

COMMUNITY AND ECONOMIC DEVELOPMENT DEPARTMENT

STAFF REPORT

CASE NO: RCU2020-00004
CASE NAME: Pioneer Produced Water Pipeline Project

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COMMUNITY AND ECONOMIC DEVELOPMENT DEPARTMENT

STAFF REPORT

Planning Commission

August 13, 2020

Case Number.:	RCU2020-00004	
Case Name:	Pioneer Produced Water Pipeline Project	
Applicant's Name:	Spence McCallie, Pioneer Water Pipeline, LLC	
Applicant's Address:	600 17 th Street, Suite 725, Denver, CO 80202	
Location of Request:	Multiple Parcels in Adams County. The linear pipeline project	
	stretches from the vicinity of the intersection of East 136 th Avenue	
	and Buckley Road to the vicinity of the intersection of East 168 th	
	Avenue and Quebec Street	
Nature of Request:	1) Conditional Use Permit (CUP) to construct a new pipeline	
	system conveying produced water	
	2) Development Agreement that covers pre-construction	
	requirements, construction and operational standards, and	
	maintenance of the pipelines.	
Zone Districts:	Agricultural-1 (A-1), Agricuture-3 (A-3), Planned Unit Development (PUD), Public Lands (PL), Residential Estate (RE)	
Site Size: Total length of the pipelines is approximately 12.3 miles		
	unincorporated Adams County	
Proposed Uses:	Oil & Gas Infrastructure	
Existing Use:	Agriculture, single-family homes, open space, & vacant land	
Hearing Date(s):	PC: August 13, 2020 / 6:00 p.m.	
	BOCC: September 1, 2020 / 9:30 a.m.	
Report Date:	August 7, 2020	
Case Manager:	Greg Barnes	
Staff Recommendation:	APPROVAL with 33 findings-of-fact, 1 condition, and 1 note.	

SUMMARY OF APPLICATION

Background

The applicant, Pioneer Water Pipeline, LLC (a subsidiary of Expedition Water Solutions Colorado, LLC) is requesting a conditional use permit to allow construction of a new pipeline system. The pipeline will measure 4-12 inches in diameter, and the applicant has designed the Project to allow for expansion and additional capacity in the future if there is a need and

economic feasibility to serve additional oil and gas facilities. According to the applicant, the request to allow construction of the pipeline is to transport produced water from oil and gas production facilities. The pipeline would reduce local truck traffic associated with transporting such materials by vehicles to the Expedition Water Solutions #6 Wastewater Injection and Disposal facility in Weld County. Wastewater injection is a process of disposing of fluid underground into geologic formations that can hold fluid. According to the applicant, it is estimated that oil and gas production facilities generate approximately half as much water as product, meaning that for every two barrels of product generated at an oil and gas production facility, an operator must dispose of one barrel of produced water. Without this Project, the operators of the oil and gas production facilities in Adams and Weld Counties that would be connected by the proposed pipeline would transport the water generated during production by truck. The applicant has cited that the construction of this project would create numerous benefits for the region, including: the reduction of an estimated 5,000,000 truck miles and over 50,000 truckloads per year on local roads; fewer repairs to streets and highways of the community; a reduction in the potential for traffic accidents; better air quality by reduced vehicle emissions and particulates, ozone, odors, and other air pollutants in the atmosphere; reduction of carbon emissions by 21,000 metric tons per year; and creation of 100 locally sourced jobs during construction, and approximately four permanent jobs once operational.

The Project would consist of construction of approximately 48.5 miles of high-density polyethylene (HDPE) produced water gathering pipelines and associated appurtenances in Adams and Weld Counties. Approximately 29 miles of pipeline is proposed in Weld County, and 19 miles of pipeline is proposed in Adams County. Of the 19 miles of pipeline proposed for Adams County, approximately 12 miles is proposed for unincorporated Adams County, affecting 42 parcels. The remaining 7 miles are proposed within the city limits of Brighton and Thornton.

The site plan provided with the application (Exhibit 3.1) shows the pipeline network will be interconnected between as many as fifteen existing well pad sites within Adams County. The easternmost point in Adams County of the pipeline network will be within the City of Brighton, near the intersection of Buckley Road and East 136th Avenue. The pipeline will continue westward on East 136th Avenue to Brighton Road. After crossing Brighton Road, the preferred pipeline route continues in a northwesterly direction along E-470 continuing just west of York Street. Along this portion of the pipeline, a spur continues northward beginning just to the east of Colorado Boulevard and stretches to connect several well pads in that area. Two additional segments of the pipeline network also impact unincorporated portions of Adams County. A section of the pipeline is proposed along the southern side of State Highway 7 between Colorado Boulevard and Quebec Street. At Quebec Street, the pipeline then crosses Highway 7 and continues north. An additional section of the network will begin along Riverdale Road and traverse northbound along the western side of Tucson Street before crossing into Weld County.

Development Standards and Regulations Requirements

The County's Development Standards and Regulations outlines requirements for a conditional use permit. Specifically, Section 2-02-08 of the County's Development Standards requires an applicant to demonstrate that the request for a conditional use permit is compatible with the surrounding area, not detrimental to the immediate area, all off-site impacts have been addressed, and that the site plan will provide the most convenient and functional use of the lots.

The subject request includes submittal information outlined in Section 6-07-02 of the County's Development Standards and Regulations pertaining to Areas and Activities of State Interest permits. This information is relevant for large-scale projects and addresses issues on environmental concerns, finance, and other relevant issues to address. Submittal items required and outlined in the Development Standards includes the following information:

- Detailed applicant information
- Extensive information regarding the project
- Information on property rights, permits, and other approvals
- Financial feasibility of the project
- Land use
- Local governmental services
- Financial burden on residents
- Local economy
- Environmental impact analysis: this includes analysis on water (surface and ground water), visual impacts, air quality, wetland and riparian areas, flora and fauna, soils, geologic conditions, and areas of paleontological, historic or archaeological importance.

Staff reviewed documentation submitted with the applications and has determined that the information provided adequately conforms to the requirements for Areas and Activities of State Interest. The application documents included information about the company and their financial ability to fund the project. Routing analysis submitted with the application also justified selection of the preferred routes. The preferred alignments are those that best minimize potential impacts on existing residential developments. In addition, most of the properties that the pipelines traverse through are predominately used for agriculture. The construction of the pipelines would not impede current or future uses of the surrounding properties. Staff reviewed environmental impact report included with the application and determined procedures and guidelines outlined in the report adequately demonstrate protection and preservation of water resources, visual impacts, air quality, wetland and riparian areas, flora and fauna, soils, geologic conditions, and areas of paleontological, historic or archaeological importance.

Per Section 6-07-02-03 of the County's Development Standards and Regulations, the applicant is required to submit a routing analysis with at least three alternative routes for each of the proposed pipelines. The applicant provided this information. According to the applicant, a preferred route was determined to have the least impacts on existing residential uses, as well as minimal impact on agriculturally utilized lands within unincorporated Adams County.

Development Agreement

As part of the conditional use permit application, the applicant has agreed to enter into a development agreement with the County for each of the proposed pipelines. The agreement covers multiple requirements, such as pre-construction approvals (which include stormwater, road crossing, and traffic control permits), documentation of standard operating procedures, and maintenance of the pipeline. In addition, the development agreement is required to address all

comments from various review agencies. The development agreement conforms to the requirements.

The applicant will also be responsible to maintain all likely affected Adams County roadway infrastructure by cleaning the roads and repairing any damage. The agreement requires the pipeline route to be located out of future road right-of-ways. Any land disturbed by construction in the project area is also required to be restored. Finally, the agreement requires the developer to avoid areas where regional drainage improvements may occur. If avoiding such infrastructure is impossible, then the developer, at its own expense, will be required to relocate the pipeline whenever such drainage improvement occurs. The development agreement is attached to this report for review and consideration (see exhibit 6.7).

Future Land Use Designation/Goals of the Comprehensive Plan for the Area:

The preferred pipeline route affects seven future land use designations. Specifically, those designations are: Mixed-Use Neighborhood, Agriculture, Parks and Open Space, Mixed-Use Employment, Local District Mixed-Use, Commercial, and Estate Residential. Analysis of each of these future land use designations and their intended purposes are discussed below:

Goals of the Mixed-Use Neighborhood Future Land Use:

The Mixed Use Neighborhood future land use allows for a range of urban level residential uses, including single and multi-family housing combined with compatible and supporting uses and activities that serve the neighborhood and are developed and operated in harmony with the residential characteristics of a neighborhood. Seven of the nine parcels that the pipeline traverses are designated as Mixed-Use Neighborhood. Current land use activities on these parcels are agricultural with some existing and proposed oil and gas wells. The pipeline path would be located on the edges of the impacted parcels and outside any future road rights-of-way. Location of the pipeline would not hinder development of the properties or surrounding areas from achieving the goals of the Mixed-Use Neighborhood future land use designation.

Goals of the Mixed-Use Employment Future Land Use:

This land use category allows a mixture of employment uses, including offices, retail, and clean, indoor manufacturing, distribution, warehousing, and airport and technology uses. New Mixed-Use Employment areas are designated in locations that will have excellent transportation access and visibility but are not suitable for residential uses. Large swaths of properties around Denver International Airport, Front Range Airport, and the I-70 corridor are designated for future Mixed Use Employment to preserve future long-term opportunities for employment growth in these areas, but any future development in these areas should be phased and concentrated around where urban services and infrastructure are most readily available.

Goals of the Commercial Future Land Use:

Commercial areas are intended to serve either neighborhood or regional needs and can be comprised of a variety of uses, including retail sales, restaurants and other services, and professional and commercial offices. The primary objective of the Commercial land use designation is to support and attract businesses that provide employment opportunities, meet the needs of County residents and visitors, and contribute to the County's tax base. Commercial

areas should be compatible with surrounding development, and located in areas with adequate transportation access, services, and public infrastructure. Building materials, architectural design, relationship to streets, sidewalks, and parking areas, should all contribute positively to the aesthetic character of the area.

Goals of the Agriculture Future Land Use:

The areas that have been identified as agricultural are those that are not expected to develop, except for limited areas of very low density residential at densities of 1 dwelling per 35 acres, for the foreseeable future. These areas are typically characterized by a lack of urban services.

Goals of the Estate Residential Future Land Use:

The Estate Residential future land designated areas are for single family housing at lower densities, typically no greater than 1 unit per acre, and compatible uses such as schools and parks. The main goal for the Estate Residential future land use areas is to provide limited opportunities for ex-urban or rural lifestyles in the County.

Goals of the Local District Mixed-Use Future Land Use:

The Local District Mixed-Use Designation is assigned for areas within the Historic Splendid Valley Plan. This area is an eclectic agricultural area established through a partnership with the City of Brighton and Adams County. The area is focused on preserving farmland and stimulating innovative opportunities that create closer connections between people, farming, and nature.

Goals of the Parks & Open Space Future Land Use:

The primary uses in this category are public parks, trails and open space. In most cases, land uses in this category will be open to the public. Development is limited to recreational facilities and maintenance and other facilities that serve the site. The primary objectives of these areas are to provide land for recreation and enjoyment, provide areas for wildlife, and preserve especially sensitive, beautiful, or historic areas.

The preferred pipeline has been designed (as indicated on the site plan, Exhibit 3.1) to not hinder development of the surrounding properties from achieving the goals of the associated future land use designation. Although some hindrance may be possible for future vertical development where the 10-foot wide easement is located, it is not expected to negatively impact the County's long-term goals in the area. The affected parcels can be developed in a manner consistent with the future land use designation goals.

Site Characteristics:

The preferred pipeline route will traverse through 42 properties in unincorporated Adams County. On its easternmost end, the route runs along the northern edge of East 136th Avenue between Brighton Road and Sable Boulevard. This region consists largely of vacant, agricultural, and rural residential uses. The region is part of the Historic Splendid Valley District. The route continues to west and enters unincorporated Adams County again along the edges of E-470 between the South Platte River and Colorado Boulevard. These areas are mostly vacant lands and rural residential uses. The route runs along the northern edge of the Ridge at Riverdale subdivision. Several pockets of the pipeline system are located north of East 152nd Avenue stretching to the Weld County line at East 168th Avenue. These three sections of the pipeline

generally run in a north-south direction in the vicinities of Colorado Boulevard, Quebec Street, and Tucson Street. These three portions of the pipeline route are all characteristic of rural residential uses, agricultural, and vacant lands. The proposed produced water pipeline may have some initial impacts during construction but will ultimately reduce traffic and improve air quality in the region by eliminating the need for trucking of the produced water to the injection sites. Measures are included in the associated Development Agreement to reduce the impacts of the pipeline's construction process on nearby property owners.

Compatibility with the Surrounding Land Uses:

Most of the area surrounding the pipeline is comprised of agriculturally zoned and used properties, as well as single-family homes. According to the applicant, the pipeline would be buried and strategically placed along perimeters of properties and outside future road right-of-ways. This is to minimize potential impacts to surrounding properties. The proposed request would not negatively impact existing surrounding uses.

There are oil and gas developments existing or proposed in the immediate vicinity of the subject pipeline. This pipeline would service those oil and gas wells, which will substantially reduce truck traffic associated with transporting of products from the gas wells. In addition, the pipeline will support gathering, processing, and transporting oil and gas products from Adams County without causing impacts to the local transportation system.

Staff Recommendation:

Based upon the application, the criteria for conditional use permit approval, and a recent site visit, staff recommends approval of the conditional use permit with 33 findings-of-fact, 1 condition, and 1 note.

Staff also recommends approval of the development agreement.

Recommended Findings-of-Fact:

- 1. The conditional use is permitted in the applicable zone district.
- 2. The conditional use is consistent with the purposes of these standards and regulations.
- 3. The conditional use will comply with the requirements of these standards and regulations including, but not limited to, all applicable performance standards.
- 4. The conditional use is compatible with the surrounding area, harmonious with the character of the neighborhood, not detrimental to the immediate area, not detrimental to the future development of the area, and not detrimental to the health, safety, or welfare of the inhabitants of the area and the County.
- 5. The conditional use permit has addressed all off-site impacts.
- 6. The site is suitable for the conditional use including adequate usable space, adequate access, and absence of environmental constraints.
- 7. The site plans for the proposed conditional use will provide the most convenient and functional use of the lot including the parking scheme, traffic circulation, open space, fencing, screening, landscaping, signage, and lighting.
- 8. Sewer, water, storm water drainage, fire protection, police protection, and roads are to be available and adequate to serve the needs of the conditional use as designed and proposed.

- 9. Documentation that prior to site disturbance associated with the Proposed Project, the Applicant can and will obtain all necessary property rights, permits and approvals. The Board may, at its discretion, defer making a final decision on the application until outstanding property rights, permits and approvals are obtained or the Board may grant a Permit with conditions and/or conditions precedent which will adequately address outstanding concerns.
- 10. The Proposed Project considers the relevant provisions of the regional water quality plans.
- 11. The Applicant has the necessary expertise and financial capability to develop and operate the Proposed Project consistent with all requirements and conditions.
- 12. The Proposed Project is technically and financially feasible.
- 13. The Proposed Project is not subject to significant risk from Natural Hazards.
- 14. The Proposed Project is in general conformity with the applicable comprehensive plans.
- 15. The Proposed Project does not have a significant adverse effect on the capability of local government to provide services or exceed the capacity of service delivery systems.
- 16. The Proposed Project does not create an undue financial burden on existing or future residents of the County.
- 17. The Proposed Project does not significantly degrade any substantial sector of the local economy.
- 18. The Proposed Project does not unduly degrade the quality or quantity of recreational opportunities and experience.
- 19. The planning, design and operation of the Proposed Project reflects principals of resource conservation, energy efficiency and recycling or reuse.
- 20. The Proposed Project does not significantly degrade the environment. This includes the considerations that shall be used to determine whether there will be significant degradation of the environment. For purposes of this section, the term environment shall include:
 - Air quality,
 - Visual quality,
 - Surface water quality,
 - Groundwater quality,
 - Wetlands, flood plains, streambed meander limits, recharge areas, and riparian areas,
 - Terrestrial and aquatic animal life,
 - Terrestrial and aquatic plant life, and
 - Soils and geologic conditions.
- 21. The Proposed Project does not cause a nuisance and, if a nuisance has been determined to be created by the Proposed Project, the nuisance has been mitigated to the satisfaction of the County.
- 22. The Proposed Project does not significantly degrade areas of paleontological, historical, or archaeological importance.
- 23. The Proposed Project does not result in unreasonable risk of releases of hazardous materials. In making this determination as to such risk, the Board's consideration shall include:
 - Plans for compliance with Federal and State handling, storage, disposal and transportation requirements,
 - Use of waste minimization techniques, and
 - Adequacy of spill prevention and counter measures, and emergency response plans.
- 24. The benefits accruing to the County and its citizens from the proposed activity outweigh the losses of any resources within the County, or the losses of opportunities to develop such resources.

- 25. The Proposed Project is the best alternative available based on consideration of need, existing technology, cost, impact and these Regulations.
- 26. The Proposed Project shall not unduly degrade the quality or quantity of agricultural activities.
- 27. The proposed Project does not negatively affect transportation in the area.
- 28. All reasonable alternatives to the Proposed Project, including use of existing rights-of-way and joint use of rights-of-way wherever uses are compatible, have been adequately assessed and the Proposed Project is compatible with and represents the best interests of the people of the County and represents a fair and reasonable utilization of resources in the Impact Area.
- 29. The nature and location of the Proposed Project or expansion will not unduly interfere with existing easements, rights-of-way, other utilities, canals, mineral claims or roads.
- 30. Adequate electric, gas, telephone, water, sewage and other utilities exist or shall be developed to service the site.
- 31. The proposed project will not have a significantly adverse Net Effect on the capacities or functioning of streams, lakes and reservoirs in the impact area, nor on the permeability, volume, recharge capability and depth of aquifers in the impact area.
- 32. The purpose and need for the Proposed Project are to meet the needs of an increasing population within the County, the area and community development plans and population trends clearly demonstrate a need for such development.
- 33. The Proposed Project is compatible with the surrounding area, harmonious with the character of the neighborhood, not detrimental to the immediate area, not detrimental to the future development of the area, and not detrimental to the health, safety, or welfare of the inhabitants of the area.

Recommended Condition of Approval:

1. The applicant shall comply with all the terms and conditions of the executed Development Agreement between Pioneer Water Pipeline, LLC and Adams County.

Recommended Note to Applicant:

1. The applicant shall execute the Development Agreement associated with the conditional use permit prior to the scheduled September 1, 2020 Board of County Commissioners hearing. The executed Development Agreement shall be submitted to Adams County staff no later than August 28, 2020.

PUBLIC COMMENTS

Notifications Sent	Number of Responses
728	1

Staff sent referrals to all property owners within 1,000 feet of the pipeline route. As of writing this report, staff has received one comment from a property owner who is supportive of the request as long as the project is deemed safe for the public (see exhibit 5.1).

COUNTY AGENCY COMMENTS

The Adams County Development Services Division requested that the pipeline shall be located within permanent easements. The applicant will ensure that the pipeline will only cross County-maintained street right-of-way at or near a perpendicular angle and that any segment of the pipeline constructed parallel to an Adams County right-of-way will be constructed a minimum of five (5) feet from the edge of the maximum future right-of-way width.

REFERRAL AGENCY COMMENTS

Responding with Comments or Concerns:

City of Thornton (Exhibit 4.2)

• Thornton requested the applicant to incorporate the design and alignment of the City of Thornton's 42-inch raw water pipeline into the design and alignment of the Pioneer Water Pipeline along Quebec Street between 160th and 168th. No conflicts are expected. The applicant will apply for a Floodplain Development Permit from the City of Thornton if work within a FEMA floodplain or other Special Hazard Area is Required. Additionally, the applicant will ensure that the applicable permits for right-of-way crossings within the City of Thornton's jurisdiction have been approved by the City of Thornton's Infrastructure Department prior to construction. Prior to construction within Adams County, easements for parcels within Adams County will be provided prior to construction. The applicant has agreed that the pipeline will remain outside the City of Thornton's future rights-of-way for Highway 7, 152nd Avenue, Holly Street, Quebec Street, and 156th Avenue. The applicant also agreed that all utility crossings occur at near 90-degree angles when possible and be constructed following the City of Thornton's approval.

Colorado Department of Public Health and Environment (CDPHE) (Exhibit 4.3)

• CDPHE provided the applicant with a list of state requirements that must be met. The applicant provided a response to CDPHE stating that they will provide documentation that a Construction Permit has been obtained if necessary and will provide documentation of APEN submittal to CDPHE prior to construction.

Colorado Division of Parks & Wildlife (Exhibit 4.4)

• The Colorado Div. of Parks & Wildlife provided comments to the applicant to provide guidance for pre-construction and construction phases with the intention of protecting burrowing owl and bald eagle populations. The applicant has incorporated these measures into the Development Agreement with Adams County.

E-470 Authority (Exhibit 4.5)

a. The E-470 Authority provided comments to the application regarding permitting and operational procedures for the construction and post-construction phases of the project. The development agreement requires the applicant to submit evidence to the County of the approved E-470 Public Highway Authority ("E-470") Pipeline Crossing Permit for the crossing of E-470.

Metro Wastewater Reclamation District (Exhibit 4.6)

• Metro Wastewater Reclamation District (MWRD) initially had concerns that the proposed pipeline may intersect or impact the District's Second Creek Interceptor project. The applicant provided reassurance to MWRD that the two projects will not intersect. MWRD provided no further comments after the applicant's response.

Xcel Energy (Exhibit 4.8)

• Xcel Energy stated their company has electric transmission infrastructure that could be impacted by the proposed project. The development agreement requires the applicant to comply with Xcel Energy's requirements.

Responding without Concerns:

United Power (Exhibit 4.7)

Notified but not Responding / Considered a Favorable Response:

Adams County Sheriff
Amber Creek Metropolitan District
Brighton Fire District
Brighton 27J School District

Colorado Department of Transportation

Century Link

Comcast

Eagle Shadow Metro District Heritage at Todd Creek Metropolitan District

North Metro Fire District

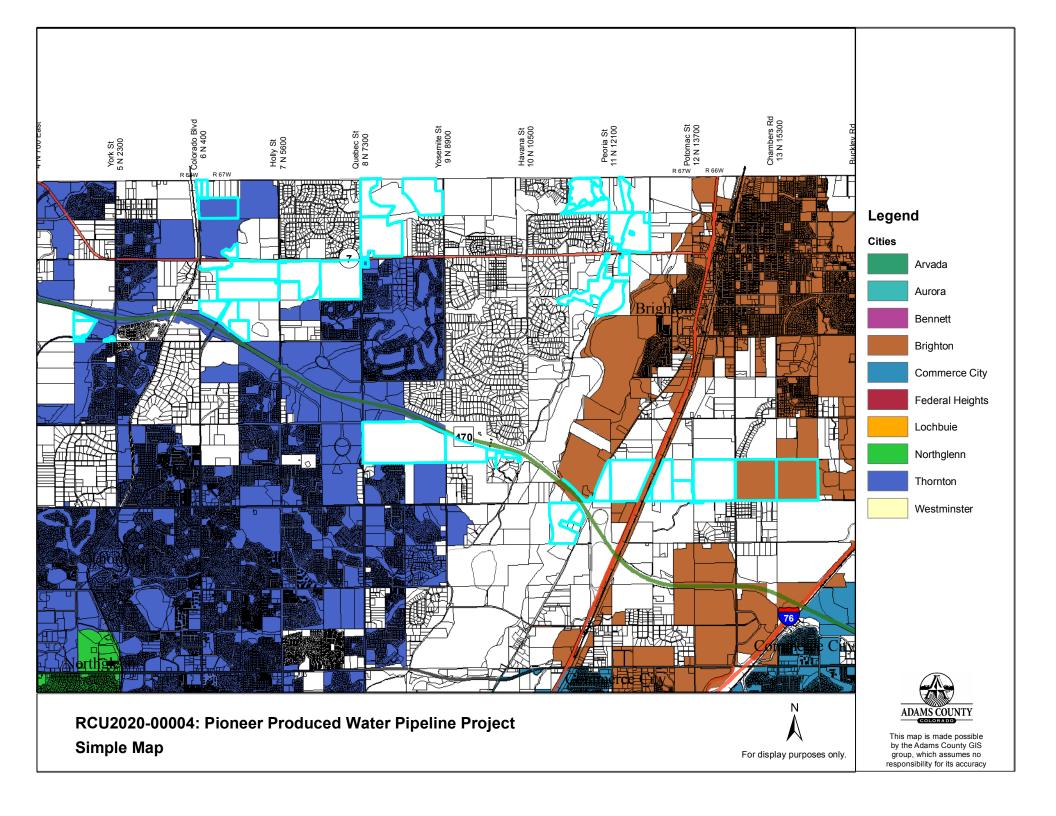
Regional Transportation District

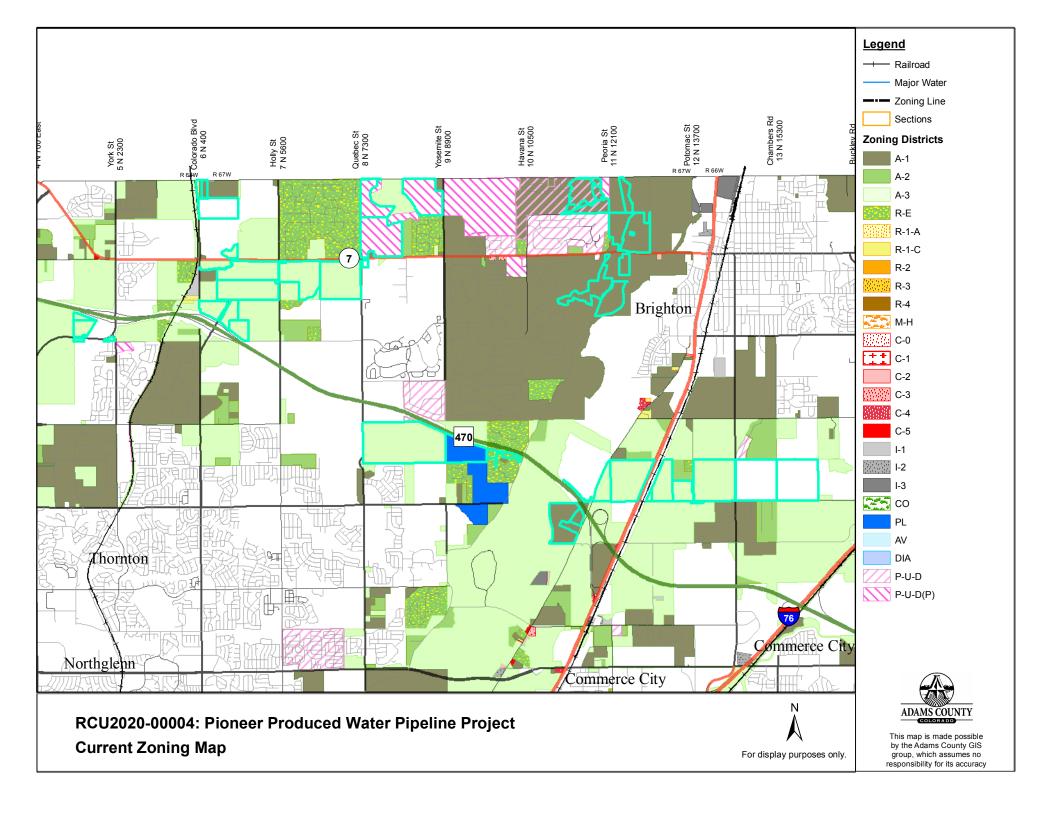
Riverdale Peaks Metropolitan District

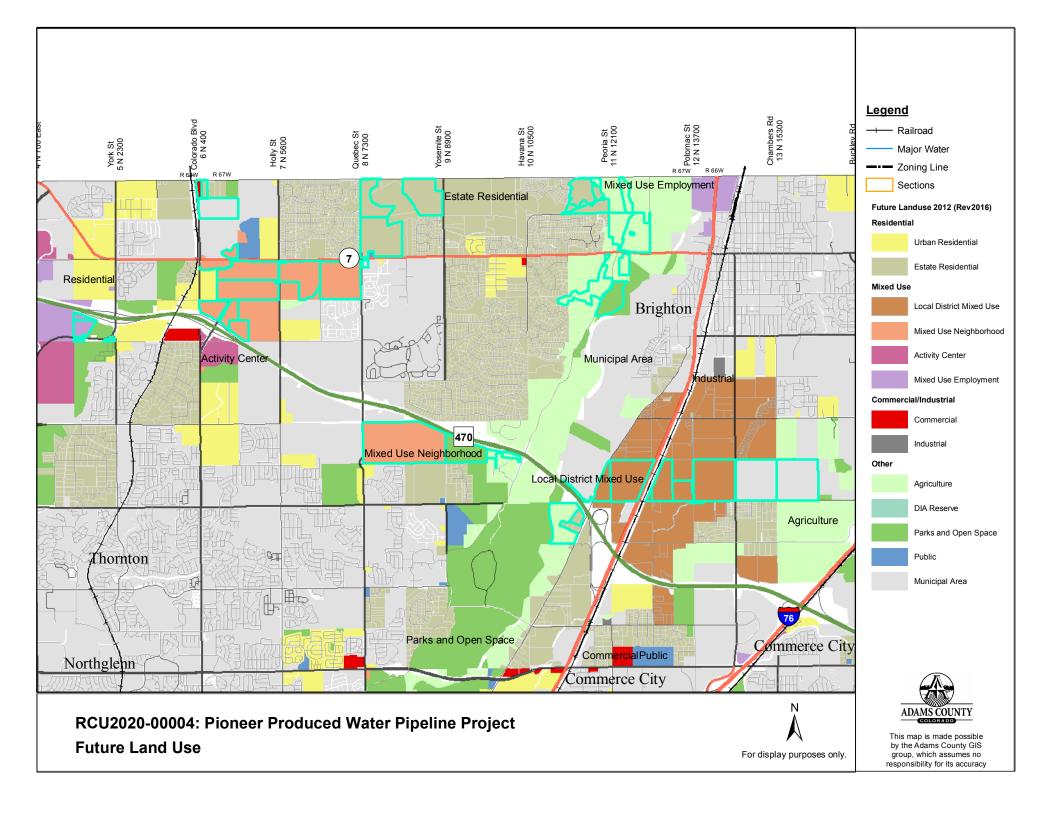
Thornton Fire District

Todd Creek Metro District #2

Todd Creek Village Metropolitan District







Pioneer Water Pipeline Project

Conditional Use Permit Application

February 2020

Prepared for:



4430 South Adams County Parkway, Brighton, CO 80601

Prepared by:



Pioneer Water Pipeline, LLC, 600 17th Street, Suite 725, Denver, CO 80202

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List of Acronyms

AASI Areas and Activities of State Interest

ACDSR Adams County Development Standards and Regulations

BMP Best Management Practice

CAAQS Colorado Ambient Air Quality Standards

CDPHE Colorado Department of Public Health and Environment

CDWR Colorado Division of Water Resources

CFR Code of Federal Regulation

COGCC Colorado Oil and Gas Conservation Commission

CPW Colorado Parks and Wildlife
CRS Colorado Revised Statues
CUP Conditional Use Permit

dBA Decibels

EPA U.S. Environmental Protection Agency
Expedition Expedition Water Solutions Colorado, LLC

HDD Horizontal Directional Drilling
HDPE High-Density Polyethylene

IPaC Information for Planning and Consultation
NAAQS National Ambient Air Quality Standards

NHD National Hydrology Dataset

NRCO Natural Resources Conservation Overlay

NRHP National Register of Historic Places

NWI National Wetland InventoryPioneer Water Pipeline, LLCProject Pioneer Water Pipeline Project

ROW Right-of-Way

SCADA Supervisory Control and Data Acquisition

SWMP Stormwater Management Plan

Tetra Tech Tetra Tech, Inc.

USR Use by Special Review

USACE U.S. Army Corps of Engineers
USFWS U.S. Fish and Wildlife Service
USGS United States Geological Survey

WOTUS Waters of the United States

1. Introduction

Tetra Tech, Inc (Tetra Tech), has prepared this Conditional Use Permit (CUP) application on behalf of Pioneer Water Pipeline, LLC (Pioneer), a subsidiary of Expedition Water Solutions Colorado, LLC (Expedition), for the proposed Pioneer Water Pipeline Project (Project). Tetra Tech prepared this CUP application per the requirements of Chapter 2—Application and Permitting Procedures in the Adams County Development Standards and Regulations (ACDSR), the CUP Checklist, and the requirements outlined in Chapter 6—Regulations Governing Areas and Activities of State Interest (AASI) as requested by the Adams County Department of Community Planning and Development during the Conceptual Review process (PRE2019-00065).

1.1 Document Organization

The permit application is organized in the same sequence as the submittal requirements in the CUP Checklist, AASI Checklist, and the Adams County Department of Community Planning and Development supplemental requirements. Exhibits provided with the application are listed in Table 1. Individual figures are listed in Table 2.

Table 1:
List of Exhibits Included with the Application

Exhibit	Content	
Α	Alignment Sheets	
В	Natural Resource Conservation Overlay Report	
С	Conceptual Review Preliminary Comments, Questions, and Responses	
D	Typical Pipeline Trench and HDD	
Е	Expedition's Occupational Safety and Health Administration form 300: Summary of Work-Related Injuries and Illnesses	
F	List of Parcel Owners	
G	Neighborhood Meeting Notification, Meeting Materials, and Summary	
Н	Routing Narrative	
	Summary of Water Wells in the Vicinity of the Project.	

Table 2: List of Figures Included with the Application

Figure Number	Content ¹	
1	Project Overview Map	
2	Adams County Overview Map	
3	Adams County Road Crossings Map	
4	Adams County Zoning Map	
5	Adams County Land Cover Map	
6	Adams County Groundwater Aquifers Map	

The information in this application is based on the pipeline route shown in these figures. The pipeline alignment is subject to change based on final engineering.

1.2 Project Description

The Project would consist of construction of approximately 48.5 miles of 4- to 12 inch-diameter high-density polyethylene (HDPE) produced water gathering pipelines and associated appurtenances in Adams and Weld counties, Colorado. Approximately 29.3 miles of pipeline would be located in Weld County, and 19.2 miles of pipeline would be located in Adams County. Approximately 12.3 miles will be in unincorporated Adams County. Within Adams County, the Project would traverse the municipalities of Brighton and Thornton. A Project Overview Map is provided as Figure 1 and an Adams County Project Map is provided as Figure 2. A detailed Project description is included in Section 2.3. Alignment sheets are included as Exhibit A.

1.3 Project History

Pioneer attended a Conceptual Review meeting with the Adams County Department of Community Planning and Development (PRE2019-00065) on July 22, 2019. The Adams County Department of Community Planning and Development advised Pioneer that the Project would be subject to the County's CUP review and approval. In addition, Pioneer was notified that the CUP application must also address and include submittal requirements for the AASI permit (Section 3) and a Natural Resources Conservation Overlay (NRCO) Review if the Project impacts up to an acre of land in the NRCO Review (Exhibit B).

Copies of the Adams County Department of Community Planning and Development Conceptual Review comments and the sections of this document that respond to those questions are included in Exhibit C. Table B-1 in Exhibit C also includes responses to the Development Conceptual Review comments and a reference matrix that details the specific section of this document where additional information can be found addressing each of the review comments.

1.4 Purpose and Need

The purpose of the Project is to allow more efficient pipeline transportation of produced water from oil and gas production facilities in Adams and Weld counties to Expedition's existing EWS #6 wastewater injection and disposal facility, thereby also significantly reducing truck traffic. Wastewater injection is a process of disposing of fluid underground into geologic formations that are capable of holding fluid. EWS #6 accepts water 24 hours per day and is able to dispose of 25,000 barrels (1,050,000 gallons) of water per day with the ability to expand.

Pioneer estimates that oil and gas production facilities generate approximately half as much water as product, meaning that that for every two barrels of product generated at an oil and gas production facility, an operator much dispose of one barrel of produced water. Without this Project, the operators of the oil and gas production facilities in Adams and Weld counties that would be connected by the proposed pipeline would transport the water generated during production to EWS #6 by truck (Illustration 1). Permits for the oil and gas facilities are described in additional detail in Section 2.3.2. Pioneer expects that the Project would have the following beneficial effects:

• **Traffic**: Construction of the Project would remove the equivalent of 5 million truck miles and over 50,000 truckloads per year on local roads.

- **Infrastructure**: The removal of these trucks from local road means fewer repairs and longer life for the streets and highways of the community.
- Safety: The removal of heavy truck miles from local roads would reduce the potential for traffic accidents.
- **Air Quality**: Removal of truck traffic reduces vehicle emissions and the quantity of particulates, ozone, odors, and other air pollutants in the atmosphere.
- **Sustainability**: Completion of the 100 percent electric-powered Project would reduce carbon emissions by 21,000 metric tons per year.
- **Community Revenue**: The Project anticipates providing approximately \$500,000 per year in new tax revenue to the community, directly benefitting public schools among other public services.
- **Jobs**: The Project is expected to create 100 locally sourced jobs during construction, and approximately four permanent jobs once operational.

Pioneer has designed the Project to allow for expansion and additional capacity in the future if there is a need and economic feasibility to connect additional oil and gas facilities.

1.5 Regulatory Overview

Pioneer would ensure the Project obtains applicable land use, environmental, and construction permits, and would ensure permit conditions are met prior to the start of construction. Refer to Section 3.4.2 for additional information on permitting for the Project.

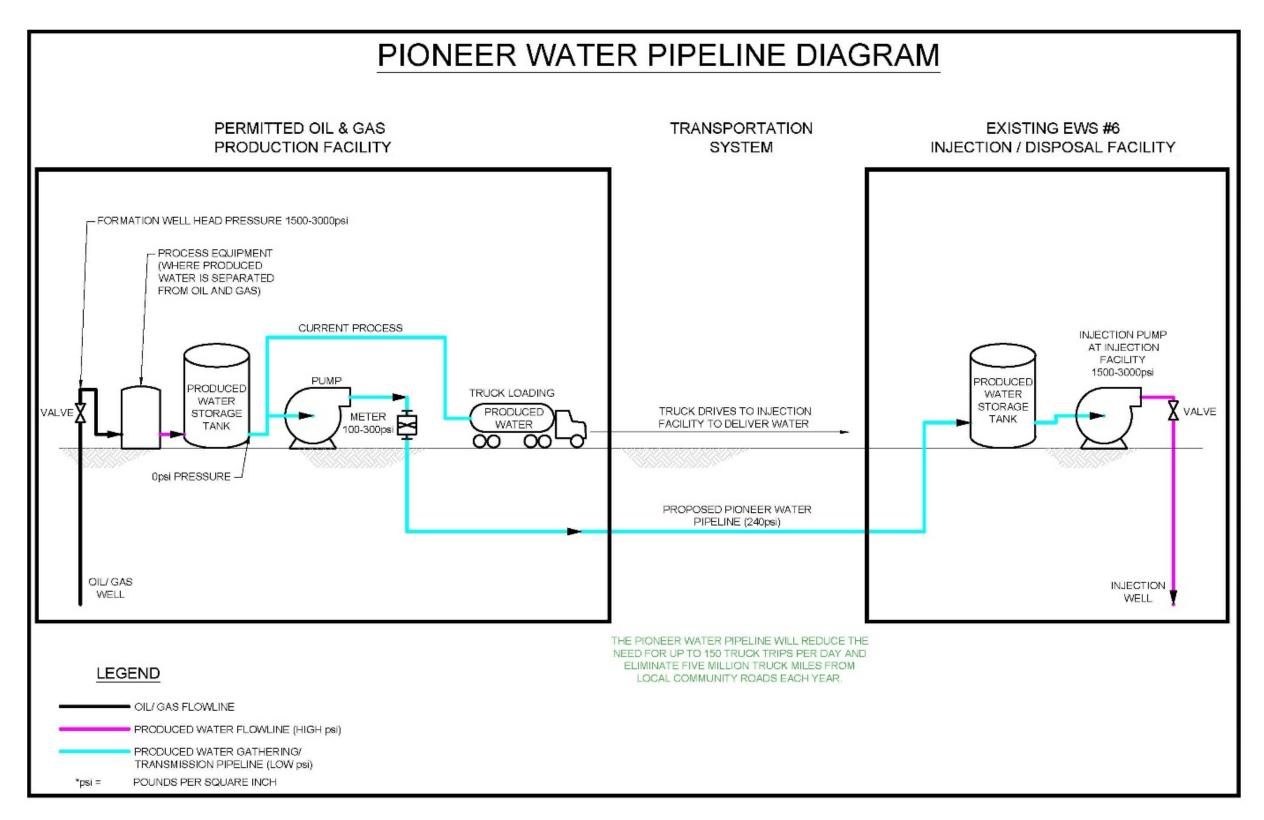


Illustration 1: Current and Proposed Method of Produced Water Transportation from Oil and Gas Production Facilities

Note: The Project would transport the produced water via pipeline; without the Project, the produced water would be transported by truck.

2. Conditional Use Permit Application Requirements

2.1 Development Application Form and CUP Checklist

The Adams County Development Application and AASI and CUP Checklists are included as part of this permit package as an attachment to the cover letter.

2.2 Application Fees

The \$1,000.00 application fee for the CUP permit and the \$360.00 Tri-County Health Department review fee are included with this application.

2.3 Written Explanation of the Project

2.3.1 Project Overview

The Project consists of construction and operation of approximately 19.2 miles of new produced water gathering pipelines in Adams County (Figures 1–2). Of the 19.2 miles in Adams County, approximately 12.3 miles are within unincorporated Adams County, and the remaining 6.9 miles are within the jurisdictional boundaries of the City of Brighton and City of Thornton. The City of Thornton and the City of Brighton would review the portions of the Project within municipal limits.

The Project is designed to transport produced water from 16 oil and gas production facilities located within Adams County and operated by Great Western Petroleum, LLC (see Section 2.3.2 for additional information about oil and gas production facility permits). An additional 29.3 miles of pipeline and connections to six additional oil and gas production facilities would be located within Weld County.

Produced water, also known as wastewater, is recovered as byproduct that is brought to the surface during oil and gas production. Oil, gas, and produced water leaves the well head at pressures up to 3,000 pounds per square inch (psi). The content of produced water varies with the formation where the water originates, but is generally high in salts with trace amounts of other minerals. After being brought to the surface, produced water is stored at the permitted oil and gas facilities in a storage tank. From the storage tank, the Project would transport the produced water via pipeline to Expedition's existing EWS #6 wastewater injection and disposal facility in Weld County. The pipeline would transport the produced water at a maximum pressure of approximately 240 psi until it reaches a storage tank at EWS #6. The maximum allowable pressure of the Pioneer Water Pipeline Project will be 333 psi. Expedition would increase the water pressure again at EWS #6 before it is injected underground.

2.3.2 Oil and Gas Production Facilities

Sixteen of the 22 oil and gas production facilities that the Project would connect are located within Adams County. The remaining six oil and gas production facilities are located in Weld County. The pipeline will be capable of transporting approximately 39.2 thousand barrels per day, of which an estimated 33 thousand barrels per day would come from oil and gas production facilities in Adams County at peak flow. Table 3 identifies the permit status for the Adams County oil and gas production facilities.

Table 3:
Oil and Gas Production Facility Permitting Jurisdictions and Permitting Status

Oil and Gas Production Facility Name	Permitting Jurisdiction	Permit Number/Status
Baseline	Adams County	USR2018-00010
B-Farm	Adams County	USR2017-00004
Brant	Adams County	USR2018-00011
Gus	Adams County	USR2018-00013
lvey	Adams County	USR2016-00006
Kortum	Adams County	USR2018-00009
Ocho	Adams County	USR2016-00005
Rio	Adams County	USR2019-00001
Schaefer	Adams County	USR2016-00003
Seltzer	Adams County	USR2018-00002
Tollway	Adams County	USR2018-00005
Tower	Adams County	USR2018-00012
Sharp	Adams County	Application for USR in progress
Rico	Adams County	Application for USR in progress
Henderson	Adams County	Application for USR in progress
Prairie	Brighton	Located within the City of Brighton (Case File 18-00214)

USR = Use by Special Review

Great Western Petroleum, LLC would obtain Use by Special Review permits for the Sharp, Rico, and Henderson oil and gas production facilities from the Adams County Department of Community and Economic Development. Each Use by Special Review (USR) permit authorizes at least one produced water pipeline and associated appurtenances (pumps, valves, etc.) at the oil and gas production facility. Great Western Petroleum, LLC would assign the right to construct the produced water pipeline to Pioneer. Pioneer would construct the pipeline and appurtenances associated with the Project within the limits of the permitted well pad. This application therefore excludes Project facilities within the well pad. Pioneer would not construct the facilities at these locations until a USR permit has been issued to Great Western Petroleum, LLC.

2.3.3 Pipelines

The Project would consist of construction of approximately 48.5 miles of 4- to 12 inch-diameter HDPE produced water gathering pipelines and associated appurtenances in Adams and Weld counties. Pioneer is seeking a permanent easement for its pipelines that is approximately 10 feet wide as well as an additional 30 feet of temporary easement for pipeline construction.

The pressure and capacity of produced water pipelines is dependent on the distance from the pipeline origin (at each oil and gas production facility). The temperature of the produced water when it is extracted from the ground is high (close to formation temperature) and it cools and contracts as it travels through pipelines away from the well head. The Project pipelines would operate at an estimated 240 psi but may operate at a higher pressure depending on temperature. The maximum allowable pressure will be

333 psi. Pioneer would control pressure and monitor temperature using remotely operated valves located along the Project route. Illustration 1 in Section 1.4 of this document provides a graphical representation of the pipeline from the permitted oil and gas production facilities to EWS#6. Table 4 and Figures 1 and 2 provide the pipeline segment names, diameters, and total length of each within unincorporated Adams County. Brighton and Thornton would review and approve the remaining approximately 6.9 miles of pipeline in Adams County. Section 3.6 provides information on existing land use and zoning districts crossed by the Project.

