

HISTORICAL ANALYSIS OF
BOULDER RESERVOIR

Prepared by:
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Parks Planning & Construction Intern
Boulder Parks & Recreation Department

Early in 1952, representatives of the City of Boulder appeared before the Northern Colorado Water Conservancy District's Board of Directors requesting inclusion of the City into the District and the allotment of a substantial block of water. A committee appointed by the directors and a similar committee from the Boulder City Council, after many meetings, succeeded, by the end of the year, in developing satisfactory terms and conditions of the arrangement.

The District agreed to repay one-third the cost of "Boulder" Reservoir in 40 annual installments with interest at the rate paid by the City on borrowed funds. A number of minor items and a plenitude of legal language completed the document. With the contract executed on August 24th, 1953, the City of Boulder became a part of the Northern Colorado Water Conservancy District and entered into a contract with the District for delivery by the District to the City of 12,700 acre-foot units of Colorado-Big Thompson Project water to be delivered into and measured at Twin Lakes (Boulder) Reservoir. Delivery of the water was to be made from Carter Lake of the Colorado-Big Thompson Project to the Boulder Creek Supply Canal, which was being constructed by the U.S. Bureau of Reclamation. In order that the City realize the full benefit of this water, a terminal reservoir was essential. The City determined that the best site for such a reservoir was that known locally as the Twin Lakes reservoir site.

The 1953 contract set forth the rights of the City of Boulder and the NCWCD pertaining to the operation of Boulder Reservoir, which was a joint project between the City and the District. Revisions were made to this contract in 1954, 1965 and 1969 which pertained to the City's rights to use the reservoir for recreational purposes and to the construction of the Boulder Reservoir treatment plant.

Because the embankment forming the Six-Mile Reservoir was raised and the spillway of that reservoir relocated to a point on its north side where it would spill into Boulder Reservoir, the flood control capacity was increased and an auxiliary outlet was added to the preliminary plan.

With the auxiliary outlet at a lower elevation than the main outlet, the amount of dead storage was reduced to approximately 300 acre-feet and permitted the attainment of the greater capacity required for flood control with no increase in the height of the dam over that originally contemplated and without reducing the operating capacity available for the use of the City of Boulder and the NCWCD.

The auxiliary outlet at the lower elevation has a further advantage in that should it ever be necessary, it makes possible the complete unwatering of the main outlet for maintenance and inspection.

Construction began April 19th, 1954 with the Tipton engineering group of Phillips, Carter & Osborne in direct charge, letting contracts for the work to Colorado Constructors and to Horne & Switzer of Denver. The work was completed April 20th, 1955 at a cost of \$1,190,800.

The reservoir was built with a storage capacity of 13,100 acre feet (12,800 acre feet operating capacity and 300 acre feet dead storage). Instead of a hardened (concrete) spillway, the dam has an emergency spillway consisting of a low section in the natural formation beyond the North abutment of the dam. Consequently, the State Engineer requires that 7,000 acre feet of this storage be left unfilled in order to prevent the dam from being washed out during a flood.

The revised contract presently provides for the right to build the hardened spillway and spells out how the additional storage is to be shared between the City and the District.

The existing agreement between the City and the District allocates the 12,800 acre feet operating capacity of the reservoir between the City and the District for the period from May 1st to October 31st as follows: 1,000 acre feet for the City's long term hold over storage; 4,800 acre feet for the District's operating pool; and 7,000 acre feet for flood control purposes. Over the years the District has been increasing their summer operating pool at the expense of the flood pool, until at present, they have been operating, with the tacit approval of the State Engineer, with a

flood pool capacity between 2,000-3,000 acre feet. According to Bob Smith, Operation and Maintenance Superintendent, NCWCD, "It is the objective of the NCWCD to fill the reservoir to a 10,000 acre feet capacity by the first of July each year." In so doing, they maintain a flood pool of approximately 3,000 acre feet.

(See: Notes from Feb. 18th, 1977 meeting with the Northern Water Conservancy District and Boulder Parks Planner)

It is my understanding that the flood pool restriction was utilized as a means to save construction costs in lieu of building a spillway system adequate to pass possible flood flows from the drainage basin. The City now needs additional storage at the reservoir, and it is planned that a hardened spillway system be constructed in order to have all currently effective flood pool restrictions removed from the operational conditions of the reservoir by the office of the State Engineer. (The State Engineer has the right to enforce compliance with the operating rules pertaining to flood control.) Once the City has made these improvements, according to capacity estimates of Black & Veatch, the total capacity of the reservoir is likely to be 13,270 acre feet. This storage will be needed in the future as a container for storage of the City's Big Thompson Project water.

The City has also filed on the rights to store Boulder Creek water in Boulder Reservoir. The amount of this filing is for 13,052 acre feet. Such water as may accrue to this right shall be delivered to the reservoir from Boulder Creek through the Farmers' Ditch.

With the proposed addition of the new treatment plant at the reservoir, Colorado-Big Thompson project water would be directly added to the City's domestic water supply. Use of the reservoir for this purpose required increasing the storage capacity of the reservoir.

The proposed accomplishments of this project included major earthmoving and construction necessary to rebuild the existing beach area, as the majority of the beach would be lost when the water level of the reservoir basin was allowed to be raised 10 vertical feet.

New parking areas were also needed at the beach. More land to

the south of the reservoir was needed to provide this parking. The land between Boulder Reservoir and Six-Mile Reservoir, the most logical for acquisition and improvements, was owned by the Boulder and White Rock Ditch and Reservoir Company. By virtue of federal funds already allotted to the improvements of the general recreation area, the City found itself under considerable pressure.

In order for the City to take advantage of this Federal money, the improvements had to be commenced that year (1967). After many negotiation sessions, it appeared that the Boulder and White Rock Ditch and Reservoir Company was not going to sell its property at a "fair appraised price." Because it was imperative that the City own this land, a final purchase offer was made with the understanding that if this offer was refused, the City would proceed with condemnation action.

The Boulder and White Rock Ditch and Reservoir Company agreed to sell the land for \$15,000 and signed the Corporation Deed on April 24th, 1968, which gave the City of Boulder the land they needed. The City has since agreed to move its fence a sufficient distance back from the Six-Mile Reservoir in order to facilitate the ditch company's maintenance of the reservoir. Together with moving the fence back, the City has conveyed to the ditch company a right-of-way over its property which is necessary for this purpose.

With the construction of the water treatment plant at Boulder Reservoir and a transmission line between Farmers' Ditch and the reservoir (See Appendix A), the City will have the capability of using Colorado-Big Thompson water directly, and in addition, will be able to utilize direct flow water rights on Boulder Creek via the Farmers' Ditch to Boulder Reservoir and then to the treatment plant.

During periods when there is direct flow water available to the City's rights, and water is being run in the Boulder Supply Canal to the reservoir, the City would deliver direct flow water to the reservoir and divert an equal amount from the Supply Canal

ahead of the reservoir for delivery to the treatment plant. When water is not being run to the reservoir by the District, the City would withdraw its direct flow water from the auxiliary reservoir outlet. If water demands at the treatment plant are in excess of the City's direct flow rights, the difference would be made up from the City's Colorado-Big Thompson water or from City storage in the reservoir. Diversions would be made from the Boulder Supply Canal ahead of the reservoir whenever possible, and if not possible, directly from the auxiliary outlet of the reservoir. Consequently, the higher water level and the fluctuations must be planned for in the long-range recreational planning of the reservoir.

The Second Supplemental Agreement (July 7, 1964) contains, but does not spell out these understandings:

- 1) The City will not reopen the area along the North shore of Boulder Reservoir to vehicular traffic.
- 2) The City will take such measures as may be necessary to prevent unauthorized vehicular access to the reservoir dikes.
- 3) The District and the City will cooperate in the control of Canadian Thistle on all land adjacent to the reservoir owned by the City. Cost of control on areas reserved in the agreement for District requirements will be borne by the District. The City will pay cost of control on areas reserved for City uses.

Recreational Uses

None of the City's recreational rights at the reservoir were changed by the additional contracts. While the recreational use of the reservoir would not be terminated, some additional restrictions and good policing of the area are desirable.

The location of Boulder Reservoir, the supply canal and the tributary drainage area are all such that complete treatment of all water taken from these sources is required, with or without the recreational facilities.

Recreational use is not normally recommended for terminal reservoirs on municipal water systems, however the supply canal, tributary streams and drainage area are all open to the public.

Since these areas cannot be controlled it is somewhat futile to prohibit the recreational use of the reservoir proper. During the irrigation season there is normally a large flow of water through Boulder Reservoir for irrigation purposes in addition to water used by the City. Good sanitary regulations and policing of the recreational activities are recommended.

During the irrigation season, April through October, it is expected to normally withdraw water to the treatment plant from a point on the supply canal ahead of the reservoir. Under present District operating procedures, water for treatment will be withdrawn from the reservoir during winter months and on some other limited occasions.

Black and Veatch, Consulting Engineers, suggest that the following operating procedures and regulations relative to recreation be placed into effect prior to introducing water directly into the treatment plant from the reservoir via the auxiliary outlet.

- 1) Swimming be restricted to the period from approximately June 1 through Sept. 1.
- 2) Boating, fishing, water-skiing, etc, be prohibited for some distance from the intake.
- 3) Adequate sanitary facilities be provided to move all sewage away from the reservoir area.
- 4) Other sanitary regulations be established and properly policed to prohibit objectionable materials from being left in the area or entering the lake.

Mineral Rights on City-Owned Land
Surrounding Boulder Reservoir

In the memo from the City Engineer to the Parks and Recreation Department dated January 23, 1973, it states that the City controls the surface rights to land surrounding Boulder Reservoir. Therefore, mineral extraction by parties other than the City, could only be accomplished by tunnelling or drilling under the property from the adjoining property.

The stratigraphic horizon was drilled in the early 1950's and proved insufficient for petroleum production immediately south of the reservoir. There is the possibility of sand, gravel and clay existing in mineable quantity. Extensive survey, however, would be required to determine exact quantities. If the City desired to mine these minerals, the rights could be purchased.

By contract dated June 22, 1971, entered between the City of Boulder and Continental Oil Company, Continental agrees to the following general conditions concerning their total mineral ownership under W $\frac{1}{2}$ NE $\frac{1}{4}$ Sec 4, T1N, R70W (See Appendix B):

- 1) Continental agrees to non-use of surface for purposes of drilling for gas and oil.
- 2) The agreement will be for an indefinite and continuing term with the understanding that any possible development of minerals under the property while the agreement is in effect, will be by "slant" or "directional" drilling from locations on adjacent mineral ownership.
- 3) Should surface cease to be used for purposes of parks and recreation, then the agreement will automatically become null and void.

