# Colliers Hill Metropolitan District No. 1

Dear Malcolm and Erie Board of Trustee Members,

The Colliers Hill Metropolitan District #1 would like to bring to your attention a matter regarding the Westerly Development on your agenda this evening. In October of 2007, Colliers Hill (then called Bridgewater) was annexed into the Town of Erie. (See attached: Bridgewater Annexation Agreement -Reception #3518317 recorded on 11/19/2007) Prior to that annexation, the landowner, CDGE, had granted a sewer line easement to the Town for a sewer line to serve the proposed Erie High School. CDGE negotiated an agreement with the School District for the School District to construct a sewer line serving Erie High School but large enough to also serve the first phase of Colliers Hill which would also be served by the same sewer line. Upon the first units within Colliers Hill connecting to this sewer line, Colliers Hill Metropolitan District #1 would reimburse the School District for all the excess capacity in this sewer line above that needed for the school needs. At the time of annexation in 2007, this was memorialized in Section I.2.a of the annexation agreement. (See attached: Section 1.2.a of annexation agreement) The clause specifically states "The Owner agrees to reimburse SVVSD \$375,100 for this sewer line at the time of the first connection to this line. The Town agrees that Owner may be due a pro-rata reimbursement from any future developments which utilize this line based on a percentage of capacity utilized by such development from subsequent connections to the line". The Annexation Agreement and the highlighted page pertaining to this issue are attached.

In April of this year, the Colliers Hill Metropolitan District #1 responded to a referral on the Westerly Development pointing out this clause and requesting the Town require a reimbursement based on a sewer utility study. The verbal response received from the Town Engineering was that the clause says "may" and at this time the Town does not see the need to ask the Westerly developer for reimbursement. For a little history lesson, Mark Shapiro, former Erie Town Attorney, used the word "may" in many documents so that if the Town staff missed requiring the reimbursements, the Town was not liable to make the reimbursement itself!

As the President of the Colliers Hill Metropolitan District #1, I respectfully request the Board of Trustees add a condition to the approval for the Westerly Development to reimburse the Colliers Metropolitan District #1 for Westerly's capacity in this sewer line. As part of the Westerly submittal package, there is a Utility Study which includes calculations of sewer capacity for the Colliers Hill line. I have attached the study and a summary of the information by Hurst and Associates. The percentage of capacity used by the Westerly community is 27.6%. Therefore, a reimbursement from Westerly to the Colliers Hill Metropolitan District #1 should be \$103,527.60. For your information, a small portion of Erie Highlands also flows into this sewer line and their reimbursement for their 7.5% should be \$28,132.50. A portion of the State Land Board parcel east of the High School also flows into this sewer line using 22.2% of the capacity and should reimburse Colliers Hill Metropolitan District \$83,272.20.

Nearly every development in Erie has reimbursement amounts to existing sewer lines which were oversized at the time of installation. Some reimbursements go to Districts or landowners who installed the line, and some are paid to the Town for lines installed by the Town. Colliers should not be treated differently nor should the residents within Colliers Hill Metropolitan District #1 be responsible to fund improvements for other adjacent developments.

For the reasons stated above, the Colliers Hill Metropolitan District #1 asks that the Board add a condition for Westerly to reimburse the district \$103,527.60 at time of connection to this sewer line. We also request the Board direct staff to use their best efforts to add the reimbursement requirements to the next commercial plat in Erie Highlands and the annexation agreement of the State Land Board parcel if and when they request annexation.

Sincerely,

Jon Lee

3518317 11/19/2007 04:02P Weld County, CO 1 of 56 R 281.00 D 0.00 Steve Moreno Clerk & Recorder

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## BRIDGEWATER ANNEXATION AGREEMENT

THIS ANNEXATION AGREEMENT ("Agreement") is made and entered into this 9<sup>th</sup> day of October, 2007, by and between Tallgrass Investors, LLC, a Colorado limited liability company and Community Development Group of Erie, Inc., a Colorado corporation, 2500 Arapahoe Avenue, Suite 220, Boulder, Colorado 80302, hereinafter collectively referred to as the "Owner," and the Town of Erie, a municipal corporation of the State of Colorado, hereinafter referred to as "Erie" or "Town".

#### WITNESSETH:

WHEREAS, the Owner desires to annex to Erie the property more particularly described on Exhibit "A," which is attached hereto, incorporated herein, and made a part hereof (such property is hereinafter referred to as "the Property"); and

WHEREAS, Owner has executed a petition to annex the Property ("Annexation Petition"), a copy of which petition is attached hereto as Exhibit "B," and incorporated herein and made a part hereof; and

WHEREAS, it is to the mutual benefit of the parties hereto to enter into the following Agreement; and

WHEREAS, Owner acknowledges that upon annexation, the Property will be subject to all ordinances, resolutions, and other regulations of the Town of Erie, as they may be amended from time to time; and

WHEREAS, Owner acknowledges that the need for conveyances and dedication of certain property, including but not limited to property for streets, rights-of-way and easements, parks and open space, utility facilities and improvements, to Erie as contemplated in this Agreement are directly related to and generated by the development intended to occur within the Property and that no taking thereby will occur requiring any compensation; and

WHEREAS, Owner desires to develop the Property as a master planned residential community, a portion of which is mixed use, and public and private open spaces; and

WHEREAS, the Town desires to have a master planned residential community, a portion of which is mixed use, and the public and private open space opportunities afforded by the development of the Property, and

WHEREAS, The Town and Owner acknowledge that development of a master planned residential community of the scope and quality both desire, and the necessary dedication of property and construction of infrastructure may require the establishment of one or more Metropolitan Districts to serve the Property.



**NOW, THEREFORE,** in consideration of the above premises and the covenants as hereinafter set forth, it is agreed by and between the parties as follows:

I. ANNEXATION AND ZONING. The annexation of the Property shall be in conformance with the Colorado Municipal Annexation Act of 1965, as amended, and with applicable Town of Erie codes.

The Owner desires Estate Residential (ER), Suburban Residential (SR), Low-Density Residential (LR), Medium Density Residential (MR) and Community Mixed-Use (CMU) zoning with a Planned Unit Development Overlay District (PUD). The parties recognize that it is the intent and desire of the Owner to develop the Property in a manner generally consistent with the zoning requested and that the granting of such zoning by the Town of Erie is a condition to annex the Property. Owner shall take all action necessary to permit zoning by the Town of Erie of the annexed area within the time prescribed by state statutes.

- A. Land Use. All residential and commercial construction will be subject to the types and intensities of land use as permitted per this Agreement, the PUD and zoning. Pursuant to the processes outlined in the Title 10, "Unified Development Code and Design Guidelines," of the Town of Erie Municipal Code ("Municipal Code"); in effect on the date hereof, or in effect on the date when building permit applications are filed.
- B. Master Development Plan. Erie and the Owner recognize that property development is subject to market conditions. To assure Erie that the development of the Property proceeds in an orderly manner, Owner may phase the development. A "master development plan" for the Property will be provided during the subdivision process. For each phase, a site specific plan may be submitted to the Erie Planning and Zoning Commission and the Board of Trustees for review and approval. The site specific plan shall be in general conformance with the "master development plan" for the Property, as approved and/or amended by the Board of Trustees.
- II. ANNEXATION MAP FOR PROPERTY. The 2005 Erie Comprehensive Plan encompasses the entire Property. The Comprehensive Plan has been amended by the Town to reflect the land uses for the Property proposed herein. The "Annexation Map" incorporated and adopted as a portion of the ordinance annexing the Property and attached hereto as Exhibit "C" complies with the requirements of C.R.S. 31-12-105 (1)(e).
- III. LAND DEDICATION. The dedication of parks and open space, public easements for utilities, rights-of-way for streets and other public ways and dedications for other public purposes shall be by Special Warranty Deed or appropriate instrument of conveyance acceptable to the Town. Such dedications as may be required by the Town shall occur immediately upon request of the Town except that internal rights-of-way shall be dedicated at the time of subdivision platting, unless the Town specifies another time. The Town and the Owner agree that such dedications are directly related to and generated by development



intended to occur within the Property and that no taking thereby will occur requiring any compensation.

- A. Roads and Utility Easements. The Owner shall dedicate right-of-way for all roads and utility easements to Erie. All utility easements, dedicated to Erie, shall be for the use and the benefit of the various entities furnishing utility services, i.e., electrical, telephone, gas, TV cable, water sewer. The grantor shall retain the right to install and maintain reasonable landscape and hardscape improvements within all right-of-way and utility easements. The grantor shall retain the right to make reasonable requirements for replacement of landscape, grading and hardscape that may be damaged within easements and right-of-way. ALL UTILITIES WILL BE PLACED UNDERGROUND, except for the Public Service Company power distribution lines located along the northern boundary of Section 8 and Section 17.
- IV. AVAILABILITY OF SERVICES. Erie agrees to make available to the Property all of the usual municipal services in accordance with the ordinances and policies of the Town which services include, but are not limited to, police protection and water and sewer services. Owner acknowledges that Town services do not include, as of the date of the execution of this Agreement, fire protection or emergency medical services, but the Property is presently included within the boundaries of and is entitled to receive such services from the Mountain View Fire Protection District.
- WATER SERVICE. Water service to the Property shall be provided by the Town. If the V. Property is not already in the Northern Colorado Water Conservancy District and/or the Municipal Subdistrict, the Owner agrees to include the Property in said District(s) and to the payment of any fees and taxes levied by the District(s) as a condition of said inclusion prior to receiving water service from Erie. In addition, the Owner shall exclude the Property from the Left Hand Water District if the Property is currently within said District prior to receiving water service from Erie. Owner hereby acknowledges its receipt of a copy of Municipal Code, Titles 2 and 8, as amended, concerning Town policy with respect to obtaining water service from the Town, the dedication of water rights to the Town in connection with annexations and the extension of water lines and pumping facilities to the Property. Owner agrees to comply with said Municipal Code, Titles 2 and 8, and with any amendments thereto, including any applicable amendments adopted subsequent to the annexation of the Property. The Town and the Owner agree that such dedications are directly related to and generated by development intended to occur within the Property and that no taking thereby will occur requiring any compensation.
  - A. Extension of Water Services. The extension of water mains or trunk lines shall be in accordance with the Municipal Code, Section 8-1-16. Owner shall install at his sole cost and expense, all the water mains, trunk lines, pumping facilities and appurtenances necessary to provide service from the Town's system to the Property. These extensions may include the over sizing of lines and pumping facilities for future development of adjacent property. Owner shall install at his sole cost and expense, all



the water lines, fire hydrants and appurtenances within the Property. Water lines lying within the dedicated right-of-way shall be dedicated to Erie after construction. Any reimbursements to the Owner for over sizing of water lines will be subject to a separate Development Agreement.

- B. Water Service Availability. This Agreement is a commitment to provide water service to the Property. However, Erie does not warrant the availability of water service to the Owner at a particular time for any phase of development. A determination of water service availability by Erie shall be made by a water system analysis with the first submittal of master plan or preliminary plat, whichever comes first. In the event that the Town determines that it has insufficient water service availability, no water taps shall be issued until such time as there is water service availability, and in addition, the vested rights period indicated in Section R.1., shall be extended for the period of time elapsed until such time as water service and water taps in sufficient quantity to issue a minimum of 300 taps per year are deemed available by the Town.
- C. Water Tap Fees and Water Dedication Fees. Water tap and dedication fees shall be the existing Town water tap and dedication fees at the time which the applicant requests or is required to obtain a water tap. Water tap and dedication fees shall be paid when a building permit for a structure is requested from the Town.
- D. Water Rights Dedication. Owner represents to the Town, to the current knowledge of Owner that the tributary and non-tributary water rights listed on Exhibit "D", attached hereto and incorporated herein by this reference, constitute all of the water rights appurtenant to the subject property. In accordance with the Municipal Code, Title 8, as amended, and existing Town policy, the Town shall have the right to purchase historical surface water rights from the land at fair market value. The purchase may be delayed until the Owner is ready to sell to Developer. In addition, the Owner shall convey to the Town at the time of annexation all non-tributary and not non-tributary groundwater underlying the land to be served. Said ground water shall be in addition to any water dedication hereunder, and no credit shall be given to said water for dedication purposes in accordance with Erie Municipal Code. Transfer of said water rights shall be accomplished prior to the recording of the annexation with the County Clerk and Recorder.
- VI. SEWER SERVICE. Sewer service to the Property shall be provided by the Town, The Owner agrees to connect Owner's Individual Sewage Disposal System to sanitary sewer at Owner's expense when such sewer service comes to the boundary of the particular portion of the Property utilizing such septic system. The Owner shall record a disclosure with all lots sold verifying that it shall be the responsibility of the fee title owner of the land to bear the cost of extending Town sewer lines to the Property, should the State of Colorado or any other governmental agency require Town sewer service to be provided to this property.



Owner hereby acknowledges receipt of a copy of the Municipal Code, Title 8, concerning Town policy with respect to obtaining sewer service from the Town and the extension of sewer lines to the Property. Owner agrees to comply with the Municipal Code, Title 8 and with any amendments thereto, including any applicable amendments adopted subsequent to the annexation of the subject Property. The Town and the Owner agree that dedications required by the Municipal Code, Title 8 are directly related to and generated by development intended to occur within the Property and that no taking thereby will occur requiring any compensation.

- A. Extension of Sewer Services. The extension of sewer mains or trunk lines shall be in accordance with the Municipal Code, Title 8. Owner shall install at his sole cost and expense, all the sewer mains, trunk lines, sewer lift stations, and appurtenant facilities necessary to connect to the Town's system. These line extensions may include the oversizing of lines for future development of adjacent property. Owner shall install at his sole cost and expense, all the sewer lines and appurtenances within the Property. Sewer lines lying within dedicated rights-of-way shall be dedicated to Erie after construction. Any reimbursements to the Owner for over sizing of sewer lines, sewer lift stations and appurtenant facilities will be subject to a separate Development Agreement.
- B. Sewer Service Availability. Erie does not warrant the availability of sewer service to the Owner for any phase of development. A determination of sewer service availability by Erie shall be made by a sewer system analysis at the time of the first submittal of a master plan or preliminary plat, whichever comes first. In the event that the Town determines that it has insufficient sewer service availability, no sewer taps shall be issued until such time as there is sewer service availability, and in addition, the vested rights period indicated in Section XI.Q.1. shall be extended for the period of time elapsed until such time as sewer service and sewer taps of sufficient quantity to issue a minimum of 300 taps annually are deemed available by the Town.
- C. Sewer Tap Fees. Sewer tap fees shall be the existing Town fees at the time which applicant requests or is required to obtain a sewer tap. Sewer tap fees shall be paid when a building permit for a structure is requested from the Town.
- VII. STREETS, TRAILS AND PUBLIC RIGHTS-OF-WAY. All public streets shall be constructed to Town standards or as approved in this document or the PUD. Trails shall be constructed as an integral feature of the development, in accordance with Town construction standards. All public streets, trails and rights-of-way shall be dedicated to Erie. Owner will install, at Owner's expense, street name signs, striping, stop signs, speed limit and other signs on all streets, in accordance with the Model Traffic Code, as from time to time amended, and other applicable legal requirements. The total cost of street light installation shall be the Owner's obligation. The type of street lights shall be chosen by Owner, with approval from Erie, which approval shall not be unreasonably withheld. Owner shall provide a two (2) year guarantee for all improvements from the time of final acceptance to Erie.



- VIII. CONFORMANCE WITH TOWN REGULATIONS. Owner agrees that the design, improvement, construction, development, and use of the Property shall be in conformance with all Town ordinances and resolutions, the Municipal Code, Title 10, the approved PUD on the Property and the Town's "Standards and Specifications for Design and Construction of Public Improvements" including, without limitation, those pertaining to subdivision, zoning, streets, storm drainage, utilities, flood control, and parks.
- PUBLIC IMPROVEMENTS. Owner agrees to design, construct and install in accordance IX. with Town approved plans, certain public improvements including but not limited to streets, curb, gutter, sidewalks, storm sewer lines, storm drainage improvements, sanitary sewer lines, water lines, trails and park improvements within or adjacent to the Property. Owner agrees to guarantee construction of all required improvements, and, if requested by Erie, to dedicate to Erie any or all other required improvements. Said guarantee may be in cash or a letter of credit in form and substance approved by the Town. Town and Owner will together consider concepts consistent with the guarantee requirements of the Municipal Code, which would allow one or more Metropolitan District(s) to be formed for the Property to provide the improvement guarantees associated with the improvements to be constructed upon the Property. However, in no event shall the value of the cash or letter of credit be less than the current estimated value of the public improvement to be built. Town and Owner agree to enter into an agreement pertaining to such improvements and other matters prior to any development of the Property. The construction of public improvements shall be subject to any reimbursement which may be provided for in the Subdivision Development Agreement. The Town agrees to reduce the guarantees for public improvements on a phased basis at such time as the public improvements in any phase have received initial acceptance as described in the Development Agreements. Letters of Credit shall be in the form as set forth in Exhibit G," attached hereto and incorporated herein by this reference.
- X. EXCLUSIVITY OF ANNEXATION PETITION. Owner agrees to not sign any other petition for annexation of the Property or any petition for an annexation election relating to the Property, except upon request of Erie.
- XI. SPECIAL PROVISIONS. Where applicable the following special provisions amend and supersede any previous provisions regarding the same subject matter.
  - A. PUD. Concurrent with this Annexation, the Town's Board of Trustees has approved the PUD (the "Approved PUD"). In the event there is any discrepancy between the Approved PUD, the Municipal Code, Title 10, and/or the "Standards and Specifications for Design and Construction of Public Improvements," the provisions of the Approved PUD shall govern. Any provisions that are not specifically addressed in the Approved PUD, shall be comply with the Municipal Code, Title 10 and/or "Standards and Specifications for Design and Construction of Public Improvements."



## B. Development Phasing/Processing.

- **Processing.** Within ninety (90) days subsequent to the annexation and zoning 1. of the Property, including approval of the PUD and approval of the Metro District, Owner shall submit and process a Sketch Plan and within 120 days subsequent to Owner's receipt of formal review comments from Town Staff and the Planning Commission on the Sketch Plan, Owner shall submit and process a Preliminary Plat to the Town for one or more of the planning areas identified on the Approved PUD which shall be processed in accordance with the Municipal Code, Title 10, and shall be in general conformance with the Approved PUD. Upon approval of the Preliminary Plat, Owner shall submit and process one or more Final Plats in accordance with the Municipal Code, Title 10, which shall be in general conformance with both the Approved PUD and the approved Preliminary Plat. Nothing in this section shall preclude Owner from processing a Master or Preliminary Plat for the Property in order to divide the Property into saleable development parcels and/or to dedicate major roadways and/or open space to the Town in compliance with Municipal Code requirements.
- 2. Year. The term Year is used throughout this document. Year 1 shall refer to the calendar year in which the first home building permits for the Property are issued by the Town or 36 months from the Effective Date of this Annexation, whichever occurs first. The Effective Date shall be the date the annexation ordinance annexing the Property becomes effective ("Effective Date"). However, if this approval occurs in the last four months of a calendar year, then Year 1 shall refer to the subsequent calendar year. Year 2, 3..... 5, etc. refers to successive calendar years. All deadlines associated with a specific Year shall fall on December 31 of that calendar year.
- 3. Phasing. The map included as Exhibit "E," attached hereto, delineates three phases for the development of the Property. The improvements in Phase 1 are anticipated to be completed by Year 5, Phase 2 by Year 10 and Phase 3 by Year 15. In the event that the Town is unable to issue water or sewer taps due to insufficient availability, these phase benchmarks shall be extended by a period of time equal to that of any inability of the Town to issue water or sewer taps in sufficient quantity to issue the required water or sewer taps in any Year.
- C. Density. Owner acknowledges that the maximum number of residential units that may be constructed on the Property is two thousand eight hundred eighty (2,880) units which shall be platted and constructed on the Property in accordance with Municipal Code, Title 10 and the Approved PUD. In addition, Owner agrees that approximately four hundred (400) townhouse or multi-family units will be platted and constructed on the Property. Such multi-family units may include one or more of the



following housing types, as defined in the Municipal Code, Title 10: Stacked Triplex/Quad-plex, Duplex, Manor Home, Apartment and /or Live/Work Units.

- **D. Off-Site Improvements.** The specific off-site improvements to be constructed by the Metropolitan District(s) are set forth in Exhibit "F," attached hereto.
- Cemetery. Owner shall provide a maximum one hundred and fifty (150) foot native E. landscape buffer on the north and south sides of the cemetery along WCR 3, extending out diagonally to the north and south to points which satisfy the requirement to provide equal area per the Comprehensive Plan designation of the open space area north of the cemetery. Said buffer, when combined with the cemetery shall meet the minimum three hundred (300) foot open space width requirement and shall be credited as open space for the Property. Owner shall be responsible for the removal of debris, grading, installation of native landscaping, mutually agreed upon fencing, signage and irrigation improvements within such buffer ("Cemetery Improvements"). The Town shall be responsible for obtaining all water rights and water taps for irrigation within the cemetery and the Owner shall be responsible for obtaining all water rights for the cemetery buffer described above. Owner has no obligation to maintain the cemetery, the cemetery buffer, and the Cemetery Improvements after final construction acceptance of improvements have been granted by the Town.
- F. Oil and Gas Well Sites. All existing oil and gas well sites/facilities and all future oil and gas well site/facilities on the Property shall be screened and integrated into open space and park areas within the Property in accordance with Municipal Code, Title 10. The setback to any occupied building as measured from existing or proposed wells, tanks, separators and/or combustors shall be in accordance with Title 10 of the Municipal Code. The 350-foot setback requirements may be reduced to 250-feet in the event the Owner complies with the setback reduction procedures provided in Title 10 of the Municipal Code.
- G. Waterline Installation and Oversizing. In the event that any water lines or facilities are oversized to serve other properties (the "Benefited Properties"), the Town agrees to enter into one or more reimbursement agreements with the owners of such other Benefited Properties causing such owners to reimburse any incremental costs to the Owner prior to granting any land use approvals for development of the Benefited Property owners at such time as the first final plat is approved for the benefit of the Benefited Property. "Oversizing" shall mean any requirement by the Town to install a waterline, which is greater than twelve inches (12") or required by the development. "Incremental Costs" shall mean the cost difference of pipe and any related water system improvements. Nothing contained in this Agreement shall operate to create an obligation on the part of Erie to pay or reimburse any costs to Owner in the event such costs are not recovered by Erie as contemplated herein, for any reason, from the



Benefited Properties or Benefited Property owners that use the utilities or public improvements.

- 1. Installation Obligations. Owner shall install, at its sole cost and expense, all the waterlines, pump stations, fire hydrants and other related facilities within the Property subject to the oversizing and reimbursement contributions as provided for herein. Waterlines lying within the dedicated rights-of-way or Town accepted easements shall be dedicated to the Town upon the Town's construction acceptance thereof.
  - a. BridgeWater Transmission Main. The Owner shall install segments of an 18-inch water main and related water system improvements from Leon A Wurl Parkway north to approximately Weld County Road 10 as required by the Public Works Director (the "BridgeWater Transmission Main"). Each segment shall be constructed generally at the same time as the residential development that abuts that segment of the BridgeWater Transmission Line. The costs of the BridgeWater Transmission line are not reimbursable to Owner. The BridgeWater Transmission Line will be utilized as an integral part of the water distribution network within the Property, and nothing will preclude the Owner from connecting with this line as necessary throughout the Property to accommodate development.
- Parkway right-of-way, which Owner will connect to in order to serve the first phase of development on the Property. A second waterline within the Property shall be constructed to loop the water system to the existing water line in Leon A. Wurl Parkway as described above and shown in Exhibit "F" prior to the issuance of the first certificate of occupancy on the Property. The sizing of the waterlines will be determined based on the results of a water demand analysis, which is required to be submitted by Owner and accepted by the Town with the first Preliminary Plat for the Property.
- 3. Future Off-Site Waterline Improvements. Owner will design a 1.5 million gallon water storage tank (the "Zone 3 Tank") at the Town's existing tank site. Owner shall submit construction drawings for the Zone 3 Tank by Year 1. In consideration for Owner funding the sewer line as set forth in Section XI.I.2.b.the Owner will not be responsible for any construction costs associated with this tank, estimated to be \$2,500,000, or other offsite water infrastructure.
- 4. Weld County Road 5 Water Line. Owner agrees to reimburse \$47,134 to the St. Vrain Valley School District for its pro-rata share of the water line improvements constructed by the St. Vrain Valley School District, concurrent



with the recordation of the first final plat along WC5.