Table 4: Proposed Pipeline Segments within Unincorporated Adams County

Pipeline	Diameter (inches)	Length within Unincorporated Adams County (miles)
B-Farm Connection	6	0.15
Baseline Lateral	6	0.23
Gus Lateral	6	0.28
Henderson Lateral	4	0.11
Ivey Lateral	8	0.15
Kortum Lateral	8	0.14
North Adams Trunk	10	1.81
Ocho Connection	6	0.19
Pioneer Mainline	12	4.29
Rio Lateral	8	0.19
South Adams Trunk	10–12	3.6
Seltzer Lateral	4	0.08
Tollway Connection	6	0.12
Tower Lateral	6	0.92

To date, Pioneer has conducted a detailed routing effort to identify a preferred route. Pioneer is currently in the final stages of civil survey and anticipates finalizing landowner agreements and survey by the end of March 2020. The Project route may undergo minor route changes within the same parcels currently crossed by the Project as survey has been completed and landowner agreements are finalized. Pipeline construction often results in minor changes to the pipeline centerline within the permanent easement as a result of information gathered during construction. Pioneer would alert Adams County if information gathered in the field resulted in a change in the permanent and easement and would provide as-built spatial data identifying the pipeline centerline to Adams County upon completion of construction.

Pioneer's construction contractor would install the pipeline using mechanically excavated open-cut trenching techniques. The pipeline would be buried at a depth of 48 inches of cover or more. Pioneer's construction contractor would string pipe segments along the ditch line, fuse sections together using thermal fusion, and lower the pipeline into the open cut ditches. Each fusion joint would be logged by a data recorder with the results audited by qualified technicians, then lowered into the trench and backfilled. Upon completion of construction, the pipeline would be hydrostatically pressure tested to industry standards prior to operations.

Pioneer routed the Project to make use of existing rights-of-way (ROWs), property boundaries, and utility corridors associated with the oil and gas production facilities to the extent possible. Pioneer would obtain Adams County road ROW permits as required prior to construction, and the pipeline would only cross county road ROWs at or near a perpendicular angle. Pioneer has received preliminary approval to install pipelines within the E-470 Public Highway Authority ROW. Pioneer would obtain easements where the pipeline would cross private property. The pipeline would cross parcel 157123401001, which is owned by Adams County (reference Section 2.6). Additional information about the routing process is included in Section 3.3.2.

Pioneer proposes to cross state highways, county roads, railroads, and wetlands and streams and other existing infrastructure where practicable via horizontal directional drilling (HDD) to mitigate impacts to infrastructure and sensitive resources to the maximum extent practicable. Table 5 lists the county and state road crossings where the pipeline would be installed using HDD within Adams County. Section 3.11.5 describes Pioneer's commitment to avoiding impacts to wetlands and surface waters. The crossings listed in Table 5 are also depicted on Figure 3. Typical road and culvert crossings are provided in Exhibit D. Pioneer would repair or replace any Adams County infrastructure damaged during construction of the Project to pre-construction conditions.

Table 5:
Adams County Road Crossings

Crossing ID (Figure 3)	Street	Nearest Cross Streets ¹	Road Type
1	Colorado Blvd	E 156th Ave & Colorado Blvd	Local Road
2	Holly St	State Highway 7 & Holly St	Local Road
3	Monaco St	State Highway 7 & Monaco St	Local Road
4	Quebec St	State Highway 7 & Quebec St (South)	Local Road
5	County Road 2 - #3	County Rd 2 & Quebec St	County
6	County Road 2 - #4	County Rd 2 & Yosemite St	County
7	County Road 2 - #2	County Rd 2 & Lima St	County
8	County Road 2 - #1	County Rd 2 & Tucson St	County
9	Riverdale Rd #1	Riverdale Rd & State Highway 7 (South)	Local Road
10	Riverdale Rd #2	E-470 & Riverdale Rd	Local Road
11	E 136th Ave #1	E 136th Ave & Potomac St (West)	Local Road
12	E 136th Ave #2	E 136th Ave & Potomac St (East)	Local Road
13	Potomac St	E 136th Ave & Potomac St (South)	Local Road

2.3.4 Aboveground Appurtenances and Construction Laydown Areas

Construction of the pipelines would require an approximately 10-foot-wide permanent easement plus an additional 30-foot-wide temporary easement for a total construction corridor of 40 feet in width. Appurtenant aboveground facilities such as isolation valves, pumps, and cleaning tool launcher and receivers would be located at the existing oil and gas production facilities. Approximately five aboveground appurtenances consisting of three mainline valve sets and two cleaning tool launchers or receivers would be located on private easements within unincorporated Adams County. Pioneer would

site aboveground appurtenances outside of floodplains and outside of Adams County ROWs on private land. Easement negotiations for the aboveground locations are currently underway. Final locations of valves and other appurtenances would be provided to the Adams County Department of Community and Economic Development prior to public hearings.

Pioneer would design the project to be remotely operated through an automated supervisory control and data acquisition (SCADA) system. In the event of a leak or other unsafe condition, the SCADA system would automatically close valves and stop the flow of produced water.

Pioneer would use exiting laydown areas in Weld County and at EWS #6 to stage equipment and materials for Project construction. Pioneer does not anticipate using additional temporary workspaces in unincorporated Adams County besides those located along the pipeline route (see Exhibit A for the locations) that would be used to excavate trench, fuse pipeline segments, deliver the HDD equipment and pipe segments, excavate HDD entry and receiving pits, temporarily stockpile excavated soil from the pits, and serve as laydown for pipe segments. Pioneer's construction contractor would backfill, compact, and restore and revegetate the pipeline trench upon completion of the pipe installation. Following construction, the contractor would return temporary workspaces to pre-construction conditions.

2.3.5 Project Construction and Operation Safety

Pioneer is committed to safety and the Project would comply with all federal, state, and local rules and regulations to provide safe, reliable service. The Colorado Oil and Gas Conservation Commission (COGCC) would regulate the Project under the COGCC Series 1100 rules for flowlines (Series 1100 Rules), which references various technical standards and design, installation, construction reclamation, and operating/integrity management requirements. The Series 1100 Rules require Pioneer to submit a Flowline Report (Form 44) within 90 days of placing the Project into active status. Form 44 would include the location and specifications of the Project. The COGCC would have the authority to inspect the Project, and Pioneer would be required to notify the COGCC of the location of the Project within 30 days of construction.

Pioneer's parent company, Expedition, is rated Platinum by Independent Energy Standards, which place Expedition in the top 10 percent of similar companies for safety, environmental stewardship, and responsibility. Expedition's Occupational Safety and Health Administration's Form 300, "Summary of Work-Related Injuries and Illnesses," is included with this application as Exhibit E.

In the event of an emergency, the Project's SCADA system would automatically stop flow in the pipelines. Emergency response procedures would be described in an Emergency Response Plan for the Project, which can be provided to Adams County upon request.

2.3.6 Impact Avoidance and Minimization

Pioneer would design the Project to minimize impacts to sensitive resources and existing infrastructure such as utilities and roadways through the use of HDD. County and public road crossings would be constructed using HDD. Major construction activities for construction the Project would include staging materials, pipeline trenching and road crossing, pipeline installation, pressure-testing, backfilling, and restoration.

2.4 Construction Schedule

Pioneer proposes to begin construction activities in Weld County as early as March 2020 and in Adams County in fall 2020. Construction is expected to take approximately 6 months, with the Project fully inservice by the first quarter of 2021. Table 6 summarizes the Project's anticipated schedule in Adams County.

Table 6: Project Schedule

Project Schedule Milestone	Approximate Milestone Date
Adams County Neighborhood Meeting	December 2019
CUP Application Filed with Adams County	February 2020
Anticipated Adams County Planning Commission Hearing	June 2020
Anticipated Board of County Commissioners (BOCC) Hearing	July 2020
Anticipated Development Agreement Signed by BOCC	July 2020
Begin Construction Adams County	July 2020
Pipeline Testing	Late Fall 2020
Project In-Service	First Quarter 2021

2.5 Site Plan Showing Proposed Development

An overview of the Project is included as Figure 1. An Adams County overview map is provided as Figure 2. Alignment sheets according to CUP Application standards showing existing and proposed improvements for the gathering system are provided as Exhibit A.

2.6 Proof of Ownership (Warranty Deed or Title Policy)

Pioneer would secure applicable easements and executed ROW agreements with landowners authorizing the right to construct, operate, and maintain the Project on privately and publicly owned properties. Pioneer would execute agreements with property owners and would record these agreements with the Adams County Clerk and Recorders Office prior to the commencement of construction activities. At this time, easements are in place for a majority of the Project route within Adams County. Pioneer would provide easements to Adams County for the Project prior to construction.

The pipeline would cross one Adams County-owned parcel (parcel #157123401001) via HDD, and Pioneer has contacted Adams County to obtain a license agreement from Adams County Real Property division. The License Agreement would not inhibit Adams County's continued use of this parcel as open space and South Platte River Trail.

Pioneer would obtain Adams County road ROW permits from Adams County as required prior to construction, and the pipeline would only cross county road ROWs at or near a perpendicular angle. A map depicting unincorporated Adams County road crossings is included as Figure 3. A list of parcels within unincorporated Adams County on which the Project would be located is included in Exhibit F.

2.7 Proof of Water and Sewer Services

2.7.1 Water Services

Pioneer's construction contractor would use water during construction for dust suppression, weed control, soil conditioning, and testing of the pipeline. Pioneer's construction contractor would obtain water under permit or delivered to the site as needed from local supplier and would not require a municipal water supply. Additional information is available in Section 3.4.4.

2.7.2 Sewer Services

The operation of the Project would not require water or sanitary services. Temporary sanitary facilities would be provided for construction workers along the pipeline ROW during construction.

2.8 Proof of Utilities (e.g., Electric, Gas)

A utility connection is not required to construct or operate the Project.

2.9 Legal Description

Exhibit A shows parcels crossed by the Project and their legal descriptions.

2.10 Certificate of Taxes Paid

Prior to commencement of construction activities, Pioneer would obtain applicable easements and executed ROW agreements for the pipeline. As easement holder, Pioneer is not responsible for the payment of property taxes on the parcels; they remain the responsibility of the landowner.

2.11 Certificate of Notice to Mineral Estate Owners/and Lessees

Pursuant to Colorado Revised Statues (CRS) Section 24-65.5-102 (2)(a), a pipeline does not constitute an "application for development" that would trigger the requirements of the Surface Development Notification Act, CRS Section 24-65.5-101; therefore, these requirements are not applicable to the Project.

2.12 Notice of Surface Development

Pursuant to CRS Section 24-65.5-102 (2)(a), a pipeline does not constitute an "application for development" that would trigger the requirements of the Surface Development Notification Act, CRS Section 24-65.5-101; therefore, these requirements are not applicable to the Project.

2.13 Supplemental CUP Information

2.13.1 Neighborhood Meeting Summary

Pioneer held a neighborhood meeting in accordance with the ACDSR from 5 p.m. to 8 p.m. on Tuesday, December 10, 2019, at Todd Creek Golf Club (8455 Heritage Dr., Thornton, CO 80602). The purpose of the neighborhood meeting was to provide the community a description of the Project and answer related questions from the attendees. A copy of the notification, neighborhood meeting materials, and a summary of the neighborhood meeting is provided in Exhibit G.

2.13.2 Solid Waste Transfer Station

Not applicable. The Project does not involve a solid waste transfer station.

2.13.3 Solid Waste Composting Facility

Not applicable. The Project does not involve a solid waste composting facility.

2.13.4 Scrap Tire Recycling Facility

Not applicable. The Project does not involve a solid tire recycling facility.

2.13.5 Inert Fill

Not applicable. The Project does not involve inert fill.

2.13.6 AASI Requirements

This permit application also includes AASI requirements as requested by the Adams County Department of Community Planning and Development during the Conceptual Review process. Refer to Section 3 of this application package.

3. Section 6-07-02. AASI Additional Supplemental Requirements

This CUP application also responds to requirements outlined in Section 06-07-02 under Chapter 6 Regulations Governing AASI and the AASI Checklist as requested by Adams County during the Conceptual Review process. The Project does not meet definitions of a Major New Domestic Water Treatment System, a Major New Domestic Sewage Treatment Systems, a major extension of an existing Domestic Water and Wastewater Treatment System, Major Facilities of a Public Utility, an Airport, Arterial Highways, Interchanges and Collector Highways, or Rapid or Mass Transit Facilities; therefore, this CUP application does not address Section 6-08 for additional submittal requirements related to AASI submittals for those project types.

3.1 6-07-02-01. Application Fee

A \$1,000.00 application fee and the \$360.00 Tri-County Health Department review fee are included as part of the CUP permit application. AASI permit fees are not applicable to the Project.

3.2 6-07-02-02. Information Describing the Applicant

The names, addresses, email address, fax number, organization form, and business of the Applicant, and if different, the owner of the Project.

Applicant Information

Pioneer Water Pipeline, LLC
Attn: Mr. Spence McCallie
600 17th Street, Suite 725
Denver, CO 80202
303-815-7064
smccallie@expedition-water.com

Project Owner Information

Pioneer Water Pipeline, LLC
Attn: Mr. Spence McCallie
600 17th Street, Suite 725
Denver, CO 80202
303-815-7064
smccallie@expedition-water.com

3.2.1 The names, addresses and qualifications, including those areas of expertise and experience with projects directly related or similar to that proposed in the application package, of individuals who are or shall be responsible for constructing and operating the Project.

Land Project Manager
Rhett Gore
Purple Land Management
700 17th Street #500
Denver, CO 80202
(303) 586-3167
rgore@purplelandmgmt.com

Permitting and Environmental Consultant:

Tetra Tech
John Heule, Project Manager
350 Indiana Street, Suite 500
Golden, CO 80401
Office: 303-980-3574
John.Heule@tetratech.com

Project Engineer

Mr. Jim McMangle Spartan Engineering 12345 W Alameda Parkway Lakewood, CO 80228

Project Surveyor

Jeff Weaver Encompass Services 10901 W 120th Ave Suite 400 Broomfield, CO 80021

Construction Manager

The construction manager would be identified once the Project has been put out for bid in 2020.

Operations Manager

The operations manager would be identified once the Project has been put out for bid in 2020.

3.2.2 Authorization of Application by the Project Owner (If Different than the Applicant)
Not applicable.

3.2.3 Qualifications of Individuals Directly Related to the Proposed Project and Applicant's Financial and Technical Capability

Pioneer's parent company, Expedition, is a private-equity backed leading midstream produced water infrastructure company in the Rockies, and has expanded its revolving credit facility to \$100 million. Cadence Bank served as lead arranger and administrative agent. The increased facility would fund Expedition's continued pipeline and facilities growth initiatives to service long-term, contracted customers in the Denver–Julesburg, Green River and Powder River Basins. The syndicated bank group also includes UMB. First Horizon and Woodforest.

Founded in 2013, Expedition has grown from a single disposal facility to a multi-basin company today with a capacity of more than 150,000 barrels a day. Expedition has constructed and manages 17 disposal wells and over 300 acres of evaporative pond capacity in Colorado and Wyoming. Expedition's commitment to build and maintain high-volume facilities enables it to grow with its customers while bringing tangible benefits to communities in which it operates.

Spence McCallie is the lead engineer for Pioneer Water Pipeline. Mr. McCallie has more than 10 years of experience constructing produced water pipelines and more than 20 years of overall pipeline construction experience. Pioneer has contracted Spartan Engineering to provide additional expertise in safety, engineering, and construction of the pipeline. Spartan Engineering is a global full-service engineering company with centuries of combined engineering, design, and construction management experience for pipelines.

3.3 6-07-02-03. Information Describing the Project

3.3.1 Detailed Plans and Specifications of the Project

Please see Section 2.3 for Detailed Plans and Specifications of the Project.

3.3.2 Descriptions of Alternatives

Pioneer considered and eliminated several alternative routes prior to selecting the preferred route. The routing process began by identifying the pipeline beginning points (permitted oil and gas production facilities) and the terminus (EWS #6). Alternative routes were then selected to minimize potential impacts while meeting the pipeline's objective. Refer to Exhibit H for descriptions of the alternatives.

3.3.3 Schedules for Designing, Permitting, Constructing, and Operating the Project.

Pioneer will design and construct the Project to avoid impacts to existing land uses and the public to the extent practicable. Section 2.4 provides an estimated milestone schedule for the Project. A final schedule for construction activities would be developed at a later date. The sections below provide additional detail on temporary workspaces and phasing for construction of the Project.

3.3.3.1 Survey, Permitting, Landowner Negotiations, Work Zone Preperation

The preliminary work phase consists of activities that cannot be performed at the same time as pipeline construction, such as civil survey, permitting, landowner negotiations, and work zone preparation.

3.3.3.2 Pipeline Construction

Pioneer is seeking permanent easement that is approximately 10 feet wide and an additional 30 feet of temporary easement for pipeline construction. The pipeline construction would consist of trenching, assembling the pipeline, and placing the pipeline within the open trench, backfilling the trench, and restoring the land according to landowner agreements. Typical construction drawings depicting typical trench section views and HDD are included in Exhibit D. The work zone may move up to 5,000 feet per day. In addition, this phase would include pipeline HDD installation. Refer to Section 2.3.5 for information regarding temporary workspaces and staging areas.

3.3.3.3 Surface Restoration

Upon completion of the construction, Pioneer's restoration contractor would remove construction materials and debris from the site. Temporary workspaces would be re-contoured to pre-construction conditions. Disturbed areas where vegetation was removed by construction activities to an extent that it caused potential soil erosion would be treated with seedbed preparation techniques, re-seeded with an approved seed mixture, and mulched as necessary during the planting season according to landowner agreements.

The Project would utilize a Stormwater Management Plan (SWMP) for implementation of best management practices (BMPs) to mitigate soil erosion, control noxious weeds, and revegetate disturbed areas. The Project intersects approximately 2.8 miles of area designated within the Adams County Stormwater Permit Area. Therefore, Pioneer will likely be required to obtain an Adams County Stormwater Quality (SWQ) Permit for Construction. Mature vegetation would be actively avoided, although some vegetation would be impossible to avoid and therefore would be replaced per the property owner's reasonable request with a like species. Vegetation in public ROW would be replaced to Adams County standards for revegetation within the public ROW. If pavement is damaged by open-cut crossings, it would be restored to meet or exceed pre-construction existing conditions and comply with local standards. Pioneer would repair or replace any Adams County infrastructure damaged by construction of the Project to pre-construction conditions.

3.3.3.4 Testing and Commissioning

The commissioning phase consists of testing and cleaning the pipeline and associated facilities. Before the pipeline is put into service, it would undergo hydrostatic pressure testing, i.e., filled with water and tested to verify the structural integrity and workmanship of the pipeline. Additionally, the test would ensure that no leaks are present.

3.3.4 Purpose and Need

Refer to Section 1.4—Purpose and Need, of this application.

3.3.5 Construction and Operation Conservation Techniques

Construction of the Project would incorporate mitigation measures that would minimize impacts to water quality, water use, existing land uses, surrounding communities, cultural resources, and the natural environment. Pioneer would use a SWMP for implementation of BMPs to mitigate soil erosion, control noxious weeds, and revegetate disturbed areas.

3.4 6-07-02-04. Property Rights, Permits and Other Approvals

Pioneer would obtain all necessary federal, state, and local permits and approvals and obtain property rights for construction and operation of the Project. A description of property rights, permits, and approvals required is provided in the sections that follow.

3.4.1 Property Rights

Documentation of property rights would be provided to Adams County Department of Planning and Development prior to construction. Refer to Section 2.5—Proof of Ownership of this application for more details.

3.4.2 Federal, State, and Local Permits and Approvals

Table 7 lists the permits approvals anticipated to be required for the Project and the status of obtaining these permits. Construction of the Project would be performed in accordance with the applicable requirements as stipulated in the permits.

Table 7:		
Potential Permits and Approva	ls	
Regulatory Authority	Permit/Approval	Status
Federal Approvals		_
U.S. Army Corps of Engineers (USACE)	Federal Clean Water Act Section 404	Pioneer would hire a qualified contractor to perform wetland delineations in spring 2020, prior to construction. Pioneer would implement minor project layout adjustments, including minor route adjustments and the use HDD technology, to avoid unnecessary wetland impacts. If wetland impacts are unavoidable, Pioneer would obtain necessary permits and approvals from the USACE-Denver Regulatory Office prior to construction. The Project would likely qualify for a Nationwide Permit 12 for impacts related to linear transportation projects.
State of Colorado Approvals		
Colorado Department of Public Health and Environment (CDPHE), Water Quality Control Division	Stormwater Discharges Associated with Construction Activity Authorization to Discharge under the Colorado Discharge Permit System (COR400000)	Pioneer would apply for coverage under COR400000 at least 10 days prior to construction in accordance with CDPHE requirements. Pioneer would also manage stormwater through implementation of a SWMP in accordance with Part I.C. of COR400000.
	General Permit for Construction Dewatering Discharges to Discharge under the Colorado Discharge Permit System (COG070000)	Pioneer would apply for coverage under COG070000 at least 30 days before the anticipated date of discharge as needed.
Colorado Division of Water Resources (CDWR), Groundwater Information and Well Permitting	Temporary Dewatering Permit (GWS-62 form)	Pioneer would obtain prior to construction as needed.

Table 7: Potential Permits and Appro	vals	
Regulatory Authority	Permit/Approval	Status
CDPHE, Water Quality Control Division	Water Quality Certification under Section 401 of the Clean Water Act	Pioneer would obtain in conjunction with Section 404 permits. Under the Colorado 401 Certification Regulation, all nationwide permits are certified by statue and do not require a certification.
Colorado Department of	Driveway/ Access Permit	Pioneer to apply for permit in spring 2020.
Transportation, Region 1	Utility/Special Use Permit for crossings of state and federal highways	Pioneer to apply for permit in spring 2020.
CDPHE, Air Pollution Control Division	General Construction Permit –Land Development Projects (GP03) for land development including but not limited to land preparation such as excavating or grading, for residential, commercial, or industrial development, or oil and gas exploration and production	Pioneer would obtain prior to construction as needed.
	Air Pollutant Emission Notice for construction activity that disturbs 25 acres of continuous land or more and/or lasts 6 months or more in duration	Pioneer would obtain prior to construction as needed.
Local Approvals		
Adams County	Conditional Use Permit	Submitted to Adams County in February 2020.
, admic county	ROW Permit and Engineering Review for work in Adams County public ROW	Pioneer would apply for the ROW permit prior to CUP public hearings in spring 2020, and Pioneer would only cross county road ROWs at or near a perpendicular angle. New access to Adams County road ROW is not required for this Project. Pioneer does not anticipate obtaining an access permit from Adams County.
	Adams County Stormwater Quality (SWQ) Permit	The Project intersects approximately 2.8 miles of area designated within the Adams County Stormwater Permit Area. Therefore, Pioneer will likely be required to obtain an Adams County Stormwater Quality (SWQ) Permit for Construction.
Weld County	Right-of-Way Use Permit Application	Pioneer to apply for permit in spring 2020.
	Floodplain Development Permit	Pioneer to apply for permit in spring 2020.
E-470	Application for Pipeline or Wire Line – Crossing And/or Longitudinal for construction in, on, along, over, across, through or under E-470 property	Pioneer has received preliminary approval to install pipelines within the E-470 Public Highway Authority ROW based on in-person meetings with E-470 in fall 2019. Pioneer would apply for formal approval in spring 2020.
UPRR Railroad	Union Pacific Crossing/Encroachment Permit issued by the Union Pacific Railroad for utilities that cross or follow along the ROW	Pioneer to apply for permit in spring 2020.
City of Thornton	Special Use Permit ¹	Pioneer held a meeting with the City of Thornton on November 21, 2019, to discuss permitting requirements for the Project, and Pioneer provided additional information about the Project on February 14, 2020. To date, Thornton has not indicated whether the Project would require a land use permit. Pioneer would apply for the permit in March 2020 if required.

Table 7:				
Potential Permits and Approvals Regulatory Authority Permit/Approval Status				
	Right-of-way Permit for road crossings.	Pioneer to apply for permit in spring 2020.		
City of Brighton	Conditional Use Permit	Pioneer submitted an application in December 2019 and received comments on the application in early February 2020. Pioneer expects permit approval in late spring or early summer 2020.		
City of Fort Lupton	Use by Special Review Permit	Pioneer to apply for permit in spring 2020.		
Ditch Owners	Application for project review and crossing approval.	Pioneer to apply for permit in spring 2020.		

¹ Pioneer began conversations with Thornton on November 21, 2019, to determine whether City of Thornton permits are required for construction. At this time, Thornton is not requiring a land use permit.

3.4.3 Copies of Federal and State Consultation Correspondence and Mitigation Requirements and Environmental Impact Reporting

3.4.3.1 Federal and State Consultation Correspondence

Pioneer does not currently expect a federal or state approval is required for the Project as there is no federal nexus and there are no state consultation requirements at this time. The Project would be permitted through local jurisdictions. If the Project requires a federal permit (i.e., USACE) then the Project would coordinate and obtain the necessary permits and approvals prior to construction.

3.4.3.2 Mitigation Required by Federal, State, and Local Authorities

If mitigation measures are required as conditions of federal, state, or local permits issued for the Project, Pioneer would provide copies upon receipt.

3.4.4 Description of Water to Be Used by The Project

Dust suppression, weed control, soil conditioning, and hydrostatic testing of the pipeline would require water use during construction. The construction contractor would obtain appropriate permits for water appropriation and discharge, as required (Table 7). Water would be obtained from surface or groundwater under permit or delivered to the site as needed from local supplier as available. Approximately 680,000 gallons of water would be required for hydrostatic testing. Hydrostatic test water would be tested and disposed of according to the CDPHE General Permit for Construction Dewatering Discharges (COG070000) and returned to the source or injected at EWS #6 upon completion of hydrostatic testing. An additional 1.3 million gallons of water would be needed for dust suppression, weed control, and soil conditioning during construction.

3.5 6-07-02-05. Financial Feasibility of the Project

3.5.1 Estimated Construction Costs

The total estimated cost of the proposed Project is approximately \$51 million. It is estimated approximately \$27 million would be associated with construction in Adams County.

3.5.2 Contract or Agreement for Revenues or Services

The Project would be financed through private equity, with contractual agreements with local customers to provide minimum revenues. The details of contracts between Pioneer and its contractors to build the proposed Project have not been completed; contract details would be largely confidential.

3.5.3 Description of the persons or entity(ies) who shall pay for or use the Project and/or services produced by the Development and those who shall benefit from any and all revenues generated by it.

The purpose of the Project is to provide transportation of produced water from Great Western Petroleum, LLC oil and gas production facilities in Adams County to the existing injection facility at EWS #6. In addition, the proposed Project would reduce future truck use for wastewater transportation and provide safe and reliable service to Pioneer's customers. Pioneer anticipates that construction of this pipeline would reduce the need for up to 150 truckloads per day from Adams County roads and eliminate 5 million truck miles from local community roads each year of the of the predicted 50-year lifespan of the Project. Property tax revenue to Adams County generated by the proposed Project are estimated to be about \$250,000 annually inclusive of all mill levy jurisdictions. Pioneer will pay about \$319,000 in sales tax associated with construction of the Project.

The Project expects to directly benefit Great Western Petroleum LLC and its customers, Adams County, and indirectly benefit the public.

3.5.4 Cost of All Mitigation Measures Proposed for the Project.

The cost of mitigation, such as for HDD crossings of streams, roads, and drainages and avoidance sensitive resources, is included within the total estimated cost of the Project. The total cost for construction of the proposed Project in Adams County is approximately \$27 million. Pioneer would bear 100 percent of mitigation costs.

3.5.5 Detailed description of Project Financing

Pioneer's parent company, Expedition Water Solutions (Expedition) is a private-equity-backed leading midstream produced water infrastructure company in the Rockies, and has a revolving credit facility of \$100 million. Cadence Bank (Cadence) served as lead arranger and administrative agent for the recent expansion of revolving credit. The increased facility would fund Expedition's continued pipeline and facilities growth initiatives. The syndicated bank group also includes UMB, First Horizon, and Woodforest.

3.6 6-07-02-06. Land Use

3.6.1 Description of Existing Land Uses

Adams County zoning maps (11-21-2019) indicate the Project passes through six zoning classifications. The Project is overlaid on the Adams County Zoning classifications on Figure 4. Table 8 lists the zoning districts crossed by the Project and length in each zone. The Project meets the requirements of a Major Energy Facility, which is a conditional use in the zoned areas traversed by the Project.

Table 8:
Adams County Zone Districts Crossed by the Project.

Zone District	Zone Symbol	Length Crossed by the Project (miles
Agricultural-1 District	A-1	2.2
Agricultural-3 District	A-3	7.8
Planned Unit of Development	P-U-D	0.3
Proposed Planned Unit of Development	P-U-D(P)	1.2
Public Lands, Parks Open Space, and Facilities	PL	0.5
Residential Estate	R-E	0.5

Fifteen National Land Cover Database land cover classifications are crossed by the Project within Adams County (Figure 5): open water, developed open space, developed low intensity, developed medium intensity, developed high intensity, barren land, deciduous forest, evergreen forest, mixed forest, shrub/scrub, grassland/herbaceous, pasture/hay, cultivated crops, woody wetlands, and emergent herbaceous wetlands (Exhibit B, Figure 2).

3.6.2 Compliance with Provisions of Local Land Use Plans

The Imagine Adams County Adams County Comprehensive Plan (Adams County 2012a) outlines the County's objectives for future development within unincorporated areas of the County and in municipal growth areas. It establishes goals, policies, and strategies that would influence day-to-day decision-making regarding land use applications, capital improvement planning, and regional coordination efforts with other jurisdictions and agencies. Key goals, policies, and strategies related to the Project are discussed below.

Key Goal: Promote Coordinated and Connected Growth.

The Project would support the County's growing population and provide construction-related jobs. The Project would also serve to remove industrial traffic from County roads increasing safety within the County as it grows.

Key Goal: Protect the Health, Safety, and Welfare of Adams County's Inhabitants.

The Project would replace less efficient truck traffic with more efficient and safer pipeline transportation of produced water to the treatment facility. This would in turn reduce emissions from vehicles increasing the health and safety of residents within the County and near oil and gas production sites.

Key Goal: Foster Regional Collaboration and Partnerships.

Because the Project route passes through multiple municipalities and serving the oil and gas industry throughout the region, it would serve to further integrate the area and mitigate the impacts of the oil and gas industry throughout the region.

Key Goal: Reduce the Fiscal Impact of Growth

With the construction of the Pioneer pipeline, fewer trucks would be making daily trips on roads that serve the area, reducing the wear and frequency of repairs and maintenance, *and* decreasing costs to the County, especially as the population and industry within the County grows and changes.

Key Goal: Promote Economic Vitality.

The Project may restrict future land uses directly within the pipeline permanent easement but agricultural uses would continue to be allowed. The Project would not discourage high-quality commercial growth and economic development from occurring in areas surrounding the Project. The Project supports commercial growth and economic development in the surrounding area by ensuring a reliable and high-quality produced water transportation service that is essential to promoting a clean and safe environment for existing and future businesses in Adams County. The Project would also generate construction and operations-related jobs.

Key Goal: Preserve the County's Natural Resources.

The Project would not require additional water supply or use during operation. Pioneer is acquiring necessary permits for water service required during construction of the Project. See Sections 3.4.2, 3.11.3, and 3.11.4. The Project would reduce vehicle traffic, benefiting user experience in outdoor areas in the County, including parks, trails, and natural areas.

Countywide Policy: Transportation

The Project anticipates that construction of this Project would eliminate 5 million truck miles from local community roads each year of the predicted 50-year lifespan of the Project, which would provide a more sustainable transportation solution, preserve the integrity of the road system, and provide the safest and most reliable means of transportation through Adams County.

Countywide Policy: Economic Development

Construction and operation of the Project would generate economic benefits for the local economy in Adams County. The Project is expected to have a total estimated cost of \$51 million; approximately \$27 million of the Project cost would be allocated for the Adams County portion of the Project. At its peak, construction of the Project is expected to involve approximately 100 on-site jobs that would be filled primarily by local workers. Additional non-local workers are expected to commute from the Colorado Front Range Region or temporarily relocate to Adams and Weld Counties for construction of the Project. Estimates that construction wages will add \$3.2 million to the Adams County economy and estimates the Project would result in hiring of four full-time employees for operations.

Adams County may also benefit from Project-related expenditures during Project operation. The Project would qualify as a targeted industry for employment within the County as specified by the Adams County Economic Development Corporation (Energy, Logistics, Wholesale Trade). The Project would allow for existing businesses in Adams County to expand and strengthen the labor workforce who live and work in the County.

Additional economic benefits would be derived from property tax. Based on assessed value, Pioneer estimates that property tax revenues generated by the Project would be approximately \$500,000 annually. Taxing authorities that would benefit from property tax would include school districts, metropolitan districts, fire districts, library district, water and sanitation districts and other Adams County municipalities. These benefits would be generated each year and extend for the operating life of the Project.

Countywide Policy: County Fiscal Balance

Fiscal balance is a key element of the County Comprehensive Plan. The Comprehensive Plan states that "commercial and industrial development anywhere in the County would generate a positive fiscal benefit." Pioneer estimates property tax revenues generated by the Project are estimated to be approximately \$250,000 annually.

Countywide Policy: Community Facilities and Services

The Project would be built to federal, state, and local quality and design standards. Pioneer is committed to safety, and would follow federal, state, and local regulations, design, and performance standards to provide safe, reliable service to Pioneer's customers.

Economic, environmental, and visual impacts due to construction and operation of the pipeline facilities were considered during the planning and development and siting of the pipeline facilities was designed to ensure minimization of impacts. The pipeline would be located underground and is not expected to interfere with existing or proposed agricultural use for more than one growing season.

Countywide Policy: Natural Resources and Resource Extraction

The Project supports commercial growth and economic development in the surrounding area by ensuring a reliable and produced water transportation service that is essential to existing companies in Adams County. The transport of produced water supports the extraction of natural resources contributes to the local economy, providing employment to County citizens and tax income to the government.

Pioneer has minimized its impacts to Adams County natural resources including wetlands, watersheds, floodplains, streams, and air quality. Section 3.11 summarizes potential Project impacts and mitigation measures taken by Pioneer to reduce impacts and avoid resources.

Countywide Policy: Agricultural Lands

Impacts to agricultural land would be minimal because the route primarily parallels existing ROWs. Furthermore, the pipeline would be located underground with the exception of approximately five appurtenances located within the permanent easements aboveground (reference Section 2.3.4) and is not expected to interfere with existing or proposed agricultural use.

Countywide Policy: Sustainability Initiatives

The Project anticipates that construction of this Project would eliminate 5 million truck miles from local community roads each year of the of the predicted 50-year lifespan of the Project, improving the operational efficiency of produced water transportation in and around Adams County by reducing energy

and fuel consumption and decreasing overall risk. Pipelines provide the safest and most reliable means of transportation or resources. Overall, the Project would reduce emissions, reduce potential conflicts between passenger vehicles and trucks, minimize the risk of spills, preserve the integrity of the road networks, avoid environmentally sensitive areas and abate impacts to property owner land by following section lines and existing ROWs.

Countywide Policy: Hazard Mitigation

Pioneer would prepare a site-specific Emergency Response Plan to establish emergency protocols for the produced water pipeline and associated facilities. Contractors and project personnel would be familiarized with the emergency procedures. In addition, construction contractors have standardized emergency protocol. Refer to Section 3.11.11.

3.6.3 Impacts and Net Effect of Project on Land Use Patterns

The Project would have no impact on the land use patterns within Adams County. Overall, the Project route would allow for agricultural practices and other zoned uses to continue within the pipeline easement, reduce environmental pollutants and risks to environmentally sensitive areas, minimize truck traffic and impacts to County roads and provide service local customers to boost local employment and contribute to the tax base.

3.6.4 Description of Surrounding and/or Impacted Communities

The Project is located primarily within unincorporated Adams County, with portions in Brighton and Thornton, CO and extends into unincorporated Weld County. Within unincorporated Adams County, the pipeline route passes on the edges of residential communities and developments, but remains adjacent to roadway ROWs, not going directly through residential communities. Otherwise, the project route passes primarily though agricultural uses.

3.6.5 Description of Cultural Resources

Refer to Section 3.11.10—Areas of Paleontological, Historic or Archaeological Importance.

3.6.6 Existing and Unique Agricultural Land in Area

The Adams County Open Space, Parks and Trails Master Plan (Adams County 2012b) identifies agricultural lands and local food production districts to preserve high-quality agricultural lands in the County. The Project would not impact these districts, proposed open space or park focus areas, nor would it impact associated land use goals. Refer to Sections 3.6.2 and 3.6.3 for additional information. The Project route and valve set locations would be along existing roads, property section lines, utility ROWs, and easements to minimize impacts to agricultural activities. Furthermore, the pipeline would be located to a depth of at least 48 inches and is not expected to interfere with existing or proposed agricultural use for more than one growing season.

3.7 6-02-02-07. Local Government Services

3.7.1 Existing Capacity of and Demand for Local Government Services

The Project would not have an adverse effect on the capability of local government to continue to provide services, nor would it exceed the capacity of service delivery systems. The Project would not require new permanent roads to complete construction of the Project or operations activities. Oversized loads would be permitted and approved by the County prior to using County roads. Effects on roads and transportation are discussed in Section 3.7.3 of this application.

In Adams County, the Project would be located within two school districts, Brighton School District 27J and Adams 12 Five Star School District. Impacts to these districts are not anticipated because the construction does not directly pass by any schools and is not expected to substantially impact bus routes.

In Adams County, the Project route is located within two fire districts, North Metro Fire Protection District and Brighton Fire Rescue District. Pioneer would consult with each to address any concerns the fire protection districts have. Neither fire protection districts have expressed any concerns to date.

As discussed in Section 2.3.5 and Section 3.11.11, Pioneer's Emergency Response Plan would include procedures and directions for emergency dispatch in the case of a pipeline emergency. The Project would not increase fire protection demands.

The Project is not expected to cause additional demand on law enforcement services. Interference or damage to the pipeline facilities would be detected by continuous electronic monitoring by Pioneer employees. In the case of an emergency, Pioneer would follow the Emergency Response Plan described in Section 3.11.11. Local law enforcement would be contacted as applicable based on the type and degree of such an emergency.

The existing infrastructure has the capacity to accommodate the activities associated with the construction, operations, and required maintenance of the proposed facilities and respective pipelines.

3.7.2 Impacts and Net Effect of the Project on Demand for Local Government Services

No new electric service would be required for the Project. Aboveground appurtenances would operate on solar power from on-site solar panels. Natural gas would not be necessary to construct the Project. Water use would be obtained from surface or groundwater under permit or delivered to the site as needed. A municipal source is not required.

The required electricity associated with the pipeline would not have an adverse effect on the capability of local government to continue to provide services, nor would it exceed the capacity of service delivery systems. The Project would not increase the need for police or fire protection services during construction and would be operated by Pioneer using appropriate security and emergency response procedures. No disruption to local utility services are expected to occur during construction or operation of the Project. It is not anticipated that the construction and operation of the Project would create additional demands for local government services.

3.7.3 Potential Effect of the Project on the Existing Transportation Network

As described in Section 2.12, the Project would not adversely impact the existing transportation network. Pioneer anticipates that construction of this Project would eliminate 150 truck trips per day and 5 million truck miles from local community roads each year of the predicted 50-year lifespan of the Project, which would reduce emissions, reduce potential conflicts between passenger vehicles and trucks, preserve the integrity of the road networks, reduce impacts to local infrastructure in conjunction with the goals of the Adams County Comprehensive Plan, and provide the safest and most reliable means of transportation of produced water through Adams County.

Pioneer would obtain an Adams County ROW crossing permit prior to construction, and the pipeline would only cross county road ROWs at or near a perpendicular angle. In any segment of the Project that is parallel to an Adams County ROW, the pipeline will be constructed a minimum of five (5) feet from the edge of the maximum future ROW width, as designated in the Adams County 2012 Transportation Plan.

Truck haul routes for material deliveries from off-site areas to the Project would utilize Colorado Boulevard, 160th Avenue, 168th Avenue, Quebec Street, U.S. 85, Riverdale Road, and 136th Avenue. None of these roads are expected to experience a significant impact from the delivery of materials during construction. Pioneer does not anticipate that the construction contractor would need to improve or close roads, intersections, or bridges to accommodate oversized truck deliveries to the Project.

Increases in traffic due construction trucks and other vehicles are expected to be negligible. Construction work hours are expected to be 7 AM to 7 PM Monday through Saturday. Construction may occur on Sundays and other hours outside the 7 AM to 7 PM timeframe on an as-required basis.

The total number and type of vehicles accessing the pipeline route during peak construction would include:

Pickup trucks: 100 trips per day

• "Low boy" equipment transport trucks: 1-6 trips per week

Pipe transport truck and trailer: 12 trips per week

Bus/van: 1 trip per day

3.8 6-07-02-08. Financial Burden on County Residents

3.8.1 Description of the Existing Tax Burden and Fee Structure for Government Services

The Project is expected to generate economic benefits to Adams County during construction and after the Project has been placed in service because of an increase in assessed value and goods and services associated with the annual operation of these facilities. Pioneer estimates property tax revenue to Adams County generated by the Project would be about \$250,000 annually.

3.8.2 Impacts and Net Effect of the Project on Existing Tax Burden and Fee Structure for Government Service

The Project would not create an undue financial burden on Adams County. The total estimated cost of the Project is estimated to be approximately \$51 million. Approximately \$27 million of the Project cost would be allocated for the Adams County portion of the Project. Pioneer estimates they will pay approximately \$250,000 annually in property tax.

3.9 6-02-02-09. Local Economy

3.9.1 Description of Local Economy

Adams County had a total estimated population of 511,868 in 2018 (Table 9). The population in Adams County increased by an estimated 70,265 residents or approximately 16 percent from 2010 to 2018 and accounted for approximately nine percent of the total statewide population in 2018 (U.S. Census Bureau, 2019).

Table 9: Population—2010

	Total Population1		2010 to 2018	
Geographic Area	2010	2018	Net Change	Percent Change
Adams County	441,603	511,868	70,265	15.9%
State of Colorado	5,029,196	5,695,564	666,368	13.2%
United States	308,745,538	327,167,434	18,421,896	6.0%

¹ U.S. Census Bureau (2019)

According to the Colorado Department of Labor and Employment, the annual unemployment rate (not seasonally adjusted) was 2.4 percent in Adams County in October 2019, slightly higher than the statewide annual unemployment rate of 2.2 percent. Annual average unemployment rates during the recent economic downtown peaked in 2011, ranging from 9.2 percent statewide to 10.8 percent in Adams County (Colorado Information Marketplace 2019).

In 2017, the Adams County economy employed approximately 259,641 people. Employment has subsequently increased, with more people employed in 2017 than a decade earlier. Overall, Adams County represented 9.0 percent of the state's total employment in 2017 (Colorado Information Marketplace 2019).

In 2017, the most common industries in Adams County by number of employees are office and administrative support (40,255), management (25,958) and sales and related (24,532). These industries were the largest employers, collectively employing 34.9 percent of the Adams County workforce in 2017. The highest paying industries include computer and mathematical; architecture and engineering; computer; engineering and science; and law enforcement workers including supervisors and legal. (Data USA 2019).

In 2017, the average annual household income in Adams County was \$64,087, approximately 2.1 percent lower than the state average of \$65,458, and 12.2 percent lower than the Denver-Aurora-Lakewood Metro Area of \$71,884 (Data USA 2019).

3.9.2 Impacts and Net Effects on the Local Economy and Opportunities for Economic Diversity

Construction and operation of the Project would generate economic benefits for the local economy in Adams County. The construction and capital spending phase would also generate economic benefits elsewhere in the state of Colorado and for the state as a whole.

The Project is expected to have a total estimated cost of \$51 million, approximately \$27 million of the Project cost would be allocated for the Adams County portion of the Project. At its peak, construction of the Project is expected to involve approximately 100 jobs during construction that would be filled primarily by local workers. Additional non-local workers are expected to commute from the Colorado Front Range Region or temporarily relocate to Adams and Weld Counties for construction of the Project. The Project is expected to result in four new full-time employees during operations.

Project-related expenditures for construction labor and materials would also support economic activity elsewhere in the local and state economy through the multiplier effect, because these initial changes in demand "ripple" through the local economy and generate secondary impacts. Industries likely to experience the greatest economic benefits include the construction sector and the professional and technical services sectors. Spending on local accommodation, food, and local services by construction workers temporarily relocating to the area is also expected to support income elsewhere in the local area. Construction-related impacts would be one-time impacts that would last for the duration of construction.

Adams County may also benefit from Project-related expenditures during Project operation. These impacts would be much smaller than those expected to occur during construction. Additional economic benefits would be derived from property tax, approximately \$250,000 based on all mill levy jurisdictions. Authorities that would benefit from property tax would include school districts, metropolitan districts, fire districts, library district, water and sanitation districts, and other Adams County municipalities. These benefits would be generated each year and extend for the operating life of the Project.

3.9.3 Description of Jobs Created

Project construction is expected to directly employ approximately 100 construction-related workers during construction peak, with additional employment supported elsewhere in the local and state economy. The Project is expected to result in four new full-time employees during operations.

3.9.4 Income Potential from Jobs Created by or as a Result of the Project

The Project is expected to have a total estimated construction labor cost of \$51 million, approximately \$27 million associated with Adams County. As discussed in Section 3.9.2, construction of the Project would also support employment and income in other sectors of the local and state economy through the multiplier effect, because these initial changes in demand "ripple" through the local economy and generate secondary impacts. Spending on local accommodation, food, and local services by construction

workers temporarily relocating to the area is also expected to support income elsewhere in the local area. Construction-related impacts would be one-time impacts that would last for the duration of construction.

