

**colorado development**

**consulting services, inc.**

James L. Castrodale, Sr.  
President

THIRD CREEK RANCH  
METROPOLITAN DISTRICT SERVICE PLAN

*Approved*  
MAY 1985

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CHAPTER I

SUMMARY

## CHAPTER I

### SUMMARY

The proposed Third Creek Metropolitan District will provide a variety of municipal type services to an unincorporated area located wholly within the boundaries of Adams County. This area is not currently being served with either water or sanitary sewer service and is not located within any city, town or special district authorized to provide these services.

#### WATER

The District's water supply will be provided by shallow and deep wells coupled with additional surface water rights. The District reserves the right to contract or purchase rights to off-site wells as well as to develop its own on-site wells. The raw water supply requirement for the development of the total area located within the District service area can be met by the District. The quality of water delivered to the users will meet Federal Safe Water Drinking Act of 1973 standards for potable water.

Fire protection capabilities and adequate water pressure will be assured through central storage and pressure boosting facilities.

#### SEWER

Presently, a Clean Water Plan Amendment is being developed for the First, Second and Third Creek Basins, (see

outline of this study as an exhibit to this Service Plan). It is anticipated that the three basins will ultimately require a new regional facility in order to provide wastewater treatment to this area. The regional facility could be built by Denver Metropolitan Sewer District, Thornton, Brighton, South Adams Water and Sanitation District or a consortium of these entities. However, construction of such a facility is five to ten years in the future. In the interim, the Clean Water Plan Amendment will be prepared and processed through the appropriate agencies and wastewater treatment will be provided on a permanent basis by the City of Brighton.

#### OTHER SERVICES TO BE PROVIDED

It is the intent of this proposed District to provide all or a part of the following services.

- a. Mosquito Control
- b. Parks and Recreation
- c. Safety Protection
- d. Sanitation (with cooperation with the City of Brighton)
- e. Street Improvement
- f. Television Relay and Transmission
- g. Transportation
- g. Water (in cooperation with the City of Brighton)

The option services are mosquito control, safety protection, television relay and transmission, and transportation. The principals desire that these services be available to the District to perform if, in fact, said services are needed.

## LAND USE

The proposed District is located south of Brighton adjacent to and west of Interstate 76. The northern boundary extends north of 144th Avenue with 136th Avenue forming the southern boundary. The property will be planned for single family residential and multi-family residential uses with support office/retail and some light industrial/research and development type development. The proposed District encompasses approximately 1,500 acres (including rights of way) and is irregularly shaped. Residential development, in addition to agricultural uses, presently exists in the area. The utilities for these developments are provided by individual wells and septic systems. To the south, the land is basically agricultural with Barr Lake 1-1/2 miles to the east, on the east side of Interstate 76.

## JUSTIFICATION

The Third Creek Metropolitan District is a necessity for the following reasons:

1. Timing - The principals must be in a position to begin development soon or they may lose the opportunity to begin construction in this very positive and dynamic development cycle.
2. Financing - The project requires significant on-site and off-site capital improvements. The geographic location, topography, and proximity to Brighton all mandate major capital commitments in order to develop the property.
3. Resources - The principals are owners of water rights which ultimately could be conveyed to the City of

Brighton. The formation of this District provides for the proper vehicle and structure for an intergovernmental agreement.

4. Quality - The principals are anticipating developing a quality project which will increase the overall cost of development.
5. Specific - Several specific off-site improvements/costs are required of this project but benefit both the City of Brighton and the general area:

Major sewer outfall line

Major water resources

Major water supply system

Open space, parks, recreation

School sites

CHAPTER II

BOUNDARIES



## CHAPTER II

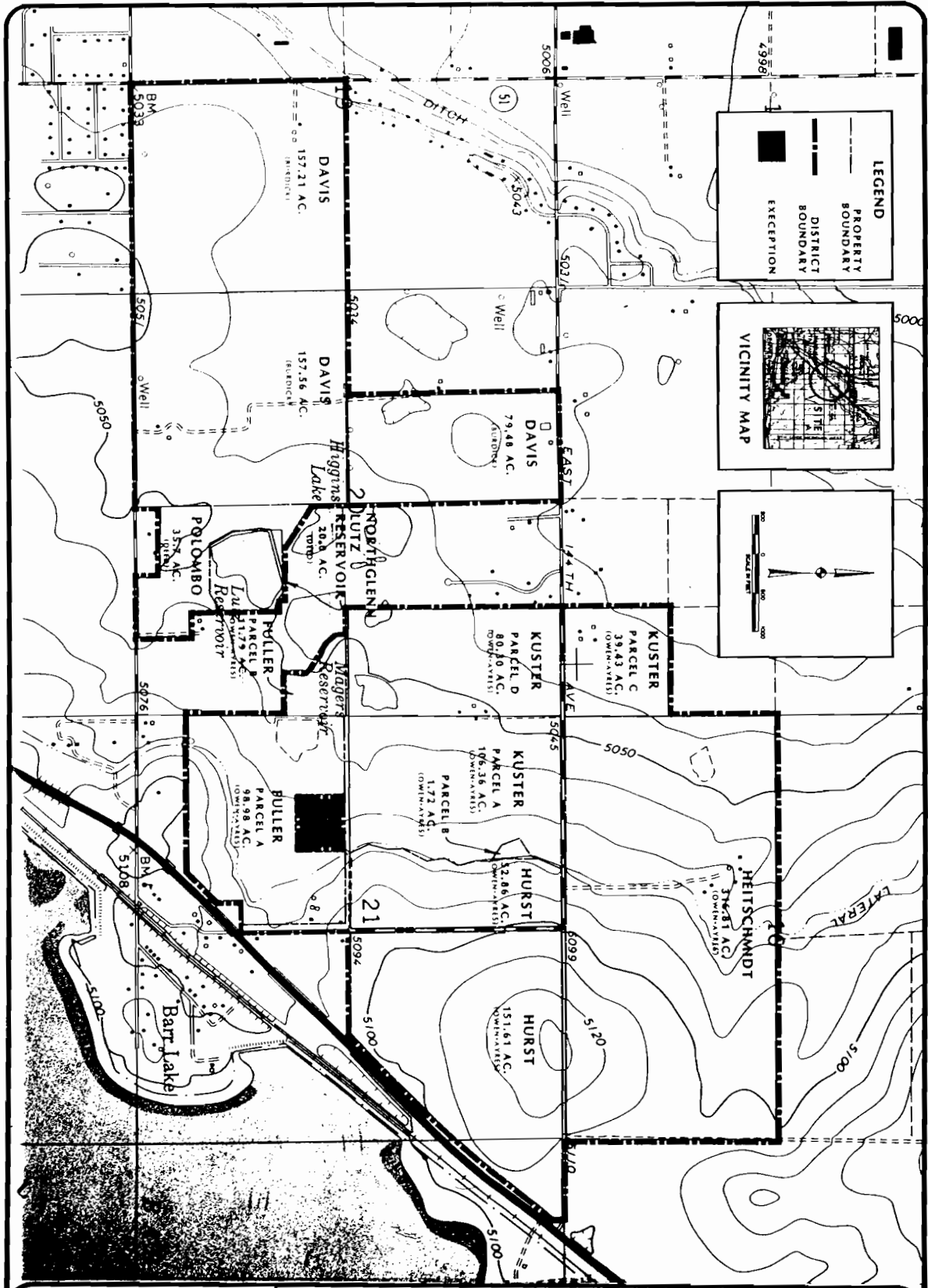
### BOUNDARIES

#### PROPOSED DISTRICT BOUNDARIES

The land to be included within the proposed District is generally located between Interstate 76 and State Highways 6 and 85. The property is located within Sections 16, 19, 20 and 21, Township 2 South, Range 66 West, of the 6th Principal Meridian, Adams County, Colorado. The boundaries of the proposed District and the legal descriptions for the property are presented in this Chapter. The total area of the proposed District is approximately 1,500 acres.

#### PROPOSED DISTRICT SERVICE AREA

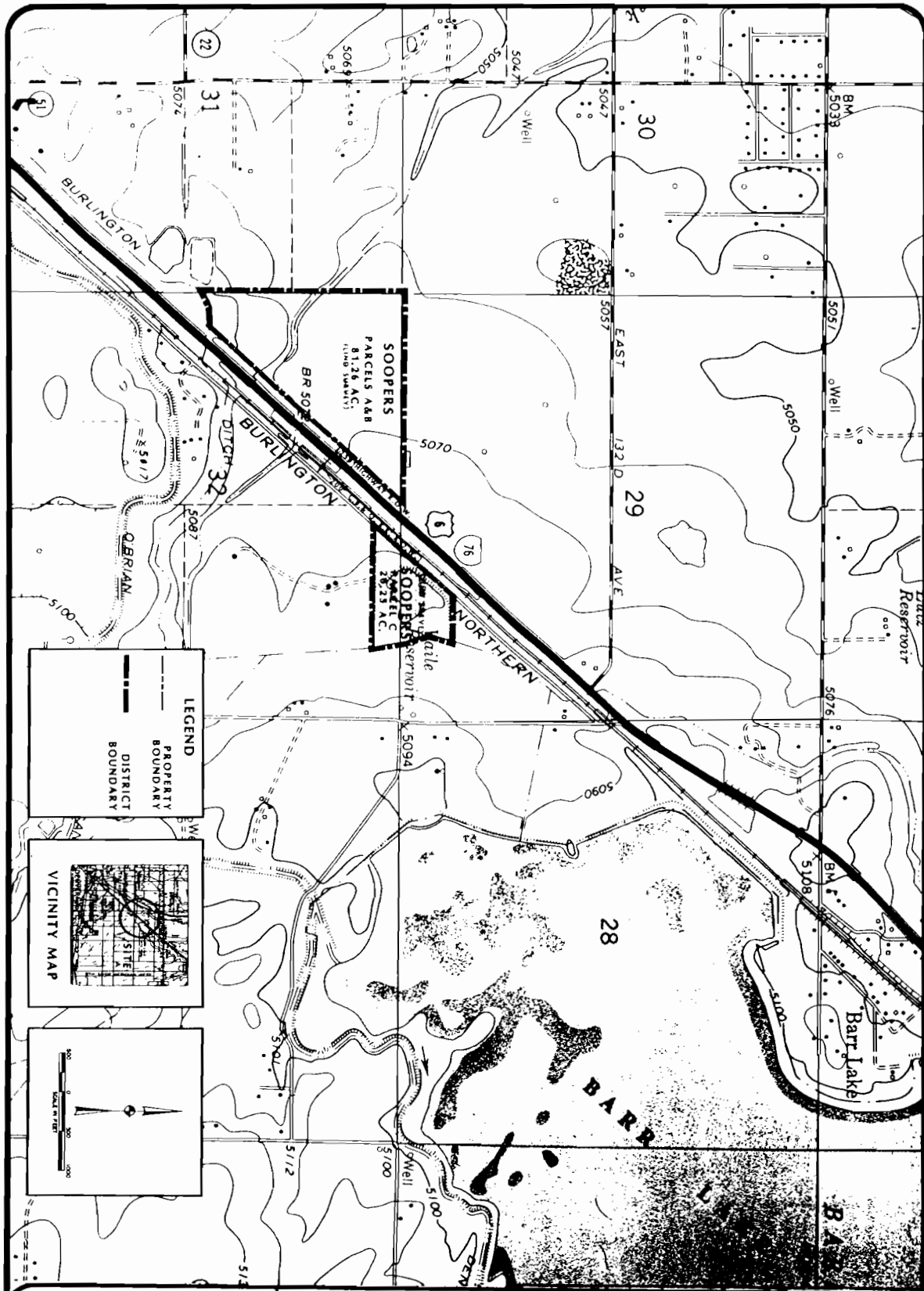
In addition to the land initially to be included within the proposed District boundaries, it is anticipated that parcels of land adjacent to the proposed District may desire to be served by and/or annexed to the proposed District. The District may provide service to all such lands, provided that all conditions of service are satisfied. The District will require, as a condition of inclusion, that water rights in the amount equivalent to the anticipated water needs be conveyed to the District. Further, sewer and water main extensions must be provided by the entity seeking inclusion or service. It is contemplated that no revision or modifications of this Service Plan, as originally approved, will be required to serve areas outside the initial District boundaries but located within the proposed service area.



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**THIRD CREEK METROPOLITAN DISTRICT**  
**PARCEL MAPS**

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**THIRD CREEK METROPOLITAN DISTRICT**

**PARCEL MAPS**

**consultants**

**The Civil Design Group, Inc.**  
Consulting Civil - Structural Engineers

LEGAL DESCRIPTION

THE THIRD CREEK METROPOLITAN DISTRICT IS COMPRISED OF THE FOLLOWING PARCELS AS HEREIN DESCRIBED.

**SUPERS PARCEL**

PARCEL A:

THAT PART OF THE NW 1/4 OF SECTION 32, TOWNSHIP 1 SOUTH, RANGE 66 WEST OF 6TH P.M., LYING NORTHWESTERLY OF U.S. HIGHWAY NO. 6, RIGHT OF WAY, DESCRIBED AS FOLLOWS:

BEGINNING AT THE NORTHWEST CORNER OF SAID SECTION 32; THENCE S89° 41'30" E ALONG THE NORTH LINE SAID SECTION 32, A DISTANCE OF 2580.3 FEET MORE OR LESS, TO A POINT ON THE NORTHWESTERLY RIGHT OF WAY LINE OF SAID U.S. HIGHWAY NO. 6, AS DESCRIBED IN DEED RECORDED IN BOOK 664 AT PAGE 58, ADAMS COUNTY RECORDS; THENCE SOUTHWESTERLY ALONG SAID NORTHWEST RIGHT OF WAY LINE BY THE FOLLOWING COURSES AND DISTANCES:

S41° 48' W, 1298.2 FEET; THENCE S43° 48' W, 1856.04 FEET MORE OR LESS, TO A POINT ON THE NORTH SIDE OF THE BURLINGTON DITCH MAINTENANCE ROAD; THENCE ALONG SAID NORTH SIDE BY THE FOLLOWING COURSES AND DISTANCES:

189° 04' W, 96.2 FEET; THENCE S80° 38' W, 66.95 FEET; THENCE S72° 50' W, 81.77 FEET; THENCE S62° 56' W, 208.8 FEET MORE OR LESS, TO A POINT ON THE WEST LINE OF SAID NW 1/4; THENCE NORTH ALONG SAID WEST LINE A DISTANCE OF 2446.0 FEET TO THE POINT OF BEGINNING.

PARCEL B:

THAT PART OF THE SE 1/4 OF SECTION 29 AND THE NE 1/4 OF SECTION 32, TOWNSHIP 1 SOUTH, RANGE 66 WEST OF THE 6TH P.M., DESCRIBED AS FOLLOWS:

BEGINNING AT THE NORTHWEST CORNER SAID SECTION 32; THENCE S89° 41'30" EAST ALONG THE NORTH LINE SAID SECTION 32, A DISTANCE OF 3183.83 FEET TO A POINT ON THE EASTERLY RIGHT OF WAY LINE OF THE C. B. & Q. RAILROAD, SAID POINT BEING THE TRUE POINT OF BEGINNING; THENCE N41° 54' EAST ALONG SAID EASTERLY RIGHT OF WAY LINE A DISTANCE OF 778.44 FEET TO A POINT 580 FEET NORTH OF AND MEASURED AT RIGHT ANGLES TO THE SOUTH LINE SAID SE 1/4 SECTION 29; THENCE S89° 41'30" E AND PARALLEL TO SAID SOUTH LINE A DISTANCE OF 606.9 FEET TO A POINT ON THE WEST SIDE OF BURLINGTON DITCH MAINTENANCE ROAD; THENCE ALONG SAID WEST SIDE BY THE FOLLOWING COURSES AND DISTANCES; S21° 58' W, 235.47 FEET; THENCE S18° 38'30" E, 309.9 FEET; THENCE S11° 52'30" E, 379.94 FEET TO A POINT 300.0 FEET SOUTH OF AN MEASURED AT RIGHT ANGLES TO THE NORTH LINE SAID SECTION 32; THENCE N89° 41'30" W AND PARALLEL TO SAID NORTH LINE A DISTANCE OF 1484.84 FEET MORE OR LESS TO A POINT ON THE EASTERLY RIGHT OF WAY LINE OF THE C.B.&Q. RAILROAD; THENCE N41 54' E ALONG SAID EASTERLY RIGHT OF WAY LINE, A DISTANCE OF 402.64 FEET TO THE TRUE POINT OF BEGINNING.

ALL THE ABOVE LOCATED IN THE COUNTY OF ADAMS, STATE OF COLORADO.

LEGAL DESCRIPTION

Continued

DAVIS PARCEL

THE SE 1/4 OF SECTION 19, THE E 1/2 NW 1/4 OF SECTION 20 AND THE SW 1/4 OF SECTION 20, TOWNSHIP 1 SOUTH, RANGE 66 WEST OF THE 6TH P.M. EXCEPT THAT PART OF SAID SW 1/4 OF SECTION 20 DESCRIBED AS FOLLOWS:

BEGINNING AT THE NORTHEAST CORNER OF SAID SW 1/4; THENCE SOUTH 25 FEET; THENCE NORTHWESTERLY TO A POINT ON THE NORTH LINE OF SAID SW 1/4, SAID POINT BEING 90 RODS (1485.0 FEET) WEST OF THE POINT OF BEGINNING, THENCE EAST ALONG NORTH LINE 90 RODS TO THE POINT OF BEGINNING.

COUNTY OF ADAMS, STATE OF COLORADO

IURST PARCEL

THE NW 1/4 OF SECTION 21, TOWNSHIP 1 SOUTH, RANGE 66 WEST OF THE 6TH P.M., EXCEPT THE NORTH 30.0 FEET THEREOF AND EXCEPT THAT PORTION CONVEYED IN DEEDS RECORDED DECEMBER 30, 1965 IN BOOK 1267 AT PAGES 150 AND 152;

THE NE 1/4 OF SECTION 21, TOWNSHIP 1 SOUTH, RANGE 66 WEST OF THE 6TH P.M., EXCEPT THAT PORTION CONVEYED IN DEED RECORDED JULY 18, 1952 IN BOOK 445 AT PAGE 514; AND THAT PART OF THE NW 1/4 OF SECTION 22, TOWNSHIP 1 SOUTH, RANGE 66 WEST OF THE 6TH P.M. LYING NORTH AND WEST OF THE C. B. & Q. RIGHT-OF-WAY.

NOTE: PROPERTY CONVEYED IN DEED RECORDED DECEMBER 30, 1965 IN BOOK 1267 AT PAGES 150 AND 152, IS DESCRIBED AS FOLLOWS:

THAT PART OF THE NW 1/4 OF SECTION 21, TOWNSHIP 1 SOUTH, RANGE 66 WEST OF THE 6TH P.M., DESCRIBED AS FOLLOWS:

BEGINNING AT THE WEST QUARTER CORNER OF SAID SECTION 21; THENCE NORTH ALONG THE WEST LINE OF NW 1/4 A DISTANCE OF 2648.0 FEET MORE OR LESS TO THE NORTHWEST CORNER OF SAID SECTION 21; THENCE N89°49'E ALONG THE NORTH LINE SAID NW 1/4 A DISTANCE OF 1920.6 FEET TO A POINT 20 FEET EAST OF THE EAST BANK OF THE BRIGHTON LATERAL DITCH; THENCE SOUTHERLY ALONG A LINE WHICH IS APPROXIMATELY 20.0 FEET EASTERLY OF THE EAST BANK OF THE BRIGHTON LATERAL DITCH BY THE FOLLOWING COURSES AND DISTANCES: S21°19'W, 441.5 FEET; THENCE S58°46'W, 257.0 FEET; THENCE S21°35'E, 211.0 FEET; THENCE S55°02'E, 263.14 FEET; THENCE S04°49'W, 179.3 FEET; THENCE S18°03'30"E, 229.7 FEET; THENCE S27°36'30"W, 187.0 FEET, THENCE S06°48'30"E 224.0 FEET; THENCE S26°13'W, 345.6 FEET; THENCE S00°20'E, 140.6 FEET; THENCE S12°08'W, 274.6 FEET; THENCE S23°35'30"E

LEGAL DESCRIPTION

Continued

HURST PARCEL Continued

276.4 FEET MORE OR LESS TO A POINT ON THE SOUTH LINE SAID NW 1/4; THENCE S89°49'30"W, 1731.0 FEET MORE OR LESS TO THE TRUE POINT OF BEGINNING, EXCEPT, THE NORTH 30.0 FEET THEREOF FOR COUNTY ROAD.

KUSTER PARCEL

PARCEL A:

THAT PART OF THE NW 1/4 OF SECTION 21, TOWNSHIP 1 SOUTH, RANGE 66 WEST OF THE 6TH P.M., DESCRIBED AS FOLLOWS:

BEGINNING AT THE WEST QUARTER CORNER OF SAID SECTION 21; THENCE NORTH ALONG THE WEST LINE SAID NW 1/4 A DISTANCE OF 2648.0 FEET MORE OR LESS TO THE NORTHWEST CORNER OF SAID SECTION 21; THENCE N89°49'E ALONG THE NORTH LINE SAID NW 1/4 A DISTANCE OF 1920.6 FEET TO A POINT 20 FEET EAST OF THE EAST BANK OF THE BRIGHTON LATERAL DITCH;

THENCE SOUTHERLY ALONG A LINE WHICH IS APPROXIMATELY 20.0 FEET EASTERLY OF THE EAST BANK OF THE BRIGHTON LATERAL DITCH BY THE FOLLOWING COURSES AND DISTANCES S21°19'W, 441.5 FEET; THENCE S58°46'W, 257.0 FEET; THENCE S21°35'E, 211.0 FEET; THENCE S55°02'E, 263.14 FEET; THENCE S04°49'W, 179.3 FEET; THENCE S18°03'30"E, 229.7 FEET; THENCE S27°36'30"W, 187.0 FEET; THENCE S06°48'30"E, 224.0 FEET; THENCE S26°13'W, 345.6 FEET; THENCE S00°20'E, 140.6 FEET; THENCE S12°08'W, 274.6 FEET THENCE S23°35'30"E, 276.4 FEET MORE OR LESS TO A POINT ON THE SOUTH LINE SAID NW 1/4; THENCE S89°49'30"W, 1731.0 FEET MORE OR LESS TO THE TRUE POINT OF BEGINNING, EXCEPT, THE NORTH 30.0 FEET THEREOF FOR COUNTY ROAD.

PARCEL B:

THAT PART OF THE NW 1/4 OF SECTION 21, TOWNSHIP 1 SOUTH, RANGE 66 WEST OF THE 6TH P.M. DESCRIBED AS FOLLOWS:

BEGINNING AT THE NORTHWEST CORNER OF SAID NW 1/4; THENCE N89°49'E, ALONG THE NORTH LINE OF SAID NW 1/4 A DISTANCE OF 1920.6 FEET TO A POINT 20 FEET EAST OF THE EAST BANK OF THE BRIGHTON LATERAL DITCH;

THENCE SOUTHERLY ALONG A LINE WHICH IS APPROXIMATELY 20.0 FEET EASTERLY OF THE EAST BANK OF THE BRIGHTON LATERAL DITCH BY THE FOLLOWING COURSES AND DISTANCE: S21°19'W, 333.55 FEET TO THE TRUE POINT OF BEGINNING; THENCE S00°12'W, 419.74 FEET; THENCE S03°29'E, 142.43 FEET TO A POINT; THENCE N55°02'W, 230.09 FEET; THENCE N21°35'W, 211.0 FEET; THENCE N58°46'E, 257.0 FEET; THENCE N21°19'E, 107.95 FEET TO THE TRUE POINT OF BEGINNING

LEGAL DESCRIPTION

Continued

KUSTER PARCEL Continued

PARCEL C:

THE SE 1/4 OF THE SE 1/4 OF SECTION 17, TOWNSHIP 1 SOUTH, RANGE 66 WEST OF THE 6TH P.M.

PARCEL D:

THE E 1/2 OF THE NE 1/4 OF SECTION 20, TOWNSHIP 1 SOUTH, RANGE 66 WEST OF THE 6TH P.M.

HEITSCHMIDT PARCEL

THE SOUTH 1/2 OF SECTION 16, TOWNSHIP 1 SOUTH, RANGE 66 WEST OF THE 6TH P.M., EXCEPT ANY PART LYING WITHIN EAST 144TH AVENUE, COUNTY OF ADAMS, STATE OF COLORADO.