- **H.** Non-Potable Water. The Town and Owner desire to utilize non-potable or raw water for the irrigation of parks, open space, and major street rights-of-ways.
  - 1. Irrigated Areas. Owner shall construct and utilize a non-potable irrigation system within the Property which shall serve, but not be limited to, parks, open space, and arterial rights-of-way. Potable water shall be used for the irrigation of residential lots and individual pocket parks which are less than one acre in size if they are not part of a larger open space or park area. The Owner shall be required to dedicate only those water shares described below for the sodded areas, shrub areas, trees, and flower beds which will be shown on the non-potable irrigation plan. All native, drought tolerant landscaped areas shall be established utilizing leased raw water. The total estimated demand is up to 120 acre feet per year of water. The Town shall convey to Owner permanent reuse water credit of no less than 120 acre feet upon receipt of the letter of credit described below. For the above consideration of use of the non-potable system, the Owner shall construct a 12-inch re-use line from the North Waste Water Treatment Plant to the Property. Owner shall pay the Town \$1,000,000 at such time as the Town has awarded a contract to construct a re-use water reservoir for at least 120 acre feet of storage. The Owner will provide a \$1,000,000 letter of credit in form and substance approved by the Town upon the Town's approval of the first final plat for the Property. Town and Owner will together consider concepts consistent with the guarantee requirements of the Municipal Code, which would allow the Metropolitan District to be formed for the Property to provide the improvement guarantees associated with the improvements to be constructed upon the Property. Letters of Credit shall be in the form as set forth in Exhibit "G," attached hereto and incorporated herein by this reference.
  - 2. Non-Potable Irrigation Plan. Owner shall submit to the Town a non-potable irrigation plan ("Non-Potable Irrigation Plan") with each Final Plat, which shall identify the areas to be irrigated with the non-potable irrigation system, the types of vegetation to be irrigated and the facilities and control devices necessary to provide and control such water. The Town will accept dedication of water rights for raw water irrigation upon the Town's written approval of the Non-Potable Irrigation Plan.
  - 3. Non-Potable Water Sources. Water to be used for irrigation may include the following sources, subject to the terms and limitations within this Agreement. Any raw water acquired by the Owner shall reduce the Owner's obligation to purchase, and the Town's obligation to reserve, re-use water.

- a. Leyner-Cottonwood Consolidated Ditch Company shares ("Leyner-Cottonwood"). This water source shall be used as a supplement to raw CBT water and the Town's re-use water system. For purposes of this Agreement, Owner shall receive a credit of 0.21 acre feet per share of Leyner-Cottonwood, which is the dry year yield of said shares.
- b. Erie Coal Creek Reservoir and Ditch Company shares ("ECC"). This water source shall be used as a supplement to raw CBT water and the Town's re-use water system. For purposes of this Agreement, Owner shall receive a credit of 0.56 acre feet per share, which is the dry year yield of said shares.
- c. Other Native Water. Lower Boulder, Community Ditch, FRICO or other native waters may be dedicated for the irrigation of sodded areas or as temporary irrigation for the establishment of native seeded areas. The associated yield for these waters shall be determined prior to dedication.
- d. Re-use Water. The Town will have reusable consumptive use credits available at the Town's wastewater treatment plant in the future. When re-use credits become available, they shall be made available to Owner at a cost of the re-use water dedication fee at the time which the applicant requests the re-use water tap. Owner shall construct, as on-site development requires, the entire re-use water line as shown on Exhibit "F."
- e. Potable Water. Owner shall use potable water for the irrigation of individual pocket parks which are less than one acre in size that are not part of a larger open space or park area, any areas which cannot be connected to the non-potable irrigation system in a cost effective manner and/or as a supplement to the non-potable water sources set forth above. The Owner shall pay water dedication fees for potable water used for irrigation in accordance with the Town's water dedication ordinance.
- f. Raw CBT Units. In the event the water sources discussed above are not available, raw CBT water for both establishment and temporary irrigation shall be leased by Town to Owner at the non-potable water rate in effect at the time of use for a period not to exceed two (2) years. Owner can elect to dedicate CBT Units to the Town, in which case raw CBT water for permanent irrigation will be made available in an amount of 0.5 acre feet/CBT Unit at the non-potable water rate in effect at the time of use. The raw CBT units shall be conveyed to the



Property from the Town's water treatment plant through the Leyner-Cottonwood Ditch and Erie Coal Creek Ditch conveyance system as shown on Exhibit "F," attached hereto and incorporated by reference herein.

- **4. Water Dedications.** Any water shares conveyed by Owner to the Town as described above shall be conveyed by Special Warranty Deed, with an endorsement of the original share certificate and a stock assignment satisfactory to the applicable ditch company. Owner also hereby agrees to execute any additional documentation which may be necessary for transfer of said water rights.
- 5. Water Court Proceedings. The parties recognize that water court proceedings may be required for use of the raw water sources set forth above. The Town and Owner agree to cooperate in an effort to use the non-potable water sources in a manner which will not require water court proceedings. However, should water court proceedings be required, Owner shall be responsible for all costs of said proceedings and the credits for the Leyner-Cottonwood and ECC shares set forth above shall be reduced if the water court determines otherwise.
- 6. State Engineer and Ditch Company Approvals. Owner shall be solely responsible for acquiring all necessary approvals from the Office of the State Engineer and the ditch companies for use of Leyner-Cottonwood and ECC shares on the Property. The Town will cooperate with Owner in acquiring said approvals, at no cost to the Town.
- 7. Phased Acquisition of Water Rights. The parties agree that the acquisition of water rights for non-potable irrigation may be acquired on an as-needed basis for irrigation within the Property.
- 8. Irrigation Water Availability. In the event that re-use water is not available when the Property is constructed, the Town will supply potable water in lieu of non-potable water for the Property as shown on Exhibit "F."
- 9. Re-use Water Rates. The parties recognize that the Town will charge re-use water rates for raw water used on the Property in accordance with the Town's water fee ordinance.
- I. Sewer Installation and Oversizing. In the event that any sewer lines or facilities within the Property are oversized to serve other properties (the "Sewer Benefited Properties"), the Town agrees to enter into one or more reimbursement agreements with the owners of such Sewer Benefited Properties causing such owners to reimburse any incremental costs to Owner prior to granting any land use approval for



development of the Sewer Benefited Properties. The reimbursements shall be required to be paid by the Sewer Benefited Properties owners at such time as the first final plat is approved for the benefit of the Sewer Benefited Properties. "Oversizing" shall mean any requirement by the Town to install a sewer line which is greater than that which would otherwise be required to serve only the Property. "Incremental Costs" shall mean the cost difference of pipe and related facility oversizing. Nothing contained in this Agreement shall operate to create an obligation on the part of Erie to pay or reimburse any costs to Owner in the event such costs are not recovered by Erie as contemplated herein, for any reason, from the Sewer Benefited Properties or Sewer Benefited Property owners.

- 1. Installation Obligations. Owner shall install, at its sole cost and expense, all the sewer lines and appurtenances located within the boundaries of the Property, subject to the oversizing and reimbursements provided for herein. Sewer lines lying within dedicated rights-of-way or Town approved easements shall be dedicated to the Town upon the Town's construction acceptance thereof.
- 2. Off-Site. The sewer lines will be sized to provide service to the entire sewer basin. The Town agrees to enter into one or more reimbursement and service agreements with Owner and the owners of other Sewer Benefited Properties in the basin causing such owners to reimburse any incremental costs to Owner or such other entity as may construct the sewer line serving all such Sewer Benefited Properties. Based on sewer capacity, any reimbursement payments described above shall be made at the time of construction of the sewer line or at such time as the first connection is made to the sewer line if such connection is made after the sewer line has been constructed. The off-site sewer lines to be constructed with the development of the Property as described above are shown on the preliminary utility plan submitted with this annexation and outlined in Exhibit "F."
  - a. Erie High School Sewer Extension. The St. Vrain Valley School District ("SVVSD") has constructed an "A" line through the Property within an easement granted by Owner to serve the Erie High School. This line is sized to accommodate all of the Property that drains to this line. The Owner agrees to reimburse SVVSD \$375,100 for this sewer line at the time of the first connection to this line. The Town agrees that Owner may be due a pro-rata reimbursement from any future developments which utilize this line based on a percentage of capacity utilized by such development from subsequent connections to the line. The Town has no obligation to reimburse or pursue reimbursement.
  - b. BridgeWater Sewer Line Extension. Owner agrees to install the entire on-site and off-site northern sewer gathering line for the



Property ("BridgeWater Sewer Line Extension") as shown on Exhibit "F" to the point of connection to the Town's sewer line extension from the existing sewer plant to the proposed sewer plant north of State Highway 52, as designated in the Town's Master Plan, unless portions of such line have been constructed by other property owners. The Town agrees to aid in obtaining all easements and/or right-of-way that may be necessary for constructing such line. In such event, Owner shall reimburse such other property owners for its portion, as based on a percentage of capacity utilized by the development, of the sewer line. Owner shall commence construction of the BridgeWater Sewer Line Extension concurrently with the development of that portion of the Property which will drain to such sewer line, but not prior to Town approval of all plats for areas that will drain to such sewer line.

- c. Coal Creek Connection Fees. Owner will reimburse the Town for connection to the existing 30-inch sewer line in Coal Creek at the rate of \$55 per single family equivalent at the time of each final plat for units which connect to this sewer line.
- North Water Reclamation Facility (NWRF) Interceptor. The Owner 3. acknowledges that the North Water Reclamation Facility and the NWRF Interceptor services the BridgeWater development as shown in the Town of Erie 2006 Water and Wastewater Master Plan. In consideration for the Town providing to Owner favorable terms as set forth in Section XI.G.3 (water tank), Section XI.O (vesting rights) Section XI.R (permit allocation), Section XII.D (Leon A. Wurl Parkway bridge). Owner shall be responsible to provide the off site improvement cost for a 12-inch sewer line to the NWRF site. The actual sewer line to be installed by the Town will be a 36-inch line; however the Owner shall only be responsible to pay the cost of a 12-inch sewer line. The Town will prepare the designs, bids, and construct the actual 36-inch sewer line. The Owner will pay the Town the actual costs of a 12-inch sewer line, appurtenances and proportional share of the engineering and construction management costs, based upon the awarded contract unit bid prices. This cost will be paid by Owner to Town at the time of the issuance of the first building permit on the Property. The Town will require the bid to include unit costs for a 12-inch sewer line and appurtenances from the NWRF influent line to the Kenosha Farm's subdivision. The Owner will provide \$500,000 letter of credit at the end of the bid process, and a letter of credit for the balance of the actual costs of a 12-inch sewer line based upon the awarded contract unit bid prices at the end of Year 1 or final plat, whichever is sooner. Town and Owner will together consider concepts consistent with the guarantee requirements of the Municipal Code, which would allow the Metropolitan District to be formed for the Property to provide the improvement guarantees



associated with the improvements to be constructed upon the Property. Letters of Credit shall be in the form as set forth in Exhibit "G," attached hereto and incorporated herein by this reference.

## J. Storm Drainage Improvements.

- 1. Criteria and Standards. Owner shall meet all Town design criteria for drainage improvements within the Property, and as noted in the Town of Erie's Weld County OSP, which improvements shall be set forth in a Phase 2 Drainage Report and Plan to be submitted and approved with the Preliminary Plat. Such storm drainage improvements are generally set forth in Exhibit "F" attached hereto.
- 2. On-Site. In the event that drainage facilities within the Property are regional facilities from those shown on the final drainage plans and oversized, the Town agrees to enter into one or more reimbursement agreements with the owners of other properties benefiting from such oversizing, which shall allow Owner to be reimbursed for the incremental oversizing costs paid by Owner. "Oversizing" for drainage purposes shall mean any requirement by the Town for any channel or other drainage facility within the Property to be a size greater than the size required to serve the Property. The Town will not include in the reimbursement the cost to convey historic flows through the Property.
- 3. Drainage Facilities. Subject to the Town's approval, the Property will contain several water quality and stormwater detention areas, which Owner intends to incorporate within the open space and parks on the Property. This detention will ultimately release into the regional drainage basins in the area. Owner agrees that it will incorporate open, grass-lined channels where appropriate in place of concrete channels or underground piping. In the event the Town requires Owner to oversize any drainage improvements to accommodate development of other properties, the Town shall enter into reimbursement agreements for such other properties requiring that they reimburse Owner for their pro-rata share of such oversizing costs. The Town will not include in the reimbursement the cost to convey historic flows through the Property.
- 4. Off-Site Drainage Improvements. The Owner shall release drainage from the Property at historic rates which shall be mitigated prior to release from the Property. The Owner will provide a solution acceptable to the Town to return all discharges (all events, flood peaks, and volumes) to mimic existing hydrologic conditions or to safely channel flows to Coal Creek, such that all drainage meets historic rates.

- 5. Drainage Liability. The Owner shall indemnify and hold harmless the Town for any liability the latter may have on account of any change in the nature, direction, quantity and/or quality of historical drainage flow resulting from the development of this Property or from the construction of streets or storm sewers therein. In addition, the Owner promises to reimburse the Town for any and all costs including, but not limited to, reasonable attorney's fees, which the Town incurs in acquiring or condemning rights-of-way or easements which the Town is required to acquire or condemn or which the Town is held to have acquired or condemned, for drainage as a result of the development of this Property.
- K. Off-Site Easements and Rights-of-Way. In the event Owner is unable to obtain off-site easements and rights-of-way which are necessary for the installation of raw water services, sanitary sewer services, storm drainage outfalls and roadways to serve the Property, the Town agrees to assist Owner in obtaining such easements and rights-of-way.
- L. Districts. The Town acknowledges that the Owner intends to establish one or more metropolitan districts to service the Property ("Metro District") for the purpose of financing, constructing, installing, acquiring and maintaining certain public improvements required for the development of the Property. The Metro District can acquire property with its eminent domain powers with prior written permission of the Town. Any requirement of the Owner in this Agreement, including but not limited to, the construction of improvements, reimbursement for improvements, letters of credit and the payment of fees, may be undertaken by the Metro District, at the Owner's discretion, provided only that such activity is in accordance with the Municipal Code and a lawful activity of a special district under C.R.S. 32-1-101 et seq. Any reimbursements described herein for such improvements shall be payable to the entity who constructed such improvements.
  - 1. Establishment. Owner will submit, within forty-five (45) days following the Property's annexation, a Consolidated Service Plan for the Property to the Town for consideration pursuant to C.R.S. 32-1-101, et seq. The Town shall schedule a Board of Trustees hearing within forty-five (45) days of the submitted Consolidated Service Plan. The Metro District will follow the Town's Ordinance regarding metropolitan districts.
- M. Schools. The Owner acknowledges and agrees to comply with the Intergovernmental Agreement dated August 13, 1998 between the Town of Erie and the SVVSD, as the same may be amended from time to time.
  - 1. Middle School Site. The Owner agrees to pay for the purchase of the 25-acre State Land Board parcel, to be used for a middle school site. The SVVSD has a cash-in-lieu account for fees collected in the Town of Erie. The



Owner's obligation to fund the middle school site shall be reduced by any dollars available in this cash-in-lieu account set aside by the SVVSD to assist in the purchase of a middle school site. The State Land Board parcel is located adjacent to the Erie High School. The purchase price for the State Land Board parcel shall be that price determined by the State Land Board's statutory procedure for the sale of state lands and as agreed to by the School District. The purchase price is based upon an appraisal by the State Land Board of the fair market value. Owner shall establish an escrow account once the purchase price has been determined, which shall be payable to the SVVSD upon closing of the State Land Board parcel. If such purchase price has not been determined prior to the recording of the first final plat immediately adjacent to the middle school site (across WCR 5) for the Property, the amount of the escrow shall be funded at no less than an estimated amount of \$500,000 and prior to recording of the first final plat for the property immediately adjacent to the middle school site (across WCR 5).

- 2. Elementary School Site. Owner also agrees to dedicate and deed to the SVVSD the 10-acre parcel for an elementary school site in conformance with the terms and conditions of the Intergovernmental Agreement between the Town of Erie and the SVVSD. Dedication of the 10-acre school site shall occur when the property immediately adjacent to the school site at Bridgewater is platted. Any remaining acreage, if any, owed by Owner based on the total number of dwelling units will be made up with cash-in-lieu payments.
- 3. School Cash-In-Lieu. The dedication of the 35 acres identified above will create an equivalent number of dwelling unit credits for the Owner for which no cash-in-lieu payment will be required.

#### N. Public and Private Land Provisions.

- 1. Private Amenity Facilities. Owner may construct one or more private amenity facilities on the Property. These facilities may include pools, clubhouses, a recreation center, parking lots, landscaping, etc., to be determined at the Owner's discretion at the time of Preliminary Plat. These facilities and related improvements shall be owned and maintained by the Metro District or a Homeowner's Association.
- 2. Parks and Open Space. The park and open space land dedications required in Municipal Code, Title 10 will be met by the Owner as shown on the Approved PUD based on a total of 2,880 total residential units. The Town shall not withhold the issuance of building permits adjacent to any parks or open space as long as the surety or Metro District funding is in place for any improvements within such parks or open space. All parks and open space



costs discussed in this Section shall escalate according to the ENR Construction Cost Index which escalation shall start upon recordation of this Agreement. The Town shall own and maintain all open space, neighborhood park and community park lands. Pocket Parks shall be owned and maintained by the Metro District. Owner shall receive parks and open space credit for permanent water bodies, raw water storage ponds, detention ponds and water quality ponds as long as the ponds are organically graded into the adjacent park or open space and comply with Municipal Code, Title 10.

- a. Pocket Parks. Pocket Parks will be dedicated and constructed on the Property in accordance with the Approved PUD. The improvements required for each Pocket Park will be determined at the time of Preliminary Plat for the area of the Property in which each Pocket Park is located. The cost of each Pocket Park shall not exceed \$175,000 including all active and passive improvements, landscaping and hardscape but shall not include design fees, water tap and water right acquisition fees.
- b. Neighborhood Parks. Neighborhood Parks will be dedicated and constructed on the Property in accordance with the Approved PUD and Municipal Code, Title 10. Each Neighborhood Park will consist of a maximum of three (3) acres of irrigated blue grass sod play fields and one (1) Pocket Park equivalent as described above. The remaining acreage shall contain native passive park improvements. Additional amenities within each Neighborhood Park shall be added at the Owner's discretion but shall not be required by the Town. Any water storage and drainage facilities within the Neighborhood Parks will be integrally designed in such park in accordance with Municipal Code, Title 10.
- c. Community Park. One Community Park will be dedicated and constructed on the Property in accordance with the Approved PUD and Municipal Code, Title 10. The improvements required for the Community Park will be determined at the time of Preliminary Plat for the area of the Property in which the Community Park is located, but shall be nine (9) acres of grass play area and active and passive park improvements not exceed \$2,700,000 which may be distributed throughout the Community Park. The remaining acreage shall contain native passive park improvements. Any water storage and drainage facilities within the Community Park will be integrally designed in such park in accordance with Municipal Code, Title 10.



### d. Open Space

- i. Open Space. Open Space shall be dedicated in accordance with the Approved PUD and Municipal Code, Title 10. The improvements which Owner agrees to construct shall be limited to a ten (10) foot wide regional trail at a location to be determined by the Town, trees on drip irrigation, reseeding of disturbed areas with temporary irrigation required for establishment of the seed only, an overlook and two (2) paved trail head parking areas, each consisting of not more than twenty (20) parking stalls, at locations to be determined by the Town. Leased CBT Units shall be used for such temporary irrigation as set forth above. The Owner shall not be obligated to construct a connection to the regional Coal Creek trail or any associated crossing of the existing railroad right-of-way. The remainder of the Open Space shall be left in its native, undisturbed condition. Owner shall not be required to construct any active playfields or parks within the Open Space unless mutually agreed upon. Any water storage, drainage facilities and water quality ponds located within the Open Space will be integrally designed in accordance with Municipal Code, Title 10 and the acreage of each water storage, drainage facility and water quality pond shall be fully credited toward the Open Space land dedication requirement provided these areas meet the Open Space Design Standards outlined in Municipal Code, Title 10. Owner shall maintain these areas.
- ii. Coal Creek Corridor. The Coal Creek Corridor is not located within the boundaries of the Property and Owner shall not be responsible for any costs or improvements associated with the Coal Creek Corridor.
- iii. Erie Coal Creek Ditch. Owner agrees to leave the ECC ditch as an open channel. Owner shall formalize an agreement with the ditch company for any maintenance, improvements, piping or crossing within or across the ditch right-of-way.
- iv. Internal Open Space. Owner agrees to provide approximately forty-five (45) acres of open space within the Planning Areas identified on the Approved PUD which shall be limited to a pedestrian trail and native grasses as generally shown on the Approved PUD. The improvements which Owner agrees to construct shall be limited to two (2) eight (8) foot wide recreational trails which shall be located within the



Property and will provide connections to the regional trail at locations to be determined by the Town, trees on drip irrigation and reseeding of disturbed areas with temporary irrigation required for establishment of the seed only.

- Out-Parcel. The Owner has agreed to include the Town v. owned out-parcel located adjacent to the Property, which has been historically used as a Town dump site ("Out-Parcel"), within the Annexation, Zoning and Approved PUD for the Owner also agrees to complete a Phase II Property. environmental site assessment report on the Out-Parcel, which Phase II environmental site assessment report shall be completed and submitted to the Town no later than 90 days Owner shall be responsible for following annexation. removing debris, grading and reseeding the surface of the Out-Parcel and for incorporating the Out-Parcel into the adjacent open space system which is being developed for the Property, and shall be credited toward Owner's open space requirements. However, in no event shall Owner be required to complete any remediation on the Out-Parcel. The Town agrees to indemnify and hold Owner harmless against any claims or liabilities, environmental or otherwise, that may arise from Owner's improvements on the Out-Parcel. In the event any environmental remediation is required based on the results of the Phase II environmental site assessment, the Owner shall not be responsible for any costs and liabilities associated with such clean-up.
- 3. Owner agrees to construct up to a total of four (4) Underpasses. underpasses in the approximate locations shown on the Approved PUD which will allow pedestrians to utilize the trail system on the Property without crossing any of the major collector roadways adjacent to the property. Owner shall fund and construct 100% of the two (2) underpasses located within the boundaries of the Property concurrent with the construction of the corresponding roadways. Owner shall also construct the Weld County Road 5 underpass from the Property to the Erie High School concurrent with the construction of the Weld County Road 5 roadway improvements. Provisions for the Leon A. Wurl Parkway underpass from the Property to the development south of the Property shall be established with the construction of the roadway and the construction of the underpass shall be started concurrent with the commencement of construction of the development to the south or no later than Year 7. The Owner will be reimbursed 50% of the cost of the underpasses up to a total of \$600,000. Such reimbursement shall be made for each underpass built earlier than Year 9 for the Leon A. Wurl



Parkway underpass in the event the property located immediately to the south of the Property has entered into a Development Agreement with the Town. Such reimbursement shall be made in Year 9 for the Weld County Road 5 underpass. If the Town decides not to build the underpasses, the Owner, concurrent with its roadway improvements, will construct bike and pedestrian friendly roadway crossings as determined by the Town which shall not exceed \$1,200,000.

- O. Entry Monuments. Owner shall be allowed to construct entry monuments on one or both sides of any major entry into the Property along Leon A. Wurl Parkway, Weld County Road 5 and Weld County Road 3 in accordance with Municipal Code, Title 10.
- P. Mine Subsidence. Owner shall cause a mine subsidence investigation report to be completed and shall submit such report with the first preliminary plat on the Property.

## Q. Land Use Vesting.

The Town acknowledges that the development of the 1. Vested Rights. Property, as contemplated by the Approved PUD and this Agreement, shall require the investment of substantial funds by Owner over a long period of time and that, due to the uncertainties of future market conditions and cycles, the full development of the Property might not be completed for many years. Further, the Town acknowledges that as an inducement to Owner to agree to annex the Property to Erie, the Town has agreed to provide vested property rights to the fullest extent permitted by Colorado law. This Annexation Agreement is a "development agreement" pursuant to C.R.S. 24-68-104(2), and as authorized by Section 20.090 of the Erie Vested Rights Ordinance. In accordance with and pursuant to C.R.S. 24-68-105, the Town agrees not to take any zoning or land use action, by action of the Town or through initiative measure which would alter, impair, prevent, diminish, impose a moratorium on development, or otherwise delay the development or use of the Property as set forth in this Agreement and on the Approved PUD. Vested rights are hereby established with respect to the zoning, land use and other terms of the Approved PUD and this Agreement to the fullest extend permitted by C.R.S. 24-68-101, et seq. The Property shall be vested for a period of twelve (12) years beginning Year 1, in consideration for Owner funding the sewer line as set forth in Section XI.I.2.b. However, the period of vested rights shall be extended for an equal period of time for any period of time during which the Town is unable to supply water taps, sewer taps and/or building permits due Due to the scale of the to insufficient availability of any of these. development, the magnitude of the development costs and the possible duration of the development process, such property rights are vested from the date of the adoption of said ordinance. At such time as any portion of the



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Property receives final development plan or final plat approval, the Town agrees to enact such supplemental ordinances as Owner may request to extend the vested rights granted herein to such final development plan or final plat. The provisions of this Section XI.Q.1 shall also be incorporated in any Development Agreement with the Town pertaining to the Property.

- 2. Enforcement. The Town agrees that the foregoing vested rights provision may be specifically enforced. The Town acknowledges that, due to the substantial financial investment which Owner must make toward the development of the Property, the damages allowed under C.R.S. 24-68-105(1)(c) may be inadequate in the event Owner is unable to enforce this provision. Accordingly, Owner shall have the ability to waive its right to receive compensation pursuant to C.R.S. 24-68-105(1)(c) or any similar future statutory provision and to enforce the provisions of XI.Q.1 above by obtaining relief in the form of specific performance, injunction or other appropriate declaratory or equitable relief.
- 3. Processing. The Town shall permit the development of the Property upon the submission of the proper plans, applications, plats and the payment of fees required by the Town ordinances and regulations. The Town agrees not to unduly delay or hinder the development of the Property (such as refusing to timely process, review and act upon development applications), nor shall the Town unreasonably withhold its consent to or approval of a development request or permit made in substantial compliance with the Approved PUD, Municipal Code, Title 10 and this Agreement. The Town agrees to coordinate with Owner any filings or applications before other governmental or quasi-governmental entities necessary for Owner to fulfill its obligations under this Agreement or to permit development of the Property. The Town agrees to process amendments to the Approved PUD as permitted by Municipal Code, Title 10.

