

**APPENDIX F**  
**WATER AUGMENTATION PLAN**

FILED  
IN THE DISTRICT COURT  
WATER DISTRICT #4

JAN 11 1979

IN THE DISTRICT COURT IN AND FOR  
WATER DIVISION NO. 4

*Kay Phillips*  
WATER CLERK

STATE OF COLORADO

By \_\_\_\_\_ DEPUTY

Case No. 3276

IN THE MATTER OF THE APPLICA- )	FINDINGS OF FACT, CONCLUSIONS
TION FOR APPROVAL OF PLAN FOR )	OF LAW AND RULING OF THE
AUGMENTATION OF QUARTZ CREEK )	WATER REFEREE APPROVING PLAN
PROPERTIES, INC., IN QUARTZ )	FOR AUGMENTATION INCLUDING
CREEK AND ITS TRIBUTARIES, )	EXCHANGE OF WATER AND PROVISION
ALL TRIBUTARY TO TOMICHI )	OF SUBSTITUTE SUPPLIES OF WATER
CREEK, A TRIBUTARY OF THE )	
GUNNISON RIVER, IN GUNNISON )	
COUNTY, COLORADO. )	

THIS MATTER having come on for determination upon the application of Quartz Creek Properties, Inc., a Colorado corporation, for approval of its plan for augmentation, which application was filed on December 29, 1977; and the Referee having considered the application, the documents filed herein as well as the stipulation of the parties hereto, FINDS:

1. Timely and adequate notice of this proceeding has been provided in the manner required by law, and the Water Referee has jurisdiction over the subject matter of this proceeding and over all parties affected hereby, whether they have appeared or not. Statements of Opposition have been filed herein by the United States of America through Hank Meshorer, Esq., its attorney, and by the Colorado River Water Conservation District through Delaney & Balcomb, its attorneys. The latter party made a withdrawal of its statement of opposition dated May 15, 1978. No other parties have entered their appearance in this proceeding, and the time for filing statements of opposition has expired.

2. The individual properties owned by applicant Quartz Creek Properties, Inc., or its successors and assigns, (herein called "Quartz Creek Properties") are located in all or parts of sections 19 through 34 inclusive, Township 51

North, Range 4 East of the N.M.P.M.; sections 3 through 10 inclusive, and section 16, Township 50 North, Range 4 East of the N.M.P.M., Gunnison County, Colorado.

There are 494 individual properties which average about five acres in size. Water service to individual properties may be provided either by wells or by hauling water from a number of springs which exist in the area. Applicant anticipates that approximately 100 properties will be serviced by wells, and the remainder by springs. Each of these sources to be augmented will be described in more detail below.

3. Applicant is in the process of selling to individual purchasers its interests in the 494 individual properties. As a result of such purchases, there will develop a demand for domestic water for a maximum of 494 dwelling units. Domestic sewage therefrom is anticipated to be returned through individual septic tanks and leaching fields. Domestic use of water transmitted through the septic tanks and leaching fields is anticipated to consume approximately 5.33 per cent of water diverted. The estimated gross water requirements for the Quartz Creek Properties area are based upon the assumptions that the residential units will be occupied by three persons per parcel with each person possessing an average daily water requirement of 75 gallons.

4. The vast majority of homes to be constructed in the area are anticipated to be occupied only seasonally, during the 123-day period from May 15 through September 15 of each year, and 484 of these units are anticipated to be so occupied. Accordingly, planning for the project anticipates

a total maximum demand from seasonal residents of approximately 41.1 acre feet of water per annum. The consumptive use attributable to those requirements is thus 2.2 acre feet of water annually.

In addition to the above seasonal occupation, applicant anticipates the usage of water by its caretaker, sales personnel and other staff to be at a maximum equivalent of 20 year-round residents. Applicant's projections also include an additional allowance for 10 year-round units, which are equivalent to 30 year-round residents. Utilizing a daily water requirement of 75 gallons per person, and the same sewage treatment systems as discussed previously, these 50 equivalent persons would require approximately 4.2 acre feet of domestic water diversions annually, the use of which would consume approximately 0.2 acre feet per annum.

The consumptive use for each individual residence can be computed as follows:

- a) Water use on each seasonal residence would require diversions of 0.0849 acre feet per annum, of which 0.0045 acre feet of water per annum would be consumed.
- b) Water use on each year-round residence would require diversions of 0.252 acre feet per annum, of which 0.0134 acre feet of water per annum would be consumed.