Grassland Leases

The Parks and Recreation Department is no longer leasing any of its reservoir property for grazing purposes. May 1st, 1969, Charles P. Pancost's 3-year lease for 40 acres of land, located east of County Highway 51 on the west side of the reservoir, expired. The deterioration of the grassland dictated that the Parks and Recreation Department discontinue leasing that parcel of land. They did, however, renew Howard J. Lore's lease for 120 acres of grassland, located west of County Highway 51 on the west side of the reservoir, for another year. However, because of several inquiries concerning the possibility of leasing this 120 acres, the Department allowed individuals to submit closed bids for the next 3 years. Howard Lore, by virtue of submitting the highest bids, continued to lease this parcel for those 3 years. After

Lore's 1972-1973 lease expired, the Department elected to terminate the leasing of this land.

According to Ron Donahue, City of Boulder Parks Superintendent, the Department does not intend to re-open these parcels of land for private grazing purposes.

Prairie Dogs

Jim Fitzgerald, Professor of Biology at the University of Northern Colorado, has been contacted before concerning the compatibility of the prairie dogs and the water treatment plant's operations at Boulder Reservoir. He should, perhaps, be utilized as a consultant when considering the future of the prairie dog colonies.

The prairie dog colonies east of the dams at Boulder Reservoir are considered ideal for a Visitor Center. A site selected for a prairie dog town visitor center would be ideal with these characteristics:

- 1) Short grass prairie on higher, well-drained ground
- 2) Access by public road near the site where a good view of prairie dogs is possible without undue interruption of their behavior
- 3) Permanently public land with protection from shooting, grazing, domestic pets and undue disturbances from human activity
- 4) Proximity to other wildlands with resident predators.

Site improvements necessary to make Boulder Prairie Dog Town Visitor Center ideal for human enjoyment and prairie dog survival include:

- 1) Overlook parking lot connecting to access road
- 2) Interpretive signs of prairie dog town landmarks and behavior patterns
- 3) Protective signs: No Hunting, No Trespassing By Vehicle
- 4) Fence along access road to prevent vehicle trespass
- 5) Clean-up of area
- 6) Inclusion of all designated land into public ownership (on south edge of proposed site)

- 7) Removal and realigning of fences
- 8) Possible interpretive walk through one edge of the prairie
Dog Town

Concessions

June 28th, 1956, George D. Young of Boulder Concessionaires, Inc., requested and was granted the concession at Boulder Reservoir. In 1957, a restaurant building and docking facilities were built. For the next 13 years, the concessions' ownership traded hands several times.

Under and pursuant to the provisions of a certain Concessions Lease and Option Agreement dated May 10th, 1965 by and between Boulder Concessionaires, Inc. and the City of Boulder, the City leased the concession facilities from May 1st, 1970 to May 1st, 1971 for \$4,000 with the option to purchase the property and the right to operate the concession facilities at Boulder Reservoir. The following year, the City elected to exercise its option of purchase and paid \$8,000 as per the option provisions. The following year, the \$5,000 balance was paid to Boulder Concessionaires, Inc.

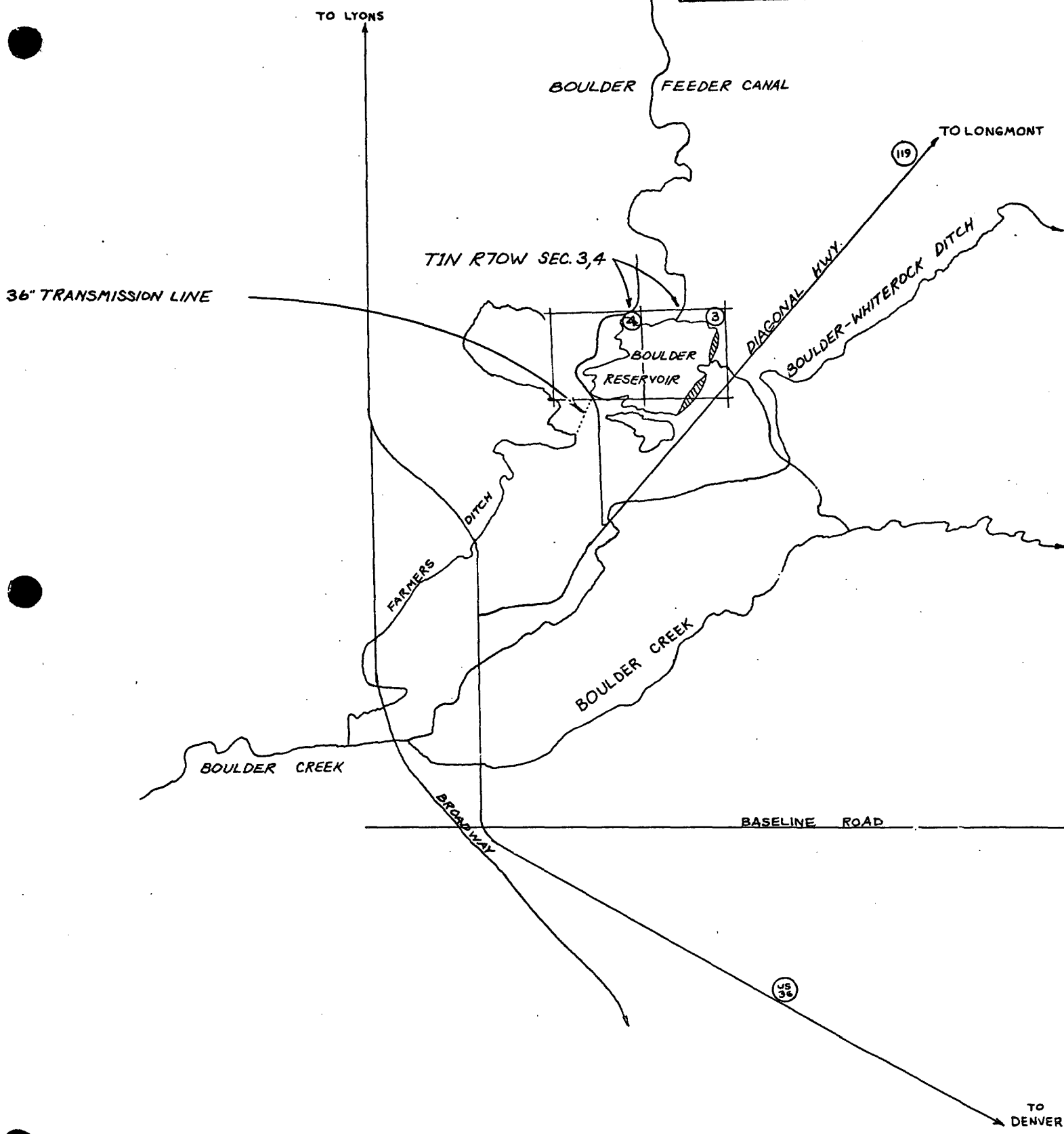
Estimated Attendance at Boulder Reservoir

1964	88,000	1969	105,000
1965	91,000	1970	115,000
1966	104,000	1971	125,000
1967	105,000	1972	95,000*
1968	110,000	1973	130,000

* Decline in attendance due to poor summer weather and very low water in August. Without the adjusted fee rates prior to the 1972 season and the 300% increase in season passes sold, the financial loss would have been significantly greater.

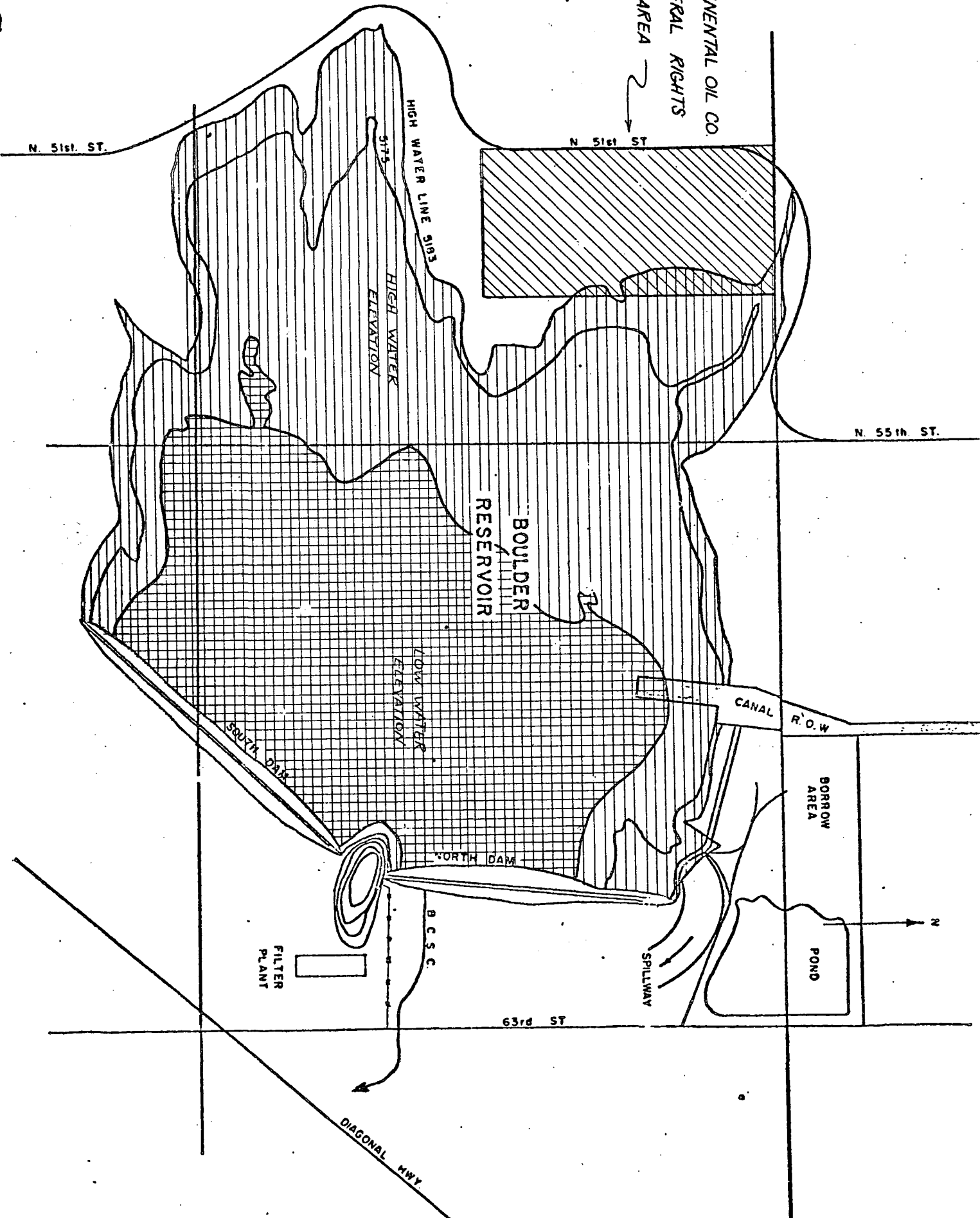
In the early days of the reservoir there was no concerted effort to recover costs of operation. The area was treated as a service provided to the public on a subsidized basis. Only since 1973 have the fees been set to recover prospective expenditures.