FULLER PARCEL (BARR LAKE ASSOCIATES)

BLOCK 39, BARR CITY, EXCEPT THOSE PORTIONS OF SAID BLOCK DESCRIBED IN DEEDS RECORDED IN BOOK 225 AT PAGE 265 AND IN BOOK 445 AT PAGE 447, RESPECTIVELY; ALL OF BLOCKS 1, 2, 3, 6, 7, 8, AND BLOCKS 25 TO 38, BARR CITY; ALL ALLEYS IN BLOCKS 25, 34, 35, 36, 37, 38, AND 39, BARR CITY; AND THE FOLLOWING PORTIONS OF STREETS SHOWN ON THE PLAT OF SAID SUBDIVISION; ALL THAT PART OF PINE STREET LYING BETWEEN SOUTH LINE OF FOURTH STREET AND NORTH LINE OF FIRST STREET; THAT PART OF OLIVE STREET LYING BETWEEN SOUTH LINE OF FOURTH STREET AND NORTH LINE OF FIRST STREET; THAT PART OF LOCUST STREET LYING BETWEEN SOUTH LINE OF THIRD STREET AND NORTH LINE OF FIRST STREET; THE WEST 1/2 OF LOCUST STREET LYING BETWEEN THE NORTH LINE OF THIRD STREET AND THE SOUTH LINE OF FOURTH STREET THE PART OF VINE STREET LYING BETWEEN SOUTH LINE OF THIRD STREET AND NORTH LINE OF FIRST STREET; THAT PART OF WALNUT STREET LYING BETWEEN SOUTH LINE OF THIRD STREET AND NORTH LINE OF FIRST STREET; THAT PART OF ELM STREET LYING BETWEEN SOUTH LINE OF FOURTH STREET AND NORTH LINE OF FIRST STREET; THAT PART OF CHESTNUT STREET LYING BETWEEN SOUTH LINE OF FOURTH STREET AND NORTH LINE OF U.S. HIGHWAY #6; THAT PART OF THIRD STREET LYING BETWEEN EAST LINE OF BRIGHTON BOULEVARD AND THE WEST LINE OF LOCUST STREET AND BETWEEN A POINT 23 FEET EAST OF THE EAST LINE OF WALNUT STREET AND WEST LINE OF BURLINGTON BOULEVARD; THAT PART OF SECOND STREET LYING BETWEEN EAST LINE OF BRIGHTON BOULEVARD AND WEST LINE OF BURLINGTON STREET; THAT PART OF THE N 1/2 OF FIRST STREET LYING BETWEEN BRIGHTON BOULEVARD AND THE WEST LINE OF U.S. HIGHWAY #6; THAT

LEGAL DESCRIPTION

Continued

FULLER PARCEL (BARR LAKE ASSOCIATES) Continued

PORTION OF THE EAST 1/2 OF BRIGHTON BOULEVARD LYING ADJACENT TO BLOCKS 1, 32, 33, SECOND, THIRD STREETS, AND THE NORTH 1/2 OF FIRST STREET THAT PORTION OF THE SOUTH 1/2 OF THIRD STREET BETWEEN THE WEST LINE OF LOCUST STREET AND A POINT LYING 23 FEET EAST OF THE EAST LINE OF WALNUT STREET, AS SHOWN ON THE VACATION PLAT OF BARR CITY, EXCEPT THAT PART OF SAID BLOCK 6 AND OF WALNUT STREET ADJACENT TO SAID BLOCK DESCRIBED AS FOLLOWS:

BEGINNING AT THE NORTHWEST CORNER OF SAID BLOCK 6; THENCE EAST ALONG THE NORTH LINE OF SAID BLOCK 23.0 FEET; THENCE SOUTH, PARALLEL WITH THE WEST LINE OF SAID BLOCK 580.0 FEET TO THE SOUTH LINE OF SAID BLOCK; THENCE WEST ALONG SAID SOUTH LINE AND SAID SOUTH LINE EXTENDED 53.0 FEET TO THE CENTERLINE OF WALNUT STREET; THENCE NORTH ALONG SAID CENTERLINE 580.00 FEET; THENCE EAST 30.0 FEET TO THE POINT OF BEGINNING, COUNTY OF ADAMS, STATE OF COLORADO.

PARCEL B:

THAT PART OF THE EAST 1/2 SOUTHEAST 1/4 OF SECTION 20, TOWNSHIP 1 SOUTH, RANGE 66 WEST OF THE 6TH P.M., DESCRIBED AS FOLLOWS:

BEGINNING ON THE EAST LINE OF SAID SECTION AT A POINT 1884 FEET NORTH OF THE SOUTHEAST CORNER OF SAID SECTION, THENCE NORTH, ALONG THE EAST LINE OF SAID SECTION, 731 FEET MORE OR LESS, TO A POINT 25 FEET SOUTH OF THE NORTHEAST CORNER OF THE SOUTHEAST 1/4 OF SAID SECTION; THENCE N89° 14' W, 1006.8 FEET; THENCE S4° 22' E, 120.2 FEET; THENCE S47° 39' E, 245 FEET; THENCE S63° 12' E, 280 FEET; THENCE S42° 43' E, 120.80 FEET; THENCE S10° 15' W, 242 FEET; THENCE S89° 18' E, 527.62 FEET, MORE OR LESS TO THE POINT OF BEGINNING, COUNTY OF ADAMS, STATE OF COLORADO.

NORTHGLENN (LUTZ RESERVOIR) PARCEL

A PARCEL OF LAND LOCATED IN THE SE 1/4 OF SECTION 20, TOWNSHIP 1 SOUTH, RANGE 66 WEST OF THE 6TH P.M., COUNTY OF ADAMS, STATE OF COLORADO, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING 1,039 FEET NORTH OF THE SOUTHEAST CORNER OF SAID W 1/2 OF SE 1/4 OF SAID SECTION 20, THENCE NORTH ALONG THE EAST LINE OF SAID W 1/2 OF SE 1/4 TO LINE OF LAND DEEDED BY JOHN P. HEISLER TO MAGERS FOR RESERVOIR 721 FEET; THENCE WEST ALONG THE SOUTH LINE OF SAID PROPERTY 145 FEET TO THE SW CORNER; THENCE NORTH ALONG SAID PROPERTY 83 FEET, MORE OR LESS TO LAND DEEDED TO HIGGINS FOR RESERVOIR; THENCE S85° 35' W, ALONG THE SOUTH LINE OF HIGGINS LAND EXTENDED 865 FEET TO A POINT 310 FEET EAST OF THE WEST LINE; THENCE SOUTH PARALLEL WITH THE WEST LINE OF SAID QUARTER SECTION 568 FEET; THENCE S20° 00' E 325 FEET TO A POINT 454 FEET EAST OF THE WEST LINE OF SAID 1/4 SECTION; THENCE EAST 645 FEET MORE OR LESS TO A POINT WHICH IS 221 FEET WEST OF THE EAST LINE OF THE W 1/2 OF SAID 1/4 SECTION; THENCE NORTHEAST TO THE POINT OF BEGINNING. COUNTY OF ADAMS, STATE OF COLORADO.



LEGAL DESCRIPTION

Continued

PALOMBO PARCEL

THE S 1/2 OF THE SE 1/4 SE 1/4 AND THAT PART OF THE W 1/2 OF THE SE 1/4 OF SECTION 20, TOWNSHIP 1 SOUTH, RANGE 66 WEST OF THE 6TH P.M., DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT 1039 FEET NORTH OF THE SOUTHEAST CORNER OF THE W 1/2 SE 1/4 OF SAID SECTION 20; THENCE SOUTH 1039 FEET; THENCE WEST 1320 FEET TO THE WEST LINE OF SAID 1/4 SECTION (THE SOUTH 1/4 CORNER OF SAID SECTION 20); THENCE NORTH 2182 FEET; THENCE S56°30'E, 651 FEET TO A POINT WHICH IS 838 FEET SOUTH OF THE NORTH LINE OF SAID 1/4 SECTION (SE 1/4 OF SECTION 20); THENCE WEST 227 FEET TO A POINT 310 FEET EAST OF THE WEST LINE OF SAID 1/4 SECTION; THENCE SOUTH 568 FEET; THENCE S20°00'E, 325 FEET; THENCE EAST 645 FEET TO A POINT 221 FEET WEST OF THE EAST LINE OF THE W 1/2 OF SAID 1/4 SECTION; THENCE NORTHEAST TO THE PLACE OF BEGINNING; EXCEPTING THAT PART DESCRIBED IN BOOK 59 AT PAGE 564 AND IN BOOK 365 AT PAGE 276, AND EXCEPT THE RIGHT OF WAY DESCRIBED IN BOOK 557 AT PAGE 241, AND ANY OTHER RIGHTS OF WAY FOR DITCHES AND RESERVOIRS, IF ANY --

EXCEPT A:

THAT PORTION OF THE SW 1/4 SE 1/4 OF SECTION 20, TOWNSHIP 1 SOUTH, RANGE 66 WEST OF THE 6TH P.M., WHICH BEGINS AT THE SOUTHWEST CORNER OF SAID SW 1/4 SE 1/4 (THE SOUTH 1/4 CORNER OF SAID SECTION 20); THENCE EAST ALONG THE SOUTH LINE OF SAID SE 1/4 A DISTANCE OF 488 FEET; THENCE N27°04'W 361 FEET; THENCE WEST AND PARALLEL WITH THE SOUTH LINE OF SAID SE 1/4 A DISTANCE OF 328.3 FEET, MORE OR LESS, TO A POINT ON THE WEST LINE OF SAID SE 1/4 OF SECTION 20; THENCE SOUTH ALONG SAID WEST LINE OF THE SE 1/4 A DISTANCE OF 321.4 FEET TO THE POINT OF BEGINNING, EXCEPTING THEREFROM THE SOUTH 30 FEET THEREOF IN USE AS EAST 136TH AVENUE, A PUBLIC WAY.

EXCEPT B:

THE S 1/2 OF THE SE 1/4 OF THE SE 1/4 OF SECTION 20, TOWNSHIP 1 SOUTH, RANGE 66 WEST OF THE 6TH P.M. EXCEPTING THEREFROM THE WEST 299 FEET THEREOF, AND FURTHER EXCEPTING THE SOUTH 30 FEET THEREOF, IN USE AS EAST 136TH AVENUE, A PUBLIC WAY.

LEGAL DESCRIPTION

Continued

POLOMBO PARCEL Continued

EXCEPT C:

THAT PART OF THE SE 1/4 OF SECTION 20, TOWNSHIP 1 SOUTH, RANGE 66 WEST OF THE 6TH P.M., ADAMS COUNTY COLORADO, DESCRIBED AS:

BEGINNING AT THE SOUTHWEST CORNER SAID SE 1/4: THENCE N90°00'00"E ON AN ASSUMED BEARING ALONG THE SOUTH LINE SAID SE 1/4 A DISTANCE OF 513.30 FEET TO THE TRUE POINT OF BEGINNING: THENCE N27°04'00"W A DISTANCE OF 361.00 FEET TO A POINT; THENCE N90°00'00"E PARALLEL WITH THE SOUTH LINE SAID SE 1/4 A DISTANCE OF 522.82 FEET; THENCE S00°00'00"W A DISTANCE OF 321.46 FEET TO A POINT ON THE SOUTH LINE SAID SE 1/4, THENCE S90°00'00"W ALONG SAID SOUTH LINE A DISTANCE 358.56 FEET TO THE TRUE POINT OF BEGINNING, EXCEPT THE SOUTH 30.0 FEET THEREOF IS SUBJECT TO RIGHT-OF-WAY FOR EAST 136TH AVENUE.

EXCEPT D:

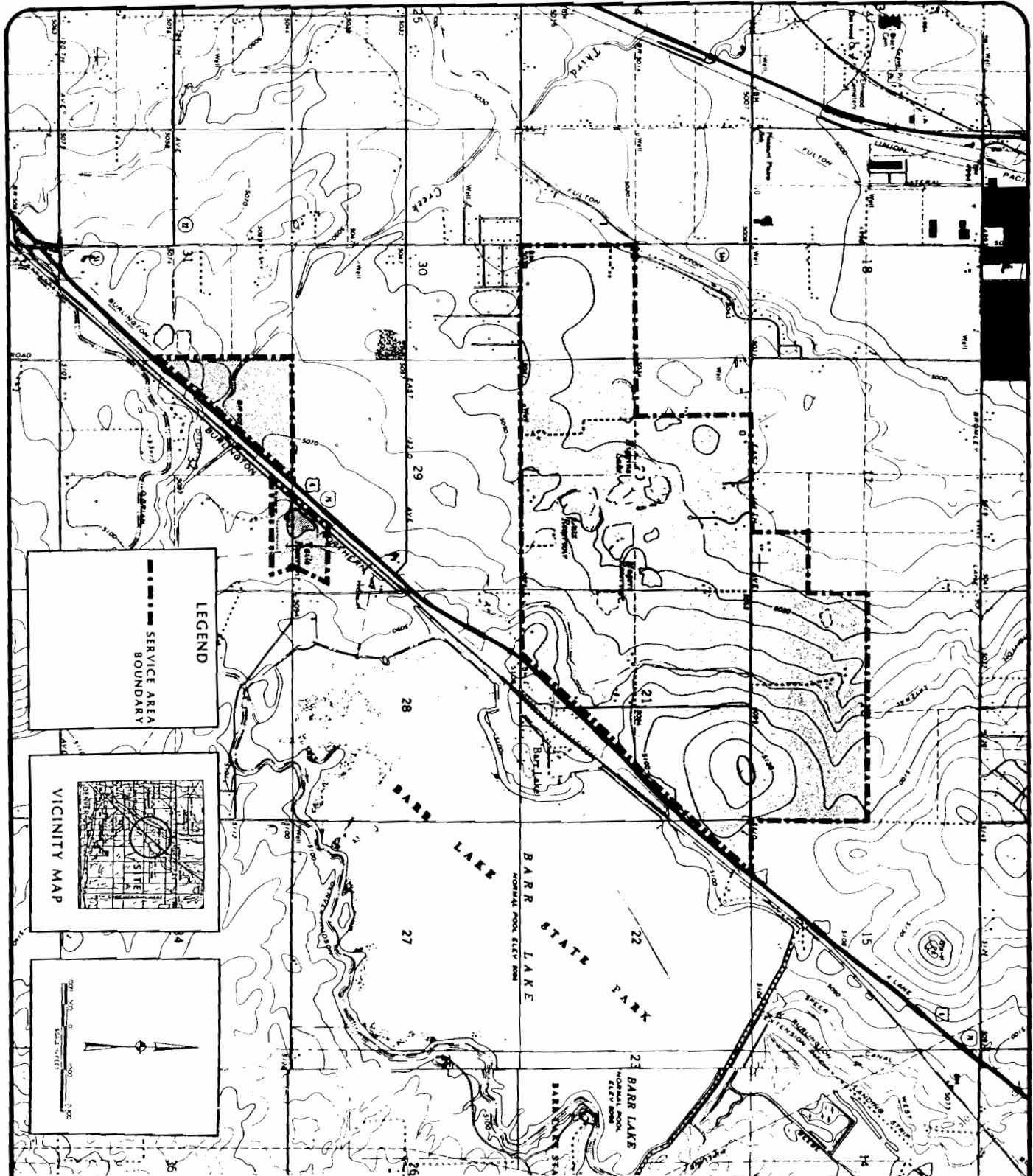
THAT PART OF THE SE 1/4 OF SECTION 20, TOWNSHIP 1 SOUTH, RANGE 66 WEST OF THE 6TH P.M., DESCRIBED AS:

BEGINNING AT THE SOUTHWEST CORNER SAID SE 1/4; THENCE N90°00'00" EAST ON AN ASSUMED BEARING ALONG THE SOUTH LINE SAID SE 1/4 A DISTANCE OF 513.30 FEET; THENCE N27°04'00"W, A DISTANCE OF 363.81 FEET TO A POINT; THENCE S90°00'00"W, PARALLEL WITH THE SOUTH LINE SAID SE 1/4 A DISTANCE OF 349.66 FEET TO A POINT ON THE WEST LINE SAID SE 1/4; THENCE S00°20'10"E, ALONG SAID WEST LINE A DISTANCE OF 323.97 FEET TO THE POINT OF BEGINNING, EXCEPT THE SOUTH 30.0 FEET THEREOF FOR EAST 136TH AVENUE.

TOGETHER WITH ANY AND ALL INTEREST OF GRANTOR IN THE SE 1/4 OF SECTION 20, TOWNSHIP 1 SOUTH, RANGE 66 WEST OF THE 6TH P.M.

MAP

SERVICE AREA BOUNDARY



**LEGEND**

--- SERVICE AREA BOUNDARY

**VICINITY MAP**

Scale: 1" = 200'

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**THIRD CREEK METROPOLITAN DISTRICT**

**DISTRICT SERVICE BOUNDARY**

consultants

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Consulting Civil & Structural Engineers



CHAPTER III

METROPOLITAN DISTRICT  
DEFINITION AND DUTIES

CHAPTER III

METROPOLITAN DISTRICT  
DEFINITION AND DUTIES

"Metropolitan District" means a special district which provides for the inhabitants thereof any two or more of the following services:

- a. Mosquito Control
- b. Parks and Recreation
- c. Safety Protection
- d. Sanitation
- e. Street Improvement
- f. Television Relay and Transmission
- g. Transportation
- h. Water

METROPOLITAN DISTRICT POWERS AND DUTIES

METROPOLITAN DISTRICT DEFINITION  
(as may be amended from time to time)

32.1-1004. Metropolitan districts - Additional Powers and Duties.

- (1) In addition to the powers specified in Section 32-1-1001, the board of any metropolitan district has the following powers for and on behalf of such district:
  - (a) To enter into contracts with public utilities, cooperative electric associations, and municipalities for the purpose of furnishing street lighting service;
  - (b) To erect and maintain, in providing safety protection services, traffic and safety controls and devices on streets and highways and at railroad crossings and to enter into agreements with the county or counties in which a metropolitan district is situated or with adjoining counties, the state department of highways, or railroad companies for the erection of such safety controls and devices and for the construction of underpasses or overpasses at railroad crossings.
  
- (2) A metropolitan district shall provide two or more of the following services:
  - (a) Fire protection as specified in Section 32-1-103(7);
  - (b) Elimination and control of mosquitoes;
  - (c) Parks or recreational facilities or programs as specified in Section 32-1-103(14);
  - (d) Safety protection through traffic and safety controls and devices on streets and highways and at railroad crossings.
  - (e) Sanitation services as specified in Section 32-1-103(18);



- (f) Street improvements through the construction and installation of curbs, gutters, culverts, and other drainage facilities and sidewalks, bridges, parking facilities, paving, lighting, grading, landscaping, and other street improvements;
  - (g) Establishment and maintenance of television relay and translator facilities;
  - (h) Transportation as specified in subsection (5) of this section;
  - (i) Water and sanitation services as specified in Section 32-1-103(18), (24), (25);
  - (j) Water as specified in Section 32-1-103(25).
- (3) Any metropolitan district providing services specified in paragraph (a), (c), (i), or (j) of subsection (2) of this section shall have all the duties, powers, and authority granted to a fire protection, park and recreation, sanitation, water and sanitation, or water district by this article, except as provided in subsection (4) of this section.
- (4) A metropolitan district may have and exercise the power of eminent domain and dominant eminent domain and, in the manner provided by Article 2 of Title 38, CRS, may take any property necessary to the exercise of the powers granted, both within and without the special district, only for the purposes of fire protection, sanitation, street improvements, television relay and translator facilities, water, or water and sanitation except for the acquisition of water rights, and, within the boundaries of the district, if the district is providing park and recreation services, only for the purpose of easements and rights-of-way for access to park and recreational facilities operated by the special district and anywhere no other access to such facilities exists or can be acquired by other means.
- (5) The board of a metropolitan district has the power to establish, maintain, operate a system to transport the public by bus, rail, or any other means of conveyance, or any combination thereof, and may contract pursuant to the provisions of Part 2 of Article 1 of Title 19, CRS. The board of a metropolitan district may not

establish, maintain, or operate such a system of transportation in a county, city, or city and county or any other political subdivision of the state empowered to provide a system of transportation except pursuant to a contract entered into pursuant to the provisions of Part 2 of Article 1 of Title 29, CRS. The board of a metropolitan district not originally organized as having the power granted in this subsection (5) may exercise such power upon compliance with the provisions of Part 2 of this article. Notwithstanding any other provision of this subsection (5), the board of a metropolitan district shall not exercise the power under this subsection (5) until approved by the district court in compliance with the provisions of Part 2 of this article and unless authorized, at a regular or special election held subject to the provisions of Part 8 of this article, by a majority of the electors of the district voting on the question of whether the board should exercise such power. The board of a metropolitan district which exercises the power granted in this subsection (5) shall provide such transportation services only in the county or counties within which the boundaries of said metropolitan district lie.

- (6) Notwithstanding anything in this article or any other law to the contrary:
- (a) A metropolitan district may be formed within any part of the area within the regional transportation district, as described in Section 32-9-106, for the single service of financing a system to transport the public by bus, guideway or any other means of conveyance, or any combination thereof.
  - (b) A district created pursuant to paragraph (a) of this subsection (6) may be formed wholly or partly within an existing special district which provides or is authorized to provide the service of mass transportation if the improvements or facilities to be financed by such a district do not duplicate or interfere with any other improvements or facilities already constructed or planned to be constructed within the limits of the existing special district.
  - (c) The intergovernmental contract by subsection (5) of this section shall not be required for such a district except where the county, city or city and

county or any other political subdivision of the state within which a system of transportation is to be financed is actually operating a system of transportation.

- (d) Except as specifically modified by this subsection (6), all other provisions of this article shall apply to such a district.

CHAPTER IV

LAND USE

## CHAPTER IV

### LAND USE

#### POPULATION AND LAND USE

At the present time there are few residents within the boundaries of the proposed District. Adams County and the City of Brighton anticipate development of this area to be primarily residential. The land use proposed by these two agencies equates to approximately 6 residential units per gross acre. However, the development of E-470 in this area could significantly influence a change to higher densities.

Based on land use influences of the City of Brighton, the County, a major drainage way, the South Platte River, Bar Lake and two major highways, the following land uses are being considered:

Single Family 4-6 dwelling units per acre	750 acres	3,750 units
Multi-Family 8-12 dwelling units per acre	250 acres	2,500 units
Retail/Commercial .35 floor area ratio	180 acres	2,500,000 square feet
Light Industrial/ Research and Development .50 floor area ratio	100 acres	2,000,000 square feet
Open Space/Greenbelts/ Park and School Sites	120 acres <sup>1/</sup>	600 units
Right-of-Way	<u>100</u> acres <sup>1/</sup>	<u>500</u> units
TOTAL RESIDENTIAL:	1,500+ acres	7,350 units
TOTAL COMMERCIAL:		4,500,000 square feet

<sup>1/</sup>Density transfer of 5 dwelling units per acre

Approximately 120 acres will be developed as a part of the open space and greenbelt/park system.

Full development of the property will not require the extension of any major arterial roadways into the property. The major roadways servicing the area are Interstate 76 in addition to State Highways 6 and 85.

The area of the proposed District lies within the Third Creek subdrainage basin which is tributary to the South Platte River. Chapter II contains a vicinity map with the

items of importance being illustrated, such as: Brighton City limits, South Adams Water and Sanitation District boundaries, major roads and highways, Barr Lake and the South Platte River.

CHAPTER V

WATER



## CHAPTER V

### WATER

#### WATER SUPPLY SOURCES

The water supply for the District will be obtained from existing shallow wells and the drilling of new on-site deep wells. The location of the proposed wells is shown on the ground water report map of the District, attached as an exhibit. In addition, the District may, by contract or purchase, acquire water from off-site sources.

Ground water is present beneath the proposed District in the shallow tributary alluvium plus the non-tributary formations of the Arapahoe (100 to 600') and the Laramie Fox Hills (1,000 to 1,300'). It is proposed that non-tributary wells be drilled into the Arapahoe and Laramie Fox Hills formation sandstones. The non-tributary water has been adjudicated by the Water Court in Greeley by Case 84-CW-105 and 107.

Total appropriation from these wells, 526 acre feet of water per year, is 1% of the total non-tributary water available in the formations. These wells would not interfere with existing wells, as the appropriation has been computed pursuant to the rules and regulations established pursuant to CRS 1973 37-90-237(4) (SB-213).

The principal water supply would be from existing shallow wells which could provide up to 4,000 gallons per minute pumping capacity. Several new tributary well permits have

been applied for by the property owners. An augmentation plan has been filed to authorize the use of this tributary water supply as the primary water resource while the non-tributary ground water would be available for make-up water for the shallow water (stream) depletions. A plan for augmentation would allow for a total water supply of over 4,000 acre feet annually between the tributary and non-tributary water sources.

Water from these wells will satisfy the required water supply for total development of the proposed district and service area.

To meet peak water demand periods the tributary wells pumped simultaneously should produce up to 4,000 gallons of water per minute. In addition, it is anticipated that wells drilled into the Arapahoe and Laramie Fox Hills formations will pump 75 to 100 gallons per minute, respectively. The District's ground water geologist, Wm. Curtis Wells, has caused to be performed, water tests on shallow wells in the area. It has been determined that the water quality from these wells would be acceptable for domestic consumption with only chlorination being necessary as a State Health Department requirement. A treated water storage facility will be constructed to meet peak demand periods. The District will require installation of meters to each residence or building in order to monitor municipal type usages and allow flexibility for future water management.

## WATER NEEDS

As previously stated, the suggested land uses anticipate that the development within the District will be a combination of residential, office, retail and light industrial/research and development uses. The total irrigation water needs will be minimized through water management programs. Creative landscaping, utilizing native plant materials and drought resistant species may be encouraged by the developers and could further reduce the amount of water needed for irrigation purposes.

Fire protection capabilities will be achieved through water storage. The fire protection capabilities will affect storage requirements only and will not create any additional demand for treated water supplies.

The following are the estimated water requirements for the land uses anticipated by the developer:

1. Residential:
  - .50 acre feet per year for single family
  - .40 acre feet per year for multi-family
2. Office:
  - .12 gallons per day per square foot of improvements
3. Retail:
  - .08 gallons per day per square foot of improvements
4. Light Industrial/Research and Development:
  - .06 gallons per day per square foot of improvements

These water requirements are based on an analysis of historical water use for comparable developments in the Denver metropolitan area.