As individual properties are developed the projected consumptive use for the area can be computed in accordance with the following formula:

$$Q = 0.0045a + 0.0134b$$

With "Q" as the consumptive use in acre feet per annum;

"a" as the total number of seasonal residences developed; and

"b" as the total number of year-round residences developed.

The maximum projected consumptive use for the area is thus computed as follows:

For the 484 parcels on which residences could be constructed and occupied seasonally: 2.2 consumptive acre feet per annum; for the equivalent of 50 year-round residents: 0.22 consumptive acre feet per annum. Accordingly, the maximum proposed usage of water within the Quartz Creek Properties would not exceed 2.42 consumptive acre feet per annum.

5. The water needs for the Quartz Creek Properties area will be supplied from waters derived from areas located within the Quartz Creek watershed.

6. Quartz Creek Properties will utilize all or some of the following structures as essential parts of its plan for augmentation:

a) Wells:

Water service to 100 individual properties may be provided by the following types of wells:

- i) an as yet undetermined number of small-capacity wells serving one or more dwellings, and
- ii) one or more municipal-type wells serving a number of dwellings.

Since the final selection of home sites has not been made with respect to each of these parcels, and will not be made in the near future, it is impossible now to determine with any precision the final location of each of these well structures.

b) Springs:

A number of springs arise on and within the area to be served, the water from which may be used to provide domestic supplies.

Such water supplies may be made available to residents by one or more of the following means:

- i) gravity flow,
- ii) manual collection, transportation and use, or
- iii) other means of collection, including pumping and haulage.

These springs either have been decreed for use by applicant (or its predecessor in interest) or decrees have been applied for. Each of such springs is more particularly described in Exhibit "A."

c) Reservoirs:

Applicant proposes to augment the structures described above by utilizing certain waters and water rights available to applicant by virtue of the storage of water in each of the following structures:

- i) White House Reservoir. The midpoint of the dam for this reservoir is situate in the Southwest quarter of the Southwest quarter (SW $\frac{1}{4}$ SW $\frac{1}{4}$ ) of Section 4, Township 50 North, Range 4 East, of the N.M.P.M., at a point whence the Southwest corner of said Section 4 bears South 36°35' West 1,438 feet, in Gunnison County, Colorado. The axis of the dam lies across the channel of Armstrong Gulch and the reservoir has an active capacity of 3.01 acre feet. This reservoir is the subject of a separate application for water right filed in this water division under Case No. W-3272, the contents of which are incorporated herein by this reference as if set forth verbatim.
- ii) Armstrong Reservoir. The midpoint of the dam for this reservoir is situate in the Northwest quarter of the Southwest quarter (NW $\frac{1}{4}$ SW $\frac{1}{4}$ ) of Section 4, Township 50 North, Range

4 East, of the N.M.P.M., at a point whence the Southwest corner of said Section 4 bears South 26°45' West 2,468 feet, in Gunnison County, Colorado. The reservoir has an active capacity of 2.580 acre feet. This reservoir is the subject of a separate application for water right filed in this water division under Case No. W-3274, the contents of which are incorporated herein by this reference as if set forth verbatim.

- iii) Tipi Reservoir. The midpoint of the dam for this reservoir is situate in the Northwest quarter of the Southwest quarter (NW¼SW¼) of Section 4, Township 50 North, Range 4 East, of the N.M.P.M., at a point whence the Southwest corner of said Section 4 bears South 31° West 1,832 feet, in Gunnison County, Colorado. The reservoir has an active capacity of 2.31 acre feet. This reservoir is the subject of a separate application for water right filed in this water division under Case No. W-3273, the contents of which are incorporated herein by this reference as if set forth verbatim.

By releasing stored waters to the Quartz Creek drainage, applicant will replace the consumptive use depletion to the Quartz Creek system which would otherwise occur, thus augmenting the flow of said stream to the extent of its depletions. Applicant will thus assure the balancing of such depletions and eliminate the possibility of any injurious effect upon owners of or persons entitled to use water under vested water rights or decreed conditional water rights in the Quartz Creek system and waters to which it is tributary. Applicants propose to augment the stream by storing in and releasing from one or more of the above reservoirs a maximum amount of 2.42 acre feet annually.

7. As discussed at paragraph 4 above, the maximum depletion anticipated to be felt in the Quartz Creek system by virtue of the consumptive use caused by the domestic use of water within the Quartz Creek Properties area would be 2.42 consumptive acre feet of water per annum. Accordingly, applicant proposes to balance this depletion by releasing to the Quartz Creek drainage, during times of valid call by downstream water users senior to applicant, and at a rate as directed by the division engineer, the maximum amount of 2.42 acre feet of water per annum. In this manner, applicant will augment the flow of Quartz Creek to the extent of the maximum depletions thereof.

