

Introduction

The city of Thornton (Thornton), Colorado is requesting a 1041 permit for the Thornton Water Project (TWP) water pipeline and appurtenant facilities, the siting and development of which has been designated as an area and activity of state interest as authorized by Title 24, Section 65.1-501 of the Colorado Revised Statutes, and Sections 12 and 14 of Part II of the Larimer County Land Use Code (LUC), version September 13, 2017. The matter of state interest, as defined by the LUC, involves the siting and development of a new domestic water transmission line that is contained within new permanent easements greater than 30 feet.

At the Larimer County Land Use hearing on August 1, 2018, on Thornton's 1041 permit Application, the Larimer County Board of County Commissioners (BOCC) continued the hearing until December 17, 2018 to allow Larimer County and Thornton to work with the public to better define and analyze issues and alternatives, mitigate the effects of the project to residents in the area, identify benefits to Larimer County and engage in additional public outreach related to the TWP water pipeline. As a result of the direction of the BOCC, Thornton participated in the Larimer Water Projects Working Group (Working Group) process which was convened by Larimer County staff. During Larimer County's public involvement (Public Involvement) process, Thornton listened to community interests and concerns and gathered ideas about options, maximizing community benefits, minimizing or mitigating negative impacts, and creating efficiencies for the project. As a result of the Public Involvement process and as further discussed below and supplemented herein, Thornton proposes a pipeline route identified as Alternative 3 (Option C) Corridor which is similar to the West 2 alternative route described in the Application, as modified to reflect input received from the Public Involvement process. Thornton Water Project Larimer County 1041 Application Supplement 3 (Supplement 3) provides information on this reasonable siting and design alternative that meets expressed community interests and the purpose and need of the TWP. Information included in this Supplement 3 is to assist the BOCC in their decision-making process on the TWP water pipeline.

Background

Thornton's purpose and need of the TWP is to provide an adequate, reliable source of high quality drinking water to the Thornton community, its families, children, schools, residents, business and the people of the state as a whole who visit or work in Thornton. Water is vital to the ability of any community to thrive and providing safe drinking water is a foremost government responsibility. Thornton purchased WSSC system water in the mid-1980's to enhance Thornton's water supply reliability and drought resiliency, help address source water quality issues, and meet municipal and industrial demands of Thornton's water customers through 2065. Thornton obtained a water court Decree, changing the water rights it purchased so that they could be used for municipal purposes in Thornton. The Decree that Thornton pursued, and was entered, sought to: 1) preserve source water quality to protect public health; 2) provide water supply reliability; 3) protect yield; and 4) protect WSSC, its shareholders and other water users.

On January 5, 2018, the city of Thornton (Thornton) filed its Thornton Water Project Larimer County 1041 Application (Application) for a 1041 permit to construct, operate and maintain a new buried 48-inch domestic water transmission line and associated appurtenances in Larimer County. Thornton requested approval of a corridor alignment as shown in **Figure 2.a-1** of the Application. Due to concerns expressed by Larimer County residents that the corridor approach could impact their homes, trees and other improvements, Larimer County indicated that Thornton should

consider limiting construction to the Larimer County right-of-way (ROW), and encouraged Thornton to review multiple alternatives in the corridor between WSSC Reservoir No. 4 to County Road 9.

After receiving feedback from residents and staff, Thornton reviewed and analyzed ten alternative pipeline alignments and pump station locations between those locations. As a result of this analysis, an alignment identified as South 2 was selected as Thornton's preferred alignment and presented for consideration by Larimer County. See **Application Appendix A**, Technical Memorandum No. 5.1.12.2 *Larimer County Alternative Configurations Analysis-WSSC Reservoir Area to Larimer County Road 9* at p. 5.1.12.2-31 and Figure 5.1.12.2-11. This alignment, which proposed to construct the water pipeline along Douglas Road entirely within the ROW, became commonly known as the "Douglas Road" alignment.

On April 2, 2018, Thornton submitted "Supplemental Additional Information" (SAI) to provide additional technical information and materials requested by Larimer County on the Douglas Road alignment from approximately Bayshore Road to Turnberry Road, as well as additional information on the source water pump station. On April 10, 2018 Thornton submitted a "Supplemental Addendum" (SA) providing additional information and clarification to materials submitted in the SAI requested by Larimer County.

