensitive species and their habitat will be identified during ongoing consultation with the Colorado Division of Wildlife. All mitigation will be designed on an as-needed and case-by-case basis.
- Construction will be scheduled to minimize impacts on sensitive wildlife species within the Project area to the maximum extent possible. The Applicant has consulted with CPW regarding impacts to sensitive wildlife species. Copies of this correspondence and CPW's comment letter are provided in Appendix K.
- Prior to construction, all construction personnel will be instructed by Applicant's consultant on the protection of cultural resources with reference to relevant laws and penalties, and the need to cease work in the location if cultural resource items are discovered.

3.17.2 DESCRIBE HOW AND WHEN MITIGATION WILL BE IMPLEMENTED AND FINANCED.

Mitigation techniques will be implemented as appropriate prior to, during, and immediately after construction with the assistance of Applicant's consultant. These measures will be financed as part of the overall Project cost. Impacts to local resources and species as a result of the Project shall be addressed immediately upon identification or notification.

3.17.3 DESCRIBE IMPACTS THAT ARE UNAVOIDABLE THAT CAN'T BE MITIGATED.

There are no known impacts that cannot be mitigated.

3.17.4 DESCRIPTION OF METHODOLOGY USED TO MEASURE IMPACTS OF THE PROJECT AND EFFECTIVENESS OF PROPOSED MITIGATION MEASURES.

The aforementioned mitigation measures have been utilized by the Applicant and related entities on previous projects similar in design and natural habitat with good results. These measures are designed to minimize known impacts, to the extent practicable.

3.17.5 DESCRIPTION, LOCATION, AND INTERVALS OF PROPOSED MONITORING TO ENSURE THAT MITIGATION WILL BE EFFECTIVE.

All mitigation techniques along the full ROW will be monitored during and after construction by field personnel. A GESC Report (Appendix E) and GESC Plan (Appendix F) have been prepared in accordance with state and local jurisdictional requirements. In addition, Applicant's consultants shall follow up following the completion of construction to insure effectiveness of mitigation techniques, ROW stabilization, and revegetation. The Applicant will also conduct drone surveys of the full ROW twice a year. The Applicant will communicate with the county inspector during construction. If changes are deemed necessary, they will be discussed and agreed upon with the county inspector before they are implemented.

3.18 TRANSPORTATION IMPACTS

The anticipated routes to be used are:

I-70 to N Kiowa-Bennett Road
Kiowa-Bennett Road south to County Line Road
County Line Road west to the pipeline ROW entrance

I-70 to County Line Road
County Line Road 129 west to the pipeline ROW entrance

The maximum anticipated traffic loading during construction is estimated to be 30 to 40 round trips per day for a duration of 6 to 8 weeks. This traffic estimate includes four to five round trips for heavy haul equipment for a duration of six to eight weeks to cover equipment mobilization, pipe delivery, and bore equipment. Traffic for the rest of the construction window will be minimal and mostly limited to workers commuting vehicles; therefore, construction of the Project will not impact the existing transportation network within Arapahoe County.

Traffic after construction and during normal pipeline operations will not impact the current County traffic loads; therefore, operation of the Project will not impact the existing transportation network in Arapahoe County. The Applicant will notify residents located within 500 feet of the Project by mail two weeks prior to the commencement of construction related traffic along County Line Road.

3.19 BENEFIT/COST ANALYSIS

Submittal of a benefit/cost analysis of the Project and identify the distribution of the burden of the cost for the proposed improvements, including cost to adjacent state or local jurisdiction.

There will be no cost burden to Arapahoe County or to any adjacent state or local jurisdiction. The Project will support the expansion of natural gas production, much of which will eventually be used to generate fuel and electricity, for the public benefit. Meeting the increasing demand for electricity through domestically supplied natural gas has the potential to increase national energy independence and address climate change concerns.

The benefits of the output associated with the Project are spread across the national and local economies. The major benefits to Arapahoe County and the state of Colorado include the tax revenues, employment income, and increase in local business output that will be generated by construction of the Project. The employment benefits of the Project include the income derived from the 55 to 60 jobs that will be created during pipeline construction. It is reasonable to assume a portion of the workers hired by the contractor will be local; however, this will not be determined until a contractor is selected prior to construction. Additionally, workers will be provided with a per diem allowance, and it is reasonable to assume that a portion of that will be spent on goods and services within Arapahoe County for the construction period of 6-8 weeks. Further, wherever possible, the Applicant and its contractor(s) will purchase materials locally.