Project-related expenditures during operation would also support income in the local and state economy through the multiplier effect. These expenditures are expected to result in small but positive economic impacts that would occur annually over the operating life of the Project.

3.10 6-02-02-10. Recreational Opportunities

3.10.1 Description of Present and Potential Recreation Uses

Avoidance of recreational lands (parks) was a major consideration in the route selection process and the Project is not expected to be located within recreational areas. Because the produced water pipeline would be located underground with the exception of approximately five appurtenances (reference Section 2.3.4), located aboveground within the permanent easements, there is no anticipated impact to recreation resources. The pipeline will be installed using HDD at a near perpendicular angle across the Todd Creek Trail and South Platte River Trail. No hunting areas or recreational facilities are in the vicinity of the Project. The Project would not affect area fishing amenities.

3.10.2 Map of Locations of Recreational Uses

The pipeline crosses the Todd Creek Trail and the South Platte River Trail. No other recreational facilities or trails are located in the vicinity of the pipeline route.

3.10.3 Impacts and Net Effect of the Project on Present and Potential Recreational Opportunities

The Project would not degrade the quality or quantity of recreational opportunities and experiences within the County as the Project would be located underground with the exception of approximately five appurtenances located aboveground (reference Section 2.3.4) within the permanent easements. The pipeline will be installed using HDD to cross the Todd Creek Trail and the South Platte River Trail. No temporary or permanent impacts to these trails are expected.

3.11 6-02-02-11. Environmental Impact Analysis

This section addresses Section 6-20-01 of the Adams County Development Manual, which is an appendix that provides examples of the types of concerns that the BOCC would take into consideration in determining whether permit application complies with the approval criteria contained in Section 6-17 of the Adams County Development Manual.

3.11.1 Air Quality

3.11.1.1 Affected Airsheds

The Project is located within the Denver Metro/North Front Range airshed, which encompasses Adams County. Since 2002, the region has been designated as in attainment with all National Ambient Air Quality Standards (NAAQS) except ozone, for which the region is designated as nonattainment. As of January 22, 2020, the entire project is located within the "serious nonattainment area" for the 2008 eight-hour

ozone standard (84 FR 70897). Ozone levels tend to peak during the summer months when ozone formation is greatest in the presence of heat and sunlight.

3.11.1.2 Map and Description of the Ambient Air Quality and State Air Quality Standards of Affected Airsheds

The air pollutants for which U.S. Environmental Protection Agency (EPA) has promulgated NAAQS, and the Colorado Air Quality Control Commission has promulgated Colorado Ambient Air Quality Standards (CAAQS), summarized in Table 10.

Table 10:
Ambient Air Quality Standards and PSD Increments

Pollutant/Averaging Time	NAAQS (μg/m³)	CAAQS (µg/m³)	PSD Class I Increment (µg/m³)¹	PSD Class II Increment (μg/m³)¹	
CO (carbon monoxide)			<u> </u>	, , , , , , , , , , , , , , , , , , ,	
1-hour ²	40,000	40,000	3	_3	
8-hour ²	10,000	10,000	3	_3	
NO ₂ (nitrogen dioxide)					
1-hour ⁸	188	188	_3	_3	
Annual ⁴	100	100	2.5	25	
O ₃ (ozone)	O ₃ (ozone)				
8-hour ⁶	137	137	3	_3	
PM _{2.5} (particulate matter less than 10	microns in diam	eter)			
24-hour ⁷	35	35	2	9	
Annual ⁴	12	12	1	4	
SO ₂ (sulphur dioxide)	SO ₂ (sulphur dioxide)				
1-hour ⁹	196	196	_3	_3	
3-hour ²	1,300	700	25	512	
24-hour ²	_5		5	91	
Annual ⁴	5		2	20	

PSD = Prevention of significant deterioration

μg/m³ = Micrograms per cubic meter

- 1 The PSD increment values serve information purposes only and do not constitute a regulatory PSD increment consumption analysis.
- 2 No more than one exceedance per year.
- 3 No PSD increments have been established.
- 4 Annual arithmetic mean.
- The NAAQS for this averaging time for this pollutant was revoked by the EPA (2016).
- An area is in compliance with the standard if the fourth-highest daily maximum 8-hour ozone concentrations in a year, averaged over 3 years, is less than or equal to the level of the standard.
- An area is in compliance with the standard if the highest 24-hour PM2.5 concentrations in a year, averaged over 3 years, is less than or equal to the level of the standard.
- An area is in compliance with the standard if the 98th percentile of daily maximum 1-hour NO2 concentrations in a year, averaged over 3 years, is less than or equal to the level of the standard.
- 9 An area is in compliance with the standard if the 99th percentile of daily maximum 1-hour SO₂ concentrations in a year, averaged over years, is less than or equal to the level of the standard.

Air pollutants emitted from construction of the Project would be transported by the winds in the area. CDPHE has provided a representative wind rose (Illustration 2) for the Fort St. Vrain Power Plant located near Platteville. This wind rose shows the typical wind patterns in the Front Range, which includes the Project. As shown in the illustration, winds generally follow a northeast-southwest orientation that aligns with the South Platte River.

3.11.1.3 Impacts and Net Effect on Air Quality during Construction and Operation

Impacts to air quality in the vicinity of the Project would be short term, transient, and limited to the construction period of the pipeline (approximately 6 months). Construction vehicles and equipment required for vegetation clearing, trenching, HDD installation and re-contouring may produce fugitive dust or exhaust emissions during the construction phase of the Project. Emissions of fugitive particulate matter (PM₁₀ and PM_{2.5}) may be generated by construction equipment movement, pipeline trench excavation, and earthmoving activities. Engine exhaust emissions of NO_x, SO₂, CO, volatile organic compounds and particulate matter (PM₁₀, PM_{2.5}) would result from the operation of construction equipment.

Dust suppression would be conducted during construction. No air emissions are expected from the operation of the pipeline. As described in Section 3.4.2 (Table 7) Pioneer will submit a CDPHE APEN including a dust suppression plan prior to construction, and CDPHE would stipulate additional mitigation, monitoring and recordkeeping requirements for a minor source construction air permit if required.

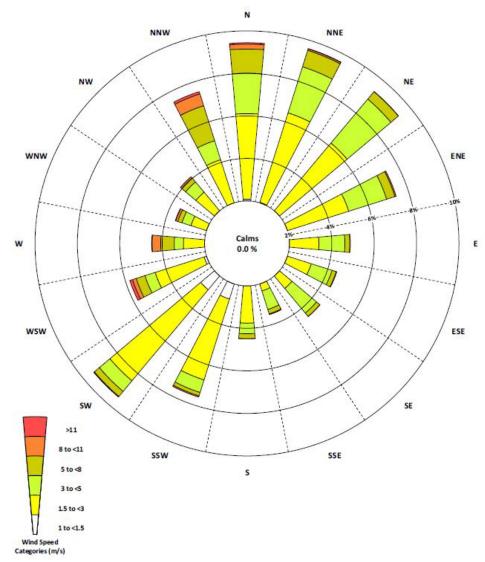


Illustration 2: Wind Frequencies by Speed and Direction, Platteville, CO

3.11.2 Visual Quality

3.11.2.1 Ground Cover, Vegetation, or Other Natural Features

The Project would be predominantly located adjacent to existing roadways and within grasslands, pastures, and areas of agricultural land use. The pipeline would be installed by means of open trenching or by HDD and would ultimately be buried underground with the exception of approximately three valve sets located within the permanent easement (Section 2.3.4). Pioneer would provide the final location of valve sets prior to public hearings for the Project.

Ground cover, vegetation, and other natural features vary throughout Adams County along the Project alignment. The entire Project is within the Flat to Rolling Plains Ecoregion, which is a subset of the High Plains Ecoregion, and consists of relatively flat terrain with few natural landscape features. The majority of the native vegetation in this area has been removed and replaced with crops such as wheat, grain, corn, and barley. Natural features crossed by the Project are limited to natural drainageways that traverse the landscape.

3.11.2.2 Description of Viewsheds, Scenic Vistas, Unique Landscapes or Land Formations

The Project would not affect high visibility corridors. Unique landscapes or formations that would be crossed by the Project were not identified, which consists of primarily grasslands/pastures and agricultural land use and light commercial development The Project would also not affect scenic vistas to the west towards the mountain ranges because the pipeline would be underground and there are no buildings associated with the valve sets.

3.11.2.3 Map and Description of Buildings, Structure Design, and Materials To Be Used for the Project

A map and description of the Project components, including structure design and materials to be used, are provided in Section 2.3.2.

3.11.2.4 Impacts and Net Effect of the Project on Visual Quality

Overall, the Project is not expected to affect visual quality. The pipeline would be installed by means of trenching or by HDD and ultimately would be buried underground and would be compatible with the surrounding area and harmonious with the character of the predominantly rural and agricultural land uses. The valve sets would be located within the permanent easements for the Project, which would be collocated with other linear ROWs including utility corridors and roadways. The valve sets would be visible from adjacent roadways and nearby residences. However, the valve sets would be similar to ancillary facilities associated with other oil and gas production facilities and would therefore not be out of character in the landscape setting.

Pioneer anticipates that pipeline construction would take approximately 6 months. Visual impacts would occur during construction when equipment, construction crews, and temporary construction staging areas are present; however, visual impacts would be short term as the pipeline would be installed underground and equipment would be removed once construction is complete.

3.11.3 Surface Water Quality

3.11.3.1 Map and Description of All Surface Waters

The Project is anticipated to cross surface water features mapped by the National Hydrography Dataset (NHD). The NRCO Report (Exhibit B) for the Project describes pipeline crossings of desktop-mapped surface water features within the NRCO. Pioneer would contract a qualified consultant to complete a wetland and other waters of the United States (WOTUS) delineation in spring 2020 to verify and delineate aquatic resources. Potential streams mapped by the NHD crossed by the Project in Adams County are summarized in Table 11.

Table 11:
Surface Water Crossings by the Project in Unincorporated Adams County

Crossing ID	Lateral Name	Stream Name (if available)	Latitude of Crossing ¹	Longitude of Crossing ¹
1	Pioneer Mainline	German Ditch	39.9858017	-104.9329987
2	Pioneer Mainline	German Ditch	39.9856987	-104.9329987
3	Pioneer Mainline	_	39.98550034	-104.9329987
4	Pioneer Mainline	_	39.98490143	-104.9329987
5	Pioneer Mainline	_	39.98590088	-104.9169998
6	Pioneer Mainline	Signal Ditch	39.98889923	-104.9029999
7	Pioneer Mainline	Signal Ditch	39.98590088	-104.9049988
8	N. Adams Trunk	Brighton Ditch	39.99409866	-104.8410034
9	N Adams Trunk	Brighton Ditch	39.9817009	-104.8460007
10	Tower Lateral	_	39.95660019	-104.9029999
11	Tower Lateral	_	39.95740128	-104.901001
12	S. Adams Trunk	Fulton Lateral Ditch	39.94319916	-104.8280029
13	Gus Lateral	_	39.95460129	-104.8850021
14	S. Adams Trunk	_	39.95510101	-104.8840027
15	S. Adams Trunk	Brantner Ditch	39.95199966	-104.8649979
16	S. Adams Trunk	_	39.94879913	-104.8600006
17	S. Adams Trunk	Third Creek	39.9435997	-104.8290024
18	S. Adams Trunk	Third Creek	39.94340134	-104.8280029
19	S. Adams Trunk	Third Creek	39.94329834	-104.8280029
20	S. Adams Trunk	Fulton Ditch	39.94319916	-104.8249969

Source: USGS (2018)

Pioneer plans to install the pipeline using HDD for crossings of a majority of these features. If construction using HDD is not practicable, Pioneer would work under a USACE Nationwide Permit 12 and restore the crossing to pre-construction conditions when construction has been completed. Pioneer would not site aboveground appurtenances within the NRCO. Therefore, the Project would not result in permanent impacts to wetlands or other WOTUS.

¹ Based on preliminary desktop analysis. Field verification required to confirm actual site conditions.

3.11.3.2 Impact and Net Effects of the Project on the Quantity and Quality of Surface Waters

The Project would not have an adverse net effect on the capacities or functioning of streams in the impact area, or on the permeability, volume, recharge capability, and depth of aquifers in the surrounding area. Pioneer would obtain all necessary state, county, and local permits and comply with associated permit conditions (Section 3.4.2).

BMPs for sediment and erosion control to protect surface water would be accomplished through a combination of construction techniques, vegetation and revegetation, administrative controls, and structural features. BMPs that can be expected are listed in Table 12. Specific BMP types and selection criteria expected for various stages of construction are listed below in Table 13.

Table 12: Non-Structural and Structural BMPs

Non-Structural BMPs		
Program Oversight	Construction Site Planning and Management	Good Housekeeping/ Materials Management
Construction Phase Plan Review Contractor Training and Certification Database Development and Maintenance	Timing of Projects Construction Sequencing Site Operator BMP Inspection and Maintenance Training Non-structural practices may include, but are not limited to a stabilized staging area, minimize initial pad site acreage, slope pad to the reserve put, wind erosion and dust control, temporary vegetation, permanent vegetation, mulching, geotextiles, sod stabilization, slope roughening, vegetative buffer strops, protection of trees, and preservation of mature vegetation. A water source may be used to abate dust and alleviate wind erosion.	General Construction Site Waste Management Emergency Response Plan
	Structural BMPs	
Erosional Control	Sediment Control	Runoff Control
Berms Check Dams Culverts Culvert Protection Diversions Land Grading	Silt Fence Straw Bales Land Grading Vehicle Tracking Control Wattle	Berm Check Dam Culverts Culvert Protection Ditch and Berm

Table 13: BMPs Types and Selection Criteria

Active	Completed	Final Stabilization
Pipelines and Storage Areas		
Berm Check Dams Culvert Protection Ditch & Berm Erosion Control Blanket Land Grading Mulches, with or without a tackifier Revegetation Silt Fence Vehicle Tracking Control	Berm Check Dams Culvert Protection Ditch & Berm Erosion Control Blanket Land Grading Mulches, with or without a tackifier Revegetation Silt Fence	Berm Culverts Diversion Ditch/Ditch and Berm Revegetation Mulches, with or without a tackifier

Table 13: BMPs Types and Selection Criteria

Active	Completed	Final Stabilization
Straw Bales Wind Erosion Control Wattles	Straw Bales Wattles	
Access Roads		
Berm Check Dams Culverts Culvert Protection Ditch & Berm Erosion Control Blanket Land Grading Mulches, with or without a tackifier Revegetation Silt Fence Vehicle Tracking Control Straw Bale Wind Erosion Control Wattles	Berm Check Dams Culverts Culvert Protection Ditch & Berm Erosion Control Blanket Land Grading Silt Fence Straw Bale Roadside Ditch with Turnout	Berm Culverts Culvert Protection Ditch and Berm Gravel Surfacing Revegetation

3.11.3.3 Impacts and Net Effects of the Project Streambed Conditions

Streams and man-made waterways in the vicinity of the Project have been modified greatly as a result of historical and current agricultural practices. The Project would avoid perennial streams, rivers, or features through the use of HDD technology; however, other ephemeral and intermittent resources may be crossed by the Project alignment via open-cut trenching following USACE regulations and standards. Impacts to streams would be minor and temporary, the Project ROW would be returned to preconstruction conditions following construction. Downstream flow and aquatic life, if present, would not be impeded. Features would be returned to pre-construction contours, backfilled with the originally excavated material, and restored with salvaged vegetation in the minimum time necessary to conduct activities. BMPs would be used to avoid adverse impacts on minor ephemeral and intermittent streams, irrigation ditches, and any associated riparian features during the temporary disturbance of the features. As a result, the Project would not permanently affect the physical characteristics of the waterways crossed by the Project.

3.11.4 Groundwater Quality and Quantity

3.11.4.1 Map and Description of All Groundwater

The Project is located above the Denver and Arapahoe aquifers within the Denver Basin (Figure 6; CDWR, 2018). The Denver Basin (Denver, Arapahoe, and Laramie-Fox Hills aquifers) is a geologic formation in which aquifers lie on top of each other in layers with confining deposits separating the aquifers (USGS 2009). The Project is entirely within the CDWR South Platte Division (CGS 1992). Groundwater in areas crossed by the Project and vicinity generally flows towards the South Platte River.

3.11.4.1.1.1 Project Area Aquifers

The pipeline alignment within Adams County is located above the Denver, Arapahoe, and Laramie-Fox Hills aquifers of the Denver Basin.

3.11.4.1.1.2 The Denver Aquifer

The Denver aquifer underlies an area of approximately 3,500 miles and varies in thickness from a thin eroded edge at its outcrop/subcrop up to 1,000 feet. The Denver aquifer consists of a series of interbedded clay shale, clay, siltstone, and sandstone lenses. The sandstone and peddle compositions are typically volcanic. Carbonaceous material and coal beds are also common (CDNR, 2014).

Due to the fine-grained composition of the aquifer, wells commonly have yields of 50 to 150 gallons per minute. The wells are typically developed for domestic uses, although a number of municipal wells have been drilled on the western side of the basin where yields are higher. The Denver aquifer is separated from the underlying Arapahoe aquifer by an extensive clay/shale unit approximately 50 feet thick. The clay/shale interval serves as a hydraulic barrier between the aquifers (CDNR 2014).

3.11.4.1.1.3 The Arapahoe Aguifer

The Arapahoe aquifer is composed of interbedded conglomerates, sandstones, siltstones, and clay shales. The aquifer underlies an area of almost 4,700 square miles and is generally about 400 feet thick. For administrative purposes, the northern portion of the hydrogeologic unit is subdivided into an upper and lower aquifer that is separated by shale sequence ranging from 50 to 100 feet thick (CDNR, 2014).

Wells in the Arapahoe aquifer have the highest yield of the four aquifers, up to 800 gallons per minute. Consequently, the aquifer is used extensively to supply municipal water systems. Water quality is generally good, as evidenced by its use by Deep Rock Water to obtain water for bottling (CDNR 2014).

3.11.4.1.1.4 The Laramie-Fox Hills Aguifer

The lowermost of the four Denver Basin aquifers is the Laramie-Fox Hills aquifer, which underlies approximately 6,700 square miles and marks the areal extent of the basin for economic groundwater development. The aquifer is made up of both the marine sandstones of the Fox Hills and the overlying fluvial sandstones in the lower Laramie Formation. The Laramie-Fox Hills aquifer is generally between 250 and 300 feet thick and includes about 150 to 200 feet of fine- and medium-grained sandstone (CDNR, 2014).

Well yields of 350 gallons per minutes are common. The aquifer is extensively utilized throughout the basin for commercial development and less so for domestic use because wells within the aquifer are deeper over most of the basin. Both the Laramie-Fox Hills and Arapahoe aquifers are generally under artesian pressure (CDNR, 2014).

3.11.4.1.2 Colorado Division of Water Resources South Platte Division

Groundwater well information for wells permitted by the CDWR (2018) in the vicinity of the Project was reviewed to summarize groundwater conditions. A summary of information for water wells within 0.25 mile

of the Project is provided in Exhibit I. A map of water wells is included within Exhibit I, Figure I-1. Groundwater flow in the deeper bedrock aguifers is expected to be influenced by regional flow conditions.

The Project would not impact groundwater, directly contribute to groundwater recharge, or impact aquifer water levels. The pipeline would be located approximately 48 inches deep; therefore, no aquifer groundwater is expected to be encountered or impacted. If groundwater is encountered during trenching or HDD activities, dewatering methods may be employed, and the water would be pumped and discharged to undisturbed soils close to the pipeline trench.

Groundwater quality also would be protected through the implementation of a SWMP and through the implementation of waste management BMPs during construction. Waste from materials brought onto the construction site would be placed in appropriate containment and then removed for disposal/recycling to a licensed facility. No waste materials would be buried, dumped, or discharged to waters of the state. In addition, groundwater would not be utilized during construction activities or when the pipeline is operational. No subsurface water impoundment structures are proposed such as water storage systems or subsurface dams.

The potential for a pipeline failure release is remote. There may be areas that would require mitigation in order to restore areas affected by spills and/or repair the pipeline; however, the overall impacts are expected to be localized and minor.

Pioneer would prepare a site-specific Emergency Response Plan to establish emergency protocols for the produced water pipeline and associated facilities in the event of a release. Contractors and project personnel would be familiarized with the emergency procedures. In addition, construction contractors have their own standardized emergency protocol they would follow.

3.11.5 Wetlands and Riparian Areas

3.11.5.1 Map and Description of all Floodplains, Wetlands, and Riparian Areas To Be Affected by the Project

Using aerial imagery, USGS topographic maps and NHD, NWI, and Federal Emergency Management Agency floodplain information, potential aquatic resources intersected by the Project are shown in detail on sheet maps in Exhibit B. Table 14 summarizes wetland types crossed by the Project in unincorporated Adams County.

Table 14: Wetland Types Crossed by the Project in Unincorporated Adams County

Wetland Type	Cowardin Type	Acreage within the Project Area ²
Freshwater Emergent Wetland	PEM1A	0.03
Freshwater Emergent Wetland	PEM1C	0.55
Freshwater Pond	PUBF	0.17
Riverine	R2UBH	0.43
Riverine	R4SBC	1.33
Riverine	R5UBFx	0.04
Riverine	R5UBH	0.16
	Total	2.71

Table 14:
Wetland Types Crossed by the Project in Unincorporated Adams County

,, , , , , , , , , , , , , , , , , , ,		
Wetland Type	Cowardin Type	Acreage within the Project Area ²

Source: USFWS (2019)

Notes: PEM1A—Palustrine, Emergent, Persistent, Temporary flooded; PEM1C—Palustrine, Emergent, Persistent, Seasonally Flooded; PUBF—Palustrine, Unconsolidated Bottom, Semipermanently Flooded; R2UBH—Riverine. Lower Perennial, Unconsolidated Bottom, Permanently Flooded; R4SBC—Riverine, Intermittent, Streambed, Seasonally Flooded; R5UBFx—Riverine, Unknown Perennial, Unconsolidated Bottom, Semipermanently Flooded, Excavated; R5UBH— Riverine, Unknown Perennial, Unconsolidated Bottom, Permanently Flooded

2 Based on preliminary desktop analysis. Field verification required to confirm actual site conditions.

3.11.5.2 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.)

Potential wetland areas and other aquatic features were identified during a preliminary desktop review. The majority of the features crossed by the Project are anticipated to be fed by surface water runoff, high groundwater table, and/or seepage from irrigation ditches and canals.

3.11.5.3 Impacts and Net Effect of the Project on the Floodplains, Delineated Flood Hazard Zones, Wetlands, and Riparian Areas

The proposed Project would intersect riparian areas associated with the South Platte River in two locations, a narrow riparian area along Big Dry Creek and a small riparian area following an unnamed stream north of German Ditch.

At the time of this application, the Project study area intersects 86 suspected emergent wetlands within Adams County; however, field verification would be required to confirm the location and extent of wetlands intersected by the Project. No forested wetlands or riparian areas would be crossed by the Project as delineated by the USFWS NWI or observed on aerial imagery (Table 14). In addition, pipeline installation is generally considered a temporary impact, as wetland features would be returned to preconstruction contours and revegetated upon completion of construction. Pioneer would contract a qualified consultant to complete a wetland and other WOTUS delineation in spring 2020 to verify and delineate aquatic resources. HDD technology would be utilized to avoid surface impacts to perennial features and any other sensitive resources identified. Pioneer would complete appropriate consultation and/or permitting with the USACE-Denver Regulatory Office and obtain all authorizations for impacts to potential WOTUS as needed; however, based on a preliminary review of resources present and construction plans and methodology, written authorization does not appear to be necessary.

The Project intersects Federal Emergency Management Agency 100-year floodplains associated with Big Dry Creek, Todd Creek, an unnamed tributary to Todd Creek, and the South Platte River. The Project would temporarily impact floodplains. These impacts would be restored to the original contours once construction is completed and therefore, the project would not result in impacts to 100-year floodplains. Reference Exhibit B, Figure 3 for a map of FEMA 100-Year floodplains crossed by the Project.

3.11.6 Terrestrial and Aquatic Animals and Habitat

3.11.6.1 Map and Description of Terrestrial and Aquatic Animals

A desktop analysis was performed to identify wildlife habitat in the area of the Project (Exhibit B). The shortgrass prairie in Colorado was once inhabited by massive herds of free-ranging bison and pronghorn as well as huge prairie dog colonies, deer, and elk and top predators including gray wolves and grizzly bears. Currently, the most abundant animals on the prairie are domestic cattle, coyotes, and prairie dogs. Pronghorn still inhabit Colorado's prairies, although in reduced numbers. Species of conservation concern that still inhabit native prairie habitats in Colorado include burrowing owl, ferruginous hawk, mountain plover, McCown's longspur, chestnut-collared longspur, and long-billed curlew as well as northern pocket gopher, ornate box turtle, massasugua rattlesnake, and Texas horned lizard (NatureServe 2018). Deer, turkey, pheasant, and dove are the common game wildlife in the vicinity of the Project. It is not anticipated that construction and operation would have a more than a temporary and negligible impact on game and non-game wildlife, livestock, and other animals.

3.11.6.2 Description of Stream Flows and Lake Levels Needed to Protect the Aquatic Environment

The Project would not impact stream flows or lake levels. Perennial water features would be crossed by HDD with no disturbance to the bed or bank. Other features would be crossed by open-cut trenching, however, downstream flow and aquatic life, if present, would not be impeded. Features would be returned to pre-construction contours, backfilled with the originally excavated material, and restored with salvaged vegetation in the minimum time necessary. All surface water crossings necessary for the Project would adhere to state requirements for the use of surface waters as regulated by the CDWR. The aquatic environment would not be adversely impacted by the Project following restoration.

The CDPHE Water Quality Control Division's General Permit for Stormwater Discharges from Construction Activities allows for dewatering of groundwater and stormwater to undisturbed soils to allow for infiltration on the site. It is not anticipated that dewatering activities would be required during the Project. However, if dewatering becomes necessary, groundwater and/or stormwater may be pumped from excavations or trenches to the ground surface for containment, infiltration, or evaporation. If necessary, the location of pumping and discharge of the groundwater or stormwater would be marked on the site plan prior to the start of pumping activities. If it becomes necessary to contain and sample groundwater prior to discharge or pump groundwater off site or into a waterway or storm sewer, a groundwater discharge permit (Colorado Discharge Permit System) would be obtained from the state prior to engaging such activities. It is not expected that any such dewatering activities would impact stream flows or lake levels.

3.11.6.3 Description of Threatened or Endangered Animal Species and Habitat

Please reference Exhibit B for information regarding threatened and endangered animal species and habitat.

3.11.6.4 Map and Description of Critical Wildlife Habitat and Livestock Range

Please reference Exhibit B for a map and description of wildlife habitat. The Project is not expected to affect livestock as the pipeline would be located underground with the exception of three aboveground valve sets located within the permanent easement for the Project.

3.11.6.5 Impacts and Net Effect of Project on Terrestrial and Aquatic Animals, Habitat and Food Chain

No critical wildlife habitat for federally listed species is present in the immediate vicinity of the Project and no such habitat is mapped by state or local agencies. The relative size of the Project and primarily temporary nature of disturbance is not anticipated to impact the food chain of area wildlife.

The Project is located in a predominantly rural agricultural area with little native wildlife habitat and ideal grassland habitat. Project construction (pipeline) would cause temporary disturbance of approximately 190 acres of agricultural land. Native shortgrass prairie is not anticipated at a measurable quantity with the Project boundaries. Under expected conditions, it is not anticipated that construction and operation within the Project would have a more than a temporary and negligible impact on migration routes, calving areas, summer and winter range, game and non-game wildlife, livestock, or other animals. It is possible that the Project may be used for opportunistic feeding for wildlife; however, the Project ROW does not offer suitable habitat distinguishable from the rest of the surrounding properties. The primary effect is likely to be temporary wildlife avoidance of the construction zone due to noise, vibration, and human presence during one growing season. However, impacts to vegetation and wildlife would be minimized using BMPs and mitigation measures, performance of appropriate pre-construction surveys, avoidance of sensitive habitat areas, and using HDD techniques to avoid disturbance to sensitive resources.

Quantitative impacts, albeit temporary and minimal, to aquatic resources cannot be estimated until field investigations are conducted to confirm and delineate features. Minimal and temporary impacts to the aquatic environmental may occur during excavation, pipeline placement, and backfill. BMPs would minimize erosion and sedimentation. Intermittent and ephemeral water features would not be dewatered (in the event water is present) during pipeline construction and local water sources would not be utilized for construction. The pipeline would be installed via HDD under all perennial streams. All water features would be restored to pre-existing contours; therefore, no stream flows, lake levels, or spawning streambeds would be permanently impacted by the Project.

A raptor nest survey for the entire Project (not limited to the NRCO areas) conducted in January 2020 within 0.5 mile of the Project identified 32 raptor nests during the survey (Attachment 1). Twenty raptor nests were observed within the 0.5-mile buffer of the Project including one bald eagle nest (Nest 023), two red-tailed hawk nests (Nests 0018 and 009), and 17 nests with unknown species determination. The unknown nests were small and are unlikely to be used by eagles. Nest 032, a bald eagle nest located within the 0.5-mile buffer of the Project according to data provided by CPW, was not found by the biologist during the survey.

CPW recommends a seasonal non-encroachment buffer of 0.5 mile from October 15 to July 31 for active bald eagle nests and 0.3 mile from February 15 to July 15 for active red-tailed hawk nests. As the raptor nest survey was conducted early in the year (January 2020), only a few nests were active. Additional raptor nest surveys should be conducted if construction activities are expected to occur prior to August 31, 2020, when the raptor breeding season ends. The Project will adhere to the CPW recommendations to avoid potential harassment of raptors during construction.

3.11.7 Terrestrial and Aquatic Plant Life

3.11.7.1 Map and Description of Terrestrial and Aquatic Plant

A desktop analysis was performed to identify terrestrial and aquatic plant habitat in the area of the Project and field reconnaissance is proposed for late summer/early fall 2018. The results of those studies were reported in Exhibit B and are summarized in this section.

The Project intersects five vegetation types (CPW 2013):

- Agriculture is controlled use for production of biological products.
- Irrigated Ag is irrigated crops and fields.
- Grass/Forb Mix is rangeland co-dominated by grasses and forbs.
- Grass Dominated is rangeland dominated by annual and perennial grasses.
- Rangeland is a mix of non-native and native grasses, grass-like plants, forbs, or shrubs suitable for grazing or browsing use.

The Project in Adams County is located entirely with the one Level III ecoregion, High Plains (25) as mapped by the EPA. Within the High Plains, the Project is located within the Flat to Rolling Plains (25d). Dryland farming is extensive, with areas of irrigated cropland scattered throughout the ecoregion. Winter wheat is the main crop, with a smaller acreage in forage crops. Land use is predominantly rangeland in contrast to the cropland or mosaic of cropland and rangeland of surrounding ecoregions. Blue grama-buffalograss is the natural shortgrass prairie type with blue grama (*Bouteloua gracili*), buffalograss (*Bouteloua dactyloides*), threadleaf sedge (*Carex filifolia*), fringed sage (*Carex crinita*), Junegrass (*Koeleria* spp.), and western wheatgrass (*Pascopyrum* spp.) the most common species expected (Chapman et al. 2006).

Desktop analysis suggests that variations of Palustrine, Emergent or Palustrine, Scrub/Shrub wetlands may be crossed by the Project. If wetland communities are present, the wetland vegetation anticipated include cattail (*Typha* spp.), rough cocklebur (*Xanthium strumarium*), plains switchgrass (*Panicum virgatum*), barnyard grass (*Echinochloa* spp.), bulrushes (*Scirpus* spp.), rushes (*Juncus* spp.), and sedges (*Carex* spp.), willows (*Salix* spp.), alder (*Alnus* spp.), peach-leaf willow (*Salix amygdaloides*), and cottonwoods (*Populus* spp.).

Listed Plant Species: Three federally listed plant species, Colorado butterfly plant, Ute ladies-tresses and western prairie fringed orchid, were considered for an effects analysis. As described in Exhibit B, it is unlikely that the identified federally listed species would occur in areas crossed by the Project.

Noxious Weeds. Noxious weeds, as identified based on the Colorado Noxious Weed Act (35-5.5 CRS) and the Adams County Noxious Weed Management Plan and Enforcement Policy, are expected to be encountered because the majority of the Project is located within recently disturbed areas, near roadways, and in fallow fields. Because field investigations are pending (anticipated late summer/early fall 2018), the specific composition and density of noxious weeds cannot be identified at this time. Following field assessment, a specific weed management plan would be prepared as necessary. The Project would comply with the Adams County Noxious Weed Management Plan and Enforcement Policy.

3.11.7.2 Impacts and Net Effect that the Project on Terrestrial and Aquatic Plant Life

Based on the Project location and lack of suitable plant and wildlife habitat, it is not anticipated that any formal field surveys for federally listed plant species would be necessary. The State of Colorado does not have a sensitive species list for plants, and no formal protections are in force. Pioneer has begun informal consultation with USFWS and CPW to identify any issues that need to be addressed with development of the Project. No issues with effects to terrestrial or aquatic plants have been identified to date.

Field reconnaissance is pending and proposed for late summer/early fall 2018. Findings from the survey would provide the necessary data to prepare an appropriate weed management and revegetation plan as needed. Field data would ensure the plan would address the actual site conditions and propose appropriate actions for compliance with county and state regulations. A preliminary reclamation plan for the project, which addresses BMPs for the minimization of weed species, has been prepared as part of the SWMP.

Overall, the Project pipeline would cause temporary disturbance of less than 59.5 acres of agricultural/rangeland within unincorporated Adams County. Native shortgrass prairie is not anticipated to be present at a measurable quantity with the Project boundaries. Quantitative impacts, albeit temporary and minimal, to aquatic resources cannot be estimated until field investigations are conducted to confirm and delineate features. Mitigation measures would be performed if required to replace vegetation disturbed during construction of the Project.

3.11.8 Soils, Geologic Conditions, and Natural Hazards

3.11.8.1 Map and Description of Soil, Geologic Conditions, and Natural Hazards

3.11.8.1.1 Soils

NRCS-mapped soil types crossed by the Project are summarized in Table 15. Generally, the soils crossed by the Project are non-hydric, gently to moderately sloping, well drained loams (NRCS 2020).

Table 15: Summary of Soil Types

Soil ID	Soil Series	Slopes	Flooded	Ponded	Drainage	Permeability	Hydric
AdB	Arvada loam	0–3%	None	None	Well drained	Rapid	No
AsB	Ascalon sandy loam	0–3%	None	None	Well drained	Very Rapid	No
AsC	Ascalon sandy loam	3–5%	None	None	Well drained	Very Rapid	No
AsD	Ascalon sandy loam	5–9%	None	None	Well drained	Very Rapid	No
BoD	Blakeland loamy sand	3–9%	None	None	Somewhat excessively drained	Very Rapid	No
DaA	Dacono loam	0–1%	None	None	Well drained	Very Rapid	No
DaB	Dacono Ioam	1–3%	None	None	Well drained	Very Rapid	No
Gr	Gravelly land-Shale outcrop complex	N/A	None	None	Excessively drained	Very Rapid	No
Lv	Loamy alluvial land, gravelly substratum	N/A	Occasional	None	Somewhat excessively drained	Very Rapid	Yes; 5%

Table 15: Summary of Soil Types

Soil ID	Soil Series	Slopes	Flooded	Ponded	Drainage	Permeability	Hydric
Lw	Loamy alluvial land, moderately wet	N/A	Occasional	None	Somewhat poorly drained	Very Rapid	Yes; 6%
MISLD	Gravel pits	N/A	None	None	N/A	Very Rapid	No
NIA	Nunn loam	0–1%	None	None	Well drained	Rapid	No
NuA	Nunn clay loam	0–1%	None	None	Well drained	Rapid	No
NuB	Nunn clay loam	1–3%	None	None	Well drained	Moderately Rapid	No
PIB	Platner loam	0–3%	None	None	Well drained	Rapid	No
PIC	Platner loam	3–5%	None	None	Well drained	Rapid	No
ReD	Renohill loam	3–9%	None	None	Well drained	Moderately Rapid	No
ShF	Samsil-Shingle complex	3–35%	None	None	Well drained	Moderately Slow	No
Тс	Terrace escarpments	N/A	None	None	Excessively drained	Very Rapid	No
UIC	Ulm loam	3–5%	None	None	Well drained	Rapid	Yes; 2%
UID	Ulm loam	5–9%	None	None	Well drained	Rapid	Yes; 2%
W	Water	N/A	None	None	N/A	N/A	Yes; 10%
Wt	Wet alluvial land	N/A	Frequent	None	Poorly drained	Very Rapid	Yes;100%

Source: NRCS (2020)

3.11.8.1.2 Geologic Characteristics

According to the Adams County Colorado Geologic Features map (2005), surface geology in areas crossed by the Project consists predominantly of sedimentary rock such as mudstone, sandstone, claystone, and conglomerates of the Denver and Arapahoe Formations, modern alluviums, eolian deposits, and gravel and alluviums. A geotechnical study would be performed at select locations along the pipeline route as needed prior to the initiation of construction activities.

3.11.8.1.3 Natural Hazards

The Project passes through multiple 100-year floodplains within Adams County (Exhibit B, Figure 3). Sensitive aquatics features as discussed in Sections 3.11.3 and 3.11.5 would be identified through field reconnaissance and avoided. In the Denver Basin, most aquifer recharge occurs in the highland areas between stream channels in the topographically higher southern part of the basin (El Paso, Elbert, Douglas counties). Precipitation is greater in this area, and the permeable soils derived from the Dawson Arkose formation enable deep percolation (USGS 2009). Recharge to this area of the South Platte River basin primarily occurs as infiltration of precipitation, infiltration of ephemeral stream water, deep percolation of water applied to irrigated, agricultural fields and seepage beneath irrigation ditches (Arnold 2010). The Project is located within the northern portion of the Denver and Arapahoe aquifers and consist of shallow and temporary soil disturbance. Impacts to aquifer recharge are not anticipated.

Steep terrain is typically avoided or excluded during routing because constructing a pipeline and access roads on steep slopes could require complex engineering and erosion controls around the pipeline and

may result in greater potential environmental impacts. The pipeline is not expected to be installed in areas with slopes greater than 8 percent; however; if steep terrain is encountered, the pipeline may be installed using HDD and no additional measures would be needed for this sloped area. Pioneer would avoid other areas of steep slopes. No geotechnical hazards such as faults and fissures, unstable slopes, expansive or evaporative soils, or risk of subsidence of upheaval have been identified that might affect the ability to safely construct or operate the Project. The Project is located in a rural agricultural area that is not generally subject to wildfire hazard.

3.11.8.2 Risks to the Project from Natural Hazards

Based on the location of the Project in the Colorado Front Range and general agricultural setting, the Project would not be subject to significant risk from natural hazards.

3.11.8.3 Impact and Net Effect of the Project on Soil and Geologic Conditions in the area

Pipeline construction is not anticipated to impact long-term soil productivity. The pipeline would be primarily installed underground in a shallow (approximately 4 feet deep) trench and would not affect soil and geologic conditions in the area, impact any streambed meander limits, or affect aquifer recharge. The staging areas in Adams County are described in Section 3.3.3. These staging areas are limited in extent and will be sited to limit affect soil and geologic conditions, streambed meander limits or aquifer recharge areas.

3.11.9 Nuisances

Short-term localized impacts are anticipated from a temporary increase in traffic, construction equipment exhaust (fumes), and clearing and preparing areas for construction. The short-term impacts are not expected to result in nuisance effects. If a nuisance arises during construction, the nuisance would be mitigated in coordination with Adams County. The following sections address potential nuisances that may arise, as a result of the Project.

3.11.9.1 Noise

Project construction is expected to take place between the hours of 7 AM and 7 PM, is not expected to exceed 80 decibels on the A-weighted scale (dBA) and would therefore be in conformance with Section 4-13-03.2 of the ACDSR.

Major activities involved in construction of the Project would include staging materials, produced water pipeline trenching and boring, produced water pipeline fusing and installation, pressure-testing, backfilling the pipeline trench, installation of valve sets, re-contouring and revegetation. See Section 3.3.3 for a description of these activities. Construction at night is not anticipated but may occur in coordination and with approval from Adams County.

The construction phase would produce noise because heavy equipment would be required to build the proposed produced water pipeline and valve sets. Sound levels would fluctuate, depending on the construction activity, equipment type and distance between noise source and receiver. Sound from construction equipment would vary dependent on the construction phase and the number and type of

equipment a location at any given time. The variation in power and usage imposes additional complexity in characterizing construction noise levels

The following mitigation measures would reduce the potential for temporary adverse noise impacts during construction:

- Advertise a Project hotline and email whereby residents can contact Pioneer directly with their noise concerns. Throughout construction and operation of the Project, Pioneer would document, investigate, and attempt to resolve legitimate Project-related noise complaints.
- Notify landowners who may be directly impacted along the ROW prior to noisy construction activities.
- Coordinate construction vehicle travel to reduce the number of passes by sensitive receptors.
- Restrict noisy construction activity, which causes off-site annoyance as evidenced by the filing of a
 legitimate noise complaint, would be restricted to daytime hours (i.e., 7 AM to 7 PM) unless
 construction during nighttime hours is requested by Pioneer.

The produced pipeline would be buried underground. No noise is expected to be generated by the produced water pipeline during operation. The valve sets would be unmanned facilities. No noise is expected to be generated at the valve sets during operation, except when crews are onsite to perform routine maintenance activities. Noise generated as a result of routine maintenance activities would be short term.

3.11.9.2 Glare

Glare is not anticipated to be generated by the Project because the produced water pipeline would be buried underground. The aboveground piping associated with aboveground appurtenances would not have a reflective surface.

3.11.9.3 Dust

Limited dust would be generated during all construction phases with the exception of pressure testing. Dust suppression measures that would be implemented during construction, BMPs, and site restoration and revegetation activities are discussed in Tables 12 and 13. Pioneer will submit a CDPHE APEN including a dust suppression plan prior to construction, and CDPHE would stipulate additional mitigation, monitoring and recordkeeping requirements for a minor source construction air permit if required.

3.11.9.4 Fumes

Fumes would be generated during construction from construction equipment exhaust. Fumes from vehicles would also be generated during operation of the Project and would include fumes from trucks used for routine maintenance activities along the pipeline or at valve set locations. Impacts during construction and operation as a result of fumes would be short term and localized to the location of construction equipment and delivery trucks. Additional air quality information is included in Section 3.11.1.

3.11.9.5 Vibrations

Minimal vibration would occur during construction due to the use of heavy machinery and operations such as drilling and trenching. The vibrations would be temporary in nature and limited to the immediate area

around the construction work. Any vibrations would last only during the construction timeframe and only be experienced within the 50-foot-wide construction zone adjacent to construction vehicles. No vibrations are expected during operation of the pipeline.

3.11.9.6 Odors

An odor is the property of a substance to stimulate chemical sense receptors that sample the air in and around human or animal (Encyclopedia Britannica 2012). Existing odors in the vicinity of the pipeline route may include diesel exhaust from vehicles, vehicles traveling on adjacent roadways, and agricultural operations immediately surrounding the Project.

Odors resulting from construction of the Project may include vehicle and equipment exhaust. These odor emissions are expected to be short term and transient in nature, limited to the area of active construction, and adequately dispersed by diurnal winds.

During commissioning, startup, and long-term operations and maintenance of the Project, odors would be minimal and limited to the use of on-site maintenance equipment.

3.11.10 Areas of Paleontological, Historic or Archaeological Importance

3.11.10.1 Description of All Sites of Paleontological, Historic, or Archaeological Interest

Tetra Tech completed a desktop analysis to identify cultural and historic resources listed on the National Register of Historic Places (NRHP), determined or recommended eligible for the NRHP, or that remain unevaluated for listing on the NRHP that may be impacted by construction of the Project. No potentially significant cultural resources are expected to be impacted by the Project. Pioneer would have an Unanticipated Discovery Plan in place for the Project, however. Please refer to Attachment 2 of the NRCO report for the full Cultural Resources Class I Letter Report and additional information regarding cultural resources.

3.11.10.2 Impacts and Net Effect of the Project All Sites of Paleontological, Historic, or Archaeological Interest

The results of a Class I cultural resources survey conducted in January 2020 did not identify any significant cultural, historic, or archaeological resources within the Project in Adams County that could not be avoided. Should any additional undiscovered paleontological, historic, or archaeological artifacts be uncovered during construction activities that are not previously identified, such activities would be temporarily stopped until a qualified person can evaluate the object of interest as outlined in the Unanticipated Discovery Plan.

3.11.11 Hazardous Materials Description

3.11.11.1 Hazardous, Toxic, and Explosive Substances To Be Used, Stored, Transported, Disturbed or Produced in Connection with the Project

Upon completion, the pipeline would transport produced water to the existing EWS #6 water facility located in Weld County. The Project includes the placement of remote isolation valves spaced throughout the Project within Adams County for the purpose of providing emergency safety isolation along the pipeline.

Toxic or explosive substances would not be stored in construction areas or along the pipeline or associated valve sets during operations. There are no chemical or waste storage facilities associated with the Project.

Hazardous chemicals that may be used during construction and operation are those found in diesel fuel, gasoline, coolant (ethylene glycol) and lubricants in machinery. Hazardous materials would not be drained onto the ground or into streams or drainage areas. Enclosed containment would be provided for waste disposal. Pioneer does not expect that the Project will generate hazardous materials during any phase of the Project, however construction waste, including trash and litter, garbage, other solid waste, petroleum products and other potentially hazardous materials would be removed to a disposal facility authorized to accept such materials. The hazardous materials identified above may be stored in trucks in small quantities overnight within unincorporated Adams County.