Utilizing the foregoing criteria, the following water demand is determined: (These are hypothetical land uses only)

Office/Retail Park:

180 acres @ .35 to 1.0 floor area ratio  
= 2,500,000 square feet

.10 gallons per day per square foot = 280 acre feet  
annually

Light Industrial/Research and Development

100 acres @ .50 to 1.0 floor area ratio  
= 2,000,000 square feet

.06 gallons per day per square foot = 134 acre feet  
annually

Residential:

750 acres @ 5 units per acre = 3,750 units

3,750 single family detached  
units @ .50 acre feet of water  
per year per living unit or 1,875 acre feet  
annually

250 acres @ 10 units per acre = 2,500 units

2,500 single family attached  
units @ .40 acre feet of water  
per year per living unit or 1,000 acre feet  
annually

220 acres @ 5 units per acre = 1,100 units  
 Density transfer:  
 .50 acre feet of water per  
 year per living unit or 550 acre feet  
 annually

The following table illustrates the water required in  
 acre feet per year: (all numbers rounded up)

Office/Retail	280 acre feet
Light Industrial/Research and Development	135 acre feet
Residential	<u>3,425</u> acre feet
TOTAL	3,840 acre feet

There should be no modification to the presented criteria as no known factors would have a significant effect on the summary data which could increase the amount of water required. Since the land use allocated for this project is consistent with historical demands and general market influences, a disproportionate increase in any category is not likely.

Based on the above analysis, it is anticipated that a maximum of 4,000 acre feet of water per year will satisfy the total anticipated development potential of the property. Development will span a period of twenty years in order to assure controlled use of resources.

The anticipated appropriation of water, ultimately available to the District, will be sufficient to satisfy the

needed water supply for the District. The proposed facilities are shown in Exhibits "C" and "D" and summarized in Chapters 5, 6, 7 and 8.

CHAPTER VI  
WATER SYSTEM COSTS

## CHAPTER VI

### WATER SYSTEM COSTS

The central water system to be designed and constructed to serve the proposed District will consist of central storage facilities, major distribution facilities, and any necessary treatment facilities and appurtenances.

The water system cost estimates have been developed for the capital costs required by the anticipated growth within the District. Estimated costs are based on 1985 dollars as follows:

Supply (including wells, booster station, etc.)	\$ 705,000
Storage	800,000
Distribution <sup>1/</sup>	<u>1,745,000</u>
Subtotal	3,250,000
Engineering and Contingency	<u>650,000</u>
TOTAL	\$ 3,900,000

<sup>1/</sup>Does not include developer's infrastructure.

These estimates are based on building out all of the District facilities simultaneously. However, the facilities development will occur by phases based on actual market demand and the subsequent need for services.



CHAPTER VII

WASTEWATER

## CHAPTER VII

### WASTEWATER

As stated in Chapter I, the wastewater treatment and disposal responsibilities will be provided in conjunction with the City of Brighton.

It is important to note that District organizers have initiated and are cooperating in the Clean Water Plan Study that will result in processing a Clean Water Plan Amendment for First, Second and Third Creeks (see exhibit). Participating in this Clean Water Plan Study are the following entities:

- Adams, County of
- Aurora, City of
- Barr Lake Village Metropolitan District
- Brighton, City of
- Central Adams County
- Denver Metropolitan Sewer District No. 1
- Denver Regional Council of Governments
- First Creek Metropolitan District
- South Adams Water and Sanitation District (proposed)
- Thornton, City of

The study will be completed in a year with the Clean Water Plan Amendment requiring an additional year for approval. The Clean Water Plan will establish recommendations for providing wastewater treatment for this central area of Adams County known as the First, Second and Third Creeks Drainage Basins. Once the study is completed and approved,

it is estimated it would take another two years to design and construct (implement) the first phase of the study's recommendations. However, it appears Third Creek Metropolitan District will be located wholly within the City of Brighton service area (or annexed to the City of Brighton).

Note: One hundred acres, (the property located south of 136th Avenue) is located in an area which appears in both the proposed Brighton service area and the proposed South Adams Water and Sanitation District service area. Whatever governmental entity ultimately receives the authority to service this area, the Third Creek Metropolitan District will fully cooperate with that entity.

CHAPTER VIII  
WASTEWATER SYSTEM COSTS

## CHAPTER VIII

### WASTEWATER SYSTEM COSTS

#### SEWAGE FACILITIES

The central sewage system to be designed and constructed to serve the proposed District will consist of mains, collection lines, pumping stations (pumping of raw sewage will be required), force mains, and all appurtenances that may be required. The proposed facilities are shown in the exhibit and summarized in this Chapter.

The City of Brighton will provide the sewage treatment facilities. Sewage effluent would be treated appropriately in accordance with policies, rules and regulations established by the Water Quality Control Commission of the State of Colorado and the Tri-County Health Department.

The District will provide only the major support-type facilities and individual developers will be required to construct all necessary internal collector lines required to tie into the major outfall system. As contemplated, the major sewer outfall lines will flow by gravity.

Based on the proposed land uses as suggested by the City and County in addition to the flow estimates provided by the District's engineers, Civil Design Group, gravity sewer trunk lines have been designed to be 10 to 18 inches in diameter. The sewer system is designed to accommodate

the ultimate growth within the proposed District. Where applicable, the system is sized for possible future service to additional areas outside the District boundaries.

AVERAGE DAILY FLOW

(in gallons)

<u>RESIDENTIAL</u>	<u>OFFICE/ RETAIL</u>	<u>TOTAL</u>	<u>POPULATION EQUIVALENT</u>
1,962,000	238,000	2,200,000	22,000

The system will be designed in accordance with the City of Brighton Rules and Regulations (engineering standards) relative to peak factors and per capita flows, minimum pipe sizes, slopes, design criteria, etc.

SYSTEM COST SUMMARY

Wastewater Collection	\$ 419,000
Lift Stations	200,000
Trunk Line	<u>805,000</u>
Subtotal	1,505,000
Engineering and Contingency	395,000
TOTAL	\$1,900,000
	=====

CHAPTER IX  
OTHER SERVICES

CHAPTER IX

OTHER SERVICES

SERVICES TO BE PROVIDED

The proposed District anticipates providing the services:

Parks and Recreation  
Sanitation  
Street Improvements  
Water

Note: A sanitation district (or metropolitan district which includes sanitation services) may also elect to provide for both sanitary and storm sewers. This will include:

Flood and Surface Drainage  
Storm Sewers  
All equipment and appurtenances incident thereto

32-1-103(18) "Sanitation district means a special district which provides for storm or sanitary sewers, or both, flood and surface drainage, treatment and disposal works and facilities, and all necessary or proper equipment and appurtenances incident thereto."

An election has been made by the principals to include the flood and surface drainage facilities and equipment in this Service Plan.



#### PARKS AND RECREATION

The proposed District may include some 120 acres to be designated as parks, open space, and possible joint use areas. A linear park is planned to interconnect the various areas of the project. A bird sanctuary (wildlife habitat) is located generally in the center of the land area. The land finally to be so designated must be determined by a land use plan (preliminary development plan). The cost to develop this land will be significant, and as such, has been included in this Service Plan.

#### SANITATION

Providing sewer services to this area will ultimately require the construction of a major sewer interceptor from Third Creek to the new Brighton wastewater treatment facility. This project alone, without the cost of the sewer infrastructure, would warrant inclusion within this Service Plan. It is important to note this facility will serve an area much larger than the proposed District including the City of Brighton.

#### STREET IMPROVEMENTS

The necessity to build several county roads (or half roads) generates significant financial impact upon the principals. In addition to the construction of the internal collector streets, curbs, gutters and sidewalks, the developers must build either all or a part of 136th Avenue, 144th Avenue, and Buckley Road. These roadways are considered to

be arterials by both the County and the City of Brighton. The costs for these street improvements would be excessive except for the ability to bond these improvements.

#### WATER

Major investments have been made in water rights to service this area. With Brighton unable to provide water services to this area today, the principals invested heavily to acquire the necessary water resources. The potable water system being developed includes:

- Water Resources
- Wells (deep and shallow)
- Pumps and Motors
- Storage
- Treatment
- Boosting
- Transmission Lines

#### DRAINAGE

The drainage improvements for the District will provide for the control and release of additional storm runoff generated by the proposed development. The major storm runoff is controlled by utilizing open channels, pipes, and regional detention ponds. These improvements will be designed to provide protection from the 100 year storm.

CHAPTER X  
OTHER SERVICES COSTS

CHAPTER X

OTHER SERVICES COSTS

The capital costs for streets, drainage, and parks are summarized as follows:

Streets:

Parkway	\$ 1,401,250
Arterial	2,512,500
Collector	<u>2,454,000</u>
	6,367,750
Contingency	<u>1,032,350</u>
TOTAL	\$ 7,400,000

Drainage:

Open Channel	\$ 1,080,000
Drainage Pipe	540,000
Detention Ponds	205,000
Overflow Structures	<u>75,000</u>
	1,900,000
Contingency	<u>500,000</u>
TOTAL	\$ 2,400,000

Parks:

Regional Park	\$ 4,000,000
Contingency	<u>800,000</u>
TOTAL	\$ 4,800,000

CHAPTER XI

FINANCING

CHAPTER XI

FINANCING

BONDS

The District will have organization planning, engineering, and legal expenses. These are estimated to be:

Administrative	\$ 60,000
Legal	30,000
Engineering	30,000
Planning	20,000
Water Analysis	<u>10,000</u>
TOTAL	\$150,000

Land and easements for the water and sewer treatment facilities, wells and mains will be acquired from the developer at no cost to the District. Additionally, easements for all interior lines will be granted to the District at no cost to the District.

When formed, the District will issue bonds to finance the construction of the water and sewer systems. Revenue to pay off the bonds is to be developed from mill levies plus water and sewer tap fees. The mill levy is anticipated to be 10 mils as shown in the attached exhibits.

The water tap fee is proposed to be set at \$4,000 per tap equivalent and the sewer tap fee at \$2,000 per tap

equivalent. When the District is "built-out," there is projected to be a total of 7,750 single family tap equivalents (TE's) divided as follows:

Residential:	6,850 tap equivalents
Retail/Office Park:	<u>900</u> tap equivalents
TOTAL	7,750 tap equivalents

From time to time, tap fees may be increased to compensate for current market conditions and/or inflationary factors. The anticipated tap fees are indicated in the Financial Projections included in the exhibits.

To develop the system to serve the 7,750 tap equivalents would require a total capital outlay of \$42,000,000. The tap fees would be designated for debt service retirement. In addition, a mill levy of 10 mills would be assessed to provide equilibrium to the variances a District may experience in tap fee revenues from year to year.

#### ASSESSED VALUATION

The approximate present assessed valuation of the property located within the District is \$118,160. Development within the District as suggested by the various land uses will provide the following assessed valuation per square foot:

Residential	\$10.00 per square foot
Business Park	\$11.00 per square foot
Retail/Office	\$14.00 per square foot

The overall assessed values are based on the latest legislation passed in Colorado. The total assessed valuation at build-out is anticipated to be \$148,800,000. This total, divided by the type of development, is as follows:

Residential	\$87,000,000
Business Park	\$24,000,000
Retail/Office	\$37,800,000

A mill levy of 10 mills is anticipated to assist in retirement of the District's debt.

#### FACILITY DEVELOPMENT

The total water and sewer systems are to be developed in phases in order to maintain the greatest flexibility for the District in administering their fiscal responsibilities. The financial requirements and debt service projections anticipate the District developing 100% of the physical facilities over the next twenty years. Should development not occur as anticipated, the facility expansion plans would simply be postponed.

#### FINANCIAL REQUIREMENTS

The District anticipates borrowing \$2,000,000 through the issuance of General Obligation Bonds in 1985. The proposed maximum interest rate for all bond issues will not exceed 18% per annum. The cost of issuance and two year's capitalized interest on the initial bond sales is included



in the Projected Bond Sales presented in Exhibit "E" attached to this Service Plan. The maximum bond discount is anticipated to be 6%.

#### OPERATION AND MAINTENANCE COSTS

The estimated operation and maintenance costs at build-out based on 1985 costs are as follows:

Wastewater Treatment Plant Operation and Maintenance	\$	None
Water System <sup>1/</sup>		700,000
Storm Drainage		50,000
Parks Maintenance		150,000
District Administration		400,000
Utilities Replacement Fund		<u>300,000</u>
TOTAL		\$1,600,000

<sup>1/</sup>Based on comparable facilities in the Denver metropolitan area.

Water service charges will be set as required to provide sufficient revenue for operating expenses, including but not limited to, all administrative, operational, and maintenance expenses, engineering, accounting and legal fees. For example, if the District is delivering 4,000 acre feet of water annually when fully developed, this would equate to 1,300,000 one thousand gallon units, (325 one thousand gallon units in each acre foot). An average of

\$1.00 per one thousand gallons of water delivered would generate \$1,300,000 in water user fees. Additionally, utilities user charges of \$1.00 per month per user will generate \$93,000 annually to recover storm drainage system maintenance costs. The park system will be maintained by the City of Brighton.

CHAPTER XII  
MANAGEMENT

## CHAPTER XII

### MANAGEMENT

The organizers of this proposed District understand and are committed to the development of a quality utility system. Further, as professional business persons, they are committed to the professional operation and management of this District. Therefore, policies and procedures will be established as detailed in this Chapter.

The District Board of Directors will employ a professional management team to assure the effective and efficient operation of this District. The team will include a manager, engineer and an attorney knowledgeable in District operations and law. The Board will adopt rules and regulations which will assure the proper operation of the system. District policies will be established to set guidelines for consumer relationships which will be supported by proper communication with the District's customers. The Board will meet on a regular basis to monitor the operation and management of the District.

The Directors will adopt engineering standards which will utilize the American Water Works Association engineering guidelines or the City of Brighton's Standards, whichever is more stringent. These engineering standards will not only apply to the construction of the District facilities performed under the direction of the Board, but will apply to all developers and contractors building and working within the District service area.

The District staff shall see that an electronic monitoring system is provided for all of the critical elements of the system; water wells, treated water storage facility and lift stations (if required). A special maintenance crew will be on standby 24 hours a day, seven days a week, and shall have available to them an emergency number for non-business hours. It is the commitment of the organizers to provide water and sewer service to their users on a dependable and cost effective basis.

The District water and sewer rates will be determined by operation and maintenance costs. The financial structure of the District sets forth the following income/expense allocation:

Water/Sewer User Fees	Operation/Maintenance
Water/Sewer Tap Fees	Debt Service
Mill Levy (advalorem taxes)	Debt Service

The District's fees and charges will be reviewed annually by the Directors to assure the District remains in a strong and financially viable condition.

The system development will be phased to meet developers requirements for services while keeping the District economically sound.

The principals are currently negotiating with the City of Brighton regarding the following issues:

- Annexation
- Water Service
- Sewer Service
- Water Acquisition

It is anticipated an agreement will be reached between the parties in the next few months.

EXHIBITS

EXHIBIT  
FINANCIAL REPORT



THIRD CREEK RANCH METROPOLITAN DISTRICT

FINANCIAL CONSIDERATIONS

GENERAL

After consultation with the engineers, and upon advice of Hanifen, Imhoff Inc., investment bankers to the proposed District, it has been decided that the improvements to be constructed by the proposed District will be financed by the issuance of general obligation bonds to be authorized and issued in accordance with the authorizing act approved by the Colorado Legislature. The bonds, when issued, will mature in not more than 20 years from date of issuance with the first maturity being not later than three years from their date as required by statute. The proposed maximum interest rate will be 18% and the maximum discount 6%. The exact interest, rates and discounts will be established at the time the bonds are sold by the proposed District and will reflect market conditions at the time of sale.

It is proposed that a total of \$32,100,000 of bonds for various purposes will be submitted to the electors of the proposed District for approval to fund the improvements. The amount to be voted exceeds the amount of bonds to be sold as shown in the attached schedules to allow for unforeseen contingencies and increases in construction costs not contemplated in this Service Plan. Based upon construction estimates as computed during the preparation of the Service Plan, it is anticipated that a total of \$19,475,000 of bonds will be issued based upon 1985 construction costs. The bonds will contain adequate call provisions to allow the prior redemption or refinancing of bonds sold by the proposed District. The amount of bonds sold will be based upon final engineering estimates or actual construction contracts.

The proposed District will have as a source of revenue to retire the bonded debt, water and sewer tap fee charges, developers and in addition, a mill levy assessed on all taxable property in the District, which is estimated at 10.00 mills throughout the bond repayment period. This mill levy may vary depending upon the elected board's decision to fund the projects contemplated in the Service Plan. In addition, from the proceeds of the bonds, the proposed District will capitalize interest from the series of bonds to permit payment of interest during the time lapse between development of taxable properties and certification of this development on the tax rolls. Interest income through the reinvestment of construction funds, capitalized interest and annual tax receipts will provide additional income to meet operational expenses.

### Cost Summary and Bond Development

The following schedules reflect the amount of bonds to be sold to finance construction costs, including related expenses of the sale of bonds. For the purpose of calculation, and upon advice of Hanifen, Imhoff Inc., interest rates have been assumed to be 11% on the projected bond issues.

### Projection of Assessed Valuation

For purposes of developing the financial plan, it was assumed that living units and commercial development within the proposed District would be assessed at various percentages depending upon the year of construction. It is also assumed that the assessed valuation will be realized one year after construction and that tax collections will be realized two years after initial construction.

### Cash Flow Schedule

The cash flow schedule projects the anticipated flow of funds and is based upon estimates of construction and project needs for bond financing to finance the proposed District's improvements. The cash flow schedule indicates the best estimate of growth within the proposed District and flexibility is given the Board of Directors so that all debt is not incurred prior to a time when the facilities are needed to meet the growing population demands.

Third Creek Ranch Metropolitan District  
Single/Multi Family Home Development

Computation of Assessed Value

Const. Year	Single Family Units	Single Family			Cumulative Single Family			Multi - Family			Cumulative Multi Family			Total Assessed Value(4)	Collection Year
		Market Value Per Unit(1)	Market Value	Units	Market Value	Units	Total Assessed Value(2)	Market Value Per Unit(3)	Market Value	Units	Market Value	Units			
1984															
1985		\$75,000	0	0			0	\$64,850	0	0			0	0	1986
1986	50	78,750	3,937,500	3,937,500	3,937,500	393,750		68,093	0	0			0	0	1988
1987	100	82,688	8,268,750	12,206,250	1,220,625			71,497	0	0			0	0	1989
1988	200	86,822	17,364,375	29,570,625	2,957,063			75,072	0	0			0	0	1990
1989	200	91,163	18,232,594	47,803,219	4,780,322			78,826	0	0			0	0	1991
1990	200	95,721	19,144,223	66,947,442	6,694,744			82,767	4,129,343	4,129,343			4,129,343	0	1992
1991	200	95,721	19,144,223	86,091,666	8,609,167			82,767	9,111,152	12,249,495			1,224,950	0	1993
1992	200	95,721	19,144,223	105,235,889	10,523,589			82,767	13,904,832	26,154,328			2,615,433	0	1994
1993	200	95,721	19,144,223	124,380,113	12,438,011			82,767	13,904,832	40,059,160			4,005,916	0	1995
1994	200	95,721	19,144,223	143,524,336	14,352,434			82,767	13,904,832	53,963,992			5,396,399	0	1996
1995	200	95,721	19,144,223	162,668,559	16,266,856			82,767	13,904,832	67,868,825			6,786,882	0	1997
1996	200	95,721	19,144,223	181,812,783	18,181,278			82,767	13,904,832	81,773,657			8,177,266	0	1998
1997	200	95,721	19,144,223	200,957,006	20,095,701			82,767	13,904,832	95,678,489			9,567,849	0	1999
1998	200	95,721	19,144,223	220,101,230	22,010,123			82,767	13,904,832	109,583,322			10,958,332	0	2000
1999	200	95,721	19,144,223	239,245,453	23,924,545			82,767	13,904,832	123,488,154			12,348,815	0	2001
2000	200	95,721	19,144,223	258,389,677	25,828,968			82,767	13,904,832	137,392,986			13,739,399	0	2002
2001	200	95,721	19,144,223	277,533,900	27,753,390			82,767	13,904,832	151,297,819			15,129,782	0	2003
2002	200	95,721	19,144,223	296,678,123	29,657,812			82,767	13,904,832	165,202,651			16,520,265	0	2004
2003	200	95,721	19,144,223	315,822,347	31,582,235			82,767	13,904,832	179,107,484			17,910,748	0	2005
2004	200	95,721	19,144,223	334,966,570	33,496,557			82,767	13,904,832	193,012,316			19,301,232	0	2006
2005	200	95,721	19,144,223	354,110,794	35,411,079			82,767	13,904,832	206,917,148			20,691,715	0	2007
2006		95,721	0	354,110,794	35,411,079			82,767	0	206,917,148			20,691,715	0	2008
2007		95,721	0	354,110,794	35,411,079			82,767	0	206,917,148			20,691,715	0	2009
2008		95,721	0	354,110,794	35,411,079			82,767	0	206,917,148			20,691,715	0	2010
2009		95,721	0	354,110,794	35,411,079			82,767	0	206,917,148			20,691,715	0	2011
Totals	3,750														
															2,500

ASSUMPTIONS:

- (1) Single Family Detached Units Market Value assumes an increase per year of..... 5.00%
- (2) Single Family Detached Units Assessed Value to 1984 Market Value Ratio equals..... 10.00%
- (3) Multi Family Units Market Value assumes an increase per year of ..... 5.00%
- (4) Multi Family Units Assessed Value to 1984 Market Value Ratio equals ..... 10.00%

RATES:

- 5.00%
- 10.00%
- 5.00%
- 10.00%

Third Creek Ranch Metropolitan District  
Industrial & Commercial Development

Computation of Assessed Value

Const. Year	Industrial				Commercial				Totals					
	Industrial Development (Sq.Ft.)	Market Value (\$)	Per Sq. Ft.	Total Assessed Value (\$)	Total Development (Sq.Ft.)	Market Value (\$)	Per Sq. Ft.	Total Assessed Value (\$)	Industrial Market Value (\$)	Commercial Market Value (\$)	Total Assessed Value (\$)	Grand Total Market Value (\$)	Grand Total Assessed Value (\$)	Collection Year
1984														1986
1985		60.78	0	0	0	95.72	0	0	0	0	0	0	0	1987
1986		52.50	0	0	0	78.75	0	0	0	0	0	3,937,500	393,750	1988
1987		55.12	0	0	0	82.69	0	0	0	0	0	12,206,250	1,220,625	1989
1988		57.88	0	0	0	86.82	0	0	0	0	0	29,570,625	2,957,063	1990
1989		60.78	0	0	0	91.15	0	0	0	0	0	47,803,219	4,780,322	1991
1990	45,000	63.81	2,871,634	430,745	70,000	95.72	6,700,478	6,700,478	1,035,072	21,739,052	125,147,074	13,254,403	1993	1993
1991	90,000	63.81	5,743,267	861,491	120,000	95.72	11,486,574	11,486,574	18,187,012	5,087,149	132,381,944	20,772,781	1994	1994
1992	130,000	63.81	8,295,810	1,610,731	165,000	95.72	15,793,984	15,793,984	23,874,981	7,466,247	239,420,814	27,691,159	1995	1995
1993	170,000	63.81	10,848,353	2,101,071	210,000	95.72	20,100,559	20,100,559	29,977,038	8,932,224	296,353,048	34,609,336	1996	1996
1994	210,000	63.81	13,399,896	2,591,411	255,000	95.72	24,307,133	24,307,133	35,969,262	10,864,442	353,698,555	41,527,914	1997	1997
1995	250,000	63.81	15,951,439	3,081,751	300,000	95.72	28,512,707	28,512,707	42,061,484	12,644,442	410,557,455	48,446,292	1998	1998
1996	290,000	63.81	18,502,982	3,572,091	345,000	95.72	32,718,281	32,718,281	47,156,724	14,173,540	468,295,366	55,412,530	1999	1999
1997	330,000	63.81	21,054,525	4,062,431	390,000	95.72	36,923,855	36,923,855	52,251,166	15,702,984	527,000,311	61,299,768	2000	2000
1998	370,000	63.81	23,606,068	4,552,771	435,000	95.72	41,129,429	41,129,429	57,345,607	17,248,928	584,249,239	67,245,007	2001	2001
1999	410,000	63.81	26,157,611	5,043,111	480,000	95.72	45,334,003	45,334,003	62,439,048	18,793,984	641,443,223	73,311,245	2002	2002
2000	450,000	63.81	28,709,154	5,533,451	525,000	95.72	49,538,577	49,538,577	67,533,489	20,344,000	708,981,712	80,322,491	2003	2003
2001	490,000	63.81	31,260,697	6,023,791	570,000	95.72	53,743,151	53,743,151	72,627,930	21,893,024	781,574,686	89,333,732	2004	2004
2002	530,000	63.81	33,812,240	6,514,131	615,000	95.72	57,947,725	57,947,725	77,722,371	23,442,000	854,116,658	97,209,960	2005	2005
2003	570,000	63.81	36,363,783	7,004,471	660,000	95.72	62,152,299	62,152,299	82,816,812	24,991,024	927,008,580	104,176,158	2006	2006
2004	610,000	63.81	38,915,326	7,494,811	705,000	95.72	66,356,873	66,356,873	87,910,253	26,540,000	999,918,731	111,142,437	2007	2007
2005	650,000	63.81	41,466,869	7,985,151	750,000	95.72	70,561,447	70,561,447	93,009,694	28,089,024	1,072,928,325	118,142,437	2008	2008
2006	690,000	63.81	44,018,412	8,475,491	795,000	95.72	74,766,021	74,766,021	98,109,135	29,638,048	1,146,037,419	125,142,437	2009	2009
2007	730,000	63.81	46,569,955	8,965,831	840,000	95.72	78,970,595	78,970,595	103,208,576	31,187,072	1,219,142,437	132,142,437	2010	2010
2008	770,000	63.81	49,121,498	9,456,171	885,000	95.72	83,175,169	83,175,169	108,308,017	32,736,096	1,292,242,437	139,142,437	2011	2011
2009	810,000	63.81	51,673,041	9,946,511	930,000	95.72	87,379,743	87,379,743	113,407,458	34,285,120	1,365,342,437	146,142,437	Totals	
2,500,000														