APPENDIX A



APPENDIX B

CONTINENTAL OIL CO.
MINERAL RIGHTS
AREA



ADDENDUM #2

BOULDER RESERVOIR SPILLWAY

SLA PROJECT #CO-CB-03

- Item 1. The estimated quantity of riprap is revised to square yard measure for consistency with the bid item description. A replacement page for bid schedule is attached and shall be used in submitting proposals.
- Item 2. Sheet 22 of the plans is revised to include waterstop and elastomeric joint sealant on the expansion/contraction joints. A revised sheet is enclosed.
- Item 3. Sheet 3 of the plans indicates three borehole locations incorrectly. Boreholes SP14, SP13, and SP4 are shown in the correct locations on the attached sheet along with additional boreholes referenced in the Summary of Geotechnical Conditions.
- Item 4. The following shall be added to the Standard Specifications for Concrete, Section IV, Cast-in-Place Concrete, page 105.

3.08 Elastomeric Joint Sealer

An elastomeric joint sealer shall be used to seal all expansion/contraction joint grooves. Joint sealer shall be the thermosetting, chemically curing-type made of polysulfide, silicone, urethane, or epoxy-based materials. The joint surface shall be clean, sound, and dry and may require sandblasting or wire brushing to remove curing compound or contamination. A joint backing-bond breaker shall be used to control depth of sealant and prevent three-sided adhesion. Sealant shall be applied with any necessary primer according to the manufacturer's instructions. The joint surface shall be dry-tooled immediately after application to insure firm contact with the joint interface.

- Item 5. Substantial completion, as defined in Special Provision #16 is amended to specifically not include the relocation of the 42-inch water main and completion of the channel, riprap, and service road within 15 feet of either side of the centerline of the water main. The Contractor shall have 150 calendar days to complete these items after notice to proceed.
- Item 6. Bid Item Description 1.1 is amended to delete requirements for stripping of the spoil area. Spoil area stripping is hereby included under Bid Item 4.1.

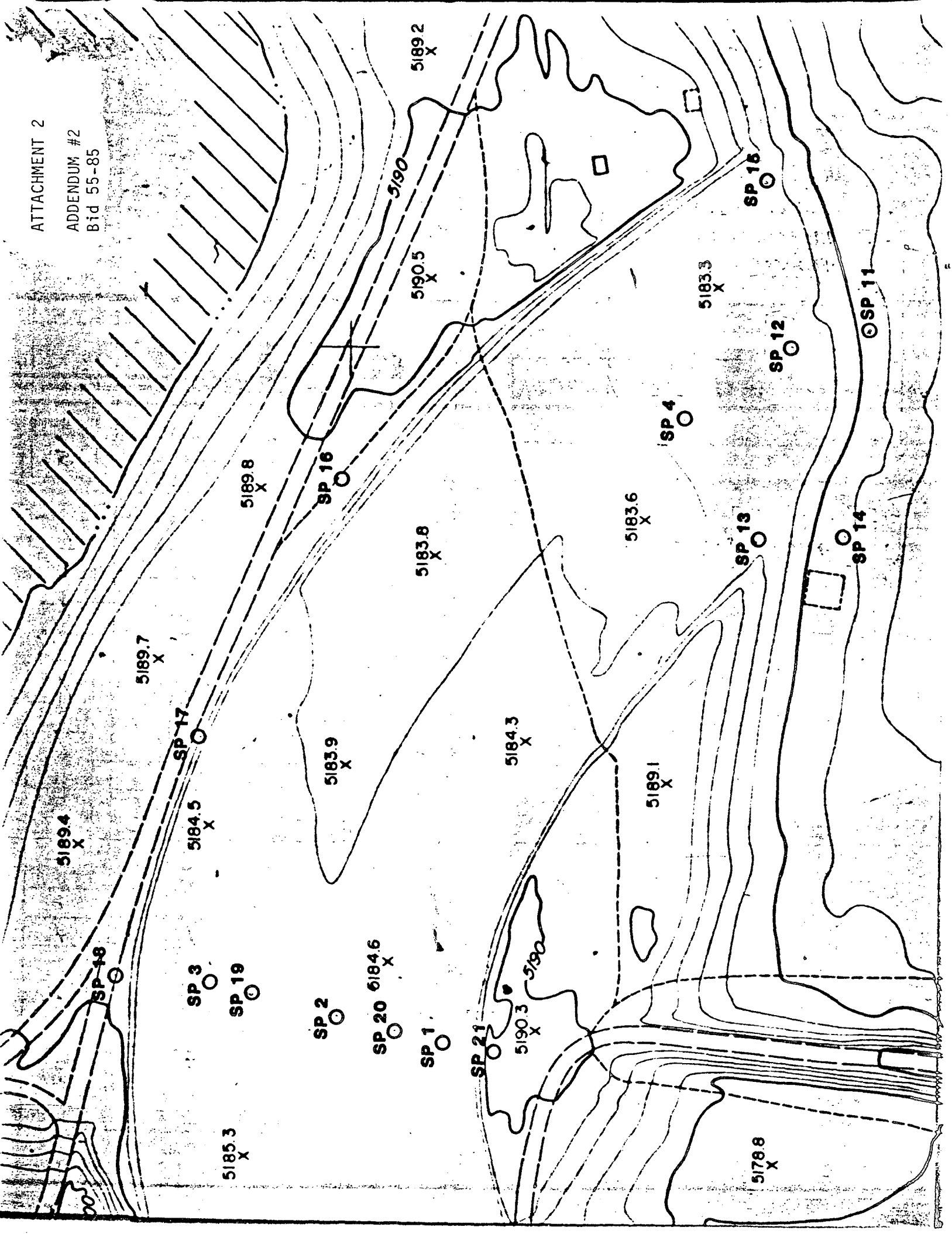
Item 7. In preparing bids for Bid Item 1.1, Contractors are advised to review Special Provision #39, regarding the Stage I excavation contract and General Condition #9, regarding adjustment of unit prices for altered quantities. Contractor bids for this item shall be based upon the estimated quantity given on the bid schedule.

REVISED ADDENDUM #2
August 9, 1985

ESTIMATED QUANTITIES

<u>Item</u>	<u>Description</u>	<u>Unit</u>	<u>Quantity</u>	<u>Unit Price</u>	<u>Total Extension</u>
<u>Section I Earthwork</u>					
1.1	Excavate channel	CY	81,202		
1.2	Structural excavation	CY	485		
1.3	Backfill	CY	1,621		
1.4	Backfill, unclassified	CY	1,600		
1.5	Filter material	CY	1,984		
1.6	Riprap w/bedding	SY	5,540		
1.7	Grade road	LF	1,252		
1.8	Revegetation of disturbed areas	LS	NA		
			<u>Total Section I</u>		
<u>Section II Drain and Water Lines</u>					
2.1	Excavate & re-lay 42" dia. water line	LF	1,000		
2.2	New 42" dia. reinf. conc. cyl. pipe	LF	OPEN		
2.3	Trench, place & backfill 6" dia. and 8" dia. drain lines	LF	806		
2.4	6" dia. slotted & non-perforated drain pipe	LF	1,085		
			<u>Total Section II</u>		
<u>Section III Concrete & Formwork</u>					
3.1	Reinf. concrete slab - weir	CY	955		
3.2	Reinf. concrete wall - weir	CY	455		
3.3	Reinf. concrete - basin & sloped apron	CY	525		
3.4	Concrete retaining wall	CY	575		
3.5	Pipe railing	LF	446		
			<u>Total Section III</u>		
			<u>Total Bid Section I-III</u>		
<u>Section IV Onsite Spoil Disposal Option</u>					
4.1	Increase (decrease) for Owner allowing onsite spoil and revegetation of excess excavated materials	LS			
			<u>Total Section IV</u>		
			<u>Total Bid Section I-IV</u>		
Total Bid:					
<u>Section I-IV</u>					
(in words)					

ATTACHMENT 2
ADDENDUM #2
Bid 55-85



NORTHERN COLORADO WATER CONSERVANCY DISTRICT-

CITY OF BOULDER CONTRACT

AUGUST 24, 1953

AGREEMENT

The City of Boulder, Colorado, herein called "Boulder" first party, and Northern Colorado Water Conservancy District, herein called "District", second party, in consideration of the premises and the mutual covenants hereof have agreed as follows:

1. Both parties agree that, upon the terms and conditions herein set forth, a water supply from District supplies will be made available and furnished to Boulder and the petition to include Boulder and its environs described generally in Boulder's pending petition in Weld County District Court may be granted.

2. Boulder shall, by ordinances effective contingent on inclusion of such area in the District, legally obligate itself to pay to the District annually, each December 31, in ten (10) equal annual installments, or earlier, for capital cost heretofore incurred by the District for the procuring of such water supplies, an amount in the aggregate equal to what Boulder would have produced by general taxes for District purposes extended against the valuations of property then in Boulder on levies made in the years 1937 and successive years to the year when such general tax levies for District purposes shall actually be made against said proposed area, and shall also pay annual interest on said aggregate amount at the rate of two percent (2%) per annum from each August 1 on which said tax would have accrued, to date of payment, contingent, each year falling due, on the District making available to Boulder that year's water service of 12,700 acre feet water allotment hereunder.