Pioneer and its contractors would provide and maintain sanitary accommodations for the use of their employees during construction of the Project in a manner that would comply with the requirements and regulations of health departments and of other governmental bodies. These accommodations, including trash dumpsters and portable waste facilities (toilets), would be located in several locations along the construction route based on the construction plan. The final numbers, locations, and vendors would be provided by the construction contractor. Construction waste would be stockpiled in the construction staging areas and would be removed from the construction sites during the construction process.

3.11.11.2 Location of Storage Areas

Temporary workspaces are discussed in Section 2.3. These areas would be used to temporarily store pipeline construction materials as well as necessary construction equipment. Spill containment measures would be specified in the site-specific SWMP. Temporary workspaces are discussed in Section 2.3.4 and would also be used to temporarily store pipe and other materials necessary for construction HDD activities.

3.11.11.3 Reportable Quantities, Emergency Response Plan

Reference Section 2.3.5 for information regarding Project safety.

In addition, the Project would be designed and operated per the Pioneer internal operating standards and practices and written maintenance procedures including the development of a site-specific Emergency Response Plan.

Construction activities would be performed by methods that prevent discharge or accidental spillage of solid matter, contaminants, debris, and other pollutants and wastes into flowing streams or dry watercourses, lakes and underground water sources. During construction, the focus would be primarily on containment-type BMPs.

Temporary workspaces would be located and arranged in a manner to preserve trees and vegetation. Excavated material or other construction materials would not be stockpiled or deposited near or onstream banks or other watercourse perimeters where they could be washed away by high water or storm runoff or could encroach upon stream banks.

Fueling vehicles would be equipped with spill kits and fire extinguishers and personnel would be properly trained in spill prevention control and countermeasures. Based on review of available information from federal and state databases, construction activities associated with the Project are not anticipated to encounter known areas of soil or groundwater contamination. In general, if trenching or HDD activity uncovers previously unknown areas of contamination, work would immediately be stopped until a predetermined Pioneer contact is notified and consulted. Pioneer or its contractor would then perform all necessary testing and handling of such materials as required by applicable state and/or federal requirements.

3.11.11.3.1 Emergency Response

Pioneer would prepare a site-specific Emergency Response Plan to establish emergency protocols for the produced water pipelines and associated facilities. The purpose of this plan is primarily to minimize the hazard to the public, Pioneer's employees and to property and secondarily to reestablish service should a service interruption occur. The plan would establish procedures and defines responsibilities prior to, during, and following an emergency and includes contact information and instructions for all such anticipated emergency situations. The plan would describe the specific responsibilities of Pioneer responders including dispatchers and emergency responders.

3.11.11.3.2 Routine Maintenance

Routine maintenance of the Project facilities would be performed as outlined in Pioneer's internal operating standards and practices and written maintenance procedures, which meet or exceed regulatory requirements. Maintenance activities associated with the Project would include, but are not limited to:

- Implement a damage prevention program, including observation of any construction activities by others on or near the permanent easement.
- Participate in the State of Colorado's one-call program and responding to one-calls.
- Implement a public education program.
- Install and maintain pipeline markers.
- Inspect block valves.
- Inspect crossings by other pipelines, highways, railroads and utilities.
- Inspect and maintain safety, control, mechanical and electrical equipment.
- Maintain communication equipment.
- Calibration of all instruments.

3.11.12 Balance Between Benefits and Losses

3.11.12.1 Foreseeable Benefits of Natural, Agricultural, Recreational, Range, or Industrial Resources

There would be no anticipated loss of resources within Adams County or loss of opportunities to develop such resources. Industrial resources and future opportunities to develop commercial and industrial resources would be supported by the Project because it would continue to support the oil and gas industry and help support future growth.

3.11.12.2 Foreseeable Losses of Natural, Agricultural, Recreational, Range, or Industrial Resources

The majority of the project ROW in Adams County is located within agricultural/rangeland. Pioneer's restoration contractor would restore the pipeline ROWs to pre-construction conditions. Native shortgrass prairie is not present at a measurable quantity within the pipeline ROW. Potential impacts to wetland

would be minimal based on desktop analysis. Impacts to wetlands are not anticipated to extend past one to two growing seasons (see Section 3.11.5). The Project would not adversely affect future opportunities to develop commercial and industrial resources. The pipeline ROW has been routed with landowner considerations to maximize the use of existing ROWs and property boundaries and to avoid potential conflict with land use and development.

3.11.13 Monitoring and Mitigation

3.11.13.1 Description of All Mitigation for the Project

Mitigation and monitoring activities have been described as related to environmental and community resources and concerns throughout this document. Construction and operation mitigation activities would be financed as a part of the cost of the Project. BMPs listed in Tables 12 and 13 are intended to minimize disturbed area and to protect natural features. Mitigation would be completed during and after construction until the ROW has been restored.

3.11.13.2 Methodology Used to Measure Impacts

Field investigations would be conducted in spring 2020 to define potential aquatic and terrestrial resources, wildlife, and cultural resources baseline and impacts more accurately. As needed, additional mitigation and/or studies would be proposed following the pedestrian surveys and analysis specific to the resources identified and potential impacts.

Fugitive dust emissions during construction would be controlled with the implementation of BMPs including application of water during high wind conditions to eliminate fugitive dusts. The SWMP would specify BMPs to be followed during construction activities that would minimize erosion and impacts to water quality from storm events. The implementation of dust controls and stormwater BMPs include monitoring requirements.

3.11.13.3 Description of Location and Intervals of Proposed Monitoring

Construction monitoring may be required for stormwater, erosion control, air quality, wildlife, cultural and historic resources, and other resources. During construction of the Project, BMPs would be monitored either by Pioneer or by Pioneer's contractor to ensure their effective implementation. For example, the effectiveness of dust suppression and stormwater management controls would be evaluated. An environmental inspector would also monitor sediment erosion control facilities during construction to ensure compliance with the SWMP.

Post-construction monitoring would be completed for stormwater/erosion, ROW restoration, and weed control until all permit requirements have been met and all landowners' requirements have been met. The Project intersects approximately 2.8 miles of area designated within the Adams County Stormwater Permit Area. Therefore, Pioneer will likely be required to obtain an Adams County Stormwater Quality (SWQ) Permit for Construction.

3.12 60-07-02-12. Referrals to Outside Agencies, Response to Referral Comments and Neighborhood Scoping Meeting

To date, no referrals or responses from outside agencies has been received to date. A description of the Neighborhood Meeting is included in Section 2.13.1.

4. Section 2-02-08-06. CUP Approval Criteria

The Planning Commission, in making their recommendation, and the Board of County Commissioners, in approving a conditional use permit, shall find:

1. The conditional use is permitted in the applicable zone district.

Response in this Application. In consultation with the Adams County Department of Community Planning and Development, Pioneer has been advised that the produced water pipeline is subject to the County CUP review and approval in zone districts crossed by the Project. Reference Section 3.6 for additional information regarding the existing land use plans and potential Project impacts.

Reference Sections. Section 2.3—Written Explanation of the Project, Section 3.6—Land Use.

2. The conditional use is consistent with the purposes of these standards and regulations.

Response in this Application. The Project would remain consistent with the purposes of the ACDSR's goals to "control and assist in the orderly, efficient, and integrated development of the County, in order to preserve the health, safety, and welfare of the public, in accordance with established County policies and plans" (ACDSR 1-01-03). All required permits would be obtained from the appropriate federal, state, or local agency prior to construction. Table 7 in Section 3.4.2 describes the permits and approvals required by the Project and their status.

Reference Sections. Section 3.4—Property Rights, Permits and Other Approvals

3. The conditional use will comply with the requirements of these standards and regulations including, but not limited to, all applicable performance standards.

Response in this Application. The Project would remain consistent with ACDSR's performance standards outlined in Chapter 4—Design Requirements and Performance Standards. All other federal, state, and local standards would be upheld including the COGCC Series 1100 Rules, Colorado Department of Transportation Construction Standards, Clean Water Act Sections 404 and 401, etc.

Reference Sections. Section 2.3—Written Explanation of the Project and Section 3.4—Property Rights, Permits and Other Approvals.

4. The conditional use is compatible with the surrounding area, harmonious with the character of the neighborhood, not detrimental to the immediate area, not detrimental to the future development of the area, and not detrimental to the health, safety, or welfare of the inhabitants of the area and the County. In making this determination, the Planning Commission and the Board of County Commissioners shall find, at a minimum, that the conditional use will not result in excessive traffic generation, noise, vibration, dust, glare, heat, smoke, fumes, gas, odors, or inappropriate hours of operation.

Response in this Application. The Project is compatible with the surrounding area and its operation would not result in permanent additional nuisances to the local population. Overall, the produced

water pipeline is not expected to affect visual quality. The produced water pipeline would be installed by means of trenching or by HDD, and it ultimately would be buried underground and so would be compatible with the surrounding area and harmonious with the character of surrounding rural and agricultural land uses. Aboveground appurtenances would be similar to other ancillary facilities associated with oil and gas in the area and therefore would not be out of character in the landscape.

Short-term localized noise impacts are anticipated from a temporary increase in traffic, construction equipment exhaust (fumes), and clearing and preparing areas for construction. The short-term impacts are not expected to result in nuisance effects. If a nuisance arises during construction, the nuisance would be mitigated in coordination with Adams County. Section 3.11.9 address potential nuisances that may arise as a result of the Project.

Reference Sections. Section 3.11.2—Visual Quality and Section 3.11.9—Nuisances

5. The conditional use permit has addressed all off-site impacts.

Response in this Application. Pioneer is committed to safety and would follow all federal, state, and local rules and regulations to provide safe, reliable service for Pioneer's customers. Off-site impacts due to construction or operation of the pipeline were considered during the planning, siting, and routing process of the pipelines (Sections 3.3.2). The pipeline routes would be located underground and their operation would not produce any nuisances or inconveniences to nearby landowners or the general public.

Construction of the Project would incorporate mitigation measures that would minimize impacts to water quality, water use, existing land uses, local government resources, cultural resources, and the natural environment. Pioneer would use a SWMP for implementation of BMPs to mitigate soil erosion, control noxious weeds, and revegetate disturbed areas. Groundwater quality also would be protected through the implementation of a SWMP and through the implementation of waste management BMPs during construction.

Given the location of the route along existing roadways and agricultural areas, noise during construction has been partially mitigated by avoiding dense population areas, and following unpopulated and rural populated areas. The resulting noise would not be uncharacteristic of typical noise from day-to-day activities in the area. Dust suppression would be conducted during construction and would not be uncharacteristic of the dust created by existing agricultural activities. No other offsite impacts to air or water quality are expected as a result of construction or operation of the facilities or pipelines. During construction, an increase in traffic is expected to be negligible.

Reference Sections. Exhibit H—Routing Analysis, Section 3.3.1—Detailed Plans and Specifications of the Project, Section 3.11.1—Air Quality, Section 3.11.2—Visual Quality, Section 3.11.4—Groundwater Quality and Quantity, and Section 3.11.9—Nuisances

6. The site is suitable for the conditional use including adequate usable space, adequate access, and absence of environmental constraints.

Response in this Application. Pioneer conducted a thorough review of the pipeline route. Pioneer is seeking a permanent easement for its pipelines that is approximately 10 feet wide, along with an additional 30 feet of temporary easement, for a total construction corridor of 40 feet in width. Appurtenant aboveground appurtenances such as isolation valves, pumps, and cleaning tool launcher and receivers would be located at the existing oil and gas production facilities. Within unincorporated Adams County, approximately five aboveground appurtenances (reference Section 2.3.4) would be located along the pipelines within the 10-foot-wide pipeline easements.

Pioneer does not anticipate using additional temporary workspaces in unincorporated Adams County besides the temporary workspaces located along the pipeline route, which would be used to excavate trench, fuse pipeline segments, deliver the HDD equipment and pipe segments, excavate HDD entry and receiving pits, temporarily stockpile excavated soil from the pits, and serve as laydown for pipe segments. Following construction, the contractor would return temporary workspaces to preconstruction conditions.

The pipeline would be constructed on private land with the exception of CDOT ROW crossings and one Adams County-owned parcel (parcel #157123401001). The pipeline would be installed using HDD and would not impact the existing South Platte River Trail on this parcel. The pipeline would be located underground for its entire length and Pioneer would minimize impacts to sensitive water resources and public roads using HDD techniques where possible. The pipeline easements could continue to be farmed after the pipeline is installed.

Section 3.7.3 describes haul routes that would be used during construction of the Project. None of these roads are expected to experience a significant impact from the delivery of materials during construction. It is not expected that Pioneer's construction contractor would need to improve or close any roads, intersections, or bridges to accommodate oversized truck deliveries to the Project.

Reference Sections. Section 2.3—Written Explanation of the Project, Section 3.7.3—Potential Effect of the Project on the Existing Transportation Network.

7. The site plan for the proposed conditional use will provide the most convenient and functional use of the lot including the parking scheme, traffic circulation, open space, fencing, screening, landscaping, signage, and lighting.

Response in this Application. The pipeline would not interfere with the agriculture use in the area and is generally routed near and parallel to section lines, property lines, and existing utility corridors to minimize impacts on future development. The aboveground appurtenances are not visually sensitive given the existing oil and gas infrastructure in the area and they would appear as a minor feature in the landscape. It is anticipated that the Project would not adversely impact area visual resources.

Reference Sections. Section 2.3—Written Explanation of the Project, Section 3.11.2—Visual Quality and Section 3.11.9—Nuisances.

8. Sewer, water, storm water drainage, fire protection, police protection, and roads are to be available and adequate to serve the needs of the conditional use as designed and proposed.

Response in this Application. Pioneer accounted for all sewer, water, stormwater drainage, fire protection, police protection, and road availability to serve the needs of the Project. The pipelines would be located underground and would not require utility services (i.e., sewer, water, stormwater drainage, etc.), or the construction of new roads.

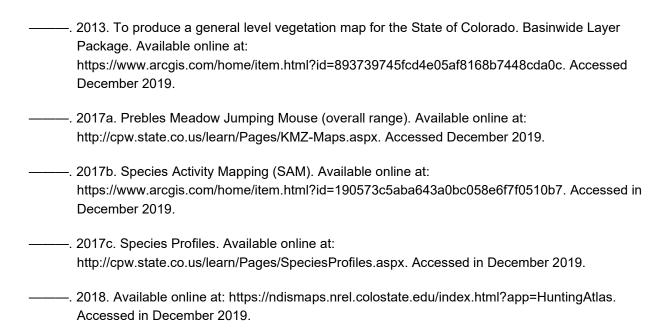
As discussed in Section 3.11.11, Pioneer would follow an Emergency Response Plan, which would include procedures and directions for emergency dispatch in the case of a pipeline emergency. The Project would not increase fire protection demands. Appurtenant aboveground facilities such as isolation valves, pumps, and cleaning tool launcher and receivers would be located at the existing oil and gas production facilities. Aboveground appurtenances within unincorporated Adams County would be located on private land and outside of storm water drainage facilities and floodplains. The Project does not anticipate an increase in police protection.

It is not expected that Pioneer's construction contractor would need to improve or close any roads, intersections, or bridges to accommodate oversized truck deliveries to the Project. See Section 3.7.3 for additional information about the Project and its effect on local transportation networks.

Reference Sections. Section 2.3—Written Explanation of the Project, Section 2.7—Proof of Water and Sewer Services, and Section 3.7—Local Government Services.

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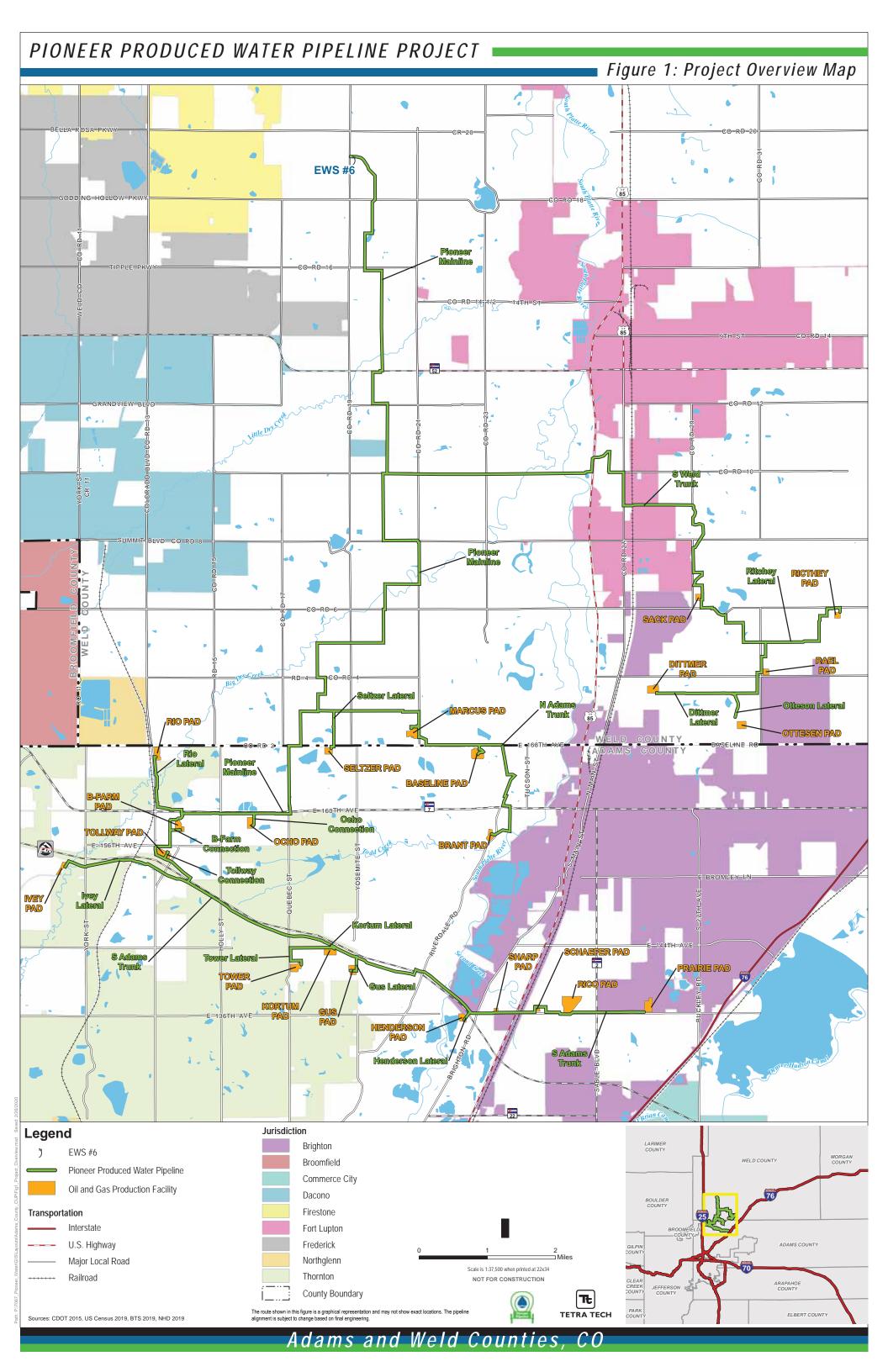
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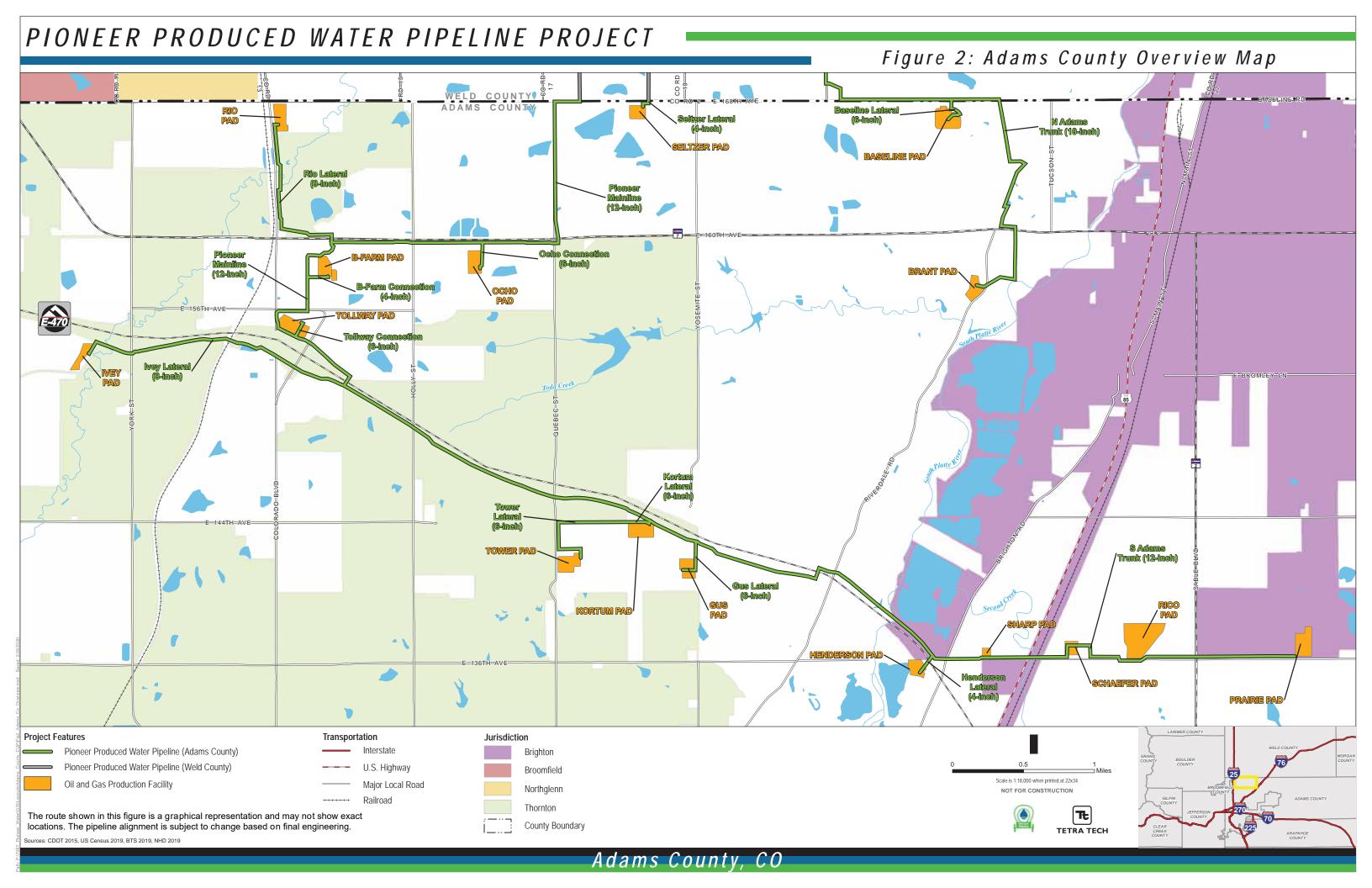
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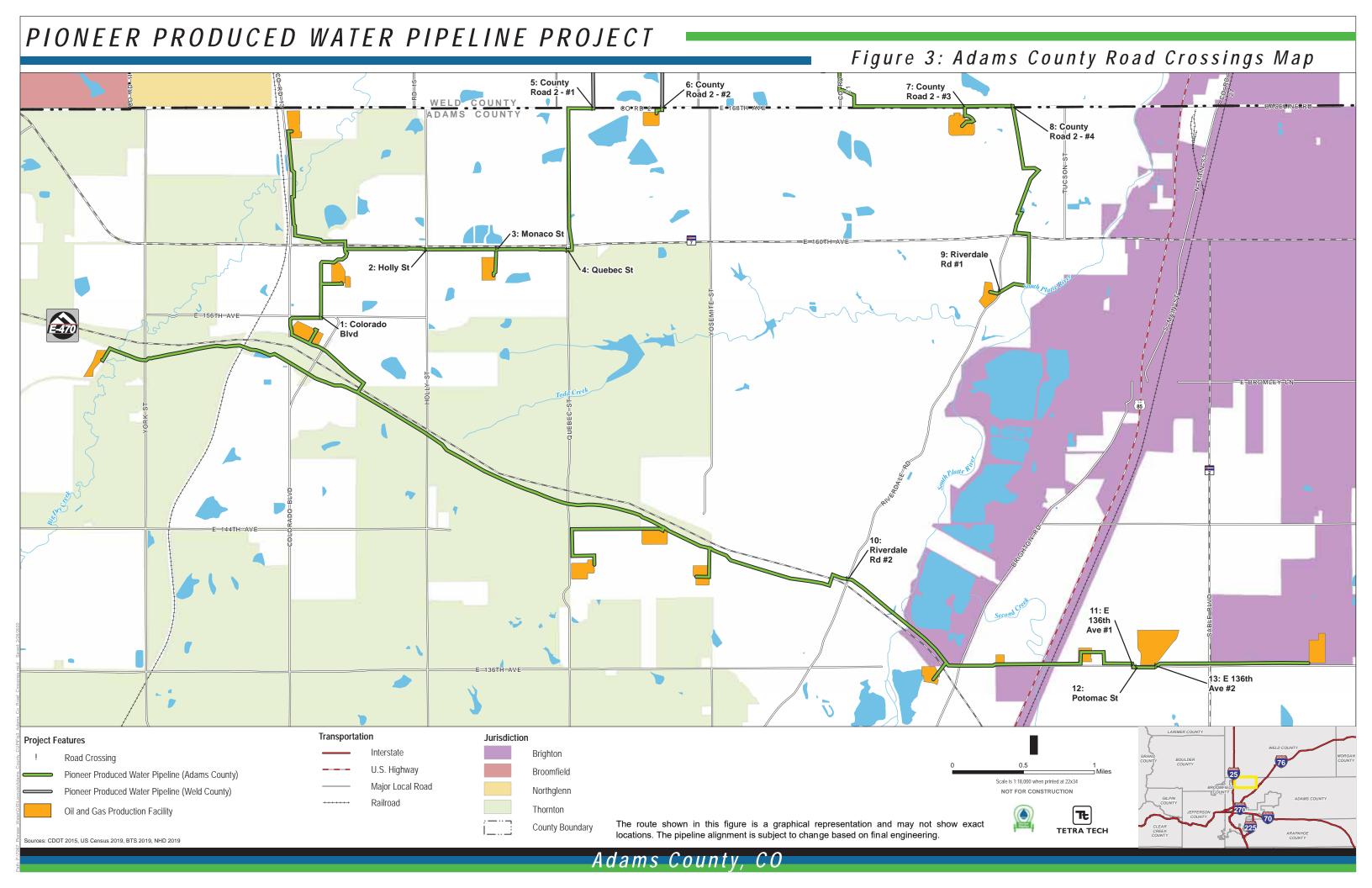
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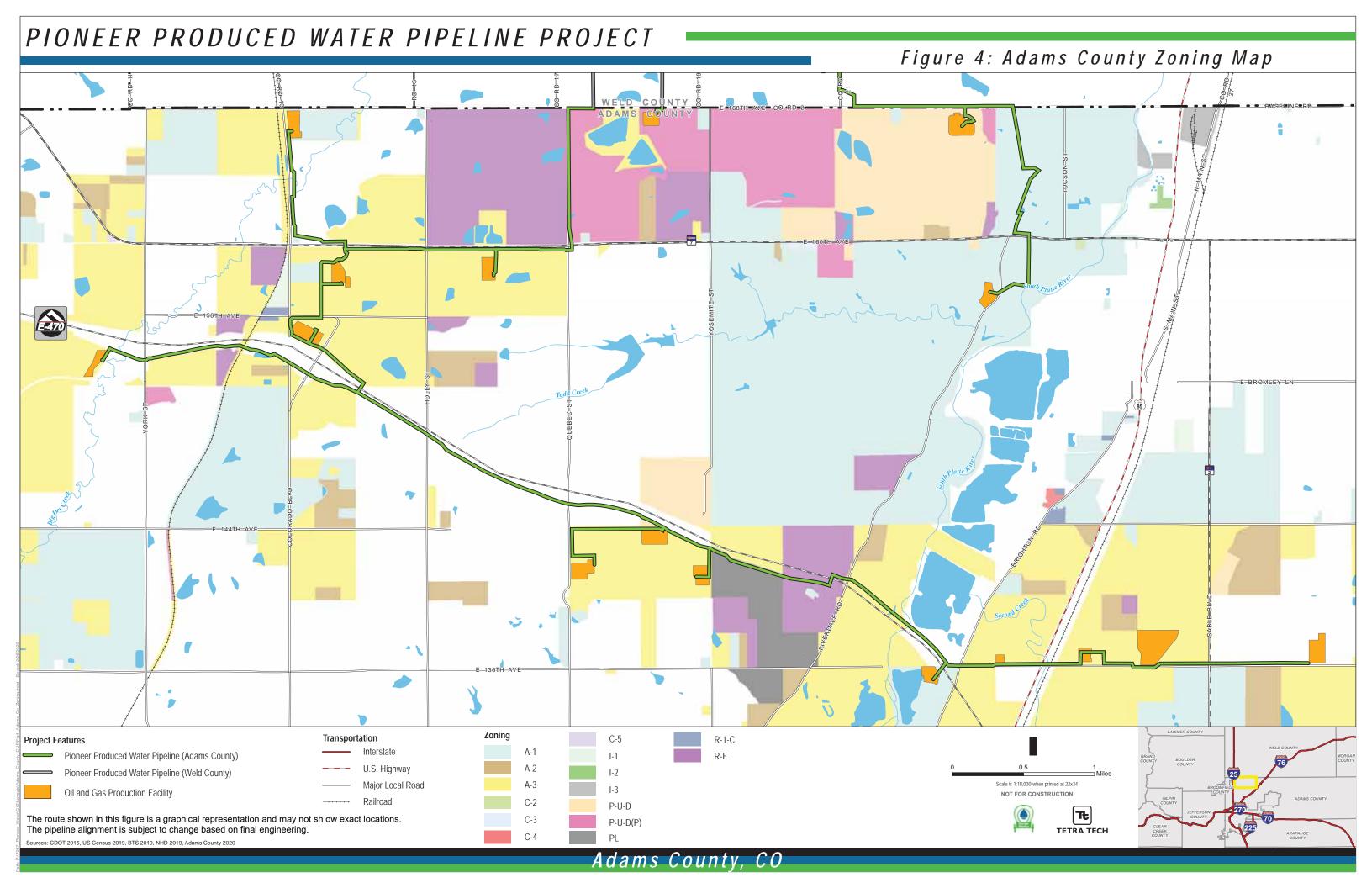
Figures

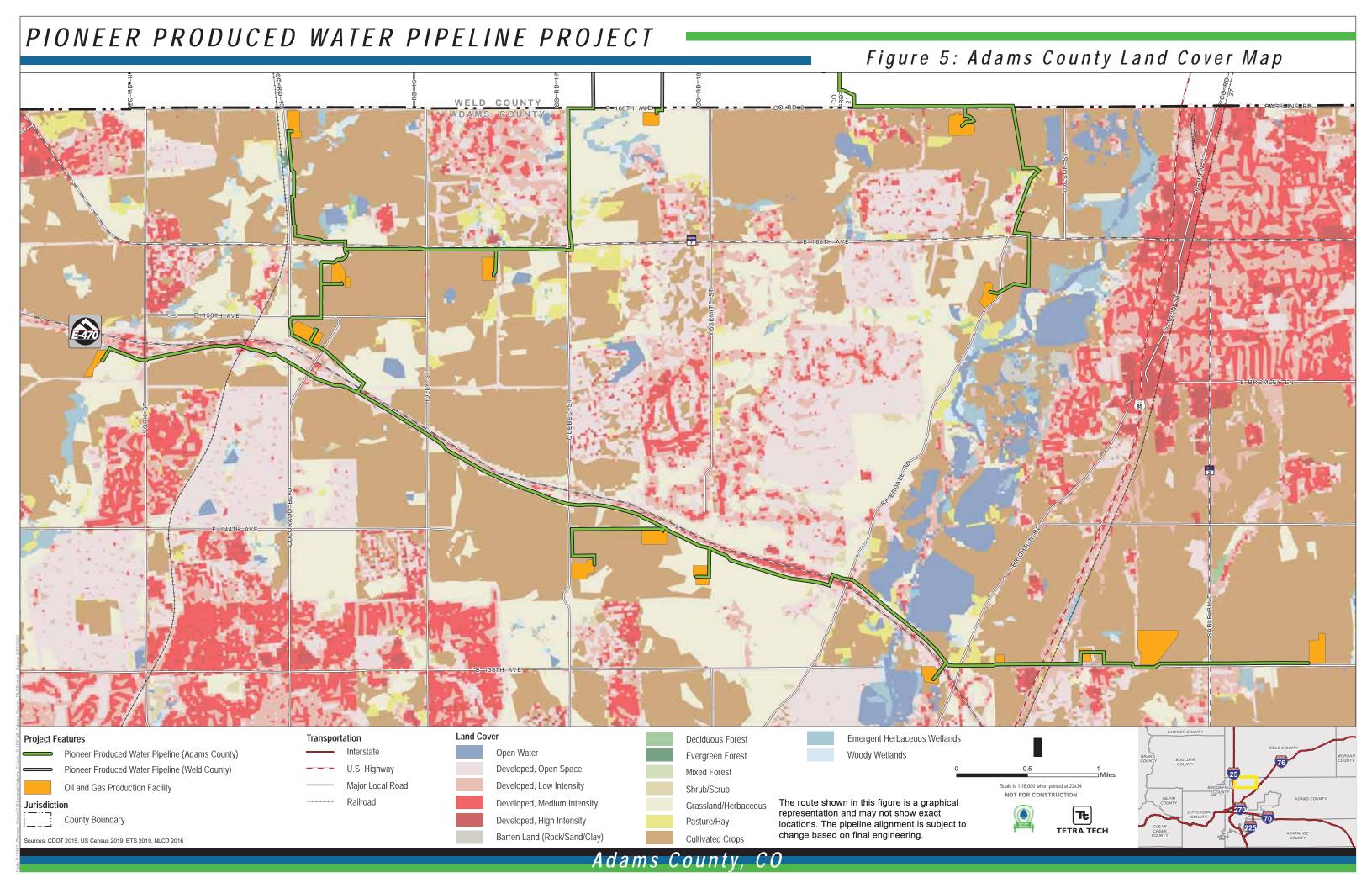
- 1: Project Overview Map
- 2: Adams County Overview Map
- 3: Adams County Road Crossings Map
- 4: Adams County Zoning Map
- 5: Adams County Land Cover Map
- 6: Adams County Groundwater Aquifers Map











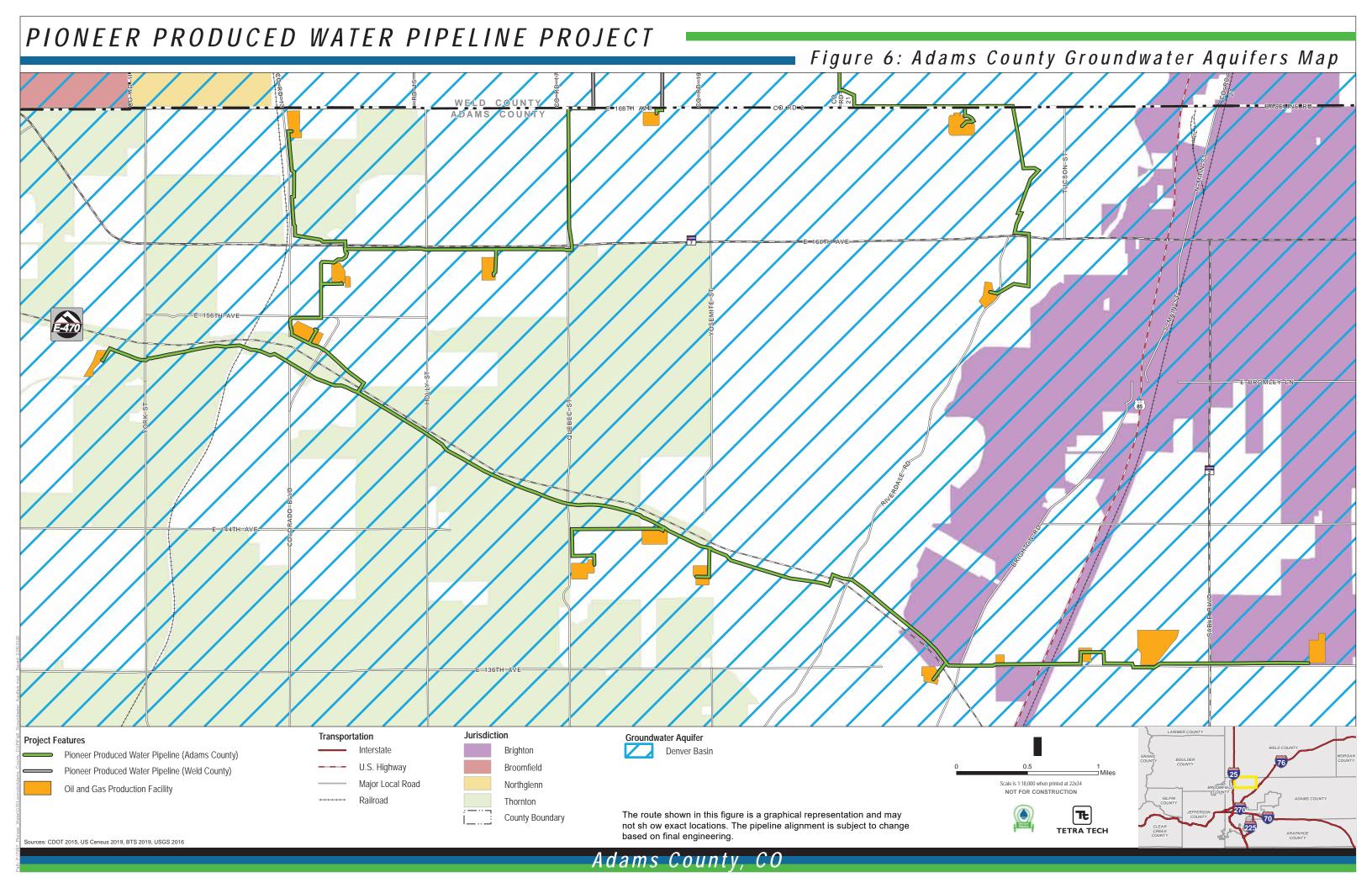


Exhibit H: Routing Analysis

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Figure H1: Adams County Alternative Routes

1. Introduction

Tetra Tech, Inc (Tetra Tech), has prepared this routing analysis on behalf of Pioneer Water Pipeline, LLC (Pioneer), a subsidiary of Expedition Water Solutions Colorado, LLC (Expedition), for the proposed Pioneer Water Pipeline Project (Project). The analysis was performed as required by Section 6-07-02-03 under Chapter 6 Regulations Governing AASI and the AASI Checklist for supplemental environmental impact analysis and as requested by Adams County during the Conceptual Review process.

1.1. Alternative Concepts Considered

The purpose of the Project is to allow more efficient pipeline transportation of produced water from oil and gas production facilities (OGPFs) in Adams and Weld counties to Expedition's existing EWS #6 wastewater injection and disposal facility, thereby also significantly reducing truck traffic. Without the Project, oil and gas producers will transport produced water from permitted OGPFs to EWS #6 by truck. Transport of produced water by truck was eliminated as an alternative because Pioneer expects construction of the Project will remove the equivalent of five million truck miles and over 50,000 truckloads per year on local roads.

2. Identification of Preferred Routes

Pioneer considered and eliminated several alternative routes prior to deciding the preferred route (Figure H-1). The routing process began by identifying the pipeline beginning points (permitted OGPFs, Figure 1) and the terminus (EWS #6, Figure 1). Alternative routes were then selected to minimize potential impacts. The total length of each pipeline within unincorporated Adams County, Weld County, and municipalities is listed in Table (Page8). The features of the alternative routes included:

- Meets the Project's purpose and need in transporting produced water to the existing EWS #6 facility from OGPFs operated by Great Western Petroleum in the shortest distance possible to reduce impacts and construction costs.
- Parallels existing roadways, pipeline/utility corridors, and section lines to the extent practicable to minimize the creation of new linear corridors.
- Is located within properties owned by landowners who are willing to grant an easement for the pipeline on their property.
- Minimizes potential disturbance to environmentally sensitive areas such as floodplains, wetlands, and federal/state species habitats.
- Minimizes impacts to major water crossings and topography constraints.
- Reflects Pioneer's consideration of compatible zoning and land uses.

The major considerations for the preferred route within Adams County was to parallel existing rights-of-way and circumventing to the extent possible existing and planned residential areas and intentionally not bisect them. Emphasis was also placed on working with landowners to identify what would be least impactful and securing easements for the Pioneer Water Pipeline on private land and public rights-of-way.

Consideration was also given to reducing the number and length of laterals needed to reach well pads by having the pipeline route run through the well pad sites as well as the shortest linear length of pipeline.

3. Route Descriptions and Comparative Analysis

The Project was divided into four zones for ease of identification of alternative routes (Figure 1). Descriptions of the preferred and alternative routes for each zone are described below:

3.1. **Zone A**

3.1.1. Preferred Route

This route originates on the eastern side of Zone A at the Brant LD OGPF. The pipeline travels east from the OGPF for 1,500 feet, crossing Riverdale Road and Brighton Ditch. The pipeline then turns north, crossing 160th Avenue and turning west, paralleling the north side of 160th Avenue, then turning north just before Brighton Ditch. The pipeline parallels the east side of Brighton Ditch for approximately 2,700 feet, where it turns west and crosses Brighton Ditch at a 90-degree angle. The pipeline turns north, crossing 168th Avenue and passing into Weld County. The pipeline parallels the north side of 168th Avenue as it travels west, crossing Brantner Ditch. Just west of Brantner Ditch, a lateral come from the Baseline LE OGPF on the south side of 168th Avenue, crossing the roadway to join the pipeline on the north side. The pipeline continues west along 168th Avenue, and as the pipeline reaches Havana Street turns, it north for 400 feet, then turns west, crossing County Road (CR) 21. The pipeline travels north, paralleling the west side of CR 21. A lateral connects the Marcus LD OGPF to the pipeline, located in Weld County. North of 168th Avenue, approximately 0.5 mile (2,600 feet), the pipeline turns west, crossing CR 19. Just west of CR 19, a lateral connecting the Seltzer LD OGPF to the pipeline, which crosses 168th Avenue from Adams to Weld county. The pipeline joins with the pipeline from Zone B and continues north into Weld County toward the EWS #6 facility. This route has secured easements, has the least amount of pipeline within Adams County, the least amount of waterway crossings, and is the furthest from the Todd Creek residential area.

- Route Length: 3.8 miles
- Route Length within unincorporated Adams County: 2.13 miles
- Route Length within unincorporated Weld County: 1.67 miles

3.1.2. Route A-1

This route originates on the eastern side of Zone A at the Brant LD OGPF. The pipeline travels north paralleling the east side of Brantner Ditch, then crossing Brantner Ditch near the location of the Brantner Ditch crossing of 160th Avenue. The pipeline continues north, paralleling the west side of Brantner Ditch. Approximately 2,600 feet north of 160th Avenue, the pipeline turns west. A lateral from the Baseline LE OGPF joins the pipeline at this turn. As the pipeline travels west, it parallels the east-west portion of Havana Street/Lima Street, passing to the south of Stouffer Reservoirs No. 1. A lateral connects from Marcus LD OGPF in Weld County and travels south, crossing 168th Avenue, connecting to the pipeline. The pipeline continues 500 feet west from this lateral junction and turns south, crossing Signal Ditch. The pipeline turns west, paralleling the south side of Signal Ditch, crossing Signal Ditch again and turning

north. Approximately 1,300 feet north of signal ditch, the pipeline turns west. The pipeline turns north before Signal Reservoir Number 2 and passes by the Seltzer LD OGPF. The pipeline turns west at 168th Avenue and parallels the roadway. The pipeline connects to the pipeline segment from Zone B, crosses 168th Avenue, passing into Weld County, traveling north to EWS #6. The majority of this portion of the pipeline is not located along major roadways. By not constructing along these major roadways, traffic impacts during construction of the pipeline will be reduced. This route is closest to Todd Creek residential area, of the Zone A routes. This section primarily runs along parcel boundaries, avoiding bisecting lands, and for portions is collocated with Williams's natural gas pipeline. This pipeline has the most water crossings and has the least engineering feasibility for construction within this zone.

Route Length: 6.02 miles

• Route Length within unincorporated Adams County: 5.69 miles

Route Length within unincorporated Weld County: 0.32 mile

3.1.3. Route A-2

This route originates on the eastern side of Zone A at the Brant LD OGPF. The pipeline travels east approximately 1,500 feet, crossing Riverdale Road and Brighton Ditch, turning north near the South Platte River. The pipeline then travels north, crossing 160th Avenue. The pipeline turns west, paralleling the north side of 160th Avenue, turning north just before the east side of Brighton Ditch. The pipeline parallels the east side of Brighton Ditch for approximately 2,800 feet, where it turns west and crosses Brighton Ditch and Brantner Ditch at a 90-degree angle. The pipeline turns north, paralleling the west side of Brantner Ditch, passing by the Baseline LE OGPF, crossing 168th Avenue and into Weld County. The pipeline parallels the north side of 168th Avenue as it travels west. The pipeline crosses CR 21 and passes by the Marcus LD OGPF. The pipeline continues west, crossing CR 19. Just east of the Seltzer LD OGPF, it then turns north. At this turn, a lateral connects Seltzer LD OGPF to the pipeline, crossing 168th Avenue from Adams County. The pipeline then connects to the pipeline section from Zone B that pass into Weld County and travel north to EWS #6. Much of this route is outside of Adams County and farther away from the Todd Creek residential area than Route A-1. The landowners along this route are not all interested in participating in the project, rendering this route unfeasible.