If the Town does not have adequate staff for the timely review and processing of Owner's applications, the Town may contract for such services, and the Town shall charge Owner for the actual costs related thereto.

R. Building Permit Allocation. The Town and Owner agree to the creation of a residential building permit allocation program ("Building Permit Program") for the Property. This Building Permit Program does not guarantee raw water rights to the Owner for the guaranteed building permits identified below. This Building Permit Program is intended to guarantee to the Town that a minimum number of water and sewer taps (excluding the cash-in-lieu fee for raw water, if applicable), all current Town Impact Fees (transportation, parks, public facilities, street trees, and drainage) and applicable development fees will be purchased and/or paid for the Property each year, at the then current rates, whether or not a corresponding building permit is



issued. The Owner shall not be required to pre-purchase any water taps, sewer taps, or pay Impact Fees or applicable development fees during any year in which the Town has refused to issue water taps or sewer taps due to insufficient availability of water or sewer service. The Town agrees to reserve adequate system capacity (not water dedication) for any water taps or sewer taps pre-purchased pursuant to this Section XI.R. The current cost of each pre-purchased water tap, sewer tap and impact fees and applicable development fee is \$18,451.00 per unit, which cost shall increase to the then applicable rate at the time of pre-payment by the Owner. Owner shall pay the cash-in-lieu fee for raw water and any additional fees or balances due for pre-paid fees at the time of building permit application. The Building Permit Program will commence at the end of Year 1. The Town may issue up to fifteen (15) building permits for model homes prior to the commencement of the Building Permit Program, which will count toward the minimum required purchase for the first calendar year, as long as such model homes meet the requirements set forth in the Municipal Code, Title 10.

Calendar Year	Minimum Required Purchase of Water & Sewer Tap Certificates and Impact Fees	Maximum Carry Forward Per Year	Number of Guaranteed Building Permits
1	100	20	150
2	150	40	200
3 through 6	200	60	400
7	200	60	400

In the event Owner purchases more than the Minimum Required Purchase of Water & Sewer Tap Certificates and Impact Fees in any calendar year, such pre-purchase shall count toward the following year's Minimum Required Purchase of Water & Sewer Tap Certificates and Impact Fees. In any year where the Owner does not utilize their Guaranteed Building Permits, the maximum carry forward permits, as described in the table above, shall be available in the subsequent year.

Owner may elect to assign its obligation to purchase the Minimum Required Purchase of Water and Sewer Tap Certificates and Impact Fees to a third party homebuilder upon the sale of finished or unfinished lots within the Property to such homebuilder. The Building Permit Program will be tracked and administered by Owner and reconciled with the Town on or before December 31<sup>st</sup> of each calendar year. In the event the Minimum Required Purchase of Water and Sewer Tap and Impact Fees and applicable development fees are not purchased by December 31<sup>st</sup> of each calendar year, Owner agrees to pay or cause to be purchased and paid for such Water and Sewer Tap Certificates and Impact Fees and applicable development fees on or before January 31<sup>st</sup> of the subsequent calendar year. In the event Owner purchases Water and Sewer Tap Certificates and pays Impact Fees and applicable development fees for



which building permits have not been issued in a calendar year, the Town agrees that it shall require such certificates to be used for the issuance of building permits the following year prior to the Town's issuance of any additional Water and Sewer Tap Certificates and Impact Fees for the Property and the unused guaranteed permits shall carry forward over to the subsequent years. The maximum unused guaranteed permits that may carry forward are indicated in the above table.

## XII. ROADWAY IMPROVEMENTS.

Owner shall only be required to complete the improvements identified on Exhibit "F," attached hereto and incorporated herein by this reference. Owner shall not be responsible for the construction of any roadway improvements not located on or immediately adjacent to the Property, other than those as set forth in Exhibit "F." In addition, the rights-of-way for one half of the ultimate width of Weld County Roads 3, 5 and 10 shall be dedicated to the Town by plat at such time as the final plats are recorded for the portions of the Property immediately adjacent one side of such roads.

- A. Traffic Signalization. Owner shall be responsible for the installation of mast arm (similar to the signals installed at Leon A. Wurl Parkway and County Line Road in 2007) traffic signals on Leon A. Wurl Parkway and Weld County Roads 5 and 10 as identified by the traffic study submitted with this annexation.
  - 1. The Owner will construct and fund one hundred percent (100%) when a signal is located internal to the Property.
  - 2. The Owner will construct the mast arm traffic signals on Leon A. Wurl Parkway and Weld County Road 5 in Year 2, or when two (2) warrants are met, which ever is sooner. The Town will require the other property owners adjacent to such intersection to reimburse 75% of the total costs for this signal to Owner. Nothing contained in this Agreement shall operate to create an obligation on the part of Erie to pay or reimburse any costs to Owner in the event such costs are not recovered by Erie as contemplated herein, for any reason, from the properties or property owners responsible for payments toward such signals.
  - Parkway and Weld County Road 3 in Year 5. The Town will require other property owners adjacent to such intersection to reimburse 50% of the total costs for this signal to Owner. Nothing contained in this Agreement shall operate to create an obligation on the part of Erie to pay or reimburse any costs to Owner in the event such costs are not recovered by Erie as contemplated herein, for any reason, from the properties or property owners responsible for payments toward such signals.



- 4. The Owner will construct the mast arm traffic signals on Leon A. Wurl Parkway at the secondary entry which is approximately ¼ mile west of WCR 5 when warrants are met. The Town will require the owners of the property immediately south of the Property to reimburse 50 % of the total costs for this signal to Owner. All reimbursements for construction shall be payable to the Owner prior to the release of any further building permits to the adjacent owner(s). Nothing contained in this Agreement shall operate to create an obligation on the part of Erie to pay or reimburse any costs to Owner in the event such costs are not recovered by Erie as contemplated herein, for any reason, from the properties or property owners that use the utilities or public improvements.
- 5. The Owner will construct the mast arm traffic signals on Weld County Road 5 and Road C and Weld County Road 5 and Weld County Road 10 when warrants are met. The Town will require the other property owners adjacent to such intersections to reimburse 50% of the total costs for such signals to Owner. All reimbursements for construction shall be payable to the Owner prior to the release of any building permits to the adjacent owner(s). Nothing contained in this Agreement shall operate to create an obligation on the part of Erie to pay or reimburse any costs to Owner in the event such costs are not recovered by Erie as contemplated herein, for any reason, from the properties or property owners responsible for payments toward such signals.

#### B. Roadway Maintenance.

- 1. Roadway. After construction acceptance of any roadway improvements the Owner shall be responsible for maintenance of such roadway improvements and the landscape improvements within any roadway medians for a two year warranty period.
- 2. Right-of-Way Landscaping. The landscaping for the roadways described in Section C below within the rights-of-way and any adjacent landscape tracts or easements shall be primarily irrigated native grasses with trees on drip irrigation. At the Owner's discretion sod, ornamental grasses or perennials shall be included at the intersection of the primary roadways. After the Town's construction acceptance of the landscape improvements, the Metro District shall be responsible for the maintenance of landscape improvements within all rights-of-way (except medians on arterials) and buffers.

#### C. Roadway Section.

1. Leon A. Wurl Parkway. Owner will construct the center two lanes of a Principal Arterial roadway, from the Coal Creek Bridge crossing to WCR 5. The improvements will include but not be limited to shoulder and bike lane with a centered landscaped median, sidewalk on one side, and roadside ditches at the ½ road section. The landscaping within the median shall be limited to



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trees on drip irrigation and non irrigated dry land seeding. The construction shall be completed as each phase is started, which phasing is identified in Exhibit "E." The start of each phase shall be the time of issuance of the first building permit for such phase. The Town will require the property owners to the south of Leon A. Wurl Parkway to provide the outside additional lanes with curb and gutter when platted. The Owners landscape improvements in the right-of-way where future roadway improvements are anticipated shall be limited to non-irrigated dry land seeding.

- 2. Weld County Road 5. The Owner agrees to reimburse \$263,800, excluding any costs for right-of-way acquisition, to SVVSD for its pro-rata share of the improvements constructed by SVVSD, which are not reconstructed by Owner with the WCR 5 improvements, at such time as the Town issues a construction permit for Owner's improvements to WCR 5 as determined by the Director of Public Works. The Owner agrees to construct two center lanes of the Minor Arterial roadway and bike lanes with a centered landscaped median, sidewalk on one side and roadside ditches as the ½ section. The landscaping within the median shall be limited to trees on drip irrigation and dry land seeding. The Town shall be responsible for obtaining any rights-of-way which are not a part of the Property. The construction shall be completed with any residential phase that abuts WCR 5, which phasing is shown on Exhibit "E" and discussed in Section XI,B.3.
- 3. Weld County Road 3. The Owner will construct the entire section of WCR 3, as a two lane Minor Arterial roadway. The right-of-way dedication shall be a minimum of 120-feet, with a minimum of two (2) 15-foot roadway sections, two (2) 2½-foot vertical curb and gutter, an 18-foot landscape median and 33½-foot each side roadway landscaped buffer and sidewalk. The landscaped buffer shall meet the requirement of Section 6.1.D of Title 10 of the Municipal Code. The construction shall be completed with any residential phase that abuts WCR 3, which phasing is shown in Exhibit "E" and discussed in Section XI. B.3. In the event that WCR 3 is not paved by Weld County, the Owner shall pave the remaining sections of Weld County Road 3 to Weld County Road 1.5 to a Rural Arterial roadway with the first building permit.
- 4. Weld County Road 10. The Owner will construct the entire section of WCR 10 as a two lane Minor Arterial roadway for the first ½-mile west of WCR 5. The Town shall be responsible for obtaining any rights-of-way which are not a part of the Property. The construction shall be completed with any residential phase that abuts WCR10, which phasing is shown on Exhibit "E" and discussed in Section XI. B.3. The Owner is not responsible for any WCR 10 improvements west of this first ½-mile.
- D. Leon A. Wurl Parkway Bridge over Coal Creek. Owner will construct a two-lane bridge on Leon A. Wurl Parkway, similar in appearance to the bridge on Vista Ridge Parkway, with a center median and bike lanes, which can be expanded in the future.



The construction of the bridge shall start in Year 2 and be completed no later than the end of Year 5. The Owner will be reimbursed for the construction of the bridge based upon the 2030 traffic generated from the project on the Property (6,755 site traffic/31,600 total average daily traffic). The Town will reimburse the Owner up to a total amount of \$1,490,000 as follows: in Calendar Year 5 \$745,000, and in Calendar Year 6 \$745,000. The cost for this project is estimated to be \$2,000,000. All bridge construction costs discussed in this Section shall escalate according to the ENR Construction Cost Index which escalation shall start upon recordation of this Agreement.

**E.** Roadway and Trail Connection to Old Town. The Owner will design and dedicate right-of-way for an at-grade crossing, a Collector Roadway and a trail connection to Old Town from WCR 3 to the western Property boundary. The Town will cooperate with the Owner to obtain a railroad crossing permit. If a crossing permit is not obtained by the end of Year 10, or earlier at the Town's discretion the Owner will be released from this obligation. If the crossing permit is obtained, the Owner shall be responsible for the road and trail connection costs from WCR 3 to the western Property boundary.

#### F. Disclosure Statements.

- 1. **Airport Acknowledgment.** The Owner acknowledges that the Property is located within close proximity of the Parkland Estates and Erie Municipal Tri-County Airport. At the time of Preliminary Plat application, the Owner shall provide the Town the following documents for Town approval:
  - a. Contract Disclosure Statement. The Disclosure Statement will be an addendum to any Purchase Agreement that acknowledges the proximity of the Parkland Estates and Erie Municipal Tri-County Airports and provides the mapped location of the Airports relative to the purchasers' property.
  - b. Land Use Covenant. The Owner shall record a Land Use Covenant against the Property which states that the Property is within close proximity to the Parkland Estates and Erie Municipal Tri-County Airports.
- 2. Weld County 3 Acknowledgment. Weld County Road 3 will initially be constructed as a two lane Minor Arterial roadway. The Owner acknowledges that a portion of the landscape buffer located within the Weld County Road 3 right-of-way may be removed at the Town's discretion to add two additional paved travel lanes to said road in the future. At the time of Preliminary Plat application, the Owner shall provide the Town the following document for Town approval:
  - a. Contract Disclosure Statement. The Disclosure Statement will be an addendum to any Purchase Agreement for any lot abutting or within close proximity to Weld County Road 3 that acknowledges that



the Town may utilize the landscape buffer within the right-of-way to add two additional paved travel lanes to said roadway in the future at the Town's sole discretion.

- 3. Landfill Acknowledgment. The owner acknowledges that the Property is located within close proximity of several landfills. At the time of Preliminary Plat application, the Owner shall provide the Town the following documents for Town approval:
  - a. Contract Disclosure Statement. The Disclosure Statement will be an addendum to any Purchase Agreement that acknowledges the proximity of landfills and provides the mapped location of the landfills relative to the purchasers' property.
  - **b.** Land Use Covenant. The Owner shall record a Land Use Covenant against the Property which states that the subject property is within close proximity to several landfills.

#### XIII. MISCELLANEOUS PROVISIONS.

- A. Interpretation. Nothing in this Agreement shall constitute or be interpreted as a repeal of the Town's ordinances or resolutions, or as a waiver of the Town's legislative, governmental, or police powers to promote and protect the health, safety, and welfare of the Town and it's inhabitants, nor shall this Agreement prohibit the enactment or increase by the Town of any tax or fee.
- **B.** Severability. If any part, section, subsection, sentence, clause or phrase of this Agreement is for any reason held to be invalid, such invalidity shall not affect the validity of the remaining sections of the Agreement. The parties hereby declare that they would have agreed to the Agreement including each part, section, subsection, sentence, clause or phrase thereof, irrespective of the fact that one or more parts, sections, subsections, sentence, clauses or phrases be declared invalid.
- C. Amendments to the Agreement. This Agreement may be amended, at anytime, upon agreement of the parties hereto. Such amendments shall be in writing, shall be recorded with the County Clerk & Recorder of Weld County, Colorado, shall be covenants running with the land, and shall be binding upon all persons or entities having an interest in the Property subject to the amendment unless otherwise specified in the amendment.

In addition, this Agreement may be amended by the Town and any Owner without the consent of any other Owner as long as such amendment affects only that Owner's portion of the Property. Such amendments shall be in writing, shall be recorded with the County Clerk & Recorder of Weld County, Colorado, shall be covenants running with the land, and shall be binding upon all persons or entities having an interest in the Property subject to the amendment unless otherwise specified in the amendment.



- D. Binding Effect. This Agreement shall be binding upon and inure to the benefit of and be binding upon the parties, their successors in interest, or their legal representatives, including all developers, purchasers and subsequent owners of any lots or parcels within the Property, and shall constitute covenants running with the land. This Agreement shall be recorded with the County Clerk & Recorder of Weld County, Colorado, at Owner's expense. Subject to the conditions precedent herein, this Agreement may be enforced in any court of competent jurisdiction.
- E. Indemnification. Owner agrees to indemnify and hold harmless the Town and the Town's officers, employees, agents, and contractors, from and against all liability, claims, and demands, including attorney's fees and court costs, which arise out of or are in any manner connected with the annexation of the Property, or with any other annexation or other action determined necessary or desirable by the Town in order to effectuate the annexation of the Property, or which are in any manner connected with Erie's enforcement of this Agreement. Owner further agrees to investigate, handle, respond to, and to provide defense for and defend against or at the Town's option to pay the attorney's fees for defense counsel of the Town's choice for, any such liability, claims, or demands.
- **F. Termination.** If the annexation of the Property is, for any reason, not completed then this Agreement shall be null and void and of no force and effect whatsoever.
- G. No Right or Remedy of Disconnection. No right or remedy of disconnection of the Property from the Town shall accrue from this Agreement, other than provided by applicable state laws. In the event the Property or any portion thereof is disconnected at Owner's request, the Town of Erie shall have no obligation to serve the disconnected property or portion thereof and this Agreement shall be void and of no further force and effect as to such property or portion thereof.
- H. Annexation and Zoning Subject to Legislative Discretion. The Owner acknowledges that the annexation and subsequent zoning of the Property are subject to the legislative discretion of the Board of Trustees of the Town of Erie. No assurances of annexation or zoning have been made or relied upon by the Owner. In the event that the Town of Erie Board of Trustees, in the exercise of it's legislative discretion, does not take any action with respect to the Property herein contemplated, then the sole and exclusive remedy for the breach hereof accompanied by the exercise of such discretion shall be the withdrawal of the petition for annexation by the Owner, or disconnection from the Town in accordance with state law, as may be appropriate.
- I. Legal Discretion in the Case of Challenge. The Town of Erie reserves the right to not defend any legal challenge to this annexation. In the event such a challenge occurs prior to any expiration of any statute of limitation, Erie may, at its discretion, choose to legally fight the challenge or allow the challenge to proceed without



defense. This does not restrict the Owner from engaging the Town's legal representatives in such a defense, at no cost to the Town.

- J. Application of Town Policies. Upon annexation, all subsequent development of the Property shall be subject to and bound by the applicable provisions of Erie ordinances, as amended, including public land dedications, provided however, that changes or amendments to the Municipal Code, after the date of this Agreement shall in no way limit or impair Erie's obligation hereunder, except as specifically set forth in this Agreement.
- K. Amendments to Governing Ordinances, Resolutions and Policies. As used in this Agreement, unless otherwise specifically provided herein, any reference to any provision of any Town ordinance, resolution, or policy is intended to refer to any subsequent amendments or revisions to such ordinance, resolution, or policy, and the parties agree that such amendments or revisions shall be binding upon Owner.
- L. Legal Fees. In the event that either party finds it necessary to retain an attorney in connection with a default by the other as to any of the provisions contained in this Agreement, the defaulting party shall pay the other's reasonable attorney's fees and costs incurred in enforcing the provisions of this Agreement.
- M. Reimbursement for Other Costs. Should the Town require additional professional services outside the normal scope of Town review and analysis, the Town will make the Owner aware of the scope and estimated costs of such extraordinary services. Upon approval by the Owner of the scope and estimated costs, the Town will engage the appropriate professional services and the Owner shall reimburse the Town for those professional services
- N. Avigation Easements. Owner agrees to provide the Town with an executed avigation easement upon the Mayors signature to this Annexation Agreement, which provides the Town of Erie an easement for the operation of aircraft to and from the Tri-County Airport, and which provides the residents of Parkland Estates, a Weld County Subdivision, an easement for the operation of aircraft to and from the private landing strip in Parkland Estates within the airspace of the Owner's Property.
- O. Oil and Gas Access Roads. All oil and gas access roads located on the Property will remain where they are unless relocated in accordance with a Surface Use Agreement, and will be considered a current obligation between the Owner and the oil and gas company(s). The Town will not be responsible for any maintenance of any current oil and gas access road.
- **P.** Cooperation. The parties agree that they will cooperate with one another in accomplishing the terms, conditions, and provisions of the Agreement, and will execute such additional documents as necessary to effectuate the same.



- Q. Timely Submittal of Materials. Owner agrees to provide legal documents, surveys, engineering work, newspaper publication, maps, reports and other documents necessary to accomplish the annexation of the Property and the other provisions of this Agreement.
- **R.** Compliance with State Law. The Owner shall comply with all applicable State law and regulations.
- **S. Recording of Agreement.** This Agreement shall be recorded in the records of the Weld County Clerk and Recorder.
- XIV. COMPLETE AGREEMENT. This instrument embodies the whole agreement of the parties. There are no promises, terms, conditions, or obligations other than those contained herein; and this Agreement shall supersede all previous communications, representations, or agreements, either verbal or written, between the parties hereto. Except as provided herein there shall be no modifications of this Agreement except in writing, executed with the same formalities as this instrument. Subject to the conditions precedent herein this Agreement may be enforced in any court of competent jurisdiction.



By this acknowledgment, the undersigned hereby certify that the above Agreement is complete and true and entered into of their own free will and volition.

#### **OWNER:**

TALLGRASS INVESTORS, LLC, a Colorado limited liability company

By: Zuni /lol	toclar
Its: Authorized	Representative
Date: 10/30/07	2

COMMUNITY DEVELOPMENT GROUP OF ERIE, INC., a Colorado corporation

Ву: _	Luns	Voltse	law	
Its: Date:	Author	ized R	(epresei	rtative

## TOWN:

TOWN OF ERIE, a municipal corporation

Andrew J Moore, Mayor

Date: **October 30, 2007** 

ATTEST:

By: Marker Tarker
Town Clerk

3518317 11/19/2007 04:02P Weld County, CO 33 of 56 R 281.00 D 0.00 Steve Moreno Clerk & Recorder

STATE OF COLORADO ) SS. COUNTY OF Boulder The foregoing instrument was acknowledged before me this 30th day of , 2007 by Lewis Holtsclaw as Anthorized Representations of Tallgrass Investors, LLC. My commission expires: 7,500 Witness my hand and official seal oTARy tar Public OF COMMUNICIONAL STATE OF COLORADO ) SS. COUNTY OF Boulder ) The foregoing instrument was acknowledged before me this \_\_\_\_\_\_ day of October, 2007 by Lewis Holtsclaw as Authorized Representative # of Community Development Group of Erie, Inc. My commission expires: 7-30-10 Witness my hand and official/seat?



## **EXHIBITS LIST**

Exhibit A	Property Legal Description
Exhibit B	Annexation Petition
Exhibit C	Annexation Map
Exhibit D	Tributary & Non-Tributary Water Rights
Exhibit E	Phasing Map
Exhibit F	Off-Site Improvements
Exhibit F1	Transportation Exhibit
Exhibit F2	Parks & Open Space Exhibit
Exhibit F3	Raw Water Exhibit
Exhibit F4	Potable Water Transmission Main Exhibit
Exhibit F5	Stormwater Exhibit
Exhibit F6	Sanitary Sewer Exhibit
Exhibit G	Form of Letter of Credit



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#### EXHIBIT "A" Property Legal Description

A PARCEL OF LAND LOCATED IN THE SOUTHEAST QUARTER OF SECTION 7, THE SOUTH HALF OF SECTION 8, THE SOUTHWEST QUARTER OF SECTION 9, THE WEST HALF OF SECTION 16, SECTION 17 AND THE EAST HALF OF SECTION 18, TOWNSHIP 1 NORTH, RANGE 68 WEST OF THE 6TH P.M., COUNTY OF WELD, STATE OF COLORADO DESCRIBED AS FOLLOWS:

BEGINNING AT THE EAST QUARTER CORNER OF SECTION 8 FROM WHENCE THE SOUTHEAST CORNER LIES S00°49'09"W, 2,674.68 FEET (BASIS OF BEARINGS);

THENCE N89°35'35"E, 30.01 FEET;

THENCE ALONG THE EASTERLY RIGHT OF WAY LINE OF WELD COUNTY ROAD 5 THE **FOLLOWING THREE COURSES:** 

- 1) S00°49'09"W, 2,675.05 FEET;
- 2) S00°12'52"E, 2,631.39 FEET;
- 3) S00°13'30"E, 652.21 FEET;

THENCE ALONG THE BOUNDARY OF THE "ERIE HIGH SCHOOL ANNEXATION" THE FOLLOWING TWO COURSES:

- 1) S89°46'30"W, 60.00 FEET;
- 2) S00°13'30"E, 1,950.00 FEET;

THENCE ALONG THE NORTHERLY RIGHT OF WAY LINE OF WELD COUNTY ROAD 8 THE **FOLLOWING TWO COURSES:** 

- 1) S88°48'09"W, 2,618.87 FEET;
- 2) \$88°48'45"W, 2,617.65 FEET;

THENCE ALONG THE EASTERLY RIGHT OF WAY LINE OF WELD COUNTY ROAD 3 THE **FOLLOWING TWO COURSES:** 

- 1) N00°25'10"W, 2,573.96 FEET;
- 2) N00°02'28"W, 778.78 FEET;

THENCE ALONG THE BOUNDARY OF THE "ERIE CEMETERY ANNEXATION #4" THE FOLLOWING FOUR COURSES:

- 1) S89°38'32"W, 655.44 FEET;
- 2) \$00°18'28"E, 404.65 FEET;
- 3) S12°21'32"W, 413.00 FEET;
- 4) N87°14'32"E, 683.00 FEET;

THENCE S00°25'10"E, 2,573.80 FEET ALONG THE WESTERLY RIGHT OF WAY LINE OF WELD COUNTY ROAD 3;

THENCE ALONG THE NORTHERLY RIGHT OF WAY LINE OF WELD COUNTY ROAD 8 THE **FOLLOWING FIVE COURSES:** 

- 1) N89°31'17"W, 258.53 FEET;
- 2) N86°54'04"W, 1,098.53 FEET;
- 3) N89°31'18"W, 37.15 FEET;
- 4) N67°43'13"W, 53.85 FEET;
- 5) N89°31'18"W, 151.28 FEET;

THENCE ALONG THE SOUTHWESTERLY LINE OF A PARCEL OF LAND RECORDED AT RECEPTION NO. 2914530 THE FOLLOWING THREE COURSES:

- 1) N01°00'43"E, 30.22 FEET;
- 2) 254.25 FEET ALONG THE ARC OF A NON-TANGENT CURVE TO THE LEFT, SAID ARC SUBTENDED BY A RADIUS OF 250.00 FEET, A CENTRAL ANGLE OF 58°16'08", AND A CHORD BEARING N28°07'23"W, 243.43 FEET;
- 3) N57°15'28"W, 164.22 FEET;