3. An allotment acre-foot of water is defined as being 1/310,000 of the water supplies produced annually between each November 1 and the succeeding October 31 from the works of the Colorado-Big Thompson Project built under contract with the United States together with those supplies which may be produced by Twin Lakes Reservoir. Boulder, by ordinance effective contingent upon such inclusion, shall concurrently herewith validly petition the District Board for a Class "B" perpetual

water allotment of 12,700 acre-feet. The annual value and price of the water allotment to Boulder per acre-foot shall be Two Dollars (\$2). Said allotment of water shall be for delivery and measurement to Boulder at Twin Lakes Reservoir on Dry Creek, to be conducted thereinto by Boulder Creek conduit and to be subject otherwise to the terms usual to such allotment petitions and orders for cities and to the contract between the United States and the District.

4. The Board of Directors of the District shall take proper proceedings to promptly order such allotment on said terms and conditions and shall file its verified consent to decree granting said petition for inclusion upon the terms and conditions of this agreement, which terms and conditions shall be embodied in the decree.

5. Boulder shall cause to be constructed at its own original cost and expense Twin Lakes Reservoir on Dry Creek to a capacity of 11,700 acre feet of 43,500 actual cubic feet to each acre-foot before the end of the year 1955. Approximately 11,000 acre-feet at the reservoir shall be considered as operating capacity in a manner hereinafter described. The plans for the dam and its appurtenances to create the reservoir shall be submitted to the Board of the District for approval before construction thereof. Boulder shall obtain the rights-of-way for and the title of the reservoir shall be in Boulder. The District shall have certain rights of use of the reservoir as hereinafter provided.

6. The District shall at its own cost and expense control, operate, maintain and keep in repair the said reservoir in a diligent manner for the benefit of all of the water allottees of the District, including Boulder, subject to the following general operating rules and contractual provisions:

Of the total operating capacity of the reservoir Boulder shall have the right to utilize two-thirds (2/3) and the District one-third (1/3) provided that either party shall have the right to utilize unused storage capacity of the other party at any time and so long as, and to the

extent only, that the other party has not immediate need therefor, in which event, the other party, on demand, shall have its share of capacity promptly surrendered to the extent it has water to store therein, and provided, further, that the operation of the reservoir shall conform with the parties' respective rights under the following general rules:

(a) Of Boulder's share of the operating capacity, 1000 acre-feet shall be reserved for Boulder for long-time (in excess of one year) carry-over.

(b) Subject to other operating rules hereof 4,000 acre-feet of the operating capacity of the reservoir may be utilized by the District for equalizing and for storing and carrying over beyond November 1 Colorado-Big Thompson project's appropriations from the Colorado River and those appropriations being made from the East Slope streams by the District, including any appropriations made by the District by virtue of Boulder Creek Conduit and its rights to use of capacity in said reservoir. The District, as appropriator of water for said reservoir from St. Vrain Creek and its tributaries in Water District No. 5, shall sustain the claims related to said reservoir in any water adjudication proceedings.

(c) During the period May 1st to October 31st, inclusive, the District shall deliver upon demand of Boulder at flow rates not to exceed 60 cubic feet per second that portion of the Colorado-Big Thompson water allotted to Boulder and required for use during that period. Should Boulder acquire by purchase or rental additional units of Colorado-Big Thompson water, the District also shall deliver this additional water to Boulder during said period on demand provided, however, that such additional water shall not be required to be delivered at a rate of flow which would impair the delivery of water to other District allottees calling for it and entitled to its delivery through said reservoir.

(d) Each year Boulder shall determine the amount of its Requirements for Colorado-Big Thompson winter water for the period from November 1st to December 1st and from that December 1st to April 30th, inclusive, and shall notify the District annually of such requirements for both said periods on or before September 1st of the calendar year of the first of said periods. The District shall deliver and store in Twin Lakes Reservoir on or before each November 1st sufficient water to take care of Boulder's so notified November requirement and shall deliver and have in storage in the reservoir on or before November 30, the amount of water required to take care of Boulder's so notified requirements from December 1st and April 30th. The storage capacity available for storing the foregoing water to supply Boulder's winter requirements shall be not less than 9,000 acre-feet including the 1,000 acre-feet reserved under item (a) above, plus any remaining unused, operating capacity not then required by the District. The storage accumulated in the reservoir for the winter use of Boulder or other purposes shall be vacated to leave a minimum unoccupied capacity of 6,000 acre-feet below the level of the crest of the spillway on or before May 1st. This unoccupied capacity of 6,000 acre-feet shall not be encroached upon by the storage of water during the period May 1st to October 31st, inclusive, except for flood control. Any water stored for this flood control purpose shall be released at the maximum practicable rate. Water in excess of 1,000 acre-feet operating capacity remaining in the reservoir on May 1st shall be considered as water of the District.

(e) Boulder shall have the right to enlarge the capacity of Twin Lakes Reservoir at its own cost and such additional capacity shall be operated by the District entirely as directed by Boulder,

In which event the additional cost of maintenance and operation shall be borne by Boulder computed on the direct proportion of such additional storage to the whole capacity of the reservoir.

(f) Boulder shall at its own cost and expense have the right, sole control, and sole risk and liability to others for recreational uses of the reservoir but such uses shall at all times be subordinate to the primary use of such reservoir for domestic, municipal, irrigation, and industrial purposes by the District for equalizing the Boulder Creek conduit flow and for storage of water.

7. It is understood that the District is divided into two units, as follows:

FIRST: The first unit shall consist of all lands now in the District except those lands served by ditches having their headgates on Boulder Creek or its tributaries or on the South Platte River above the mouth of St. Vrain Creek, all of which excepted lands are supplied with project water by releases through Twin Lakes Reservoir on Dry Creek.

The acre-foot charge for water under said first unit shall be \$1.50 per acre-foot.

SECOND: The second unit shall consist of all lands in the District served by ditches having their headgates on Boulder Creek or its tributaries or on the South Platte River above the mouth of St. Vrain Creek and all of which lands are supplied with project water by releases through Twin Lakes Reservoir on Dry Creek.

The acre-foot charge for water under said second unit shall be \$2.00 per acre-foot.

8. From annual tax and water allotment revenues derived from Boulder, the District shall pay to Boulder for the use of said reservoir an amount equal to one-third (1/3) of the total

original capital cost of said reservoir, provided, however, that such total capital payment by the District shall not exceed \$450,000 (Four Hundred Fifty Thousand and no/100 Dollars). Such payment shall be made in forty (40) equal annual principal installments beginning on the first day of January of the year following the completion of the construction of the reservoir. To said forty annual principal payments shall be added interest from the date of completion of the reservoir to date of payment on unpaid balances at the average debt-financing rate secured by the City of Boulder for the financing of the cost of said reservoir. Any of said payments by the District may be made before due without penalty.

9. All said agreements shall be made legally binding upon Boulder and the District and evidenced by acts of the respective parties and each party shall adopt such valid ordinances, resolutions, and do such other acts as shall make the said inclusion effective and the said water allotment binding as obligations of the respective municipal and quasi-municipal corporations, Boulder and the District. Each party obligates itself to diligently take such steps as shall be proper to promptly and substantially accomplish the foregoing agreements, it being understood, however, that the construction of said reservoir is contingent upon the said decree of inclusion having first been entered.

20. If such inclusion of such proposed area be not decreed by said court during the calendar year 1953, then both parties shall be relieved herefrom and their relationship toward each other and the relationship of their respective property owners shall stand as if this agreement had never been made and the District boundaries shall thereafter be as they now exist.

WITNESS: The corporate names of the parties attested by their seals all herunto affixed this twentieth-fourth day of August, 1953 by their respective officers herunto authorized by Ordinance and Resolutions of their respective City Council and Board of Directors.

CITY OF BOULDER, COLORADO

Attest:

(Seal of City of Boulder)

BY (Sd.) John W. Kilgore
MAYOR

By (Sd.) Edmond B. Jones
City Clerk

Attest:

(Seal)

NORTHERN COLORADO WATER CONSERVANCY
DISTRICT

BY (Sd.) Jacob S. Schuy
President

By (Sd.) I. M. Rille
Secretary

STATE OF COLORADO)
COUNTY OF WELD) SS

IN THE DISTRICT COURT
SITTING IN AND FOR WELD COUNTY

IN THE MATTER OF NORTHERN COLORADO)
WATER CONSERVANCY DISTRICT, UPON)
PETITION OF BOULDER AND WHITE ROCK) CONSENT TO INCLUSION
DITCH AND RESERVOIR COMPANY, ET AL.)
FOR INCLUSION OF AREA IN THE DISTRICT)

Jacob S. Schey, President, and J. H. Dille, Secretary-
Manager, of Northern Colorado Water Conservancy District, each
being duly sworn, say: The attached agreement, bearing date
of August 24, 1953, was entered into by said officers on
behalf of said District with the City of Boulder, Colorado,
pursuant to resolution duly passed and adopted by the Board
of the District. That the District consents to the inclusion
in the District of the area generally described in the petition
of The Boulder and White Rock Ditch and Reservoir Company and
others, filed July 1, 1953 in the District Court of Weld County,
Colorado, upon terms and conditions as in said agreement set
forth, and to be embodied in the decree for inclusion.

Jacob S. Schey
Jacob S. Schey, President
J. H. Dille
J. H. Dille, Secretary-Manager

Subscribed and sworn to before me this 31st day of August,
1953.

My commission expires:

Clark Detroit
Notary Public

SUPPLEMENT I

FEBRUARY 6, 1954

156

SUPPLEMENTAL AGREEMENT

THIS AGREEMENT, made in duplicate this 6th day of February, 1954,
by the CITY OF BOULDER, first party, and NORTHERN COLORADO WATER CONSERVANCY
DISTRICT, second party, as a supplement to and in modification of the original
agreement between them in writing dated August 24, 1953, relative to construc-
tion of Twin Lakes Reservoir, now known as Boulder Reservoir, and its operation,
IS TO WITNESS THAT:

WHEREAS, in the course of the development of detailed plans for
said reservoir, it has been found necessary and desirable, for the mutual
benefit of both parties to enhance the security and utility of the reservoir
to make certain hereinafter specified modifications in the total capacity of
the reservoir and in the division of that capacity among the several uses; and

WHEREAS, in the public interest the operating rules of the reservoir
as included in the original agreement were intended to provide a measure of
protection from floods to property lying downstream from the dam on Dry Creek,
through the allocation of a portion of the capacity of the reservoir to
flood control purposes; and

WHEREAS, in order to assure that for flood control purposes and
for safety, the reservoir will at all times be operated in the manner intended,
it is deemed desirable to recognize the right of approval and the authority
of the State Engineer of the State of Colorado in requiring compliance with
the said operating rules and other regulations insofar as they pertain to
flood control and safety; and

WHEREAS, in addition to the works embodied in the basic reservoir
project as contemplated under the original agreement, it is now necessary
and beneficial to both parties to supplement the same with a greater original
basin capacity and that an outlet canal and appurtenant structures be pro-
vided and that the terms of sharing in cost of said outlet canal feature be
defined;

NOW THEREFORE, IN CONSIDERATION OF MUTUAL BENEFITS TO BE GAINED BY
EACH, IT IS AGREED that this supplemental contract shall modify said original
agreement as follows:

1. The said reservoir shall be so originally constructed as to provide a total storage capacity of 13,100 acre-feet, of which 12,000 acre-feet shall be considered as operating capacity. This total operating capacity shall be for the purpose, and divided among the two parties, in accord with the terms prescribed in the original agreement, with the following modifications of stated values in that agreement. The operating capacity available to the District during the period of May 1 to October 31 shall be increased from 4,000 to 4,800 acre-feet, and that portion of the capacity allocated for the control of floods during the period May 1 to October 31, shall be increased from 6,000 to 7,000 acre-feet.