8. Applicant proposes to store at least 7.9 acre feet per annum in the above reservoirs. Of this amount, applicant shall release the aforementioned maximum 2.42 acre feet per annum to Quartz Creek in order to prevent potential injury to others.

9. If the plan for augmentation is operated and administered in accordance with the above-detailed description, it will have the effect of replacing water in the stream at the time and places and in the amounts of the depletions caused by the Quartz Creek Properties' use of water. As a result, the water to be diverted and used by Quartz Creek Properties which might otherwise be considered as appropriated and unavailable for use, will now be available for appropriation without adversely affecting the owners or users of vested water rights or conditionally decreed water rights on the Gunnison River or its tributaries.

10. Pursuant to C.R.S. § 37-92-304(6) (1973), as amended by S.B.4, Ch. 483, 1977 Colo. Sess. Laws, the Referee finds, decides and determines that, within a period of three (3) years from the date hereof, experience with the

operation of this plan would have been sufficient to determine whether the decree should be subject to reconsideration on the question of injury to the vested rights of others, including applicant.

11. The Referee finds that by the imposition of the conditions set forth in these findings, all well and spring diversions contemplated herein may be made without adversely affecting the owner or user of any vested water rights or conditionally decreed water rights in the Gunnison River or its tributaries, and that by the implementation of the augmentation plan herein approved, Quartz Creek Properties may secure permits for the wells described above and may use all wells and springs contemplated herein without adversely affecting the owner or user of any vested water rights or decreed conditional water rights on the Gunnison River or its tributaries, and may continue such use without any need for the administration or curtailment of the withdrawal of water from any of such wells or springs so long as replacement water is available in the Quartz Creek Properties' reservoirs described above to meet the lawful requirements of a senior diverter at the time and location and to the extent that the senior would be deprived of his lawful entitlement by applicant's diversion.

#### CONCLUSIONS OF LAW

The Referee concludes, as a matter of law:

1. The Plan for Augmentation proposed by applicant is one contemplated by law, and if operated and administered in accordance with this ruling, will as hereinabove described permit the provision of water service to the residential equivalent units in the Quartz Creek Properties without adversely affecting the owners or users of vested water rights or decreed conditional water rights in the

Gunnison River or its tributaries.

2. The State Engineer shall lawfully be required under the terms of this decree:

- (a) to comply with and administer the plan for augmentation in the manner set forth herein, and
- (b) not to curtail diversions during times of a valid senior call for water, so long as replacement water is available under this plan for augmentation to meet the lawful requirements of a senior diverter at the time and location and to the extent the senior would be deprived of his lawful entitlement by applicant's diversion.

RULING

IT IS, THEREFORE, THE RULING OF THE REFEREE THAT:

1. The plan for augmentation including exchange of water and provision of substitute supplies of water as found and described in all preceding paragraphs is hereby approved.
2. The State Engineer, the Division Engineer of Water Division No. 4, and other water administration officials shall administer and comply with the plan for augmentation as herein approved, by:
  - (a) recognizing applicant's right to store up to 7.9 acre feet per annum in the reservoirs available to Quartz Creek Properties as described in paragraphs 6(c) of the findings above; and
  - (b) directing applicant to release from said storage to the Gunnison River and its tributaries, at such times and in such amounts as the Division Engineer for Water Division No. 4 may reasonably require consistent with the provision for release set forth in paragraph 7 of the findings above to meet the lawful

requirements of a senior diverter at the time and location and to the extent the senior would be deprived of his lawful entitlement by applicant's diversion, provided however, that at no time will applicant be required to release more than 2.42 acre feet of water per annum. The State Engineer shall curtail all out-of-priority diversions, the depletions from which are not so replaced as to prevent injury to vested water rights.

3. The amount of stored water not required for augmentation may be sold, leased or otherwise disposed of by applicant for use within Quartz Creek Properties or at such other locations as applicant desires.

4. So long as the transferable consumptive use dedicated herein is held or utilized for the purposes of augmentation pursuant to this ruling, the water rights involved herein will not be subject to abandonment despite any lack of records of use by the Water Commissioner.

5. The State Engineer, in the discharge of his responsibilities with respect to the processing of applications for permits for the wells described in paragraph 6 of the findings above and for any additional wells applied for in the future shall recognize the existence and operation of the plan for augmentation herein approved, and shall issue well permits for the use of such wells. Each permit issued for such wells shall incorporate within it by reference the provisions of this ruling.