THENCE ALONG THE EASTERLY RIGHT OF WAY LINE OF THE UNION PACIFIC RAILROAD (A LINE PARALLEL WITH AND 50.00 FEET EAST OF THE CENTERLINE OF THE EXISTING TRACKS) THE **FOLLOWING TEN COURSES:** 

1) N32°44'32"E, 53.23 FEET;



2) 785.20 FEET ALONG THE ARC OF A NON-TANGENT CURVE TO THE LEFT, SAID ARC SUBTENDED BY A RADIUS OF 1,007.50 FEET, A CENTRAL ANGLE OF 44°39'13", AND A CHORD BEARING N11°57'45"E, 765.48 FEET;

3) N10°21'52"W, 694.70 FEET;

4) 894.20 FEET ALONG THE ARC OF A TANGENT CURVE TO THE RIGHT, SAID ARC SUBTENDED BY A RADIUS OF 1,287.50 FEET, A CENTRAL ANGLE OF 39°47'36", AND A CHORD BEARING N09°31'56"E, 876.34 FEET;

5) N29°25'45"E, 224.87 FEET;

6) 463.85 FEET ALONG THE ARC OF A TANGENT CURVE TO THE LEFT, SAID ARC SUBTENDED BY A RADIUS OF 1,673.50 FEET, A CENTRAL ANGLE OF 15°52'51", AND A CHORD BEARING N21°29'20"E, 462.36 FEET;

7) N13°32'54"E, 421.72 FEET;

8) 966.20 FEET ALONG THE ARC OF A TANGENT CURVE TO THE LEFT, SAID ARC SUBTENDED BY A RADIUS OF 2,957.50 FEET, A CENTRAL ANGLE OF 18°43'06", AND A CHORD BEARING N04°11'21"E, 961.91 FEET;

9) N05°10'12"W, 351.67 FEET;

10) 165.07 FEET ALONG THE ARC OF A TANGENT CURVE TO THE RIGHT, SAID ARC SUBTENDED BY A RADIUS OF 1,575.00 FEET, A CENTRAL ANGLE OF 06°00'18", AND A CHORD BEARING N02°10'03"W, 165.00 FEET;

THENCE S89°14'48"E, 1,206.70 FEET ALONG THE NORTHERLY LINE OF THE SOUTHEAST QUARTER OF SECTION 18;

THENCE N03°07'01"W, 30.07 FEET ALONG THE WESTERLY RIGHT OF WAY LINE OF WELD COUNTY ROAD 3:

THENCE \$89°09'21"E, 30.07 FEET;

THENCE N89°01'14"E, 2,650.08 FEET ALONG THE NORTHERLY RIGHT OF WAY LINE OF WELD COUNTY ROAD 10;

THENCE N00°01'31"E, 1,579.23 FEET ALONG THE WESTERLY LINE OF THE SOUTHWEST QUARTER OF SECTION 8;

THENCE ALONG THE SOUTHERLY RIGHT OF WAY LINE OF THE UNION PACIFIC RAILROAD (A LINE PARALLEL WITH AND 50.00 FEET SOUTH OF THE CENTERLINE OF THE EXISTING TRACKS) THE FOLLOWING THREE COURSES:

1) N42°43'40"E, 467.34 FEET;

2) 1,735.43 FEET ALONG THE ARC OF A TANGENT CURVE TO THE RIGHT, SAID ARC SUBTENDED BY A RADIUS OF 1,858.50 FEET, A CENTRAL ANGLE OF 53°30'06", AND A CHORD BEARING N69°28'43"E. 1.673.07 FEET:

3) S83°46'14"E, 772.36 FEET;

THENCE N00°49'09"E, 100.45 FEET ALONG THE WESTERLY RIGHT OF WAY LINE OF WELD COUNTY ROAD 5;

THENCE ALONG THE NORTHERLY RIGHT OF WAY LINE OF THE UNION PACIFIC RAILROAD (A LINE PARALLEL WITH AND 50.00 FEET NORTH OF THE CENTERLINE OF THE EXISTING TRACKS) THE FOLLOWING THREE COURSES:

1) N83°46'14"W, 762.89 FEET;

2) 1,828.81 FEET ALONG THE ARC OF A TANGENT CURVE TO THE LEFT, SAID ARC SUBTENDED BY A RADIUS OF 1,958.50 FEET, A CENTRAL ANGLE OF 53°30'06", AND A CHORD BEARING S69°28'43"W, 1,763.09 FEET;

3) S42°43'40"W, 358.98 FEET;

THENCE N00°01'31"E, 943.91 FEET ALONG THE WESTERLY LINE OF THE SOUTHWEST QUARTER OF SECTION 8;

THENCE N89°35'35"E, 2,685.16 FEET ALONG THE NORTHERLY LINE OF THE SOUTHWEST QUARTER OF SECTION 8 TO THE POINT OF BEGINNING, CONTAINING 967.83 ACRES, MORE OR LESS.



EXHIBIT "B"

**Annexation Petition** 



3518317 11/19/2007 04:02P Weld County, CO 38 of 56 R 281.00 D 0.00 Steve Moreno Clerk & Recorder

TO: THE BOARD OF TRUSTEES OF THE TOWN OF ERIE, COLORADO.

RE: Petition Known As: BridgeWater (formerly known as Tallgrass)

DATE: August 4, 2000 (Updated May 2001, April 2005, May 2006 and May 2007)

We, Community Development Group of Erie, Inc., a Colorado corporation, the undersigned applicant with the consent of Taligrass Investors, LLC, a Colorado limited liability company, the undersigned landowner, in accordance with Colorado law, hereby petition the Town of Erie and its Board of Trustees for annexation to the Town of Erie of the following described unincorporated territory located in the County of Weld and State of Colorado, to-wit:

See legal description in Exhibit A, attached hereto and incorporated herein by this reference.

As part of this petition, your petitioner further states to the Board of Trustees of Erie, Colorado, that:

- It is desirable and necessary that the territory described above be annexed to the Town
  of Erie.
- The requirements of C.R.S. sections 31-12-104 and 31-12-105, as amended, exist or have been met in that:
  - a. Not less than one-sixth of the perimeter of the area proposed to be annexed is contiguous with the Town of Erie or will be contiguous with the Town of Erie within such time as required by 31-12-104.
  - A community of interest exists between the area proposed to be annexed and the Town of Erie.
  - The area proposed to be annexed is urban or will be urbanized in the near future.
  - d. The area proposed to be annexed is integrated with or is capable of being integrated with the Town of Erie.
  - e. No land within the boundary of the territory proposed to be annexed which is held in identical ownership, whether consisting of one tract or parcel of real estate or two or more contiguous tracts or parcels of real estate, has been divided into separate parts or parcels without the written consent of the landowner or landowners thereof, unless such tracts or parcels were separated by a dedicated street, road or other public way.
  - f. No land within the boundary of the area proposed to be annexed which is held in identical ownership, comprises twenty acres or more, and which, together with the buildings and improvements situated thereon has an assessed value in excess of two hundred thousand dollars (\$200,000.00) for ad valorem tax purposes for the year next preceding the annexation, has been included within the area proposed to be annexed without the written consent of the landowner or landowners.
  - g. No annexation proceedings have been commenced for any portion of the



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territory proposed to be annexed for the annexation of such territory to another municipality.

- h. The annexation of the territory proposed to be annexed will not result in the detachment of area from any school district.
- i. The annexation of the territory proposed to be annexed will not have the effect of extending the boundary of the Town of Erie more than three miles in any direction from any point of the boundary of the Town of Erie in any one year.
- j. Prior to completion of the annexation of the territory proposed to be annexed, the Town of Erie will have in place a plan for that area, which generally describes the proposed: Location, character, and extent of streets, subways, bridges, waterways, waterfronts, parkways, playgrounds, squares, parks, aviation fields, other public ways, grounds, open spaces, public utilities, and terminals for water, tight, sanitation, transportation, and power to be provided by the Town of Erie; and the proposed land uses for the area; such plan to be updated at least once annually.
- k. In establishing the boundary of the territory proposed to be annexed, if a portion of a platted street or alley is to be annexed, the entire width of the street or alley has been included within the territory to be annexed. The Town of Erie will not deny reasonable access to any landowners, owners of any easement, or the owners of any franchise adjoining any platted street or alley which is to be annexed to the Town of Erie but is not bounded on both sides by the Town of Erie.
- The owners of more than fifty percent of the area proposed to be annexed, exclusive of dedicated streets and alleys, have signed this petition and hereby petition for annexation of such territory.
- Accompanying this petition are four copies of an annexation map containing the following information:
  - A written legal description of the boundaries of the area proposed to be annexed;
  - A map showing the boundary or the area proposed to be annexed, said map prepared and containing the seal of a registered engineer;
  - Within the annexation boundary map, a showing of the location of each ownership tract in unplatted land and, if part or all of the area is platted, the boundaries and the plat numbers of plots or of lots and blocks;
  - d. Next to the boundary of the area proposed to be annexed, a drawing of the contiguous boundary of the Town of Erie and the contiguous boundary of any other municipality abutting the area proposed to be annexed, and a showing of the dimensions of such contiguous boundaries.
- 5. Upon the Annexation Ordinance becoming effective, all lands within the area proposed to be annexed will become subject to all ordinances, rules and regulations of the Town of Erie, except for general property taxes of the Town of Erie which shall become effective as the January 1 next ensuing.

The zoning classifications requested for the area proposed to be annexed are ER, SR, 6. LR. MR. CMU and OS with a PUD Overlay.

WHEREFORE, the following petitioner respectfully requests that the Town of Erie, acting through its Board of Trustees, approve the annexation of the area proposed to be annexed. By this acknowledgment, the undersigned hereby certify that the above information is complete and true.

Owner:

Tailgrass Investors, LLC,

a Colorado limited liability company

By: M Lee, Manager Date: 5-31-07

Applicant:

Community Development Group of Erie, Inc.,

a Colorado corporation

SS.

By: Lewis G. Holtsclaw, Secretary

Date: \_5-31-07

STATE OF COLORADO

COUNTY OF Boulder

The foregoing instrument was acknowledged before me this 3/5+ day of May, 2007, by Jon

Lee as Manage, of Tallgrass Investors, LLC.

GCA C

My commission expires: 7-30-10 เป็นเป็นครุร My hand and official seal.

PUBLIC

COUNTY OF HOULD

The foregoing instrument was acknowledged before me this 3104 day of May, 2007, by Lewis G. Holtsclaw as Secretary of Community Development Group of Erie, Inc.

> Cimpission expires: 7-30-(O hand and official seal.

AND THE PROPERTY OF THE PARTY O

BridgeWater Annexation Petition May 2007



# RECORD OF LAND OWNERSHIP AND DATE SIGNED

Landowner/Petitioner Mailing Address

Date Signed

Legal Description of Land Owned

Tailgrass Investors, LLC 2500 Arapahoe Ave., Suite 220 Boulder, Colorado 80302 May 31, 2007

See attached Exhibit A



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#### AFFIDAVIT OF CIRCULATOR

STATE OF COLORADO	)	
	) :	SS
COUNTY OF BOULDER	)	

Mike Burns, being first duly sworn upon oath, deposes and says that he was the circulator of this Petition for Annexation of lands to the Town of Erie, Colorado, consisting of [6] pages including this page and that each signature hereon was witnessed by your affiant and is the signature of the person whose name it purports to be.

Circulator

state of colorado ) ss. county of Boulder )

The foregoing instrument was acknowledged before me this  $31^{5}$  day of May, 2007, by Mike Burns.

My commission expires: 7-30-10 Witness My hand and official seal.

Novary Public



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#### **EXHIBIT A**

#### BRIDGEWATER LEGAL DESCRIPTION

A PARCEL OF LAND LOCATED IN THE SOUTHEAST QUARTER OF SECTION 7, THE SOUTH HALF OF SECTION 8, THE SOUTHWEST QUARTER OF SECTION 9, THE WEST HALF OF SECTION 16, SECTION 17 AND THE EAST HALF OF SECTION 18, TOWNSHIP 1 NORTH, RANGE 68 WEST OF THE 6TH P.M., COUNTY OF WELD, STATE OF COLORADO DESCRIBED AS FOLLOWS:

COMMENCING AT THE SOUTHEAST QUARTER OF SAID SECTION 17 FROM WHENCE THE SOUTH QUARTER CORNER LIES \$88"48'34"W, 2,648.37 FEET;

THENCE N00°13'30"W. 30.00 FEET ALONG THE EASTERLY LINE OF THE SOUTHEAST QUARTER OF SECTION 17 TO THE POINT OF BEGINNING:

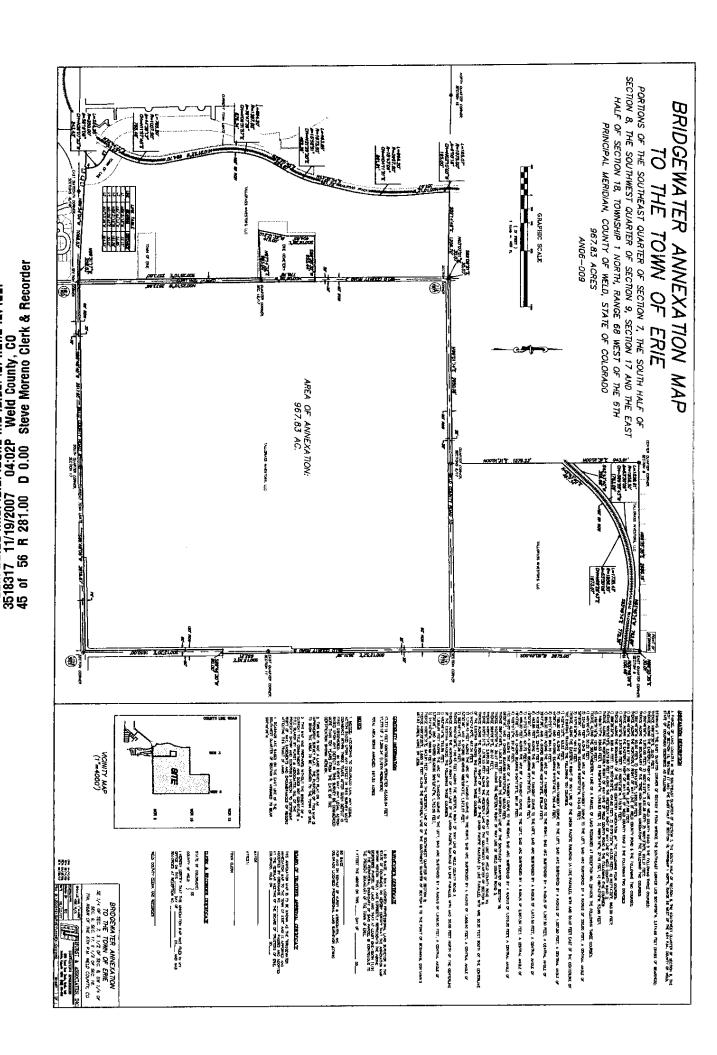
THENCE ALONG THE NORTHERLY RIGHT OF WAY LINE OF WELD COUNTY ROAD 8 THE FOLLOWING TWO COURSES:

- 1) S88°48'09"W, 2,648.88 FEET;
- 2) S88°48'45'W, 2,617.65 FEET;
- THENCE ALONG THE EASTERLY RIGHT OF WAY LINE OF WELD COUNTY ROAD 3 THE FOLLOWING TWO COURSES:
- 1) N00\*25'10"W, 2.573.96 FEET;
- 2) N00\*02'28"W, 778.78 FEET;
- THENCE ALONG THE BOUNDARY OF "ERIE CEMETERY ANNEXATION #4" THE FOLLOWING FOUR COURSES:
- 1) \$89°38'32"W, 655.44 FEET;
- 2) S00°18'28"E, 404.65 FEET; 3) S12°21'32"W, 413.00 FEET;
- 4) N87°14'32"E, 683.00 FEET;
- THENCE S00°25'10"E, 2,573.80 FEET ALONG THE WESTERLY RIGHT OF WAY LINE OF WELD COUNTY ROAD 3;
- THENCE ALONG THE NORTHERLY LINE OF WELD COUNTY ROAD 8 THE FOLLOWING FOUR COURSES:
- 1) N89°31'17"W, 258,53 FEET;
- 2) N86°54'04"W, 1,098.53 FEET; 3) N89°31'18"W, 37.15 FEET;
- 4) N67°43'13'W, 53.85 FEET;
- THENCE ALONG THE SOUTHWESTERLY LINE OF A PARCEL RECORDED AT RECEPTION NO. 2914530 THE FOLLOWING THREE COURSES:
- 1) N89°31'18"W, 151.28 FEET;
- 2) N01°00'43"E, 30.22 FEET;
- 3) 254.25 FEET ALONG THE ARC OF A NON-TANGENT CURVE TO THE LEFT, SAID ARC SUBTENDED BY A RADIUS OF 250.00 FEET, A CENTRAL ANGLE OF 58°16'08" AND A CHORD BEARING N28°07'23"W, 243.43 FEET;
- 4) N57°15'29'W, 163.99 FEET;
- THENCE \$32°57'42"W. 60.89 FEET ALONG THE EASTERLY RIGHT OF WAY LINE OF THE UNION PACIFIC RAILROAD (A LINE 50.00 FEET EASTERLY OF THE CENTERLINE OF THE EXISTING TRACKS);
- THENCE N57°15'28"W, 100.00 FEET;
- THENCE ALONG THE WESTERLY RIGHT OF WAY LINE OF THE UNION PACIFIC RAILROAD (A LINE 50.00 FEET WESTERLY OF THE CENTERLINE OF THE EXISTING TRACKS) THE FOLLOWING TEN COURSES:
- 1) N32°44'32"E, 115.51 FEET;
- 2) 708.58 FEET ALONG THE ARC OF A NON-TANGENT CURVE TO THE LEFT, SAID ARC SUBTENDED BY A RADIUS OF 907.50 FEET. A CENTRAL ANGLE OF 44"44'12" AND A CHORD BEARING N12\*00'14"E, 690.72 FEET:
- 3) N10°21'52'W, 694.70 FEET;
- 4) 963.66 FEET ALONG THE ARC OF A TANGENT CURVE TO THE RIGHT, SAID ARC SUBTENDED BY A RADIUS OF 1,387.50 FEET, A CENTRAL ANGLE OF 39°47'36" AND A CHORD BEARING N09°31'56"E, 944.40 FEET:
- 5) N29°25'45"E, 224.87 FEET;
- 6) 436.13 FEET ALONG THE ARC OF A TANGENT CURVE TO THE LEFT, SAID ARC SUBTENDED BY A RADIUS OF 1,573.50 FEET, A CENTRAL ANGLE OF 15°52'51" AND A CHORD BEARING N21°29'20"E, 434.73 FEET;
- 7) N13\*32'54"E, 421.72 FEET;
- 8) 933,53 FEET ALONG THE ARC OF A TANGENT CURVE TO THE LEFT, SAID ARC SUBTENDED BY A RADIUS OF 2.857,50 FEET, A CENTRAL ANGLE OF 18°43'06" AND A CHORD BEARING N04°11'21"E, 929.39 FEET;
- 9) N05°10'12"W, 351.67 FEET;
- 10) 175.41 FEET ALONG THE ARC OF A TANGENT CURVE TO THE RIGHT, SAID ARC SUBTENDED BY A RADIUS OF 1,675.00 FEET, A CENTRAL ANGLE OF 06°00'01" AND A CHORD BEARING N02\*10'12"W, 175.33 FEET;
- THENCE S89°14'48"E, 1,306.70 FEET ALONG THE NORTHERLY LINE OF THE SOUTHEAST QUARTER OF SECTION 18: THENCE NO3°07'01"W, 30.07 FEET ALONG THE WESTERLY LINE OF WELD COUNTY ROAD 3;
- THENCE S89°09'21"E, 30.07 FEET;
- THENCE N89°01'14"E, 2,650.08 FEET ALONG THE NORTHERLY RIGHT OF WAY LINE OF WELD COUNTY ROAD 10; THENCE N00°01'31"E, 2,670.60 FEET ALONG THE WESTERLY LINE OF THE SOUTHEAST QUARTER OF SECTION 8;
- THENCE N89°35'35"E, 2,685.16 FEET ALONG THE NORTHERLY LINE OF THE SOUTHEAST QUARTER OF SECTION 8:
- THENCE CONTINUING N89°35'35"E, 30.01 FEET;
- THENCE ALONG THE EASTERLY RIGHT OF WAY LINE OF WELD COUNTY ROAD 5 THE FOLLOWING THREE COURSES:
- 1) S00°49'09"W, 2,675.05 FEET;
- 2) \$00°12'52"E, 2,631.39 FEET; 3) \$00°13'30"E, 2,601.82 FEET;
- THENCE N89°59'32"W, 30.00 FEET TO THE POINT OF BEGINNING.



EXHIBIT "C"

Annexation Map





#### EXHIBIT "D"

Water Rights Appurtenant to Property
(Listing of all tributary and non-tributary water rights attached to the property)

Water Rights (Ditch Company, groundwater, etc.)

Number of Shares

Certificate Number(s) Yield (cfs or acre/ft)

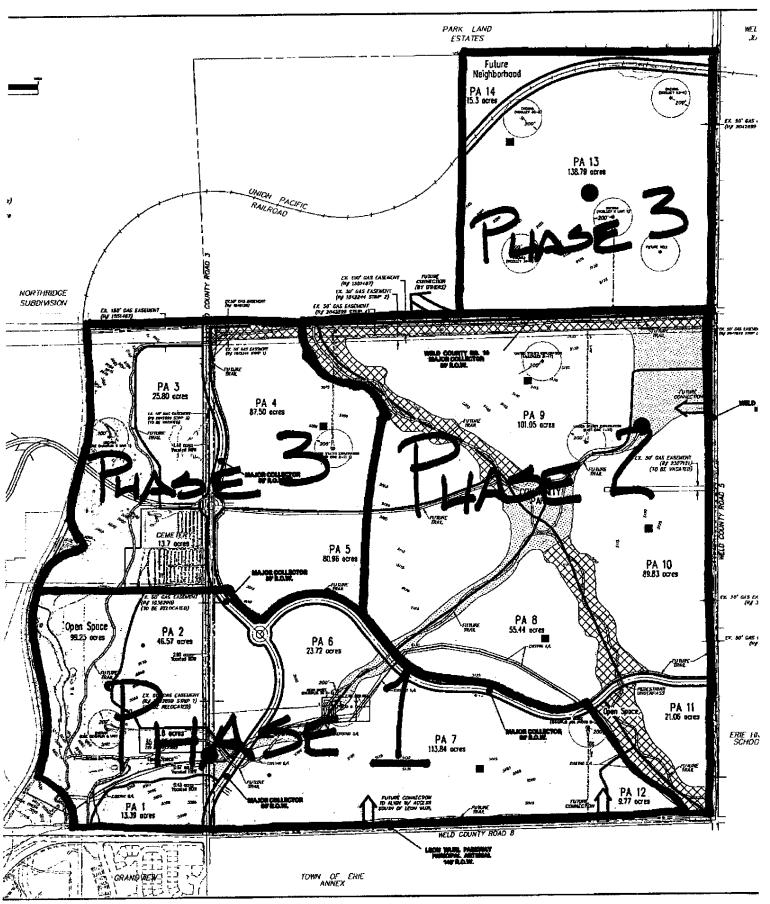
3518317 11/19/2007 04:02P Weld County, CO 47 of 56 R 281.00 D 0.00 Steve Moreno Clerk & Recorder

EXHIBIT "E"

Phasing Map



3518317 11/19/2007 04:02P Weld County, CO 48 of 56 R 281.00 D 0.00 Steve Moreno Clerk & Recorder





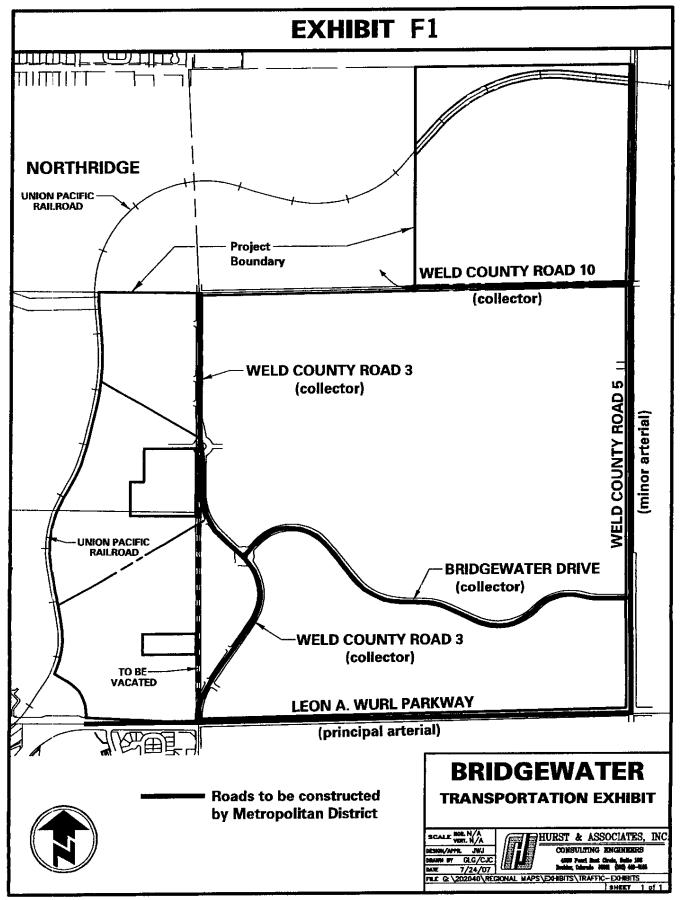
# EXHIBIT "F"