2. The parties hereto shall operate the reservoir under the rules and regulations of this Supplemental Agreement as it modifies the Original Agreement dated August 24, 1957. The reservoir shall be so operated that the capacity allocated for flood control purposes shall not be encroached upon during the period May 1 to October 31, by storage for purposes other than flood control. The parties hereto recognize the authority and right of the State Engineer to require compliance with these operating instructions limiting the amount of water stored in the reservoir during that period to an elevation of 5,171.0 feet above mean sea level, corresponding to a capacity of 6,100 acre-feet of permanent storage capacity. When the pool for flood control purposes shall be encroached upon, by water from any source, the parties hereto shall immediately cause the outlets to the reservoir to be opened to reduce the amount of water stored therein to the end that there shall be no encroachment upon the flood control pool, as such pool is defined in this Supplemental Agreement.

Provided, that nothing contained herein shall prevent the State Engineer, if in his opinion he shall determine the operation of the reservoir under any set of circumstances to be unsafe, to take such action as he shall deem in the best interests of safety, as may be provided in Sec. 86, Ch. 90, 1935 Colorado Statutes Annotated, as amended.

Provided further, that nothing under this Supplemental Agreement shall release the parties hereto from any liability imposed under the provisions of

Sec. 91, Ch. 90, 1935 Colorado Statutes Annotated, as amended, nor shall the reference to the State Engineer herein, impose any liability upon the State Engineer under such section. The parties recognize that in no manner shall the State Engineer be construed to be acting as agent, servant or employee of either party under this Supplemental Agreement. The State Engineer is referred to in this Supplemental Agreement only in his capacity as an official of the State of Colorado.

The parties hereto recognize and accept the duties and obligations imposed by this Supplemental Agreement as a condition precedent to the approval by the State Engineer of the plans, specifications and operation of the reservoir. Further, this Supplemental Agreement and the original agreement of August 24, 1953, are incorporated by reference, and made a part of the application for approval of the plans and specifications for the construction of the Boulder Reservoir, dam and appurtenant works, also known as Twin Lakes Reservoir.

3. The City of Boulder will provide at its own original cost, as a part of the construction of Twin Lakes Reservoir project an outlet canal of 200 second-foot capacity and about 3000 feet length extending from the terminus of the main outlet of the Twin Lakes Reservoir to the beginning of a siphon across Dry Creek.

The capital cost of said outlet canal together with necessary appurtenances shall be in addition to and distinct from the capital cost of the reservoir as set forth in said original agreement and said cost of canal shall be borne by the two parties as follows: two-thirds of the City of Boulder and one-third by the District. The District shall repay its one-third share to Boulder in installments over the same period of years and in the same manner as provided in Article 8 of said original agreement.

4. All the operating rules stated in the original agreement shall remain as therein provided, except as specifically modified hereby, and said agreement shall remain in full force and effect in all its obligations, terms, and provisions except as expressly modified heretofore.

SUPPLEMENT II

May 14, 1965

SECOND SUPPLEMENTAL AGREEMENT

THIS AGREEMENT, made this 14th day of May, 1965,
by the City of Boulder, first party, and Northern Colorado Water Conserv-
ancy District, second party, as a second supplement to the original agree-
ment between the parties dated August 24, 1953, relative to construction of
Boulder Reservoir and the operation of said Reservoir together with the
lands adjacent thereto;

WITNESSETH:

WHEREAS, the operating rules for the reservoir, as included in the
original agreement, do not specifically define the relative obligations of
the parties in the use, operation and maintenance of certain of the lands
purchased for and included in the construction cost of Boulder Reservoir;
and

WHEREAS, it is in the public interest and to the advantage of the
City and the District to set forth the specific land areas for which each
party shall be responsible and to define the rights and interests of each
party in the use, operation and maintenance of the reservoir properties
and appurtenances above high water line of said reservoir;

NOW, THEREFORE, in consideration of the benefits to be gained by
each party, it is agreed that this supplemental contract shall modify and
amend the Agreement of August 24, 1953, and the Supplemental Agreement
of February 6, 1954, as follows:

1. In order to fulfill all obligations and responsibilities arising
through the preceding agreements between the District and the
City of Boulder, Article 6 of the Agreement of August 24, 1953
and Article 4 of the Supplemental Agreement of February 6, 1954
are hereby modified and supplemented to define the land areas,
structures and facilities which shall hereafter be controlled,
operated and maintained by the parties hereto.

*Areas controlled
by the District*

(a) Area Controlled by the District

The District shall have exclusive and sole control, except as specifically described in Articles 2 (a) and 2 (b) hereof, of the use, occupancy, operation and maintenance of the following described land areas which comprise portions of or are adjacent to Boulder Reservoir (referred to as Twin Lakes Reservoir on Dry Creek in the original Agreement of August 24, 1953) and which are shown on that certain drawing entitled "Boulder Reservoir, General Plan" by R. J. Tipton and Associates and Phillips-Carter-Osborn, Inc., numbered 1062-3 and also shown by District survey on that certain drawing entitled "Traverse Showing Land Areas Adjacent to Boulder Reservoir", numbered D-1017-8-63, both of which are attached hereto and made a part hereof:

(1) Tract "A"

Tract "A" shall be a parcel of land sixty (60) feet in width, for road purposes, thirty (30) feet on each side of the following described centerline.

*Boulder
Feeder Canal
Inlet area*

Beginning at a point on the centerline of Boulder Feeder Canal, and here designated as Point 1, which said Point lies N. 06° 29' E. a distance of 53.3 feet from Station 667 + 78.0 on the centerline of said Boulder Feeder Canal; thence S. 83° 31' E. a distance of 39 feet to Point 2; thence S. 71° 53' E. a distance of 604 feet to Point 3; thence N. 67° 45' E. a distance of 342.0 feet to Point 4; thence N. 53° 50' E. a distance of 250 feet to Point 5; thence S. 62° 05' E. a distance of 260.0 feet to Point 6.

(2) Tract "B"

Tract "B" shall be that parcel of land generally described as being bordered on the East by the North-South County

road, on the West by the North Dam of Boulder Reservoir, and on the South by the access road immediately South of the Boulder Creek Supply Canal and the North by the access road immediately South of the North line of Section 3.

(3) Tract "C"

Tract "C" shall be that parcel of land within Boulder Reservoir which lies below high water line of said Reservoir or, more specifically, below elevation 5,183.0.

(b) Structures and Facilities Controlled by the District

The District shall have exclusive and sole control, except as specifically described in Articles 2(a), 2(b) and 2(c) hereof, of the use, operation and maintenance of the following structures and facilities which are appurtenances of Boulder Reservoir:

- (1) The chute structure at the terminus of Boulder Feeder Canal.
- (2) The North Dam of Boulder Reservoir together with the spillway and outlet works which comprise parts thereof.
- (3) The South Dam of Boulder Reservoir together with the auxiliary outlet works which comprise a part thereof.
- (4) Boulder Creek Supply Canal from the outlet works in the North Dam of Boulder Reservoir to the inlet of the siphon which commences at Station 740 + 05 of said Boulder Creek Supply Canal.
- (5) All maintenance and access roads located on, over or adjacent to the structures enumerated in paragraphs (1) through (4) above and on, over or across the lands described as Tracts "A" and "B" in Article 1(a) hereof.
- (6) All such fences, gates, cattle guards, drainage structures or other facilities necessary and convenient to the District

in the discharge of its responsibilities and which are or may be located on, over or adjacent to those structures and facilities enumerated in paragraphs (1) through (5) above and on, over or across the lands described as Tracts "A" and "B" in Article 1(a) hereof.

(c) Areas Controlled by the City

The City shall have exclusive and sole control, except as specifically described in Article 2(d) hereof, of the use, occupancy, operation and maintenance of all lands owned by the City which comprise portions of or are adjacent to Boulder Reservoir, except Tracts "A", "B" and "C" as specifically described in Article 1(a) hereof.

(d) Structures and Facilities Controlled by the City

The City shall have exclusive and sole control, except as specifically described in Article 2(c) hereof, of the installation, use, operation and maintenance of the following facilities:

- (1) All buildings and structures, whether fixed or movable, which are located upon or permitted to be placed upon the lands described in Article 1(c) hereof.
- (2) All roads, fences, gates, cattle guards, drainage structures, parking areas or other facilities necessary and convenient to the City for recreational or other uses made by the City of the lands described in Article 1(c) hereof.