As a part of the Agenda for the Larimer County Planning Commission (Planning Commission) hearing for May 16, 2018, Planning Commission staff provided a Report and recommendation to the Planning Commission on Thornton's 1041 permit Application. Subject to enumerated conditions, Larimer County staff recommended approval of Thornton's 1041 permit Application. On May 16, 2018, Thornton's Application was heard by the Planning Commission. The Planning Commission voted to recommend that the BOCC deny the Application but it did not issue a written decision. The Planning Commission recommendation is not binding on the BOCC.

Thornton provided a legal *Statement in Support of the Thornton Water Project Application* dated June 29, 2018. See **Supplement 3 Appendix E**. The June 29, 2018 statement sets forth Thornton's legal position that the source water pump station is not regulated under Larimer County's 1041 process but without waiving any of its rights, that Thornton would proceed to address the source water pump station as part of its 1041 Application. That statement also set forth Thornton's legal position that consideration of any Cache la Poudre River water delivery option for Thornton's drinking water supply was not within Larimer County's 1041 powers. While Thornton maintains these legal positions, as described in this Supplement 3 Thornton seriously considered, analyzed and evaluated River Delivery Alternatives presented as a part of the Public Involvement process.

On July 31, 2018, Thornton provided a Rebuttal Statement of Legal Points in Support of the Thornton Water Project Application. See **Supplement 3 Appendix F**. The July 31 rebuttal sets forth Thornton's legal positions, among others, that Criterion 10 is not limited to consideration of the benefits only as to Larimer County but must also consider the benefits of the proposal to Thornton as well as to the people of the state of Colorado. Thornton also provided its legal position that Criterion 2 does not include Cache la Poudre River or canal delivery options as reasonable siting and design alternatives for a water pipeline permit process. While Thornton maintains the legal positions set forth in its July 31 rebuttal, as described in this Supplement 3 Thornton seriously considered, analyzed and evaluated River Delivery Alternatives and Canal Delivery Alternatives presented as a part of the Public Involvement process.

Thornton's Application was heard by the BOCC on July 9 and 23, 2018 and August 1, 2018. At the conclusion of the hearing on August 1, 2018 the BOCC moved to "continue the hearing of Thornton's 1041 permit application to 6:30 p.m. on December 17, 2018, to allow county staff and Thornton

time to provide the specific additional information as discussed by the Board of County Commissioners at tonight’s hearing and to direct county staff to involve the public in the information gathering process through public meetings or open houses.”

Working Group and Open Houses

As a result of the BOCC’s direction, Larimer County staff hired Peak Facilitation Group to assist stakeholders, known as the Working Group, to develop shared understanding, identify interests, identify ways to maximize community benefits and minimize or mitigate negative impacts, evaluate ideas against the interests, and submit a report on this work to the BOCC. Thornton was not a member of the Working Group but participated as a resource to the Working Group to assist them in finding ways to maximize community benefits and mitigate impacts from the water pipeline project and provide technical expertise and educational materials for their consideration and evaluation.

Thornton attended all Public Involvement meetings, listened to community interests, suggestions and concerns, and provided information as requested by Larimer County, the facilitator, the Working Group and the public, by answering questions, providing technical memos and a webinar.

Revised Preferred Alignment

The Application sought a permit for construction of the South 2 alternative (Douglas Road) as the preferred alternative. See **Application Appendix A**, Technical Memorandum No. 5.1.12.2 *Larimer County Alternative Configurations Analysis-WSSC Reservoir Area to Larimer County Road 9* at p. 5.1.12.2-31 and Figure 5.1.12.2-11. This is commonly known as the Douglas Road alignment. This alternative was re-analyzed as a part of the Working Group and Public Involvement process and it remains a reasonable siting and design alternative as set forth in the Application, so long as the project is not co-located with the Northern Integrated Supply Project (NISP) pipeline in Douglas Road. It is no longer being put forth as the preferred alternative because the Working Group and the public showed consistent support of co-location of the water pipeline and the NISP pipeline. While co-location of these pipelines in Douglas Road can be done, such a project would significantly impact traffic and increase construction timelines which were identified by the Working Group and the public to be negative impacts.