Route Length: 4.69 miles

Route Length within unincorporated Adams County: 2.14 miles

• Route Length within unincorporated Weld County: 2.55 miles

3.2. **Zone B**

3.2.1. Preferred Route

This route originates in the southwest corner of Zone B at the Ivey LC OGPF. The lateral from this OGPF travels east, paralleling the south side of E-470. The pipeline crosses Dig Dry Creek, York Street, an unnamed intermittent stream, German Ditch, Union Pacific Railroad tracks, and Colorado Boulevard at 90-degree angles. The lateral joins the pipeline where it enters from Zone C, then crosses E-470 to the north side of the highway. The pipeline parallels the north side of E-470 to the west, crossing Colorado Boulevard and passing by the Tollway LC OGPF. The pipeline turns north just past the Tollway LC OGPF, connects with a short lateral, and then turns east at the east-west portion of Colorado Boulevard.

The pipeline travels east approximately 1,100 feet before turning north, crossing the east-west portion of Colorado Boulevard. The pipeline travels north, turning east just before German Ditch and passes by B-Farm LD OGPF, connecting with a short lateral. The pipeline parallels the route of German Ditch, crossing two unnamed intermittent streams. The pipeline then turns east and travels on the south side of 160th Avenue. At this turn, a lateral joins the pipeline, originating at the Rio LA OGPF on the southeast corner of 168th Avenue and Colorado Boulevard. The lateral travels south from the OGPF, paralleling the east side of Colorado Boulevard and crossing Big Dry Creek 3 times. The lateral turns east at an unnamed intermittent stream just north of 160th Avenue and crosses German Ditch. Just to the east of German Ditch, the lateral turns south, crossing 160th Avenue and joins the Pioneer mainline. As the pipeline travels east along the south side of 160th Avenue, it crosses Holly Street, an unnamed ditch, and passes by the Ocho LD OGPF and connects with a short lateral. The pipeline continues traveling east along 160th Avenue, crossing Monaco Street, Signal Ditch, and Quebec Street. On the southeast corner of 160th Avenue and Quebec Street, the pipeline turns north, crossing 160th Avenue and paralleling the east side of Quebec Street. As the pipeline travels north it crosses Signal Ditch, turns east at 168th Avenue and parallels the roadway for approximately 1,000 feet, then turns north, crossing 168th Avenue and into Weld County where the pipeline joins with the pipeline portion from Zone A in Weld County and travels north through Weld County to the EWS #6 disposal facility. This route has secured easements, runs along many existing utility corridors, and most efficiently connects all the well pad sites in the areas.

Route Length: 8.55 miles

Route Length within unincorporated Adams County: 5.08 miles

Route Length within unincorporated Weld County: 0.52 mile

Route Length within the City of Thornton: 1.94 miles

3.2.2. Route B-1

This route originates in the southwest corner of Zone B at the Ivey LC OGPF. The lateral from this OGPF travels east paralleling the south side of E-470. The pipeline crosses Dig Dry Creek, York Street, an unnamed intermittent stream, German Ditch, Union Pacific Railroad tracks, and Colorado Boulevard at 90-degree angles. The lateral joins the pipeline where it enters from Zone C, then crosses E-470 to the north side of the highway. The pipeline parallels the north side of E-470 going west, crossing Colorado Boulevard and passing by the Tollway LC OGPF. The pipeline turns north just past the Tollway LC OGPF, connecting with a short lateral, and then turns east at the east-west portion of Colorado Boulevard. The pipeline travels east approximately 1,100 feet before turning north, crossing the east-west portion of Colorado Boulevard. The pipeline travels north, turning east just before German Ditch and passes by B-Farm LD OGPF, connecting with a short lateral. The pipeline parallels the route of German Ditch, crossing two unnamed intermittent streams. The pipeline then turns east at 160th Avenue and travels east on the south side of the roadway. At this turn a lateral joins the pipeline, originating at the Rio LA OGPF on the southeast corner of 168th Avenue and Colorado Boulevard. The lateral travels south from the OGPF, paralleling the east side of Colorado Boulevard, and crossing Big Dry Creek 3 times. The lateral turns east at an unnamed intermittent stream just north of 160th Avenue and crosses German Ditch. Just to the east of German Ditch, the lateral turns south, crossing 160th Avenue and joins the main pipeline. The pipeline travels east along the south side of 160th Avenue, crossing Holly Street then turning north, crossing 160th Avenue and traveling north along the east side of Holly Street. At this turn, a lateral

from the Ocho LD OGPF at the southwest corner of 160th Avenue and Monaco Street, which crosses an unnamed intermittent stream connects to the pipeline. The pipeline continues north, parallel to the west side of Holly St, crossing 162nd Avenue, German Ditch, and Eagle Shadow Drive at 90-degree angles. At 168th Avenue, the pipeline turns west and crosses Holly Street. At CR 15, the pipeline crosses 168th Avenue into Weld County and travels north along the east side of CR 15. Approximately 1,400 feet north of 168th Avenue, the pipeline turns east and joins with the pipeline portion from Zone A and then travels north through Weld County to the EWS #6 disposal facility. This route follows the west and north borders of a residential development instead of the east and south borders, should there be conflicts within existing utility corridors. This route also has less pipeline within Adams County, but has an increased number of road crossings.

- Route Length: 9.02 miles
- Route Length within unincorporated Adams County: 3.89 miles
- Route Length within unincorporated Weld County: 1.68 miles
- Route Length within the City of Thornton: 3.45 miles

3.2.3. Route B-2

This route originates where the pipeline from Zone C enters Zone B. The pipeline travels west along the south side of E-470, crossing Colorado Boulevard, German Ditch, Union Pacific Railroad tracks, and an unnamed intermittent stream. Approximately 1,000 feet west of the railroad tracks, the pipeline turns north, crossing E-470. At this turn a lateral connects from the Ivey LC OGPF which originates in the southeast corner of Zone B. From this OGPF, the lateral travels east, paralleling the south side of E-470 crossing Big Dry Creek and York St where it joins the pipeline at this turn. The pipeline travels north, crossing an unnamed intermittent stream, 156th Avenue, Big Dry Creek, 160th Avenue, and an unnamed intermittent stream. The pipeline turns east just before 168th Avenue, crosses Colorado Boulevard, and connects with the Rio LA OGPF. The pipeline turns north, crossing 168th Avenue and into Weld County and paralleling the east side of CR 13. Approximately 1,400 feet north of 168th Avenue, the pipeline turns east, crossing Thompson Ditch, Big Dry Creek, and CR 15. Approximately 1,300 feet east of CR 17, the pipeline turns north for 1,200 feet, then turns east, passing German Reservoir Number 12, an unnamed intermittent stream, and CR 17. The pipeline joins with the pipeline portion from Zone A and travels north through Weld County to the EWS #6 disposal facility. This route is unable to connect to the Tollway LC. B-Farm LD, and Ocho LD OGPFs due to engineering constraints, requiring these OGPFs to continue to be served by trucks to transport produced water to EWS #6.

- Route Length: 7.38 miles
- Route Length within unincorporated Adams County: 1.76 miles
- Route Length within unincorporated Weld County: 2.73 miles
- Route Length within the City of Thornton: 2.89 miles

3.3. **Zone C**

3.3.1. Preferred Route

This route originates where the pipeline from Zone D enters the east side of Zone C. A lateral crosses beneath E-470 connecting the Henderson OGPF to the pipeline. The pipeline travels west, paralleling the

Exhibit H: Routing Analysis
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north side of E-470 where it crosses the South Platte River via horizontal directional drilling (HDD), an unnamed intermittent stream, Brantner Ditch and Riverdale Rd. Just west of Riverdale road, the pipeline turns south, crossing E-470 then turning back west, paralleling the south side of E-470, crossing an unnamed intermittent stream. Just west of this unnamed intermittent stream, a lateral comes from the south connecting the Gus LD OGPF to the pipeline. The pipeline continues west along E-470, passing by the Kortum LD OGPF, a lateral comes from the Tower LD OGPF, passing by the Kortum LD OGPF, and connecting to the pipeline. The pipeline continues west, paralleling the south side of E-470, crossing an unnamed intermittent stream, Quebec Street, two unnamed intermittent streams, Todd Creek, Holly Street, Signal Ditch and reaching the west side of Zone C. This route is the most direct route, following the E-470 right-of-way for the entirety of the zone. This route has the best approach for the HDD beneath the South Platte River.

Route Length: 6.29 miles

• Route Length within unincorporated Adams County: 3.19 miles

Route Length within the City of Brighton: 2.64 miles

Route Length within the City of Thornton: 0.45 mile

3.3.2. Route C-1

This route originates where the pipeline from Zone D enters the east side of Zone C. A lateral crosses beneath E-470 connecting the Henderson OGPF to the pipeline. The pipeline travels west, paralleling the north side of E-470, where it crosses the South Platte River via HDD, an unnamed intermittent stream, Brantner Ditch, Riverdale Road, and the same unnamed intermittent stream five times. A lateral from the south crosses E-470, connecting the Kortum LD OGPF, Gus LD OGPF, and Tower LD OGPF. The pipeline continues west, paralleling the south side of E-470, crossing an unnamed intermittent stream, Quebec Street, two more unnamed intermittent stream, Todd Creek, Holly Street, and Signal Ditch and reaching the west side of Zone C. This route has an increased number of waterway crossings and is on the opposite side of E-470 from the existing utility corridor.

• Route Length: 6.54 miles

• Route Length within unincorporated Adams County: 2.99 miles

• Route Length within the City of Brighton: 0.43 mile

Route Length within the City of Thornton: 3.12 miles

3.3.3. Route C-2

This route originates where the pipeline from Zone D enters the east side of Zone C. The pipeline crosses from the north to the south side of E-470, turning west and paralleling the south side of E-470. At this junction, a lateral extends southwest that connects the Henderson OGPF to the pipeline. The pipeline travels west, paralleling the south side of E-470, where it crosses the South Platte River, an unnamed intermittent stream, Brantner Ditch, Riverdale Road, and an unnamed intermittent stream. Just west of this unnamed intermittent stream, a lateral from the south connects the Gus LD OGPF to the pipeline. The pipeline continues west along E-470, passing by the Kortum LD OGPF, a lateral comes from the Tower LD OGPF, passing by the Kortum LD OGPF, and connecting to the pipeline. The pipeline continues west, paralleling the south side of E-470, crossing an unnamed intermittent stream, Quebec

Street, two unnamed intermittent stream, Todd Creek, Holly Street, Signal Ditch and reaching the west side of Zone C. This route does not have the best approach for the HDD of the South Platte River, but reduces the number of HDDs needed under E-470.

• Route Length: 6.1 miles

Route Length within unincorporated Adams County: 3.05 miles

• Route Length within the City of Brighton: 0.42 mile

• Route Length within the City of Thornton: 2.62 miles

3.4. **Zone D**

3.4.1. Preferred Route:

This route originates at the Prairie LE OGPF on the eastern side of Zone D. The pipeline goes west from the OGPF paralleling the north side of 136th Avenue. The pipeline passes by the Rico OGPF on the northeast corner of 136th Avenue and Potomac Street. The pipeline crosses to the south side of 136th Avenue at the same location the Fulton Ditch crosses 136th Avenue. The pipeline continues west, paralleling 136th Avenue, and crossing the Fulton Lateral Ditch at a 90-degree angle. The pipeline crosses to the north side of 136th Avenue at the same location Third Creek crosses 136th Avenue. The pipeline continues west for approximately 1,000 feet and turns north approximately 400 feet before turning west again for 900 feet, passing by the Schaefer OGPF, turning south and the turning west to again parallel the north side of 136th Avenue. The pipeline then crosses the Union Pacific Railroad tracks, Second Creek, and U.S. Highway 85. The pipeline continues west, passing by the Sharp OGPF, then crossing Brighton Road at the western side of Zone D. This is the shortest pipeline route, presenting the most engineering feasibility, and is collocated with the Boardwalk Pipeline along 136th Avenue.

Route Length: 2.73 miles

Route Length within unincorporated Adams County: 1.84 miles

• Route Length within the City of Brighton: 0.89 mile

3.4.2. Route D-1

This route originates at the Prairie LE OGPF on the eastern side of Zone D. The pipeline goes west from the OGPF, paralleling the north side of 136th Avenue. The pipeline passes by the Rico OGPF on the northeast corner of 136th Avenue and Potomac Street. At the Fulton Lateral Ditch, the pipeline turns north, paralleling the east side of Fulton Lateral Ditch. Approximately 3,100 feet north of 136th Avenue, the pipeline turns west, crossing Fulton Lateral Ditch and Potomac Street. The pipeline turns south, paralleling the east side of the Union Pacific Railroad tracks for approximately 1,800 feet, crossing Third Creek before turning west. The pipeline crosses the Union Pacific Railroad tracks and U.S. Highway 85. A lateral to the south connects to the Schaefer OGPF to this turn. The pipeline continues west from the U.S. Highway 85 crossing, turning south just before Brighton Road. The pipeline crosses Second Creek and passes by the Sharp OGPF. The pipeline turns west, paralleling the north side of 136th Avenue, crossing Brighton Road to reach the west side of zone D. This route is collocated with the Boardwalk Pipeline from Prairie LE OGPF to the junction with the lateral for the Schaefer OGPF, which presents ease for land use designation of a new pipeline. This route is not feasible from an engineering standpoint and would result in more disturbance because it is longer than the preferred route.

Route Length: 4.31 miles

Route Length within unincorporated Adams County: 3.41 miles

Route Length within the City of Brighton: 0.90 mile

3.4.3. Route D-2

This route originates at Prairie LE OGPF on the eastern side of Zone D. The pipeline heads west, paralleling the north side of 136th Avenue for approximately 1,000 feet, then turns north. The pipeline turns west at 144th Avenue, paralleling the south side of 144th Avenue and crosses Country Hills Drive and Fulton Ditch. The pipeline turns south on the east side of the Fulton Ditch Lateral and parallels the ditch for 2,000 feet. The pipeline turns west, crossing Fulton Lateral Ditch and Potomac Street. A lateral extends from the south, connecting the Rico OGPF at this turn. After traveling west, the pipeline turns south, paralleling the east side of the Union Pacific Railroad tracks for approximately 1,800 feet, crossing Third Creek before turning west. The pipeline crosses the Union Pacific Railroad tracks and U.S. Highway 85. There is a lateral that connects from the south from the Schaefer OGPF to this turn. The pipeline continues west from the U.S. Highway 85 crossing, turning south just before Brighton Road. The pipeline crosses Second Creek and passes by the Sharp OGPF. The pipeline turns west, paralleling the north side of 136th Avenue, crossing Brighton Road to reach the west side of Zone D. This route is the longest within Zone D and is not feasible from an engineering standpoint because the minimum pipeline pressure requirements cannot be attained along a longer route.

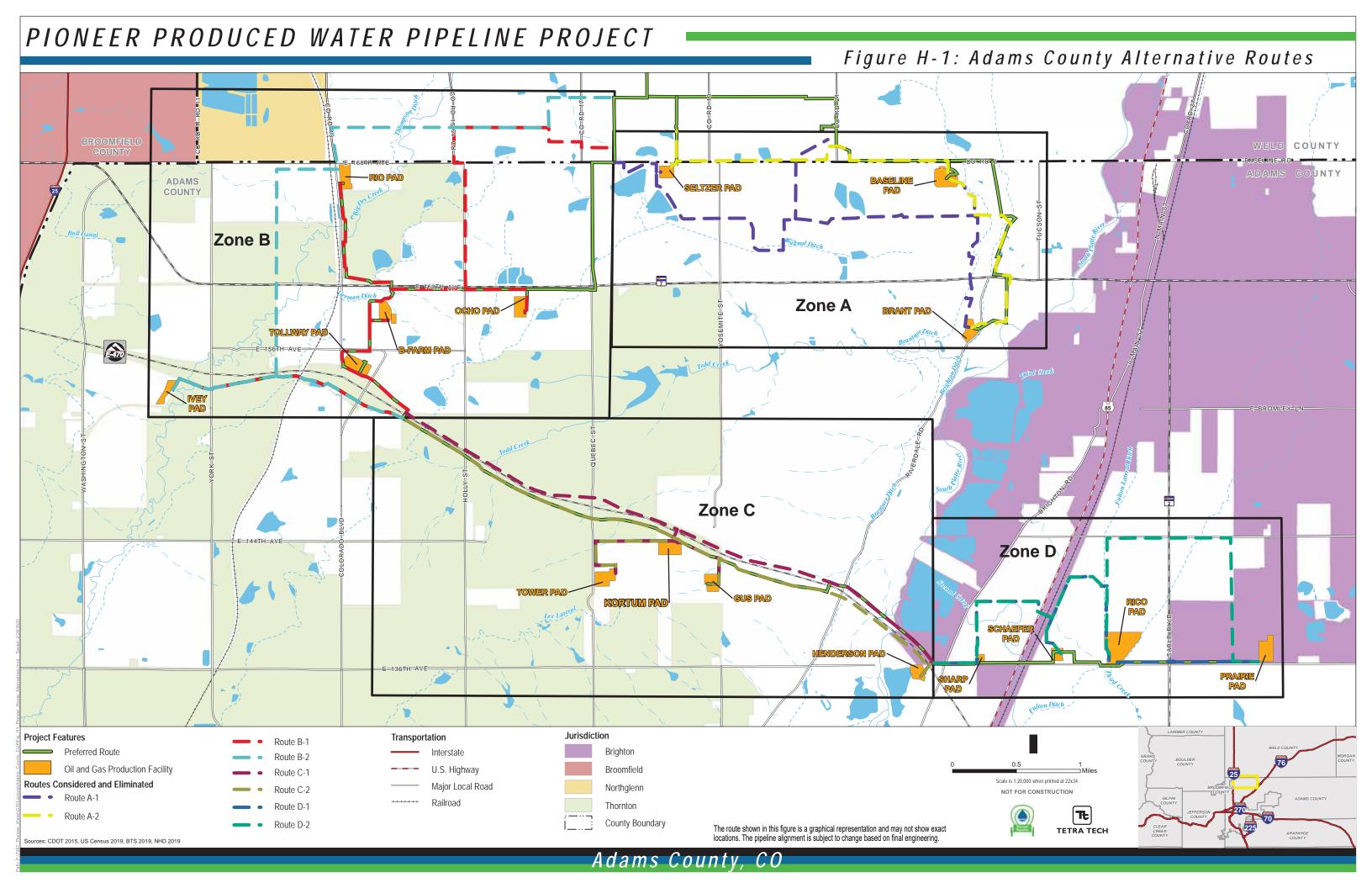
• Route Length: 5.58 miles

• Route Length within unincorporated Adams County: 4.70 miles

Route Length within the City of Brighton: 0.88 mile

Table 1: dams County Pipeline Length by Zone by Municipality

Route Name	Total Length (miles)	Length within Unincorporated Adams Co. (miles)	Length within Unincorporated Weld Co. (miles)	Length within Brighton (miles)	Length within Thornton (miles)
A-Preferred	3.80	2.13	1.67	0	0
A-1	6.02	5.69	0.32	0	0
A-2	4.69	2.14	2.55	0	0
B-Preferred	8.55	5.08	0.52	0	1.94
B-1	9.02	3.89	1.68	0	3.45
B-2	7.38	1.76	2.73	0	2.89
C-Preferred	6.29	3.19	0	2.64	0.45
C-1	6.54	2.99	0	0.43	3.12
C-2	6.10	3.05	0	0.42	2.62
D-Preferred	2.73	1.84	0	0.89	0
D-1	4.31	3.41	0	0.90	0
D-2	5.58	4.70	0	0.88	0



DEVELOPMENT AGREEMENT

THIS DEVELOPMENT AGREEMENT ("Agreement") is made and entered into by and between the **COUNTY OF ADAMS**, a political subdivision of the State of Colorado, hereinafter called ("County"), and **Pioneer Water Pipeline**, **LLC**, a Delaware limited liability company, 2015 Clubhouse Dr, Suite 201, Greeley, CO 80634, hereinafter called ("Developer"). County and Developer may be referred to in this Agreement collectively as "Parties" or singularly as "Party."

WITNESSETH:

WHEREAS, Developer desires to construct approximately 19.2 miles of 4- to 12 inch-diameter high-density-polyethylene (HDPE) produced water gathering pipelines and associated appurtenances in Adams County, Colorado, as shown in the alignment sheets in Exhibit A; more particularly described in that certain Conditional Use Permit ("CUP") Application dated February 28, 2020; and

WHEREAS, on February 28, 2020, Developer submitted an application for a CUP to Adams County in accordance with the requirements outlined in Chapter 2 of the Adams County Development Standards and Regulations ("the Regulations"), the CUP Checklist, and requested submittal criteria from the Adams County Areas and Activities of State Interest ("AASI") Checklist; and

WHEREAS, Developer will acquire, if it has not already done so, all necessary right-of-way easements and temporary construction easements to utilize certain real property in the County of Adams, State of Colorado; and

WHEREAS, the County has designated its future road expansion plans in the Adams County Transportation Plan adopted November 2012 ("Transportation Plan"); and

WHEREAS, the County and Developer have planned and designed the Project, so it will not prohibit future development, and so that it will not add cost to the County's future infrastructure plans to support development.

NOW, THEREFORE, in consideration of the foregoing, the parties hereto promise, covenant, and agree as follows:

I. DEVELOPER'S OBLIGATIONS:

- 1. <u>Pre-Construction Activities.</u> Prior to site disturbance and commencing construction in the County, Developer Shall:
 - a. Apply for the applicable construction permits.
 - b. Prepare a Storm Water Management Plan. Storm Water Best Management Practices ("BMPs") will be implemented for the construction phase to capture and treat onsite Storm Water runoff in accordance with the requirements for the Storm Water Management Plan for the Project.
 - c. Secure applicable local, state, and federal permits for the Project and submit copies of these permits to the County.
 - d. Secure Adams County Right-of-Way permits prior to constructing crossings, which shall not be unreasonably withheld or delayed.
 - e. Record all executed easements and property deeds for the Project with the County.
 - f. Contact and use commercially reasonable efforts to work with Xcel Energy and United Power regarding any possible encroachment the Project may have on Xcel Energy's or United Power's pipeline(s) or related facilities.
 - g. Submit evidence (e.g. permit number) of approved Xcel Energy license agreements to the County.
 - h. Submit evidence (e.g. permit number) of approved Colorado Department of Transportation ("CDOT") Utility Permit for the Crossing of U.S. Highway 85, State Highway 7, and State Highway 2 to the County.
 - i. Submit evidence (e.g. permit number) of the approved E-470 Public Highway Authority ("E-470") Pipeline Crossing Permit for the crossing of E-470 to the County
 - j. Submit evidence (e.g. permit number) of the approved Union Pacific Railroad Crossing/Encroachment Permit for utilities that cross or follow along the ROW.
 - k. Submit engineering plans for an approximately 10-foot-wide permanent easement plus an additional 30-foot-wide temporary easement for a total construction corridor of 40 feet in width to be designed and constructed in accordance with Chapter 7 of the Adams County Development Standards and Regulations
- 2. <u>Construction Activities.</u> During construction, Developer shall:
 - a. Construct the Project in accordance with the CUP.
 - b. Manage Stormwater in accordance with a stormwater management plan ("SWMP") prepared under the Colorado Department of Public Health and Environment ("CDPHE") Colorado Discharge Permitting System ("CDPS") Permit and in accordance with the Clean Water Act National Pollution Discharge Elimination System ("NPDES") regulations and Adams County's Grading Erosion and Sediment Control standards. Stormwater BMPs will be implemented for the construction phase to capture and treat onsite Storm Water runoff in accordance with the requirements for the SWMP.
 - c. Operate at the Project site only from 7:00 AM to 7:00 PM, Monday through Saturday. Construction may occur on Sundays and other hours outside 7:00 AM to 7:00 PM timeframe on an as-required basis during inclement weather, during hydrostatic testing, horizontal directional drilling ("HDD"), and emergency situations that would cause Developer to be out of compliance with any applicable local, state, or federal permit. The County Director of Community and Economic

Development may extend the hours and days of operation if Developer makes a request in writing and demonstrates sufficient need.

- d. Comply with guidelines of Section 106 of the National Historic Preservation Act of 1966 in locations that have been identified as federally regulated within the County. Comply with State of Colorado Historical, Paleontological, and Archeological Resources Act of 1973 (C.R.S. §§ 24-80-401 to 410) on all identified state lands within the County. All best management practices and avoidance measures proposed within the approved CUP on lands that are state and federally regulated by the above listed laws will be enforced.
- e. Comply with the terms of the Project's Air Pollution Emissions Notice ("APEN") issued by CDPHE, if an APEN is required.
- f. Comply with C.R.S. § 42-4-1407, covering loads for all hauling/construction trucks.
- g. Be responsible for the cleanliness and safety of roadways adjacent to the Project in the event there are any issues related to the Project during construction. If at any time these roadways are found to be dangerous or not passable due to debris or mud caused by Project activities, the County may require the Developer to cease Project operations immediately in the affected area and clear the roadway of any and all debris or mud. If required by the County, the Project shall not resume until the County deems the roadway conditions acceptable. If the Developer fails to keep the adjacent roadways clean and free from debris, Adams County Transportation Department has the option to perform the required clean up and bill clean up charges directly to the Developer.
- h. Be responsible for repairing County infrastructure that is damaged as a result of the construction from the Project. County will make a reasonable effort to provide any locations of County infrastructure to Developer within 30 days of CUP approval. Repairs shall occur as soon as possible, but no later than six (6) months following construction completion, unless an extension is granted by the County for extenuating circumstances. The Developer may submit evidence of the condition of the County's infrastructure at the start and completion of construction in order to demonstrate the pre-construction condition and the post-construction condition of the infrastructure.
- i. Remove and dispose of fluid spills caused by the project if applicable, such as hydraulic oil from maintenance of equipment, at a facility permitted for such disposal.
- j. Convey complaints Developer receives concerning off-site impacts and the resolution of those complaints to the Adams County Community and Economic Development Department. Off-site impacts shall be responded to and resolved by Developer. The Adams County Community and Economic Development Department will be the final decision maker regarding the resolution of noise complaints or any other off-site impacts, provided that Developer is provided notice and given an opportunity to be heard. Excessive complaints that are not resolved to the satisfaction of the County may be justification for a Show Cause Hearing before the Adams County Board of County Commissioners.
- k. Ensure that construction vehicles have a backup alarm that complies with Occupational Safety and Health Administration requirements, 29 CFR 1926.601(b)(4) and 1926.602(a)(9), and/or other remedies (such as flagmen) to minimize noise as approved by the County.
- I. Notify the County prior to commencing snow removal operations within the County's right-of-way. The Developer shall be responsible for damages to the right-of-way caused by these activities and shall repair damages at its expense within 60 days of receiving notice from the County.
- m. Screen storage or staging areas from adjacent residential properties within 100 feet.
- n. Comply with all applicable local, state, and federal requirements during the course of the project.
- o. Implement the following BMPs outlined in the Biological Resources Assessment:

- I. Horizontal directional drilling shall be used to avoid impacts to wetlands and waterbodies to the extent practicable and in accordance with U.S. Army Corps of Engineers requirements.
- II. Raptor and bald eagle surveys should be conducted by a qualified biologist prior to disturbance.
- III. If initial land disturbance is anticipated from March 15th to September 31st, a survey for potential burrowing owl habitat will be conducted. If potential habitat is found, surveys will be conducted in accordance with the Colorado Parks and Wildlife (CPW) protocols prior to the start of construction.
- IV. If construction is planned to occur between April 1st to July 31st, field reconnaissance of potential mountain plover habitat should be conducted prior to disturbance.
- V. In areas of trenching, trenches left overnight shall be covered or a means of egress provided for any wildlife that may enter the trench. Trenches should be checked for wildlife daily and if a species listed as Federal- or State- threatened or endangered is found or suspected, work should stop while a qualified biologist is contacted to relocate the animal.
- p. Implement the following Tri-County Health Department water well mitigation measures:
 - I. If trench dewatering is necessary, the water will be pumped and discharged to alluvial/colluvial sediments close to the stream channel.
 - II. If discharge of groundwater is necessary during construction, Developer agrees to obtain a discharge permit from CDPHE, Water Quality Control Division.

3. Design Requirements.

- a. The Project will be designed to meet or exceed the minimum safety standards contained the Colorado Oil and Gas Conservation Commission Part 1100 rules, as applicable, and national engineering design codes for pipelines set forth by the American Society of Mechanical Engineers.
- b. Pipeline burial depths will meet or exceed federal, state, and applicable engineering standards. The Pipelines will be buried with a minimum of 48-inches of cover where practical.
- c. Ensure the pipeline is located in easements on private property or County owned property and County road crossings shall be as near as possible to right angles. This effective placement of the Pipeline complies with required structure setbacks per 2012 Transportation Plan.

4. Operational Requirements.

- a. The Project will be operated in accordance with the safety standards contained the Colorado Oil and Gas Conservation Commission (COGCC) Part 1100 rules.
- b. The Project will be operated in accordance with all applicable local, state, and federal codes, laws, and regulations, including but not limited to CDOT and CDPHE.
- c. The Project will utilize an integrity management program as detailed in the COGCC Part 1100 rules.

5. Post-Construction and Maintenance Requirements.

- a. Developer agrees to restore disturbed County-owned lands in compliance with the requirements of applicable easement agreements. In the event that reseeding is unsuccessful in the first growing season, Developer agrees to comply with the terms of the easement agreements during the subsequent growing season. The County may grant an extension for good cause, in writing, in the event of unforeseen circumstances.
- b. Developer agrees to restore disturbed private property in accordance with the applicable easement agreements. In the event that reseeding is unsuccessful in the first growing season, Developer agrees to comply with the terms of the easement agreements to restore the land. The

County may grant an extension for good cause, in writing, in the event of unforeseen circumstances.

- c. The Developer also agrees that the approval of encroachment agreement requests for parking lots and driveways on private property shall not be unreasonably or arbitrarily withheld, in accordance with the terms of the easement agreements for the Project, so long as such encroachment requests do not affect Developer's ability to safely operate its Pipeline.
- d. Developer agrees that it will not disrupt or damage the functionality of existing drainage facilities.
- e. Developer agrees to submit "as built" construction drawings to the Adams County Community and Economic Development Department and Public Works Department within 180 days of construction completion in accordance with the procedures established by the County.
- f. Developer agrees to submit emergency contact information, emergency response plans, and final maps of the Project, including associated Pipeline components, to the local fire districts encompassing the Project and to the Adams County Office of Emergency Management before commencing operation of the Pipeline. The Developer shall comply with other requests for information from the Adams County Office of Emergency Management in accordance with local, state, and federal law.
- g. Maintenance of the Project will follow guidelines set forth in Developer's operations and maintenance procedures, which meet or exceed regulatory requirements. Maintenance activities associated with the Pipeline and permanent easement include, the following:
 - Implement a damage prevention program, including observation of any construction activities by others on or near the permanent easement;
 - Participate in the State of Colorado's one-call program and responding to one-calls;
 - Install and maintain pipeline markers;
 - Inspect block valves;
 - Inspect crossings by other pipelines, highways, railroads, and utilities;
 - Inspect and maintain safety, control, mechanical, and electrical equipment;
 - Maintain communication equipment; and
- 6. Development Impact Fees. There are no development impact fees associated with this Project.
- 7. <u>Guarantee of Compliance</u>. Developer herby agrees that, should it fail to comply with the terms of this Agreement through no fault of Adams County, the County is entitled to obtain from the Colorado State District Court for the Seventeenth Judicial District a mandatory injunction requiring said Developer to comply with the terms of this Agreement. Prior to the County seeking such an injunction, Developer will be provided the opportunity to cure any default in accordance with the terms set forth herein. Developer further agrees that failing to comply with the requirements set forth in this Agreement may be justification for a Show Cause Hearing where the CUP Permit may be revoked.
- 8. <u>Successors and Assigns</u>. The rights granted herein may be assigned in whole or in part, and the terms, conditions, and provisions of this Agreement shall be deemed a covenant running with the real property in perpetuity and shall be binding upon the heirs, executors, personal representatives, successors, and assigns of Developer and of the County.

II. COUNTY'S OBLIGATIONS:

Except as expressly set forth herein, the County shall have no obligations associated with this Agreement.

III. GENERAL PROVISIONS:

- 1. <u>No Third-Party Beneficiaries</u>. This Agreement is intended to describe and determine such rights and responsibilities only as between the Parties hereto. It is not intended to and shall not be deemed to confer rights or responsibilities to any person or entities not named hereto.
- 2. <u>Notices</u>. Any and all notices, demands or other communications desired or required to be given under any provision of this Agreement shall be given in writing and delivered personally or sent by registered or certified mail, return receipt requested, postage prepaid or by email address as follows:

To Developer:

PIONEER WATER PIPELINE, LLC Attn: Land Manager 600 17th St., Suite 725-S Denver, CO 80202

To Adams County:

Director, Adams County Community and Economic Development 4430 South Adams County Parkway, 1st Floor, Suite W2000A Brighton, CO 80601

With a copy to:

Adams County Attorney 4430 South Adams County Parkway, 5th Floor, Suite C500B Brighton, CO 80601

3. <u>Amendments</u>. Should any changes to the CUP be proposed by Developer before, during or after completion of the Project, Developer shall submit the details of those changes to the Adams County Community and Economic Development Director for a determination as to whether those changes constitute a Major or Minor Amendment in accordance with the Regulations.

This Agreement may only be modified amended, changed or terminated in whole or in part by a separate agreement in writing duly authorized and executed by the Parties hereto with the same formality, and subject to the same statutory and regulatory requirement, as this Agreement.

- 4. <u>Controlling Law</u>. This Agreement and its application shall be construed in an accordance with the laws of the State of Colorado.
- 5. <u>Default</u>. If either Party is in default under this Agreement, the non-defaulting Party shall provide written notice to said defaulting Party at the address provided in Section 2 immediately above. The defaulting Party shall have 30 days to cure the default, unless an extension is granted in writing by the non-defaulting Party for good cause. The non-defaulting Party may seek all remedies available pursuant to the Agreement and under the law.
- 6. <u>Costs and Fees</u>. In the event of any litigation arising out of this Agreement, the Parties agree that each Party will pay its own costs and fees.

DEVELOPER:					
PIONEER WATER PIPELINE, LLC a Colorado limited liability company					
By: Jim Goddard Title: President					
ACKNOV	VLEDGMENT				
STATE OF COLORADO)					
COUNTY OF ADAMS) ss.					
The foregoing instrument was acknowledged before Goddard, as President, on behalf of Pioneer Water F Witness my hand and official seal.	e me this day of2020, by Jim Pipeline, LLC, Colorado limited liability company.				
	Notary Public State of Colorado				
My Commission Expires:					
My Commission Number:					
APPROVED BY resolution at the meeting of	, 2020.				
ATTEST:	BOARD OF COUNTY COMMISSIONERS ADAMS COUNTY, COLORADO				
Clerk to the Board	Chairperson				
Approved as to form:					
Adams County Attorney's Office					

EXHIBIT "A"

Pipeline Alignment Sheets

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2. **Development Review Team**

Community & Economic Development Department www.adcogov.org



4430 South Adams County Parkway 1st Floor, Suite W2000 Brighton, CO 80601-8204 PHONE 720.523.6800 FAX 720.523.6998

Development Review Team Comments

Date: 4/6/2020

Project Number: RCU2020-00004

Project Name: PIONEER WATER PIPELINE PROJECT

Commenting Division: Planner Review

Name of Reviewer: Greg Barnes

Date: 04/06/2020

Email: gjbarnes@adcogov.org

Resubmittal Required

- 1. Throughout the document, please update our department name to "Community and Economic Development".
- 2. In your resubmittal, please include a written response to the public comment for Mr. Lloyd. I will share your reply with him.

Commenting Division: ROW Review Name of Reviewer: Eden Steele

Date: 03/27/2020

Email:

ROW1: Applicant acknowledged in Section 3.7.3 of the application that "Pioneer would obtain an Adams County ROW crossing permit prior to construction, and the pipeline would only cross county road ROWs at or near a perpendicular angle. In any segment of the Project that is parallel to an Adams County ROW, the pipeline will be constructed a minimum of five (5) feet from the edge of the maximum future ROW width, as designated in the Adams County 2012 Transportation Plan." Compliance with this requirement will be confirmed prior to construction/utility permit issuance. Applicant should include pipeline setbacks from Adams County roadway centerlines on the final set of construction documents.

BOARD OF COUNTY COMMISSIONERS

Eva J. Henry

Charles "Chaz" Tedesco Emma Pinter DISTRICT 2

DISTRICT 3

Steve O'Dorisio

Mary Hodge

Page 1 of 3

Commenting Division: Development Engineering Review

Name of Reviewer: Eden Steele

Date: 03/27/2020

Email: Complete

ENG1: No floodplain use permit required for underground utilities.

ENG2: Applicant is aware an Adams County SWQ Permit will be required prior to construction/utility permit issuance. The applicant can contact Juliana Archuleta, the County's Stormwater Program Manager, to inquire about obtaining a SWQ Permit. Ms. Archuleta can be contacted at 720-523-6869 or by email at mjarchuleta@adcogov.org.

ENG3: Prior to construction/utility permit issuance, the applicant should ensure the pipeline elevation and alignment does not conflict with Mile High Flood District plans when designed plans are available. There are some proposed detention/ water quality facilities and associated drainage infrastructure within the proposed pipeline alignment in the following locations:

1) Along E 136th Ave east of Potomac St.

Brighton Watershed Area – Brighton Watershed Tributary to South Platte River – Outfall Systems Planning – Preliminary Design Report; Prepared for Urban Drainage and Flood Control District, Adams County, and the City of Brighton; Dec 1998

2) Along northern property line of Parcel #: 0157121000016 Todd Creek Area – Todd Creek and DFA 0052 Watersheds Outfall System Planning Study – Preliminary Design Report; Prepared for Urban Drainage and Flood Control District, Adams County, and City of Thornton: Dec 2003

ENG4: The County will review all construction documents via the Engineering Review process to ensure County roadway crossings meet requirements set forth in Chapter 7 of the Adams County Development Standards and Regulations. Pipeline setbacks from roadway centerlines should be included on the construction plans. Compliance with County environmental and right-of-way requirements will be confirmed prior to construction/utility permit issuance.

Commenting Division: Environmental Analyst Review

Name of Reviewer: Katie Keefe

Date: 03/25/2020

Email:

Resubmittal Required

Conditions Precedent

- 1: In accordance with Colorado Parks and Wildlife (CPW) recommendations and as specified in the project's Resources Review, applicant will provide documentation of seasonal raptor nest surveys for active nests prior to construction activities commencing between October 15 and July 31.
- 2: The applicant will provide documentation of coverage under the USACE Nationwide Permit 12 prior to construction of pipeline segments crossing WOTUS where HDD is not feasible and for which restoration to antecedent conditions is required.
- 3. The applicant must provide documentation that a Construction Permit, if required, has been obtained and documentation of APEN submittal to Colorado Department of Public Health and Environment.

Conditions

ENV1. The applicant shall adhere to CPW Recommended Survey Protocol and Actions to Protect Nesting Burrowing Owls for construction activities commencing between October 15 and July 15.

ENV2. The applicant shall adhere to all nuisance impact mitigation measures as identified in Section 3.11.9 of its conditional use permit application.

ENV3. To minimize fugitive dust emissions, the applicant shall cease all earthmoving activities at any time wind speeds exceed 25 mph.

Comments

ENV1. An Emergency Response Plan, as requested, was not included with the conditional use permit application documentation. Please provide a copy of the project Emergency Response Plan and documentation that a copy has been provided to the County Office of Emergency Management as the DERA.

Responses to Comments from Adams County

Planner Review

- 1. Comment noted. The department name has been updated in a revised version of the text provided with this resubmittal.
- 2. Please find the written response included in this resubmittal following Mr. Lloyd's comments.

ROW Review

ROW1:

Pioneer will ensure that the pipeline will only cross county road ROWs at or near a perpendicular angle and that any segment of the pipeline constructed parallel to an Adams County ROW will be constructed a minimum of five (5) feet from the edge of the maximum future ROW width and will include the setbacks from the roadway centerlines in the final alignment sheets. Pioneer understands that Adams County will confirm compliance with this requirement prior to construction/utility permit issuance. Pipeline setbacks from Adams County roadway centerlines will be provided on the final set of construction documents.

Development Engineering Review

ENG 1

Comment noted.

ENG 2

Pioneer will apply for the Adams County SWQ Permit prior to construction within the Adams County MS4 permitted area.

ENG 3

Pioneer has reviewed the Mile High Flood District plans along East 136 Avenue East of Potomac Street and at the Todd Creek area along the northern property line of Parcel 0157121000016. No conflict between the Pioneer Water Pipeline and the Mile High Flood District Plans is anticipated.

<u>ENG 4</u>

Pioneer understands that compliance with Adams County environmental and ROW requirements will be confirmed prior to construction/utility permit issuance.

Environmental Analyst Review

Conditions Precedent

- 1. Pioneer will provide documentation of seasonal raptor nest surveys between October 15 and July 31, prior to construction activities commencing.
- 2. Pioneer will provide documentation of coverage under the USACE Nationwide Permit 12 or other Nationwide Permit prior to construction commencing if applicable.

Adams County Referral Comments Conditional Use Permit (RCU2020-00004)

3. Pioneer will provide documentation that a Construction Permit has been obtained if necessary and will provide documentation of APEN submittal to CDPHE prior to construction.

Conditions

Pioneer notes these conditions of approval.

Comments

ENV 1

A draft Emergency Response Plan (ERP) and documentation the ERP is included with this resubmittal for review by the Adams County Office of Emergency Management. The ERP will be finalized following construction to ensure accuracy based on final engineering.

3. Colorado Parks and Wildlife



Northeast Regional Office 6060 Broadway Denver, CO 80216 P 303.291.7227

March 30, 2020

Mr. Greg Barnes Community & Economic Development Department 4430 South Adams County Parkway, 1st Floor, Suite W2000B Brighton, CO 80601-8218

RE: Pioneer Produced Water Pipeline CUP, RCU2020-00004

Dear Mr. Barnes:

Thank you for the opportunity to comment on the proposed conditional use permit for the construction and operation of approximately 19.2 miles of new produced water gathering pipelines within Adams County. The 19.2 miles of pipeline will reduce the impacts to the surrounding communities to oil and gas exploration by transferring the transportation of produced water to pipelines from trucks within Adams County and Weld Counties. The oil and gas production facilities are operated by Great Western Petroleum, LLC. The proposed pipeline will be in unincorporated Adams County and within the cities of Brighton and Thornton, on various parcels of private and public property. The project will cross various state highways, county roads, railroads, wetlands, streams and other existing infrastructure.

The mission of Colorado Parks and Wildlife (CPW) is to perpetuate the wildlife resources of the state, to provide a quality state parks system, and to provide enjoyable and sustainable outdoor recreation opportunities that educate and inspire current and future generations to serve as active stewards of Colorado's natural resources. Our goal in responding to land use proposals such as this is to provide complete, consistent, and timely information to all entities who request comment on matters within our statutory authority. Current CPW policy directs our efforts towards proposals that will potentially have high impacts to wildlife and wildlife habitat. The emphasis of CPW's concerns is on large acreages, critical habitats, wildlife diversity, and impacts to species of special concern, or those that are state or federally endangered.

On a vast majority of the parcels, CPW would expect to find small ground dwelling mammals including prairie dogs and passerine birds. Due to the low availability of undeveloped habitat surrounding those parcels, impacts of the development, as proposed, may be characterized as minimal. CPW recommends that the developer minimize the amount of time trenches are open and the length of trenches are in order to reduce impacts to ground dwelling mammals. CPW also recommends that the developer consider implementing a method for ground dwelling mammals to escape after falling into an open trench. However, several parcels are in close proximity to active bald eagle nests, wetlands and streams. CPW expects that there may be potential impacts to those parcels.

Dan Prenzlow, Director, Colorado Parks and Wildlife • Parks and Wildlife Commission: Michelle Zimmerman, Chair • Marvin McDaniel, Vice-Chair James Vigil, Secretary • Taishya Adams • Betsy Blecha • Robert W. Bray • Charles Garcia • Marie Haskett • Carrie Besnette Hauser • Luke B. Schafer • Eden Vardy



Burrowing Owls

If prairie dog towns are present on the sites or if prairie dogs establish themselves on the property prior to development - CPW recommends that a burrowing owl survey be conducted prior to earth moving. Burrowing owls live on flat, treeless land with short vegetation, and nest underground in burrows dug by prairie dogs, badgers, and foxes. These raptors are classified as a state threatened species and are protected by state and federal laws, including the Migratory Bird Treaty Act.

These laws prohibit the killing of burrowing owls or disturbance of their nests. Therefore, if any earth-moving will occur between March 15th and October 31st, a burrowing owl survey should be performed. Guidelines for performing a burrowing owl survey may be obtained by visiting the CPW website at http://cpw.state.co.us or by calling the CPW Denver Region Office at (303) 291-7227.

Natural Vegetation, Wetlands and Water Sources

CPW recommends that land within the project area be restored to native habitat if possible. To improve wildlife habitat after construction, CPW recommends using native plant species along the project area. CPW also recommends planting trees, shrubs, and grasses so that they are mixed within the landscape. A landscape that has a good mix of trees, grasses, and shrubs is more beneficial to wildlife than a landscape with all trees in one area and all grasses and shrubs in others.

If heavy equipment is used near any water source (that was used in another stream, river, lake, reservoir, pond, or wetland) one of the following disinfection practices is necessary prior to construction to prevent the spread of New Zealand mud snails, zebra mussels, quagga mussels, whirling disease, and any other aquatic invasive species into this drainage. These practices are also necessary after project completion, prior to this equipment being used in another stream, river, lake, reservoir, pond, or wetland:

- Remove all mud, plants, debris from equipment (tracks, turrets, buckets, drags, teeth, etc.) and spray/soak equipment in a 1:15 solution of Quat 4 or Super HDQ Neutral institutional cleaner and water. Keep equipment moist for at least 10 minutes OR
- Remove all mud, plants and debris from equipment (tracks, turrets, buckets, drags, teeth, etc.) and spray/soak equipment with water greater than 140 degrees F for at least 10 minutes.
- Clean hand tools, boots, and any other equipment that will be used in the water with one of the above options as well. Do not move water from one water body to another. Be sure equipment is dry before use.