2. It is mutually understood and agreed that there shall be the following exceptions to exclusive and sole control of lands, structures and facilities by either the District or the City:

- (a) In exercising control, operation and maintenance of the lands, structures and facilities set forth in Articles 1(a) and 1(b), it is the intent of the District to prevent vehicular access thereto by the general public. However, employees and other authorized

FILTER PLANT OPERATING AGREEMENT

May 9, 1969

CONTRACT FOR FUTURE OPERATIONS

March 14, 1975

1 copy - then file Reservoir Agreements OFFICERS

DIRECTORS

BOULDER COUNTY
RAYMOND JOYCE
EVERETT C LONG
MILTON H NELSON

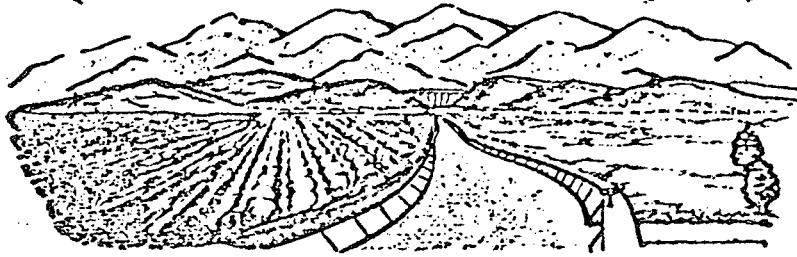
LARIMER COUNTY
GORDON C DYKMAN
WARD H FISCHER
JOHN R MOORE

WELD COUNTY
W. D FARR
WILLIAM E. BOHLENDER
J. BEN NIX

WASHINGTON AND
MORGAN COUNTIES
R. J. LAMBOURN

LOGAN COUNTY
M. H. VANDEHOER

SEDGWICK COUNTY
KIYOSHI OTSUKA



NORTHERN COLORADO WATER CONSERVANCY DISTRICT

1250 NORTH WILSON AVENUE
(1 MILE WEST OF LAKE LOVELAND ON HIGHWAY 34-1 BLOCK SOUTH)
P. O. BOX 679

LOVELAND, COLORADO
80537

303-667-2437

March 25, 1975

OFFICERS
J. BEN NIX, PRESIDENT
GORDON C DYKMAN
VICE PRESIDENT
E. F. PHIPPS, SECRETARY
LARRY D SIMPSON, TREASURER

STAFF

E. F. PHIPPS, MANAGER
LEONA M SCHWAB,
ADMINISTRATIVE SUPERVISOR
LARRY D. SIMPSON,
PLANNING COORDINATOR
ROBERT R. SMITH,
O. & M. SUPERINTENDENT
JOHN M. SAYRE,
PRINCIPAL COUNSEL
DAVIS, GRAHAM & STUBBS,
AMERICAN NATIONAL BANK
BUILDING
DENVER, COLORADO 80202
J. R. BARKLEY, CONSULTANT

City Clerk's Office
City of Boulder
P. O. Box 791
Boulder, Colorado 80302

Gentlemen:

Enclosed is a copy of the fully executed agreement of March 14, 1975, between this District and the City of Boulder for the future operation of Boulder Reservoir. Should you need additional copies, please let us know.

Yours very truly,

Manager

EFP:bb

Enclosure

cc: Ray Moses
Don Douglas ✓
C. V. Hallenbeck

*effective when new
is hardened spillway
is completed & accepted
(in writing) by
the NCWC District*

FILTER PLANT OPERATING AGREEMENT

THIS AGREEMENT, made this ^{May} 29th day of April, 1969, between the City of Boulder, a municipal corporation of the State of Colorado, acting by and through its duly authorized Mayor and City Clerk, and hereinafter termed "the City"; and Northern Colorado Water Conservancy District, a quasi-municipal corporation organized under the laws of the State of Colorado, and hereinafter termed "the District";

WITNESSETH:

WHEREAS, the District is the operator of certain works of the Colorado-Big Thompson Project transferred by the United States to the District for administration, operation, maintenance, repair, and rehabilitation; and,

WHEREAS, by contract agreement dated August 24, 1953, between the City and the District, and by Supplements 1 and 2 thereof dated February 6, 1954, and May 14, 1965, respectively, the rights and obligations of the City and the District in the use of Boulder Reservoir, appurtenant structures, and land areas are defined; and,

WHEREAS, the City has acquired design approval and a right-of-way license, Contract No. 14-06-713-72 for the installation of a turnout in Boulder Creek Supply Canal, at Station 659 + 92, for the purpose of taking delivery of water allotted to the City by the District; and,

WHEREAS, it is considered that mutual benefits will accrue thereby to the City and the District, the intent and purpose of this agreement is to provide the terms and conditions under which said water delivery to the City will be provided and, also, to provide the protection necessary to the District in the performance of its operations and services to the City and to other contract allottees of the District;

NOW, THEREFORE, IN CONSIDERATION OF THE RESPECTIVE COVENANTS HEREOF, IT IS MUTUALLY AGREED AS FOLLOWS:

1. For the purpose of this contract the following definitions shall obtain:

(a) "Acre-foot" is defined as 43,560 cubic feet and any volume of water delivered by the District will be computed on the assumption that a flow of one cubic foot of water per second of time will equal two (2) acre-feet in twenty-four (24) hours.

(b) "Acre-foot unit" is defined as the volume of water which is represented by an acre-foot as referred to in all water allotment contracts of the District or $\frac{1}{310,000}$ of the water supply annually made available for distribution by the Board of Directors of the District.

(c) "Water Year" shall mean the period from November 1 of one calendar year through October 31 of the next succeeding calendar year.

2. The City will finance and construct the works necessary to convey the City's water from the turnout in Boulder Creek Supply Canal and from the auxiliary outlet of Boulder Reservoir to the City's proposed water treatment facilities. Design and construction of the pipelines for conveyance of the City's water to the filter plant, where such pipelines cross lands controlled by the District, will be subject to approval by the District. It is further agreed that the City will install, within the works of the City, adequate measuring devices approved in writing by the District which will produce continuous chart records of flow through the raw water lines serving the proposed filter plant. A method of periodically testing the accuracy of the measuring and recording equipment shall be provided by the City within the installed facilities wherein check measurements of flow can be determined independently of the recording devices. Further, the water measurement

and recording equipment will be accessible at all times to operating personnel of the District, and the charts utilized for constant recording of water deliveries will be furnished, labeled, dated, changed, and delivered once each month by the City to the District for retention as a part of the District's permanent records. It is understood and agreed that the City may, at its own expense, copy such charts or records before delivery thereof to the District.

3. The District will deliver to the City in any water year such quantities of the City's water as may be available within the works operated by the District by reason of District water allotment contracts with the City or water stored in Boulder Reservoir by the City in accordance with existing or future operating agreements between the City and the District. Such deliveries will be made at the option of the City through the works defined in Article 2 above or released to Boulder Creek, all in accordance with operating procedures heretofore or herein established. It is expressly understood, however, that, except for deliveries through the auxiliary outlet from Boulder Reservoir, all such deliveries will be confined to the period between April 1 and October 31. It is further understood that the District will not be obligated to operate the inlet portion of Boulder Creek Supply Canal for the sole purpose of making water deliveries to the City's turnout in said canal and that those deliveries may, at times, be dependent upon quantities of other water being carried in the canal.

4. The City may take delivery of water through the auxiliary outlet of Boulder Reservoir in such manner as will best serve the needs of the City subject only to the provisions of Article 6(d) of that certain agreement of August 24, 1953, referred to hereinbefore. The District reserves the right to limit deliveries to the City to a maximum combined total flow rate of 90

→ City to notify District annually of water requirements by -3- said date for said period...

cubic feet per second of time through all District controlled facilities serving the City when necessary to prevent impairment of water delivery to other District allottees.

5. It is recognized by the parties hereto that future changes in water use and delivery requirements by the City and the District may arise in some manner not now foreseen. When and if such changes occur, it is the intent of the City and the District to negotiate amendments to this contract which will provide the operating procedures necessary for the protection of each party's operations for the benefit of their respective water users.

6. In addition to all other terms and conditions contained within this agreement, it is specifically understood and agreed by and between the parties hereto that the rights of the City hereunder are subject to:

(a) The Water Conservancy Act of Colorado, Chapter 150-5, Colorado Revised Statutes, 1963, as amended and other acts supplementary thereto.

(b) The terms and provisions of that certain Contract No. 11r-1051, including amendment thereof, dated July 5, 1938, between the United States of America and the Northern Colorado Water Conservancy District.

(c) The Rules and Regulations of the Board of Directors of Northern Colorado Water Conservancy District.

7. The City agrees to hold the District harmless and to pay for damages, losses, or repairs to works of the District or other parties resulting from the facilities constructed by the City and from any operation of such constructed facilities, which damages, losses, or repairs could not have occurred or would not have been required had such facilities not been built or had not been operated by the City.

The District does not, by reason of this contract, assume any liability or damage to any person or property incident to or arising during and in consequence of (a) the use, occupancy, and enjoyment of any easements involved herein; (b) the construction, reconstruction, operation and maintenance of facilities built to deliver water to the City from works operated by the District.

8. This agreement shall extend to and be binding upon the successors and assigns of the parties hereto.

IN WITNESS WHEREOF, the parties hereto have caused their respective names to be hereunto affixed by their respective officers, as duly authorized, upon the day and year first above written.

THE CITY OF BOULDER, COLORADO

By: *Reu Knecht*
Mayor

Attest:

C. K. Chapel
City Clerk

NORTHERN COLORADO WATER
CONSERVANCY DISTRICT

By: *J. Bea Nix*
President

Attest:

J. R. Buckley
Secretary

representatives of the City shall be permitted such access thereto as the needs of the City require, provided that the City shall furnish its own locks at the gates, chains or other obstructions located at all points of vehicular access.

- (b) In regard to Tract "B", described in Article 1(a)(3) hereof, the City reserves the right to construct, maintain and use a water treatment facility over which it shall retain sole and exclusive control, anything in this agreement to the contrary notwithstanding.

Also, public pedestrian traffic across the North access road shall not be denied by the District.

- (c) In regard to Trace "C", described in Article 1(a)(3) hereof, at no cost to the District, the City or its assigns shall be permitted to utilize land below elevation 5,183.0 for installation, operation and maintenance of beach areas, piers, ramps, docks, pumps, pipelines or other facilities necessary and convenient to the City in its use of portions of Tract "C" for recreational or municipal or other water supply purposes; provided, however, that any water pumped from the Reservoir, for use by the City, shall be considered as a part of the City's allotment and shall be measured by means of measuring facilities satisfactory to the District.

- (d) Whenever the City shall deem it necessary to utilize the auxiliary outlet of Boulder Reservoir, located in the South Dam and referred to in Article 1(b)(3) hereof, at least 30 days' notice of intent to use said outlet shall be given to the District in writing. Within the same notice, the City shall designate authorized representatives to confer with District representatives for the purpose of preparing a supplement to this Article (2)(d) which

shall set forth the respective obligations of the parties in relation to operation, maintenance, repair, replacement or modification of said auxiliary outlet; measurement of water released therefrom and such other matters as may be, at that time, of mutual interest to the parties hereto.