ASSUMPTIONS:

- (5) Commercial & Industrial Development Market Value assumes an increase per year of 5.00%
- (6) Commercial & Industrial Development Assessed Value to 1984 Market Value Ratio equals 15.00%

RATES:

- 5.00%
- 15.00%

Third Creek Patch Metropolitan District  
 Computation of Water and Sewer Tap Fees  
 Water Tap Fee... \$4,000  
 Sewer Tap Fee... \$2,000

Const. Year	Single Family		Multi Family Units	Industrial		Est. (18) EDR Taps	Commercial Development		Tap Fee Charge Per Est. (18) Tap(17) EDR Taps	Tap Fee Charge Per Est. (18) Tap(17) EDR Taps	Tap Fee Cumulative Charge Taps(19) Income Required	Grand Total Tap Fee Charge Const. Year
	Units	Tap Fee Charge Per Unit(14)		Tap Fee Charge Per Sq. Ft.	Tap Fee Charge Per Sq. Ft.		Tap Fee Charge Per Sq. Ft.					
1984	0	0	0	0	0	0	0	0	0	0	0	0
1985	0	0	0	0	0	0	0	0	0	0	0	0
1986	50	8,000	0	0	0	0	0	0	0	0	0	0
1987	100	8,000	0	0	0	0	0	0	0	0	0	0
1988	200	8,000	0	0	0	0	0	0	0	0	0	0
1989	200	8,000	0	0	0	0	0	0	0	0	0	0
1990	200	8,000	0	0	0	0	0	0	0	0	0	0
1991	200	8,000	50	45,000	5,000	9	54,000	76,000	6,000	14	84,000	2,158,000
1992	200	8,000	98	76,000	6,000	18	102,000	120,000	6,000	24	144,000	2,340,000
1993	200	8,000	188	1,008,000	6,000	26	136,000	165,000	6,000	33	198,000	2,532,000
1994	200	8,000	188	1,008,000	6,000	26	136,000	165,000	6,000	33	198,000	2,724,000
1995	200	8,000	188	1,008,000	6,000	26	136,000	165,000	6,000	33	198,000	2,916,000
1996	200	8,000	188	1,008,000	6,000	26	136,000	165,000	6,000	33	198,000	3,108,000
1997	200	8,000	188	1,008,000	6,000	26	136,000	165,000	6,000	33	198,000	3,300,000
1998	200	8,000	188	1,008,000	6,000	26	136,000	165,000	6,000	33	198,000	3,492,000
1999	200	8,000	188	1,008,000	6,000	26	136,000	165,000	6,000	33	198,000	3,684,000
2000	200	8,000	188	1,008,000	6,000	26	136,000	165,000	6,000	33	198,000	3,876,000
2001	200	8,000	188	1,008,000	6,000	26	136,000	165,000	6,000	33	198,000	4,068,000
2002	200	8,000	188	1,008,000	6,000	26	136,000	165,000	6,000	33	198,000	4,260,000
2003	200	8,000	188	1,008,000	6,000	26	136,000	165,000	6,000	33	198,000	4,452,000
2004	200	8,000	188	1,008,000	6,000	26	136,000	165,000	6,000	33	198,000	4,644,000
2005	200	8,000	188	1,008,000	6,000	26	136,000	165,000	6,000	33	198,000	4,836,000
2006	0	8,000	0	0	6,000	1	6,000	0	6,000	0	0	2,158,000
2007	0	8,000	0	0	6,000	1	6,000	0	6,000	0	0	2,350,000
2008	0	8,000	0	0	6,000	1	6,000	0	6,000	0	0	2,542,000
2009	0	8,000	0	0	6,000	1	6,000	0	6,000	0	0	2,734,000
Totals	3,750	\$22,500,000	2,520	\$15,000,000	2,000,000	400	\$2,400,000	2,500,000	500	\$3,000,000		\$42,700,000

ASSUMPTIONS:  
 (1) Single Family Units issue Water & Sewer Taps per unit to total.....  
 (2) Single Family Units Water & Sewer Tap Charges will increase per year.....  
 (3) Multi Family Units issue Water & Sewer Taps per unit to total.....  
 (4) Multi Family Units Water & Sewer Tap Charge will increase per year.....  
 (5) Industrial & Commercial Development assumes one (1) Water & Sewer Tap per 5,000 SQ.FT.  
 (6) Estimated Total Water and Sewer Taps required on a cumulative basis for project completion.....

J Cree  
 Computation of Developer Lot Fees

Fee Per Lot..... \$1,000  
 Increase Per Year..... \$0

Const. Year	Single Family Units 1:(13)	Single Family Taps	Dev. Fee Charge Per Unit(14)	Single Family		Multi Family Units 1:(15)	Multi Family Taps	Dev. Fee Charge Per Unit(16)	Multi Family		Industrial Development Charge Per Sq. Ft. Tap(17)	Industrial Development Charge Per Est.(18)	Industrial Development Charge Per Sq. Ft. Tap(17)	Industrial Development Charge Per Est.(18)	Commercial Development Charge Per Est.(18)	Commercial Development Charge Per Sq. Ft. Tap(17)	Commercial Development Charge Per Est.(18)	Grand Total Dev. Fee Charge	Const. Year
				Dev. Fee Charge	Income				Dev. Fee Charge	Income									
1984	0	0	\$1,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1984
1985	0	0	1,000	0	0	0	0	1,000	0	0	0	0	0	0	0	0	0	0	1985
1986	50	50	1,000	50,000	0	0	0	1,000	0	0	0	0	0	0	0	0	0	50,000	1986
1987	100	100	1,000	100,000	0	0	0	1,000	0	0	0	0	0	0	0	0	0	100,000	1987
1988	200	200	1,000	200,000	0	0	0	1,000	0	0	0	0	0	0	0	0	0	200,000	1988
1989	200	200	1,000	200,000	0	0	0	1,000	0	0	0	0	0	0	0	0	0	200,000	1989
1990	200	200	1,000	200,000	50	50	1,000	50,000	45,000	9,000	9,000	9,000	70,000	14,000	14,000	14,000	273,000	1990	
1991	200	200	1,000	200,000	98	98	1,000	98,000	90,000	18,000	18,000	18,000	120,000	24,000	24,000	24,000	349,000	1991	
1992	200	200	1,000	200,000	168	168	1,000	168,000	150,000	26,000	26,000	26,000	165,000	33,000	33,000	33,000	427,000	1992	
1993	200	200	1,000	200,000	168	168	1,000	168,000	150,000	26,000	26,000	26,000	165,000	33,000	33,000	33,000	427,000	1993	
1994	200	200	1,000	200,000	168	168	1,000	168,000	150,000	26,000	26,000	26,000	165,000	33,000	33,000	33,000	427,000	1994	
1995	200	200	1,000	200,000	168	168	1,000	168,000	150,000	26,000	26,000	26,000	165,000	33,000	33,000	33,000	427,000	1995	
1996	200	200	1,000	200,000	168	168	1,000	168,000	150,000	26,000	26,000	26,000	165,000	33,000	33,000	33,000	427,000	1996	
1997	200	200	1,000	200,000	168	168	1,000	168,000	150,000	26,000	26,000	26,000	165,000	33,000	33,000	33,000	428,000	1997	
1998	200	200	1,000	200,000	168	168	1,000	168,000	150,000	26,000	26,000	26,000	165,000	33,000	33,000	33,000	428,000	1998	
1999	200	200	1,000	200,000	168	168	1,000	168,000	150,000	26,000	26,000	26,000	165,000	33,000	33,000	33,000	428,000	1999	
2000	200	200	1,000	200,000	168	168	1,000	168,000	150,000	26,000	26,000	26,000	165,000	33,000	33,000	33,000	428,000	2000	
2001	200	200	1,000	200,000	168	168	1,000	168,000	150,000	26,000	26,000	26,000	165,000	33,000	33,000	33,000	428,000	2001	
2002	200	200	1,000	200,000	168	168	1,000	168,000	150,000	26,000	26,000	26,000	165,000	33,000	33,000	33,000	428,000	2002	
2003	200	200	1,000	200,000	168	168	1,000	168,000	150,000	26,000	26,000	26,000	165,000	33,000	33,000	33,000	428,000	2003	
2004	200	200	1,000	200,000	168	168	1,000	168,000	150,000	26,000	26,000	26,000	165,000	33,000	33,000	33,000	428,000	2004	
2005	200	200	1,000	200,000	168	168	1,000	168,000	150,000	26,000	26,000	26,000	165,000	33,000	33,000	33,000	428,000	2005	
2006	0	0	1,000	0	0	0	0	1,000	0	0	0	0	0	0	0	0	0	0	2006
2007	0	0	1,000	0	0	0	0	1,000	0	0	0	0	0	0	0	0	0	0	2007
2008	0	0	1,000	0	0	0	0	1,000	0	0	0	0	0	0	0	0	0	0	2008
2009	0	0	1,000	0	0	0	0	1,000	0	0	0	0	0	0	0	0	0	0	2009

Totals 3,750 3,750 \$3,750,000 2,500 2,500 \$2,500,000 2,000,000 400.00 \$400,000 2,500,000 500.00 \$500,000 \$7,150,000 Totals

Wood Creek Ranch Metropolitan District  
Estimated Financial Plan

Year	Assessed Value(1)	Mill Levy(2)	Tax Revenue(4)	Interest Earned On Tax Revenue(5)	Tap Fee Charge Income(3)	Dev. Fee Charge Income	Fee Div. & Charge Income(7)	Total Available From Taxes & Charges	Capitalized Interest(8)	Interest Earned on Capitalized Interest(9)	Total Available Revenue Service(10)	Grand Total Debt Service(11)	General/Adm. Expenses	Total Required Payments	Annual Surplus																				
																1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
1984	115,166	12.1	0	0	0	0	0	0	0	0	0	0	0	0	0																				
1985	151,000	10.00	1,506	45	0	0	0	1,545	0	24,027	27,572	0	0	0	27,572																				
1986	225,000	10.00	2,250	65	306,000	50,000	7,875	360,192	289,300	26,037	676,647	289,300	0	289,300	387,347																				
1987	325,000	10.00	3,250	98	600,000	100,000	15,750	719,098	289,300	26,037	1,051,279	289,300	0	289,300	761,979																				
1988	357,750	10.00	3,578	118	1,200,000	200,000	31,500	1,439,558	0	47,683	1,487,241	309,300	0	309,300	1,177,941																				
1989	420,000	10.00	4,200	366	1,200,000	200,000	31,500	1,444,000	518,788	46,691	2,104,758	608,550	0	608,550	1,496,208																				
1990	497,000	10.00	4,970	667	1,635,000	273,000	41,978	1,949,455	0	155,873	2,105,328	630,800	0	630,800	1,474,528																				
1991	4,765,732	10.00	47,657	1,434	2,040,000	340,000	53,550	2,482,782	1,059,000	98,610	2,695,724	650,300	0	650,300	2,049,424																				
1992	5,544,395	10.00	55,444	2,567	2,562,000	427,000	67,253	3,141,266	0	431,296	3,179,920	1,388,050	0	1,388,050	1,791,870																				
1993	13,854,402	10.00	138,544	4,156	2,562,000	427,000	67,253	3,196,952	0	805,054	4,297,202	2,170,550	0	2,170,550	2,126,652																				
1994	20,772,781	10.00	207,728	6,232	2,562,000	427,000	67,253	3,270,212	717,062	892,184	4,454,590	2,612,300	0	2,612,300	1,842,290																				
1995	27,687,159	10.00	276,871	8,307	2,562,000	427,000	67,253	3,341,471	0	962,196	4,600,955	2,701,900	0	2,701,900	1,899,055																				
1996	34,569,526	10.00	345,695	10,381	2,562,000	427,000	67,253	3,412,731	0	1,043,206	4,745,619	2,895,900	0	2,895,900	1,549,719																				
1997	41,527,514	10.00	415,279	12,458	2,568,000	428,000	67,410	3,491,148	0	1,122,367	4,895,971	2,859,450	0	2,859,450	2,036,521																				
1998	48,446,292	10.00	484,463	14,534	2,568,000	428,000	67,410	3,562,407	0	1,204,948	5,054,364	2,852,400	0	2,852,400	2,201,964																				
1999	55,412,520	10.00	554,125	16,624	2,568,000	428,000	67,410	3,634,159	0	1,284,128	5,215,296	2,912,150	0	2,912,150	2,303,146																				
2000	62,378,768	10.00	623,788	18,714	2,568,000	428,000	67,410	3,705,911	0	1,367,405	5,380,325	2,925,900	0	2,925,900	2,454,426																				
2001	69,245,907	10.00	692,460	20,804	2,568,000	428,000	67,410	3,777,664	0	1,446,648	5,551,320	2,547,850	0	2,547,850	3,003,470																				
2002	76,113,245	10.00	761,132	22,893	2,568,000	428,000	67,410	3,849,416	0	1,528,252	5,720,368	2,567,800	0	2,567,800	3,152,568																				
2003	82,979,482	10.00	829,795	24,983	2,568,000	428,000	67,410	3,921,186	0	1,612,865	5,895,651	2,592,950	0	2,592,950	3,301,701																				
2004	89,845,720	10.00	898,457	27,073	2,568,000	428,000	67,410	3,992,936	0	1,697,478	6,069,624	2,613,000	0	2,613,000	3,450,624																				
2005	97,209,910	10.00	972,100	29,163	2,568,000	428,000	67,410	4,064,672	0	1,782,091	6,249,663	2,633,050	0	2,633,050	3,600,613																				
2006	104,176,198	10.00	1,041,762	31,253	0	0	0	1,073,015	0	1,866,704	6,433,377	2,653,100	0	2,653,100	3,750,277																				
2007	111,142,437	10.00	1,111,424	33,343	0	0	0	1,144,767	0	1,951,223	6,627,600	2,673,150	0	2,673,150	3,900,450																				
2008	118,108,676	10.00	1,181,087	35,433	0	0	0	1,176,520	0	2,036,742	6,827,342	2,693,200	0	2,693,200	4,050,142																				
2009	125,074,915	10.00	1,250,749	37,523	0	0	0	1,207,273	0	2,122,265	7,033,607	2,713,250	0	2,713,250	4,200,357																				
2010	132,041,154	10.00	1,320,412	39,613	0	0	0	1,238,026	0	2,207,788	7,241,833	2,733,300	0	2,733,300	4,350,533																				
2011	139,007,393	10.00	1,390,074	41,703	0	0	0	1,268,779	0	2,292,301	7,450,134	2,753,350	0	2,753,350	4,500,784																				
2012	145,973,632	10.00	1,459,736	43,793	0	0	0	1,299,532	0	2,376,814	7,658,448	2,773,400	0	2,773,400	4,651,044																				
2013	152,939,871	10.00	1,529,399	45,883	0	0	0	1,330,285	0	2,461,327	7,866,763	2,793,450	0	2,793,450	4,801,313																				
2014	159,906,110	10.00	1,599,062	47,973	0	0	0	1,361,038	0	2,545,840	8,075,077	2,813,500	0	2,813,500	4,951,573																				
2015	166,872,349	10.00	1,668,725	50,063	0	0	0	1,391,791	0	2,629,353	8,283,391	2,833,550	0	2,833,550	5,101,842																				
2016	173,838,588	10.00	1,738,386	52,153	0	0	0	1,422,544	0	2,711,866	8,491,705	2,853,600	0	2,853,600	5,252,102																				
2017	180,804,827	10.00	1,808,048	54,243	0	0	0	1,453,297	0	2,794,379	8,700,019	2,873,650	0	2,873,650	5,402,362																				
2018	187,771,066	10.00	1,877,771	56,333	0	0	0	1,484,050	0	2,876,892	8,908,333	2,893,700	0	2,893,700	5,552,632																				
Totals		10.00								\$38,485,053	\$46,813,850	\$46,813,850		\$46,813,850																					

ASSUMPTIONS:

- (1) Estimated Assessed Value Based on Absorption Projections for all classes of Development.
- (2) 1984 Estimated Assessed Value of Property.
- (3) Estimated Mill Levy to be imposed by the District in each year.
- (4) Estimated Tax Revenue based upon District Assessed Value and Mill Levy Projections.
- (5) Interest Earnings on current years tax revenues are calculated at 9.00% for a period of 4 months.
- (6) Estimated Water and Sewer Tap Fee Income from all classes of development according to each District's share.
- (7) Interest Earnings on Developer and Tap Fee Income has been calculated at 9.00% for a period of 3 months.
- (8) Capitalized Interest has been included for each bond issue scheduled.
- (9) Interest Earnings have been calculated at 9.00% per annum.
- (10) Estimated Total G. O. Debt Payments for all scheduled issues.

The District plans to authorize \$32,100,000 in General Obligation Debt.

All Administrative, Operation and Maintenance expenses will be paid from service charges.

Third Creek Ranch Metropolitan District  
 Estimated Bond Issues

Year	1995 Issue			1988 Issue			1991 Issue			1994 Issue			Year
	Principal Payment	Interest Payment	Annual Payment	Principal Payment	Interest Payment	Annual Payment	Principal Payment	Interest Payment	Annual Payment	Principal Payment	Interest Payment	Annual Payment	
1984													1984
1985													1985
1986													1986
1987													1987
1988													1988
1989	20,000	11.00%	289,700	11.00%	296,450	296,450							1989
1990	25,000	11.00%	289,700	11.00%	296,450	296,450							1990
1991	50,000	11.00%	289,700	11.00%	296,450	311,450							1991
1992	75,000	11.00%	289,700	11.00%	296,450	314,900							1992
1993	100,000	11.00%	289,700	11.00%	296,450	317,300							1993
1994	120,000	11.00%	289,700	11.00%	296,450	319,850	25,000						1994
1995	140,000	11.00%	289,700	11.00%	296,450	326,550	50,000						1995
1996	160,000	11.00%	289,700	11.00%	296,450	336,550	100,000						1996
1997	180,000	11.00%	289,700	11.00%	296,450	351,150	200,000						1997
1998	200,000	11.00%	289,700	11.00%	296,450	371,150	350,000						1998
1999	225,000	11.00%	289,700	11.00%	296,450	393,550	500,000						1999
2000	250,000	11.00%	289,700	11.00%	296,450	418,150	750,000						2000
2001	275,000	11.00%	289,700	11.00%	296,450	447,150	1,000,000						2001
2002	300,000	11.00%	289,700	11.00%	296,450	481,150	1,250,000						2002
2003	320,000	11.00%	289,700	11.00%	296,450	521,150	1,500,000						2003
2004	350,000	11.00%	289,700	11.00%	296,450	567,150	1,750,000						2004
2005						619,150	2,000,000						2005
2006						677,150	2,250,000						2006
2007						741,150	2,500,000						2007
2008						811,150	2,750,000						2008
2009						887,150	3,000,000						2009
2010						969,150	3,250,000						2010
2011						1,057,150	3,500,000						2011
2012						1,151,150	3,750,000						2012
2013						1,251,150	4,000,000						2013
2014						1,357,150	4,250,000						2014
2015						1,469,150	4,500,000						2015
2016						1,587,150	4,750,000						2016
2017						1,711,150	5,000,000						2017
2018						1,841,150	5,250,000						2018
Totals	\$2,620,000	11.00%	\$4,699,450	11.00%	\$4,699,450	\$7,360,700	\$6,600,000	\$5,215,000	\$5,215,000	11.00%	\$10,745,500	\$14,945,500	Totals
Construction and Engineering			\$1,912,325		\$2,048,200	\$2,048,200	\$2,048,200	\$2,048,200	\$2,048,200		\$5,197,500	\$5,197,500	1991
Capitalized Interest			\$578,620		\$518,798	\$518,798	\$518,798	\$518,798	\$518,798		\$1,069,000	\$1,069,000	1994
Underwriting Discount			\$92,050		\$94,325	\$94,325	\$94,325	\$94,325	\$94,325		\$187,500	\$187,500	1994
Other Issuing Expenses			\$145,025		\$145,837	\$145,837	\$145,837	\$145,837	\$145,837		\$287,500	\$287,500	1994
Totals	\$2,620,000		\$4,699,450		\$4,699,450	\$7,360,700	\$6,600,000	\$5,215,000	\$5,215,000		\$10,745,500	\$14,945,500	Totals
Interest Earnings on Const. Funds			\$54,953		\$100,647	\$100,647	\$100,647	\$100,647	\$100,647		\$403,259	\$403,259	1994
Total Available for Const.			\$1,498,378		\$2,151,947	\$2,151,947	\$2,151,947	\$2,151,947	\$2,151,947		\$5,930,759	\$5,930,759	Totals



Third Creek Ranch Metropolitan District  
 Estimated Bond Issues

\$2,225,000  
 1997 Issue

Year	Principal Payment	Interest Rate	Interest Payment	Annual Payment	Grand Total Debt Service	Year
1994					0	1994
1995					0	1995
1996					289,700	1996
1997					289,700	1997
1998					309,300	1998
1999					308,550	1999
2000					330,800	2000
2001					350,300	2001
2002					368,350	2002
2003					386,350	2003
2004					403,750	2004
2005					420,600	2005
2006					437,000	2006
2007					452,950	2007
2008					467,550	2008
2009					481,750	2009
2010					495,550	2010
2011					508,950	2011
2012					521,950	2012
2013					534,550	2013
2014					546,750	2014
2015					558,550	2015
2016					570,000	2016
2017					581,200	2017
2018					592,200	2018
Totals	\$2,225,000	11.00%	\$1,972,100	\$4,227,100	\$46,813,850	Totals
-----						
					Grand Total	
					1997	All Issues
					Construction and Engineering	\$2,224,068
					Capitalized Interest	40
					Underwriting Discount	181,725
					Other Issuing Expenses	129,168
					Totals	\$2,325,000
-----						
					Interest Savings on Const. Funds	\$75,767
					Total Av. Life for Const.	\$2,299,455

EXHIBIT  
WATER REPORT



W.C. WELLS & CO. INC. / *consulting geologists*  
the ranch office commons, bldg 1, suite 12 /  
2000 west 120th avenue / denver, colorado 80234 / telephone (303) 466-3801

GROUND WATER INVESTIGATION  
THIRD CREEK RANCH METROPOLITAN DISTRICT  
ADAMS COUNTY, COLORADO

Prepared For:  
Colorado Development Consulting Services, Inc.  
10701 Melody Drive, Suite 500  
Northglenn, Colorado 80233

Job No. 1177

August 17, 1984



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TABLE I	Sand Thickness
TABLE II	Non-Tributary Ground Water Availability
TABLE III	Third Creek Ranch Water Analysis



## INTRODUCTION

This report presents the results of our ground water investigation of the Third Creek Ranch Metropolitan District just west of Barr Lake in Adams County, Colorado. The property, as outlined on the attached Figure-1, represents 1,432 acres of various parcels that may be incorporated in the proposed district. Reportedly the area might be developed for a mixed use of residential, commercial and industrial/office park. Development planning has not advanced to the stage where realistic estimates of proposed water demand is available.

The objectives of our investigation were to determine the availability of ground water in geologic formations beneath the area. At this time we anticipate ground water would be the primary source of municipal water to the proposed district. To accomplish our objectives we have reviewed our files and those of State and Federal agencies for geologic, ground water, and well information in the area. We have also studied the geophysical logs of numerous water and oil wells to determine the subsurface conditions of geologic formations beneath the area and the amount of water saturated sands that may be in the principal aquifers. We have also reviewed drillers logs of wells tapping the shallow alluvial formation to determine its configuration, depth and water yield characteristics. Much of the geohydrologic information is illustrated on the attached Figure-1, Geohydrologic Map.



#### SUMMARY OF CONCLUSIONS

- (1) Ground water appears to be present in the overburden alluvial sands and gravels plus the sandstones of the Arapahoe and Laramie Fox Hills formations. Existing shallow irrigation wells might be physically able to produce 3,880 gallons per minute. With an augmentation plan for the property these shallow wells might have the legal right to produce 3,315+ acre feet of water per year.
- (2) The quality of ground water from the three water bearing formations should be acceptable for domestic consumption.

#### LOCATION AND SITE CONDITIONS

The subject combined property as outlined on Figure-1 is located in contiguous sectors of Sections 16, 17, 19, 20, and 21 plus an outlying area in Section 32, Township 1 South, Range 66 West in Adams County. As pointed out, these properties lie west of Barr Lake and are situated on the South Platte River valley flanking slopes. The ground surface across most of the properties inclines to the west and the southern sectors of this property are drained by Third Creek, a northwest trending tributary of the South Platte River. Barr Lake and a bedrock ridge trending northerly from the lake separates this property topographically from Beebe Draw to the northeast. Several irrigation canals cross the area and several storage reservoirs are located in the vicinity of the subject property. These parcels have been irrigated for agricultural production.



## GENERAL GEOLOGY

Bedrock units beneath the subject area in descending stratigraphic order are the Denver, Arapahoe, Laramie Shale, Laramie Fox Hills Sandstones and the Pierre-Niobrara-Benton Group. We anticipate the Denver formation is the principal bedrock unit, particularly in the southern sectors of the study area. Based on our interpretation of geophysical logs, this formation consists of a series of interbedded shales, thin sandstones and occasional thin coal seams. We anticipate its depth is probably no more than 100 feet within the study area.