6. The State Engineer and the Division Engineer of Water Division No. 4 shall not, at the request of other appropriators, or on their own initiative, curtail the diversion of water through any of the well or spring diversions provided for herein so long as this plan is being administered in accordance with this ruling.

7. It is specifically ordered, adjudged and

decreed, based on hydrological and geological fact, that pursuant to the operation of this plan there will be an increased supply of water available within a portion of Water Division No. 4, there is unappropriated water thereby available for the wells and springs contemplated herein, and no vested water rights or decreed conditional water rights of others will be materially injured thereby.

This ruling shall be filed with the Water Clerk and shall become effective upon such filing.

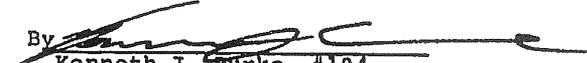
DATED this 11<sup>th</sup> day of January, 1979.

  
Elra L. Wilson, Water Referee  
Water Division No. 4

Approved as to substance and form:

QUARTZ CREEK PROPERTIES, INC.

Dated: 1-5-79

By   
Kenneth J. Burke, #194  
Holme Roberts & Owen  
1700 Broadway, Suite 1800  
Denver, Colorado 80290  
(303) 861-7000

ATTORNEYS FOR APPLICANT

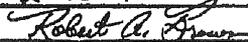
UNITED STATES OF AMERICA

Dated: Jan 4, 78

By   
Hank Meshorer, #6977  
Trial Attorney, Dept. of Justice  
Land and Natural Resources Div.  
Post Office Box 1656  
Denver, Colorado 80201

ATTORNEY FOR OPPONENT

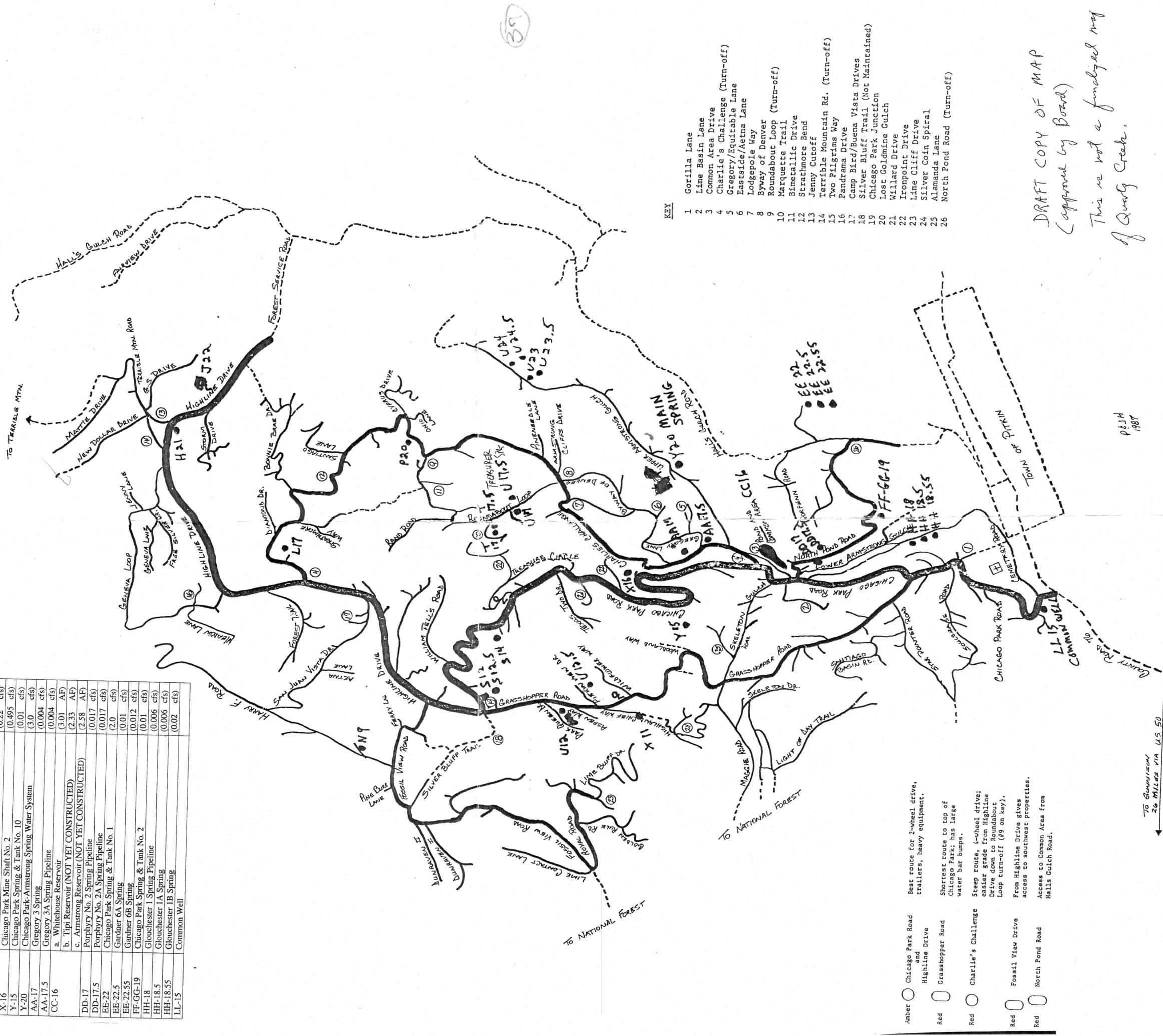
No protest was filed in this matter. The foregoing ruling is confirmed and approved, and is made the judgment and Decree of this court.