- (e) In exercising control, operation and maintenance of the lands described in Article 1(c) hereof, the City shall plan the installation and perform the operation of its own facilities and facilities of its permittees and assigns in a manner which will aid the District in preventing vehicular access by the general public to the lands, structures and facilities described in Articles 1(a) and 1(b) hereof.
- (f) Since completion of construction of Boulder Reservoir, the City has permitted the District the use of materials from the borrow area located in the SE 1/4 of Section 34, Township 2 North, Range 70 West. The District has processed by screening and has stockpiled in said borrow area approximately 500 cubic yards of gravel for road surfacing purposes. It is hereby agreed that the District shall have until April 1, 1968 to remove said stockpile of screened gravel and any of the material remaining after that date shall be the property of the City.

3. As the uses of lands and facilities by the City are for the primary purpose of providing public recreation, the City hereby agrees to patrol and police Boulder Reservoir, its water surface, and its adjacent land areas in such manner and to such degree as will best protect all land, structures and facilities operated and controlled by both the City and the District. In the event that any of the structures or facilities, described in

Article (b) and 1(d) hereof, shall become damaged or destroyed by reason of the recreational usage or related activities engaged in or permitted by the City, the costs of repair or replacement thereof shall be borne by the City.

4. The District does not, by reason of the execution of this agreement, assume any liability for injury or damage to any person or property incident to or arising during or in consequence of the use of Boulder Reservoir and its adjacent land areas for the purposes of recreational activities or activities incident thereto.
5. Except as specifically modified and supplemented by the provisions hereof, the Agreement of August 24, 1953 and the Supplemental Agreement of February 6, 1954 shall remain in full force and effect.
6. The City expressly retains all of its rights to enlarge the capacity of Boulder Reservoir, anything which may be interpreted to the contrary in this agreement notwithstanding.

IN WITNESS WHEREOF, the parties hereto have caused their respective names to be hereunto affixed by their respective officers, as duly authorized, upon the day and year first written above.

CITY OF BOULDER, COLORADO,
a Municipal corporation

By H. Paul Couch
Mayor

Attest:

M. E. Couse
Director of Finance and Record
Ex-officio City Clerk

NORTHERN COLORADO WATER
CONSERVANCY DISTRICT

By J. B. W. Tix
President

Attest:

J. R. Barkley
Secretary

AGREEMENT

This agreement, made this 14th day of March, 1975, between the City of Boulder, a municipal corporation of the State of Colorado, acting by and through its duly authorized Mayor and City Clerk, and hereinafter termed "the City;" and Northern Colorado Water Conservancy District, a quasi-municipal corporation organized under the laws of the State of Colorado, and hereinafter termed "the District:"

WITNESSETH:

WHEREAS, by contract agreement dated August 24, 1953, between the City and the District, and by Supplements 1 and 2 thereof dated February 6, 1954, and May 14, 1965, respectively, and by a "Filter Plant Operation Agreement" dated May 9, 1969, the rights and obligations of the City and the District in the construction and use of Boulder Reservoir, appurtenant structures, and land areas are defined, and

WHEREAS, in its long-range plans for expanding water supply acquisition, treatment, and distribution to meet the needs of municipal growth, the City desires to increase its use of portions of the existing storage capacity of Boulder Reservoir which are now committed for flood control purposes, and

WHEREAS, it is the intent of the District to operate, maintain, and manage Boulder Reservoir and appurtenant facilities for the maximum long-range benefit to the City and all other District contract allottees and water users, and

WHEREAS, it is considered that mutual benefits will accrue thereby to the City and the District, the intent and purpose of this agreement is to provide for the cancellation of the aforementioned contracts and supplements; and to provide the terms and conditions under which the respective rights and obligations of the parties hereto in the construction, operation, maintenance, modification, and management of the reservoir and appurtenant facilities will hereafter be fulfilled;

NOW, THEREFORE, IN CONSIDERATION OF THE RESPECTIVE COVENANTS HEREOF, IT IS MUTUALLY AGREED AS FOLLOWS:

1. For the purpose of this contract the following definitions shall obtain:
 - (a) "Acre-Foot" is defined as 43,560 cubic feet and any volume of water delivered by the District will be computed on the assumption that a flow of one cubic foot of water per second of time will equal two (2) acre-feet in twenty-four (24) hours.
 - (b) "Acre-Foot Unit" is defined as the volume of water which is represented by an acre-foot as referred to in all water allotment contracts of the District or 1/310,000 of the water supply annually made available for distribution by the Board of Directors of the District.
 - (c) "Water Year" shall mean the period from November 1 of one calendar year through October 31 of the next succeeding calendar year.
 - (d) "City Water" shall mean any net water credits accrued to the City at any point in time from any legal source available to the City including, but not limited to: measured deliveries into Boulder Reservoir of City appropriations from tributaries of the South Platte River; water allotted to the City under District allotment contracts; water allotted to the City by Municipal Subdistrict, Northern Colorado Water Conservancy District; water credits to the City arising out of transfers or exchange of District water supplies from mutual ditch companies; and any carry-over credits as provided in Article 6 hereof.

2. Having obtained the rights-of-way for and constructed Boulder Reservoir at its own original cost and expense, the City shall retain title thereto.
3. The City shall at its own cost and expense design and construct an improved spillway for Boulder Reservoir. Said improved spillway shall be constructed under designs and specifications approved by the District and by the State Engineer of the State of Colorado.
4. The District shall at its own cost and expense control, operate, maintain, and keep in repair the reservoir in a diligent manner for the benefit of all of the water allottees of the District including the City. The District shall pay to the City for the use of the reservoir \$371,561.91 which amount is one-third of the total original capital cost of the reservoir. Such payment shall be in forty equal annual principal installments of \$9,289.05 each plus interest on the unpaid balance at 2.4633 percent. Said installments which began January 1, 1955, shall continue until the remaining principal balance of \$195,069.96 is paid. Any of said payments may be made before due without penalty.
5. In order for the parties hereto to fulfill their respective obligations and responsibilities in the use, operation, and maintenance of the reservoir properties and appurtenances, it is hereby agreed as follows:

A. Areas Controlled by the District

The District shall have exclusive and sole control, except as specifically described in Article 5C and Article 5E (2) and (3) hereof, of the use, occupancy, operation, and maintenance of the following described land areas which comprise portions of or are adjacent to Boulder Reservoir.

(1) Tract "A"

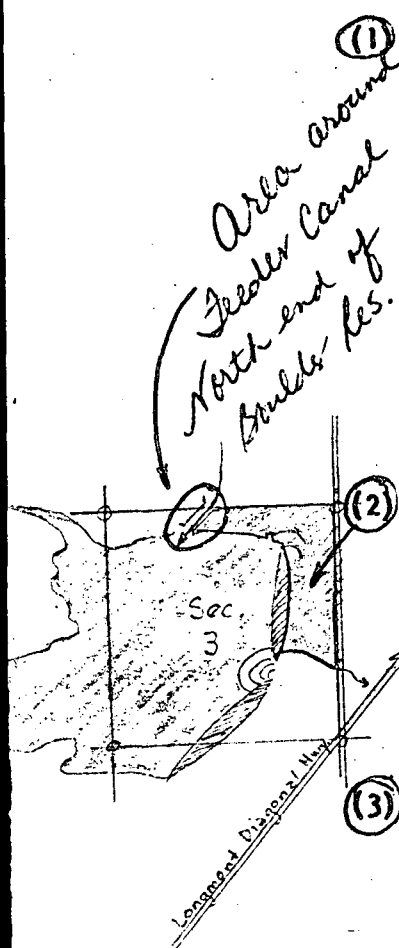
Tract "A" shall be a parcel of land sixty (60) feet in width, for road purposes, thirty (30) feet on each side of the following described centerline: Beginning at a point on the centerline of Boulder Feeder Canal, and here designated as Point 1, which said Point lies N. 06°29' E. a distance of 53.3ft from Station 667+78.0 on the centerline of said Boulder Feeder Canal; th. S. 83°31' E. a distance of 39ft to Point 2; th. S. 71°53' E. a distance of 60ft to Point 3; th. N. 67°45' E. a distance of 342.0ft to Point 4; th. N. 53°50' E. a distance of 250ft to Point 5; th. S. 62°05' E. a distance of 260.0ft to Point 6.

(2) Tract "B"

Tract "B" shall be that parcel of land generally described as being bordered on the East by the North-South County Road, on the West by the North Dam of Boulder Reservoir, and on the South by the access road immediately South of the Boulder Creek Supply Canal and the North by the access road immediately South of the North line of Section 3.

(3) Tract "C"

Tract "C" shall be that parcel of land within Boulder Reservoir which lies below high waterline of said Reservoir or, more specifically, below elevation 5,183.0.



B. Structures and Facilities Controlled by the District

The District shall have exclusive and sole control, except as specifically described in Article 5D and Article 5E (3) hereof, of the use, operation, and maintenance of the following structures and facilities which are appurtenances of Boulder Reservoir:

- ① The chute structure at the terminus of the Inlet portion of Boulder Creek Supply Canal.
- ② The North Dam of Boulder Reservoir together with the spillway and outlet works which comprise parts thereof.
- ③ The South Dam of Boulder Reservoir except the auxiliary outlet works which comprise a part thereof.
- ④ Boulder Creek Supply Canal from the outlet works in the North Dam of Boulder Reservoir to the inlet of the siphon which commences at Station 740+05 of said Boulder Creek Supply Canal.
- ⑤ All maintenance and access roads located on, over or adjacent to the structures enumerated in paragraphs (1) through (4) above and on, over or across the lands described as Tracts "A" and "B" in Article 5A hereof.
- ⑥ All such fences, gates, cattle guards, drainage structures or other facilities necessary and convenient to the District in the discharge of its responsibilities and which are or may be located on, over or adjacent to those structures and facilities enumerated in paragraphs (1) through (5) above and on, over, or across the lands described as Tracts "A" and "B" in Article 5A hereof.

C. Areas Controlled by the City

The City shall have exclusive and sole control, except as specifically described in Article 5E (1) hereof, of the use, occupancy, operation, and maintenance of all lands owned by the City which comprises portions of or are adjacent to Boulder Reservoir, except Tracts "A," "B," and "C" as specifically described in Article 5A hereof.