The Arapahoe formation should occupy the interval 100 to 550 feet. This formation consists of a mixture of sandstones and claystones that can be divided into an upper and lower unit. Beneath the Arapahoe formation is the 400+ foot thick Laramie Shale which tops the 230 foot thick Laramie Fox Hills sandstone sequence. These sandstones contain a few siltstones and claystone strata. The 4,000 foot thick Pierre-Niobrara-Benton Group is stratigraphically beneath the Laramie Fox Hills formation and is generally non-water bearing shales. This group is a barrier to the deeper search for ground water supplies in the area.

Mantling the bedrock units through most of the area is a combination of residual soil, thence a 20 to 50 foot thickness of silty sands and gravels with clay layers. This overburden alluvial material is a feathered edge in the extreme



eastern sectors of the study area and thickens westward. The alluvial material represents a combination of depositional environments wherein initially several investigators have speculated the South Platte River once coursed through Barr Lake and northeastward along Beebe Draw. Additionally, sands and gravels could be a result of stream depositions of the South Platte River as it meandered through the area.

#### GROUND WATER

The principal source of ground water beneath the property likely would be considered the sands and gravels of the alluvium. Numerous irrigation wells have been drilled to tap the source of supply. These irrigation wells reportedly produced upwards of 1,000 gallons per minute. Much of this alluvial ground water is recharged by seepage losses out of Third Creek, Barr Lake and return flows from irrigation in the area.

Ground water almost certainly saturates the porous sands of the Arapahoe and Laramie Fox Hills formations beneath the property. We doubt there would be enough Denver formation in this area to consider these sedimentary rocks a viable source of water supply. We anticipate properly drilled Arapahoe wells might yield 50 to 100 gallons per minute while Laramie Fox Hills wells might produce 75 to 150 gallons per minute. Domestic wells in the area commonly have been drilled into the Arapahoe formation. No wells are





illustrated in the State Engineer's files that tap the Arapahoe or Laramie Fox Hills formation for commercial or industrial supplies in the immediate area of the property.

Bedrock formation ground water is principally stored and is not recharged to a large degree. The resource is, therefore, mineable. Storage is computed by multiplying the area of the property by the thickness of water bearing sands and its drainable porosity. Saturated sandstone estimates have been determined by reviewing several geophysical logs in the immediate area and a summary of the log information is attached as Table I.

Wells tapping the Arapahoe formation should intercept an average of 110 feet of formation sands beneath the subject properties. Beneath this area, there should be about 26,800 acre feet of water stored in this unit. Laramie Fox Hills wells drilled to depths on the order of 1,200 feet should encounter approximately 120 feet of water saturated sand. These subject properties should command part of the aquifer that contains on the order of about 25,800 acre feet of water per year.

For this investigation we have not sampled bedrock or alluvial ground water from any of the structures of the property. Based on our experience with other wells in the area we anticipate ground water quality from the alluvium, Arapahoe and Laramie Fox Hills formations should be accepta-



ble for domestic consumption. We anticipate the alluvium will contain slightly harder ground water, but again, the mineral constituents should be within the drinkable quality range. Commonly Laramie Fox Hills ground water does contain some hydrogen sulfide gas that imparts a sulphurous odor to the water. This gas can be released from the water by splashing or spraying this water into a vented reservoir prior to municipal use.

#### EXISTING WATER SUPPLY DEVELOPMENT

On Figure-1 we illustrate the locations of existing wells on the subject properties. All of the wells are shallow and were drilled for irrigation supply. In our field reconnaissance we observed that these wells primarily were utilized for supplemental water from the irrigation ditches which cross the area. Associated with most of the property are surface water irrigation rights. All of these wells have been adjudicated in the Division I Water Court.

Without augmentation these wells would not be able to operate to any significant degree as they are so junior in priority date to surface water rights within the South Platte River basin. The information concerning the wells is illustrated on the table below. Additionally, we have attached to this report the well decrees and the well information as found in the State Engineer's office.



WELL NO.	LOCATION T1S, R66W	DEPTH (FT)	WELL YIELD (GPM)	ACRES IRRIGATED (AC)*	WATER COURT CASE NO.
13526	Sec. 20	39	889	160	W-2325
13527	Sec. 20	28	1058	60	W-2325
13528	Sec. 20	38	665	60	W-2325
13529	Sec. 20	43	1218	160	W-2325
12268	Sec. 20	31	50	20	W-2777

\*Well probably provided supplement water to these acreages.

#### WATER SUPPLY DEVELOPMENT

As can be observed from the preceding table, several wells were used to supply irrigation water. If these wells still can produce at these claimed rates, the combined discharge should be approximately 3,880 gallons per minute. If these wells were utilized and still can produce their original reported and decreed capacities for municipal purposes and were allowed to pump 3/4 of each year, this would be an adequate supply for an estimate 9,400 homes. This assumes each home would utilize water at 0.5 acre feet of water per year rate.

Under the rules and regulations in the South Platte River established for tributary water wells such as those tapping the alluvial aquifers, wells are not allowed to pump under their own priority without the aid of an augmentation plan. An augmentation plan is a court approved instrument by which tributary ground water can be pumped, utilized, and



any return flow generated from the use of that water will be allowed to flow back to the stream system for the enjoyment of other surface water appropriators. Consumed water must be replaced to the stream system so that the net effect of out of priority junior tributary well pumping is essentially zero.

The reason an augmentation plan is needed for these junior prior structures is that the South Platte River system is already over-appropriated. Senior appropriators who have derived water supplies from the South Platte River for nearly 100 years would be materially injured if all of the irrigation wells were operated unrestricted.

Replacement water to allow the use of the renewable alluvial source of water supply normally could be the release of water storage reservoirs to the South Platte River, or purchase of a surface water right. Irrigated land would then be dried up and the water historically consumed by the crop would be left in the stream system to the benefit of the augmentation plan. As shown on Table III, the subject properties have access to surface water rights potentially capable of 800 acre feet per year of augmentation water. Additionally, pumping non-tributary ground water from the Lower Arapahoe and Laramie Fox Hills formations is a good source of augmentation supply.



Normally in a municipal water system in-house use of water is returned to the stream system through a sewer treatment plant. Also, some of the water used for lawn irrigation reaches the stream from irrigation return flow. We anticipate the average annual municipal water consumption might be on the order of about 30 to 40%. On this basis, for every acre foot of water developed for a municipal system .3 to .4 acre feet of augmentation water would be necessary to fully utilize alluvial well water supplies. Plans for augmentation are normally developed by a water rights attorney who is aided by a surface water hydrologist. Augmentation plans normally require a minimum of 1-1/2 years to complete and receive court approval.

As pointed out, non-tributary ground water in the Lower Arapahoe and Laramie Fox Hills formation beneath the property would be a source of augmentation water. State statutes allow the property owners to derive 1% of the ground water in storage beneath their property each year. On Table II we illustrate our computations of available ground water. This table illustrates that from the estimated 1,432 acre combined parcels there might be about 526 acre feet of water per year available from the Arapahoe and Laramie Fox Hills formations.

This water is free of the priority system in Colorado and can be used by the property owner until it is totally consumed. As an example, should the proposed district form



an augmentation plan wherein it has dominion over waste water effluent generated from non-tributary sources, this 526 acre feet plus 800 acre feet of consumption use water per year should allow out of priority pumping of alluvial wells to the extent of 3,315 acre feet of water per year. Generally this would be an adequate supply of water to service 6,630 homes.

To develop the 526 acre feet of non-tributary ground water from the property, we anticipate that approximately 8 wells would be required into the Arapahoe and Laramie Fox Hills formations. As indicated, Arapahoe formation wells might be on the order of 600 feet deep and probably could be drilled at a rate of about \$50 per foot. A Laramie Fox Hills well on the order of 1,200 feet in depth likely could be drilled for the same well construction price, hence the anticipated 8 wells probably would cost on the order of \$30,000 for drilling, casing, well development and pumping tests. To this the permanent pumps should add \$20,000 per well, hence the total non-tributary supply might be developed for on the order of \$520,000.

The alluvial wells are old and their yields are unknown, hence if these wells are to be utilized in a municipal water supply, we suggest a consideration be given to pumping tests of the wells to determine their physical capability and mechanical efficiency. Should any one or more wells have to be replaced because of deteriorated well casings or gravel packs we anticipate that a 50 to 70 foot deep alluvial well probably could be constructed for on the order of \$20,000 pumping equipment.



Professional judgements have been expressed in this report. They are based on the information gathered for this investigation, our understanding of the project requirements and our experience with ground water aquifers in the area. Additional test hole drilling and test pumping of wells will be necessary to verify our preliminary conclusions.

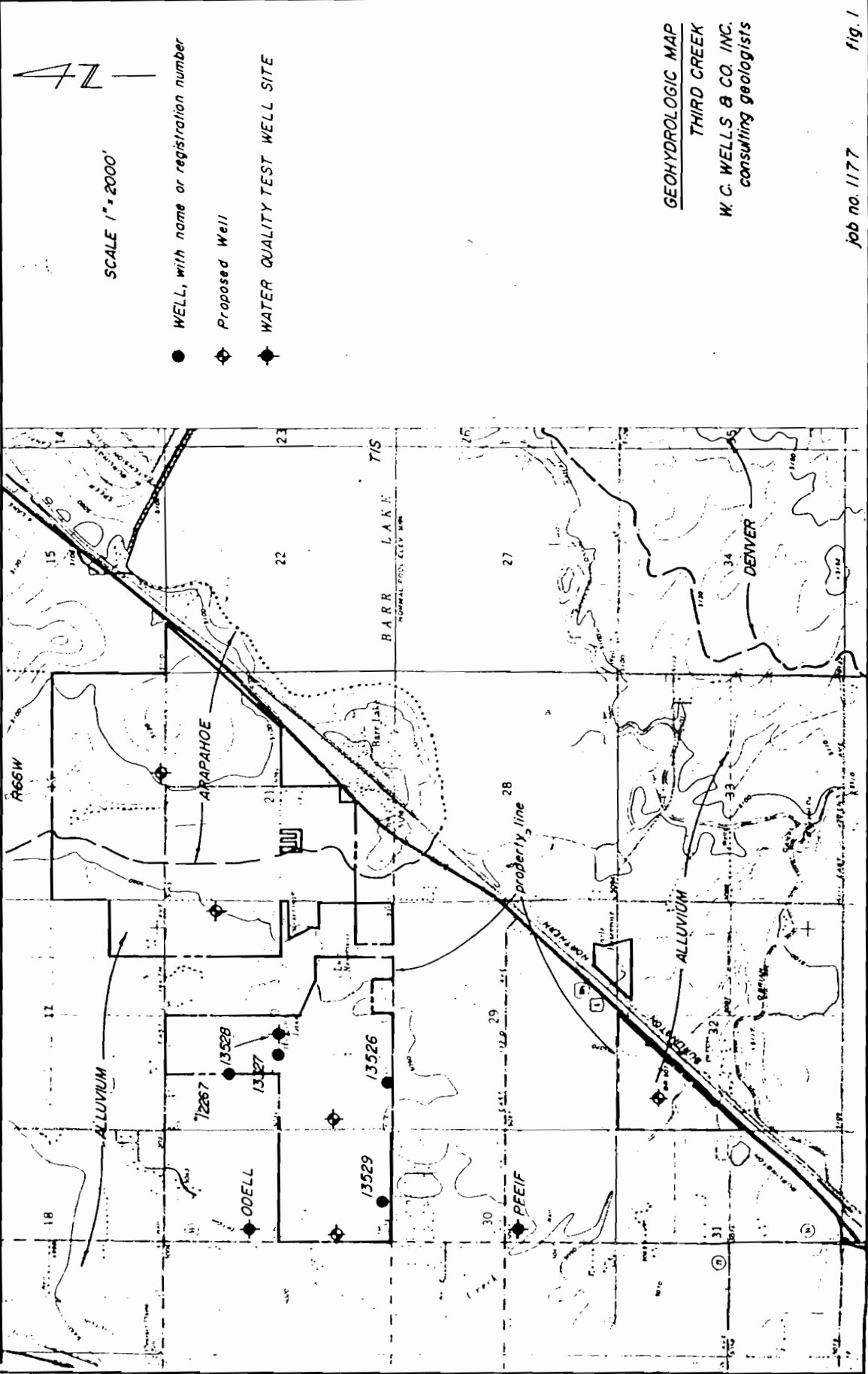
We trust this information satisfies your immediate needs. If you have any questions or care to discuss the content of this report in any regard, please feel free to call.

BY: Wm. Curtis Wells, CPG  
Consulting Ground Water Geologist

WCW/vjw

(1 copy sent)

cc: Steve Williamson  
Carl Hurst



job no. 1177 fig. 1



TABLE I  
SAND THICKNESS

Well	Location	Base Arap (ft)	Sand (ft)	Top LFH (ft)	Sand (ft)
Baumgartner	Sec. 12 T1S R67W	190	--	705	142
Wolf	Sec. 22 T1S R67W	325	--	836	137
King	Sec. 33 T1S R67W	410	--	900	170
Bergman	Sec. 3 T1S R66W	604	97	980	161
Mile High Duck	Sec. 12 T1S R66W	525	70	972	149
Case No. 1	Sec. 17 T1S R66W	538	134	928	102
Davis	Sec. 20 T1S R66W	578	58	960	111
Koch-Pollard	Sec. 28 T1S R66W	625	102	1080	125
Amend	Sec. 30 T1S R66W	580	91	970	144
Reasoner	Sec. 32 T1S R66W	695	104	1110	121

TABLE II

## Non-Tributary Ground Water Availability

Property Area/ Formation (AC)	Sand Thickness (FT)	Specific Yield	100 Years	Annual Appropriation (AF/YR)
<u>Main Property</u>				
Arapahoe 1316	110	.17	100	246
Laramie Fox Hills 1316	120	.15	100	<u>237</u>
			TOTAL	483
<u>South Property</u>				
Arapahoe 116	110	.17	100	22
Laramie Fox Hills 116	120	.15	100	<u>21</u>
			TOTAL	43

TABLE III

THIRD CREEK RANCH WATER ANALYSIS  
(Approximately 1400 Acres)

PROPERTY	TOTAL ACRES	EST. IRRIGATED	DITCH RIGHTS/AF	TRIB WELLS - GPM	NON-TRIB WELLS	EST. NON-TRIB WTR	EST. CU WATER
1. Hurst	204	-0-	None	None	None	82 AF	None
2. Heitschmidt	312	270	15 Shares B&W - 117	None	None	125 AF	200 AF
3. Custer	227	200	30 Shares B&W - 270	None	None	90 AF	200 AF
4. Supers	116	80	15 Shares Burl - 90	1 @ 800 GPM	None	46 AF	100 AF
5. Davis	400	360 <sup>3.</sup>	None	4 @ 300 GPM <sup>4.</sup>	None	160 AF	200 AF
6. Northglenn	20	-0-	Reservoir Only	None	None	8 AF	N.A.
7. Fuller	116	80	8 Shares B&W - 72 8 Shares Burl - 48	None	None	46 AF	100 AF
8. Palumbo	37	-0-	None	None	None	15 AF	N.A.
TOTAL	1432	990	Acre Feet = 597 <sup>5.</sup>	5 @ 2000 GPM	None	572 AF	800 AF

1. Arapahoe and Laramie-Fox Hills only - all quoted in annual acre feet - average estimated to be .4 AF of non-tributary water per acre.
2. Estimated at 1.5 acre feet per acre of irrigated land (shallow wells or ditch rights). Some land use both wells and ditch rights.
3. Irrigated with both wells and ditch rights. Ditch rights sold off. Estimated 60-40 use of ditch to well water.
4. These four wells included in the Northern Colorado Water Conservancy District.
5. Did not add this column into total water rights available. The consumptive use would appear in "Estimated CU" column.

THE WATER COURT IN AND FOR  
WATER DIVISION I, STATE OF COLORADO  
CASE NO. W-2325

THE MATTER OF THE APPLICATION FOR  
WATER RIGHTS OF

DAVIS ANGUS FARMS

in Adams County

FINDINGS AND RULING  
OF THE REFEREE

THIS CLAIM, having been filed with the Water Clerk, Water Division I,  
on April 10, 1972 and the Referee being fully advised in the premises,  
I hereby find:

All notices required by law of the filing of this application have  
been fulfilled, and the Referee has jurisdiction of this application.

No statement of opposition to said application has been filed, and  
the time for filing such statement has expired.

All matters contained in the application having been reviewed, and  
testimony having been taken where such testimony is necessary, and such  
corrections made as are indicated by the evidence presented herein,

IT IS HEREBY DECREED:

1. The name and address of the claimant:

Davis Angus Farms  
P.O. Box 287  
Wheat Ridge, Colorado 80030

2. The name of the structures to which a right is hereby Decreed:

Well No. 13526  
Well No. 13527  
Well No. 13528  
Well No. 13529  
Well No. 13530

3. The legal description of the structures:

Well No. 13526 is located in the SW $\frac{1}{4}$  SW $\frac{1}{4}$  of Section 20, Township 1  
South, Range 66 West of the 6th P.M., Adams County, Colorado, at  
a point 1020' E and 45' N of the SW section corner, said Section 20.

Well No. 13527 is located in the SE $\frac{1}{4}$  NW $\frac{1}{4}$  of Section 20, Township 1  
South, Range 66 West of the 6th P.M., Adams County, Colorado, at a  
point 364' E and 16' N of the SW corner of SE $\frac{1}{4}$  NW $\frac{1}{4}$ , said Section 20

Well No. 13528 is located in the SE $\frac{1}{4}$  NW $\frac{1}{4}$  of Section 20, Township 1  
South, Range 66 West of the 6th P.M., Adams County, Colorado, at a  
point 2168' E of W section line, 2614' S of N section line, said  
Section 20.

Well No. 13529 is located in the SW $\frac{1}{4}$  SE $\frac{1}{4}$  of Section 19, Township 1  
South, Range 66 West of the 6th P.M., Adams County, Colorado, at a  
point 902' E and 150' N of the SW corner, said Section 19.

Well No. 13530 is located in the NW $\frac{1}{4}$  NW $\frac{1}{4}$  of Section 24, Township 1  
South, Range 67 West of the 6th P.M., Adams County, Colorado, at a  
point 1270' E of W section line, 40' S of N section line, said  
Section 24.

FILED  
APR 11 1972  
WATER DIVISION I  
ADAMS COUNTY

4. The source of water is: Groundwater

5. The dates of appropriation:

Well No. 13526: April 30, 1932  
Well No. 13527: April 30, 1932  
Well No. 13528: April 30, 1934  
Well No. 13529: April 30, 1940  
Well No. 13530: April 30, 1950

6. The amount of water:

Well No. 13526: 2 cubic feet per second (899.56 gpm)  
Well No. 13527: 2.35 cubic feet per second (1058.4 gpm)  
Well No. 13528: 1.48 cubic feet per second (665.18 gpm)  
Well No. 13529: 2.7 cubic feet per second (1218.84 gpm)  
Well No. 13530: 2.34 cubic feet per second (1052.54 gpm)

7. The use of the water:

Well No. 13526: Irrigation of 160 acres in the SW $\frac{1}{4}$  of Section 20, Township 1 South, Range 66 West of the 6th P.M., Adams County, Colorado.

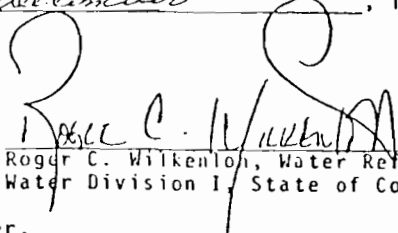
Well No. 13527: Irrigation of 120 acres in the E $\frac{1}{2}$  of NW $\frac{1}{4}$ , Section and SE $\frac{1}{4}$  SW $\frac{1}{4}$  of Section 17, Township 1 South, Range 66 West of the 6th P.M., Adams County, Colorado.

Well No. 13528: Irrigation of 120 acres in the E $\frac{1}{2}$  of NW $\frac{1}{4}$ , Section and SE $\frac{1}{4}$  SW $\frac{1}{4}$  of Section 17, Township 1 South, Range 66 West of the 6th P.M., Adams County, Colorado.

Well No. 13529: Irrigation of 160 acres in the SE $\frac{1}{4}$  of Section 19, Township 1 South, Range 66 West of the 6th P.M., Adams County, Colorado.

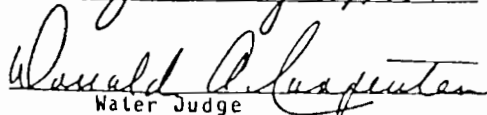
Well No. 13530: Irrigation of 150 acres in the NW $\frac{1}{4}$  Section 24, Township 1 South, Range 66 West of the 6th P.M., Adams County, Colorado.

DATED this 22<sup>nd</sup> day of December, 1972.

  
Roger C. Wilkenlon, Water Referee  
Water Division I, State of Colorado

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: January 11, 1973

  
Donald A. Carpenter  
Water Judge

WR 75 72  
THIS FORM MUST BE  
SUBMITTED PRIOR TO  
THE EXPIRATION OF THE  
PERMIT TYPE OR  
PRINT IN BLACK INK

COLORADO DIVISION OF WATER RESOURCES

101 Columbine Bldg. 1845 Sherman St.  
Denver, Colorado 80203

STATEMENT OF BENEFICIAL USE OF GROUND WATER  
X AMENDMENT OF EXISTING RECORD

Registration - General 1 and 2 from 17 to 1941  
PERMIT NUMBER 13526 R

STATE OF COLORADO  
COUNTY OF ADAMS

SS

THE AFFIANT(S) MEL W. DAVIS for DAVIS ANGUS FARMS

whose address is Post Office Box 287, Wheatridge, Colorado 80033

being duly sworn upon oath, deposes and says that he (they) is (are) the owner(s) of the well described hereon the well is

located in the SW 1/4 of the SW 1/4 of Section 20 Township 1 S

Range 66 W 6th P.M. at distances of 15' North; section line

and 10201' East feet from the West section line; the total depth of the well is 39 feet water from this well

was first applied to a beneficial use for the purposes described herein on the 1st day of April 19 32

the maximum sustained pumping rate of the well is 410 (.91 cfs) gallons per minute the pumping rate claimed hereby is 410

gallons per minute; the average annual amount of water to be diverted is 109 acre feet for which claim is hereby

made for irrigation purpose(s); the legal description of the land on which the water

from this well is to be used is XXXXX 1/4 of Sec. 20, T. 1, R. 66 W. of 4th T. 1.

which totals 160 acres and which is illustrated on the map on the reverse side of this form that this well was completed in compliance with the permit approved therefor; this statement of beneficial use of ground water is filed in compliance with law; he (they) has (have) read the statements made hereon knows the content thereof, and that the same are true of his (their) knowledge.

Signature(s) *Mel W. Davis*

Subscribed and sworn to before me on this February 19 72

My Commission expires *March 1973*

ACCEPTED FOR FILING IN THE OFFICE OF THE STATE ENGINEER OF COLORADO ON THIS DAY OF 19

STATE ENGINEER

WHITE COPY FOR DIVISION OF WATER RESOURCES  
PINK COPY FOR WELL OWNER

FOR OFFICE USE ONLY			
Prior Date			19
Well Use	6		
T	R	Sec	P.M.
Yield	WD	1-0.2	
Co	01		
Index			

WA 125 72

THIS FORM MUST BE  
SUBMITTED IN DUPLICATE TO  
THE EXAMINER OF THE  
PERMIT TYPE OR  
PRINT IN BLACK INK.

### COLORADO DIVISION OF WATER RESOURCES

101 Columbine Bldg., 1845 Sherman St.  
Denver, Colorado 80203

#### STATEMENT OF BENEFICIAL USE OF GROUND WATER X AMENDMENT OF EXISTING RECORD

Registration - Correc: [unclear] 1-1-63  
X PERMIT NUMBER 13527

STATE OF COLORADO  
COUNTY OF ADAMS

SS

THE AFFIANT(S) MEL W. DAVIS for DAVIS ANGUS FARMS

whose address is Post Office Box 287, Wheatridge, Colorado 80033

being duly sworn upon oath, deposes and says that he (they) is (are) the owner(s) of the well described hereon: the well is

located in the SE  $\frac{1}{4}$  of the NW  $\frac{1}{4}$  of Section 20 Township 1 S

Range 66 W 6th P.M. at distances of 1226 feet from the North section line  
(North or South)

and 1021 feet from the West section line. the total depth of the well is 28 feet; water from this well  
(East or West)

was first applied to a beneficial use for the purpose(s) described herein on the 1st day of April, 19 32

the maximum sustained pumping rate of the well is 700 (1.55 cfs) gallons per minute the pumping rate claimed hereby is 700

gallons per minute; the average annual amount of water to be diverted is 186 acre feet, for which claim is hereby

made for irrigation purpose(s); the legal description of the land on which the water

from this well is to be used is SE part of NE of SW of Sec. 20, T. 1 S., R. 66 W. of 6th P.M.

which totals 120 acres and which is illustrated on the map on the reverse side of this form. that this well was completed in compliance with the permit approved therefor; this statement of beneficial use of ground water is filed in compliance with law; he (they) has (have) read the statements made hereon, knows the content thereof, and that the same are true of his (their) knowledge.

Signature(s) Mel W. Davis  
for Mel W. Davis

Subscribed and sworn to before me on this 2nd day of

February, 19 72

My Commission expires March 1974  
Bartholomew  
Notary Public

ACCEPTED FOR FILING IN THE OFFICE OF THE STATE ENGINEER OF  
COLORADO ON THIS      DAY OF      19     

STATE ENGINEER

WHITE COPY FOR DIVISION OF WATER RESOURCES  
PINK COPY FOR WELL OWNER

#### FOR OFFICE USE ONLY

Permit Date      19       
Well Use 6  
 $\frac{1}{4}$   $\frac{1}{4}$   $\frac{1}{4}$  Sec  
T      R      P.M.       
Yield      W.D. 1-02  
Cc 61  
INDEX

WR 25 72

THIS FORM MUST BE SUBMITTED PRIOR TO THE EXPIRATION OF THE PERMIT. TYPE OR PRINT IN BLACK INK.