Dated: 2-16-79  
  
Water Judge

**APPENDIX G**  
**TABULATION OF WATER RIGHTS**

**KEY FOR WATER RIGHTS (8/12/05)**

H-21	Chicago Park Spring & Tank No. 4	(0.01 cfs)
J-22	Chicago Park Spring & Tank No. 3	(0.068 cfs)
L-17	Chicago Park Spring & Tank No. 5	(0.01 cfs)
N-9	Chicago Park Spring & Tank No. 7	(0.01 cfs)
P-20	Chicago Park Spring & Tank No. 6	(0.01 cfs)
S-12	Chicago Park Mine Shaft No. 1	(0.11 cfs)
S-12.5	Highland Mary No. 2 Spring Pipeline	(0.004 cfs)
S-14	Chicago Park Spring & Tank No. 8	(0.01 cfs)
T-17	Treasure No. 5 Spring Pipeline	(0.029 cfs)
T-17.5	Treasure No. 3A Spring Pipeline	(0.02 cfs)
U-17	Treasure No. 3 Spring Pipeline	(0.0046 cfs)
U-17.5	Treasure No. 3A Spring Pipeline	(0.0016 cfs)
U-23	Armstrong Gulch 10 Spring	(0.03 cfs)
U-23.5	Armstrong Gulch 10A Spring	(0.01 cfs)
U-24	Armstrong Gulch 11 Spring	(0.15 cfs)
U-24.5	Armstrong Gulch 11A Spring	(0.03 cfs)
U-12	Chicago Park Spring & Tank No. 9	(0.01 cfs)
U-12.5	Pitkin View Spring Pipeline	(0.01 cfs)
X-11	Chicago Park Mine Shaft No. 3	(0.22 cfs)
X-16	Chicago Park Mine Shaft No. 2	(0.495 cfs)
Y-15	Chicago Park Spring & Tank No. 10	(0.01 cfs)
Y-20	Chicago Park-Armstrong Spring Water System	(3.0 cfs)
AA-17	Gregory 3 Spring	(0.004 cfs)
AA-17.5	Gregory 3A Spring Pipeline	(0.004 cfs)
CC-16	a. Whitehouse Reservoir b. Tipi Reservoir (NOT YET CONSTRUCTED) c. Armstrong Reservoir (NOT YET CONSTRUCTED)	(3.01 AF) (2.33 AF) (2.58 AF)
DD-17	Porphyry No. 2 Spring Pipeline	(0.017 cfs)
DD-17.5	Porphyry No. 2A Spring Pipeline	(0.017 cfs)
EE-22	Chicago Park Spring & Tank No. 1	(2.0 cfs)
EE-22.5	Gardner 6A Spring	(0.01 cfs)
EE-22.55	Gardner 6B Spring	(0.012 cfs)
FF-GG-19	Chicago Park Spring & Tank No. 2	(0.01 cfs)
HH-18	Gloucester 1 Spring Pipeline	(0.006 cfs)
HH-18.5	Gloucester 1A Spring	(0.006 cfs)
LL-15	Gloucester 1B Spring	(0.02 cfs)
	Common Well	