As part of the Public Involvement process Thornton considered, reviewed, analyzed and provided information to the Working Group and public on five Options evaluated by the Working Group:

- Option A: Canal Conveyance
- Option B: Douglas Road (Alternative in Thornton’s 1041 Application)
- Option C: County Road 56 (Alternative in Thornton’s 1041 application)
- Option D: Poudre River; and
- Option E: Shields Street and Poudre River

Thornton considered, analyzed and evaluated Options A, D and E independently of Thornton’s legal position on whether these suggested options can be considered under 1041 permitting authority.

Thornton then developed six reasonable siting and design alternatives. Of these six, four were presented as part of Thornton’s Application. Four of these six alternatives were also based on Working Group Options B or C or variations thereof.

After vetting these Options and the Alternatives developed by Thornton, Thornton requests approval for the TWP corridor as presented in the Application from County Road 9 to County Road

14 but with a preferred alternative at the beginning of the route for the water pipeline to be installed from the source water pump station on Douglas Road around the west side of WSSC Reservoir No. 4 and meeting up with the NISP pipeline alignment at a point between WSSC Reservoir No. 3 and WSSC Reservoir No. 4. The pipeline would be co-located with the NISP pipeline from this point west to County Road 9, generally in the County Road 56 corridor. See **Figure 2.c-2S**. This alignment was evaluated by the Working Group as a part of Option C and is analyzed in Section 2.c. as the Alternative 3 (Option C) Corridor.

The Alternative 3 (Option C) Corridor is substantially similar to the West 2 Alternative as presented in the Application and shown on **Figure 5.1.12.2-8** of the Alternative Configurations Analysis (**Application Appendix A**). **Figure 2.c-S6** shows a comparison of Alternative 3 (Option C) Corridor and the West 2 Alternative presented in the Application for reference. Modifications to the West 2 Alternative from the Application were made to place the source water pump station closer to Douglas Road and coordinate the alignment with the currently-proposed NISP pipeline between WSSC Reservoir No. 3 and WSSC Reservoir No. 4, and on each side of Highway 1. As such, this Supplement 3 is not a new application but only selects a preferred alignment from the alignments previously presented in the Application as the result of additional information gathered during the Public Involvement process.

The TWP corridor with Alternative 3 (Option C) Corridor best meets what Thornton understood to be important considerations expressed by the Working Group and the public, such as: 1) the opportunity to co-locate with NISP; 2) to minimize traffic/construction duration; and 3) reduce impacts to private property. At the same time, because the public engagement process was designed to consider community interests to the exclusion of Thornton's interests, Thornton also evaluated the alignments and proposed ideas on whether they are or are not reasonable siting and design alternatives to meet the purpose and need of Thornton's drinking water supply project including: 1) preserving source water quality to protect public health; 2) providing water supply reliability; 3) protecting yield; 4) abiding by the water court Decree; 5) protecting WSSC and its shareholders; 6) being fiscally responsible with taxpayer money; and 7) delivering water to Thornton by 2025. Combined with addressing the important considerations that Thornton heard through the public process, the TWP corridor with Alternative 3 (Option C) Corridor is a reasonable siting and design alternative that satisfies Thornton's interests in the purpose and need of the project.

In addition, Thornton heard community concerns that the diesel-powered backup generator associated with the source water pump station as proposed in the Application would be noisy and have emissions detrimental to nearby residents and the community as a whole. In response, Thornton was able to confirm with PVREA that it is possible for PVREA to extend a second, redundant power feed to the source water pump station for emergency backup power; therefore, an emergency diesel powered backup generator will not be required. Accordingly, Thornton proposes as a condition of approval, that it not place a permanent emergency diesel powered backup generator at the source water pump station site.

The Application also included a water tank as an appurtenance to the Application. However after listening to the interests and concerns of the community through the hearing, Working Group process and Open House about the location of the water tank in Larimer County, Thornton has determined not to locate the water tank within Larimer County, and that request is withdrawn from the Application. Relocation of the water tank to outside of Larimer County will not require additional water lines in Larimer County beyond what is already proposed in the Application.

The Application included a ¼-mile wide corridor at the crossing of Interstate 25 (I-25) located approximately ½ mile south of County Road 56. An alternative I-25 crossing location is presented in

this Supplement 3 that locates the crossing generally following County Road 56. The width of the Alternative I-25 Crossing Corridor varies from 40 feet to 500 feet. The water pipeline could be located in either crossing location. The Alternative I-25 Crossing Corridor is considered part of the TWP corridor with Alternative 3 (Option C) Corridor in this Supplement 3. The process to develop a final water pipeline alignment route is iterative, and deviations may occur as a result of negotiations with individual property owners or if detailed land, utility, or resource surveys reveal engineering or environmental constraints. Alternatives to crossing I-25 are presented to provide options for this major road crossing and provides property owners greater flexibility in working with Thornton to develop the final water pipeline alignment.