COLORADO DIVISION OF WATER RESOURCES

101 Columbine Bldg., 1845 Sherman St. Denver, Colorado 80203

STATEMENT OF BENEFICIAL USE OF GROUND WATER  
X AMENDMENT OF EXISTING RECORD

Registration - Correct from 1971 to 1972  
PERMIT NUMBER 13528 A

STATE OF COLORADO  
COUNTY OF ADAMS

SS

THE AFFIANT(S) MEL W. DAVIS for DAVIS ANGUS FARMS

whose address is Post Office Box 287, Wheatridge, Colorado 80033

being duly sworn upon oath, deposes and says that he (they) is (are) the owner(s) of the well described hereon, the well is

located in the SE 1/4 of the SW 1/4 of Section 20 Township 1 S Range 66 W 6th P.M. at distances of 1344 feet from the North section line and 2168 feet from the South section line the total depth of the well is 30.7 feet water from this well

was first applied to a beneficial use for the purpose(s) described herein on the 1st day of April 1934

the maximum sustained pumping rate of the well is 290 (.644 cfs) gallons per minute the pumping rate claimed hereby is 290

gallons per minute; the average annual amount of water to be diverted is 76.8 acre feet for which claim is hereby

made for irrigation purpose(s). the legal description of the land on which the water

from this well is to be used is 1/4 of SW 1/4 part of Section 20, T. 1 S., R. 66 W.,

which totals 120 acres and which is illustrated on the map on the reverse side of this form, that this well was completed in compliance with the permit approved therefor, this statement of beneficial use of ground water is filed in compliance with law, he (they) has (have) read the statements made hereon, knows the content thereof, and that the same are true of his (their) knowledge.

Signature(s) *Mel W. Davis*

Subscribed and sworn to before me on this 2nd day of

February 1972

My Commission expires (month)

ACCEPTED FOR FILING IN THE OFFICE OF THE STATE ENGINEER OF

COLORADO ON THIS DAY OF 19

STATE ENGINEER

WHITE COPY FOR DIVISION OF WATER RESOURCES  
PINK COPY FOR WELL OWNER

FOR OFFICE USE ONLY

Prior Date	19	
Well Use	6	
1/4	1/4 Sec	
T	R	P.M.
Yield	wd/- 02	
Co	01 -	
Index		



WRL 20 21  
THIS FORM MUST BE  
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PERMIT. TYPE OR  
PRINT IN BLACK INK

COLORADO DIVISION OF WATER RESOURCES

101 Columbine Bldg., 1845 Sherman St.  
Denver, Colorado 80203

*slc*

STATEMENT OF BENEFICIAL USE OF GROUND WATER  
X AMENDMENT OF EXISTING RECORD

Registration - ~~015829~~ *15829* ~~197 to 607~~  
PERMIT NUMBER

STATE OF COLORADO  
COUNTY OF ADAMS

SS

THE AFFIANT(S) MEL W. DAVIS for DAVIS ANGUS FARMS

whose address is Post Office Box 267, Wheatridge, Colorado 80033

being duly sworn upon oath, deposes and says that he (they) is (are) the owner(s) of the well described hereon: the well is

located in the SW 1/4 of the SE 1/4 of Section 19 Township 1 S  
Range 66 W 6th P.M. at distances of 100 feet from the North of section line  
and 3547 feet from the East of section line the total depth of the well is 49 feet. water from this well  
(East of West) (North of South)

was first applied to a beneficial use for the purposes described herein on the 1st day of April 1940

the maximum sustained pumping rate of the well is 700 (1.55 cfs) gallons per minute. the pumping rate claimed hereby is 700

gallons per minute; the average annual amount of water to be diverted is 186 acre feet. for which claim is hereby

made for irrigation purpose(s): the legal description of the land on which the water

from this well is to be used is SW 1/4 of SE 1/4 of Sec. 19, T. 1 S, R. 66 W of 6th P.M.

which totals 160 acres and which is illustrated on the map on the reverse side of this form. that this well was completed in compliance with the permit approved therefor; this statement of beneficial use of ground water is filed in compliance with law; he (they) has (have) read the statements made hereon; knows the content thereof; and that the same are true of his (their) knowledge.

Signature(s) *Mel W. Davis*

Subscribed and sworn to before me on this day of

*February* 1972

My Commission expires

*February 1973*

ACCEPTED FOR FILING IN THE OFFICE OF THE STATE ENGINEER OF

COLORADO ON THIS DAY OF 19

STATE ENGINEER

WHITE COPY FOR DIVISION OF WATER RESOURCES  
PINK COPY FOR WELL OWNER

FOR OFFICE USE ONLY

Prior Date 19

Well Use *6*

1/4 1/2 3/4 Sec

T P P.M.

Yield WD *1-02*

Co *01*

Index

IN THE WATER COURT IN AND FOR  
WATER DIVISION I, STATE OF COLORADO

CASE NO. W- 2774

**CENTRAL FILES**

IN THE MATTER OF THE APPLICATION FOR )  
WATER RIGHTS OF )  
ALVIN & KATHRYN LOUISE )  
LAYTON )  
IN Adams County )

FINDINGS AND RULING  
OF THE REFEREE

THIS CLAIM, having been filed with the Water Clerk, Water Division I  
on May 22, 1972 and the Referee being fully advised in the  
premises, does hereby find:

All notices required by law of the filing of this application have  
been fulfilled, and the Referee has Jurisdiction of this application.

No statement of opposition to said application has been filed, and  
the time for filing such statement has expired.

All matters contained in the application having been reviewed, and  
testimony having been taken where such testimony is necessary, and such  
corrections made as are indicated by the evidence presented herein,

IT IS HEREBY DECREED:

1. The name and address of the claimant:

Alvin & Kathryn Louise Layton  
P. O. Box 153  
Brighton, Colorado 80601

2. The name of the structures to which a right is hereby Decreed:

Well No. 1-12267  
Well No. 2-12268  
Well No. 3-51397

3. The legal description of the structures:

Well No. 1-12267 is located 1424 feet South and 1216 feet  
East of the NW Corner of Section 20, Township 1 South, Range  
66 West of the 6th P.M., Adams County, Colorado.

Well No. 2-12268 is located 2088 feet South and 20 feet East  
of the NW Corner of Section 20, Township 1 South, Range 66  
West of the 6th P.M., Adams County, Colorado.

Well No. 3-51397 is located 1424 feet South and 1226 feet  
East of the NW Corner of Section 20, Township 1 South, Range  
66 West of the 6th P.M., Adams County, Colorado.

4. The source of water is: Groundwater

5. The date of appropriation:

Well No. 1-12267:	December 31, 1948
Well No. 2-12268:	April 30, 1956
Well No. 3-51397:	December 31, 1892

6. The amount of water:

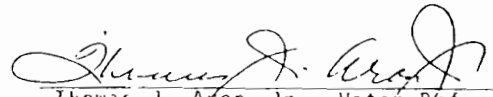
Well No. 1-12267:	0.5 cubic feet per second
Well No. 2-12268:	0.1 cubic feet per second
Well No. 3-51397:	0.027 cubic feet per second

7. The use of the water:

Well No. 1-12267 and Well No. 2-12268: Irrigation of approximately 40 acres in the SW $\frac{1}{4}$  of NW $\frac{1}{4}$  of Section 20, Township 1 South, Range 66 West of the 6th P.M., Adams County, Colorado.

Well No. 3-51397: Domestic

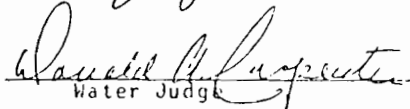
DATED this 13<sup>th</sup> day of June, 1973.



Thomas J. Aron, Jr., Water Referee  
Water Division 1, State of Colorado

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: July 10, 1973



Water Judge

STATE OF COLORADO  
DIVISION OF WATER RESOURCES  
OFFICE OF THE STATE ENGINEER, GROUND WATER SECTION

RECEIVED

APR 22 1960

REGISTRATION NO. 12214 OF WELL # 2

Registrant Blair LAYTON Date April 19 1960

P.O. Address Rt 1 Box 67 Brighton Colo.

WELL DATA  
Depth 31 ft. Diameter 3 1/2 in.

Casing: 25 ft. Plain; 6 ft. Perfor.

Static Water Level 18 ft. from top

Yield 300 (gpm)(cfs) from \_\_\_\_\_ ft.

Used for Irrigation on/at \_\_\_\_\_

(legal description of land or site)

Water conveyed by \_\_\_\_\_ size 4

PUMP DATA  
Type turbine Size \_\_\_\_\_

Driven by 3 hp motor at \_\_\_\_\_ RPM

Well was first used spring 1953

for irrigation usage \_\_\_\_\_ gpm

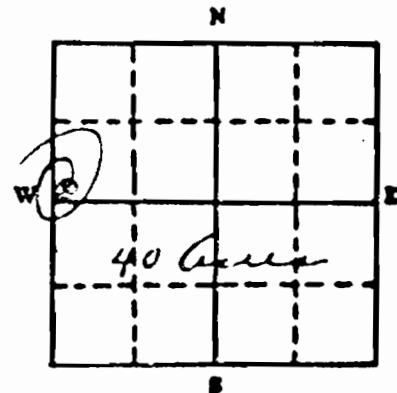
Well enlarged \_\_\_\_\_, 19   to  
deepened \_\_\_\_\_ (gpm)(cfs)(ft)

LOG SHOULD BE GIVEN ON REVERSE  
SIDE IF AVAILABLE

WELL LOCATION  
County ADAMS

SW Section 20

Twp. 16 Rge. 16W 6 PM



WELL TO BE LOCATED AS ACCURATELY AS POSSIBLE WITHIN A SMALL SQUARE WHICH REPRESENTS 40 ACRES; OR IF IN A TOWN OR SUBDIVISION FILL IN THE FOLLOWING:

Town or subdivision

Street address or Lot and block

The above well (has) (has not) been registered in the Office of the State Engineer prior to May 1, 1957. If Registered give Filing No. \_\_\_\_\_.

If NOT Registered prior to May 1, 1957, a \$5.00 filing fee accompanies this form.

The above statements are true and correct to the best of my knowledge and belief.  
Subscribed and Sworn before me

this 21 day of April, 1960

My commission expires April 2, 1961

(SEAL) Charles H. H. H.  
Notary Public

Blair Layton  
Registrant

FOR STATE ENGINEER'S USE  
Located in 12 district, Adams County for IRRIGATION

Registration No. 910 in 1-2 on APP 22 1960, 19

STATE OF COLORADO  
DIVISION OF WATER RESOURCES  
OFFICE OF THE STATE ENGINEER, GROUND WATER SECTION

RECEIVED

APR 22 1960

REGISTRATION NO. 12267 OF WELL # 1

STATE ENGINEER

Registrant FLYNN LAYTON Date April 19 1960

P.O. Address Brighton Colo R<sup>2</sup> 1 <sup>Dist 87</sup> Colo.

WELL LOCATION

County ADAMS 01

WELL DATA  
Depth 32 ft. Diameter 4 1/4 in.

SW 1/4 NW 1/4 Section 20

Casing: 20 - ft. Plain; 12 ft. Perfor. 18'

Twp. 160 Rge. 6W 6 PM

Static Water Level 18 ft. from top

Yield 150 (gpm)(cfs) from \_\_\_\_\_ ft.

Used for Irrigation on/at \_\_\_\_\_

(legal description of land or site)

Water conveyed by \_\_\_\_\_ size \_\_\_\_\_

PUMP DATA

Type hand Size 6"

Driven by Shallow Water at \_\_\_\_\_ RPM

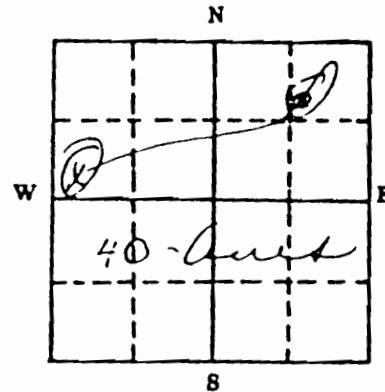
Well was first used Spring 1948

for Irrigation using 150 cfs gpm

Well enlarged \_\_\_\_\_, 19    to deepened \_\_\_\_\_

(gpm)(cfs)(ft)

LOG SHOULD BE GIVEN ON REVERSE SIDE IF AVAILABLE



WELL TO BE LOCATED AS ACCURATELY AS POSSIBLE WITHIN A SMALL SQUARE WHICH REPRESENTS 40 ACRES; OR IF IN A TOWN OR SUBDIVISION FILL IN THE FOLLOWING:

Town or Subdivision \_\_\_\_\_

Street address or Lot and Block \_\_\_\_\_

The above well (has) (has not) been registered in the Office of the State Engineer prior to May 1, 1957. If Registered give Filing No. \_\_\_\_\_

If NOT Registered prior to May 1, 1957, a \$5.00 filing fee accompanies this form.

The above statements are true and correct to the best of my knowledge and belief. Subscribed and Sworn before me

this 21 day of April, 1960

My commission expires Apr. 2, 1961

(SEAL)

Notary Public

Alvin Layton  
Registrant

FOR STATE ENGINEER'S USE

Located in 1-2 district, Adams County for IRRIGATION

Registration No. 909 in 1-2, on APR 2 - 1960, 19

IN THE WATER COURT            HD FOR  
WATER DIVISION I, STATE OF COLORADO  
CASE NO. W-2824

IN THE MATTER OF THE APPLICATION FOR ) WATER RIGHTS OF                             ) ) ) ) MELVIN E. KUSTER                         ) ELDOOR E. & MARIAN C. KUSTER         ) IN Adams County                            )	FINDINGS AND RULING OF THE REFEREE
--	---------------------------------------

THIS CLAIM, having been filed with the Water Clerk, Water Division I, on May 24, 1972 and the Referee being fully advised in the premises, does hereby find:

All notices required by law of the filing of this application have been fulfilled, and the Referee has Jurisdiction of this application.

No statement of opposition to said application has been filed, and the time for filing such statement has expired.

All matters contained in the application having been reviewed, and testimony having been taken where such testimony is necessary, and such corrections made as are indicated by the evidence presented herein,

IT IS HEREBY DECREED:

1. The name and address of the claimant:
  - Melvin E. Kuster
  - Eldor E. and Marian C. Kuster
  - Route 3, Box 294
  - Brighton, Colorado 80601
  
2. The name of the structures to which a right is hereby Decreed:
  - Well No. 1-Unregistered
  - Well No. 2-Unregistered
  - Well No. 3-Unregistered
  - Well No. 4-Unregistered
  - Well No. 5-00683
  
3. The legal description of the structures:
  - Well No. 1-Unregistered is located in the NE¼ of NE¼ of Section 20, Township 1 South, Range 66 West of the 6th P.M., Adams County, Colorado, at a point 1250 feet South and 192 feet West of the NE Corner of said Section 20.
  - Well No. 2-Unregistered is located in the NE¼ of NE¼ of Section 20, Township 1 South, Range 66 West of the 6th P.M., Adams County, Colorado, at a point 1250 feet South and 132 feet West of the NE Corner of said Section 20.
  - Well No. 3-Unregistered is located in the SE¼ of SE¼ of Section 17, Township 1 South, Range 66 West of the 6th P.M., Adams County, Colorado, at a point 320 feet North and 850 feet West of the SE Corner of said Section 17.

Well No. 4-Unregistered is located in the SE $\frac{1}{4}$  of SE $\frac{1}{4}$  of Section 17, Township 1 South, Range 66 West of the 6th P.M., Adams County, Colorado, at a point 264 feet North and 1000 feet West of the SE Corner of said Section 17.

Well No. 5-00683 is located in the SE $\frac{1}{4}$  of SE $\frac{1}{4}$  of Section 17, Township 1 South, Range 66 West of the 6th P.M., Adams County, Colorado, at a point 264 feet North and 980 feet West of the SE Corner of said Section 17.

4. The source of water: Groundwater

5. The date of appropriation:

Well No. 1-Unregistered:	December 31, 1920
Well No. 2-Unregistered:	December 31, 1936
Well No. 3-Unregistered:	December 31, 1940
Well No. 4-Unregistered:	December 31, 1935
Well No. 5-00683:	January 7, 1958

6. The amount of water:

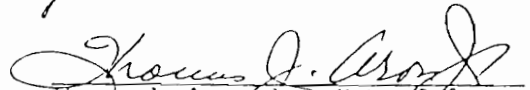
Well No. 1-Unregistered:	0.022 cubic feet per second
Well No. 2-Unregistered:	0.022 cubic feet per second
Well No. 3-Unregistered:	0.017 cubic feet per second
Well No. 4-Unregistered:	0.022 cubic feet per second
Well No. 5-00683:	0.026 cubic feet per second

7. The use of the water:

Well No. 1-Unregistered and Well No. 3-Unregistered: Stock watering


Well No. 2-Unregistered, Well No. 4-Unregistered and Well No. 5-00683: Domestic

DATED this 20<sup>th</sup> day of July, 1973.

  
Thomas J. Aron, Jr., Water Referee  
Water Division 1, State of Colorado

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: August 9, 1973

  
Donald A. Laszlo  
Water Judge

EXHIBIT

ENGINEERING REPORT



THIRD CREEK RANCH  
METROPOLITAN DISTRICT  
FACILITIES REQUIREMENTS

Prepared For

COLORADO DEVELOPMENT CONSULTING SERVICES  
Intrawest Bank Building  
10701 Melody Drive, Suite 500  
Northglenn, Colorado 80234

Prepared By:

THE CIVIL DESIGN GROUP, INC.  
2905 Center Green Court South, Suite C  
Boulder, Colorado 80301

April, 1985  
CDG Job Number 1000-17

## TABLE OF CONTENTS

- I. Introduction
- II. Water System Service Parameters
- III. Wastewater System
- IV. Street System
- V. Drainage
- VI. Parks and Recreation
- VII. Maintenance and Operations
- VIII. Cost Summary
- IX. Phasing

## I. INTRODUCTION

The purpose of this report is to determine, at the feasibility level, the capital costs associated with the Third Creek Ranch Metropolitan District.

The proposed District is located in Adams County, Colorado in the general area immediately south of Brighton and west of I-76. The district includes 1500 acres which is to be developed into residential and commercial sites. Figure 1 shows the Third Creek Ranch properties as related to the City of Brighton and the proposed Stapleton airport expansion.

To estimate the capital costs, the District services must be established and reasonable parameters for these services must be developed. The Third Creek Ranch District will provide the following services:

- 1) Water
- 2) Wastewater
- 3) Street Improvements
- 4) Major Drainage
- 5) Regional Park

Remaining sections of this report will summarize service parameters and service costs.

## II. WATER SYSTEM

The proposed Third Creek District will serve approximately 1500 acres in Adams County. Potential land uses are as follows:

Light Industrial	-	2,000,000 square feet
Office/Retail	-	2,500,000 square feet
Residential	-	3,750 units single family detached
Residential	-	2,500 units single family attached

These land uses are developed to provide a basis for determining water and wastewater requirements.

To provide the necessary water service, the raw water supply must be capable of delivering the following:

Light Industrial (0.06 gal/day/sq. ft.)	-	135 Ac. Ft./Year
Office/Retail (0.10 gal/day/sq. ft.)	-	280 Ac. Ft./Year
Residential (0.5 Ac. Ft./Single Family Detached) (0.4 Ac. Ft./Single Family Attached)	-	3425 Ac. Ft./Year
	TOTAL	3840 Ac. Ft./Year

The District plans to provide 4000 Ac. Ft./Year of raw water from alluvial (tributary) and deep (non-tributary) wells. The non-tributary wells will deliver an estimated 526 acre-feet per year, and will provide a portion of the "make-up" water necessary for the District's water augmentation plan. In addition to the non-tributary wells, surface water rights will be used to augment the alluvial well supply.

The water supply system consists of raw water collection, water treatment, treated water storage, and treated water distribution. The water system schematic (Figure 2) shows the major components of the system. The water from alluvial wells will be chlorinated and pumped directly to the distribution system or, if necessary, collected and treated prior to chlorination. The major distribution grid is estimated as 16" and 12" lines for the northern system and 8" lines for the southern system. Treated water storage is provided for each system -- 2.0 million gallons for the northern system and 0.5 million gallons for the southern system. The major water system service components are as follows:

A. NORTHERN SYSTEM	-	1384 Acres
Average Yearly Demand	-	3670 Acre Feet
Average Daily Demand	-	3.3 MGD (2290 gpm)
Peak Day Demand	-	6.6 MGD (4580 gpm)
Peak Hour Demand	-	6870 gpm

Fireflow	-	3000 gpm (1500 gpm to any two residential areas)
		Use 3000 gpm
Peak Design	-	6870 gpm (Peak Hour)
	-	7580 gpm (Peak Day + Fireflow)
	-	Use 7580 gpm
Storage		
Pumping Equalization	-	1.35 MG (30% Peak Day)
Fireflow	-	.72 MG (3000 gpm at 4 hours)
TOTAL	-	2.07 MG

With standby power for 2300 GPM (greater than average daily flow), use 2.0 MG storage.

B. SOUTHERN SYSTEM	-	116 Acres
Yearly Demand	-	170 Acre Feet
Average Daily Demand	-	150,000 GPD (105 gpm)
Peak Day Demand	-	300,000 GPD (210 gpm)

Peak Hour	-	315 gpm
Fireflow	-	2000 gpm
Storage	-	30% Peak Day - 108,000 gal. 2000 gpm (4 hours) - 480,000 gal.
		Provide standby power for 1000 gpm well and 500,000 gal. storage.

The water system will be designed to provide a residual pressure of 20 psi at fire hydrants during peak demand and to provide 50 psi minimum in the mains during normal demands. To verify the feasibility estimate and to optimize the system, a water system model will be developed as a part of the master planning effort (after District formation). This model will assist in optimizing well pumping schedules, distribution grid line sizes, and booster pump sizes.

Based on the facilities schematic, the following is an estimate of capital costs:

#### Supply

1 Alluvial Well	\$	50,000
8 Non-tributary Wells	\$	400,000
Refurbish Existing Wells	\$	125,000
Standby Power	\$	40,000
Chlorination	\$	90,000
		<hr/>
	\$	705,000

Storage

2.0 MG (\$0.30/gal)	\$ 500,000
0.5 MG (\$0.40/gal)	\$ 200,000
	<u>800,000</u>

Distribution

Booster Stations/Standby Power	\$ 327,000
18,500' - 16" (\$35)	\$ 647,500
20,100' - 12" (\$25)	\$ 502,500
13,400' - 8" (\$20)	\$ 268,000
	<u>1,745,000</u>

SUBTOTAL	\$ 3,250,000
Contingency	\$ 650,000
TOTAL WATER	\$ 3,900,000



### III. WASTEWATER SYSTEM

The wastewater system will provide for the collection and transportation of wastewater to the City of Brighton for treatment. The wastewater will be treated to secondary standards and returned to the South Platte River.

The wastewater system components are sized as follows:

Average Daily Flow	-	2.2 million gallons (65% water return flow)
Peak Flow	-	5.5 million gallons per day (2.5 peaking factor for trunk line)

Collection of wastewater would be accomplished with 10", 12", and 15" trunk lines with wastewater treatment being provided by the City of Brighton. This system would require pump stations and force mains to consolidate flows within the District. Wastewater would then be transported from the District to Brighton through an 18" trunk line to the Brighton wastewater treatment plant. Figure 3 shows the major components of the system.

The wastewater treatment facilities are estimated to have the following capital costs:

Collection (Trunk and Force Main)

2500'	- 15" Sewer Line (\$21)	-	\$	52,500
1200'	- 12" Sewer Line (\$18)	-	\$	21,500
14,000'	- 10" Sewer Line (\$15)	-	\$	210,000
9500	- 6" Force Main (\$10)	-	\$	95,000
40	Manholes (\$1000)	-	\$	40,000
				<u>419,000</u>

Lift Stations - \$ 200,000

Offsite Trunk Line

21,000'	- 18" Sewer Line (\$35)	-	\$	735,000
42	Manholes	-	\$	70,000
				<u>805,000</u>

SUBTOTAL \$ 1,505,000

Contingency \$ 395,000

TOTAL WASTEWATER SYSTEM \$ 1,900,000

#### IV. STREET SYSTEM

The street system is based on developing a grid of arterials and collectors to provide efficient circulation within the project area. The major streets are classified as follows:

Parkway -

Buckley Road

Arterial -

Sable Road

144th Ave.

136th Ave.

Tower Road

Collector

Approximately 1/2 mile grid

Figure 5 is a schematic of the proposed major road system. The street sections are shown in Figure 4, and the structural sections are estimated as 4" asphalt/12" base for the arterials and 3" asphalt/8" base for the collectors. The cost estimates are based on the length of street that is adjacent to the property. The streets which have District frontage on one side only are estimated as half-width streets.