- KEY**
- 1 Gorilla Lane
  - 2 Lime Basin Lane
  - 3 Common Area Drive
  - 4 Charlie's Challenge (Turn-off)
  - 5 Gregory/Equitable Lane
  - 6 Eastside/Aetna Lane
  - 7 Lodgepole Way
  - 8 Byway of Denver
  - 9 Roundabout Loop (Turn-off)
  - 10 Marquette Trail
  - 11 Bimetallic Drive
  - 12 Strathmore Bend
  - 13 Jenny Cutoff
  - 14 Terrible Mountain Rd. (Turn-off)
  - 15 Two Pilgrims Way
  - 16 Pandrama Drive
  - 17 Camp Bird/Buena Vista Drives
  - 18 Silver Bluff Trail (Not Maintained)
  - 19 Chicago Park Junction
  - 20 Lost Goldmine Gulch
  - 21 Willard Drive
  - 22 Ironpoint Drive
  - 23 Lime Cliff Drive
  - 24 Silver Coin Spiral
  - 25 Alamanda Lane
  - 26 North Pond Road (Turn-off)

- Amber ○ Chicago Park Road and Highline Drive
  - Red ○ Grasshopper Road
  - Red ○ Charlie's Challenge
  - Red ○ Fossil View Drive
  - Red ○ North Pond Road
- Best route for 2-wheel drive, trailers, heavy equipment.  
Shortest route to top of Chicago Park; has large water bar bumps.  
Steep route, 4-wheel drive; easier grade from Highline Drive down to Roundabout Loop turn-off (#9 on key).  
From Highline Drive gives access to southwest properties.  
Access to Common Area from Halls Gulch Road.

DRAFT COPY OF MAP  
(Approved by Board)  
This is not a finalized map  
of Quady Creek.

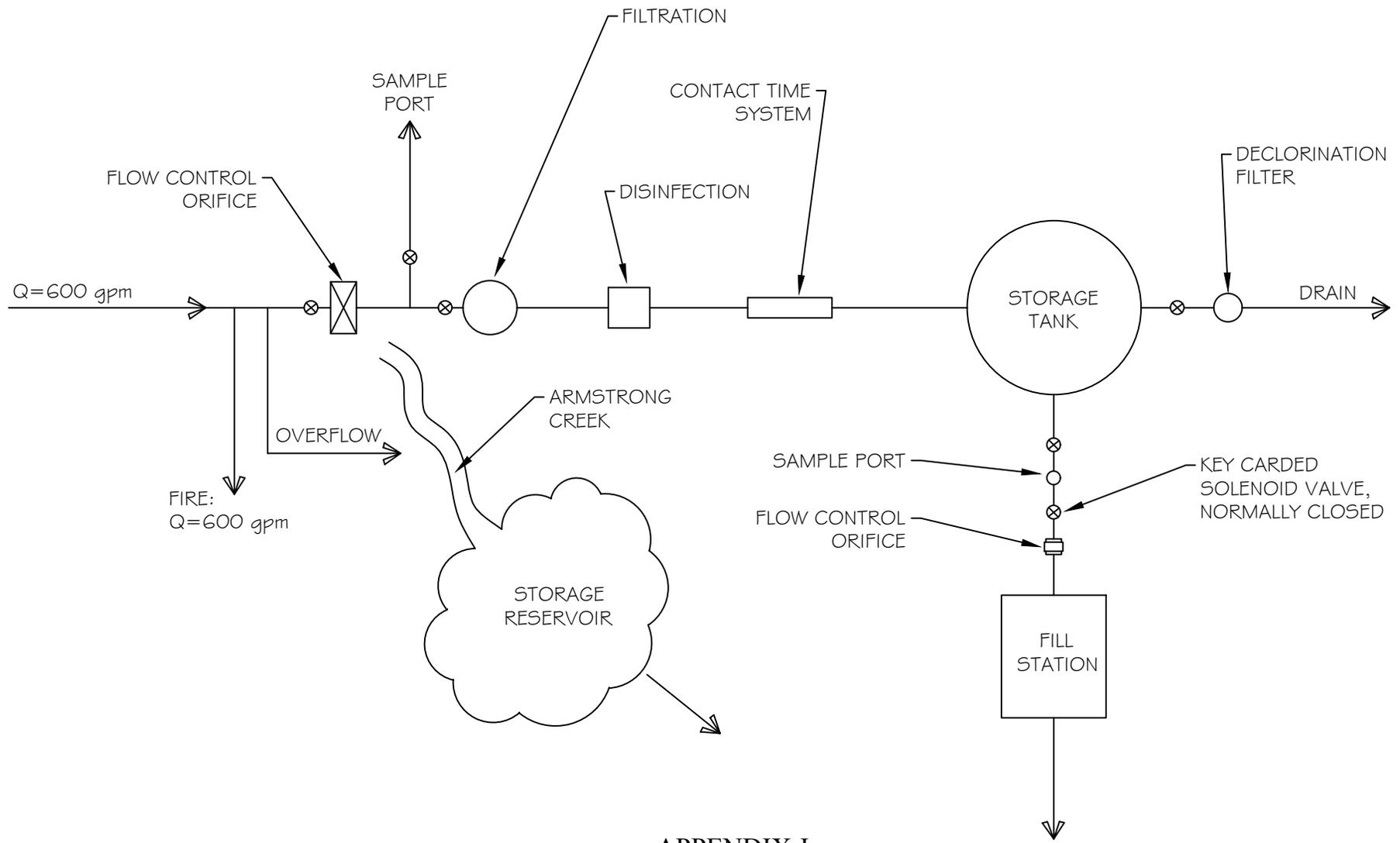
**APPENDIX H**  
**ASSOCIATION'S SPRINGS LOCATION MAP**