Benefits to Larimer County

As benefits to Larimer County associated with the water pipeline:

- Emergency Raw Water Interconnects: Thornton is willing to enter into agreements with other municipal water supply agencies in Larimer County to provide an interconnect with the TWP water pipeline to deliver short-term raw water supplies in the case of emergencies such that the raw water supply for those agencies is temporarily impacted due to circumstances such as infrastructure failure.
- Transportation Mitigation and Improvement: As mitigation for impacts to transportation assets affected by TWP construction, as well as providing additional community benefit, Thornton proposes contributing \$1,000,000 to Larimer County for use at its discretion for mitigation of “off-site” impacts of TWP construction on transportation assets, or for transportation improvements that are important to the community.

Additional Benefits to Larimer County

At the August 1, 2018 hearing on Thornton’s 1041 Application, the BOCC made several comments suggesting that Thornton identify broader community benefits as a part of its Application. Thornton has identified broader community benefits that go above and beyond direct mitigation of the pipeline impacts. Because these benefits are not directly related to the pipeline project, Thornton proposes to memorialize these enhanced community benefits in a separate Intergovernmental Agreement (Community Benefits IGA) to be entered into between Larimer County and Thornton upon issuance of a 1041 Permit to Thornton for the TWP corridor with Alternative 3 (Option C) Corridor with terms and conditions as agreed to by Thornton. These enhanced benefits have an estimated value to Larimer County of approximately \$60 million dollars. These enhanced benefits are detailed in **Section 12.b Additional Benefits to Larimer County** and include:

- Thornton commits to continue working with the Colorado Water Conservation Board (CWCB), the Colorado Division of Parks and Wildlife, the Colorado Water Trust, the cities of Fort Collins and Greeley, the Northern Water Conservation District, to establish the legal framework necessary to protect and improve flows in a 50-mile reach of the Cache la Poudre River from the canyon mouth to its confluence with the South Platte River to obtain an Instream Flow Augmentation Plan for the Poudre River (Poudre Flows Augmentation Plan).
- Thornton proposes to dedicate and deliver up to 3,000 acre-feet a year of water to the CWCB for use in the Poudre Flows Augmentation Plan. It would cost about \$45 million dollars to acquire 3,000 acre feet of comparable Cache la Poudre River water on the open market. Thornton will also continue to explore ways that it might voluntarily lease to CWCB additional Cache la Poudre River supplies on a temporary or permanent basis.

- Thornton commits to partnering with the above and other entities, and proposes to contribute \$750,000 toward the study, implementation and evaluation of efforts related to improving Cache la Poudre River connectivity, aquatic and environmental health, and water rights administration.
- Thornton proposes to contribute \$1,000,000 toward establishing a Water Innovation Fund which could be used to fund creative strategies to enhance Cache la Poudre River health and address local water supply challenges.
- Thornton proposes to provide Larimer County with approximately 1.25 miles of 50 foot wide easement across Thornton-owned properties along Boxelder Creek for connectivity of the Boxelder Creek Regional Trail. This easement has an approximate value of \$65,000.
- Thornton commits to coordinating with Larimer County and other local stakeholders to identify the interests of the community with respect to Thornton owned properties in Larimer and Weld Counties and to develop these properties in a manner in which both Thornton's water interests and the communities' vision are preserved.
- As an enhanced community benefit, where legally possible, Thornton will provide Larimer County with 12 strands of fiber-optic cable along the water pipeline from Larimer County to Thornton for Larimer County to use for institutional services or its residents. Access to this fiber is conservatively valued at \$12 million dollars.
- Thornton proposes that as long as Thornton is the fee owner of farms in Larimer County, Thornton pay the assessed valuation of those farms as agricultural property as a voluntary payment in lieu of taxes.

Compliance with 1041 Permit Requirements

Thornton's Application, together with its supplements, including this Supplement 3, details and demonstrates how the TWP corridor with Alternative 3 (Option C) Corridor for its water pipeline project fully complies with Larimer County's 12 review criteria set forth in LUC 14.10.D.