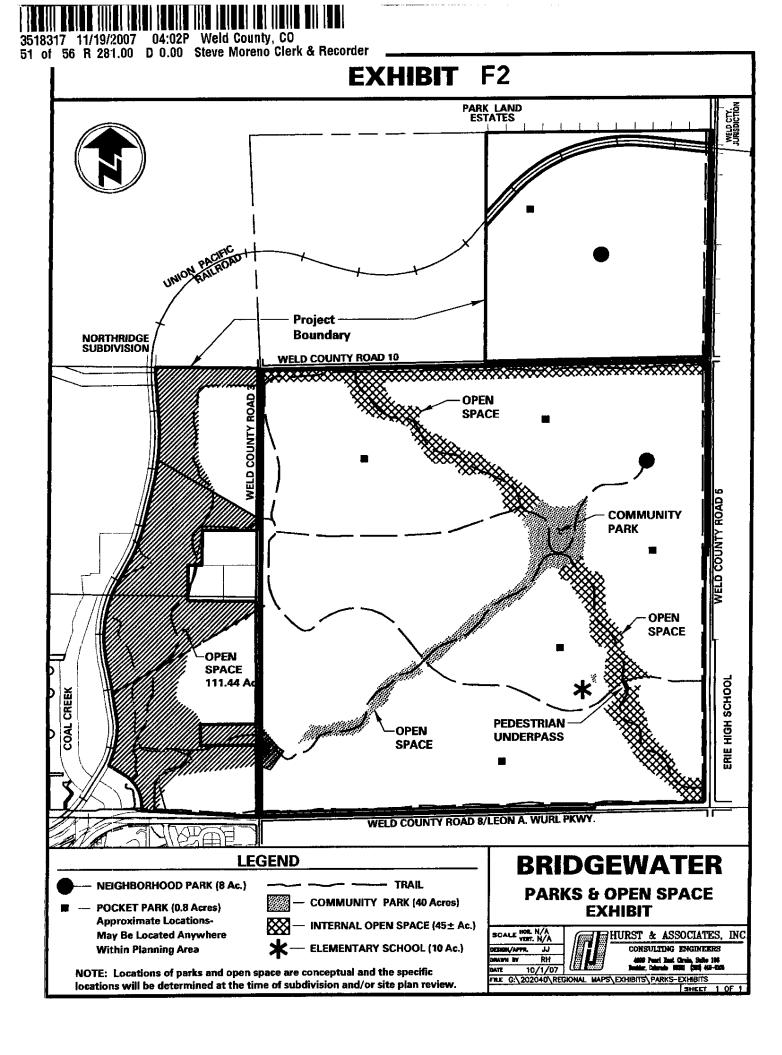
## Off-Site Improvements

BridgeWater - Metro District	Total	Year 1-5	Year 6-10	Year 11-15
Leon A. Wurl Parkway	4,709,786.79	2,354,893.40	2,354,893.40	
LAW Pkwy 2 lane bridge	2,000,000.00	2,000,000.00		
LAW Pkwy 2 lane bridge - reimbursement	(1,490,000.00)		(1,490,000.00)	
LAW underpass	1,200,000.00	1,200,000.00		
LAW underpass reimbursement	(600,000.00)		(600,000.00)	
WCR 3	5,147,500.00	2,831,125.00		2,316,375.00
WCR 3 - 2 underpass	1,200,000.00	600,000.00		600,000.00
BridgeWater Pkwy from round-a-bout to WCR 5	4,515,440.00	3,251,116.80	1,264,323.20	
18" waterline - an equivalent water line improveme	nt is included and p	hased with WCR 3	& BridgeWater Parl	kway
1.5 mg water tank to be constructed by Town				
WCR 5	4,777,554.70		2,627,655.08	2,149,899.61
WCR 5 underpass	1,200,000.00		1,200,000.00	
WCR 5 underpass reimbursement	(600,000.00)		(600,000.00)	
WCR 10	2,701,380.99		2,701,380.99	
Collector from 5 to com center	1,379,571.16		1,379,571.16	
Parks, open space & trails				
amenity center allowance	3,000,000.00	3,000,000.00		
neighborhood parks	2,100,000.00	700,000.00	700,000.00	700,000.00
community park	5,400,000.00		5,400,000.00	
trail @ western edge	1,200,000.00	600,000.00		600,000.00
misc parks, trails & open spaces	3,000,000.00	900,000.00	1,500,000.00	600,000.00
Raw water payment	1,000,000.00	1,000,000.00		
Internal raw water system & 12" raw water line	1,211,100.66	900,000.00	250,000.00	61,100.66
Storm collection & conveyance	4,000,000.00	1,800,000.00	1,400,000.00	800,000.00
Contribution to 12" interceptor	2,000,000.00	2,000,000.00		
Sanitary sewer collection	1,500,000.00	300,000.00	1,200,000.00	
subtotal	50,552,334.31	23,437,135.20	19,287,823.84	7,827,375.27
Total with contingency (20%)	60,662,801	28,124,562	23,145,389	9,392,850



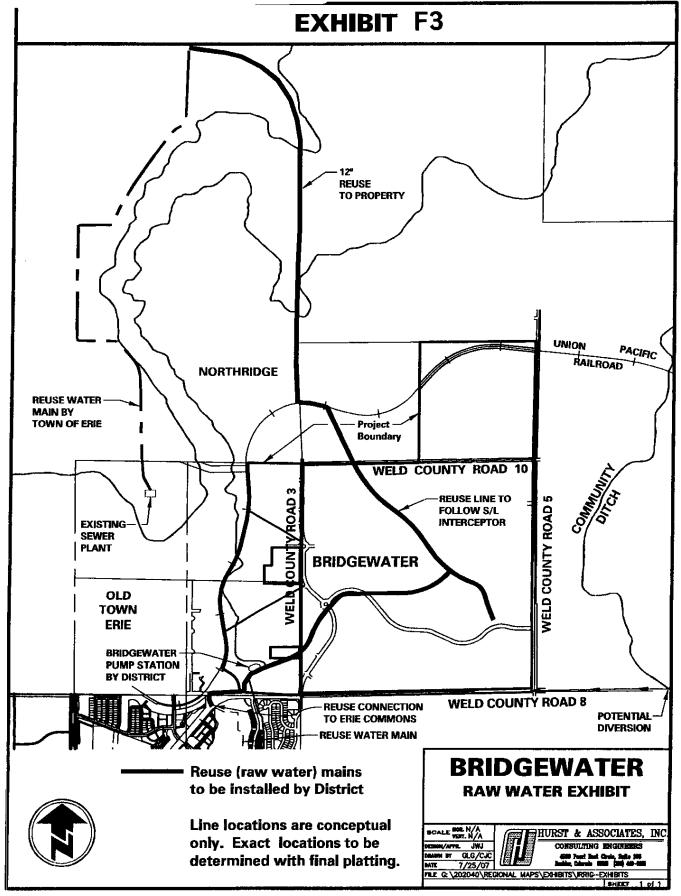
3518317 11/19/2007 04:02P Weld County, CO 50 of 56 R 281.00 D 0.00 Steve Moreno Clerk & Recorder





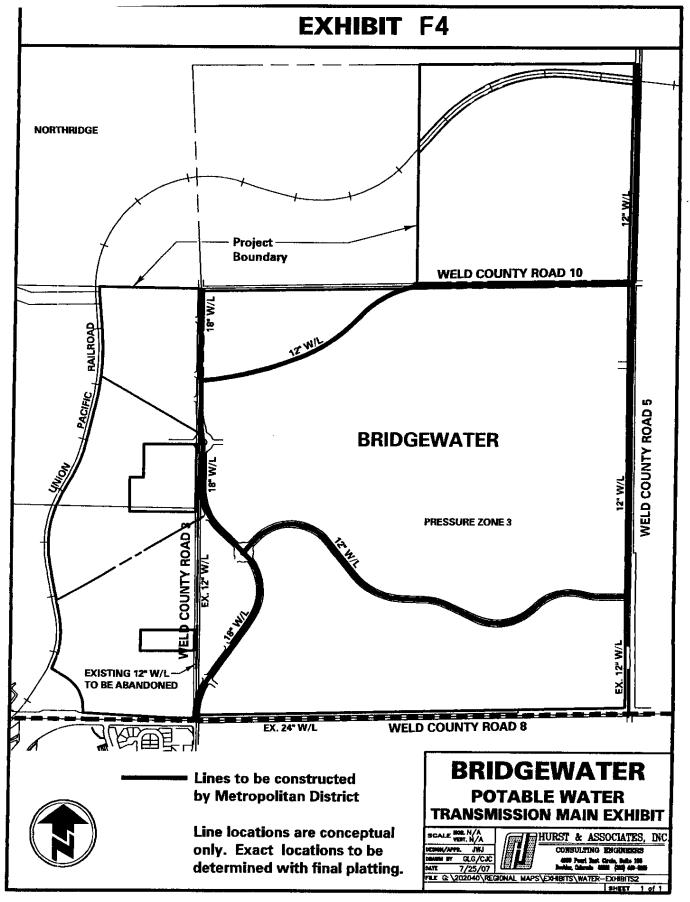


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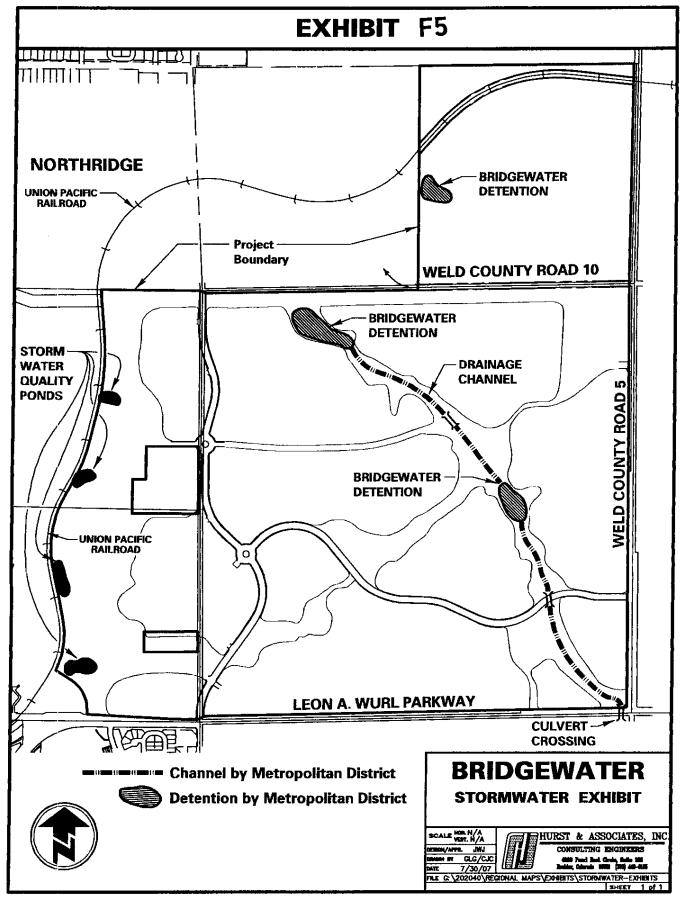


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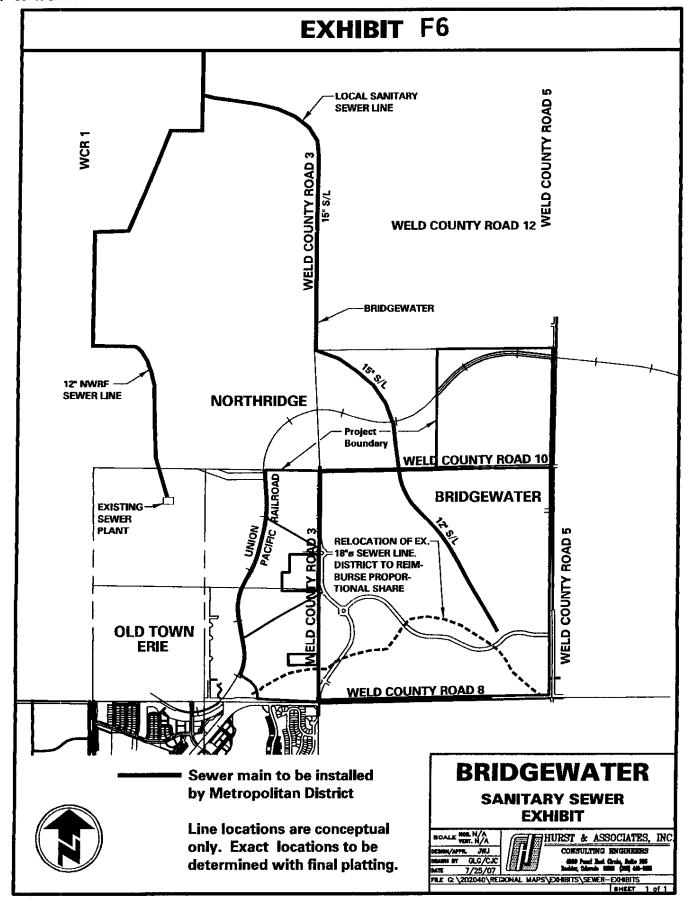


3518317 11/19/2007 04:02P Weld County, CO 54 of 56 R 281.00 D 0.00 Steve Moreno Clerk & Recorder





3518317 11/19/2007 04:02P Weld County, CO 55 of 56 R 281.00 D 0.00 Steve Moreno Clerk & Recorder





#### **EXHIBIT "G"**

#### IRREVOCABLE LETTER OF CREDIT

#### INSERT PROPERTY IDENTIFICATION

(IF FOR 2 YEAR WARRANTY ADD APPROPRIATE ITEM: LANDSCAPING OR HARDSCAPE OR TOTAL SUBDIVISION IMPROVEMENTS)

Town of Erie	No.	
645 Holbrook Street	Issue Date:	
P.O. Box 750	Expiration:	
Erie, CO 80516		
Gentlemen:		
We hereby authorize you to draw on	us for the account of	un to an
We hereby authorize you to draw on aggregate amount of \$	available by your drafts at sight ac	companied by your signed statement
that the above is drawn for payment	of public improvements pursuant to	):
Town of Erie Development Agreeme	nt dated, entere	ed into between the Town of Erie,
Town of Erie Development Agreeme Colorado and	(Include name of subdivision and f	iling number [if applicable].
Destini Description and a second of the state of		
to the Town of Erie by the issuing Ba		iginal Letter of Credit will be returned
to the Town of Effe by the issuing Ba	ink after endorsement.	
Drafts must be drawn and negotiated	on or before (expira	tion date) Each draft presented
Drafts must be drawn and negotiated under this letter of credit must state to	hat it is drawn under (Title of Bar	nk and identification of the Letter of
Credit) and the amount endorsed on t		Market State Control of the Determination of the De
We hereby agree with the drawers, en	dorsers and bona fide holders of all	l drafts drawn under and in
compliance with the terms of this Let	ter of Credit that such drafts will be	e duly honored upon the presentation
to the drawee.		
TT1: 1 ( CC 1: 1 111 )		
This Letter of Credit shall be automa		
from the present or any future expirate shall notify you in writing by overnig		
shan nothly you in writing by overing	in courier service that we elect not t	to so renew this Letter of Credit.
Except as expressly provided herein,	this Letter of Credit is governed by	the Uniform Commercial Code of
the State of Colorado.	me zener er eredn is gevenned ey	the official controller code of
Yours very truly,		
By:		
By.	<del></del>	
Title:		
	Attest;	



development of the Sewer Benefited Properties. The reimbursements shall be required to be paid by the Sewer Benefited Properties owners at such time as the first final plat is approved for the benefit of the Sewer Benefited Properties. "Oversizing" shall mean any requirement by the Town to install a sewer line which is greater than that which would otherwise be required to serve only the Property. "Incremental Costs" shall mean the cost difference of pipe and related facility oversizing. Nothing contained in this Agreement shall operate to create an obligation on the part of Erie to pay or reimburse any costs to Owner in the event such costs are not recovered by Erie as contemplated herein, for any reason, from the Sewer Benefited Properties or Sewer Benefited Property owners.

- 1. Installation Obligations. Owner shall install, at its sole cost and expense, all the sewer lines and appurtenances located within the boundaries of the Property, subject to the oversizing and reimbursements provided for herein. Sewer lines lying within dedicated rights-of-way or Town approved easements shall be dedicated to the Town upon the Town's construction acceptance thereof.
- 2. Off-Site. The sewer lines will be sized to provide service to the entire sewer basin. The Town agrees to enter into one or more reimbursement and service agreements with Owner and the owners of other Sewer Benefited Properties in the basin causing such owners to reimburse any incremental costs to Owner or such other entity as may construct the sewer line serving all such Sewer Benefited Properties. Based on sewer capacity, any reimbursement payments described above shall be made at the time of construction of the sewer line or at such time as the first connection is made to the sewer line if such connection is made after the sewer line has been constructed. The off-site sewer lines to be constructed with the development of the Property as described above are shown on the preliminary utility plan submitted with this annexation and outlined in Exhibit "F."
  - a. Erie High School Sewer Extension. The St. Vrain Valley School District ("SVVSD") has constructed an "A" line through the Property within an easement granted by Owner to serve the Erie High School. This line is sized to accommodate all of the Property that drains to this line. The Owner agrees to reimburse SVVSD \$375,100 for this sewer line at the time of the first connection to this line. The Town agrees that Owner may be due a pro-rata reimbursement from any future developments which utilize this line based on a percentage of capacity utilized by such development from subsequent connections to the line. The Town has no obligation to reimburse or pursue reimbursement.
  - b. BridgeWater Sewer Line Extension. Owner agrees to install the entire on-site and off-site northern sewer gathering line for the

# Rean Robl

FW: Sewer capacity through Colliers Tuesday, October 26, 2021 2:09 PM Rean Robl Jon Lee **Subject:** From: Sent: ű

DOC971.pdf; DOC972.pdf

Attachments:

Office - 303-442-2299

Cell - 303-588-4102

jonrlee@cdgcolorado.com

From: Tom Ackerman <tom@hurst.design>

Sent: Monday, October 25, 2021 3:28 PM

To: Jon Lee <jonrlee@cdgcolorado.com>; John Jorgenson <john@hurst.design>

Subject: FW: Sewer capacity through Colliers

# 18-inch sewer main Contributors

			*From Westerly Utility Report	*From Erie Highlands Utility Report	*From Westerly Utility Report	*Assumes 1220 students at same flow rate as Erie High	*From Westerly Utility Report	*Colliers Hill Utility Report	
	% of 18" S/L	Capacity	27.6%	7.5%	4.1%	2.2%	22.2%	16.9%	80.4%
% of	Total	Flows	34.3%	9.3%	5.1%	2.8%	27.6%	21.0%	100.0%
Peak	Flow Rate	(cfs)	2.287	0.62	0.34	0.19	1.842	1.4	6.67
			Westerly	Erie Highlands	Erie High School (Assumed 2200 students)	Soaring Heights (Assumes 1200 students)	East of Erie High	Colliers Hill	Total Flows

\*Note 18-inch S/L capacity =

cfs 8.3



Matrix Design Group, Inc. 1601 Blake Street, Suite 200 Denver, CO 80202 O 303.572.0200 F 303.572.0202 matrixdesigngroup.com

July 13, 2020

Town of Erie Town Hall 645 Holbrook Street Erie, CO 80516

RE:

Westerly Filing 1 Final Utility Compliance Letter

Dear Sir/Madam:

Matrix Design Group is submitting this Utility Compliance Letter on behalf of the Erie Land Company, LLC for the proposed Westerly Filing No. 1 development.

Westerly is a 418-acre development being planned on two contiguous parcels in the Town of Erie. The Dearmin parcel is 266.66 acres and the Swink parcel is 151.53 acres. The site is bounded by Erie Parkway on the north, Weld County Road 6 (WCR 6) on the south, Weld County Road (WCR 5) on the west, and Weld County 7 (WCR 7) on the east.

The entire Westerly development consists of 1,200 residential units in a variety of product types including 18 live/work units, 35,000 square feet of commercial space, 6,000 square feet of community space, and both dedicated open space and parks. In addition, the St. Vrain Valley School District is planning to build a middle school (grades six through eight) on 26 acres within the development. It is anticipated this school will have 750 students and 70 to 80 staff members. Westerly will be built in five phases with build-out expected to occur in 2025.

#### Phase 1 Description

Phase 1 consists of 307 residential units. Access to Phase 1 is provided at Westerly Street/Place off of Erie Parkway and Peach Avenue off of WCR 5. This phase is expected to be complete in early 2021.

Phase 1 is located completely within the Town of Erie Zone 3 water pressure. There are existing mains located in CR-5 and Erie Parkway that will be the connection points for the development. As part of the Final Utility Report a WaterCAD model analyzed the full buildout of Zone 3 which includes Phase 1. A series of 8-inch mains are proposed within the development and each home will have a ¾-inch service and water meter. Average daily flow from the 307 homes in Phase 1 equates to 0.186 cfs of the 0.346 cfs anticipated in the Zone 3 pressure zone of the Westerly development. Phase 1 calculations are attached.

Portions of the project will be serviced with non-potable irrigation. While there is not currently non-potable water at the site, a main will be extended from Erie Parkway and CR-5 (north side) to the project. In addition to the main extension, a proposed irrigation pond is planned in the north western portion of the site. Parks that are not serviced by the non-potable will have irrigation provided from the potable system.

July 13, 2020 Page 2

Currently there's an existing 8" sewer main that terminates on the southwest corner of Erie Parkway and WCR 5 named the Coal Creek Extension. This main runs north to the wastewater facility and was intended to service multiple developments—south of Erie Parkway. An updated analysis was done for all of the tributary basin and it was found that this section of pipe will need to be upsized to a 12" as part of Phase 1 due to capacity limitations. Internal sewer mains in Phase 1 will be 8" with the exception of the last stretch of the main which will be 10". Average daily flow from the 307 homes in Phase 1 equates to 0.120 cfs of the 0.496 cfs anticipated in the overall Westerly development. Phase 1 calculations are attached.

#### Conclusion

The Westerly Final Utility Report includes the analysis for the overall development. No changes were made to the report for Phase 1. Due to keeping the same land use and basin delineations, Phase 1 development is in compliance with the Westerly Final Utility Report and pipes are sized accordingly.

Should you either require additional information or have any questions, please do not hesitate to contact me.

Sincerely,

MATRIX DESIGN GROUP, INC.

John Everard, PE

cc: 18.994.001

			LAND USE FLOW CALCULATIONS								
Zones	Downstream Design Point	Residential	Commercial	Park/Recretaion (3060 GPD/AC)	Schools (20GPD/C)	Average Daily Flow	Average Daily Flow	Мак Бау	Max Day	Мах Ноиг	Max Hour
		140	1651	1651	13						
		Gal/capita/day	Gal/acre/day	Gal/acre/day	Gal/student/day				e Salaha III		
	14 P 1	(DU)	(acre)	(acre)	(# of students)	(MGD)	(cfs)	(MGD)	(cfs)	(MGD)	(cfs)
Phase 1		307				0.120	0.186	0.313	0.484	0.469	0.72

<sup>2.8</sup> capita per residence was assumed

<sup>\*</sup>Park demand was taken from the closest jurisdiction (City and County of Broomfield) as neither Erie nor Denver Water have standards

PIPE	RUN			LAN	ID USE				FLOW CAL	CULATIONS	
Basin	Tributar y Design Points	Downstr eam Design Point	Residen	Comme	Park/Re creation	Element ary School	High School	Average Daily Flow	Average Daily Flow	Peaking Factor	Peak Flow
			90	1000	50	13	20				
			Gal/capita/day	Gal/acre/day	Gal/acre/day	Gal/student/day	Gal/student/day				
			(DU)	(acre)	(acre)	(# of students)	(# of students)	(MGD)	(cfs)		(cfs)
	Westerly		307					0.077	0.120	5.0	0.59

<sup>2.8</sup> capita per residence was assumed

# **WESTERLY**

# **FINAL UTILITY REPORT**

#### Prepared for:

Southern Land Company 1601 Blake Street, Suite 200 Denver, Colorado 80202

Prepared by:



1601 Blake Street, Suite 200 Denver, Colorado 80202 Phone (303) 572-0200 Fax (303) 572-0202

Matrix Project No. 18.944.001

July 2020

#### ENGINEER'S CERTIFICATION

I hereby certify that this Final Utility Report for the design of Westerly was prepared by me (or under my direct supervision) in accordance with the provisions of the Town of Erie Standards and Specifications for Design and Construction for the owners thereof. I understand that the Town of Erie does not and will not assume liability for utilities designed by others, including the designs presented in this report.

#### **TOWN ACCEPTANCE**

This report has been reviewed and found to be in general compliance with the Town of Erie Standards and Specifications for Design and Construction and other Town requirements. THE ACCURACY AND VALIDITY OF THE ENGINEERING DESIGN, DETAILS, DIMENSIONS, QUANTITIES, AND CONCEPTS IN THIS REPORT REMAINS THE SOLE RESPONSIBILITY OF THE PROFESSIONAL ENGINEER WHOSE STAMP AND SIGNATURE APPEAR HEREON.