## WATER RIGHTS ADDENDUM (Revised 11/13/13)

Item No.	Water Right
1	Porphyry No. 2 Spring Pipeline .017 c.f.s. – absolute – domestic, stock water and recreational uses
2	Gregory 3A Spring Pipeline .004 c.f.s. – absolute – domestic, stock water and recreational uses
3	Highland Mary No. 2 Spring Pipeline .004 c.f.s. – absolute – domestic, stock water and recreational uses
4 ABANDONED (as it is under reservoir)	Porphyry No. 2A Spring Pipeline .017 c.f.s. – conditional – diligence due 12/06 – domestic, stock water and recreational uses
5	Chicago Park Spring and Tank No. 8 .033 c.f.s. – absolute – domestic and stock water uses
6	Pitkin View Spring Pipeline .01 c.f.s. – absolute – domestic uses
7	Treasure No. 3 Spring Pipeline .0046 c.f.s. – absolute – domestic uses
8	Chicago Park Spring and Tank No. 3 .062 c.f.s. – absolute – domestic uses
9	Gloucester 1B Spring .02 c.f.s. – absolute – domestic uses
10	Treasure No. 3A Spring Pipeline .0016 c.f.s. – absolute – domestic uses
11	Treasure No. 5 Spring Pipeline .026 c.f.s. – absolute – domestic, stock water and recreational uses
12	Treasure No. 5A Spring Pipeline .02 c.f.s. – absolute – domestic, stock water and recreational uses
13	Gloucester 1 Spring Pipeline .006 c.f.s. – absolute – domestic uses
14	Armstrong Gulch 10 Spring .03 c.f.s. – absolute – domestic uses
15	Armstrong Gulch 10A Spring .0098 c.f.s. – absolute – domestic uses
16	Armstrong Gulch 11 Spring .15 c.f.s. – absolute – domestic, stock water and recreational uses
17	Armstrong Gulch 11A Spring .03 c.f.s. – absolute – domestic uses
18	Gregory 3 Spring .004 c.f.s. – absolute – domestic uses
19	Gloucester 1A Spring .006 c.f.s. – absolute – domestic uses