The capital cost for streets are projected as follows:

Parkway

6700'	Full-width	(\$190)	\$ 1,273,000
1350'	Half-width	(\$ 95)	\$ 128,250
			<u>                    </u>
			\$ 1,401,250

Arterial

10,200'	Full-width	(\$150)	\$ 1,530,000
13,100'	Half-width	(\$ 75)	\$ 982,500
			<u>                    </u>
			\$ 2,512,500

Collector

14,500'	Full-width	(\$120)	\$ 1,740,000
11,300'	Half-width	(\$ 60)	\$ 714,000
			<u>                    </u>
			\$ 2,454,000

SUBTOTAL \$ 6,367,750

Contingency \$ 1,032,250

TOTAL \$ 7,400,000

## V. DRAINAGE

### Storm Drainage

The drainage improvements for Third Creek Metropolitan District provide for the control and release of additional storm runoff generated by the proposed development. The storm runoff is controlled utilizing open channels, piping, and regional detention ponds. These improvements will be designed to safely pass the 100 year storm event and provide for adequate protection of downstream areas.

The drainage basin under consideration is approximately 2060 acres including 660 acres outside the district boundary. The historic runoff is intercepted by two irrigation ditches before reaching Third Creek. Near the center of the drainage area there are a number of small lakes, and it is assumed 150 acres of the drainage basin has historically drained to these lakes.

The hydrologic analysis is based on the Soil Conservation Service Method for determining runoff utilizing the TR-20 computer program. Both historic and proposed development conditions were investigated. The sizes and general locations of the drainage improvements were estimated utilizing the peak flow rates, runoff volumes and flood hydrographs generated from the computer program.

The enclosed drainage sketch indicates the approximate locations of the drainage improvements. Individual developments located within drainage basin number one will be required to have on-site detention

ponds with controlled release rates based on the historic minor storm event. These ponds will release at this historical rate to the Brighton Ditch Lateral as shown on the drainage sketch. The 100 year storm event will be released into this lateral with flow rates greater than historical carried away by overflow structures into drainage channels. The 100 year overflow rate and all of the drainage within basin number two will be routed through a regional detention pond located within the park and open space area. This pond is sized for the 100 year storm event for drainage basins number one and two. All major drainage carriers within the development are proposed to be grass lined open channels with concrete trickle channels. The offsite major drainage carrier is proposed to be drainage pipe or open channel depending on the downstream land use and right of way conditions. This pipe or channel will empty directly into Third Creek. The storm drainage facilities are estimated as follows:

Open Channel	12,000 L.F. (\$90/L.F.)	\$ 1,080,000
60" RCP	4,500 L.F. (\$120/L.F.)	\$ 540,000
Regional Detention Ponds		\$ 205,000
Release Structures		\$ 75,000
 SUBTOTAL		 \$ 1,900,000
Contingency		\$ 500,000
TOTAL		\$ 2,400,000

VI. PARKS AND RECREATION

The plan provides for a regional park of 100 acres. This includes picnic shelters, hike/bike trail, bluegrass areas with sprinklers, plantings, parking, and passive or native areas.

This system is estimated as follows:

100 Acres @ \$40,000/Acre	\$ 4,000,000
Contingency	\$ 800,000 -----
TOTAL	\$ 4,800,000

## VII. MAINTENANCE AND OPERATIONS

The District will be responsible for the maintenance and operation of the water system, sewer system, off-street drainage system, and the regional park. Adams County will maintain the streets. Upon annexation to the City of Brighton, the maintenance and operations activities will become the responsibility of the City.

Funds for maintenance will be derived from monthly water, sewer, and storm drainage utilities charges and from a parks and recreation fee collected by the District.

The estimated yearly costs are as follows:

Water	-	\$ 700,000
Storm Drainage	-	\$ 50,000
Parks and Recreation	-	\$ 150,000
District Administration	-	\$ 400,000
Utilities Replacement Fund	-	\$ 300,000
		-----
Total Annual Operations and Maintenance	-	\$ 1,600,000



### VIII. COST SUMMARY

The total capital facilities costs are summarized as follows:

Water System	-	\$ 3.9 M
Wastewater System	-	\$ 1.9 M
Streets	-	\$ 7.4 M
Drainage	-	\$ 2.4 M
Parks	-	\$ 4.8 M
TOTAL		\$20.4 M

The portion of the total costs to be financed by District tap fees is the following:

Water System	-	\$ 3.9 M
Wastewater System	-	\$ 1.9 M
TOTAL		\$ 5.8 M

Using 7750 tap equivalents, this amounts to \$505/water tap and \$245/wastewater tap. With a 2.5 debt factor, this is approximately \$1300/water tap and \$600/sewer tap.

The street and drainage improvements (\$9.8 M) will be financed through mill levies and a per lot charge assessed directly to the developer (1). The park improvements (\$4.8 M) will be financed through the City of Brighton's sales tax participation.

(1) This charge is estimated at \$1000/lot equivalent. At this time, 7750 lot equivalents are projected (equal to tap equivalents).

## IX. FACILITIES PHASING

The phasing of the Third Creek Ranch facilities will ultimately be based on the demand created by land development. However, a potential demand pattern has been created which allows the estimation of capital facilities phasing. This phasing projection is used to examine the long-term financial viability of the District.

Based on a 15 year build-out, the following is a potential development pattern:

### Development Demand Pattern

Year	Percentage Developed	Cumulative Percentage	Taps	Cumulative Taps	Cumulative Population
1	2	2	155	155	420
2	2	4	155	310	840
3	4	8	310	620	1670
4	4	12	310	930	2510
5	6	18	465	1395	3770
6	6	24	465	1860	5020
7	10	34	775	2635	7120
8	10	44	775	3410	9210
9	10	54	775	4185	11,300
10	10	64	775	4960	13,340
11	8	72	620	5580	15,070
12	8	80	620	6200	16,740
13	8	88	620	6820	18,410
14	6	74	465	7285	19,670
15	6	100	465	7750	20,930

Using this development demand pattern, the following is a possible capital facilities phasing program:

Improvements Phasing

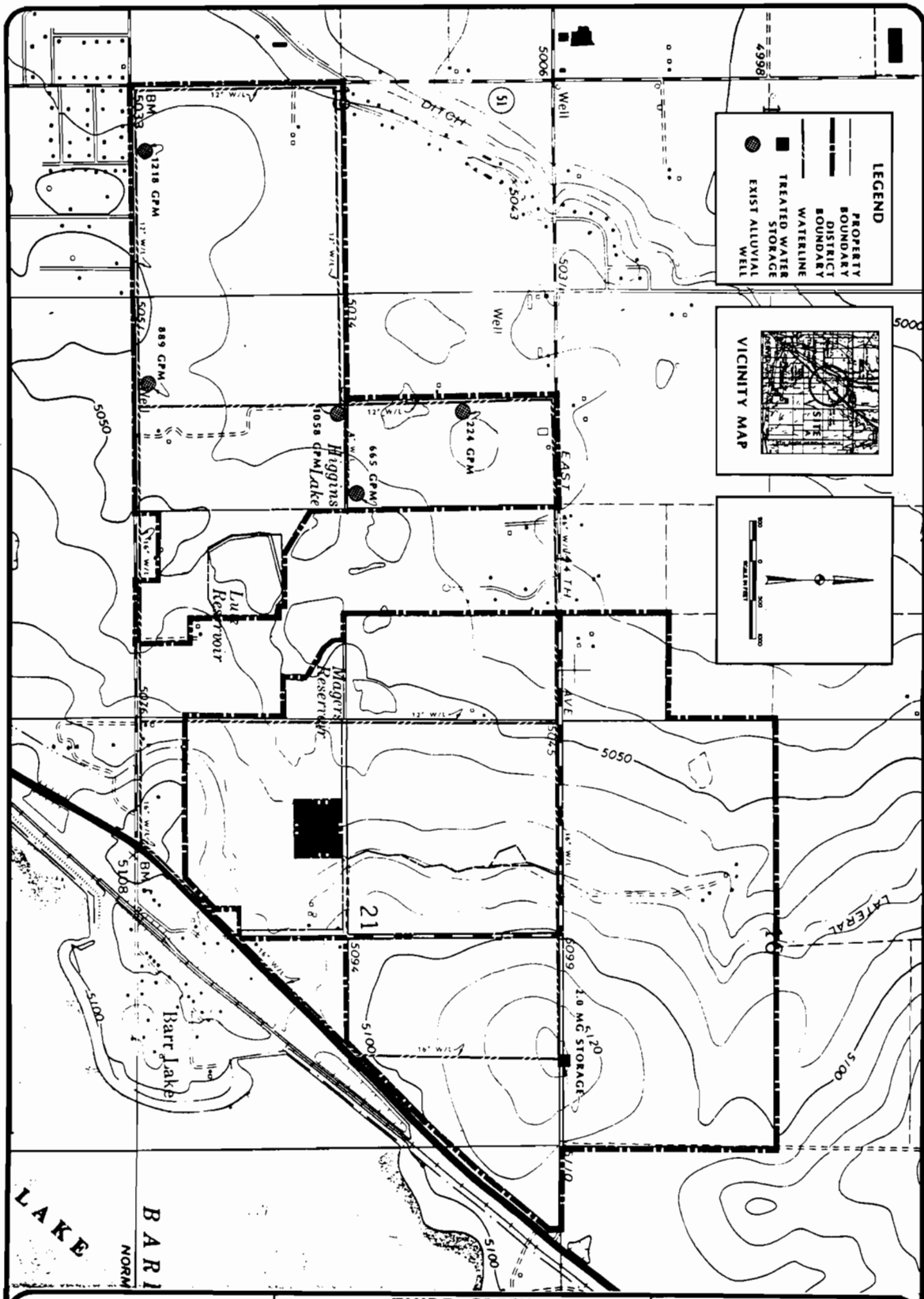
(1985 Costs)

Year	Streets	Drainage	Water	Sewer
1	\$ -	\$ -	\$ 750,000	\$ 300,000
3	1,000,000	400,000	750,000	-
6	2,500,000	500,000	1,000,000	1,600,000
9	2,500,000	1,000,000	1,000,000	-
12	1,400,000	500,000	400,000	-
	-----	-----	-----	-----
TOTAL	\$7,400,000	\$2,400,000	\$3,900,000	\$1,900,000

This phasing plan is based on developing only major water and sewer facilities in the first phase of construction. The sewer is estimated as an interim system to be utilized until a major outfall line is built. Depending on the location of development and on the types of development, first phase major drainage facilities could be required which would add \$750,000 to \$900,000 to the year 1 or year 2 costs.

FIGURE 1  
DISTRICT AREA MAP

FIGURE 2/2A  
WATER SCHEMATIC

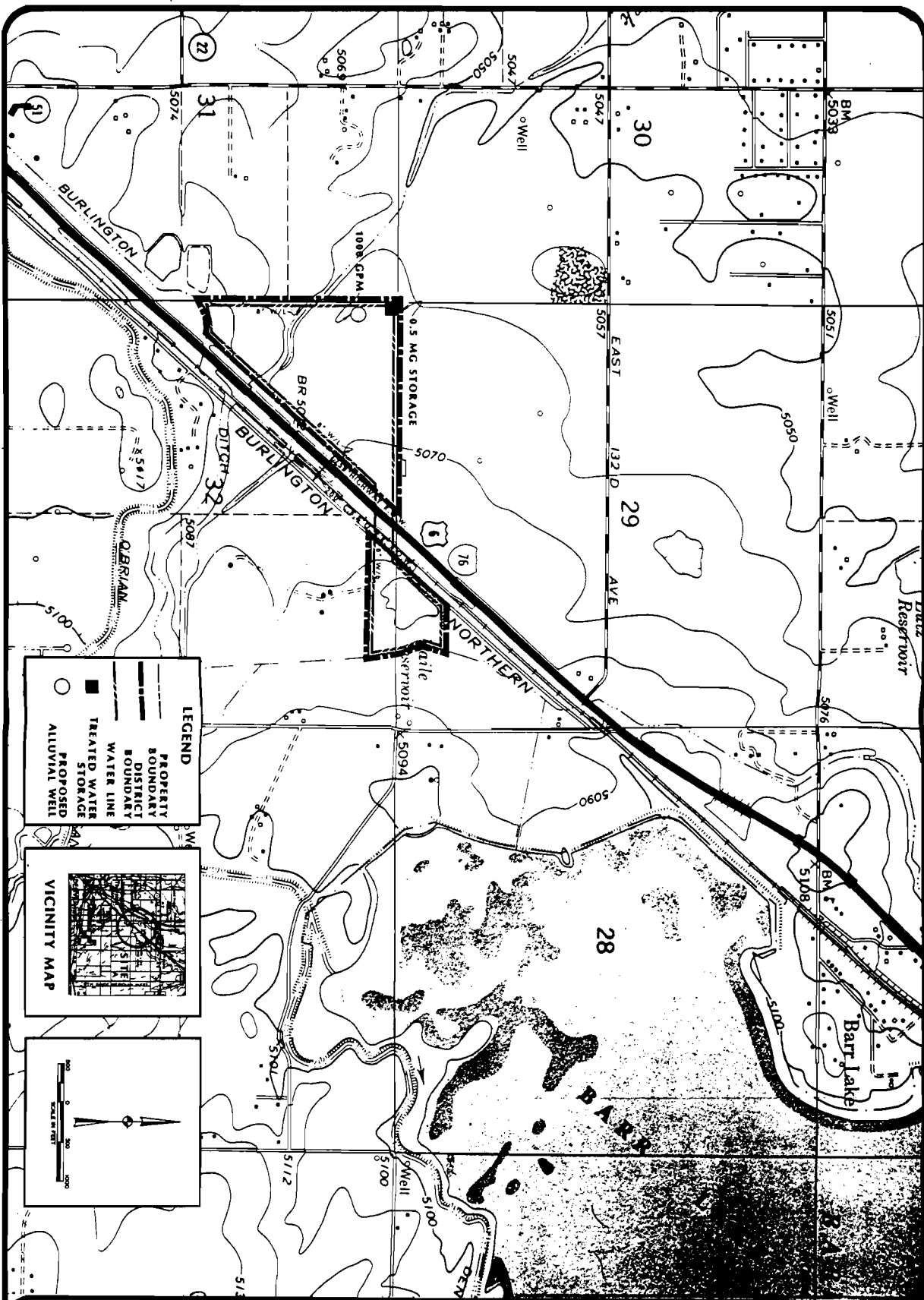


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 10701 Melody Drive  
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**THIRD CREEK METROPOLITAN DISTRICT**

**WATER SCHEMATIC**

consultants  
**The Civil Design Group, Inc.**  
 Consulting Civil - Structural Engineers  
 FIGURE 2



**LEGEND**

- TREATED WATER STORAGE
- PROPOSED STORAGE
- ALLUVIAL WELL
- PROPERTY BOUNDARY
- - - DISTRICT BOUNDARY
- - - WATER LINE

**VICINITY MAP**

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**THIRD CREEK METROPOLITAN DISTRICT**  
**WATER SCHEMATIC**

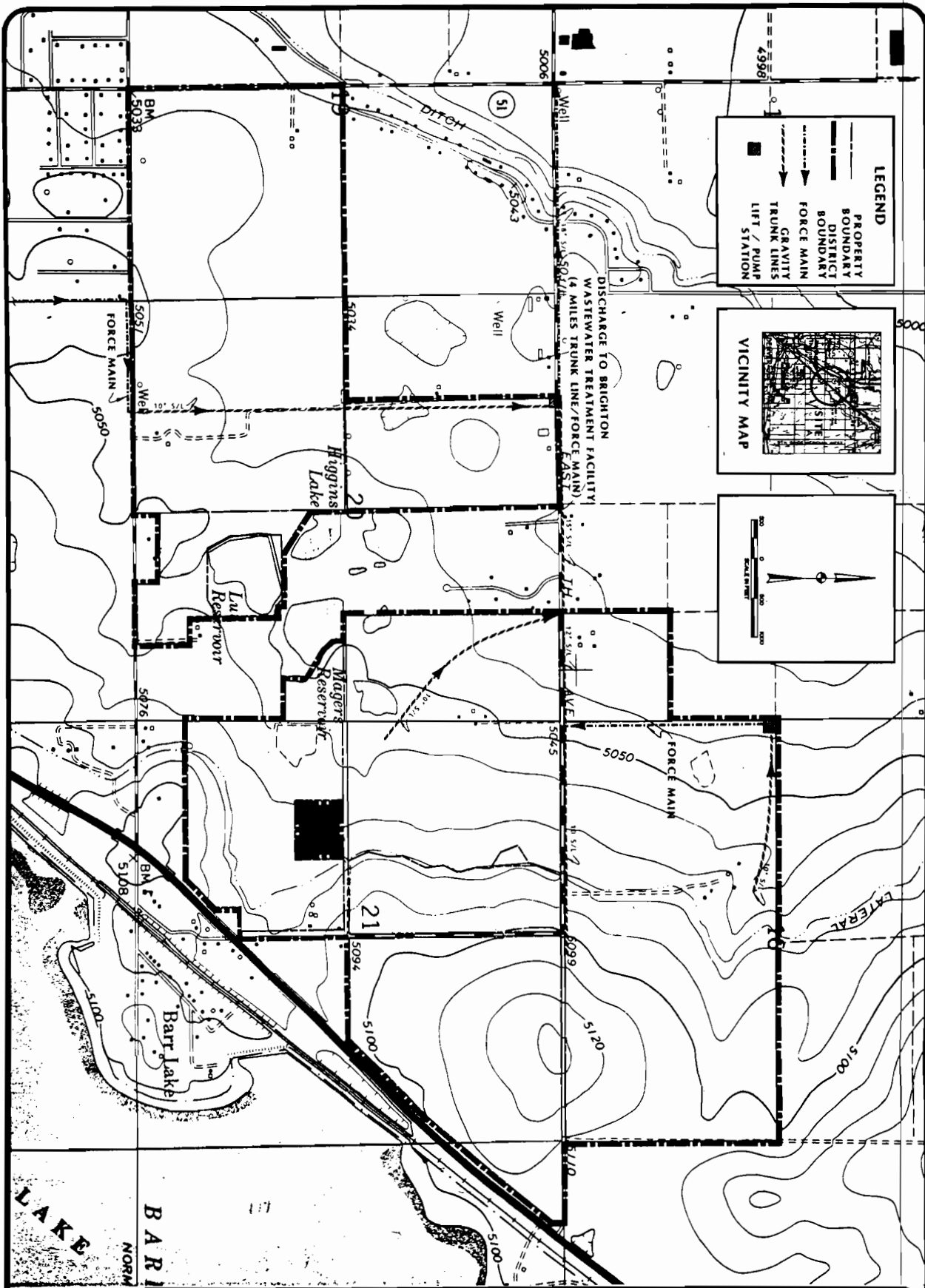
consultants  
**The Civil Design Group, Inc.**  
 Consulting Civil / Structural Engineers  
 821 14th Ave. 7th Floor Denver, Colorado 80202

**FIGURE 2A**

FIGURE 3/3A

WASTEWATER SCHEMATIC - BRIGHTON





**LEGEND**

- PROPERTY BOUNDARY
- - - DISTRICT BOUNDARY
- FORCE MAIN
- - - GRAVITY TRUNK LINES
- LIFT / PUMP STATION

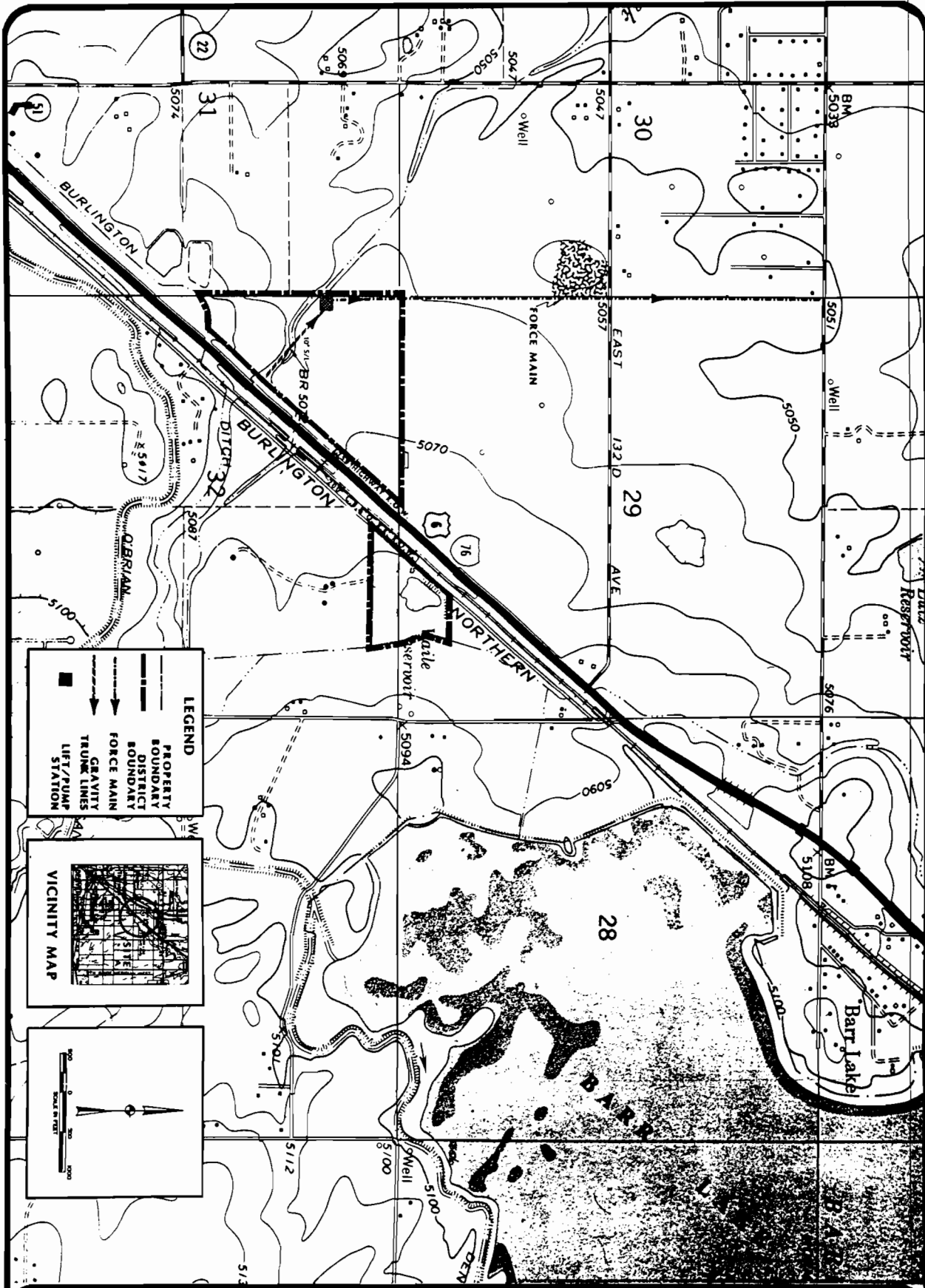
**VICINITY MAP**

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**THIRD CREEK METROPOLITAN DISTRICT**  
**WASTEWATER SCHEMATIC**  
**BRIGHTON ALTERNATE**

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**The Civil Design Group, Inc.**  
 Consulting Civil / Structural Engineers  
 202 W. 106th St., Suite 100, Denver, CO 80231

**FIGURE 3**



colorado development  
consulting services, inc.