Accepted B	y:	
	Town Engineer	Date



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## **Appendices**

Appendix A – Sanitary Sewer Map and Calculations

Appendix B - Potable Water Map, Calculations, and WaterCAD Model

Appendix C - Reference Documents



#### 1.0 Introduction

The Westerly development is a 418-acre residential development being planned on two contiguous parcels in the Town of Erie. The Dearmin parcel is 266.66 acres and the Swink parcel is 151.53 acres. The site is bounded by Erie Parkway on the north, Weld County Road 6 (WCR 6) on the south, Weld County Road 5 (WCR 5) on the west, and Weld County Road 7 (WCR 7) on the east. The Westerly development is currently planned to have 1230 residential lots, 0.80 acres of commercial as well as a school with approximately 750 students.

#### 1.1 Existing Land Use

The Dearmin and Swink parcels are predominantly farmland. The land uses adjacent to the proposed development include:

- North of Erie Parkway Mostly farmland with Erie High School located in the northeast quadrant of Erie Parkway and WCR 5.
- East of WCR 7 Mostly farmland with miscellaneous agricultural and industrial uses lining the east side of WCR 7.
- North of WCR 6 A Crestone petroleum facility is located in the southeast corner of the section.
- South of WCR 6 Mostly farmland with a regional landfill located in the southeast quadrant of WCR 6 and WCR 5.
- West of WCR 5 A new residential development is under construction to the west.
   Farmland and a couple of small businesses currently are directly adjacent to WCR 5. The northwest quadrant of WCR 5 and WCR 6 is part of the Town of Erie's open space system and contains a singletrack.

#### 1.2 Analysis Limitations and Assumptions

Currently it is assumed that downstream facilities can handle the developments demands.

#### 2.0 Sanitary Sewer

#### 2.1 Existing Sanitary Sewer

Currently, the Town of Erie has one existing wastewater treatment facility called the North Water Reclamation Facility (NWRF). This treatment facility replaced the previous South Water Reclamation Facility in 2011.

There is an existing 8" sanitary sewer line in the intersection of Weld County Road 5 and Erie Parkway that runs north to an 18" main on the north side of Erie Parkway that continues northwest through the Colliers Hill development to the treatment plant.



#### 2.2 Sanitary Sewer Demands

#### 2.2.1 Demand Criteria

Demand criteria was taken from the Town of Erie. Demand calculations were based upon the following.

- Residential = 90 gallons per day per capita
  - Single-Family Detached = 2.8 capita/unit
- Commercial = 1,000 gallons per day per acre
  - o Commercial acreage is based upon building floor area
- Park/Recreation = 50 gallons per day per acre
- Elementary Schools = 13 gallons per day per student
- High Schools = 20 gallons per day per student
- PF = 3.8/(ADF)<sup>0.17</sup>, where ADF is in MGD, 2.5 < PF < 5</li>

#### 2.3 Sanitary Sewer Design Criteria

- Sewer 10" and smaller shall have a max flow depth of 80%
- Sewer 12" and larger may be designed to full flow
- Minimum velocity = 2 fps, Maximum velocity = 10 fps at 80% flow depth
- Manning's 'n' for pipes = 0.012
- Minimum grade 8" = 0.40%, 10" = 0.28%

#### 2.4 Proposed Sanitary Sewer Layout

The proposed Sanitary Sewer layout can be seen on the attached sanitary sewer figure in Appendix A.

Sanitary Sewer pipe sizes were calculated for each of the mains shown in the sanitary sewer figure attached. All sewer mains located within the site are anticipated to be 8" sewer except for the last few stretches which are 10" and called out on the attached figure. The system for the entire site is planned to be drained through the northwest corner onto Weld County Road 5 from which it will head north toward Erie Parkway. The existing 8" main, named the Coal Creek Interceptor Extension, that crosses Erie Parkway to the north is undersized for the proposed Westerly subdivision and the contributing portion of the Erie Highlands development and will need to be pulled and replaced with a 12" main instead. From there, the main connects to an existing 18" main that runs northwest through Colliers Hill.

Downstream capacity through the Colliers Hill development was analyzed with this report and compared to the previous Colliers Hill Final Utility Report by Hurst and Associates. Based upon the Colliers Hill Final Utility Report, the contributing basin for the Coal Creek Interceptor Extension includes the Westerly development area, a portion of the Erie Highlands development area, Erie High School and a portion of land east of Erie High School. The total unit count planned for 3,840 units of residential and the full buildout of Erie High School (2,200 students) with a total peak flow of 4.6 cfs. Calculations for this basin were updated based upon the Westerly and Erie Highlands development plan. The portion of land east of Erie High School was also updated in the calculations to be high density residential based upon the 2015 Erie Land Use Map. The maximum density of 20 du/acre was used for the 49 acres to be conservative. Based upon these updated calculations for the Coal Creek Interceptor Extension basin, peak flow is 4.3 cfs which is less than



the original design plan of 4.6 cfs and thus the downstream capacity should be acceptable for the proposed development.

#### 3.0 Potable Water

#### 3.1 Existing Potable Water

Currently there are existing water mains located around the project site. Existing water mains and sizes are as follows:

- 30" main in Erie Parkway (Zone 3)
- 30" main in Weld County Road 7 (Zone 3)

The site is located in pressure Zone 3 with elevations ranging from 5,070-5,210 and an HGL of 5,316.

There are currently two tanks that are located a couple miles south of the site. The tanks are refilled with the 30" main described above that connects with the water treatment facility. This main operates in both directions by either refilling the tank or providing water demand to it's providing facilities and is operating in pressure zone 3. The pump for the existing tanks currently is operating for a zone 3 pressure as well.

#### 3.2 Potable Water Demands

#### 3.2.1 Demand Criteria

Demands criteria was taken from the Town of Erie criteria. Demand calculations were based upon the following.

Land Type	Average Demand	Max. Day/Avg. Day	Max. Hr./Avg. Day
Residential	140 GPCD*	2.6	3.9
Commercial	1651 GPD/Acre	2.0	3.0
Industrial	1651 GPD/Acre	1.32	3.0
Parks**	3060 GPD/Acre	<b>9</b>	-

<sup>\*</sup>Residential demands are calculated utilizing 2.8 persons per household

#### 3.3 Proposed Potable Water Layout

The proposed Potable Water layout can be seen on the attached potable water figure in Appendix B.

The Zone 3 area is anticipated to be served with two connections to the existing 30" main in Erie Parkway as well as two connections to a new 16" main that will be constructed in WCR 5. This main is also intended to be used by Erie Highlands and may be constructed by them depending on the timing of each development.

#### 3.4 WaterCAD Modeling

Water modeling was performed for the proposed Zone 3 with the following criteria used for modeling.



<sup>\*\*</sup>Parks demand was taken from City and County of Broomfield without Town of Erie Standards

#### 3.4.1 Modeling Criteria

- · Max velocity of 10 fps
- Maximum static head of 290 feet or 125 psi
- Minimum static head of 100 feet or 43 psi
- Maximum residual pressure for peak residential is 40 psi
- 8" 12" pipes have C-100 and maximum headloss of 2' per 1,000'
- 14" 16" pipes have C-110 and maximum headloss of 2' per 1,000'
- 20" pipes have C-130 and maximum headloss of 1.5' per 1,000'
- Over 20" pipes are at the direction of the City Engineer
- · Available fire flow shall be 20 psi residual minimum
- Minimum fire flow (2 hour duration) is 1,000 gpm for 1 and 2 family units and 2,500 gpm for commercial development.

The following modeling scenarios were performed utilizing WaterCAD v8i for the Zone 3 model.

- Static Demand
- Average Daily Demand
- Max Hour Demand
- Max Day Demand
- Max Hour Demand w/ Fire Flow

#### 3.5 WaterCAD Modeling Results

Results from the WaterCAD modeling for the proposed pipes are within Town of Erie Standards.

#### 4.0 Non-Potable Water

#### 4.1 Existing Non-Potable Water

Currently there is an existing non-potable water tank located north of the development. There are no existing non-potable lines located surrounding the development.

#### 4.2 Proposed Non-Potable Water

The proposed non-potable main that will service the development will run south from the tanks to the northwest corner of the site. In order to service the irrigation demands within the site, a proposed irrigation pond on the northwest corner of the development will be constructed that will be refilled utilizing the connection to the tanks.

#### 5.0 Conclusion

The design of the sanitary sewer and potable water design are within the Town of Erie standards.



#### 6.0 References

- Colliers Hill Final Utility Report Erie, Colorado, Sept. 2015, revised October 2016. Hurst & Associates, Inc.
- Town of Erie 2015 Comprehensive Plan
- Wastewater Utility Plan Update, Town of Erie, November 2015, Burns & McDonnell
- Erie Non-Potable Water Master Plan Update, Town of Erie, DiNatale Water Consultants



# Appendix A – Sanitary Sewer Map and Calculations



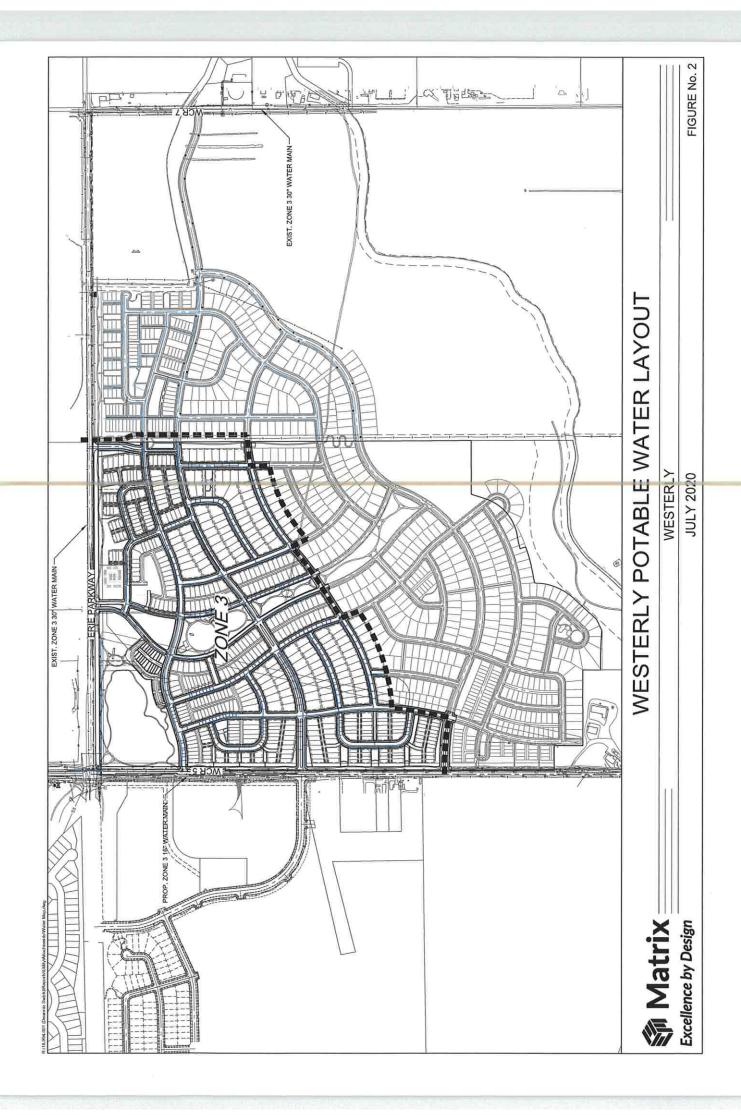


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		Peak Flow			(cfs)	2.287	2.287	1.478	0:930		0.340	1.842		A. 336	
	LATIONS	Peaking Factor				4.6	4.6	MGD	5.0		5.0	4.8		9.37	Design of the last
	FLOW CALCULATIONS	Average <mark>Daily</mark> Flow			(sp)	0.496	0.496		0.126		0.068	0.382		1.872	-
		Viled ageravA wolfi		(MGD)	0.321	0.321		0.081		0.044	0.247		0.692	-	
		High School	20	Gal/student/day	(# of students)						2,200		ne ~49 acres		UUC C
		Elementary School	13	Ga /student/day	(# of students)	750	750						utilizes the maximum density of 20 Ju/acre for the ~49 acres		750
	LAND USE	Park/Recreation	20	Gal/acre/day	(acre)								mum density of		
	LAN	Commercial	1000	Gal/acre/day	(acre)	0.80	08'0		25.00				izes the maxi		350
		Residential	06	Gal/capita/day	(na)	1,230	1,230		224			086	ster Plan and uti		2.424
er Calculations		meshtewod finio9 ngised								Erie Highlands Development	が 10年間に 10年		esidential per 2015 Town Ma		
Westerly Master Plan Sanitary Sewer Calculations	PIPE RUN	ngisag Design Points		新生子のおとうなるところなるのなか。		Westerly	TOTAL	2.8 capita per residence was assumed	Erie Highlands	2.76 capita per residence was assumed by Core for the Erie Highlands Development	Erie High School	East of Erie High School	East of Erie High School is assumed to be high-density residential per 2015 Town Master Plan and t	Coal Greek Interceptor Extension	The second secon
Vesterly	Dom:	nised						8 capita per n		76 capita per		S 45 35.84 S	st of Erie High		

## Appendix B – Potable Water Map, Calculations, and WaterCAD Model





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		noH xsM			(cfs)	1.337	3 3.485
		Max Hour			(MGD)	0.864	1.933
	FLOW CALCULATIONS	Yed xeM			(cfs)	0.893	4.230
	FLOW CAL	Ved xeM			(MGD)	0.577	1.305
		ylisG age JavA wola			(cfs)	0.346	0.824
		Worsge Daily Flow			(MGD)	0.224	0.533
		Schools (20GPD/C)	13	Gal/acre/day Gal/student/day	(# of students)		750
	O USE	Park/Recretaion (3060 GPD/AC)	1651	Gal/acre/day	(acre)	2	24
	LAND	Commercial	1651	Gal/acre/day	(acre)	0.8	0.8
tions		Residential	140	Gal/capita/day Gal/acre/day	(na)	561	1,230
ater Calcula		msərtream Jnioq ngizəQ					
<b>Nesterly Master Plan Water Calculations</b>		Zouez				Westerly Zone 3	Westerly TOTAL

2.8 capita per residence was assumed

<sup>\*</sup>Park demand was taken from the closest jurisdiction (City and County of Broomfield) as neither Erie nor Denver Water have standards



lode	The second	LAND	USE		FLOW	CALCULATIO	INS
p po N	Residential	Commercial	Park/Recretaion (3060 GPD/AC*)	Schools (20GPD/C)	Average Daily Flow	Max Day	Max Hour
	140	1651	3060	13	(www.a.chille		(Massingal
	Gal/capita/day	Gal/acre/day	Gal/acre/day	Gal/student/day			
	(DU)	(acre)	(acre)	(# of students)	(GPM)	(GPM)	(GPM)
6			1.43		3.04	3.04	3.04
8	32				8.71	22.65	33.97
11	22				5.99	15.57	23.36
26	22				5.99	15.57	23.36
27	28				7.62	19.82	29.73
47	30				8.17	21.23	31.85
49	18				4.90	12.74	19.11
50	19				5.17	13.45	20.17
55	28				7.62	19.82	29.73
81		0.80			0.92	1.83	2.75
82	32				8.71	22.65	33.97
83	28				7.62	19.82	29.73
89	23				6.26	16.28	24.42
91	22				5.99	15.57	23.36
95	33				8.98	23.36	35.04
100	21				5.72	14.86	22.30
105	22				5.99	15.57	23.36
107	27				7.35	19.11	28.67
110	33				8.98	23.36	35.04
122	24				6.53	16.99	25.48
124	18		0.14		5.20	13.04	19.41
125	20				5.44	14.16	21.23
126	24				6.53	16.99	25.48
127	35				9.53	24.77	37.16
PARTY TO	561	0.80	1.57		156.97	402.23	601.68

<sup>2.8</sup> capita per residence was assumed

<sup>\*</sup>Park demand was taken from the closest jurisdiction (City and County of Broomfield) as neither Erie nor Denver Water have standards

Scenario: Zone 3 Static Current Time Step: 0.000 h FlexTable: Junction Table

ı		T		<b>1</b>	
ı	Label	Elevation (ft)	Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)
1	J-5	5,159.00	0	5,316.00	68
ı	J-6	5,156.00	0	5,316.00	69
ı	J-7	5,158.00	0	5,316.00	68
ı	J-8	5,161.00	0	5,316.00	67
ı	J-9 J-10	5,166.00 5,170.00	0 0	5,316.00 5,316.00	65 63
ı	J-11	5,170.00	0	5,316.00	64
ı	J-12	5,180.00	ŏ	5,316.00	59
ı	J-13	5,192.00	0	5,316.00	54
ı	J-14	5,195.00	0	5,316.00	52
١	J-26	5,183.40	0	5,316.00	57
ı	J-27	5,186.00	0	5,316.00	56
ı	J-28 J-40	5,200.00	0	5,316.00	50
ı	J-41	5,213.00 5,208.00	0 0	5,316.00 5,316.00	45 47
ı	J-42	5,199.00	0	5,316.00	51
ı	J-43	5,192.00	ŏ	5,316.00	54
ı	J-44	5,185.00	0	5,316.00	57
1	J-46	5,175.00	0	5,316.00	61
I	J-47	5,161.00	0	5,316.00	67
ı	J-49	5,172.00	0	5,316.00	62
ı	J-50 J-51	5,179.00 5,183.00	0	5,316.00 5,316.00	59 58
ı	J-54	5,182.00	0	5,316.00	58
ı	J-55	5,192.00	ő	5,316.00	54
ı	J-56	5,197.00	0	5,316.00	51
ı	J-79	5,164.00	0	5,316.00	66
1	Hydrant	5,168.00	0	5,316.00	64
1	J-81	5,170.00	0	5,316.00	63
١	J-82 J-83	5,178.00	0	5,316.00	60 55
١	J-84	5,188.00 5,194.00	0	5,316.00 5,316.00	53
ı	J-88	5,181.00	ő	5,316.00	58
ı	J-89	5,179.00	0	5,316.00	59
ı	J-90	5,191.00	0	5,316.00	54
ı	J-91	5,199.00	0	5,316.00	51
ı	J-95	5,205.00	0	5,316.00	48
ı	J-97 J-98	5,187.00 5,197.00	0 0	5,316.00	56
ı	J-100	5,184.00	ő	5,316.00 5,316.00	51 57
ı	J-104	5,205.00	ŏ	5,316.00	48
ı	J-105	5,205.00	0	5,316.00	48
ı	J-107	5,195.00	0	5,316.00	52
ı	J-108	5,188.00	0	5,316.00	55
1	J-110	5,206.00	0	5,316.00	48
ı	J-111 J-114	5,184.00 5,202.00	0	5,316.00 5,316.00	57 49
	J-114 J-117	5,202.00	0	5,316.00	50 50
	J-118	5,174.00	ŏ	5,316.00	61
	J-119	5,146.00	ŏ	5,316.00	74
	J-120	5,199.00	0	5,316.00	51
	J-122	5,175.00	0	5,316.00	61
	J-123	5,179.00	0	5,316.00	59
	J-124	5,164.50	0	5,316.00	66
	J-125 J-126	5,198.02 5,192.00	0	5,316.00 5,316.00	51 54
	J-127	5,189.72	ő	5,316.00	55

Scenario: Zone 3 Static Current Time Step: 0.000 h FlexTable: Pipe Table

1							T T				
	Label	Length (Scaled) (ft)	Start Node	Stop Node	Diameter (in)	Material	Hazen- Williams C	Minor Loss Coefficient (Local)	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/ft)
	P-1	753	J-119	J-5	16.0	PVC	110.0	0.000	0	0.00	0.000
	P-4 P-5	356 237	J-5 J-6	J-6 J-7	8.0 8.0	PVC PVC	100.0	0.000	0	0.00	0.000
	P-6	223	J-7	J-8	8.0	PVC	100.0	0.000	0	0.00	0.000
	P-7 P-8	192 322	J-8 J-9	J-9 J-10	8.0 8.0	PVC PVC	100.0	0.000	0	0.00	0.000
	P-9	126	J-10	J-11	8.0	PVC	100.0	0.000	0	0.00	0.000
	P-10 P-12	597 118	J-11 J-13	J-12 J-14	8.0 8.0	PVC PVC	100.0 100.0	0.000	0	0.00	0.000
	P-25	194 145	J-26 J-40	J-27	8.0 8.0	PVC PVC	100.0 100.0	0.000	0	0.00	0.000
	P-39 P-41	272	J-40 J-42	J-41 J-43	8.0	PVC	100.0	0.000	ő	0.00	0.000
	P-44(2)(1) P-44(2)(2)	374 152	J-46 J-47	J-47 J-6	8.0 8.0	PVC PVC	100.0 100.0	0,000	0	0.00	0.000
	P-47	335	J-49	J-50	8.0	PVC	100.0	0.000	0	0.00	0.000
	P-43(1) P-48	131 281	J-44 J-50	J-51 J-51	8.0 8.0	PVC PVC	100.0	0.000	0	0.00	0.000
	P-49	249	J-49	J-46	8.0	PVC	100.0	0.000	0	0.00	0.000
	P-53 P-54	309 284	J-54 J-55	J-55 J-56	8.0 8.0	PVC PVC	100.0	0.000	0	0.00	0.000
	P-62	567	J-44	J-54	8.0	PVC	100.0	0.000	0	0.00	0.000
	P-89 P-90	529 272	J-8 J-79	J-79 Hydrant	8.0 8.0	PVC PVC	100.0 100.0	0.000	0	0.00	0.000
	P-91 P-94	82 228	Hydrant J-9	J-81 J-79	8.0 8.0	PVC PVC	100.0 100.0	0.000	0	0.00	0.000
	P-95	444	J-82	J-83	8.0	PVC	100.0	0.000	0	0.00	0.000
	P-96 P-97	183 153	J-83 J-83	J-13 J-84	8.0 8.0	PVC PVC	100.0	0.000	0	0.00	0.000
	P-98	202	J-84	J-14	8.0	PVC	100.0	0.000	0	0.00	0.000
_	P-104 P-105	145 120	J-26 J-88	J-88	8.0	PVC	100.0	0.000	0	0.00	0.000
	P-106 P-114	643 280	J-89 J-91	J-90 J-14	8.0 8.0	PVC PVC	100.0 100.0	0.000 0.000	0	0.00	0.000
	P-118	275	J-89	J-97	8.0	PVC	100,0	0.000	0	0.00	0.000
	P-119 P-123	309 743	J-97 J-98	J-98 J-95	8.0 8.0	PVC PVC	100.0	0.000	0	0.00	0.000
	P-82	283	J-56	J-28	8.0	PVC	100.0	0.000	0	0.00	0.000
	P-26 P-115	578 575	J-27 J-91	J-28 J-95	8.0 8.0	PVC PVC	100.0	0.000	0	0.00	0.000
	P-107	304	J-90	J-91	8,0	PVC	100,0	0.000	0	0.00	0.000
	P-93 P-92	235 521	J-82 J-81	J-12 J-82	8.0 8.0	PVC	100.0	0.000	0	0.00	0.000
	P-125	440 272	J-10 J-100	J-81 J-13	8.0 8.0	PVC PVC	100.0 100.0	0.000	0	0.00	0.000
	P-11(2)(2) P-126	280	J-100	J-90	8.0	PVC	100.0	0.000	ő	0.00	0.000
	P-40(1)(1) P-134	188 292	J-41 J-104	J-104 J-105	8.0 8.0	PVC PVC	100.0	0.000	0	0.00	0.000
	P-135	380	J-105	J-107	8.0	PVC	100.0	0.000	0	0.00	0.000
	P-137 P-42(1)	247 169	J-107 J-43	J-43 J-108	8.0 8.0	PVC PVC	100.0 100.0	0.000	0	0.00	0.000
	P-42(2)	148	J-108	J-44	8.0	PVC	100.0	0.000	0	0.00	0.000
	P-138 P-140	432 444	J-108 J-40	J-107 J-110	8.0 8.0	PVC PVC	100.0	0.000	0	0.00	0.000
	P-139(1) P-139(2)	141 250	J-105 J-110	J-110 J-41	8.0 8.0	PVC PVC	100.0 100.0	0.000	0	0.00	0.000
	P-143	810	J-27	J-9	8.0	PVC	100.0	0.000	0	0.00	0.000
	P-144 P-145	443 295	J-88 J-118	J-11 Hydrant	8.0 8.0	PVC PVC	100.0	0.000	0	0.00	0.000
	P-147	482	J-111	J-44	8.0	PVC	100.0	0.000	0	0.00	0.000
	P-148 P-13(1)	949 204	J-111 J-14	J-5 J-114	16.0 8.0	PVC PVC	110.0	0.000	0	0.00	0.000
	P-151	426	J-117 R-6	J-114 J-119	8.0 30.0	PVC PVC	100.0 150.0	0.000	0	0.00	0.000
	P-154 P-155	243 1,360	J-119	J-118	30.0	PVC	150.0	0.000	ő	0.00	0.000
	P-156 P-157	1,319 146	J-118 J-117	J-117 R-7	30.0 30.0	PVC PVC	150.0 150.0	0.000	0	0.00	0.000
	P-158	121	J-12	J-100	8.0	PVC	100.0	0.000	0	0.00	0.000
	P-24(1) P-24(2)	147 601	J-28 J-120	J-120 J-26	8.0 8.0	PVC PVC	100.0 100.0	0.000	0	0.00	0.000
	P-159	267	J-98	J-120	8.0	PVC	100.0	0.000	0	0.00	0.000
	P-160 P-50(1)	129 679	J-42 J-7	J-104 J-122	8.0 8.0	PVC PVC	100.0 100.0	0.000	0	0.00	0.000
	P-50(2)	285	J-122	J-54	8.0	PVC PVC	100.0	0.000	0	0.00	0.000
	P-43(1) P-43(2)	174 174	J-51 J-123	J-123 J-46	8.0 8.0	PVC	100.0 100.0	0,000 0.000	0	0.00	0.000
	P-161 P-46(1)	387 161	J-122 J-47	J-123 J-124	8.0 8.0	PVC PVC	100.0 100.0	0.000	0	0.00	0.000
	P-46(2)	345	J-124	J-49	8.0	PVC	100.0	0.000	0	0.00	0.000
	P-64(1) P-64(2)	384 395	J-42 J-125	J-125 J-56	8.0 8.0	PVC PVC	100.0 100.0	0.000	0	0.00	0.000
	P-63(1)	369	J-43	J-126	8.0	PVC	100.0	0.000	0	0.00	0.000
	P-63(2) P-124(1)	328 557	J-126 J-97	J-55 J-127	8.0 8.0	PVC PVC	100.0 100.0	0.000	0	0.00	0.000
	P-124(2)	264	J-127	J-90	8.0	PVC	100.0	0.000	Ō	0.00	0.000