The primary costs associated with the Project include material purchase and construction of the Project. The Project will have little or no external costs that would not be borne directly by the Applicant. Potential externalized costs include temporary increases in truck traffic, air and fugitive dust emissions, and visual obstruction during Project construction, which are expected to be short-term and minimal. The proposed Project is not expected to impose long-term economic or environmental costs on adjacent land, surrounding communities, or county services and recreational facilities.

3.20 ENGINEERING STUDIES

Submittal of Phase III Drainage Study, GESC and Traffic Study. If public improvements are required, the following items are also required: Collateral Letter of Intent, Cost Estimate for Public Improvements and Preliminary Construction Plans. If roadway improvements are required, a preliminary pavement design is required.

There are no public improvements anticipated. As directed by Arapahoe County, the Phase III Drainage and Traffic Impact Studies are not required for the Project. The GESC Plan is provided in Appendix F and will be finalized as part of this permit. No public improvements or roadway improvements are required for the Project.

3.21 REFERRALS TO OUTSIDE AGENCIES AND RESPONSE TO REFERRAL COMMENTS

- a. **The Planning Division will determine which outside agencies may be affected by the proposed development and should receive referral packets. Potential referral agencies may include, but not limited to homeowners' associations; local, regional, State, and Federal government entities; and service providers.**
- b. **The Planning Division will review the referral packets in order to determine that there is sufficient information in the referral packet.**
- c. **The Applicant will be responsible for putting the referral packets together and addressing the envelopes, but the Planning Division will be responsible for mailing the packets.**
- d. **The referral entities have 30 days to respond. If a referral entity does not respond within the 30-day timeframe, the assumption will be made that the referral entity does not have an objection to the Application.**
- e. **The Applicant will respond to all of the referral comments and the response will be included as part of the Application.**

3.22 IN ADDITION TO THE ABOVE SUBMITTAL REQUIREMENTS, THE FOLLOWING ADDITIONAL REQUIREMENTS SHALL APPLY TO THIS APPLICATION.

1. *Map and description of areas around any major facilities of the Project.*

There will be no major facilities.

2. Potential likelihood of nearby activities that may disrupt utility services.

Since this is a new system, there will not be any disruptions of activities currently provided by Applicant. In addition, since this is not a public utility, service disruptions have no impact to the public.

3. Description of how facilities will affect existing community patterns.

As described throughout this application, the Project will be constructed in a manner so as to be non-intrusive and will not impact existing community patterns.

4. Description of applicable adopted comprehensive plans and whether facilities comply with those provisions.

The Project has been designed to be in compliance with the Arapahoe County Comprehensive Plan as it pertains to utilities, including pipelines. The Applicant has also reviewed the Arapahoe County Lowry Range Sub-Area Plan and determined that the Project is also in compliance with the policies included in this plan. Following construction, all temporarily disturbed areas will be returned to preexisting conditions, and the land can continue to be conserved in accordance with the Arapahoe County Lowry Range Sub-Area Plan. Additionally, there will be no impacts to the floodplain.

5. Projections/forecast of need for Gathering system and the basis for the Projects and forecasts.

The Project consists of the installation of approximately 5.10 miles of 8-inch diameter natural gas gathering pipeline and 6-inch diameter oil pipeline, originating at the proposed Secret Stash Well Pad in S35 T5S R65W, which will tie-in to the previously permitted Tenderfoot Pipeline Project in S33 T5S R64W in Arapahoe County. The purpose of the Project is to transport natural gas and oil, and in the future, water, produced from the proposed Secret Stash Well Pad operated by the Applicant's parent company, GMT. The pipeline easement is intended to allow for installation of a produced water line, and above ground freshwater lines in the future, all within a 50-foot-wide permanent easement.

6. Expected effect and impact on nearby property owners and on current land uses compared with alternate locations.

A detailed alternatives analysis is presented in Section 3.3.4 and demonstrates that the proposed Project route will result in the least impacts on the environment and property owners.

7. Provide a Water Supply Plan using an aquifer life assumption of a 100-year supply, non-tributary groundwater classification only, assuming a 50 percent recovery factor to support operations.

The Project does not require a Water Supply Plan because a dedicated water source is not needed for dust control or hydrostatic testing.

4.0 CONCLUSION AND REQUEST FOR APPROVAL

The Applicant proposes to begin Project construction in Q3 2024. The Applicant believes its approach meets Arapahoe County Approval Criteria while minimizing the potential for negative impacts.

This Project is needed to allow the Applicant to transport materials produced from its mineral leases. The Applicant has sought to work closely with Arapahoe County staff in siting and designing this Project.

Accordingly, on the behalf of the Applicant, the approval of the Planning Commission and Board of County Commissioners is respectfully requested for the Project.

Respectfully Submitted,



Jess Watson (Agent for the Applicant)

5.0 REFERENCES

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