D. Structures and Facilities Controlled by the City

The City shall have exclusive and sole control of the installation, use, operation, and maintenance of the following facilities:

- ① All buildings and structures, whether fixed or movable, which are located upon or permitted to be placed upon the lands described in Article 5C hereof.
- ② All roads, fences, gates, cattle guards, drainage structures, parking areas, or other facilities necessary and convenient to the City for recreational or other uses made by the City of the lands described in Article 5C hereof.
- ✓ ③ The auxiliary outlet works in the South Dam of the reservoir.
- ✓ ④ The turnout installed by the City in the inlet portion of Boulder Creek Supply Canal and the pipeline from the turnout to the City's filter plant.

E. It is mutually understood and agreed that there shall be the following exceptions to exclusive and sole control of lands, structures, and facilities by either the District or the City:

- ✓ (1) In exercising control, operation, and maintenance of the lands, structures and facilities set forth in Articles 5A and 5B, it is the intent of the District to prevent vehicular access thereto by the general public. However, employees and other authorized representatives of the City shall be permitted such access thereto as the needs of the City require, provided that... the City shall furnish its own locks at the gates, chains, or other obstructions located at all points of vehicular access.

(2) In regard to Tract "B," described in Article 5A (2) hereof, the City reserves the right to construct, maintain, and use a water treatment facility over which it shall retain sole and exclusive control, anything in this agreement to the contrary notwithstanding. Also, public pedestrian traffic across the North access road shall not be denied by the District.

(3) In regard to Tract "C," described in Article 5A (3) hereof, at no cost to the District, the City or its assigns shall be permitted to utilize land below elevation 5,183.0 for installation, operation, and maintenance of beach areas, piers, ramps, docks, pumps, pipelines, or other facilities necessary and convenient to the City in its use of portions of Tract "C" for municipal water supply purposes or for recreational uses; provided, however, that any water pumped from the Reservoir, for use by the City, shall be considered as a part of "City Water" and shall be measured by means of measuring facilities satisfactory to the District.

(4) In exercising control, operation, and maintenance of the lands described in Article 5C hereof, the City shall plan the installation and perform the operation of its own facilities and facilities of its permittees and assigns in a manner which will aid the District in preventing vehicular access by the general public to the lands, structures, and facilities described in Article 5A and 5B hereof.

F. As the uses of lands and certain facilities by the City are in part for the primary purpose of providing public recreation, the City hereby agrees to patrol and police Boulder Reservoir, its water surface, and its adjacent land areas in such manner and to such degree as will best protect all land, structures, and facilities operated and controlled by both the City and the District. In the event that any of the structures or facilities, described in Articles 5B and 5D hereof, shall become damaged or destroyed by reason of the recreational usage or related activities engaged in or permitted by the City, the costs of repair or replacement thereof shall be borne by the City.

6. The Reservoir has been constructed to a total capacity of 13,100 acre-feet of which 300 acre-feet is below the invert of the auxiliary outlet (elevation 5,153.5) and is unavailable for use by either party hereto; 1,000 acre-feet of capacity between the invert of the auxiliary outlet and the main outlet (elevation 5,159.0) is available to the City but not available to the District; and, 11,800 acre-feet of capacity lies between the invert of the main outlet and the spillway crest (elevation 5,183.0) and is available for use by both parties hereto in the manner hereinafter provided. Subject to the other contractual provisions herein, the District shall:

(1) Manage, control, and operate the capacities of the reservoir in such manner as will best fulfill the anticipated water delivery requirements of the City and other District water users. (2) Reserve a portion of the capacity for flood control purposes pursuant to such limitations as may be imposed by the State Engineer in exercise of his statutory authority. Provided, however, that nothing in this agreement shall release the parties hereto from any liability imposed under the provisions of Chapter 148-5-13, Colorado Revised Statutes, 1963. (3) During the period May 1 through July 31 of each year, reserve not less than 2,000 acre-feet of unoccupied capacity to receive delivery of "City Water" other than water allotted by the District or the Municipal Sub-district. (4) Otherwise operate the reservoir in a manner which will best serve the needs of the District for regulation, storage, and delivery of District water supplies in accordance with the following general rules:

- A. Subject to the other operating rules hereof, the total operating capacity of the reservoir between the invert of the main outlet and the maximum water surface elevation permitted for conservation storage by the State Engineer pursuant to his statutory authority shall be apportioned as follows: (1) 4,300 acre-feet of said capacity is reserved for use by the District for equalizing, regulating, and storing water appropriations of the Colorado-Big Thompson Project and those appropriations being made from East Slope streams by the District pursuant to Article 6B hereof. (2) Two-sevenths (2/7) of the remainder of said operating capacity, in addition to the 1,000 acre-feet of capacity between the inverts of the auxiliary outlet and the main outlet, is reserved for use by the City for long term (in excess of one year) carry-over storage of "City Water." (3) Five-sevenths (5/7) of said remaining capacity shall be considered a maximum volume of "City Water" which may be accrued by the City and carried over as a deliverable water credit from one water year to the next. Subject to Article 6E hereof, any "City Water," in excess of the capacities defined in (2) and (3) above, remaining on October 31 each year shall be considered as water of the District.
- B. The District, as appropriator of water for Boulder Reservoir from St. Vrain Creek and its tributaries in former Water District No. 5, shall submit such claims related to said reservoir in any water adjudication proceedings. The City, as appropriator of water for said reservoir from Boulder Creek and its tributaries in former Water District No. 6, shall submit such claims in any water adjudication proceedings.
- C. The District will deliver to the City in any water year such quantities of "City Water" as the City may be entitled to under the terms hereof. Such deliveries will be made at the option of the City through the works defined in Article 5B (2), (3), and (4) and Article 5D (3) and (4) above or released to Boulder Creek, all in accordance with operating procedures established by the District. It is expressly understood, however, that, except for deliveries through the auxiliary outlet from Boulder Reservoir, all such deliveries will be confined to the period between April 1 and October 31. It is further understood that the District will not be obligated to operate the inlet portion of Boulder Creek Supply Canal for the sole purpose of making water deliveries to the City's turnout in said canal and that those deliveries may, at times, be dependent upon quantities of other water being carried in the canal. The City may take delivery of water through the auxiliary outlet of Boulder Reservoir in such manner as will best serve the needs of the City. The District reserves the right to limit deliveries to the City to a maximum combined total flow rate of 90 cubic feet per second of time through all District controlled facilities serving the City when necessary to prevent impairment of water delivery to other District allottees.
- D. The City will finance and construct the works necessary to convey the City's water from the turnout in Boulder Creek Supply Canal and from the auxiliary outlet of Boulder Reservoir to the City's water treatment facilities. Design and construction of the pipelines for conveyance of the City's water to the filter plant, where such pipelines cross lands controlled by the District, will be subject to approval by the District. It is further agreed that the City will install, within the works of the City, adequate measuring devices approved in writing by the District, which will produce satisfactory records of flow through the raw water lines serving the filter plant. A method of periodically testing the accuracy of the measuring and recording equipment shall be provided by the City within the installed facilities wherein check measurements of flow can be determined independently of the recording devices. Further, the water measurement and recording equipment will be accessible at all times to operating personnel of the District.

- E. Each year the City shall determine the amount of its requirements for winter water for the period from November 1 to April 30, inclusive, and shall notify the District annually of such requirements on or before September 1 of each year. The District shall deliver and store in Boulder Reservoir on or before each November 1 sufficient water to take care of the City's so notified winter requirement. Any such delivery which is in excess of "City Water" remaining for the then current water year shall be charged against "City Water" to be accrued in the next subsequent water year. The storage capacity available for storing the foregoing water to supply the City's winter requirements shall be not less than 8,500 acre-feet, plus any remaining unused, operating capacity not then required by the District. Any such water stored for the City's winter use which remains in the reservoir on May 1 in excess of water defined in Article 6A (2) hereof shall be considered as water of the District.
- F. The City shall have the right to enlarge the present capacity of Boulder Reservoir at its own cost and such additional capacity shall be operated by the District entirely as directed by the City, in which event, the additional cost of maintenance and operation shall be borne by the City computed on the direct proportion of such additional storage to the whole capacity of the reservoir.
- G. The City shall at its own cost and expense have the right, sole control, and sole risk and liability to others for recreational uses of the reservoir but such uses shall at all times be subordinate to the primary use of such reservoir for domestic, municipal, irrigation, and industrial purposes by the District for equalizing Boulder Creek Supply Canal flow and for storage of water.
7. It is recognized by the parties hereto that future changes in water use and delivery requirements by the City and the District may arise in some manner not now foreseen. When and if such changes occur, it is the intent of the City and the District to negotiate amendments to this contract which will provide for the protection of each party and for the benefit of their respective water users.
8. In addition to all other terms and conditions contained within this agreement, it is specifically understood and agreed by and between the parties hereto that the rights of the City hereunder are subject to:
- A. The Water Conservancy Act of Colorado, Chapter 150-5, Colorado Revised Statutes, 1963, as amended and other acts supplementary thereto.
- B. The terms and provisions of that certain Contract No. 11r-1051, including amendments thereof, dated July 5, 1938, between the United States of America and the Northern Colorado Water Conservancy District.
- C. The terms and provisions of that certain Contract No. 14-06-700-7497, including amendments thereof, dated October 3, 1973, between the United States of America, Northern Colorado Water Conservancy District and Municipal Subdistrict, Northern Colorado Water Conservancy District.
- D. The Rules and Regulations of the Board of Directors of Northern Colorado Water Conservancy District and of the Municipal Subdistrict, Northern Colorado Water Conservancy District.
9. The City agrees to hold the District free and harmless from any liability occasioned by the construction of facilities by the City and to pay for damages, losses, and repairs to works of the District or other parties resulting from the construction of facilities by the City and from any operation of such constructed facilities. Further, the City also agrees to hold the District free and harmless from any liability or damage to any person or property incident to or arising during and in consequence of (a) the use, occupancy, and enjoyment of any easements involved herein; (b) the construction, reconstruction, operation, and maintenance of facilities built to deliver water to the City from works operated by the District.

★ 10. This contract shall become effective on the date that the Improved spillway provided for in Article 3 hereof is completed and accepted in writing by the District. Otherwise the existing contracts and supplements shall remain in full force and effect.

11. This agreement shall extend to and be binding upon the successors and assigns of the parties hereto.

IN WITNESS WHEREOF, the parties hereto have caused their respective names to be hereunto affixed by their respective officers, as duly authorized, upon the day and year first above written.

THE CITY OF BOULDER, COLORADO

By: _____

Mayor

Attest:

Carl F. Chapel
City Clerk

NORTHERN COLORADO WATER CONSERVANCY
DISTRICT

By: _____

President

Attest:

E. J. Phipps
Secretary