Scenario: Zone 3 Static Current Time Step: 0.000 h FlexTable: Reservoir Table

ID	Label	Elevation (ft)	Zone	Flow (Out net) (gpm)	Hydraulic Grade (ft)
366	R-6	5,316.00	<none></none>	0	5,316.00
367	R-7	5,316.00	<none></none>	0	5,316.00

Scenario: Zone 3 Average Daily Current Time Step: 0.000 h FlexTable: Junction Table

		1-10100700 MAR		
Label	Elevation (ft)	Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)
J-5	5,159.00	0	5,315.99	68
J-6	5,156.00	3	5,315.97	69
J-7	5,158.00	0	5,315.96	68
J-8 J-9	5,161.00 5,166.00	9	5,315.96	67 65
J-10	5,170.00	0	5,315.96 5,315.96	63
J-11	5,168.00	6	5,315.96	64
J-12	5,180.00	0	5,315.96	59
J-13	5,192.00	0	5,315.96	54
J-14 J-26	5,195.00	0 6	5,315.96	52 57
J-27	5,183.40 5,186.00	8	5,315.96 5,315.96	57 56
J-28	5,200.00	ő	5,315.96	50
J-40	5,213.00	0	5,315.96	45
J-41	5,208.00	0	5,315.96	47
J-42	5,199.00	0	5,315.96	51
J-43 J-44	5,192.00 5,185.00	0 0	5,315.96 5,315.96	54 57
J-46	5,175.00	0	5,315.96	61
J-47	5,161.00	8	5,315.96	67
J-49	5,172.00	5 5	5,315.96	62
J-50 J-51	5,179.00	0	5,315.96	59
J-51 J-54	5,183.00 5,182.00	0	5,315.96 5,315.96	58 58
J-55	5,192.00	8	5,315.96	54
J-56	5,197.00	0	5,315.96	51
J-79	5,164.00	0	5,315.97	66
Hydrant	5,168.00	0 1	5,315.97	64
J-81 J-82	5,170.00 5,178.00	9	5,315.97 5,315.96	63 60
J-83	5,188.00	8	5,315.96	55
J-84	5,194.00	0	5,315.96	53
J-88	5,181.00	0	5,315.96	58
J-89	5,179.00	6	5,315.96	59
J-90 J-91	5,191.00 5,199.00	0 6	5,315.96 5,315.96	54 51
J-95	5,205.00	9	5,315.96	48
J-97	5,187.00	0	5,315.96	56
J-98	5,197.00	0	5,315.96	51
J-100	5,184.00	6	5,315.96	57
J-104 J-105	5,205.00 5,205.00	0 6	5,315.96 5,315.96	48 48
J-107	5,195.00	7	5,315.96	52
J-108	5,188.00	0	5,315.96	55
J-110	5,206.00	9	5,315.96	48
J-111	5,184.00	0	5,315.99	57
J-114 J-117	5,202.00 5,200.00	0	5,315.98 5,316.00	49 50
J-118	5,174.00	ŏ	5,316.00	61
J-119	5,146.00	0	5,316.00	74
J-120	5,199.00	0	5,315.96	51
J-122	5,175.00	7	5,315.96	61
J-123 J-124	5,179.00 5,164.50	0 5	5,315.96 5,315.96	59 66
J-125	5,198.02	5	5,315.96	51
J-126	5,192.00	7	5,315.96	54
J-127	5,189.72	10	5,315.96	55

Scenario: Zone 3 Average Daily Current Time Step: 0.000 h FlexTable: Pipe Table

Label	Length (Scaled) (ft)	Start Node	Stop Node	Diameter (in)	Material	Hazen- Williams C	Minor Loss Coefficient (Local)	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/ft)
P-1 P-4 P-5	753 356 237	J-119 J-5 J-6	J-5 J-6 J-7	16.0 8.0 8.0	PVC PVC PVC	110.0 100.0 100.0	0.000 0.000 0.000	76 40 14	0.12 0.26 0.09	0.000 0.000 0.000
P-6 P-7	223 192	J-7 J-8	J-8 J-9	8.0 8.0	PVC PVC	100.0 100.0	0.000	6 4	0.04 0.03	0.000 0.000
P-8 P-9	322 126	J-9 J-10	J-10 J-11	8.0 8.0	PVC PVC	100.0 100.0	0.000	5 17	0.03 0.11	0.000 0.000
P-10 P-12	597 118	J-11 J-13	J-12 J-14	8.0 8.0	PVC PVC	100.0 100.0	0.000	0 -12	0.00	0.000
P-25 P-39	194 145	J-26 J-40	J-27 J-41	8.0 8.0	PVC PVC	100.0 100.0	0:000	-1 -2	0.01 0.01	0.000 0.000
P-41 P-44(2)(1)	272 374	J-42 J-46	J-43 J-47	8.0 8.0	PVC PVC	100,0 100,0	0.000	-7 -6	0.04 0.04	0.000
P-44(2)(2) P-47	152 335	J-47 J-49	J-6 J-50	8.0 8.0	PVC PVC	100.0 100.0	0.000	-23 2	0.14 0.01	0.000
P-43(1) P-48	131 281	J-44 J-50	J-51 J-51	8.0 8.0	PVC PVC	100.0 100.0	0,000	6 -3	0.04 0.02	0.000
P-49 P-53	249 309	J-49 J-54	J-46 J-55	8.0 8.0	PVC PVC	100.0 100.0	0.000	-3 14	0.02	0.000
P-54 P-62	284 567	J-55 J-44	J-56 J-54	8.0 8.0	PVC PVC	100.0 100.0	0.000	2 7	0.01 0.05	0.000
P-89 P-90	529 272	J-8 J-79	J-79 Hydrant	8.0 8.0	PVC PVC	100.0	0.000	-7 -19	0.04 0.12	0.000
P-91	82	Hydrant	J-81	8.0	PVC	100.0	0.000	28	0.18	0.000
P-94 P-95	228 444	J-9 J-82	J-79 J-83	8.0 8.0	PVC PVC	100.0	0.000	-12 -2	0.07 0.01	0.000
P-96 P-97	183 153	J-83 J-83	J-13 J-84	8.0 8.0	PVC PVC	100.0 100.0	0.000	-3 -7	0.02 0.04	0.000
P-98 P-104	202 145	J-84 J-26	J-14 J-88	8.0 8.0	PVC PVC	100.0 100.0	0.000	-7 -6	0.04 0.04	0.000
P-105 P-106	643	J-89	J-90	8.0 8.0	PVC	100.0	0.000	-5	0.03	0.000
P-114 P-118	280 275	J-91 J-89	J-14 J-97	8.0 8.0	PVC PVC	100.0 100.0	0.00.0	-16 3	0.10 0.02	0.000 0.000
P-119 P-123	309 743	J-97 J-98	J-98 J-95	8.0 8.0	PVC PVC	100.0 100.0	0.000	3 2	0.02 0.01	0.000 0.000
P-82 P-26	283 578	J-56 J-27	J-28 J-28	8.0 8.0	PVC PVC	100.0 100.0	0.000	-5 2	0.03 0.02	0.000 0.000
P-115 P-107	575 304	J-91 J-90	J-95 J-91	8.0 8.0	PVC PVC	100.0 100.0	0.000	7 -3	0.04	0.000
P-93 P-92	235 521	J-82 J-81	J-12 J-82	8.0 8.0	PVC PVC	100.0 100.0	0.000	7 14	0.04 0.09	0.000
P-125 P-11(2)(2)	440 272	J-10 J-100	J-81 J-13	8.0 8.0	PVC PVC	100.0 100.0	0.000	-13 -9	0.08	0.000
P-126 P-40(1)(1)	280 188	J-100 J-41	J-90 J-104	8.0 8.0	PVC PVC	100.0 100.0	0.000	11 -5	0.07 0.03	0.000
P-134 P-135	292 380	J-104 J-105	J-105 J-107	8.0 8.0	PVC PVC	100.0 100.0	0.000	3 -7	0.02 0.04	0.000
P-137 P-42(1)	247 169	J-107 J-43	J-43 J-108	8.0 8.0	PVC PVC	100.0 100.0	0.000	-5 -14	0.03	0.000
P-42(2) P-138	148 432	J-108 J-108	J-44 J-107	8.0 8.0	PVC PVC	100.0 100.0	0.000	-23 9	0,15 0.06	0.000
P-140 P-139(1)	444 141	J-40 J-105	J-110 J-110	8.0 8.0	PVC PVC	100.0 100.0	0.000	2	0.01 0.03	0.000
P-139(2) P-143	250 810	J-110 J-27	J-41 J-9	8.0 8.0	PVC PVC	100.0	0.000	-3 -11	0.02 0.07	0.000
P-144	443	J-88	J-11	8.0	PVC PVC	100.0	0.000	-11 -11 46	0.07	0.000
P-145 P-147	295 482	J-118 J-111	Hydrant J-44	8.0 8.0	PVC	100.0 100.0	0.000	36	0.29 0.23	0.000
P-148 P-13(1)	949 204	J-111 J-14	J-5 J-114	16.0 8.0	PVC PVC	110.0 100.0	0.000	-36 -35	0.06 0.22	0.000
P-151 P-154	426 243	J-117 R-6	J-114 J-119	8.0 30.0	PVC PVC	100.0 150.0	0.000	35 90	0.22 0.04	0.000
P-155 P-156	1,360 1,319	J-119 J-118	J-118 J-117	30.0 30.0	PVC PVC	150.0 150.0	0.000	14 -32	0.01 0.01	0.000 0.000
P-157 P-158	146 121	J-117 J-12	R-7 J-100	30.0 8.0	PVC PVC	150.0 100.0	0.000	-67 7	0.03 0.05	0.000 0.000
P-24(1) P-24(2)	147 601	J-28 J-120	J-120 J-26	8.0 8.0	PVC PVC	100.0 100.0	0.000	-2 -2	0.02 0.01	0.000 0.000
P-159 P-160	267 129	J-98 J-42	J-120 J-104	8.0 8.0	PVC PVC	100.0 100.0	0.000	1 8	0.00 0.05	0.000 0.000
P-50(1) P-50(2)	679 285	J-7 J-122	J-122 J-54	8.0 8.0	PVC PVC	100.0 100.0	0,000	8 7	0.05 0.04	0.000 0.000
P-43(1) P-43(2)	174 174	J-51 J-123	J-123 J-46	8.0 8.0	PVC PVC	100.0 100.0	0.000	2 -3	0.02 0.02	0.000
P-161 P-46(1)	387 161	J-122 J-47	J-123 J-124	8.0 8.0	PVC PVC	100.0	0.000	-5 9	0.03 0.06	0.000
P-46(2) P-64(1)	345 384	J-124 J-42	J-49 J-125	8.0 8.0	PVC PVC	100.0 100.0	0.000	3	0.02 0.01	0.000
P-64(2) P-63(1)	395 369	J-125 J-43	J-56 J-126	8.0 8.0	PVC PVC	100.0 100.0	0.000	-7 2	0.04 0.01	0.000
P-63(2) P-124(1)	328 557	J-126 J-97	J-55 J-127	8.0 8.0	PVC PVC	100.0 100.0 100.0	0.000	-5 1	0.03	0.000
P-124(1)	264	J-127	J-90	8.0	PVC	100.0	0.000	-9	0.06	0.000

Scenario: Zone 3 Average Daily Current Time Step: 0.000 h FlexTable: Reservoir Table

ID	Label	Elevation (ft)	Zone	Flow (Out net) (gpm)	Hydraulic Grade (ft)
366	R-6	5,316.00	<none> <none></none></none>	90	5,316.00
367	R-7	5,316.00		67	5,316.00

Scenario: Zone 3 Max Day Current Time Step: 0.000 h FlexTable: Junction Table

Label	Elevation (ft)	Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)
J-5	5,159.00	0	5,315.97	68
J-6	5,156.00		5,315.81	69
J-7	5,158.00	0	5,315.80	68
J-8	5,161.00	23	5,315.79	67
J-9	5,166.00	0	5,315.79	65
J-10	5,170.00	0	5,315.79	63
J-11	5,168.00	16	5,315.78	64
J-12	5,180.00	0	5,315.78	59
J-13	5,192.00	0	5,315.78	54
J-14	5,195.00	0	5,315.79	52
J-26	5,183.40	16	5,315.76	57
J-27	5,186.00	20	5,315.76	56
J-28 J-40	5,200.00	0 0	5,315.75	50 44
J-41	5,213.00 5,208.00	0	5,315.74 5,315.74	47
J-42	5,199.00	0	5,315.75	51
J-43	5,192.00	0	5,315.75	54
J-44	5,185.00	0	5,315.79	57
J-46	5,175.00	0	5,315.78	61
J-47	5,161.00	21	5,315.79	67
J-49	5,172.00	13	5,315.78	62
J-50	5,179.00	13	5,315.78	59
J-51	5,183.00	0	5,315.78	57
J-54	5,182.00	0	5,315.77	58
J-55	5,192.00	20	5,315.75	54
J-56	5,197.00	0	5,315.75	51
J-79	5,164.00	0	5,315.80	66
Hydrant	5,168.00	0	5,315.83	64
J-81	5,170.00	2	5,315.81	63
J-82	5,178.00	23	5,315.78	60
J-83	5,188.00	20	5,315.78	55
J-84	5,194.00	0	5,315.78	53
J-88	5,181.00	0	5,315.76	58
J-89	5,179.00	16	5,315.76	59
J-90	5,191.00	0	5,315.76	54
J-91	5,199.00	16	5,315.76	51
J-95	5,205.00	23	5,315.75	48
J-97	5,187.00	0	5,315.76	56
J-98	5,197.00	0	5,315.76	51
J-100	5,184.00	15	5,315.77	57
J-104	5,205.00	0	5,315.74	48
J-105	5,205.00	16	5,315.74	48
J-107	5,195.00	19	5,315.75	52
J-108	5.188.00	0	5,315.76	55
J-110	5,206.00	23	5,315.74	47
J-111	5,184.00	0	5,315.96	57
J-114	5,202.00		5,315.86	49
J-117	5,200.00	0	5,316.00	50
J-118	5,174.00	0	5,316.00	61
J-119	5,146.00		5,316.00	74
J-120	5,199.00	0	5,315.76	51
J-122	5,175.00	17	5,315.78	61
J-123	5,179.00	0	5,315.78	59
J-124	5,164.50	13	5,315.79	65
J-125	5,198.02	14	5,315.75	51
J-126	5,192.00	17	5,315.75	54
J-127	5,189.72	25	5,315.76	55

Length (Scaled) (ft) Minor Loss Coefficient Headloss Diameter Hazen-Williams C Flow Velocity (ft/s) Label Start Node Stop Node Material Gradient (in) (gpm) (Local) (ft/ft) 753 356 237 0.000 1-119 1-5 **PVC** 110 0 0.000 J-6 J-7 100.0 100.0 P-4 P-5 P-6 P-7 P-8 P-9 P-10 P-12 J-5 J-6 J-7 J-8 J-9 J-10 J-13 J-26 J-40 J-47 J-49 J-49 J-55 J-54 J-54 J-48 0.000 8.0 0.000 39 0.25 0.000 J-8 J-9 J-10 J-11 J-12 J-14 223 192 100.0 100.0 0.000 0.11 0.000 17 12 12 46 2 -30 -4 -5 -18 -16 -60 5 14 -8 -8 37 100.0 0.000 0.08 0.000 0.08 100.0 100.0 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.19 100.0 P-25 P-39 J-27 J-41 J-43 J-47 J-6 J-50 J-51 J-51 100.0 0.03 P-41 P-44(2)(1) P-44(2)(2) P-47 0.000 0.000 0.000 0.11 0.10 0.38 0.000 0.000 0.000 100.0 100.0 100.0 100.0 0.000 0.03 0.000 P-43(1) P-48 0.000 0.000 0.000 0.05 100.0 0.000 P-49 P-53 P-54 P-62 P-89 J-46 J-55 J-56 100.0 0.000 0.05 100.0 0.000 0.000 0.000 0.03 0.12 0.11 0.000 0.000 0.000 100.0 5 19 -18 -48 71 -30 -5 -7 -18 -18 J-54 J-79 100.0 0.30 0.45 0.19 0.03 0.04 P-90 P-91 P-94 J-79 Hydrant J-9 Hydrant J-81 J-79 100.0 100.0 0.000 0.000 0.000 0.000 0.000 100.0 0.000 P-95 P-96 P-97 J-82 J-83 J-83 J-84 J-26 J-83 J-13 J-84 J-14 J-88 0.000 100.0 100.0 0.000 0.000 0.000 0.11 0.11 0.11 0.000 0.000 0.000 100.0 P-98 P-104 100.0 J-89 J-91 J-89 J-97 J-98 0.000 0.000 0.000 -12 -13 -41 8 6 5 -12 6 18 -8 18 36 -33 -23 28 -12 0.08 P-106 P-114 P-118 P-119 P-123 J-90 J-14 J-97 J-98 J-95 0.000 100.0 0.26 0.05 0.04 0.000 0.000 0.000 100.0 100.0 0.000 0.000 0.000 0.000 0.03 0.08 0.04 0.000 0.000 0.000 100.0 J-98 J-56 J-27 J-91 J-90 J-82 J-28 J-28 J-95 J-91 J-12 P-82 P-26 P-115 P-107 100.0 0.000 0.000 0.000 0.12 0.05 0.11 100.0 100.0 0.000 P-93 100.0 0.000 0.23 0.21 0.15 0.18 0.08 J-82 J-81 J-13 0.000 0.000 0.000 P-92 P-125 100.0 100.0 0.000 J-81 J-10 J-100 J-100 J-41 J-104 J-105 J-107 P-11(2)(2) P-126 P-40(1)(1) 0.000 0.000 0.000 100.0 J-90 J-104 J-105 J-107 J-43 J-108 J-44 J-107 0.000 100.0 P-134 P-135 P-137 0.000 0.000 0.000 0.06 0.12 0.08 100.0 100.0 0.000 100.0 0.000 J-107 J-43 J-108 J-108 J-40 J-105 J-110 J-27 J-88 0.08 0.23 0.38 0.15 0.03 0.07 P-42(1) P-42(2) P-138 100.0 100.0 0.000 0.000 0.000 0.000 0.000 0.000 100.0 J-107 J-110 J-110 J-41 J-9 J-11 P-140 P-139(1) 100.0 100.0 0.000 P-139(1) P-139(2) P-143 P-144 P-145 P-147 0.000 0.000 0.000 0.05 0.19 0.18 100.0 0.000 100.0 0.000 Hydrant J-44 J-5 J-114 J-119 J-118 J-117 R-7 J-100 J-120 100.0 0.000 0.000 0.000 0.001 J-118 J-111 J-111 J-14 J-117 R-6 J-119 J-118 J-117 J-12 J-28 J-120 J-98 J-42 J-7 J-122 0.76 0.59 0.15 0.57 0.57 0.10 0.02 0.04 0.08 0.12 P-148 110 0 0.000 P-13(1) P-151 0.000 0.000 100.0 100.0 P-154 P-155 P-156 0.000 0.000 0.000 0.000 0.000 0.000 150.0 150.0 P-157 P-158 0.000 0.000 150.0 100.0 P-24(1 100.0 0.000 0.000 P-24(2) P-159 P-160 J-26 J-120 J-104 100.0 0.000 0.03 0.000 0.13 0.14 0.12 0.03 0.05 0.09 100 0 0.000 0.000 J-104 J-122 J-54 J-123 J-46 J-123 P-50(1) P-50(2) 100.0 0.000 0.000 P-43(1) P-43(2) P-161 J-51 J-123 J-122 0.000 0.000 0.000 0.000 100.0 100.0 100.0 0.000 0.15 0.06 0.02 0.11 0.03 P-46(1) P-46(2) P-64(1) J-47 J-124 J-42 J-124 J-49 J-125 100.0 100.0 100.0 0.000 0.000 0.000 0.000 P-64(2) P-63(1) 395 369 J-125 J-43 J-56 J-126 100.0 0.000 0.000 5 -12 2 -23 J-55 J-127 J-90 0.08 0.01 0.15 0.000 0.000 0.000 P-63(2) 328 557 J-126 100.0 0.000 J-97 J-127 P-124(1 100.0 0.000 P-124(2 264

Scenario: Zone 3 Max Day Current Time Step: 0.000 h FlexTable: Reservoir Table

ID	Label	Elevation (ft)	Zone	Flow (Out net) (gpm)	Hydraulic Grade (ft)
366	R-6	5,316.00	<none> <none></none></none>	230	5,316.00
367	R-7	5,316.00		172	5,316.00

Scenario: Zone 3 Max Hour Current Time Step: 0.000 h FlexTable: Junction Table

		·		
9 940 49	Elevation	Demand	Hydraulic	Pressure
Label	(ft)	(gpm)	Grade (ft)	(psi)
1				20000
J-5	5,159.00	0	5,315.93	68
J-6	5,156.00	3	5,315.61	69
J-7	5,158.00	0	5,315.57	68
J-8	5,161.00	34	5,315.56	67
J-9	5,166.00	0	5,315.56	65
J-10	5,170.00	0	5,315.55	63
J-11	5,168.00	23	5,315.53	64
J-12	5,180.00	0	5,315.53	59
J-13	125 A 100 A	ő		53
	5,192.00		5,315.54	
J-14	5,195.00	0	5,315.55	52
J-26	5,183.40	23	5,315.49	57
J-27	5,186.00	30	5,315.49	56
J-28	5,200.00	0	5,315.48	50
J-40	5,213.00	0	5,315.45	44
J-41	5,208.00	0	5,315.45	46
J-42	5,199.00	0	5,315.46	50
J-43	5,192.00	ŏ	5,315.47	53
J-44	5,185.00	ŏ	5,315.55	56
J-46		ő	5,315.54	
	5,175.00			61
J-47	5,161.00	32	5,315.56	67
J-49	5,172.00	19	5,315.54	62
J-50	5,179.00	20	5,315.54	59
J-51	5,183.00	0	5,315.54	57
J-54	5,182.00	0	5,315.52	58
J-55	5,192.00	30	5,315.48	53
J-56	5,197.00	0	5,315.48	51
J-79	5,164.00	0	5,315.58	66
Hydrant	5,168.00	0	5,315.64	64
J-81	5,170.00	3	5,315.60	63
J-82	5,178.00	34	5,315.54	60
J-83	5,188.00	30	5,315.54	55
J-84				
	5,194.00	0	5,315.54	53
J-88	5,181.00	0	5,315.49	58
J-89	5,179.00	24	5,315.49	59
J-90	5,191.00	0	5,315.50	54
J-91	5,199.00	23	5,315.50	50
J-95	5,205.00	35	5,315.48	48
J-97	5,187.00	0	5,315.49	56
J-98	5,197.00	0	5,315.48	51
J-100	5,184.00	22	5,315.52	57
J-104	5,205.00	0	5,315.46	48
J-105	5,205.00	23	5,315.46	48
J-107	5,195.00	29	5,315.47	52
J-108	LU-080/50-004-01-11110-00-01	0	5,315.50	
	5,188.00	10.0		55 47
J-110	5,206.00	35	5,315.45	47
J-111	5,184.00	0	5,315.91	57
J-114	5,202.00	0	5,315.70	49
J-117	5,200.00	0	5,316.00	50
J-118	5,174.00	0	5,316.00	61
J-119	5,146.00	0	5,316.00	74
J-120	5,199.00	0	5,315.48	50
J-122	5,175.00	25	5,315.54	61
J-123	5,179.00	0	5,315.54	59
J-124	5,164.50	19	5,315.55	65
J-125	5,198.02	21	5,315.46	51
J-125 J-126				
- 165 WHEERS	5,192.00	25	5,315.47	53
J-127	5,189.72	37	5,315.48	54