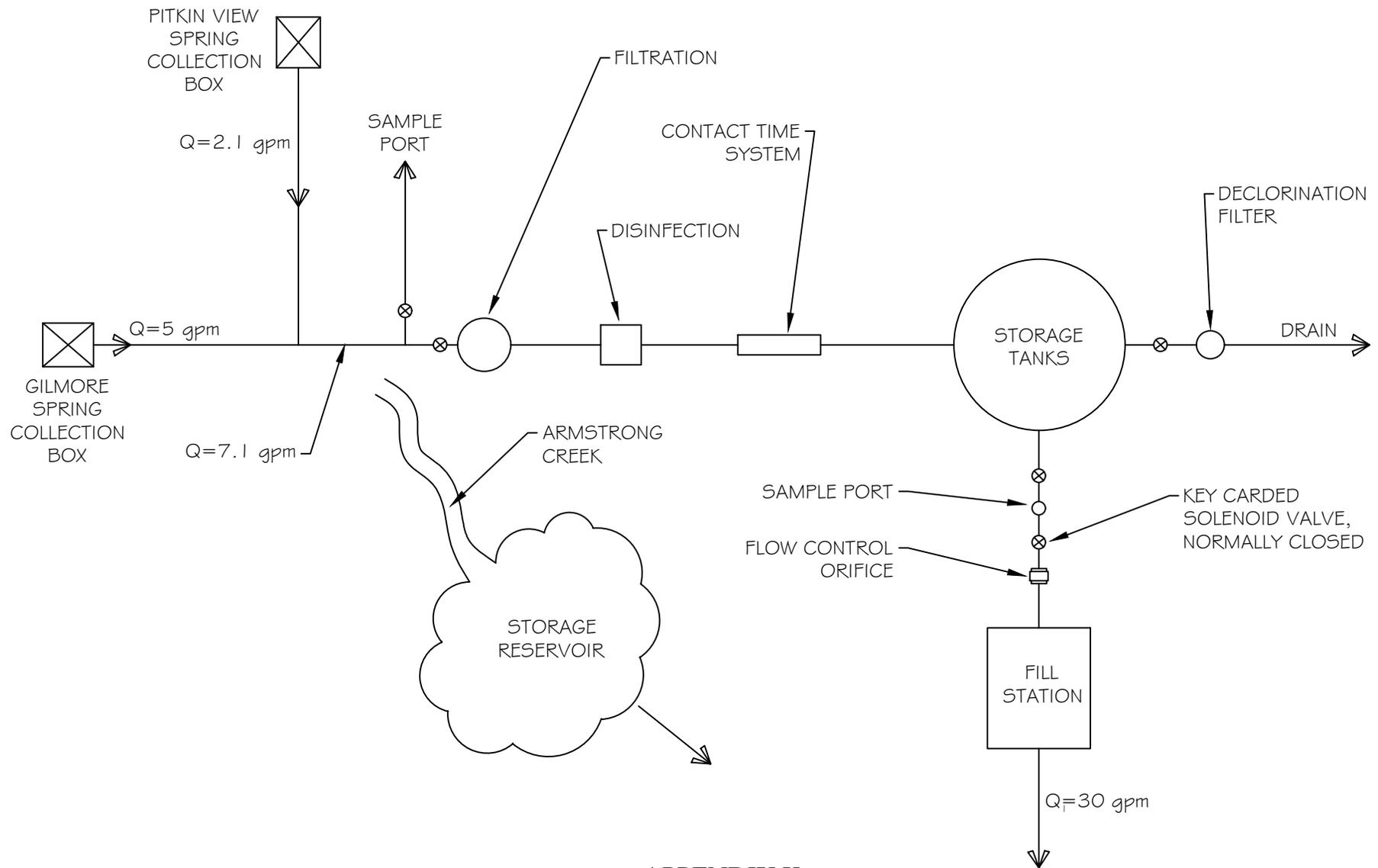
20	Gardner 6A Spring .01 c.f.s. – absolute – domestic uses
21	Gardner 6B Spring .012 c.f.s. – absolute – domestic uses
22 DILIGENCE due in Feb. 2019 (See 12 CW 91)	Chicago Park Armstrong Spring Water System 3.0 c.f.s. – absolute – stock water and recreational uses 0.831 c.f.s. – conditional – domestic uses 1.416 c.f.s. – absolute – domestic uses
23	Chicago Park Spring and Tank No. 7 .033 c.f.s. – absolute – domestic uses
24	Chicago Park Spring and Tank No. 1 .012 c.f.s. – absolute – domestic uses
25	Chicago Park Mine Shaft No. 1 .0445 c.f.s. – absolute – domestic, municipal fire protection and recreational uses (.065 cfs abandoned in 04 CW 104)
26 DILIGENCE due in June 2019	Chicago Park Mine Shaft No. 2 .495 c.f.s. – conditional – domestic, municipal fire protection and recreational uses
27 DILIGENCE due in June 2019	Chicago Park Mine Shaft No. 3 .22 c.f.s. – conditional – domestic, municipal fire protection and recreational uses
28	White House Reservoir 3.01 acre feet – absolute – recreational, domestic, stock water and augmentation uses *As improved, reservoir reportedly holds approximately 5.78 acre feet.
29	Tipi Reservoir (not yet constructed and* state seeks abandonment) 2.32 acre feet – absolute – recreational, domestic, stock water and augmentation uses
30	Armstrong Reservoir (not yet constructed and *state seeks abandonment) 2.58 acre feet – absolute – recreational, domestic, stock water and augmentation uses

**APPENDIX I**  
**GOOGLE EARTH ASSOCIATION SPRING LOCATIONS**



**APPENDIX J**  
**ARMSTRONG SPRING**  
**WATER SYSTEM**  
**SCHEMATIC FLOW DIAGRAM**

**WILLIAMS ENGINEERING L.L.C.**  
 400 NORTH MAIN STREET  
 GUNNISON COLORADO 81230  
 PH. (970) 641-2499



**APPENDIX K**  
**GILMORE & PITKIN VIEW SPRING**  
**WATER SYSTEM**  
**SCHEMATIC FLOW DIAGRAM**

**WILLIAMS ENGINEERING L.L.C.**  
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