Since the project is proposing the use of horizontal directional drilling to cross wetlands and streams, CPW recommends that the developer consult with the United States Army Corps of Engineers at (720) 922-3857 about specific requirements or permits that USACE may require prior to the start of construction.

Bald Eagles

As there two different active bald eagle nests within a half mile of the several parcels, CPW recommends that Great Western Petroleum, LLC adhere to the Recommended Buffer Zones and Seasonal Restriction Guidelines. Great Western Petroleum, LLC should contact CPW for specific nest locations. These guidelines are designed to minimize nest abandonment while allowing for potential development to continue. These guidelines are as follows:

- No surface occupancy within a quarter of a mile radius of any active nest.
- No human encroachment within a half of a mile radius of any active nest between November 15 to July 31.
- Any potential work that needs to be completed within the half of a mile buffer should be limited to August 15 through October 15.
- If the Developer cannot adhere to the Recommended Buffer Guidelines, the Developer should consult with the United States Fish and Wildlife Service Mountain-Prairie Region at (303) 236-8171.

A copy of the Recommended Buffer Zones can be obtained by visiting the CPW website at https://cpw.state.co.us/Documents/WildlifeSpecies/LivingWithWildlife/RaptorBufferGuidelin es2008.pdf or by calling the CPW Denver Region Office at (303) 291-7227.

Thank you again for the opportunity to comment on the proposed Pioneer Produced Water Pipeline in Adams County, CO. Please do not hesitate to contact us again about ways to continue managing the landscape in order to maximize wildlife value while minimizing potential conflicts. If you have any further questions, please contact District Wildlife Manager Jordan Likes jordan.likes@state.co.us at (303) 291-7227 or Serena Rocksund serena.rocksund@state.co.us at (303) 291-7132.

Sincerely,

Matt Martinez Area Wildlife Manager

Cc: M. Leslie, K. Cannon, J. Likes, S. Rocksund

Responses to Comments from CPW

Borrowing Owls

If applicable, Pioneer will conduct borrowing owl surveys along the Pioneer Water Pipeline route per CPW protocol in areas where prairie dog towns are present within 150 feet of areas planned for disturbance. If burrowing owls are found to be nesting during surveys, Pioneer will adhere to 150-foot buffers from March 15 through October 31.

Natural Vegetation, Wetlands, and Water Sources

Pioneer will restore disturbed construction areas to prior conditions as required by permits and landowner agreements and will follow CPW recommendations to the extent practicable.

Heavy equipment and personal tools previously used near other water sources will be cleaned prior to use for construction activities to prevent the spread of invasive species.

Bald Eagles

Pioneer will adhere to the Recommended Buffer Zones and Seasonal Restriction Guidelines for active Bald Eagle Nests.

4. Colorado Department of Public Health and Environment

Greg Barnes

From: Hackett - CDPHE, Sean <sean.hackett@state.co.us>

Sent: Thursday, March 26, 2020 9:09 AM

To: Greg Barnes
Cc: Layla Bajelan

Subject: Re: Request for Comments: RCU2020-00004- Pioneer Produced Water Pipeline CUP

Attachments: APEN 223 (1).PDF

Please be cautious: This email was sent from outside Adams County

Good morning, Greg:

The Colorado Department of Public Health and Environment (CDPHE) appreciates the opportunity to comment on this proposal. Please note that the following requirements and recommendations are not intended to be an exhaustive list and it is ultimately the responsibility of the applicant to comply with all applicable rules and regulations. Please also note that CDPHE's failure to respond to any referrals should not be construed as a favorable response.

Hazardous and Solid Waste

The applicant must comply with all applicable solid and hazardous waste rules and regulations.

Solid waste regulations are available here:

https://www.colorado.gov/pacific/cdphe/swregs.

Hazardous waste regulations are available here: https://www.colorado.gov/pacific/cdphe/hwregs.

Applicable requirements may include, but are not limited to, testing for and properly disposing of technologically enhanced naturally occurring radioactive materials (TENORM) and other solid or hazardous wasta

If you have any questions regarding solid and hazardous waste, please contact CDPHE's Hazardous Materials and Waste Management Division (HMWMD) by emailing comments.hmwmd@state.co.us or calling 303-692-3320.

Water Quality

The applicant must comply with all applicable water quality rules and regulations. Water quality regulations are available here: https://www.colorado.gov/pacific/cdphe/water-quality-control-commission-regulations.

Applicable requirements may include, but are not limited to obtaining a stormwater discharge permit if construction activities disturb one acre or more of land or if they are part of a larger common plan of development that will disturb one or more acres of land. In determining the area of construction disturbance, CDPHE's Water Quality Control Division (WQCD) looks at the entire plan, including disturbances associated with utilities, pipelines or roads constructed to serve the facility.

Please use the Colorado Environmental Online Services (CEOS) to apply for new construction stormwater discharge permits, modify or terminate existing permits and change permit contacts.

For CEOS support please see the division website: https://www.colorado.gov/pacific/cdphe/cor400000-stormwater-discharge or contact:

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Email: cdphe_ceos_support@state.co.us_or cdphe_wqcd_permits@state.co.us CEOS Phone: 303-691-7919 Permits Phone: 303-692-3517

WQCD has compliance assistance and guidance materials on their website. There is an Oil and Gas field wide permit guidance that is specifically for construction activities associated with oil and gas. This guidance can be found at https://environmentalrecords.colorado.gov/HPRMWebDrawer/RecordView/1338365.

Additionally, through the Federal Energy Regulatory Commission (FERC) there is a federal requirement for pipeline construction to identify wellhead protection/source water protection areas. The WQCD typically gets a request for this data primarily from the permittee or planning departments (occasionally) and they are happy to provide that information related to drinking water protection areas. WQCD would simply need a shapefile of the proposed area and they could send a list of any potential impacted public water systems.

If you have any questions regarding water quality, please contact CDPHE's WQCD by emailing cdphe.commentswgcd@state.co.us or calling 303-692-3500.

Air Quality

The applicant must comply with all relevant state and federal air quality rules and regulations. Air quality regulations are available here: https://www.colorado.gov/pacific/cdphe/aqcc-regs.

Applicable requirements may include, but are not limited to, reporting emissions to the Air Pollution Control Division (APCD) by completing an Air Pollutant Emissions Notice (APEN). An APEN is a two in one form for reporting air emissions and to obtain an air permit, if a permit will be required. While only businesses that exceed the Air Quality Control Commission (AQCC) reporting thresholds are required to report their emissions, all businesses - regardless of emission amount - must always comply with applicable AQCC regulations.

For this project, a Land Development APEN (Form APCD-223; attached) may be required. Under Colorado air quality regulations, land development refers to all land clearing activities, including but not limited to land preparation such as excavating or grading, for residential, commercial or industrial development. Land development activities release fugitive dust, a pollutant regulation by the Division. Small land development activities are not subject to the same reporting and permitting requirements as large land activities. Specifically, land development activities that are less than 25 contiguous acres and less than 6 months in duration do not need to report air emissions to APCD.

Information on oil and gas APENS and permits can be found at https://www.colorado.gov/pacific/cdphe/air/oil-and-gas-air-permit. In addition to an index of oil and gas forms, guidance, APENs and memos, this website contains an Oil and Gas Industry Emissions Calculation and Regulatory Analysis Workbook to assist operators applying for permits in following approved emissions calculation methods. If you have any questions regarding Colorado's APEN or air permitting requirements or are unsure whether your business operations emit air pollutants, please call the Small Business Assistance Program (SBAP) at 303-692-3175 or 303-692-3148.

Polyfluoroalkyl substances in firefighting foams

PFAS are a family of human-made substances that do not occur naturally in the environment. They have been used for decades in food packaging, carpets, personal care items, ski waxes, other household items, and firefighting foam due to their ability to resist heat, oil, stains, grease, and water. Human contact with these chemicals is widespread, and nearly all people have some measurable levels of the chemicals in their blood. Human health toxicity information is only available for about ten of the thousands of these chemicals. However, despite the limited information, this toxicity information suggests that exposure to some PFAS can cause a range of negative health outcomes. Health effects from these chemicals may include pregnancy complications, liver damage, high cholesterol, and others. More research is underway to better understand these health consequences. When PFAS is released into the environment, it can get into water, especially groundwater, and contaminate drinking water supplies. Pursuant to House Bill 19-1279, firefighting foam manufacturers will

be prohibited from knowingly selling or distributing firefighting foam to which PFAS chemicals have been added.

Due to the potential for contamination from the use of fluorine free firefighting foams, the applicant should coordinate with local fire departments to evaluate whether PFAS-free foam can provide the required performance for the specific hazard. If PFAS-containing foam is used at this location, then the applicant should be required to properly characterize any waste that leaves secondary containment, vacuum/drum up any contaminated soil and properly dispose of it in accordance with solid and hazardous waste regulations. If any PFAS-containing foam leaves secondary containment, the applicant should be required to conduct appropriate soil sampling and water quality monitoring.

Health Equity and Environmental Justice

CDPHE is dedicated to promoting and protecting the health and environment for all Coloradans. As part of those efforts, we strive to achieve health equity and environmental justice.

HEALTH EQUITY is when all people, regardless of who they are or what they believe, have the opportunity to attain their full health potential. Achieving health equity requires valuing all people equally with focused and ongoing efforts to address inequalities.

ENVIRONMENTAL JUSTICE is the fair treatment and meaningful involvement of all people regardless of race, color, national origin or income. With respect to the development, implementation and enforcement of environmental laws, regulations and policies.

CDPHE notes that certain projects have potential to impact vulnerable minority and low-income communities. It is our strong recommendation that your organization consider the potential for disproportionate environmental and health impacts on specific communities within the project scope and if so, take action to mitigate and minimize those impacts. This includes interfacing directly with the communities in the project area to better understand community perspectives on the project and receive feedback on how it may impact them during development and construction as well as after completion. We have included some general resources for your reference.

Resources:

CDPHE's Health Equity Resources

CDPHE's Checking Assumptions to Advance Equity

EPA's Environmental Justice and NEPA Resources

Best,

Sean Hackett

Energy Liaison



4300 Cherry Creek Drive South, Denver, CO 80246

Office Phone 303.692.3662 | Cell Phone 303.587.1423

sean.hackett@state.co.us | www.colorado.gov/cdphe

Your feedback is important to us! Please let us know how I am doing.

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Responses to Comments from CDPHE

Hazardous and Solid Waste

Pioneer will comply with applicable CDPHE solid and hazardous waste rules and regulations during construction of the Pioneer Water Pipeline.

Water Quality

Pioneer will comply with applicable CDPHE water quality rules and regulations during construction of the Pioneer Water Pipeline.

Air Quality

Pioneer will comply with relevant CDPHE state and federal air quality rules and regulations and will submit a Land Development APEN if required.

Polyfluoroalkyl Substances in Firefighting Foams

Pioneer does not propose to use firefighting foam as part of this Pioneer Water Pipeline.

Health Equity and Environmental Justice

Pioneer will consider the potential for disproportional environmental and health impacts on specific communities and mitigate and minimize disproportionate environmental land health impacts where practicable.

<u>APEN</u>

Pioneer will provide documentation that a Construction Permit has been obtained if necessary and will provide documentation of APEN submittal to CDPHE prior to construction.

5. City of Thornton



City Hall 9500 Civic Center Drive Thornton, Colorado 80229-4326 City Development Department 303-538-7295 FAX 303-538-7373 www.thornton.co.gov

March 27, 2020

Greg Barnes Case Manager 4430 South Adams County Pkwy Ste. W2000A Brighton, CO 80601

RE: Pioneer Produced Water Pipeline CUP - RCU2020-00004 - CUP

Mr. Barnes:

The City of Thornton has the following comments regarding the Pioneer Produced Water Pipeline Conditional Use Permit.

Based on the response to the comments below, the City of Thornton requests to be included in future resubmittal reviews of this project.

Infrastructure Engineering

Darwin Williams, Civil Engineer (darwin.williams@thorntonco.gov)

The City of Thornton is currently designing a 42" fully welded steel raw water pipeline along Quebec Street. The design will align the pipeline as follows:

- For the north half of the segment (160th Avenue to 168th Avenue), the pipeline will assume an existing easement on the east side of Quebec Street.
- For the south half of the segment (160th Avenue to 168th Avenue), the pipeline will align on the west side of Quebec Street, in the existing right-of-way.

As this is a future source of drinking water for the City, it is suggested that the applicant be aware of its future design and to eliminate any conflicts during their design.

Infrastructure Engineering

Rachelle Plas, Civil Engineer (rachelle.plas@thorntonco.gov)

Any work that is proposed within Thornton's jurisdiction in a FEMA floodplain or other Special Flood Hazard Area, will need a Floodplain Development Permit from Thornton.

Development Engineering

Cassie Free, Development Engineering Manager (cassie.free@thorntonco.gov)

It is unclear where the alignment of the pipeline is in the current application. Additionally, the right-of-way crossing at Quebec Street is City of Thornton right-of-way, and would require permitting through the Infrastructure Department.

Development Engineering

Heather Croke, Civil Engineering Technician I (heather.croke@thorntonco.gov)

- The City highly recommends getting title work to obtain information for easements, adjacent properties, etc.
- The waterline is required to remain outside of the city's easements and property.
- The waterline is required to remain outside future right-of-way for Highway 7, 152nd Avenue, Holly Street, Quebec Street and 156th Avenue.
- All utility crossings should be at 90 degrees and have City of Thornton approval.

End of Comments

Juli Negti

Please contact me at 303-538-7301, or via e-mail at Sadie.Naglich@thorntonco.gov for updates and/or questions related to this response.

Sincerely,

Sadie Naglich Planner I

cc: Greg Barnes, GJBarnes@adcogov.org

Cassie Free, Development Engineering Manager Heather Croke, Civil Engineering Technician I

Darwin Williams, Civil Engineer Rachelle Plas, Civil Engineer

 $V: PLANNING \ DIVISION: Outside \ Referrals Adams \ County Adams \ County \ 2020 Adams \ County \ Pioneer \ Produced \ Water Pipeline \ CUP \ PLOSR 202000460$

Responses to Comments from the City of Thornton

Pioneer requests that Adams County provide the following responses to comments to the City of Thornton. Pioneer has been in contact with Colin Wahab, Senior Planner with the City of Thornton, to discuss permitting requirements within the City of Thornton Jurisdiction.

Infrastructure Engineering—Darwin Williams

Pioneer has incorporated the design and alignment of the City of Thornton's 42-inch raw water pipeline into the design and alignment of the Pioneer Water Pipeline along Quebec Street between 160th and 168th. No conflicts are expected.

<u>Infrastructure Engineering—Rachel Plas</u>

Pioneer will apply for a Floodplain Development Permit from the City of Thornton if work within a FEMA floodplain or other Special Hazard Area is Required.

Development Engineering—Cassie Free

Pioneer will ensure that the applicable permits for ROW crossings within the City of Thornton's jurisdiction have been approved by the Infrastructure Department prior to construction.

Development Engineering—Heather Croke

Prior to construction within Adams County, easements for parcels within Adams County will be provided prior to construction. Pioneer understands that the waterline is to remain outside the City of Thornton's future ROWs for Highway 7, 152nd Avenue, Holly Street, Quebec Street, and 156th Avenue. Pioneer understands that all utility crossings occur at near 90-degree angles when possible and be constructed following the City of Thornton's approval.

Greg Barnes

From: Peggy Davenport <pdavenp@e-470.com>

Sent: Tuesday, May 26, 2020 2:17 PM

To: Greg Barnes

Subject: RCU2020-00004 Pioneer Water Pipeline resubmittal DUE 05.21.20 gjbarnes

Please be cautious: This email was sent from outside Adams County

Thank you for allowing the E-470 Public Highway Authority the opportunity to review and respond to RCU2020-00004 Pioneer Water Pipeline resubmittal DUE 05.21.20 gjbarnes.

At this time E-470 Public Highway Authority has the following comments:

- Occupying space for utility work, access, and any construction within the E-470 ROW and MUE (multi-use easement) is subject to and will
 be in compliance with the E-470 Public Highway Authority Permit Manual, April 2008, as may be amended from time to time (the "Permit
 Manual") and will require an E-470 Construction or Access Permit. The administration fee is \$750.00 and \$75,000 per acre for
 construction.
- A permit will be required from E-470 for any encroachment or disturbance to E-470 ROW or MUE prior to construction.
- Here is a link to our permit: https://www.e-470.com/Pages/WorkingWithUs/Permits.aspx
- The applicant must secure all approvals/agreements from the proper jurisdictions/entities within the E-470 corridor.
- Clearly label the ROW and MUE on all applicable drawings.
- Clearly show the TBMS (fiber) in both the plan and profile drawings.
- We prefer the proposed waterline be located 5' from the existing Discovery pipeline when in E-470 ROW/MUE.
- Areas of ATWS need to ensure they are outside the clear zone or provide adequate safety/protection to both the traveling public and materials/equipment stored.
- A dig watch will need to be scheduled when crossing the TBMS line.
- E-470 will be widened in the future to 4 lanes each direction. Please confirm a minimum cover of 5' will be provided when the highway is widened.
- All disturbed areas shall be reseeded with E-470 approved seed mix unless otherwise noted.
- All ROW fence disturbed will be reset and/or replaced if disturbed.
- Any survey markers disturbed or destroyed will need to be replaced.
- Proposed utility crossings of E-470 will be required to be bored across the highway from ROW to ROW unless otherwise agreed upon.
- Provide a limits of construction for both trenching and the bore pit in both the plan and profile.
- Pavement and utility deflection monitoring will be required for the bore across E-470.
- No construction access from E-470 will be allowed.
- Additional comments will be issued as design progresses.

For any question concerning the comments listed below please contact Chuck Weiss at 303.537.3420 or cweiss@E-470.com.

Please advise if we can be of further assistance.

Peggy Davenport Administrative Assistant/Document Control E-470 Public Highway Authority 22470 E Stephen D Hogan Parkway O: 303.537.3727

C: 720-765-1276

pdavenport@E-470.com

Please note: I am working remotely 6:00am – 2:30pm M-F. Please allow additional time for responses and contact my mobile if you need to speak to me directly.

CONFIDENTIALITY NOTICE

This message and any accompanying documents are intended only for the use of the intended addressee, and may contain information that is privileged, confidential and exempt from disclosure under applicable law. If you are not the intended recipient, you are hereby notified that any dissemination, distribution or copying of this communication is prohibited. If you have received this communication in error, please notify the author immediately. Thank you.

7. Metro Wastewater Reclamation District

Greg Barnes

From: Owens, David < Dowens@mwrd.dst.co.us>
Sent: Wednesday, March 18, 2020 1:03 PM

To: Greg Barnes

Subject: RE: RCU2020-00004 Pioneer Produced Water Pipeline CUP

Attachments: SP drawings for RCU2020-00004.pdf

Please be cautious: This email was sent from outside Adams County

Greg.

I am attaching the plan/profile drawings for our South Platte Interceptor for the developer's use in design for the above referenced project. It appears that the area shown on the attached plans is where a proposed crossing for the produced water line is.

Let me know if you have any questions.

David Owens

Engineering Tech II Metro Wastewater Reclamation District 6450 York Street Denver, Colorado 80229 (303)286-3397

From: Greg Barnes [mailto:GJBarnes@adcogov.org]
Sent: Monday, March 16, 2020 12:37 PM
To: Owens, David <Dowens@mwrd.dst.co.us>

Subject: RE: RCU2020-00004 Pioneer Produced Water Pipeline CUP

Hello,

In the letter, I mentioned that all information and color maps can be found at this link: http://www.adcogov.org/planning/currentcases

Please let me know if you have any further questions.

From: Owens, David <<u>Dowens@mwrd.dst.co.us</u>>
Sent: Friday, March 13, 2020 2:53 PM
To: Greg Barnes <<u>GJBarnes@adcogov.org</u>>

Subject: RCU2020-00004 Pioneer Produced Water Pipeline CUP

Please be cautious: This email was sent from outside Adams County

Mr. Barnes,

Regarding the above referenced project, any utility lines that are proposed to be installed across Metro Wastewater's sanitary sewer interceptors will need to have the plans reviewed and approved by Metro staff. Please forward any more

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detailed drawings, when available for this project, should any Metro Wastewater infrastructure be proposed to be impacted by the construction of this project for review. Please let me know if you have any questions of me on this. **David Owens** Engineering Tech II Metro Wastewater Reclamation District 6450 York Street Denver, Colorado 80229 (303)286-3397 2

Response to Comments from the Metro Wastewater Reclamation District

Pioneer will incorporate Metro Wastewater Reclamation District's South Platte Interceptor into the pipeline design. At this time, no intersections between Metro Wastewater Reclamation District's South Platte Interceptor and the Pioneer Water Pipeline are anticipated.

8. United Power

Greg Barnes

Sent: Monday, March 23, 2020 4:30 PM

To: Greg Barner

Subject: FW: Request for Comments: RCU2020-00004- Pioneer Produced Water Pipeline CUP

Attachments: RCU2020-00004 Pioneer Produced Water Pipeline.pdf

Please be cautious: This email was sent from outside Adams County

Hello.

Thank you for inviting United Power, Inc. to review and comment on the RCU2020-00004- Pioneer Produced Water Pipeline CUP. Being that this project is so large, please have the developer/contractor contact work closely with United Power on a case-by-case bases as they encounter any easements/ROW with our equipment within it.

Thank you,

Samantha

Right of Way Administrative Assistant

303-637-1324

UNITEDPOWER

500 Cooperative Way | Brighton, CO 80603

Powering Lives, Powering Change, Powering the Future – The Cooperative Way www.unitedpower.com

From: Layla Bajelan <LBajelan@adcogov.org> Sent: Wednesday, March 4, 2020 7:27 PM

To: Layla Bajelan < LBajelan@adcogov.org>
Cc: Greg Barnes < GJBarnes@adcogov.org>

Subject: Request for Comments: RCU2020-00004- Pioneer Produced Water Pipeline CUP

CAUTION: This email originated from outside of United Power. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Request for Comments

Case Name: Pioneer Produced Water Pipeline CUP

Case Number: RCU2020-00004

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Response to Comments from United Power

Pioneer will coordinate with United Power, Inc. on a case-by-case basis if any easements/ROW with United Power equipment are encountered along the Pioneer Water Pipeline route.

9. Public Service Company of Colorado



Right of Way & Permits

1123 West 3rd Avenue Denver, Colorado 80223 Telephone: 303.571.3286 Facsimile: 303. 571.3284 donnal.lgeorge@xcelenergy.com

March 30, 2020

Adams County Community and Economic Development Department 4430 South Adams County Parkway, 3rd Floor, Suite W3000 Brighton, CO 80601

Attn: Layla Bajelan

Re: Pioneer Produced Water Pipeline, Case # RCU2020-00004

Public Service Company of Colorado's (PSCo) Right of Way and Permits Referral Desk has determined there are **possible conflicts** with the above captioned project. Public Service Company has an existing *electric* **transmission** line at 160th Avenue and Riverdale and an existing *high pressure natural gas* **transmission** pipeline at 160th Avenue and Yosemite crossing the proposed pipeline. Any activity including grading, proposed landscaping, erosion control or similar activities involving our existing right-of-way will require Public Service Company approval. Encroachments across Public Service Company's easements must be reviewed for safety standards, operational and maintenance clearances, liability issues, and acknowledged with a Public Service Company License Agreement to be executed with the property owner. PSCo is requesting that, prior to any final approval of the development plan, it is the responsibility of the property owner/developer/contractor to contact the following for development plan review and execution of License Agreements:

- for Electric Transmission: email <u>coloradorightofway@xcelenergy.com</u> or website <u>www.xcelenergy.com/rightofway</u>
- for High Pressure Natural Gas Transmission:
 https://www.xcelenergy.com/working_with_us/builders/encroachment_requests_- click_on
 Colorado if necessary; an engineer will then be in contact to request specific plan sheets

PSCo also has natural gas distribution facilities throughout the proposed pipeline project. As always, PSCo would like to remind the developer to call the Utility Notification Center by dialing 811 to have all utilities located prior to any construction. Proper clearances must be maintained including ground cover shall not be modified from original depths. When excavating within 18" (24" is preferred) of marked facilities, hand digging strongly recommended. Please be aware that all risk and responsibility for this request are unilaterally that of the Applicant/Requestor.

Should the project require any modification to existing **distribution** facilities, the property owner/developer/contractor must complete the application process via xcelenergy.com/InstallAndConnect.

Donna George
Right of Way and Permits
Public Service Company of Colorado / Xcel Energy
Office: 303-571-3306 – Email: donna.l.george@xcelenergy.com

Exhibit B

Minimum Requirements for Grading and Excavation near Public Service Company of Colorado Transmission Pipeline(s)

1) General

- a. Colorado State Law Requires notification before excavation around utilities occurs. Requestor or Requestor's Contractor must call the Utility Notification Center of Colorado (UNCC) 1-800-922-1987 (811 when calling within Colorado) 48 hours prior to excavation, including the grading of the right of way, begins. Public Service Company of Colorado (PSCo) representatives provide these construction locates at its' cost as a participant in the one call system.
- b. All costs for labor, equipment and materials required to repair any damage to the pipeline(s) caused by Requestor or its' Contractors will be the responsibility of the Requestor and/or its Contractors for reimbursement to PSCo.
- c. Requestor's Contractor shall provide access to PSCo facilities on the project site for inspection by PSCo Personnel. Open excavations that need to be entered by PSCo Personnel shall conform to all federal, state and local jurisdictional codes and regulations governing safe entry and exit from open excavations.
- d. A fully executed agreement, applicable to the type of right being requested, between the Requestor and PSCo must be completed prior to construction activity within the PSCo ROW.
- e. Requests for installation of improvements by Requestor within the PSCo ROW must be reviewed and approved by PSCo High Pressure (HP) Gas Engineering and Operations. Installation of, and all costs associated with any improvements, are the responsibility of the Requestor. All costs associated with repairs or relocation of these improvements to accommodate PSCo Operations and Maintenance work on the existing pipeline(s) or installation of a new pipeline will be the responsibility of the Owner of record of the property at the time the work is performed.
- f. In the mutual interest of project coordination and scheduling of PSCo resources for your project, PSCo requests invitation to the Pre-Construction Meeting to obtain actual schedules and construction plans, make introductions and address any site specific conditions or project changes that have occurred between Final Design Review and Construction.
- g. Any exceptions to the Minimum Requirements stated in this document must be requested in writing and reviewed by PSCo HP Gas Engineering and Operations before approval for construction activity on the PSCo pipeline(s) permitted ROW is given.
- h. Any change in Requestor's construction plan and or scope of work that was agreed to between the Requestor and PSCo prior to, or during, construction must be presented to PSCo HP Gas Engineering and Operations for additional review and modification of requirements.
- Additional requirements may apply to address issues not foreseen during review of Requestor's proposal.

Page 1 of 7

2) Engineering

- a. Specifications of weight and type of any heavy equipment or trucks planned to be run over or along the pipeline(s) are required to be submitted to PSCo HP Gas Engineering for analysis of excessive live load stresses induced on the pipeline(s) prior to approval for crossing is given.
 - i. Should calculated allowable stresses induced by Requestor equipment traveling over the PSCo pipeline(s) be exceeded, Requestor will be required to install additional temporary fill over the pipeline(s).
 - ii. If calculated allowable combined stress on the pipeline(s) can not be reduced below limits by adding additional protective fill over the pipeline(s) or the depth of additional fill is deemed impractical, a temporary bridging structure installed over the pipeline(s) will be required to mitigate the excess stress on the pipeline(s).
 - 1. This bridging structure must be constructed of timbers, plates or other material that does not allow the driving surface to come in contact with the ground surface. The supports for the driving surface of the bridging structure may be of dirt or other material with the inside edges of the supports placed a minimum of 5 feet from the center line of the PSCo pipeline(s).
- b. Requestor's Plans must contain surveyed horizontal location of the PSCo pipeline(s) throughout the project area based on current field locates. Surveyed vertical location of the PSCo pipeline(s) based on pothole information must be presented on the Proposed Construction Drawings Profile Sheets at all Requestor facility crossing locations of the pipeline(s) prior to final comment and approval of the plans.
- c. Locates and or potholing for the purpose of Requestor's engineering, design and construction drawings to establish the horizontal and vertical locations of PSCo facilities and all associated costs will be the responsibility of Requestor. A PSCo representative will be required to be on site during any pothole operations.
 - Potholing with excavation equipment during frost conditions will not be allowed unless contractor thaws ground prior to excavation. Potholing with vac-truck will be allowed under any conditions
- d. Any excavator acting in a reckless manner while working in the area of Xcel Energy pipelines shall be asked to stop their work in that area. Work will not be allowed to continue until Xcel Energy personnel deem the situation has returned to a safe situation.

Page 2 of 7

e. Blasting Near PSCo Facilities

i. Notification

1. In accordance with Article 7 of Title 9 of CRS "Explosive Act", Section 6.1.7, Utilities must be notified at least 24 hours prior to commencement of blasting activity. If Blasting is anticipated for this project an "Explosive Use Application and Notification" and the associated Agreement Document must be processed before blasting activities may commence near the PSCo pipeline(s). It is recommended that this notification be made at least one month in advance of actual blasting activities to allow for processing of these documents and any studies that may need to be performed to access the applicants blasting plan.

ii. Limits

- 1. Buried Pipe Total Combined (Effective) Stresses on the pipe must not exceed 50% of the specified minimum yield strength of the pipe.
- 2. Above Ground Pipe –Blasting operations must not generate Peak Particle Velocity (PPV) greater than 1 in/sec.
- f. Vibrations from dynamic compaction equipment or other sources must be maintained at a peak particle velocity of not greater than 1 in /sec as measured in any one of the three components of a seismographic reading.

3) Inspection

- a. PSCo will require that one of its Field Operators be on site during the potholing, excavation, site grading, backfill operations, compaction, and installation of your facilities when working within the pipeline(s) easement and/or a minimum of fifteen (15) Ft from the outer limits of the locate marks for the PSCo pipeline(s). This standby expense is covered by PSCo during a normal 8 hour day Monday Friday. Any time required in excess of 8 hours per day or weekend and holidays will be billed to the Third Party of the facilities under construction at the applicable PSCo Labor Overtime Rates and Equipment/Vehicle Rates.
- b. Requests for standby will be filled on a first-come, first-served basis, consistent with the number of personnel available for standby and Xcel Energy workload at that time. It is not our intent to unnecessarily impede the work schedule of the installation contractor, and we will strive to be as available as possible.
- c. Appointments for standby excavations shall be scheduled to minimize the amount of time Xcel Energy personnel are waiting during contractor setup. Contractors will be charged at the applicable straight time or overtime PSCo labor rate and Equipment/Vehicle per hour for time between appointment time and actual start time (i.e. a call for an 8:00 A.M. standby and actual construction start time of 10:00 A.M. will result in 2 hours of the applicable straight time or overtime PSCo labor and Equipment/Vehicle charges)
- d. Frequency and duration of Field Operator Standby will be determined during the initial site visit with the Requestor's Construction Contractor based on construction schedule and phasing of construction activities as they relate to work near the PSCo pipeline(s).

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- e. Potholing frequency during construction will be at the discretion of the PSCo Inspector on site on an as needed basis based on field conditions and proximity of the excavation to the pipe.
- f. Potholing with excavation equipment during frost conditions will not be allowed unless contractor thaws ground prior to excavation. Potholing with vac-truck will be allowed under any conditions.

4) Construction

- a. Grading, Excavation, Installation, Backfill
 - i. A "Method of Construction Plan" shall be provided to PSCo HP Gas Engineering and Operations for review and approval prior to the beginning of construction.
 - ii. For Parallel Encroachments, the recommended method of construction is to place the trench spoils between the Requestor line and the PSCo line and set the working side on the opposite side of the trench from the spoil pile.
 - 1. Alternate Method of Construction
 - a. Install a layer of straw or some other method of identifying the top of the existing ground elevation then place trench spoils on top of the line. During backfill operations, removal of the spoil shall stop at the level of the warning material.
 - b. Requests to work above existing PSCo pipeline(s), either on top of existing ground elevation or top of spoil pile, will be reviewed on a case by case basis. Requestor must provide specs for all equipment that will be traveling on top of the line for calculation of combined stresses for determination if allowable combined stress levels are exceeded prior to approval of this method
 - iii. The maximum unsupported length of PSCo's 2" and larger diameter High Pressure Natural Gas pipeline(s) is 15 feet.
 - 1. Specific calculations can be made for pipe diameter's greater than 2" in outside diameter to determine greater free span lengths.
 - 2. Should Requestor excavation require a greater length of the pipe be exposed than allowable stress limits dictate, plans for providing support will be required to be submitted to PSCo HP Gas Engineering for review and approval. This support system can be provided by the third party's contractor and installed under the supervision of the on-site PSCo Energy Employee. A list of qualified pipeline contractors to perform this work, if needed, can be supplied to you if so requested.
 - iv. If site re-grading leaves less than 36" of cover over the PSCo pipeline(s), the pipe will have to be lowered or additional protection measures installed over the pipe such as concrete capping or steel plating. Any mitigation measures, including engineering of such structures, will be at the expense of the Third Party of the facilities being constructed.
 - v. Backfill operations around exposed sections of PSCo's pipeline(s) shall be inspected by a PSCo representative.

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- vi. Any sections of the PSCo pipeline(s) that are exposed during construction must be padded with material passing ¾" minus screens that is non-angular in shape to a depth of one (1) foot above the top of pipe before native material passing 6" minus screens or two (2) feet above the top of pipe before native material passing greater than 6" plus screens can be used for the remaining backfill. Bedding material of an angular nature and/or passing 2" minus screens may be used if rock shield, epoxy coating applied to a thickness of 30 mils or greater, or other abrasion resistant coating, is installed around the pipe over the entire exposed length. Installation of any such additional protective coating installation shall be inspected by a PSCo representative.
- vii. Utilization of flowable fill with cement or fly ash binder material may be utilized once one (1) foot of cover is established over the PSCo pipeline(s) with consolidated, non-abrasive, bedding material. The flowable fill must be able to be excavated with a shovel. The flowable fill shall extend ten feet on either side of the PSCo pipe and extend to the trench walls. The use of flowable fills is subject to approval of the local government authorities.
- viii. Other backfill material not requiring additional compactive effort to obtain required dry densities of the project specifications may be utilized around the pipe. Submittal of a backfill plan and material specifications shall be presented to PSCo HP Gas Engineering and local government authorities for review before approval is granted.
- ix. Permanently added fill over PSCo pipeline(s) shall not exceed a typical depth of cover of four (4) feet over the top of PSCo's pipeline(s) at final grade. Exceptions due to terrain, grading requirements and re-establishment of slopes must be reviewed with PSCo HP Gas Engineering but shall not exceed eight (8) feet of cover over the top of the PSCo pipeline(s).

b. Compaction over PSCo Pipelines

- i. No heavy vibratory compaction equipment (driver operated) will be allowed over or along the length of the PSCo pipeline(s) in the area requiring compaction and for a distance of ten (10) feet on either side of the outside wall of the pipe and ten (10) feet from the ends of the pipe length at the compaction area limits if less than three (3) feet of cover is left over the pipe after sub excavation work is completed.
- ii. Light vibratory compaction equipment (jumping jacks, walk behind or remote control rollers) may be utilized once the minimum one (1) foot of bedding material cover over the top of the PSCo pipeline(s) is established.

c. Facility Crossings

- i. Buried Facility Crossings of the PSCo pipeline(s) will be required to go under or over the PSCo pipeline(s) with a minimum clearance of two (2) feet to the bottom or top respectively of the PSCo pipeline(s).
- ii. Buried facilities installed parallel to the PSCo pipeline(s) must maintain a minimum horizontal separation of ten (10) feet from the pipeline(s). If this minimum horizontal separation cannot be maintained, the top of the facility being installed will be required to be one (1) feet below the bottom of the PSCo pipeline(s) for every foot closer than ten (10) feet to the pipeline(s).

Page 5 of 7

d. Improvements/Structure/Facility Placement

i. No surface or sub-grade structures or utility facilities will be allowed within the PSCo ROW limits without plan review approval from PSCo HP Gas Engineering and Operations. Potential ignition source facilities shall be a minimum of fifteen (15) from the outside wall of the pipe

e. Landscape Installation

i. No planting of vegetation will be allowed within the PSCo ROW limits without plan review approval from PSCo HP Gas Engineering and Operations. Under no circumstances will trees be allowed to be planted over the pipeline(s) within the PSCo ROW limits and shall be no closer than fifteen (15) feet from the outside wall of the pipe.

f. Cathodic Protection

- A copy of the Requestor Cathodic Protection (CP) System design shall be provided to PSCo for review prior to construction.
- ii. At crossing locations, Stray Current Mitigation will be required if either pipeline is cathodically protected from a rectified ground bed system. At a minimum this shall consist of a run of two # 8 wires from Public Service Company (PSCo) pipe and 2 # 8 wires up from the third party facility pipe into a common or separate test station for bonding of the two systems together if necessary. The wires could either run to the test station in a common conduit or separate conduits. In addition, four 17# or larger anodes are to be placed in each quadrant of the crossing pipes and placed vertically equidistant between the two pipelines. PSCo will provide the material for its CP test station and assist Requestor's contractor with installation of the test station.
- iii. For parallel encroachments, at locations where third party is installing a CP Test Station, the third party will be required to expose the PSCo pipeline(s) for installation of a CP test station for monitoring of interference. PSCo will provide the material for its CP test station and assist the third party's contractor with installation of the test station.

Page 6 of 7

5) Post Construction

a. Permanent Private Road Crossings

- i. Permanent private access roads intended for use by vehicles with a loaded single axle rating of less than or equal to CDOT load limits, must provide and maintain a minimum of 4 feet of cover over the PSCo pipeline(s). Any party needing to cross the PSCo pipeline(s) with vehicles in excess of the CDOT Load Limits per single axel must contact PSCo for additional requirements or place bridging structures over the located pipeline(s).
- ii. Permanent private access roads intended for use by vehicles with a loaded single axle rating of less than or equal to 20,000 lb per axle, must provide and maintain a minimum of **4 (four)** feet of cover over the PSCo pipeline(s).
- iii. Tracked equipment crossings of the PSCo pipeline(s) must be made via tractor/lowboy transport adhering to the restrictions of section 5.a.i. and 5.a.ii. If it is desired to track the equipment over the PSCo pipeline(s), PSCo must be contacted to calculate the limits for the specific piece of equipment or provide a bridging structure over the pipeline(s) in accordance with Section 2.a.ii.1.
- b. Four wheel all terrain sport and utility vehicles and dirt bikes are exempt from this section's restrictions. A minimum cover of twelve (12") inches of dirt over the pipe must be present before these vehicles can cross over the pipe.
- c. It is recommended that Requestor install and maintain load limit signage at all road crossings of the PSCo pipeline(s).
- d. PSCo will place pipeline markers at all permanent road crossings that are to remain at the conclusion of the installation of the Requestor pipeline.

Page 7 of 7

Response to Comments from Public Service Company of Colorado

Pioneer will ensure that construction activities that involve Public Service Company of Colorado's existing ROW be approved prior to construction commencement. Pioneer will comply with Public Service Company of Colorado's General, Engineering, Inspection, Construction, and Post Construction standard and requirements for Pioneer Water Pipeline construction occurring near their facilities.

10. B. Michl Lloyd

March 21, 2020

Adams County Community & Economic Development Department, Development Services Division 4430 South Adams County Parkway, 1st Floor, Suite W2000A Brighton, CO 80601-8218

RE: Comments on Pioneer Produced Water Pipeline Conditional Use Permit RCU2020-00004

Dear Mr. Barnes:

This letter is in response to your request for comments on Pioneer Water Pipeline's application for a conditional use permit. Please be aware that I have granted Pioneer a one year option for a 10 foot easement across the southwest corner of my property in unincorporated Adams County. I have not been informed yet as to whether or not Pioneer plans on exercising such option. Also the map you sent with your request for comments is so condensed I am not able to tell if the corner of my property is in the current plan.

In any case, I am in favor of the pipeline as it was described to me because it will reduce truck traffic and I would think the pipeline would be safer that trucks transporting the water. My neighbor has told me that he has asked project related questions of Tetra Tech representatives and has been satisfied with the answers he has received from them.

I did not attempt to access the full version of Pioneer's application and accordingly, the following two observations/questions about the project may be answered/addressed in that material:

- Pipeline Pressure Pressures of 240 psi to 300 psi are mentioned in the application. I do not
 recall the pressure that was mentioned to me when I granted the option for the easement but I
 do not think that the pressure range was that high. I realize that such pressures may be
 necessary to overcome elevation changes and distances and I do not have an issue with the
 stated pressure range as long as it is signed off by Pioneer's engineers and is acceptable to
 Adams County staff.
- Produced Water Quality Pioneer conducted a public meeting on the proposed project however I was not able to attend. I was told by a neighbor who did attend that they included a discussion of produced water from the oil/gas wells. The neighbor that attended indicated they acknowledged that the produced water could contain some hazardous chemicals/materials and before it would enter the pipline a very high percentage of such chemicals/materials would be removed and be disposed of as required by environmental regulations. In addition I was told that they stated that no water from other than the approved well sites would be allowed to enter the pipeline (i.e. a well site that was not directly on the pipeline could not transport water to a well site that is on the pipeline and have it enter the pipeline.)

This discussion would lead one to believe that the water in the pipeline would be relatively safe and if a leak did occur that it would require cleanup but would not likely create a hazardous disaster.

Neither of these water quality matters were discussed in Pioneer's written description provided in your request for comments and if they are not addressed in the full version of Pioneer's application I believe the applicant should address these issues to the County Staffs' satisfaction before any permit is granted. Please contact me at 303-659-4545 or via email at $\underline{\text{bmlloyd@aol.com}}$ if you have any questions regarding the above and thank you for the opportunity to comment.

Yours truly,

B. Michl Lloyd

Responses to Comments from B. Michl Lloyd

Pioneer requests that Adams County provides these responses to Mr. B. Michl Lloyd on behalf of Pioneer.

Pipeline Pressure

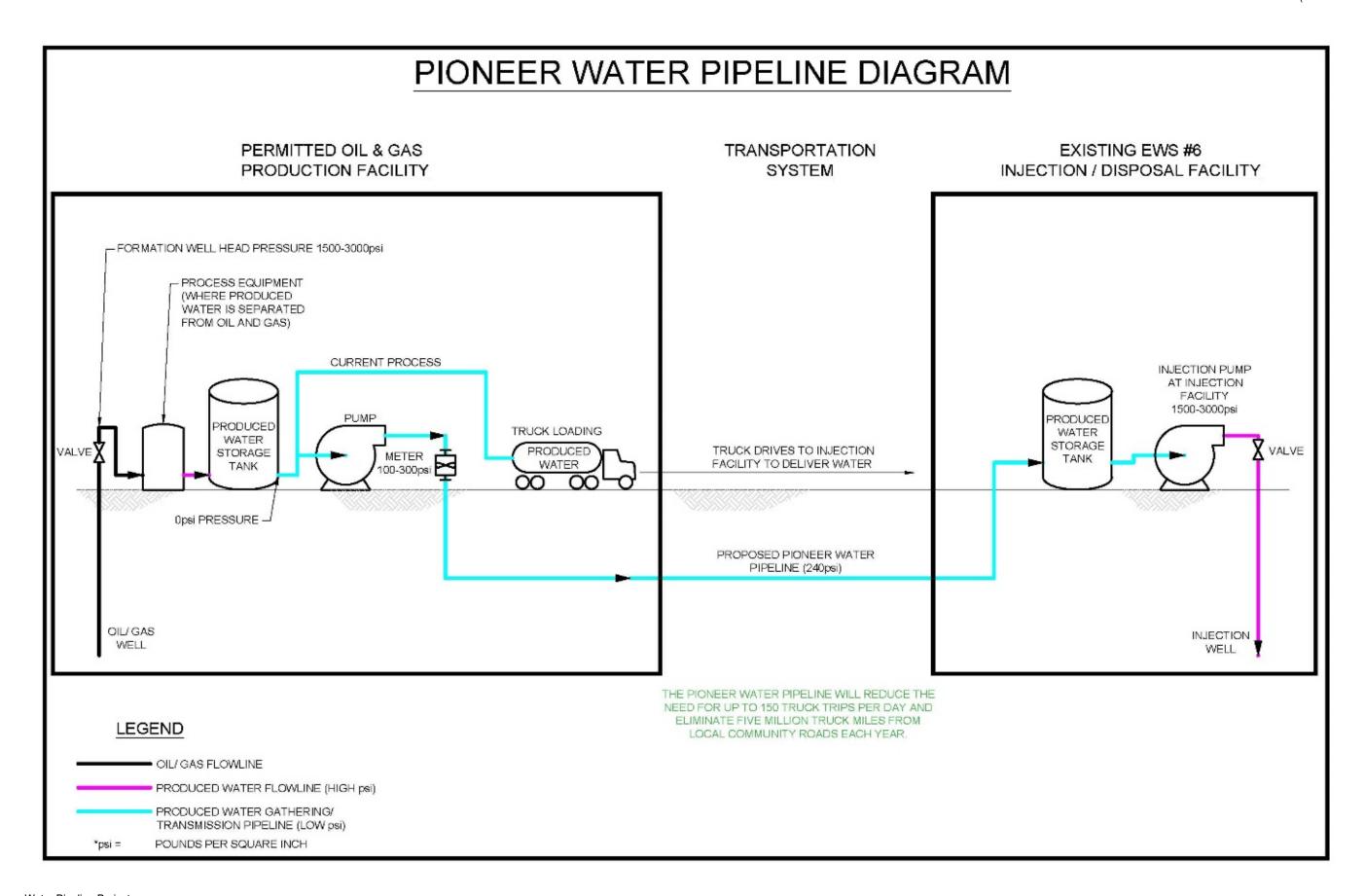
The pipeline would transport the produced water at a maximum pressure of approximately 240 pounds per square inch (psi) until it reaches a storage tank at EWS #6. The Pioneer Water Pipeline would operate at an estimated 240 psi, but they may operate at a higher pressure depending on temperature. The maximum allowable pressure will be 333 psi. Pioneer would control pressure and monitor temperature using pressure control valves located along the Pioneer Water Pipeline route.