Label	Length (Scaled) (ft)	Start Node	Stop Node	Diameter (in)	Material	Hazen- Williams C	Minor Loss Coefficient (Local)	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/ft)
P-1	753	J-119	J-5	16.0	PVC	110.0	0.000	291	0.46	0.000
P-4	356	J-5	J-6	8.0	PVC	100.0	0.000	153	0.97	0.001
P-5	237	J-6	J-7	8.0	PVC	100.0	0.000	59	0.38	0.000
P-6	223	J-7	J-8	8.0	PVC	100.0	0.000	26	0.17	0.000
P-7	192	J-8	J-9	8.0	PVC	100.0	0.000	18	0.12	0.000
P-8	322	J-9	J-10	8.0	PVC	100.0	0.000	19	0.12	0.000
P-9	126	J-10	J-11	8.0	PVC	100.0	0.000	69	0.44	0.000
P-10	597	J-11	J-12	8.0	PVC	100.0	0.000	2	0.02	0.000
P-12	118	J-13	J-14	8.0	PVC	100.0	0.000	-45	0.29	0.000
P-25	194	J-26	J-27	8.0	PVC	100.0	0.000	-6	0.04	0.000
P-39	145	J-40	J-41	8.0	PVC	100.0	0.000	-7	0.04	0.000
P-41	272	J-42	J-43	8.0	PVC	100.0	0.000	-27	0.17	0.000
P-44(2)(1)	374	J-46	J-47	8.0	PVC	100.0	0.000	-24	0.16	0.000
P-44(2)(2)	152	J-47	J-6	8.0	PVC	100.0	0.000	-90	0.58	0.000
P-47	335	J-49	J-50	8.0	PVC	100.0	0.000	8	0.05	0.000
P-43(1)	131	J-44	J-51	8.0	PVC	100.0	0.000	20	0.13	0.000
P-48	281	J-50	J-51	8.0	PVC	100.0	0.000	-12	0.08	0.000
P-49	249	J-49	J-46	8.0	PVC	100.0	0.000	-12	0.08	0.000
P-53	309	J-54	J-55	8.0	PVC	100.0	0.000	56	0.36	0.000
P-54	284	J-55	J-56	8.0	PVC	100.0	0.000	8	0.05	0,000
P-62	567	J-44	J-54	8.0	PVC	100.0	0.000	28	0.18	0,000
P-89	529	J-8	J-79	8.0	PVC	100.0	0.000	-26	0.17	0,000
P-90	272	J-79	Hydrant	8.0	PVC	100.0	0.000	-71	0.45	0.000
P-91	82	Hydrant	J-81	8.0	PVC	100.0	0.000	106	0.68	0.000
P-94	228	J-9	J-79	8.0	PVC	100.0	0.000	-45	0.29	0.000
P-95	444	J-82	J-83	8.0	PVC	100.0	0.000	-7	0.04	0.000
P-96	183	J-83	J-13	8.0	PVC	100.0	0.000	-10	0.07	0.000
P-97	153	J-83	J-84	8.0	PVC	100.0	0.000	-26	0.17	0.000
P-98	202	J-84	J-14	8.0	PVC	100.0	0.000	-26	0.17	0.000
P-104 P-105 P-106	145 129 643	J-26 J-88 J-89	J-88 J-90	8.0 8.0 8.0	PVC PVC	100.0 100.0 100.0	0.000 0.000 0.000	-25 18 -19	0.16 0.11 0.12	0.000 0.000 0.000
P-114	280	J-91	J-14	8.0	PVC	100.0	0.000	-62	0.40	0.000
P-118	275	J-89	J-97	8.0	PVC	100.0	0.000	12	0.08	0.000
P-119	309	J-97	J-98	8.0	PVC	100.0	0.000	9	0.06	0.000
P-123	743	J-98	J-95	8.0	PVC	100.0	0.000	-18	0.05	0.000
P-82	283	J-56	J-28	8.0	PVC	100.0	0.000		0.11	0.000
P-26	578	J-27	J-28	8.0	PVC	100.0	0.000	9	0.06	0.000
P-115	575	J-91	J-95	8.0	PVC	100.0	0.000	27	0.17	0.000
P-107	304	J-90	J-91	8.0	PVC	100.0	0.000	-11	0.07	0.000
P-93	235	J-82	J-12	8.0	PVC	100.0	0.000	27	0.17	0.000
P-92	521	J-81	J-82	8.0	PVC	100.0	0.000	54	0.34	0.000
P-125	440	J-10	J-81	8.0	PVC	100.0	0.000	-50	0.32	0.000
P-11(2)(2)	272	J-100	J-13	8.0	PVC	100.0	0.000	-35	0.22	0.000
P-126	280	J-100	J-90	8.0	PVC	100.0		42	0.27	0.000
P-40(1)(1)	188	J-41	J-104	8.0	PVC	100.0	0.000	-18	0.12	0.000
P-134	292	J-104	J-105	8.0	PVC	100.0	0.000	13	0.08	0.000
P-135	380	J-105	J-107	8.0	PVC	100.0	0.000	-27	0.17	0.000
P-137 P-42(1) P-42(2)	247 169 148	J-107 J-43 J-108	J-43 J-108 J-44	8.0 8.0 8.0	PVC PVC PVC	100.0 100.0 100.0	0.000 0.000 0.000	-20 -54 -90	0.13 0.34	0.000 0.000 0.000
P-138 P-140	432 444	J-108 J-40	J-107 J-110	8.0 8.0	PVC PVC	100.0 100.0	0.000 0.000	36 7	0.57 0.23 0.04	0.000 0.000
P-139(1)	141	J-105	J-110	8.0	PVC	100.0	0.000	17	0.11	0.000
P-139(2)	250	J-110	J-41	8.0	PVC	100.0	0.000	-11	0.07	0.000
P-143	810	J-27	J-9	8.0	PVC	100.0	0.000	-44	0.28	0.000
P-144	443	J-88	J-11	8.0	PVC	100.0	0.000	-43	0.27	0.000
P-145	295	J-118	Hydrant	8.0	PVC	100.0		177	1.13	0.001
P-147	482	J-111	J-44	8.0	PVC	100.0	0.000	138	0.88	0.001
P-148	949	J-111	J-5	16.0	PVC	110.0	0.000	-138	0.22	0.000
P-13(1)	204	J-14	J-114	8.0	PVC	100.0	0.000	-134	0.85	0.001
P-151	426	J-117	J-114	8.0	PVC	100.0	0.000	134	0.85	0.001
P-154	243	R-6	J-119	30.0	PVC	150.0	0.000	344	0.16	0.000
P-155	1,360	J-119	J-118	30.0	PVC	150.0	0.000	53	0.02	0.000
P-156	1,319	J-118	J-117	30.0	PVC	150.0	0.000	-124	0.06	0.000
P-157	146	J-117	R-7	30.0	PVC	150.0		-258	0.12	0.000
P-158	121	J-12	J-100	8.0	PVC	100.0	0.000	29	0.19	0.000
P-24(1)	147	J-28	J-120	8.0	PVC	100.0	0.000	-9	0.05	0.000
P-24(2)	601	J-120	J-26	8.0	PVC	100.0	0.000	-7	0.04	0.000
P-159	267	J-98	J-120	8.0	PVC	100,0	0.000	2	0.01	0.000
P-160	129	J-42	J-104	8.0	PVC	100,0	0.000	31	0.20	0.000
P-50(1)	679	J-7	J-122	8.0	PVC	100,0	0.000	33	0.21	0.000
P-50(2) P-43(1)	285 174	J-122 J-51	J-54 J-123	8.0 8.0	PVC PVC	100.0 100.0	0.000	28 8	0.18 0.05	0.000
P-43(2)	174	J-123	J-46	8.0	PVC	100.0	0.000	-12	0.08	0.000
P-161	387	J-122	J-123	8.0	PVC	100.0	0.000	-20	0.13	0.000
P-46(1)	161	J-47	J-124	8.0	PVC	100.0	0.000	34	0.22	0.000
P-46(2) P-64(1)	345 384	J-124 J-42	J-49 J-125	8.0 8.0	PVC PVC	100.0 100.0	0.000	15 -4	0.09	0.000
P-64(2)	395	J-125	J-56	8.0	PVC	100.0	0.000	-26	0.16	0.000
P-63(1)	369	J-43	J-126	8.0	PVC	100.0	0.000	7	0.04	0.000
P-63(2)	328	J-126	J-55	8.0	PVC	100.0	0.000	-19	0.12	0.000
P-124(1)	557	J-97	J-127	8.0	PVC	100.0	0.000	3	0.02	0.000
P-124(2)	264	J-127	J-90	8.0	PVC	100.0	0.000	-34	0.22	0.000

Scenario: Zone 3 Max Hour Current Time Step: 0.000 h FlexTable: Reservoir Table

Label	Elevation (ft)	Zone	Flow (Out net) (gpm)	Hydraulic Grade (ft)
-6	5,316.00	<none></none>	344	5,316.00 5,316.00
		-6 5,316.00	-6 5,316.00 <none></none>	-6 5,316.00 <none> net) (gpm)  </none>

Scenario: Zone 3 Max Hour Fire Flow

Current Time Step: 0.000 h FlexTable: Junction Table

r					
١	Label	Elevation (ft)	Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)
	J-5 J-6 J-7 J-8 J-9 J-10 J-11 J-12 J-13 J-14 J-26 J-27 J-28 J-40 J-41 J-42 J-43	(ft) 5,159.00 5,156.00 5,158.00 5,161.00 5,166.00 5,170.00 5,180.00 5,192.00 5,183.40 5,186.00 5,186.00 5,200.00 5,200.00 5,213.00 5,208.00 5,199.00 5,192.00	(gpm) 0 3 0 34 0 0 23 0 0 23 30 0 0 0 0	Grade (ft) 5,315.93 5,315.61 5,315.56 5,315.56 5,315.53 5,315.53 5,315.54 5,315.49 5,315.49 5,315.48 5,315.48 5,315.48 5,315.48 5,315.45 5,315.48 5,315.48 5,315.48 5,315.48	(psi) 68 69 68 67 65 63 64 59 53 52 57 56 50 44 46 50 53
١	J-44	5,185.00	0	5,315.55	56
1	J-46 J-47	5,175.00 5,161.00 5,172.00	0 32	5,315.54 5,315.56	61 67
	J-49 J-50 J-51 J-54 J-55 J-56 J-79 Hydrant J-81 J-82 J-83 J-84 J-88 J-90 J-91 J-95 J-97 J-98 J-100 J-104 J-105 J-107 J-108 J-110 J-111 J-114 J-117 J-118 J-119	5,172.00 5,179.00 5,183.00 5,182.00 5,192.00 5,197.00 5,168.00 5,170.00 5,178.00 5,178.00 5,181.00 5,194.00 5,191.00 5,199.00 5,199.00 5,205.00 5,197.00 5,197.00 5,197.00 5,197.00 5,197.00 5,197.00 5,197.00 5,197.00 5,197.00 5,197.00 5,197.00 5,197.00 5,205.00 5,205.00 5,205.00 5,184.00 5,205.00 5,184.00 5,206.00 5,184.00 5,200.00 5,174.00	19 20 0 30 0 0 33 34 30 0 0 24 0 23 35 0 0 22 0 23 29 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	5,315.54 5,315.54 5,315.54 5,315.52 5,315.48 5,315.58 5,315.64 5,315.54 5,315.54 5,315.54 5,315.49 5,315.49 5,315.49 5,315.49 5,315.48 5,315.48 5,315.48 5,315.48 5,315.48 5,315.49 5,315.50 5,315.50 5,315.50 5,315.50 5,315.50 5,315.50 5,315.46 5,315.50 5,315.46 5,315.50 5,315.46 5,315.50 5,315.47 5,315.50 5,315.50 5,315.46 5,315.50 5,315.60 5,315.70 5,315.70 5,316.00 5,316.00	62 59 57 58 53 51 66 64 63 60 55 53 58 59 54 56 51 57 48 52 55 47 57 49 50 61
	J-120 J-122 J-123 J-124 J-125 J-126 J-127	5,146.00 5,199.00 5,175.00 5,179.00 5,164.50 5,198.02 5,192.00 5,189.72	0 0 25 0 19 21 25 37	5,316.00 5,315.48 5,315.54 5,315.54 5,315.55 5,315.46 5,315.47 5,315.48	74 50 61 59 65 51 53

Scenario: Zone 3 Max Hour Fire Flow Current Time Step: 0.000 h FlexTable: Pipe Table

Label	Length (Scaled)	Start Node	Stop Node	Diameter	Material	Hazen-	Minor Loss Coefficient	Flow	Velocity	Headloss Gradient
P-1 P-4 P-5 P-6 P-7 P-8 P-9 P-10	(ft) 753 356 237 223 192 322 126 597 118	J-119 J-5 J-6 J-7 J-8 J-9 J-10 J-11 J-13	J-5 J-6 J-7 J-8 J-9 J-10 J-11 J-12 J-14	(in) 16.0 8.0 8.0 8.0 8.0 8.0 8.0	PVC PVC PVC PVC PVC PVC PVC PVC PVC	Williams C 110.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0	(Local) 0.000 0.000 0.000 0.000 0.000 0.000 0.000	(gpm) 291 153 59 26 18 19 69 2 -45	0.46 0.97 0.38 0.17 0.12 0.12 0.44 0.02 0.29	(ft/ft) 0.000 0.001 0.000 0.000 0.000 0.000 0.000 0.000 0.000
P-25 P-39 P-41 P-44(2)(1) P-44(2)(2) P-47 P-43(1) P-48 P-49 P-53 P-54 P-62 P-89	194 145 272 374 152 335 131 281 249 309 284 567 529	J-26 J-40 J-42 J-46 J-47 J-49 J-44 J-50 J-54 J-55 J-44 J-8	J-27 J-41 J-43 J-47 J-6 J-50 J-51 J-46 J-55 J-56 J-54 J-79	8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0	PVC PVC PVC PVC PVC PVC PVC PVC PVC PVC	100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	-6 -7 -27 -24 -90 8 20 -12 -12 56 8 28 -26	0.04 0.04 0.17 0.16 0.58 0.05 0.13 0.08 0.08 0.36 0.05	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000
P-90 P-91 P-94 P-95 P-96 P-97 P-98 P-104 P-105	272 82 228 444 183 153 202 145	J-79 Hydrant J-9 J-82 J-83 J-83 J-84 J-26	Hydrant J-81 J-79 J-83 J-13 J-84 J-14 J-88	8.0 8.0 8.0 8.0 8.0 8.0	PVC PVC PVC PVC PVC PVC PVC PVC PVC	100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0	0.000 0.000 0.000 0.000 0.000 0.000 0.000	-71 106 -45 -7 -10 -26 -26 -25	0.45 0.68 0.29 0.04 0.07 0.17 0.17 0.16	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000
P-106 P-114	643 280	J-89 J-91	J-90 J-14	8.0 8.0	PVC PVC	100.0 100.0	0.000 0.000	-19 -62	0.12 0.40	0.000
P-118 P-119 P-123	275 309 743	J-89 J-97 J-98	J-97 J-98 J-95	8.0 8.0 8.0	PVC PVC PVC	100.0 100.0 100.0	0.000 0.000 0.000	12 9 8	0.08 0.06 0.05	0,000 0,000 0,000
P-82 P-26	283 578	J-56 J-27	J-28 J-28	8.0 8.0	PVC PVC	100.0 100.0	0.000 0.000	-18 9	0.11 0.06	0.000
P-115 P-107 P-93	575 304 235	J-91 J-90 J-82	J-95 J-91 J-12	8.0 8.0 8.0	PVC PVC PVC	100.0 100.0 100.0	0.000	27 -11	0.17 0.07	0.000
P-92 P-125	521 440	J-81 J-10	J-82 J-81	8.0 8.0	PVC PVC	100.0 100.0 100.0	0.000 0.000 0.000	27 54 -50	0.17 0.34 0.32	0.000 0.000 0.000
P-11(2)(2) P-126	272 280	J-100 J-100	J-13 J-90	8.0 8.0	PVC PVC	100.0	0.000	-35 42	0.22 0.27	0.000
P-40(1)(1) P-134	188 292	J-41 J-104	J-104 J-105	8.0 8.0	PVC PVC	100.0 100.0	0.000 0.000	-18 13	0.12 0.08	0.000
P-135 P-137	380 247	J-105 J-107	J-107 J-43	8.0 8.0	PVC PVC	100.0 100.0	0.000	-27 -20	0.17 0.13	0.000
P-42(1) P-42(2) P-138	169 148 432	J-43 J-108 J-108	J-108 J-44 J-107	8.0 8.0 8.0	PVC PVC PVC	100.0 100.0 100.0	0.000 0.000 0.000	-54 -90 36	0.34 0.57 0.23	0.000
P-140 P-139(1)	444 141	J-40 J-105	J-110 J-110	8.0 8.0	PVC PVC	100.0 100.0 100.0	0.000	7	0.04 0.11	0.000 0.000 0.000
P-139(2) P-143	250 810	J-110 J-27	J-41 J-9	8.0 8.0	PVC PVC	100.0 100.0	0.000	-11 -44	0.07 0.28	0.000
P-144 P-145	443 295	J-88 J-118	J-11 Hydrant	8.0 8.0	PVC PVC	100.0 100.0	0.000 0.000	-43 177	0.27 1.13	0.000 0.001
P-147 P-148 P-13(1)	482 949 204	J-111 J-111 J-14	J-44 J-5 J-114	8.0 16.0 8.0	PVC PVC PVC	100.0 110.0 100.0	0.000 0.000 0.000	138 -138 -134	0.88 0.22 0.85	0.001
P-151 P-154	426 243	J-117 R-6	J-114 J-119	8.0 30.0	PVC PVC	100.0 100.0 150.0	0.000	134 344	0.85 0.16	0.001 0.001 0.000
P-155 P-156	1,360 1,319	J-119 J-118	J-118 J-117	30.0 30.0	PVC PVC	150.0 150.0	0.000	53 -124	0.02 0.06	0.000
P-157 P-158	146 121	J-117 J-12	R-7 J-100	30.0 8.0	PVC PVC	150.0 100.0	0.000	-258 29	0.12 0.19	0.000
P-24(1) P-24(2) P-159	147 601 267	J-28 J-120 J-98	J-120 J-26 J-120	8.0 8.0 8.0	PVC PVC PVC	100.0 100.0 100.0	0.000 0.000 0.000	-9 -7 2	0.05 0.04 0.01	0.000 0.000 0.000
P-160 P-50(1)	129 679	J-42 J-7	J-104 J-122	8.0 8.0	PVC PVC	100.0 100.0	0.000	31 33	0.20 0.21	0.000
P-50(2) P-43(1)	285 174	J-122 J-51	J-54 J-123	8.0 8.0	PVC PVC	100,0 100,0	0.000	28 8	0.18 0.05	0.000
P-43(2) P-161	174 387	J-123 J-122	J-46 J-123	8.0 8.0	PVC PVC	100.0 100.0	0.000	-12 -20	0.08 0.13	0.000
P-46(1) P-46(2)	161 345 384	J-47 J-124	J-124 J-49	8.0 8.0	PVC PVC	100.0 100.0	0.000	34 15	0.22 0.09	0.000
P-64(1) P-64(2) P-63(1)	395 369	J-42 J-125 J-43	J-125 J-56 J-126	8.0 8.0 8.0	PVC PVC PVC	100.0 100.0 100.0	0.000 0.000 0.000	-4 -26 7	0.03 0.16 0.04	0.000 0.000 0.000
P-63(2) P-124(1)	328 557	J-126 J-97	J-55 J-127	8.0 8.0	PVC PVC	100.0 100.0	0.000	-19 3	0.12 0.02	0.000
P-124(2)	264	J-127	J-90	8.0	PVC	100.0	0.000	-34	0.22	0.000

Scenario: Zone 3 Max Hour Fire Flow

Current Time Step: 0.000 h FlexTable: Reservoir Table

ID	Label	Elevation (ft)	Zone	Flow (Out net) (gpm)	Hydraulic Grade (ft)
366	R-6	5,316.00	<none> <none></none></none>	344	5,316.00
367	R-7	5,316.00		258	5,316.00

Scenario: Zone 3 Max Hour Fire Flow Current Time Step: 0.000 h Fire Flow Node FlexTable: Fire Flow Report

Fire Flow Iterations	Satisfies Fire Flow Constraints?	Fire Flow (Needed) (gpm)	Fire Flow (Available) (gpm)	Flow (Total Needed) (gpm)	Flow (Total Available) (gpm)	Pressure (Residual Lower Limit) (psi)	Pressure (Calculated Residual) (psi)	Pressure (Calculated Zone Lower Limit) (psi)	Junction w/ Minimum Pressure	Pressure (Calculated System Lower Limit)	Junction w/ Minimum Pressure	Is Fire Flor Run Balanced
	24.00	200-000	AUCUIN	(SE)	170/10010		500000	100000000000000000000000000000000000000	(Zone)	(psi)	(System)	
(N/A)	False	2,500	(N/A)	(N/A)	(N/A)	40	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	False
(N/A)	False	2,500	(N/A)	(N/A)	(N/A)	40	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	False
(N/A)	False	2,500	(N/A)	(N/A)	(N/A)	40	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	False
(N/A)	False	2,500	(N/A)	(N/A)	(N/A)	40	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	False
(N/A)	False	2,500	(N/A)	(N/A)	(N/A)	40	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	False
(N/A)	False	2,500	(N/A)	(N/A)	(N/A)	40	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	False
(N/A)	False	2,500	(N/A)	(N/A)	(N/A)	40	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	False
(N/A)	False	2,500	(N/A)	(N/A)	(N/A)	40	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	False
(N/A)	False	2,500	(N/A)	(N/A)	(N/A)	40	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	False
(N/A)	False	2,500	(N/A)	(N/A)	(N/A)	40	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	False
(N/A)	False	2,500	(N/A)	(N/A)	(N/A)	40	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	False
(N/A)	False	2,500	(N/A)	(N/A)	(N/A)	40	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	False
(N/A)	False	2,500	(N/A)	(N/A)	(N/A)	40	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	False
(N/A)	False	2,500	(N/A)	(N/A)	(N/A)	40	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	False
(N/A)	False	2,500	(N/A)	(N/A)	(N/A)	40	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	False
		2,500	(N/A)	(N/A)	(N/A)	40	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	False
(N/A)	False	2,500	(IN/A)	(IN/A)	(N/A)	40	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	
(N/A)	False	2,500	(N/A)	(N/A)						(N/A)		False
(N/A)	False	2,500	(N/A)	(N/A)	(N/A)	40	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	False
(N/A)	False	2,500	(N/A)	(N/A)	(N/A)	40	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	False
(N/A)	False	2,500	(N/A)	(N/A)	(N/A)	40	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	False
(N/A)	False	2,500	(N/A)	(N/A)	(N/A)	40	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	False
(N/A)	False	2,500	(N/A)	(N/A)	(N/A)	40	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	False
(N/A)	False	2,500	(N/A)	(N/A)	(N/A)	40	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	False
(N/A)	False	2,500	(N/A)	(N/A)	(N/A)	40	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	False
(N/A)	False	2,500	(N/A)	(N/A)	(N/A)	40	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	False
(N/A)	False	2,500	(N/A)	(N/A)	(N/A)	40	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	False
(N/A)	False	2,500	(N/A)	(N/A)	(N/A)	40	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	False
3	True	2,500	3,216	2,500	3,216	40	55	40	J-40	40	J-40	True
(N/A)	False	2,500	(N/A)	(N/A)	(N/A)	40	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	False
(N/A)	False	2,500	(N/A)	(N/A)	(N/A)	40	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	False
(N/A)	False	2,500	(N/A)	(N/A)	(N/A)	40	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	False
(N/A)	False	2,500	(N/A)	(N/A)	(N/A)	40	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	False
(N/A)	raise	2,500	(N/A)	(N/A)	(N/A)	40	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	Faise
(N/A)	False	2,500	(N/A)	(N/A)	(N/A)	40	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	False
(N/A)	False	2,500	(N/A)	(N/A)	(N/A)	40	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	False
(N/A)	False	2,500	(N/A)	(N/A)	(N/A)	40	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	False
(N/A)	False	2,500	(N/A)	(N/A)	(N/A)	40	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	False
(N/A)	False	2,500	(N/A)	(N/A)	(N/A)	40	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	False
(N/A)	False	2,500	(N/A)	(N/A)	(N/A)	40	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	False
(N/A)	False	2,500	(N/A)	(N/A)	(N/A)	40	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	False
(N/A)	False	2,500	(N/A)	(N/A)	(N/A)	40	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	False
(N/A)	False	2,500	(N/A)	(N/A)	(N/A)	40	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	False
(N/A)	False	2,500	(N/A)	(N/A)	(N/A)	40	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	False
(N/A)	False	2,500	(N/A)	(N/A)	(N/A)	40	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	False
(N/A)	False	2,500	(N/A)	(N/A)	(N/A)	40	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	False
(N/A)	False	2,500	(N/A)	(N/A)	(N/A)	40	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	False
	False	2,500	(N/A) (N/A)	(N/A)	(N/A)	40	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	False
(N/A)			(N/A)			40	(N/A)		(N/A) (N/A)			
(N/A)	False	2,500		(N/A)	(N/A)			(N/A)		(N/A)	(N/A)	False
(N/A)	False	2,500	(N/A)	(N/A)	(N/A)	40	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	False
(N/A)	False	2,500	(N/A)	(N/A)	(N/A)	40	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	False
(N/A)	False	2,500	(N/A)	(N/A)	(N/A)	40	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	False
(N/A)	False	2,500	(N/A)	(N/A)	(N/A)	40	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	False
(N/A)	False	2,500	(N/A)	(N/A)	(N/A)	40	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	False
(N/A)	False	2,500	(N/A)	(N/A)	(N/A)	40	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	False
(N/A)	False	1,000	(N/A)	(N/A)	(N/A)	40	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	False
(N/A)	False	2,500	(N/A)	(N/A)	(N/A)	40	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	False
	False	2,500	(N/A)	(N/A)	(N/A)	40	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	False

## Appendix C – Reference Documents