Illustration 1 from the CUP application includes estimated pressures and is included below for ease of reference.

Produced Water Quality

Produced water, also known as wastewater, is recovered as byproduct that is brought to the surface during oil and gas production. Oil, gas, and produced water leaves the well head at pressures up to 3,000 psi. The content of produced water varies with the formation where the water originates, but it is generally high in salts with trace amounts of other minerals.

Pioneer will have an Emergency Response Plan in place prior to the pipeline becoming operational to ensure that in the appropriate emergency responses will occur should a leak occur.



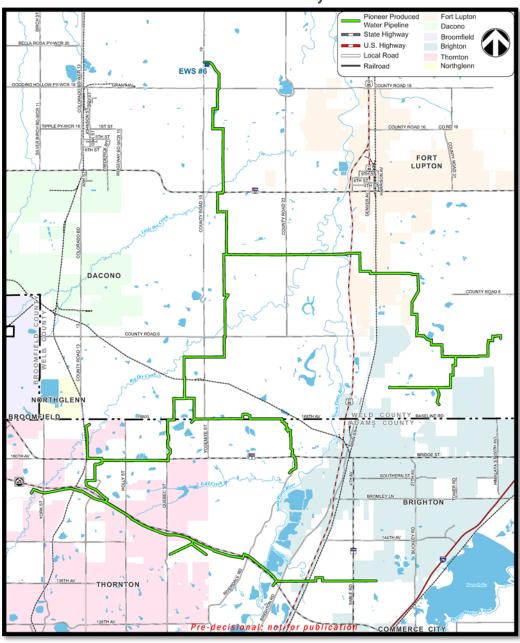
Pioneer Water Pipeline Project

Exhibit G: Neighborhood Meeting Notification, Meeting Materials, and Summary



Pioneer Water Pipeline Project

Neighborhood Meeting Report December 10, 2019



Pioneer Water Pipeline Project Overview map showing the preferred pipeline route.



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Introduction

Pioneer Water Pipeline, LLC, (Pioneer) operated by Expedition Water Services, LLC, proposes to construct, own, and operate the Pioneer Produced Water Pipeline (Project) within Adams and Weld counties in Colorado. Pioneer held a neighborhood meeting in accordance with Adams County Development Standards and Regulations from 5 p.m. to 8 p.m. on Tuesday, December 10, 2019, at Todd Creek Golf Club (8455 Heritage Dr., Thornton, CO 80602). The purpose of this report is to document the meeting notification and questions asked during the meeting and provide a summary of the meeting results.

Project Overview

The Project would consist of construction of approximately 45 miles of 4- to 12 inch-diameter high-density polyethylene (HDPE) gathering pipelines and associated appurtenances in Adams and Weld counties. Approximately 27 miles of pipeline would be located in Weld County, and 18 miles of pipeline would be located in Adams County. Within Adams and Weld counties, the Project would traverse unincorporated areas and may traverse portions of Brighton, Thornton, and Fort Lupton.

Production water, also known as wastewater, is recovered as byproduct that is brought to the surface during oil and gas production. The Project is designed to transport production water from approximately 22 oil and gas production facilities in Adams and Weld Counties to Expedition's existing EWS #6 wastewater injection and disposal facility in Weld County.

Construction of the pipelines would require an approximately 10-foot-wide permanent easement plus an additional 30-foot-wide temporary workspace. Additional temporary workspaces would also be required at locations where the pipelines cross roads or other existing infrastructure, for example, or where environmental features such as wetlands and waterbodies are present. Appurtenant aboveground facilities such as isolation valves, pumps and inline inspection tool launcher, and receivers would be located at the existing oil and gas well pad sites, and other appurtenant facilities would be located along pipelines within the 10-foot-wide permeant pipeline easements.



Neighborhood Meeting Summary

The Project Neighborhood Meeting was held from 5 p.m. to 8 p.m. on Tuesday, December 10, 2019, at Todd Creek Golf Club (8455 Heritage Dr., Thornton, CO 80602) in the City of Thornton.

The purpose of the Project Neighborhood Meeting was to provide the community a description of the Project and answer related questions from the attendees. The event was conducted in an open house format, which allowed for attendees to arrive at their convenience during a three-hour timeframe. At the meeting, attendees had an opportunity to obtain Project information based on specific areas of interest, speak directly with Project staff, and provide written and verbal comments regarding the Project.

Reproductions of the display boards, maps, contact cards, flyer, and Project information sheet used at the Neighborhood Meeting are included in Appendix A.

Neighborhood Meeting Notification

Pioneer used a direct-mail notification (Appendix B) to inform the Project stakeholders of the Project Neighborhood Meeting based on a mailing list provided by Adams County for the Project on October 11, 2019 (Appendix C). The list included four neighborhood organizations: Riverside Village Owners Association, Todd Creek Village Park and Recreation District, Todd Creek Meadow Owners Association, Inc., and Todd Creek Village Metropolitan District. A total of 389 notifications were sent. A map of the notification area is included as Appendix D. An affidavit of mailing is included as Appendix E.

The notification letter contained the following information: purpose, date, time and place of the meeting; Project location map; and Project contact information. This notification was sent by the U.S. Postal Service presorted marketing mail on Nov. 27, 2019. The timing of the distribution of the notification letter complied with Adams County Standards and Regulations as the notification letters were sent out 13 days prior to the Project Neighborhood Meeting.



Attendance and Comments Analysis

Nine members of the public signed into the Project Neighborhood Meeting. Adams County staff were notified of the Project Neighborhood Meeting date, time, and location and were invited to participate in the Project Neighborhood Meeting. Copies of the sign-in sheets are included in Appendix F.

Six Project team members attended the open house in addition to the members of the public. Team members are listed below in Table 1. A Spanish interpreter was also in attendance.

Table 1:

Project Team Members at Neighborhood Meeting

Name	Organization	Name	Organization
John Heule	Tetra Tech CES	Jim Goddard	Pioneer Water Pipeline, LLC
Max Pivonka	Tetra Tech CES	Deana Perlmutter	Forbes Tate Partners
Zach Neal	Pioneer Water Pipeline, LLC	Taylor Christy	The Integral Group
Spence McCallie	Pioneer Water Pipeline, LLC		

Comment Cards

Comment cards were provided to attendees at the Project Neighborhood Meeting. A blank comment form is provided in Appendix A. Stakeholders had the opportunity to submit written comments via the Project email address or by mailing comment cards to Pioneer. Commenters had the opportunity to request a response from Project team members. No comment cards were returned to the Project team at the meeting. As of December 20, 2019, no comment cards have been returned to the Project team.

Oral Questions and Answers

Oral questions were asked by meeting attendees and the answers provided by Project team members included:

Is this pipeline going to carry fracking water?

The Project is designed to transport production water from approximately 22 oil and gas production facilities in Adams and Weld Counties to Expedition's existing EWS #6 wastewater injection and disposal facility in Weld County. Most of the production water is groundwater from the rock formation; however, some water used during hydraulic fracturing will mix with groundwater during hydraulic fracturing and will be transported with groundwater to EWS #6.

What is in the water that is coming out of the wells?

 Production water, also known as wastewater, is recovered as byproduct that is brought to the surface during oil and gas production. Production water is sometimes referred to as brine



water. Brine water is twice as salty as sea water, and it naturally occurs within rock formations underground. For about one barrel of oil and gas produced by a well, approximately three barrels of brine water are also produced.

Will there be any pump stations on the pipeline route?

 No pump stations will be located on the pipeline route. The pumps for the pipeline will be located at the well sites where the water enters the pipeline. The pumps at those facilities produce enough pressure to push the water all the way to the disposal site in Weld County.

Where is the produced water going?

The Project would transport production water with trace amounts of oil, gas, and chemicals to Expedition's existing EWS #6 wastewater injection and disposal facility in Weld County. EWS #6 would treat the water to remove the trace amounts of oil, gas and chemicals but leaves the salt in the water, which is then pumped back into the ground into a salt water aquifer. The injected water is similar in composition to the salt water aquifer.

Will there be any surface appurtenances along the pipeline route?

 Only a few surface structures would be located along the pipeline route. They will be safety shutoff stations that will generally be at a pipeline junction and where the pipeline changes diameter.

How wide will the pipeline easements and construction areas be?

 During construction a 40-foot-wide space will be needed along the Project pipeline for installation. At times, where the pipeline crosses roads or water ways, a larger construction area will be needed. Once completed, a 10-foot-wide permanent easement will be needed for the pipeline for its lifetime.

Will the water treatment site and injection facility be fracturing or fracking the rock where they inject?

 The pressure will be low enough that the rock will not be fractured, and the injection site is regulated by the State of Colorado and the U.S. Environmental Protection Agency.

What is the projected lifetime of the injection site?

 The injection site is currently estimated to have a lifespan of 20 years, and it has been inservice since July 2019.



When will the pipeline in Adams County be constructed?

 Construction of the Adams County portion of the pipeline is estimated to start in summer 2020 and is projected to be completed by the end of 2020.

What is the equivalent number of truck trips for 500 million truck miles removed annually?

 Based on full buildout of production facilities, the Project will remove around 160 truck trips per day, and it would increase the amount removed as more oil and gas facilities are constructed and connected to the pipeline.

. What is the lifespan of an oil and gas well?

 The lifespan of oil and gas production facilities typically ranges from 10 to 30 years, but the lifespan depends on the well and the oil and gas available in the formation below each specific facility.

What is the water pipeline going to be constructed of?

o The pipeline will be constructed of 4- to 12 inch-diameter HDPE gathering pipelines.

Can they lay pipeline on my property without notifying me?

o No, Pioneer will btain easements signed by landowners for the entire Project route.

Would this Project be able to connect to future oil and gas production facilities if needed?

Yes, this pipeline will have the capacity to carry produced water from future oil and gas facilities, depending on timing and location of those facilities.

Community & Economic Development Department Development Services Division

www.adcogov.org



4430 South Adams County Parkway 1st Floor, Suite W2000B Brighton, CO 80601-8218 PHONE 720.523.6800

fax 720.523.6967

Request for Comments

Case Name: Pioneer Produced Water Pipeline CUP

Case Number: RCU2020-00004

March 4, 2020

The Adams County Planning Commission is requesting comments on the following application: **Conditional Use Permit to allow for a produced water pipeline.** The applicant has provided one preferred and two alternative routes for the pipeline. The Assessor's Parcel Numbers are: 15691900005, 156919000015, 156920000017, 156930000001, 157101200007, 157101300001, 157101300002, 157102100003, 157102100004, 157102101014, 157104100005, 157104200003, 157104300002, 157106000007, 157106000002, 157106001001, 157106001002, 157106300002, 157107000002, 157107000014, 157107000016, 157107000023, 157107400001, 157108000001, 157108000004, 157108200002, 157109202001, 157111100010, 157112000033, 157112000038, 157112010003, 157121000016, 157121000017, 157122000001, 157122103001, 157122103003, 157123000026, 157123401001, 157124000015, 157124000016, 157124000017, 157311400008, 157311400009

Applicant Information: Pioneer Water Pipeline, LLC

Spence McCallie

600 17th Street, Suite 725 Denver, Colorado 80202

Please forward any written comments on this application to the Community and Economic Development Department at 4430 South Adams County Parkway, Suite W2000A Brighton, CO 80601-8216 or call (720) 523-6800 by **03/27/2020** in order that your comments may be taken into consideration in the review of this case. If you would like your comments included verbatim please send your response by way of e-mail to GJBarnes@adcogov.org.

Once comments have been received and the staff report written, the staff report and notice of public hearing dates may be forwarded to you upon request. The full text of the proposed request and additional colored maps can be obtained by contacting this office or by accessing the Adams County web site at www.adcogov.org/planning/currentcases.

Thank you for your review of this case.

Greg Barnes Planner III

BOARD OF COUNTY COMMISSIONERS

Community & Economic Development Department **Development Services Division**

www.adcogov.org



4430 South Adams County Parkway 1st Floor, Suite W2000B Brighton, CO 80601-8218 PHONE 720.523.6800 FAX 720.523.6967

Public Hearing Notification

Case Name: Pioneer Produced Water Pipeline

Case Number: RCU2020-00004

Planning Commission Hearing Date: August 13, 2020 at 6:00 p.m. Board of County Commissioners Hearing Date: September 1, 2020 at 9:30 a.m.

July 17, 2020

A public hearing has been set by the Adams County Planning Commission and the Board of County Commissioners to consider the following request: Conditional Use Permit to allow for a produced water pipeline. The Assessor's Parcel Numbers are: 15691900005, 156919000015, 156920000017, 156930000001, 157101200007, 157101300001, 157101300002, 157102100003, 157102100004, 157102101014, 157104100005, 157104200003, 157104300002, 157106000007, 157106000022, 157106001001, 157106001002, 157106300002, 157107000002, 157107000014, 157107000016, 157107000023, 157107400001, 157108000001, 157108000004, 157108200002, 157109202001, 157111100010, 157112000033, 157112000038, 157112010003, 157121000016, 157121000017, 157122000001, 157122103001, 157122103003, 157123000026, 157123401001, 157124000015, 157124000016, 157124000017, 157124000019, 157125000012, 157126101003, 157126201001, 157301000007, 157311400002, 157311400007, 157311400008, 157311400009.

Applicant Information: Pioneer Water Pipeline, LLC

Spence McCallie

600 17th Street, Suite 725 Denver, Colorado 80202

The Planning Commission meeting will be held virtually using the Zoom video conferencing software and members of the public will be able to submit comments prior to the start of the public hearing that will then be entered into the record. For instructions on how to access the public hearing via telephone or internet, or to submit comment, please visit http://www.adcogov.org/planning-commission for up to date information.

The Board of County Commissioners meeting is broadcast live on the Adams County YouTube channel and members of the public will be able to submit comments prior to the start of the public hearing that will then be entered into the record. The eComment period opens when the agenda is published and

closes at 4:30 p.m. the Monday prior to the noticed meeting. For instructions on how to access the public hearing and submit comments, please visit http://www.adcogov.org/bocc for up to date information.

These will be public hearings and any interested parties may attend and be heard. The Applicant and Representative's presence at these hearings is requested. The full text of the proposed request and additional colored maps can be obtained by accessing the Adams County Community and Economic Development Department website at www.adcogov.org/planning/currentcases.

Thank you for your review of this case.

Greg Barnes Greg Barnes

Planner III

gjbarnes@adcogov.org

720-523-6853

PUBLICATION REQUEST

Case Name: PIONEER WATER PIPELINE

Case Number: RCU2020-00004

Planning Commission Hearing Date: August 13, 2020 at 6:00 p.m.

Board of County Commissioners Hearing Date: September 1, 2020 at 9:30 a.m.

Case Manager: Greg Barnes, gjbarnes@adcogov.org. 720-523-6853

Request: Conditional use permit to allow a produced water pipeline. The applicant has provided one

preferred and two alternative routes for the pipeline.

Parcel Numbers: 0156919000005, 0156930000001, 0157101200007, 0157101300001,

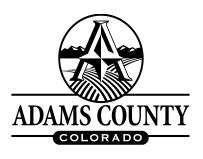
 $\begin{array}{c} 0157101300002,\ 0157102100003,\ 0157102100004,\ 0157102101014,\\ 0157104100005,\ 0157104200003,\ 0157104300002,\ 0157106000007,\\ 0157106001001,\ 0157106001002,\ 0157107000002,\ 0157107000014,\\ 0157107000016,\ 0157107000023,\ 0157107400001,\ 0157108000004,\\ 0157108000004,\ 0157108200002,\ 0157112000033,\ 0157112000038,\\ 0157112010003,\ 0157121000016,\ 0157121000017,\ 0157122000001,\\ 0157122103001,\ 0157122103003,\ 0157123000026,\ 0157124000015,\\ 0157124000016,\ 0157124000017,\ 0157124000019,\ 0157125000012,\\ 0157126101003,\ 0157126201001,\ 0157311400002,\ 0157311400007,\\ \end{array}$

0157311400008, 0157311400009

Applicant: Pioneer Water Pipeline, LLC, Spence McCallie, 600 17th St, Ste 725, Denver, CO 80202

Virtual Meeting and Public Comment Information:

These meetings will be held virtually. Please visit http://www.adcogov.org/bocc for up to date information on accessing the public hearings and submitting comment prior to the hearings. The full text of the proposed request and additional colored maps can be obtained by accessing the Adams County Community and Economic Development Department website at www.adcogov.org/planning/currentcases.



Referral Listing Case Number RCU2020-00004 PIONEER WATER PIPELINE PROJECT

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152ND AND WASHINGTON LLC PO BOX 247 EASTLAKE CO 80614-0247 ADDISON JOHN AND ADDISON ANITA PO BOX 154 BRIGHTON CO 80601

160TH INVESTMENTS LLC 15187 MADISON ST BRIGHTON CO 80602-7704 ADDISON LINDA GERALDINE AND ADDISON RONALD EDWARD 107 6TH STREET/PO BOX 562 DACONO CO 80514

ABOTE JOHN F TRUST AND ABOTE SHANNON L TRUST 16131 POPLAR ST BRIGHTON CO 80602-6081 ADHIKARI NARAYAN AND SITAULA SIRJANA 17 S MOUNTAIN VIEW DR EATON CO 80615-9117

ADAM SCOTT D AND ADAM SHERYL J 16075 OLIVE ST BRIGHTON CO 80602-6002 ADIMOOLAM RAJESH AND DHANARAJ SHANMUGA PRIYA 2039 E 151ST AVE THORNTON CO 80602-7475

ADAMS COUNTY 4430 SOUTH ADAMS COUNTY PKWY BRIGHTON CO 80601-8204

AGAN ELIZABETH COURON MICHAEL J 16234 PARIS WAY BRIGHTON CO 80602-8299

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ADAMS GERALD A AND ADAMS SANDRA H 5026 HOWES LANE SAN JOSE CA 95118 AGGREGATE INDUSTRIES WCR INC 1687 COLE BLVD STE 300 GOLDEN CO 80401-3318

ADAMS GERALD A AND ADAMS SANDRA H ADAMS DEREK 14587 E 134TH PL BRIGHTON CO 80601-7236 AGGREGATE INDUSTRIES-WCR INC 1687 COLE BLVD STE 300 GOLDEN CO 80401-3318

ADAMS LARRY G AND ADAMS NANCY C 15900 ULSTER ST BRIGHTON CO 80602-7545 AHMAD FAQUEER S RUACHO RENTERIA MARIA M 15141 GAYLORD ST THORNTON CO 80602-7471 AHMED YUSUF A AND AHMED MELISSA L 15505 QUINCE CIR THORNTON CO 80602 ANDERSON JAMES R AND JUDY D 15610 HAVANA WAY BRIGHTON CO 80602

AL-ABSSI SAMER M AND AL-ABSSI NEDREEN 13886 TRENTON ST THORNTON CO 80602-8507 ANDERSON JESSICA AND ANDERSON BRAD 11303 E 163RD CT BRIGHTON CO 80602-7578

ALIRES BENJAMIN T JR AND ALIRES ANNALEE L 13560 GRANBY ST BRIGHTON CO 80601-6959 ANDERSON LANE AND ANDERSON SUSAN 16130 POPLAR ST BRIGHTON CO 80602-6080

ALLEN ANDREW AND ALLEN LAURIE 8350 E 145TH PL BRIGHTON CO 80602-5766 ANDERSON MATTHEW DOUGLAS AND ANDERSON MEL LING 16110 POPLAR ST BRIGHTON CO 80602-6080

ALLEN RONNIE CLAYTON AND ALLEN CAROLINE LOVANE 16040 IVANHOE ST BRIGHTON CO 80602 ANDERSON NOEL Q AND GUSSENBAUER GENA 13941 TAMARAC ST THORNTON CO 80602-8506

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ALTMANN MICHAEL G AND ALTMANN SANDRA J 10861 E 155TH PL BRIGHTON CO 80602-7443 ANTHONY RODNEY A AND ANTHONY VICKI A 16081 PONTIAC CT BRIGHTON CO 80602-6077

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ANDERSEN ROBERT JAMES AND ANDERSEN JOYCE 15153 VINE WAY THORNTON CO 80602 ARELLANO ERIN NICOLE AND ARELLANO JASON TROY 2088 E 151ST AVE THORNTON CO 80602-7475

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ARMIJO LOUIS J 11830 E 160TH AVE BRIGHTON CO 80602 BALL SHERRI M ROSA AND BALL WYATT T 8620 E 145TH PL BRIGHTON CO 80602-5749

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15940 W 66TH PL ARVADA CO 80007

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BUDZYNSKI GREGORY J AND BUDZYNSKI CHANTELLE M 8540 E 145TH PL BRIGHTON CO 80602-5749 CAMAS COLORADO INC C/O AGGREGATE INDUSTRIES 1687 COLE BLVD STE 300 GOLDEN CO 80401-3318

BUFFER KRISTIN AND WAHLERS MATTHEW 15557 QUINCE ST THORNTON CO 80602-8170 CAO ZUE FAN AND LI FENG ZHU 15161 GAYLORD ST THORNTON CO 80602-7471

BULLER JAMES AND BULLER MONA RAE 15571 RIVERDALE RD BRIGHTON CO 80602-8226 CARABAJAL CARL A/IDA AND CARABAJAL AMARANTE C 15625 HAVANA WAY BRIGHTON CO 80602-7408

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BURKE JASON E 7901 E 139TH AVE THORNTON CO 80602-8138 CARLSON EDWARD R AND CARLSON TERRI LYNN 11741 KEARNEY CIR THORNTON CO 80233-5211

BURKE PHILIP J AND BURKE JENNIFER K 15841 RIVERDALE RD BRIGHTON CO 80602-8216 CARLSON TAYLOR R UND 24.25% INT AND THORNTON CORY J UND 24.25 INT ET ALS PO BOX 247 EASTLAKE CO 80614-0247

BUSTAM DAVID S AND BARNUM MELISSA L 11123 E 163RD CT BRIGHTON CO 80602-7569 CARLSON TAYLOR R UND 24.25% INT AND THORNTON CORY J UND 24.25% INT ET ALS PO BOX 247

CALAWAY PAIGE H 13936 TAMARAC CT THORNTON CO 80602-8443 CARLSON TAYLOR R UND 24.25% INT AND THORNTON CORY J UN 24.25 INT ET ALS

PO BOX 247

EASTLAKE CO 80614-0247

EASTLAKE CO 80614-0247

CALDWELL MICHAEL A JR AND CALDWELL VERONICA I 7851 E 139TH AVE THORNTON CO 80602-8136 CARNCROSS JASON T AND CARNCROSS CAROL L AND ARMSTRONG ROBERT L AND ARMSTRONG PAMELA J 10010 E 142ND AVE BRIGHTON CO 80602-5773 CARRIGAN DOUGLAS A AND CARRIGAN CATHY L 16242 POPLAR ST BRIGHTON CO 80602-6076 CHAVIRA RAMON J AND CHAVIRA AMANDA P 8031 E 139TH AVE THORNTON CO 80602-8139

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CASTRO-ANGULO GAMALIEL AND MARTINEZ MARIANA S 15160 GAYLORD ST THORNTON CO 80602-7471 CHEN SONG AND HUANG CHUNMEI 11223 E 163RD CT BRIGHTON CO 80602-7575

CASTRODALE PATRICIA 4 SEARS CT KEOKUK IA 52632-2547 CHILDS CHARLES B AND CHILDS MARY ELLEN 15531 QUINCE ST THORNTON CO 80602-8170

CC ERIE FARMS LLC UND 88% INT AND HOLLY HOLDINGS LLC UND 12% INT PO BOX 247 EASTLAKE CO 80614-0247 CHIOVITTI NICHOLAS AND CHIOVITTI DEBORAH MAE 15555 MONACO ST BRIGHTON CO 80602

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CLARK KENDALL W AND CLARK VERA E 16123 KRAMERIA CT BRIGHTON CO 80602-7973

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CITY OF AURORA THE 15151 E ALAMEDA PKWY AURORA CO 80012-1555 CLEM BRAD AND CLEM MARY 7154 E 162ND AVE BRIGHTON CO 80602-7594

CITY OF BRIGHTON 500 S 4TH AVE BRIGHTON CO 80601-3165 CLEVELAND CHERYL L AND CLEVELAND JUSTIN M AND CLEVELAND MARIA

8831 W KIOWA DR BOISE ID 83709-6322

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CITY OF THORNTON 9500 CIVIC CENTER DR THORNTON CO 80229 COBB MICHAEL J 7068 EAGLE SHADOW AVENUE BRIGHTON CO 80602

CITY OF THORNTON 9500 CIVIC CENTER DR DENVER CO 80229-4300 COLLINS CHRISTIAN A AND COLLINS BRANDI M 15645 HAVANA WAY BRIGHTON CO 80602

CITY OF THORNTON 9500 CIVIC CENTER DR DENVER CO 80229-4326 COLORADO AND E-470 LLC PO BOX 247

EASTLAKE CO 80614-0247

CITY OF THORNTON 9500 CIVIC CENTER DR THORNTON CO 80229-4326 COMEAU DORSEY A AND COMEAU MARYCATHERINE 13572 KENNEDY AVE BRIGHTON CO 80601-6946

CITY OF THORNTON THE 9500 CIVIC CENTER DR THORNTON CO 80229-4326 CONN DALE J AND CONN JUDY L 16010 PONTIAC CT BRIGHTON CO 80602-6082 CONNAUGHTON GLENN DAVID AND CONNAUGHTON ELVIRA 7907 E 139TH PL THORNTON CO 80602-8143 COUNTY OF ADAMS THE 9755 HENDERSON RD BRIGHTON CO 80601-8114

CONTRERAS JESUS M PO BOX 33314 NORTHGLENN CO 80233-0314 COX CHRISTOPHER CASEY 7858 E 139TH PL THORNTON CO 80602-8141

CORCILIUS WILLIAM A 4200 E 168TH AVE BRIGHTON CO 80602-6601

COX PAMELA M AND COX MICHAEL 5992 E 161ST AVE BRIGHTON CO 80602-7964

CORDOVA SERENA N AND HEER DARREL D JR 7402 E 157TH PL THORNTON CO 80602-8173 CREEKSIDE SOUTH ESTATES METROPOLITAN DISTRICT C/O SPECIAL DISTRICT MANAGEMENT SERVICES INC LAKEWOOD CO 80228-1898

CORDOVA SILAS W AND CORDOVA KELLY 13875 TAMARAC ST THORNTON CO 80602-8477 CROCKER DARREN AND CROCKER LACY 14121 COUNTRY HILLS DR BRIGHTON CO 80601-6711

COULL IAN D AND COULL MARY ANN 16787 LANSING CT BRIGHTON CO 80602-7980 CROWLE NELSON AND VAN SANT CROWLE CAROLINE 16021 VERBENA ST BRIGHTON CO 80602-7552

COUNTY OF ADAMS 4430 SOUTH ADAMS COUNTY PKWY BRIGHTON CO 80601-8204 CULLEN JAMES AND CULLEN CHRISTINA 11420 E 163RD CT BRIGHTON CO 80602-7579

COUNTY OF ADAMS BOARD OF COUNTY COMMISSIONERS 4430 SOUTH ADAMS COUNTY PKWY BRGHTON CO 80601-8204 CURRAN BILL STUART AND CURRAN PAMELA BETH 16070 POPLAR ST BRIGHTON CO 80602-6079

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DEHELD PATRICK AND DEHELD AMY 11230 E 163RD CT BRIGHTON CO 80602-7575 DILL AMY ANNE 13850 RIVERDALE RD BRIGHTON CO 80602-8255

DEKYONG TENZIN AND LAMA TENZING 15501 QUINCE CIR THORNTON CO 80602-8508 DIMANNA TAMMY R AND DIMANNA TERRY S 16275 NOME ST BRIGHTON CO 80602-8301

DELAROW AMY AND DELAROW JESSICA MARIE 15103 VINE WAY THORNTON CO 80602-7472 DITTO PATRICK AND DITTO JANIE 15147 VINE WAY THORNTON CO 80602-7472

DELUISE KALON AND DELUISE COLETTE 11200 E 166TH AVE BRIGHTON CO 80602-7978 DO NGOC ANH T AND LEE THOMAS T 8020 E 139TH AVE THORNTON CO 80602-8139

DELUZIO BRIAN J 16030 OAKLAND CT BRIGHTON CO 80602-8296 DOBBINS CHRISTOPHER L AND DOBBINS JILLIAN S 15851 RIVERDALE RD BRIGHTON CO 80602-8216

DENCKLAU JAMES R 13895 QUEBEC ST BRIGHTON CO 80602 DODRILL ROGER T III AND DODRILL DANA L 15517 QUINCE CIR THORNTON CO 80602-8508 DOLLINGER PAUL M AND DOLLINGER LAUREN C AND DAHL LAWRENCE A AND DAHL JERRI E 16011 POPLAR ST BRIGHTON CO 80602-6078

EDRICH JOEL 16151 VERBENA ST BRIGHTON CO 80602-7552

DORRANCE VINCENT 15669 QUINCE ST THORNTON CO 80602-8174 EDWARDS PAUL E 1709 S FILLMORE ST DENVER CO 80210-2946

DOYLE WILLIAM J AND DOYLE JILL 9825 E 138TH PL BRIGHTON CO 80602-8212 EGAN ARTHUR G AND EGAN EDNA R 4695 E 160TH AVE BRIGHTON CO 80602

DRENNAN CHARLES AND DRENNAN CHRISTEN 16125 OLIVE STREET BRIGHTON CO 80602 EGAN PHILLIP C AND EGAN CHRISTINE J 8420 E 160TH PL BRIGHTON CO 80602-7557

DRESSLER WILLIAM R AND DRESSLER DONNA L 14789 E 135TH AVE BRIGHTON CO 80601-6920 EHA TIMOTHY AND EHA BRANDY 2028 E 151ST AVE THORNTON CO 80602-7475

DROZD KENNETH J 13540 SABLE BLVD BRIGHTON CO 80601-7225 ELAINE A SCHAEFER LIVING TRUST ET AL 13295 E 136TH AVE BRIGHTON CO 80601-7281

DUNHAM BOYD A AND DUNHAM DONLEVA L 16792 POPLAR CT BRIGHTON CO 80602-6032 ELAINE A SCHAEFER LIVING TRUST UND 1/2 INT A ND CARL RICHARD SCHAEFER TESTAMENTARY TRUST UND 1/2 INT 13295 E 136TH AVE BRIGHTON CO 80601-7281

E-470 PUBLIC HIGHWAY AUTHORITY 22470 E STEPHEN D HOGAN PKWY STE 100 AURORA CO 80018

ELG INVESTORS LLC 10450 E 159TH CT BRIGHTON CO 80602-7977

EASTCREEK LLC PO BOX 247 EASTLAKE CO 80614-0247 ELSHOF MICHAEL W AND ELSHOF SARAH R 16002 OLIVE CT BRIGHTON CO 80602-7599

EDDY MICHAEL AND GRIFFITH SARAH 7835 E 139TH PL THORNTON CO 80602-8141 ERMI CYNTHIA AND ERMI MICHAEL 16081 VERBENA ST BRIGHTON CO 80602-7552 ERN LIMITED PARTNERSHIP ET AL 7 CIRCLE DR WHEAT RIDGE CO 80215-6607 FISCHER CYNTHIA L AND ROBERTS MICHAEL K 15611 COLORADO BLVD BRIGHTON CO 80602-7801

FAILS KELLY R AND FAILS SHANNON L 15935 ULSTER ST BRIGHTON CO 80602-7546 FISH RYAN M AND FISH SARAH J 16288 XENIA CT BRIGHTON CO 80602-7586

FAIRFIELD HOMEOWNERS ASSOCIATION INC 8700 TURNPIKE DR STE 230 WESTMINSTER CO 80031-7029 FISK AARON M AND JACKSON WYETH R 16051 PONTIAC COURT BRIGHTON CO 80602

FALLON JOHN AND MENDELSON JESSICA 11270 E 163RD CT BRIGHTON CO 80602-7575 FLETCHER BRETT 13550 GRANBY ST BRIGHTON CO 80601-6959

FARLEY ZACKARY M AND MC KILLOP MORGAN E 15140 GAYLORD ST THORNTON CO 80602-7471 FLORMAN NANCY S 7857 E 139TH PL THORNTON CO 80602-8141

FEIS MARK J AND FEIS KATHERINE A 15351 RIVERDALE RD BRIGHTON CO 80602-8267 FLOYD KIRSTEN L 13561 SABLE BLVD BRIGHTON CO 80601-7266

FERRELL TIMOTHY R AND FERRELL CLAUDIA M 13785 POTOMAC ST BRIGHTON CO 80601-7278 FLYNN JAMES JR 11231 E 166TH AVE BRIGHTON CO 80602-7978

FIKE GERTRUDE L 13022 E 136TH AVE BRIGHTON CO 80601-7281 FONTES JOSE C AND FONTES MARIA L 8841 E 163RD PLACE BRIGHTON CO 80602

FISCHER CYNDI AND ROBERTS MIKE 15611 COLORADO BLVD BRIGHTON CO 80602-7801 FORLENZA RICHARD A AND SMITH ROSWITHA 15516 QUINCE CIRCLE THORNTON CO 80602

FISCHER CYNTHIA L AND ROBERTS MICHAEL K 15611 COLORADO BLVD BRIGHTON CO 80602 FORTERRA INVESTMENTS LTD 200 W HAMPDEN AVE STE 201 ENGLEWOOD CO 80110-2407 FOX FRIEDA AND ZAMORA ANTHONY 8011 E 138TH PL THORNTON CO 80602 FROTTEN THOMAS S 16122 OLIVE ST BRIGHTON CO 80602-7598

FREDERICKSON SHAWN D AND FREDERICKSON SARAH A 15820 ULSTER ST BRIGHTON CO 80602-7543 FULTON DITCH CO C/O BRICE STEELE 25 S 4TH AVE BRIGHTON CO 80601-2029

FREEMAN WILLIAM C AND FREEMAN LORETTA S 11080 E 155TH PL BRIGHTON CO 80602-7446 FULTON IRRIGATION DITCH CO 13698 E 136TH AVE BRIGHTON CO 80601

FREI JOSEPH AND FREI AMBER 10000 E 138TH PL BRIGHTON CO 80602-8215 GANGER WILLIAM R JR 8446 EAST 163RD AVENUE BRIGHTON CO 80602

FREI THOMAS JACOB GST TRUST 7321 E 88TH AVE HENDERSON CO 80640-8137 GARCIA CHRISTOPHER V AND GARCIA C MICHELLE 8510 E 145TH PLACE BRIGHTON CO 80601

FRENCH JAMES R AND FRENCH COURTNEY A 14020 COUNTRY HILLS DR BRIGHTON CO 80601-6713 GARCIA DAVID D II 16102 OLIVE ST BRIGHTON CO 80602-7598

FRETTER LOIS C/O CHRIS FRETTER BRIGHTON CO 80602-5685 GARRISON WILLIAM A 16221 POPLAR STREET BRIGHTON CO 80602

FREW JAMES THOMAS 16721 POPLAR CT BRIGHTON CO 80602-6032 GIACOMINO LORI M LIVING TRUST 9075 E 138TH CT BRIGHTON CO 80602

FRIEHAUF BRYAN K AND FRIEHAUF TRACY L 11160 E 166TH AVE BRIGHTON CO 80602-6614 GILL JONATHAN AND GILL CHRISTEN 15102 VINE WAY THORNTON CO 80602-7472

FRISK MICHELLE B AND FRISK SHANE R 10320 E 142ND AVE THORNTON CO 80602-5774 GIRODO KENNETH J AND GIRODO BONNIE L 16279 XENIA CT BRIGHTON CO 80602-7586 GIST ROBERT W AND GIST TINA M 10280 E 142ND AVE THORNTON CO 80602-5773 GOOD FREDERICK RANDALL AND GOOD JENNIFER J 2029 E 151ST AVE THORNTON CO 80602-7475

GLIDEWELL BRADLEY G AND GLIDEWELL CRISTINA 11981 E 160TH AVENUE BRIGHTON CO 80602 GORMAN THOMAS F JR AND GORMAN JONI M 7808 E 139TH PL THORNTON CO 80602-8141

GOMEZ ELIZABETH A AND GOMEZ HERMINIO G 16760 LANSING CT BRIGHTON CO 80602-7980 GOVARDHANAM KRISHAPRASAD DINGIRI RADHIKA 15111 GAYLORD ST THORNTON CO 80602-7471

GOMEZ MANUEL L AND GOMEZ GRISELDA J 7845 E 139TH PL THORNTON CO 80602-8141 GREEN RICHARD E AND GREEN MICHELE L 15121 GAYLORD ST THORNTON CO 80602-7471

GOMEZ RECENDEZ ARTURO AND GOMEZ RAMIREZ ANDY 15122 VINE WAY THORNTON CO 80602-7472 GREENBURG THOMAS ARNOLD JR AND GREENBURG KATHLEEN GEAN 11180 E 166TH AVE BRIGHTON CO 80602-6614

GONZALES CHARLES AND GONZALES LISA 16021 OAKLAND CT BRIGHTON CO 80602-8296 GREENE BRIAN C AND GREENE KORI C 8050 E 139TH AVE THORNTON CO 80602-8139

GONZALES JOSE AND GONZALES JENNIE J PO BOX 1217 BRIGHTON CO 80601 GRENHAM OLIVER M AND GRENHAM KELLY A 13950 BOSTON STREET BRIGHTON CO 80601

GONZALES JOSEPH A AND ROYBAL IRAYA S 7848 E 139TH PL THORNTON CO 80602-8141 GRIFFITH FAMILY TRUST THE 16262 POPLAR ST BRIGHTON CO 80602-6076

GONZALEZ GALINDO L 13182 GRAPE CT THORNTON CO 80241-2317 GRIFFITH RANDAL P AND GRIFFITH COLLEEN G 14501 AKRON ST THORNTON CO 80602-5692

GONZALEZ-MILLAN JONATHAN AND GARZA BIANCA RUBY 13530 SABLE BLVD BRIGHTON CO 80601-7225 GRIZZLY PETROLEUM COMPANY LLC 1001 17TH ST FL 20 DENVER CO 80202-2035 GUZMAN ENRIQUE PEREZ AND VARELA ROSARIO AIDE ORTIZ 3799 E 64TH AVE COMMERCE CITY CO 80022-2210 HARMS LUISA 16347 PARIS WAY BRIGHTON CO 80602-8298

H F INVESTMENT COMPANY LLC 13022 E 136TH AVE BRIGHTON CO 80601-7281 HARRIS AUSTIN 8670 E 145TH PLACE BRIGHTON CO 80601

HAGAN GILBERT SCOTT 11287 E 162ND PL BRIGHTON CO 80602-8229

HARRIS JASON MIKEL 7877 E 139TH PL THORNTON CO 80602-8141

HALBROOK TERRY L AND HALBROOK KRISTEL 7084 E 162ND AVE BRIGHTON CO 80602-7594 HARRISON BEVERLY 3476 COUNTY ROAD KK.75 FOWLER CO 81039-9713

HALE ARTHUR A AND HALE VIRGINIA L 14120 COUNTRY HILLS DR BRIGHTON CO 80601-6714 HART DARRELL LAVERN 15864 RIVERDALE ROAD BRIGHTON CO 80602

HAMMANG MARK W AND HAMMANG LEONARD WAYNE AND HAMMANG LINDA LEE 11051 E 166TH AVE BRIGHTON CO 80602-6603 HART RONALD J 11026 TRACEY CT NEW PORT RICHEY FL 34654-1517

HANCOCK FORREST AND HANCOCK KOLLEEN 16254 PARIS WAY BRIGHTON CO 80602-8299 HARTMANN DALE 16387 PARIS WAY BRIGHTON CO 80602-8298

HANGAR 160 LLC 8450 E CRESCENT PKWY STE 200 GREENWOOD VILLAGE CO 80111-2816 HARWOOD STEPHEN R 15661 COLORADO BLVD BRIGHTON CO 80602-7801

HARDING DEBRA J 5585 E 160TH AVE BRIGHTON CO 80602 HASSAN ASHRAF G AND HAMEL ANGELA MARIE 15542 QUINCE ST THORNTON CO 80602-8170

HARGER FAMILY TRUST 11247 E 162ND PL BRIGHTON CO 80602-8229 HAVANA AND ILIFF LLC 18685 EAST PLAZA DR PARKER CO 80134 HAYS IAN AND HAYS DRITA 7950 E 139TH AVE THORNTON CO 80602-8138 HENDERSON REBECCA 14041 COUNTRY HILLS DR BRIGHTON CO 80601-6712

HAZEL TIMOTHY D AND HAZEL JULIE ANN 16780 POPLAR CT BRIGHTON CO 80602-6032 HENDERSON ROBERT P AND HENDERSON JENNIFER L 11183 E 163RD CT BRIGHTON CO 80602-7569

HEADRICK CRAIG L AND HEADRICK JANELLE C 11433 E 163RD CT BRIGHTON CO 80602 HENLEY BRIAN L JR AND HENLEY AMANDA C 8045 E 139TH PL THORNTON CO 80602-8145

HEALE SCOTT A AND HEALE CAMMIE DAWN-ELLEN 15510 QUINCE CIR THORNTON CO 80602-8508 HER PAUL AND YANG SHENG 13895 TRENTON ST THORNTON CO 80602-8507

HEDDINGS JASON AND HEDDINGS ERICA 8457 E 163RD AVE BRIGHTON CO 80602-7564 HERITAGE TODD CREEK METRO DISTRICT C/O SETER & VANDER WALL PC 7400 E ORCHARD RD STE 3300 GREENWOOD VILLAGE CO 80111-2545

HEISER DAVID L AND HEISER CHRISTINE A 11545 E 162ND DR BRIGHTON CO 80602-7684 HERNANDEZ-ALVAREZ MONICA N AND OLVERA-ROJAS JORGE E 9935 E 138TH PL THORNTON CO 80602-8214

HENDERSON AGGREGATE LTD 7321 E 88TH AVE STE 100 HENDERSON CO 80640-8137 HERR FAMILY LLC 14378 HANOVER ST BRIGHTON CO 80602-5782

HENDERSON AGGREGATE LTD 7321 E 88TH AVE HENDERSON CO 80640-8137 HERTZ FAMILY TRUST THE 9125 E 138TH CT BRIGHTON CO 80602-8201

HENDERSON AGGREGATE LTD PO BOX 700 HENDERSON CO 80640-9329 HIGH PLAINS WATER USERS ASSOCIATION PO BOX 39 EASTLAKE CO 80614-0039

HENDERSON AGGREGATE LTD PO BOX 700 HENDERSON CO 80640 HINTON PHILIP J AND HINTON CARIE ANN 13876 TAMARC ST THORNTON CO 80602 HODGSON CHRISTOPHER LEE HODGSON SABRINA RENEE 16137 PARIS WAY BRIGHTON CO 80602-8297 IN SHATHA FAREED JERIES ALSAMA 8011 E 139TH AVE THORNTON CO 80602-8139

HOLLAND RODNEY L AND HOLLAND LINDA M 14709 E 135TH AVE BRIGHTON CO 80601-6920 J & R FARM LLC 602 SHADYCROFT LN LITTLETON CO 80120-4070

HOOD JAMES A AND HOOD TERESA L 811 S 6TH AVE BRIGHTON CO 80601-3213 JACKSON BROOK AND JACKSON AUSTIN 15574 QUINCE CIR THORNTON CO 80602-8508

HT PARTERRE LAND LP 609 MAIN ST STE 4400 HOUSTON TX 77002-3169 JACKSON LARRY DEAN AND ROSEMARY 13510 FAIRPLAY ST BRIGHTON CO 80601-6954

HTC GOLF ACQUISITIONS LLC 10450 E 159TH CT BRIGHTON CO 80602 JACOBSEN BRITTNEY AND JACOBSEN TATE J 16740 LANSING CT BRIGHTON CO 80602-7980

HUCK ROBERT A AND HUCK KELLY R 8215 E 159TH CT THORNTON CO 80602-7532 JARAMILLO JOSE J AND CANCHOLA DELFINA 16025 IVANHOE ST BRIGHTON CO 80602

HUFFAKER LORI E AND HUFFAKER ERIN 16231 VERBENA STREET BRIGHTON CO 80602 JENSEN BRUCE A AND JENSEN KARLA K 7188 E 163RD AVE BRIGHTON CO 80602-7699

HUFFMAN MATTHEW KRAKORA NICOLE 15605 HAVANA WAY BRIGHTON CO 80602-7408 JENSEN DENISE M AND JENSEN WILLIAM P 8730 E 145TH PLACE BRIGHTON CO 80601

HUNTING WENDY R 15643 QUINCE ST THORNTON CO 80602-8174 JESSEN COLIN S AND JESSEN JESSICA R 11583 E 163RD CT BRIGHTON CO 80602

HUTCHINSON JENNIFER J AND SPETALIERI ALLISON M 7403 E 157TH AVE THORNTON CO 80602-8172 JOHNSON CALEB AND JOHNSON DANIELL A 16215 NOME ST BRIGHTON CO 80602-8301 JOHNSON DAVID P AND KIMBERLY L 10881 E 155TH PL BRIGHTON CO 80602-7443 JRE 85 LLC 9377 E 147TH PL BRIGHTON CO 80602-5713

JOHNSON DONALD R JR AND JOHNSON PAULA 15703 QUINCE ST THORNTON CO 80602-8309 JUAREZ BARBARA J 13481 SABLE BLVD BRIGHTON CO 80601-7219

JOHNSON JAY PATRICK AND JOHNSON ANGELA MARIE 16634 POPLAR CT BRIGHTON CO 80602-6031 K-T FARM LLC 15571 RIVERDALE RD BRIGHTON CO 80602-8226

JOHNSON MARK J AND JOHNSON DIANE L 11051 E 155TH PL BRIGHTON CO 80602-7452 KAHLER DONOVAN AND CHANTHIVONG INKHAM 16052 OLIVE ST BRIGHTON CO 80602-6002

JONES BRIAN D AND JONES SHERYL A 16072 OLIVE ST BRIGHTON CO 80602-7598 KARGAER ABDUL MUMTAZ AND KARGAR LOUDMELA 13946 TAMARAC CT THORNTON CO 80602-8443

JONES CHRISTOPHER P AND JONES ANTOINETTE R 10943 E 163RD CT BRIGHTON CO 80602 KARL JUSTINE M AND LOMBARDI GEORGE A 15880 COLORADO BLVD BRIGHTON CO 80602-7806

JONES DONALD AND TAING VIOLETTA 15507 QUINCE CIR THORNTON CO 80602-8508 KARL MICHAEL G AND KARL SHAWNA LEA 13490 KENNEDY AVENUE BRIGHTON CO 80601

JONES FRANKLIN D AND JAMISON MARIA G 11253 E 163RD CT BRIGHTON CO 80602-7575 KARSTEN JONATHAN AND KARSTEN ROBYN 16330 NOME ST BRIGHTON CO 80602-8300

JONES HOWARD MARION SR AND JONES HOWARD M JR 14767 E 134TH PL BRIGHTON CO 80601-6940 KEICHER JEFFREY M/MUNSON SUSAN M 50% INT AND SCHREYER HELEN B 50% INT 13677 CHERRY ST THORNTON CO 80602

JONES LINDSEY AND JONES MICHAEL 13885 TAMARAC ST THORNTON CO 80602-8477 KELLEY CURTIS AND KELLEY VANESSA 11343 E 163RD CT BRIGHTON CO 80602-7578 KELLEY RODNEY D 15891 RIVERDALE RD BRIGHTON CO 80602-8216 KORTUM ACRES INC 1096 SEA SHELL CT DAYTONA BEACH FL 32124-3731

KELLEY ROGER L AND CARLA R 8155 E 159TH CT BRIGHTON CO 80602 KRAMER DEREK A AND KRAMER DEBRA A 10801 E 155TH PL BRIGHTON CO 80602

KELLY ROBERT S AND KELLY CAROL ANN 7187 E 162ND CT BRIGHTON CO 80602-8069 KRAMERS LEILA M AND ZOPES MICHAEL L 16380 PARIS WAY BRIGHTON CO 80602-8298

KELSEY RICHARD A AND KELSEY DEANNA M 7900 E 139TH AVE THORNTON CO 80602-8138 KROLL MICHAEL H AND KROLL DONNA M 7120 EAGLE SHADOW AVE BRIGHTON CO 80602-6000

KHANTHAVONG SAENG AND KHANTHAVONG SAENGJOY AND KHANTHAVONG BRENDA 8771 E 163RD PL BRIGHTON CO 80602-7572 KULKARNI AJINKYA AND MULEY KETKI 2038 E 151ST AVE THORNTON CO 80602-7475

KIRK ROBERT J AND KIRK AMELIA A 13886 TAMARAC ST THORNTON CO 80602-8474 KUSEK JEWEL AND KUSEK EDWARD ALAN 16164 PARIS WAY BRIGHTON CO 80602-8297

KIRKMAN DAVID 11180 E 163RD CT BRIGHTON CO 80602-7569 LAMBERT JAMES DONALD 1/2 INT AND LAMBERT BARBARA JEAN 1/2 INT 11660 E 160TH AVE BRIGHTON CO 80602-7437

KIRKPATRICK KEVIN AND KIRKPATICK JAMIE 8047 E 139TH PL THORNTON CO 80602-8145 LAMBERT JAMES DONALD 1/2 INT AND LAMBERT BARBARA JEAN 1/2 INT 155 E BRIDGE ST BRIGHTON CO 80601-1612

KOLANO MICHAEL A AND BONNIE G 11151 E 155TH PL BRIGHTON CO 80602 LAMPSHIRE RICHARD WILLIAM AND LAMPSHIRE HILLARY NAGEL 11663 E 163RD CT BRIGHTON CO 80602

KONDORF PETER AND KONDORF MICHELLE 6052 E 161ST AVE BRIGHTON CO 80602-7964 LANGE FAMILY TRUST 8280 E 145TH PL BRIGHTON CO 80602-5766 LARSEN DALE R AND LARSEN VIVIAN L 14060 COUNTRY HILLS RD BRIGHTON CO 80601-6713 LILLARD MULLIN FAMILY LIVING TRUST 14080 COUNTRY HILLS DR BRIGHTON CO 80601-6713

LASS DANIEL WILLIAM AND LASS SUE ANN 16767 LANSING CT BRIGHTON CO 80602-7980 LINK CORY M AND LINK NATASHA A 11680 E 163RD CT BRIGHTON CO 80602-7504

LAVELY MATTHEW AND LAVELY BRENDA 14648 E 135TH AVE BRIGHTON CO 80601 LLOYD BRUCE MICHL 12202 E 168TH AVE BRIGHTON CO 80602-6661

LE BAO CHAU P 14025 FLORENCE CT BRIGHTON CO 80602-7033 LMB CAPITAL PARTNERS LLC 905 W 124TH AVE SUITE 200 WESTMINSTER CO 80234

LE CHAU B 987 HIGHWAY 85 BRIGHTON CO 80603 LOCKETT KEVIN LEE 12302 E 168TH AVE BRIGHTON CO 80602

LEE CHRISTA L 13867 TAMARAC ST THORNTON CO 80602-8477 LOCKETT KEVIN LEE 12302 E 168TH AVE BRIGHTON CO 80602-6627

LEE TOU LEE KONG 8048 E 139TH PL THORNTON CO 80602-8145 LOLLAR JIMMIE D LOLLAR KAREN L 15491 RIVERDALE RD BRIGHTON CO 80602-8231

LEFEBVRE MELANIE 7951 E 139TH AVE THORNTON CO 80602-8138 LOMBARDI BRIGHTON PROPERTIES LLC 15800 COLORADO BLVD BRIGHTON CO 80602-7806

LEFEVRE FAMILY TRUST THE 8538 E 163RD CT BRIGHTON CO 80602-7573 LOMBARDI GEORGE/DIANE LIVING TRUST THE 15840 COLORADO BLVD BRIGHTON CO 80602-7806

LEMAY BODEN J AND LEMAY KATHY D 16740 POPLAR CT BRIGHTON CO 80602-6032 LONG DENNIS E AND LONG PAMELA J 7897 E 139TH PL THORNTON CO 80602 LOR XENG AND PHOMMATHA SIVONE 13900 TAMARAC ST THORNTON CO 80602-8506 MARES FERNANDO MARTINEZ AND MARTINEZ LILIANA D 13965 FLORENCE CT BRIGHTON CO 80602-7070

LORSHBOUGH MARY J 15280 E 136TH AVE BRIGHTON CO 80601-6955 MARSHALL MATTHEW A AND WEBER ANNAMERIE 7898 E 139TH PL THORNTON CO 80602-8141

LOVATO TIMOTHY MICHAEL AND LOVATO CHRISTINE 13886 SPRUCE ST THORNTON CO 80602-8456 MARTIN DANIEL A AND MARTIN KRISTEN C 7867 E 139TH PL THORNTON CO 80602-8141

LUCAS NATASHA AND LUCAS DAVID 16257 PARIS WAY BRIGHTON CO 80602-8299 MARTINEZ ROBERT AND MARTINEZ MARGIE L 13876 TRENTON ST THORNTON CO 80602-8507

LUCIO JOE LOUIS 4705 E 168TH AVENUE BRIGHTON CO 80602 MARTINEZ STEVEN LEROY AND MARTINEZ SUSAN M 15509 QUINCE CIR THORNTON CO 80602-8508

LUNDGREN JUDITH ANN AND BUCZEK JANET AND MCKEE LARRY A 8556 E 163RD AVE BRIGHTON CO 80602-7563 MASCARENAS STEVEN L AND GARCIA DEBBIE L PO BOX 1323 EASTLAKE CO 80614

LYONS SADIE AND LYONS JEFFREY D 14740 E 136TH AVE BRIGHTON CO 80601-6958 MASSIER FAMILY TRUST 15460 KINGSTON ST BRIGHTON CO 80602-7441

MACIAS HELEN R AND MACIAS ROBERT A 16080 OAKLAND CT BRIGHTON CO 80602-8296 MAXWELL JOSEPH P AND MAXWELL DIANE M 8586 E 163RD AVE BRIGHTON CO 80602-7563

MANGUS GERALD H AND MANGUS RAMONA R 16144 PARIS WAY BRIGHTON CO 80602-8297 MC CRORY LAND AND CATTLE LLC 16155 HIGHWAY 7 BRIGHTON CO 80602-7648

MANZANARES GABRIEL AND MANZANARES ANNA MARIE 10240 E 142ND AVE BRIGHTON CO 80602-5773 MC DONALD GEORGE 7500 E 100TH AVE HENDERSON CO 80640 MC DOWELL GORDON W AND MC DOWELL RHONDA R 14221 EMPORIA STREET BRIGHTON CO 80602 MCWILLIAMS NATHANIEL CHARLES AND DIGHERO LINDSAY NICOLE 15136 VINE WAY THORNTON CO 80602-7472

MC INTOSH THOMAS E 2500 FAIRPLAY WAY AURORA CO 80011-2999 MEDLIN WAYNE E AND MEDLIN PATRICIA L 15655 RIVERDALE RD BRIGHTON CO 80602-8216

MC NURLIN DAVID D AND MC NURLIN KIRSTEN A 15655 HAVANA WAY BRIGHTON CO 80602-7415 MEDLIN WAYNE E AND PATRICIA L 15655 RIVERDALE ROAD BRIGHTON CO 80601

MCCAULEY SUSAN JALAYNE LIVING TRUST 441 S 7TH AVE BRIGHTON CO 80601-3107 MEINECKE MICHAEL E AND WEAVER KARYN G 11415 E 162ND DR BRIGHTON CO 80602-7658

MCCRORY J P 16152 MCCRORY CT BRIGHTON CO 80602-8330 MELODY HOMES INC C/O GEORGE MCELROY & ASSOCCIATES AURORA CO 80014-3509

MCFARLAND CHARLES D AND MCFARLAND SHARON A 11101 E 155TH PLACE BRIGHTON CO 80602 MELODY HOMES INC C/O GEORGE MCELROY & ASSOCIATES INC AURORA CO 80014-3509

MCKINNEY LARRY L AND TAYLOR KIRSTY L 14707 E 134TH PL BRIGHTON CO 80601-6940 MERRITT REAL ESTATE INVESTORS LLC 303 S BROADWAY DENVER CO 80209-1558

MCLAUGHLIN KARLIN RAE AND MCLAUGHLIN DAVID JAMES 15578 QUINCE ST THORNTON CO 80602-8170 METCALF ANNETTE L AND GRIFFIN MICHAEL S 11071 E 166TH AVE BRIGHTON CO 80602-6603

MCMILLAN MARK D 16717 LANSING CT BRIGHTON CO 80602-7980 MINZAK BRYAN P AND MINZAK KIMBERLY A 8021 E 138TH PL THORNTON CO 80602

MCRAE-INGRAM JULIANE 16184 PARIS WAY BRIGHTON CO 80602-8297 MOHAR ADALBERTO 15650 HAVANA WAY BRIGHTON CO 80602-7409 MOHRLANG KATHERINE MARIE 8175 E 159TH CT BRIGHTON CO 80602 MORRIS STEPHEN C AND MORRIS MELISSA 9025 E 138TH COURT BRIGHTON CO 80602

MOLLEVIK MICHAEL T AND MOLLEVIK KELLY L 4993 E 111TH PL DENVER CO 80233-3815 MORRISON LYNNETTE 2131 S COOK ST DENVER CO 80210-4913

MOLLICONI SANDRA 16227 PARIS WAY BRIGHTON CO 80602-8299

MOSHER RICHARD J AND KANAGAINTHIRAM RAMANI K 8050 E 136TH DR THORNTON CO 80602-8106

MONROE JUDITH M 7149 E 163RD AVE BRIGHTON CO 80602-7698 MOUNTAIN VIEW WATER USERS ASSOCIATION PO BOX 485 BRIGHTON CO 80601

MONTOYA ANTHONY S/SHARON L AND SOLANO ANTHONY W/NICOLE R 11550 E 163RD CT BRIGHTON CO 80602-7599 MRFR III LLLP 200 W HAMPDEN AVE STE 201 ENGLEWOOD CO 80110-2407

MONTOYA ROBERT JAMES II AND MONTOYA CHRISTY 11633 E 163RD CT BRIGHTON CO 80602 MUHLER WAYNE C AND MUHLER KAREN A 12310 E 168TH AVE BRIGHTON CO 80602-6627

MOORE CAMRON AND REGINA TRUST 11120 E 163RD CT BRIGHTON CO 80602-7569

MULLEN SHELLY K AND MULLEN BRENT M 8580 E 145TH PLACE BRIGHTON CO 80601

MORADO RODOLFO JR 8051 E 139TH AVE THORNTON CO 80602-8139 MURTHA KATHLEEN M 15430 KINGSTON ST BRIGHTON CO 80602-7441

MORELLO KIMBERLY 8509 E 163RD CT BRIGHTON CO 80602-7573 MUSE KURT W AND MUSE KELLY R 13921 TAMARAC ST THORNTON CO 80602-8506

MORGAN BARBARA A 13832 TAMARAC CT THORNTON CO 80602 MYER SANDRA K AND MYER JUSTIN E 16610 POPLAR CT BRIGHTON CO 80602-6031 NESS CHRISTOPHER 15861 RIVERDALE RD BRIGHTON CO 80602-8216 NORRIS KIMBERLY S 7888 E 139TH PL THORNTON CO 80602-8141

NEUFELD PHILLIP/DEBORAH AND NEUFELD CHRISTOPHER/PATRICK 9060 E 139TH CT BRIGHTON CO 80602-8207 NORTHERN HILLS CHRISTIAN CHURCH 5061 E 160TH AVE BRIGHTON CO 80602

NEUFER MICHAEL EARL AND NEUFER SONA 15518 QUINCE CIR THORNTON CO 80602-8508 NUNN STEVEN M AND PAMELA K 15160 RIVERDALE RD BRIGHTON CO 80601-8241

NGUYEN NICHOLAS T AND NGUYEN THANH-TAM T 7855 E 139TH PL THORNTON CO 80602-8141 NYLANDER ERIK W AND NYLANDER JENNIFER M 7095 E 162ND AVENUE BRIGHTON CO 80602

NGUYEN THO L 15522 QUINCE CIR THORNTON CO 80602-8508 O NEILL LEONARD L AND O NEILL SHEILA JO 15700 COLORADO BLVD BRIGHTON CO 80602-7806

NICHOLSON RONALD D AND NICHOLSON TAMMY S 16299 XENIA COURT BRIGHTON CO 80602 OBLAS BRIAN 15564 QUINCE ST THORNTON CO

NICKERSON JEREMY C AND NICKERSON DESIREE AND MARTINEZ DIANA 15558 QUINCE ST THORNTON CO 80602-8170 OLD SCOTT FARM LLC 5290 DTC PKWY STE 150 ENGLEWOOD CO 80111-2764

NIELSEN BLAKE C AND NEILSEN JENNY M 7967 E 139TH PL THORNTON CO 80602-8143 OLIVAS GREGORY K 13475 FAIRPLAY ST BRIGHTON CO 80601-6952

NIXON GARY N AND NIXON NANCY R 13464 CRYSTAL ST BRIGHTON CO 80601-7269 OLSAVSKY ALAN J AND OLSAVSKY MARY J 16297 PARIS WAY BRIGHTON CO 80602-8299

NOBITT MICHAEL J AND NOBITT ANDI L 7254 EAGLE SHADOW AVE BRIGHTON CO 80602-6000 ORTIZ JOHN C AND ORTIZ LESLIE 11141 E 166TH AVE BRIGHTON CO 80602-6614 OSTROM MICHAEL J AND OSTROM STEPHANIE 11393 E 163RD CT BRIGHTON CO 80602-7578 PERKINS DONALD E AND PERKINS IRIS REIKO 15116 VINE WAY THORNTON CO 80602-7472

PAICURICH EIRC ALAN AND SCHERTZ VICKI JO 2168 E 151ST AVE THORNTON CO 80602-7476 PETERSEN RICHARD F AND PETERSEN MARY N FAMILY TRUST 9600 LOWELL CT WESTMINSTER CO 80030-2608

PALIZZI FARMS LLC C/O DEBORA M PALIZZI AND GLORIA A BENNET 14820 SABLE BLVD BRIGHTON CO 80601 PETERSON HARREL H AND KEATON AMBER B 8010 E 139TH AVE THORNTON CO 80602-8139

PANCHAL RAVI CHANDRAKANT AND VAGHELA MITAL NATVARLAL 2108 E 151ST AVE THORNTON CO 80602-7476 PETERSON LANA MARIE AND PETERSON ERIK ROGER 2058 E 151ST AVE THORNTON CO 80602-7475

PAPPAS MICHAEL J AND PAPPAS MICHELLE A 16150 IVANHOE ST BRIGHTON CO 80602-7982 PETROCCO ALBERT J JR PO BOX 459 HENDERSON CO 80640-0459

PASCHEN RONALD L AND PASCHEN WILLIAM P 16050 POPLAR ST BRIGHTON CO 80602-6079 PETROCCO DOMINIC A 1/3/PETROCCO FAMILY PARTNERSHIP 1/3/PETROCCO ALBERT J 1/3 14110 BRIGHTON ROAD BRIGHTON CO 80601

PAVELKA HENRY D AND PAVELKA DENISE G 16142 OLIVE ST BRIGHTON CO 80602-7598 PETROCCO FAMILY LIMITED PARTNERSHIP LLC 14110 BRIGHTON RD BRIGHTON CO 80601-7318

PECK RYAN E AND PECK ROBIN L W DANNI 5901 E 160TH PLACE BRIGHTON CO 80602 PETROCCO FAMILY LIMITED PARTNERSHIP LLLP 14110 BRIGHTON RD BRIGHTON CO 80601

PEDRIANES AUDYS O/RAFAEL AND PEDRIANES LISA A 8038 E 139TH PL THORNTON CO 80602-8145 PETROCCO JOSEPH P AND PETROCCO EWA 15970 JACKSON ST BRIGHTON CO 80602-7795

PEGRAM RICK RYAN II AND REUTERSKIOLD DEIDRA ALISON 7818 E 139TH PL THORNTON CO 80602-8141 PJDS FAMLY TRUST THE 9845 E 138TH PL BRIGHTON CO 80602 PLAMBECK BRIAN S AND PLAMBECK RHONDA 7176 E 162ND CT BRIGHTON CO 80602-8069 POWELL ARLEN AND POWELL ROSEMARY 9955 E 138TH PL BRIGHTON CO 80602-8214

PLATEK MICHAL PAWEL AND PLATEK SYLVIA 7827 E 139TH PL THORNTON CO 80602-8141 PREBLE ANDREW AND PREBLE ANNE 13920 TAMARAC ST THORNTON CO 80602-8506

PLATTE RIVER FARMS LLC PO BOX 247 EASTLAKE CO 80614-0247 PRICE MARSHA R AND JUDD TAMMY R 16131 VERBENA STREET BRIGHTON CO 80602

PLAZA WEST 20 LLC 9377 E 147TH PL BRIGHTON CO 80602 QUEBEC 7 LLC 14642 STELLAS MEADOW DR BROOMFIELD CO 80023-8401

POLAND DUSTIN AND POLAND MELISSA 16268 XENIA CT BRIGHTON CO 80602-7586 QUEBEC HIGHLANDS HOMEOWNERS ASSOCIATION INC PO BOX 3599 ENGLEWOOD CO 80155-3599

POMPEY KAREN A AND BRUNTZ RANDY G 16696 POPLAR CT BRIGHTON CO 80602-6031 QUEBEC LIMITED C/O FINLEY AND CO 12000 WASHINGTON ST NO. 100 THORNTON CO 80241

PONUGOTI SUDHEER PONUGOTI PRAVEENA 15131 GAYLORD ST THORNTON CO 80602-7471 QUILLEN SARAH A 15955 JACKSON STREET BRIGHTON CO 80602

POPISH PHILIP H AND POPISH SHARON L 14649 E 135TH AVE BRIGHTON CO 80601-6918 QUINN RICKIE J AND QUINN LINDA K 8195 E 159TH COURT BRIGHTON CO 80602

PORTFLIET MATTHEW P VAN PORTFLIET PATRICIA L VAN 13926 TAMARAC CT THORNTON CO 80602-8443 R CHAVEZ CUSTOM HOMES INC 117 CORVETTE CT FORT LUPTON CO 80621-7624

POSTLE DEVELOPMENT COMPANY PO BOX 1024 NIWOT CO 80544-1024 RAHATPURI SHAILENDRA SINGH AND GURRAM REENA B 15143 VINE WAY THORNTON CO 80602 RAINS RONALD J AND RAINS CHERYL A 14081 COUNTRY HILLS DR BRIGHTON CO 80601-6712 REISBERGER TURNER AND REISBERGER NICOLE 15180 GAYLORD ST THORNTON CO 80602-7471

RAKES ERIC 15506 QUINCE CIR THORNTON CO 80602-8508 RENSHAW MARK DANIEL AND RENSHAW AMY 13865 TRENTON ST THORNTON CO 80602-8507

RALL RUSS W AND RALL DENISE R 11191 E 166TH AVENUE BRIGHTON CO 80602 RH TODD CREEK LLC 200 W HAMPDEN AVE STE 201 ENGLEWOOD CO 80110-2407

RAMIREZ JESUS GUSTAVO JR 13552 KENNEDY AVE BRIGHTON CO 80601-6946 RHEINHEIMER JOHN H AND RHEINHEIMER SONYA E 16625 POPLAR CT BRIGHTON CO 80602

RANDALL ELIZABETH M 16001 RIVERDALE RD BRIGHTON CO 80602-8304 RIBBLE MARK L AND BAXTER KRISTINA M 13906 TAMARAC CT THORNTON CO 80602-8443

RANDOLPH ROBERT M AND RANDOLPH TONJA S 15885 JACKSON ST BRIGHTON CO 80602-7795 RICHARDS SHAWN L AND RICHARDS CHRIS A 8790 E 145TH PL BRIGHTON CO 80602-5749

RASMUSSEN DAVID E 8860 E 145TH PL BRIGHTON CO 80602-5750 RICHMOND AMERICAN HOMES OF COLORADO INC 4350 S MONACO ST DENVER CO 80237-3400

RAVULA SRINIVAS AND MAHAKALA SARITHA 15117 VINE WAY THORNTON CO 80602-7472 RICO GARY G AND MULLEN-RICO SHARON 15130 GAYLORD ST THORNTON CO 80602-7471

READY MIXED CONCRETE COMPANY 4395 WASHINGTON ST 5775 FRANKLIN ST DENVER CO 80216-1521 RIO LA LLC 812 GRAVIER ST STE 360 NEW ORLEANS LA 70112-1408

REICHARD-ARMSTRONG LORI LOUIS 16197 PARIS WAY BRIGHTON CO 80602-8297 RIO LA LLC PO BOX 1231 KYLE TX 78640-1231 RITCHEY INVESTMENT COMPANY LLC 13821 SABLE BLVD BRIGHTON CO 80601-7264 ROSALES JOSE AND ROSALES NAOMI 16161 POPLAR ST BRIGHTON CO 80602-6081

RIVERA MYSTIQUE J AND PINTER TRAVIS 15621 QUINCE ST THORNTON CO 80602-8174 ROWZEE JACOB AND ROBERTS LYNDSEY 15142 VINE WAY THORNTON CO 80602

RIVERSIDE VILLAGE OWNERS ASSOCIATION 7501 VILLAGE SQUARE DR STE 205 CASTLE PINES CO 80108-3700 ROYBAL LANCE B ROYBAL STEPHANIE A 7990 E 139TH AVE THORNTON CO 80602-8138

ROBEY GINA 13162 PENNSYLVANIA CIR THORNTON CO 80241-1730 RUSSELL GRACE 13185 BRIGHTON RD BRIGHTON CO 80601-7341

ROBINETTE SHANNON AND ROBINETTE SEAN M 10060 E 142ND AVE BRIGHTON CO 80602-5773 RYAN KIM L 8631 E 163RD PL BRIGHTON CO 80602-7572

ROBINSKI POLLARD INC 13950 QUEBEC ST THORNTON CO 80602-7925 SAATHOFF JEFFREY S AND SAATHOFF TAMI L 14768 E 135TH AVE BRIGHTON CO 80601

ROCHA PEDRO AND ROCHA LETICIA 8810 E 145TH PLACE BRIGHTON CO 80601 SACK ALBERT F AND SACK ANNE V 5100 E 168TH AVE THORNTON CO 80602

RODMAN LA RITA A 10821 E 155TH PL BRIGHTON CO 80602-7443 SAFI MOHAMMAD J AND AMIN TAMANA 13916 TAMARAC CT THORNTON CO 80602-8443

RODRIGUEZ CHRISTOPHER JAMES AND RODRIGUEZ SARAH JANE 13876 SPRUCE ST THORNTON CO 80602-8456 SALE RORY L AND SALE JANE L 16247 MOLINE ST BRIGHTON CO 80602

RORVIG AARON MATTHEW AND RORVIG SARAH DIANA 13892 TAMARAC CT THORNTON CO 80602-8437 SALYERS CRYSTAL MICHELLE AND SALYERS MICHAEL CHRISTOPHER 15146 VINE WAY THORNTON CO 80602-7472 SAN MARTIN CABALLERO LLC 333 E 76TH AVE DENVER CO 80229-6209 SCHISSLER JOHN 13584 CRYSTAL ST BRIGHTON CO 80601

SANCHEZ CELESTE MAE AND SANCHEZ ANDREW ROMAN 12101 E 160TH AVE BRIGHTON CO 80602 SCHISSLER RICKY 13544 CRYSTAL ST BRIGHTON CO 80601-7271

SANCHEZ EDUARDO A AND SANCHEZ DORA M 8701 E 163RD PLACE BRIGHTON CO 80602 SCHMIDT KYLE J MEYERS MEGAN L 13940 TAMARAC ST THORNTON CO 80602-8506

SANCHEZ JOHN S AND JUANITA M 11700 E 160TH AVE BRIGHTON CO 80602 SCHMIDTHUBER JASON D AND SCHMIDTHUBER AMY C 8449 E 163RD COURT BRIGHTON CO 80602

SANCHEZ ROY J AND SHANCHEZ NICOLLE E 8457 E 163RD AVE BRIGHTON CO 80602-7564 SCHNEIDER ERICA N 8041 E 139TH AVE THORNTON CO 80602-8139

SASAKI FAMILY PARTNERSHIP LLLP 697 VOILES DR BRIGHTON CO 80601-3322 SCHRAUBEN COREY S 13901 TAMARAC ST THORNTON CO 80602-8506

SAUCEDO CLAUDIO 7199 E 163RD AVE BRIGHTON CO 80602-7699

SCHREINER DAVID L 7650 E 160TH AVE BRIGHTON CO 80602-7536

SAUER JOHN H 14589 E 135TH AVE BRIGHTON CO 80601-6916 SCHROEDER STEVEN B AND SCHROEDER KRISTIN L 7821 E 139TH AVE THORNTON CO 80602-8136

SAVE A CHILD INC 3241 W 44TH AVE DENVER CO 80211 SCHULMAN MELVIN E AND SCHULMAN JENNIE BRAVO 11250 E 166TH AVE BRIGHTON CO 80602-7978

SCHENK RUDY AND SCHENK LUCILLE R 8476 E 163RD AVE BRIGHTON CO 80602 SCHULZ TODD V AND SCHULZ JULIE J 16654 POPLAR COURT BRIGHTON CO 80602 SCHWEITZER BROCK J AND SCHWEITZER MANDY B 15635 HAVANA WAY BRIGHTON CO 80602-7408 SHANNON JOHN T 13890 QUEBEC STREET BRIGHTON CO 80602

SCI - 157 LLC 1440 BLAKE ST STE 320 DENVER CO 80202-1489 SHARP AC LAND LLC 9378 S STAR HILL CIR LONE TREE CO 80124-5443

SEAGROVES THOMAS ARTHUR AND GREEN ROSE IMANI AND ROSECHILD RENE SIMONE

ROSECHILD RENE SIMONE 15665 HAVANA WAY BRIGHTON CO 80602-7415 SHEPARD STACEY AND SHEPARD CORINNE 16171 VERBENA ST BRIGHTON CO 80602-7552

SEEGER DONALD R AND SEEGER PAULINE M 13590 SABLE BLVD BRIGHTON CO 80601 SHEPHERD STEVEN W AND SHEPHERD VICTORIA K 13870 QUEBEC ST BRIGHTON CO 80602

SELTZER FARMS INC 16705 YOSEMITE ST BRIGHTON CO 80602 SHERWOOD DONALD R AND RAINS TRACY LYN 16737 LANSING CT BRIGHTON CO 80602-7980

SELTZER FARMS INC 9390 E 168TH AVE BRIGHTON CO 80602-6606 SHIPPY FAMILY TRUST THE 14021 COUNTRY HILLS RD BRIGHTON CO 80601-6712

SELTZER ROBERT L FAMILY TRUST 33641 COUNTY ROAD 83 BRIGGSDALE CO 80611-7808 SHOUSE JOHNNY LAWRENCE AND LAREAU DONNA MARIE 15090 GAYLORD ST THORNTON CO 80602-7477

SERRANO COURTNEY A AND SERRANO CHRISTOPHER L 8035 E 139TH PL THORNTON CO 80602-8145 SHRESTHA RAJ AND PRADHAN PRATIVA 2049 E 151ST AVE THORNTON CO 80602-7475

SEYMOUR RAYMOND Z JR 13955 QUEBEC ST BRIGHTON CO 80602-7924 SICHTING ZERRI J AND SICHTING MELLISA C 16071 POPLAR STREET BRIGHTON CO 80602

SHAH VIRAL B AND SHAH BIJALBEN 8041 E 138TH PL THORNTON CO 80602 SJOLIN CRAIG AND SJOLIN CHRISTINA 7128 E 163RD AVE BRIGHTON CO 80602-7698 SKINNER JESSICA A 15511 QUINCE CIR THORNTON CO 80602-8508 STANLEY GARY M AND STANLEY LORRAINE J 8028 E 139TH PL THORNTON CO 80602-8145

SKOREV ANDREY AND SKOREV KRISTINA 11150 E 163RD CT BRIGHTON CO 80602-7569 STANLEY JOSHUA T 7908 E 139TH PL THORNTON CO 80602-8143

SMITH JOHNNY WAYNE AND SMITH CANDACE R 15561 SYRACUSE WAY THORNTON CO 80602-8171

STANLEY RUPERT H AND STANLEY DEBORAH L 16232 POPLAR ST BRIGHTON CO 80602-6076

SMITH TIMOTHY R AND SMITH CARMEN M 7937 E 139TH PL THORNTON CO 80602-8143 STARK BRIAN AND STARK SARAH 7126 E 162ND CT BRIGHTON CO 80602-8065

SNOOK DON R AND SNOOK SUSAN B 10370 E 142ND AVE THORNTON CO 80602-5774 STEEGER CHRISTOPHER JOHN AND STEEGER CHRISTINE MARIE 15123 VINE WAY THORNTON CO 80602-7472

SOLANO GREGORY ALLEN AND CALEGAN SOLANO KAREN ANNE 8040 E 139TH AVE THORNTON CO 80602-8139 STELLJES NICOLLE MARIE AND STELLJES VON DEWAYNE JR 15625 RIVERDALE RD BRIGHTON CO 80602-8216

SPARROW JEFFERY C AND SPARROW RUTHANN 8720 E 163RD PL BRIGHTON CO 80602-7584 STEPHENS LINDY LOU 1076 S 935 RD EL DORADO SPRINGS MO 64744-7279

SPERRY NATHANIEL M AND SPERRY ADRIENNE R 16201 VERBENA ST BRIGHTON CO 80602-7553 STEVENS DOMINIC ALDEN 7828 E 139TH PL THORNTON CO 80602-8141

SPURGEON LIVING TRUST 16032 OLIVE ST BRIGHTON CO 80602-6002 STEVENS MICHAEL C AND STEVENS TAMMARA 16282 POPLAR ST BRIGHTON CO 80602-6076

STADLER RYAN L AND STADLER SHEILA L 16272 POPLAR ST BRIGHTON CO 80602-6076 STIMMEL CHRISTOPHER J AND MCGINNESS MELISSA R 6051 E 160TH PLACE BRIGHTON CO 80602 STINSON CHRISTOPHER LYN AND STINSON ASHLEY ANNE 16300 PARIS WAY BRIGHTON CO 80602-8298 SW BIG CIRCLE RANCH LLC 5600 S QUEBEC ST STE 110A GREENWOOD VILLAGE CO 80111-2205

STONEHOCKER ROSWITHA M 15600 HOLLY ST BRIGHTON CO 80602-7911 SWANTKOSKI JAROD AND SWANTKOSKI ANGELA 16080 IVANHOE ST BRIGHTON CO 80602

STRAIGHT PATH LLC 8181 E 136TH AVE BRIGHTON CO 80602-8112 TACEY HOLLEE ANN AND TACEY ERIC JOSEPH 8018 E 139TH PL THORNTON CO 80602-8145

STRAIN CONNIE J AND CLAYTON KERRIE R 8031 E 138TH PL THORNTON CO 80602-8133 TALLEY MICHAEL DALE AND TALLEY DALE 8025 E 139TH PL THORNTON CO 80602-8145

STRATUS TALON VIEW LLC 8480 E ORCHARD RD STE 1100 GREENWOOD VILLAGE CO 80111-5015 TALON POINTE LAND LLC 1610 WYNKOOP ST STE 500 DENVER CO 80202-1158

STREET JERALD R AND STREET BARBARA R 13541 SABLE BLVD BRIGHTON CO 80601 TALON POINTE METROPOLITAN DISTRICT 10450 E 159TH CT BRIGHTON CO 80602-7977

STRUCK BRENT ALAN 2059 E 151ST AVE THORNTON CO 80602-7475 TASHIRO STUART AND TASHIRO MICHELLE 13393 BRIGHTON RD BRIGHTON CO 80601

STUMBAUGH BRYAN 7162 EAGLE SHADOW AVE BRIGHTON CO 80602-6000 TATRO JAMES A AND TATRO DENISE A 11323 E 167TH AVE BRIGHTON CO 80602-7979

SULLIVAN MICHAEL JOHN AND SULLIVAN SANDRA LEE 15573 SYRACUSE WAY THORNTON CO 80602-8171 TAYLOR TAYLOR PAIGE AND TAYLOR JAMES E 15543 QUINCE ST THORNTON CO 80602-8170

SUNDER CECIL 15171 GAYLORD ST THORNTON CO 80602-7471 TENOR TENZIN 15519 QUINCE CIR THORNTON CO THAMMASINE SONEPRASEUTH AND VILAYHONG NUDDA 2188 E 151ST AVE THORNTON CO 80602-7476 TODD CREEK VILLAGE METROPOLITAN DISTRICT 10450 E 159TH CT BRIGHTON CO 80602-7977

THF PRAIRIE CENTER DEVELOPMENT LLC C/O THF REALTY INC 211 N STADIUM BLVD STE 201 COLUMBIA MO 65203-1161 TODD CREEK VILLAGE METROPOLITAN DISTRICT 10450 E 159TH CT BRIGHTON CO 80602-7977

THOMAS JAMES R 13581 SABLE BLVD BRIGHTON CO 80601-7266 TODD CREEK VILLAGE METROPOLITAN DISTRICT 10450 E 159TH CT BRIGHTON CO 80602

THOMAS JOSEPH JEFFREY AND THOMAS KIM TERES 15930 JACKSON STREET BRIGHTON CO 80602 TODD CREEK VILLAGE PARK AND RECREATION DISTRICT 2100 S LINCOLN ST STE 2000 DENVER CO 80210-4409

THOMPSON STEVEN P 5853 E 161ST AVE BRIGHTON CO 80602-7964 TODD CREEK VILLAGE PARK AND RECREATION DISTRICT 1700 N LINCOLN ST STE 2000 DENVER CO 80203-4554

THORNGREN CYNTHIA L 12980 E 136TH AVE BRIGHTON CO 80601-7281 TODD CREEK VILLAGE PARK AND RECREATION DISTRICT 1700 N LINCOLN ST STE 2000 DENVER CO 80203-4554

THORPE REX L AND THORPE C JANE 16284 WILLOW STREET BRIGHTON CO 80602 TODD CREEK VILLAGE PARK AND RECREATION DIST C/O MURRAY DAHL KUECHENMEISTER AND 1700 LINCOLN ST STE 3800 DENVER CO 80203-4538

TIESSEN DAN E AND TIESSEN SHELLEY A 15513 QUINCE CIR THORNTON CO 80602 TORRES MARIA S TORRES EVERARDO L 15101 GAYLORD ST THORNTON CO 80602-7471

TODD CREEK FARMS METRO DIST NO 1 WATER C/O ZIONS FIRST NATIONAL BANK TRUSTEE 717 17TH ST STE 301 DENVER CO 80202-3310

TROSTEL JUSTIN 9065 E 139TH CT BRIGHTON CO 80602-8207

TODD CREEK MEADOWS OWNERS ASSOCIATION INC 8700 TURNPIKE DR STE 230 WESTMINSTER CO 80031-4301 TROSTEL MITCHELL RHONDA AND MITCHELL ROBERT PO BOX 1614 GILLETTE WY 82717-1614 TRUJILLO RICHARD L AND SANCHEZ STEPHANIE 8015 E 139TH PL THORNTON CO 80602-8145 VO THANH AND VO JUDY 11360 E 163RD CT BRIGHTON CO 80602-7578

TRUJILLO STEVEN M AND TRUJILLO MARYBELL C 9115 E 139TH COURT BRIGHTON CO 80602 VOHL MATTHEW 16274 PARIS WAY BRIGHTON CO 80602-8299

TUCCIO JOHN N JR AND TUCCIO YONG S 15151 GAYLORD ST THORNTON CO 80602 VOLKMAN CHISTOPHER J 13896 TAMARAC ST THORNTON CO 80602-8474

TUCKER JAMES A TUCKER MARGARET D 13890 TAMARAC CT THORNTON CO 80602-8437 VUE JAY M AND VUE MARIA CRISTINA G 10130 E 142ND AVE BRIGHTON CO 80602-5773

UHING KENNETH D 13526 KENNEDY AVE BRIGHTON CO 80601-6946 W AND D MC DONALD TRUST 16055 IVANHOE ST BRIGHTON CO 80602-7981

UNITED POWER INC ATTN: PROPERTY TAX DEPT. BRIGHTON CO 80603-8728 WAGNER BERNARD TRUST 1/2 INT AND MAYHEW PHYLLIS K TRUST 1/2 INT 14801 E 144TH AVE BRIGHTON CO 80601-6748

VELEZ RAFAEL A AND VELEZ JEAN MARIE 7878 E 139TH PL THORNTON CO 80602-8141 WAGNER HOWARD F 15543 QUINCE CIR THORNTON CO 80602-8508

VENKATARAMAN BALAJI RANGANATHAN AND BALAJI LAVANYA 15170 GAYLORD ST THORNTON CO 80602-7471 WAGNER KIMBERLY D 9900 E 138TH PL BRIGHTON CO 80602-8213

VILLENEUVE PAULINE 1250 S MONACO PKWY APT 76 DENVER CO 80224-1876 WAGNER RICK LYNN/GARY RON AND WAGNER TERRY DON 8808 BEHRENS MILE ROAD BYERS CO 80103

VIRGIL RICHARD DANIEL 11505 E 162ND DR BRIGHTON CO 80602-7684 WALTER ERIC C AND WALTER KATHERINE A 16135 IVANHOE ST BRIGHTON CO 80602-7982 WANDZEK MICHAEL C AND WANDZEK SATHYA F 16292 POPLAR ST BRIGHTON CO 80602-6076 WEINKAUF JOSHUA J AND WIENKAUF KAARI A 11103 E 163RD CT BRIGHTON CO 80602

WARRINGTON RICHARD R 8201 E 160TH AVENUE BRIGHTON CO 80602 WEINMASTER BRIAN F AND WEINMASTER MARIE 16720 MT WILSON CT BRIGHTON CO 80602

WASTART BRANDON J AND WASTART KRISTEN E 7948 E 139TH PL THORNTON CO 80602-8143 WEINS JOHN AND WEINS LINDA 312 MESA ST BRIGHTON CO 80601-4178

WATERMAN JEFFREY ELDON AND LOWERY-WATERMAN TRISTA RENE 2128 E 151ST AVE THORNTON CO 80602-7476 WELHAM BLAZE G/REBECCA A AND WELHAM ROD G/JEANNE L 13970 DEXTER ST THORNTON CO 80602-7034

WATKINS BILLY J 16300 YOSEMITE ST BRIGHTON CO 80602 WERBACH CYNTHIA 16601 E 136TH AVE BRIGHTON CO 80601-6956

WEBB GEORGE F 14600 E 136TH AVE BRIGHTON CO 80601-6948 WEST ORREN JR AND WEST KRISTINE 7208 EAGLE SHADOW AVE BRIGHTON CO 80602-6000

WEBB PHYLLIS ELLEN TRUST THE 12152 E 168TH AVE BRIGHTON CO 80602-6661 WEWEL PAUL A AND WEWEL DIANNA F 1187 MC INTOSH AVE BROOMFIELD CO 80020

WEBER TIMOTHY D AND WEBER SHARON A 9865 E 138TH PLACE THORNTON CO 80602 WHATTON TREVOR JOSIAH AND WOODS VICTORIA L 15520 QUINCE CIR THORNTON CO 80602-8508

WEEKS-CARD ROBIN DANIELLE AND CARD DANIEL K 16780 LANSING CT BRIGHTON CO 80602-7980 WHITE JAMES R AND MARY D 13880 QUEBEC ST BRIGHTON CO 80602

WEIGEL EDWARD AND WEIGEL SHARON K 13990 BOSTON ST BRIGHTON CO 80602 WHITE LARRY A AND WHITE DIANE C 14050 COUNTRY HILLS DR BRIGHTON CO 80601 WHITE WESLEY A 15113 VINE WAY THORNTON CO 80602-7472 WISOTZKEY RICHARD J AND GREFRATH LISA H 16045 OLIVE ST BRIGHTON CO 80602

WHITT ERIC AND WHITT DIANE 16260 NOME ST BRIGHTON CO 80602-8301 WOLFE TODD D WOLFE LAURA 16291 VERBENA ST BRIGHTON CO 80602-7553

WILDMAN KELLI LYN AND WILDMAN KAREN ELAINE 15132 VINE WAY THORNTON CO 80602-7472 WONG RANDALL E AND GARRIS DIANA L 2069 E 151ST AVE THORNTON CO 80602-7475

WILSON RANDALL AND RAPP CYNTHIA 11177 E 162ND PL BRIGHTON CO 80602-8257 WOOD JERRY D 11880 E 160TH AVE BRIGHTON CO 80602-7437

WINE LEWIS L AND WINE HEATHER C 5862 E 161ST AVE BRIGHTON CO 80602 WOOD MICHAEL R AND WOOD KRISTI L 11097 E 162ND PL BRIGHTON CO 80602-8256

WINSLOW RICHARD S AND WINSLOW MICHELE R 16015 OLIVE ST BRIGHTON CO 80602-6002

WRAY GEORGE H AND WRAY JEANNETTE I 13564 CRYSTAL STREET BRIGHTON CO 80601

WINTERS LAURIE A 15651 MONACO ST BRIGHTON CO 80602 WRIGHT REVA L PO BOX 274 BRIGHTON CO 80601-0274

WISDOM STEPHEN AND WISDOM WHITNEY 7887 E 139TH PL THORNTON CO 80602-8141 XU JINGHANG 8300 E 145TH PL THORNTON CO 80602-5766

WISE EDWARD L JR AND WISE JUDITH M 11120 E 166TH AVE BRIGHTON CO 80602-6614 XU WEN YING AND PHU ANITA AND PHU COONG VAY 16360 PARIS WAY BRIGHTON CO 80602-8298

WISE GERALD AND WISE BONNIE PO BOX 956 BRIGHTON CO 80601-0956 YORE MICHAEL AND YORE MARILYN GUYTON 11163 E 163RD CT BRIGHTON CO 80602-7569 YOUMANS ARDEN A AND YOUMANS BARBARA S 14708 E 135TH AVENUE BRIGHTON CO 80601

ZAMORA MANUEL J AND ZAMORA MARJORIE 15440 JOLIET CT BRIGHTON CO 80602-7447

ZANGANEH ALI 16095 OLIVE ST BRIGHTON CO 80602-6002

ZELLER BENJAMIN CAMPS AND ZELLER AMBER NICOLE 15133 VINE WAY THORNTON CO 80602-7472

ZEMLICKA JASON AND ZEMLICKA REBECCA 11143 E 163RD CT BRIGHTON CO 80602-7569

ZHANG SONG AND XU YILI 16773 POPLAR CT BRIGHTON CO 80602

ZIMMERMAN CARRIE L AND ZIMMERMAN GREGORY W 13516 KENNEDY AVE BRIGHTON CO 80601-6946

ZNIDARCIC LUKA AND ZNIDARCIC JENNIFER JAN 15137 VINE WAY THORNTON CO 80602

CERTIFICATE OF POSTING



I, J. Gregory Barnes do hereby certify that I posted the subject property on July 28, 2020, in accordance with the requirements of the Adams County Development Standards and Regulations.

J. Gregory Barnes