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**THIRD CREEK  
METROPOLITAN DISTRICT**

**WASTEWATER SCHEMATIC  
BRIGHTON ALTERNATE**

consultants

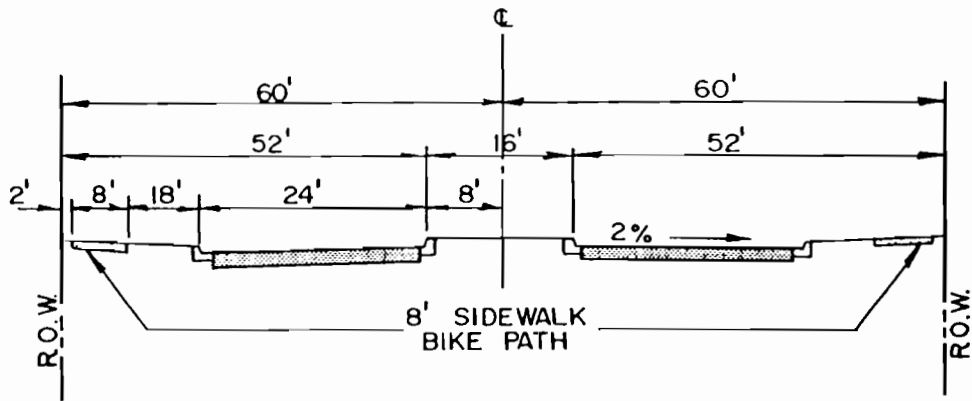


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Consulting Civil / Structural Engineers

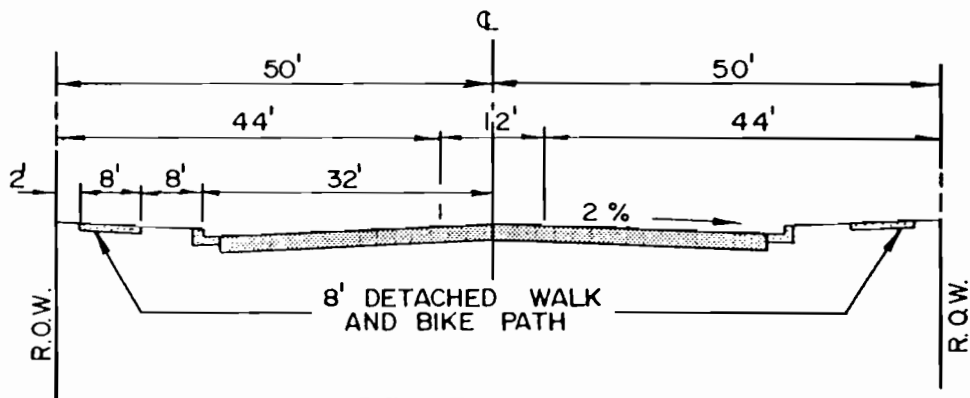
FIGURE 3A

FIGURE 4  
TYPICAL STREET SECTIONS

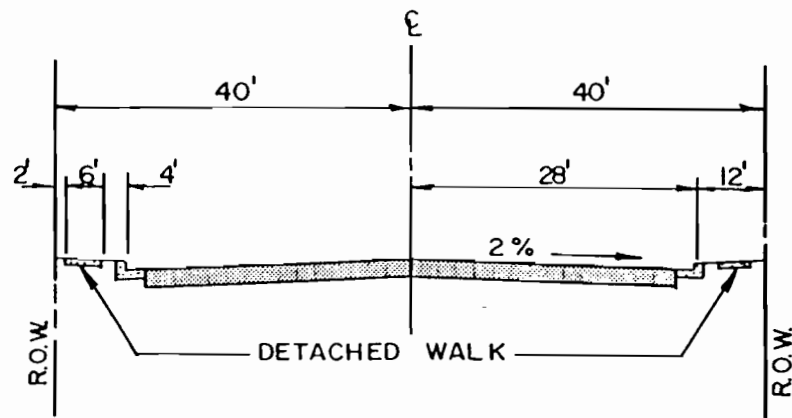
# TYPICAL STREET SECTIONS



**PARKWAY**



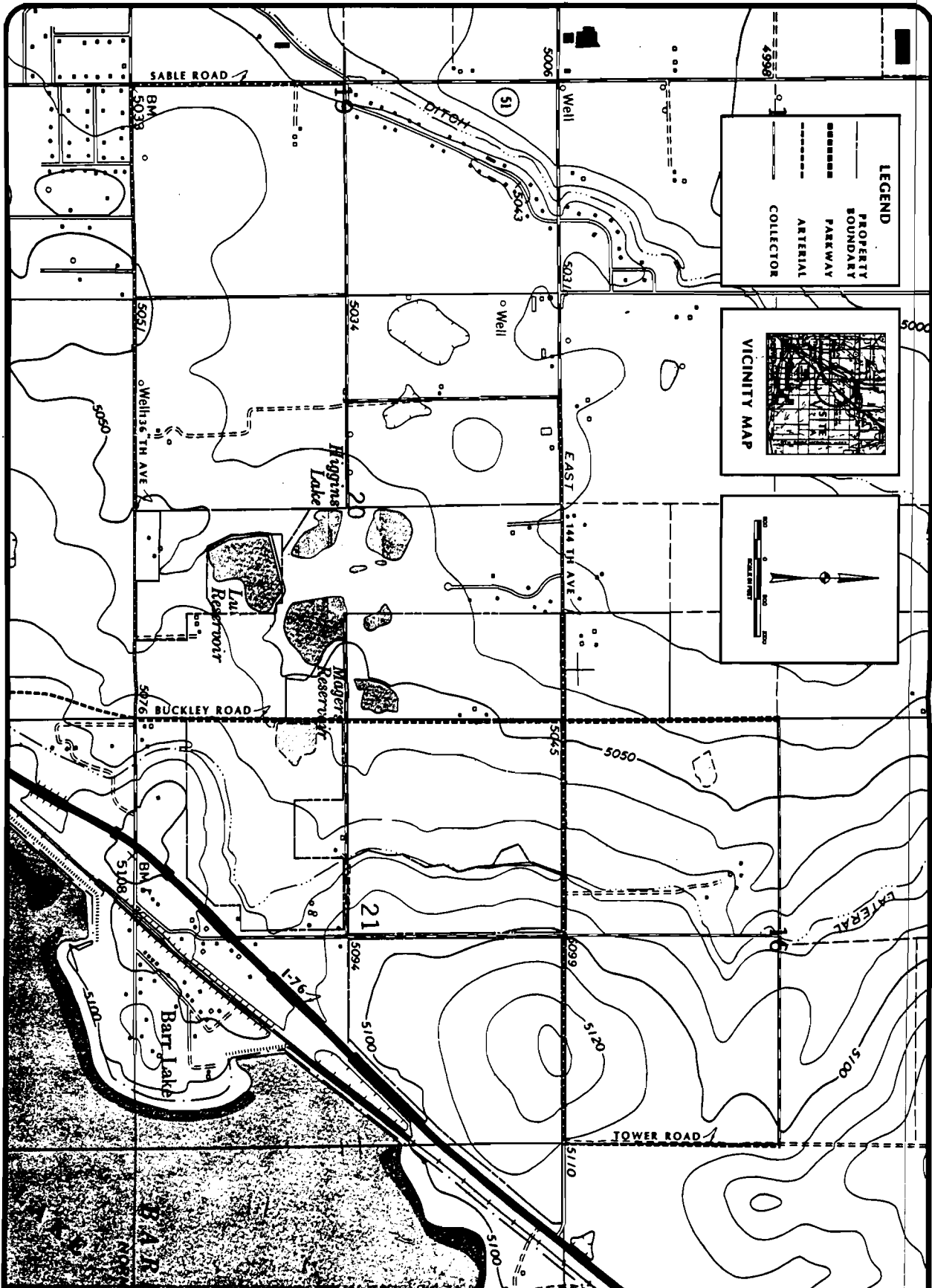
**ARTERIAL**



**COLLECTOR**

FIGURE 4

FIGURE 5/5A  
MAJOR ROADWAYS



**LEGEND**

- PROPERTY BOUNDARY
- PARKWAY
- ARTERIAL
- COLLECTOR

**VICINITY MAP**

Graphic scale bar showing 0, 100, and 200 feet.

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 10701 Malady Drive  
 Suite 600  
 Northglenn, Colorado 80224  
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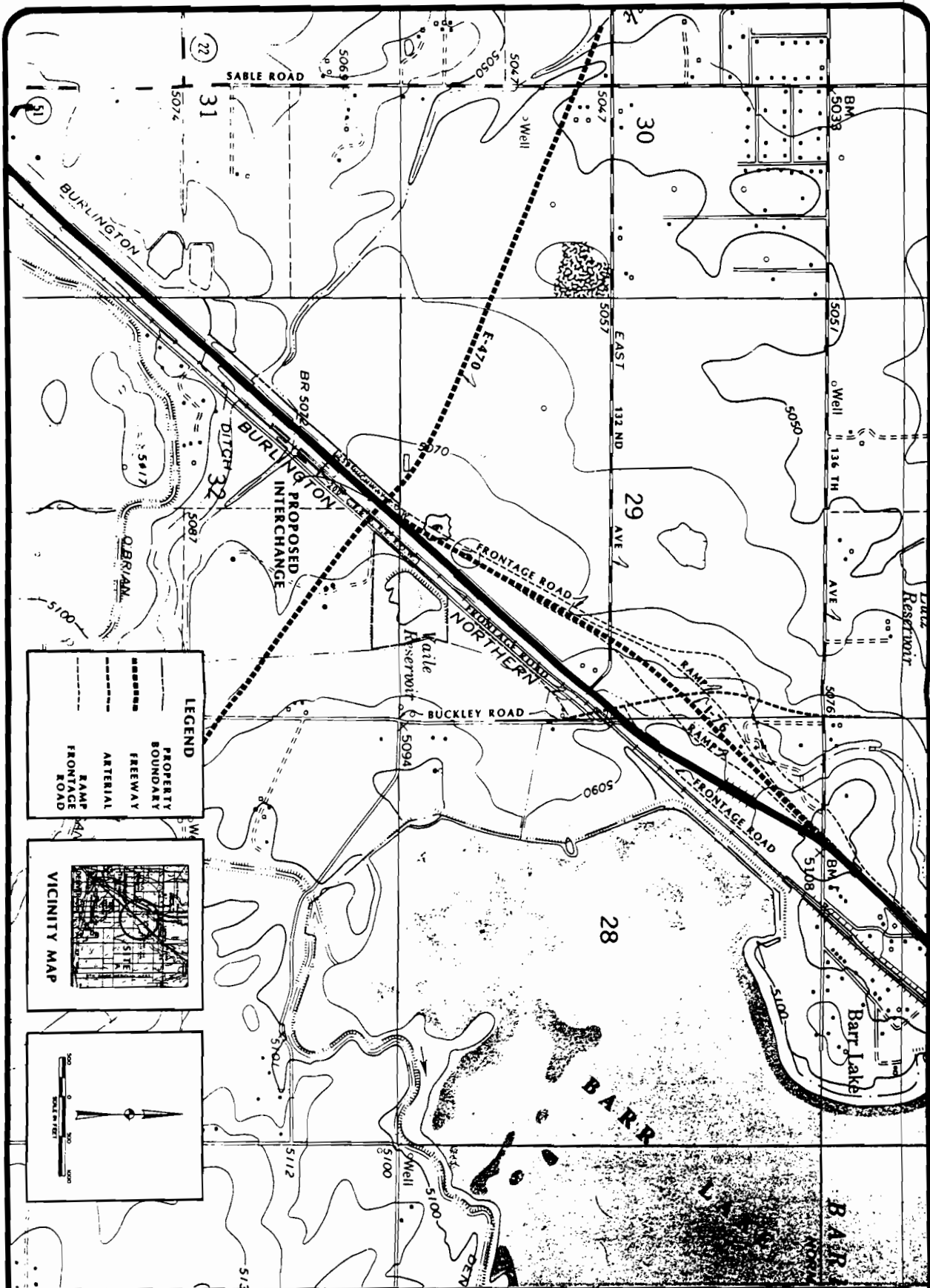
**THIRD CREEK METROPOLITAN DISTRICT**

**MAJOR ROADWAYS**

**consultants**

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 Consulting Civil / Structural Engineers  
 10000 E. 1st Ave. Suite 1000, Denver, CO 80231

**FIGURE 5**



**LEGEND**

- PROPERTY BOUNDARY
- FREEWAY
- ARTERIAL
- FRONTAGE ROAD
- RAMP

**VICINITY MAP**

0 100 200  
FOOT IN FEET

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 Suite 500  
 Northglenn, Colorado 80234  
 (303) 461-0226

**THIRD CREEK METROPOLITAN DISTRICT**

MAJOR ROADWAYS

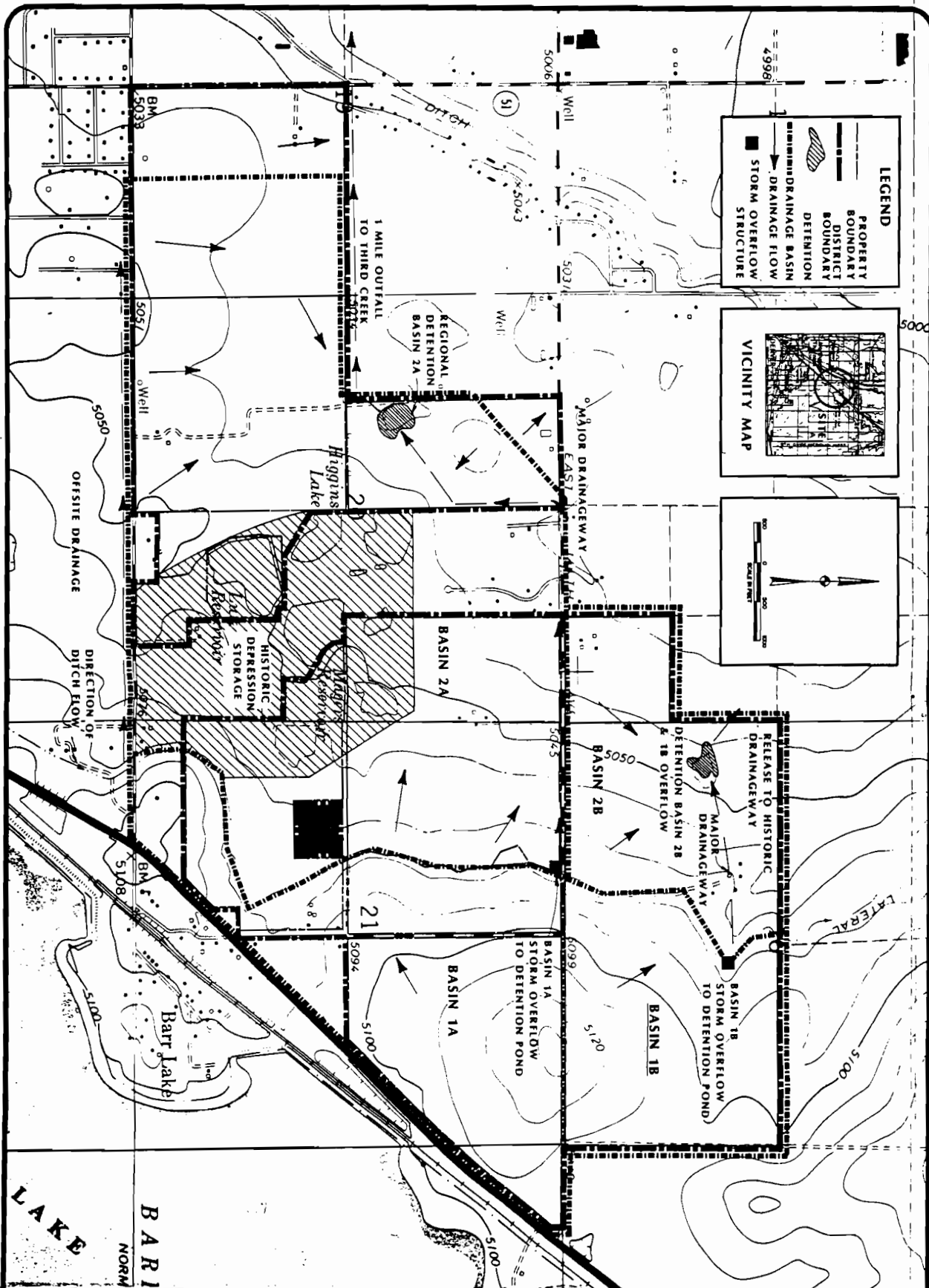
consultants

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**FIGURE 5A**

FIGURE 6/6A  
DRAINAGE SCHEMATIC





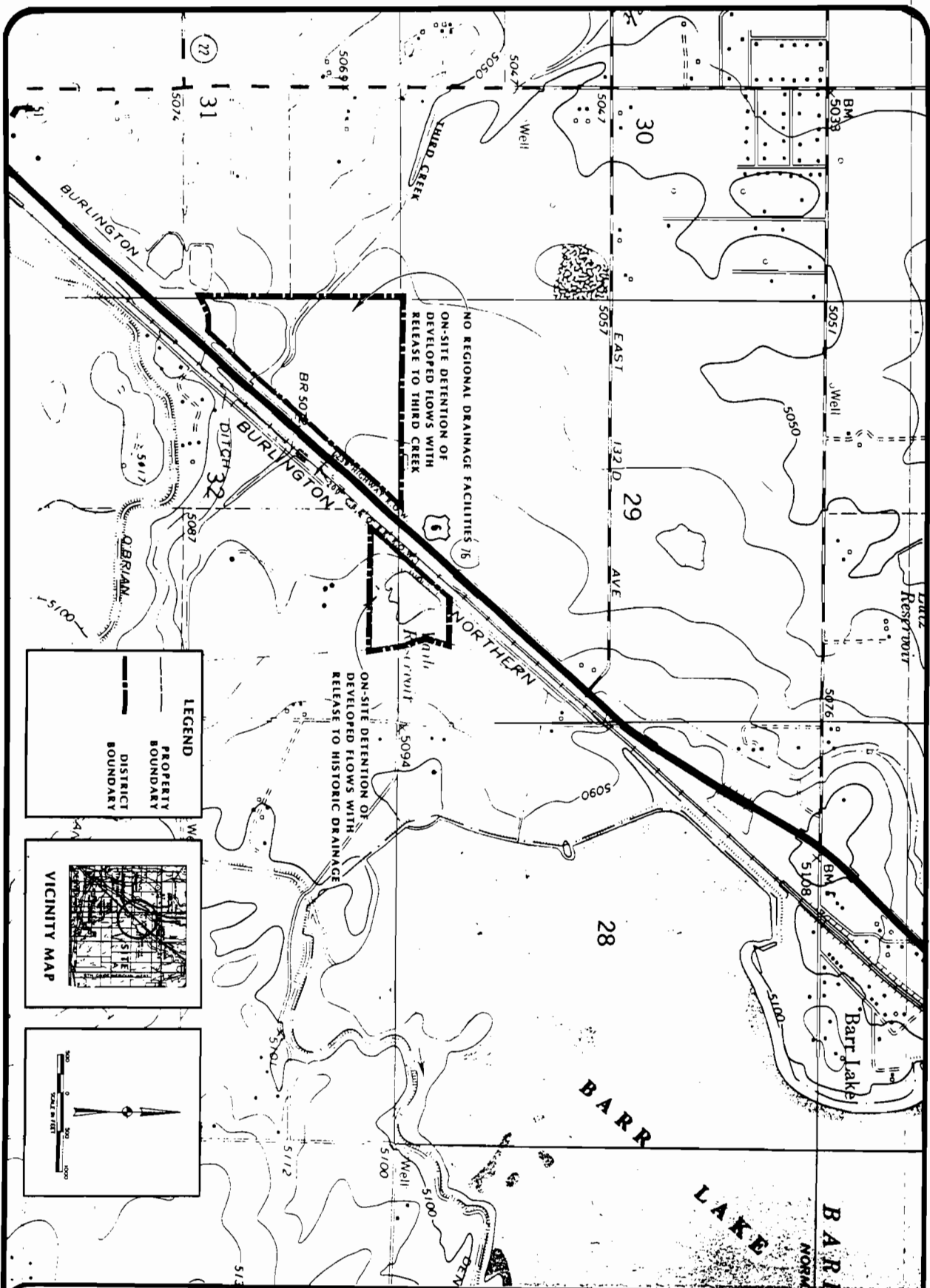
**THIRD CREEK METROPOLITAN DISTRICT**  
**DRAINAGE SCHEMATIC**

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consultants  
 The Civil Design Group, Inc.  
 Consulting Civil / Structural Engineers

FIGURE 6





**THIRD CREEK  
METROPOLITAN DISTRICT**

**DRAINAGE SCHEMATIC**

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consulting services, inc.

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consultants

The Civil Design Group, Inc.  
Consulting Civil Structural Engineers

FIGURE 6A

EXHIBIT  
POPULATION PROJECTIONS

THIRD CREEK RANCH  
POPULATION PROJECTIONS

Year	Percentage Developed	Cumulative Percentage	Population	Cumulative Population
1	2	2	420	420
2	2	4	420	840
3	4	8	840	1680
4	4	12	840	2520
5	6	18	1260	3780
6	6	24	1260	5040
7	10	34	2090	7130
8	10	44	2090	9220
9	10	54	2090	11,310
10	10	64	2090	13,400
11	8	72	1670	15,070
12	8	80	1670	16,740
13	8	88	1670	18,410
14	6	94	1260	19,670
15	6	100	1260	20,930

EXHIBIT

COLORADO DEVELOPMENT CONSORTIUM

COLORADO DEVELOPMENT CONSORTIUM

Jams L. Castrodale, Sr.	Consulstant, Project Manager Colorado Development Consulting Services, Inc.
Richard Scheurer	General Counsel Robinson and Scheurer
Steve Williamson	Water Legal Counsel Williamson & Associates
Carl Hurst	Project Engineer Civil Design Group
Curt Wells	Ground Water Geologist W. C. Wells & Co. Inc.
Brent Spronk	Water Engineer Spronk Water Engineers
Gene Andrist	Investment Banker Hanifen-Imhoff, Inc.
David Edstrom	Bond Counsel Lamm, Edstrom and Braymer

EXHIBIT  
OWNERS/DEVELOPERS

OWNERS/DEVELOPERS

Gary Antonoff  
(303) 759-5544

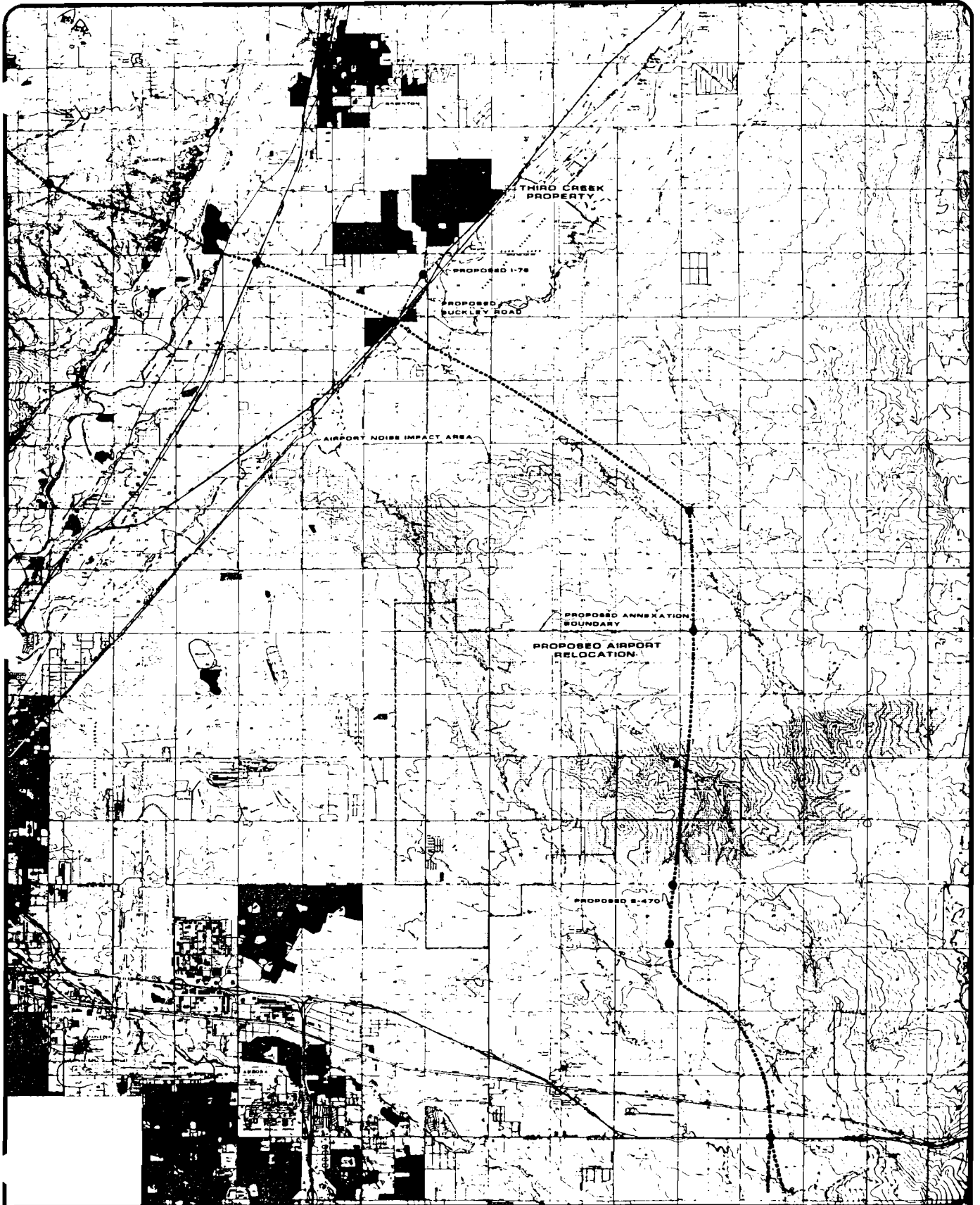
Antonoff and Company  
1720 South Bellaire, Suite 1209  
Denver, Colorado 80222

Hale Davenport  
(303) 427-7127

Davenport and Company  
2309 West 92nd Avenue  
Denver, Colorado 80221



EXHIBIT  
CLEAN WATER PLAN OUTLINE





 Colorado development  
 consulting services, inc.  
 14781 E. Hampden Blvd.  
 Suite 1000  
 Greenwood Village, CO 80120  
 (303) 451-0291

**LEGEND**  
 PROPOSED ANNEXATION BOUNDARY  
 PROPOSED AIRPORT RELOCATION  
 AIRPORT NOISE IMPACT AREA  
 PROPOSED I-75  
 PROPOSED BUCKLEY ROAD  
 PROPOSED E-470

**THIRD CREEK METROPOLITAN DISTRICT  
 AREA MAP**



consultants  

 The Civil Design Group, Inc.  
 14781 E. Hampden Blvd., Suite 1000  
 Greenwood Village, CO 80120  
 (303) 451-0291


 1/4

OUTLINE  
FIRST, SECOND, AND THIRD CREEKS  
CLEAN WATER PLAN  
June 4, 1984

I. INTRODUCTION

- A. Who - entities involved in project
- B. What - overall statement of CWP objectives
- C. Where - location of areas included, study boundary  
(First Creek from Arsenal to Platte, Second Creek and  
Third Creek Basins)
- D. When - statement of planning period, plan utility,  
implementation

II. EXISTING CONDITIONS

- A. Current Wastewater Treatment Facilities (Point Discharge)
  - 1. Facility description
  - 2. Capacity
  - 3. NPDES compliance or non-compliance
- B. Non-point Discharge
  - 1. South Platte
  - 2. Barr Lake
- C. Current condition of receiving waters
  - 1. South Platte - Segment 15
  - 2. Barr Lake - DRCOG Study
- D. Current institutional arrangements - boundaries of service

III. PLANNING REQUIREMENTS

- A. Required Water Quality

OUTLINE  
FIRST, SECOND, AND THIRD CREEKS  
CLEAN WATER PLAN  
Continued

3. Land Use Projections
  1. Pattern - Adams County/COG density and use scenerios (maximum-minimum)
  2. Timing - development timing within next 25 years - year 2010 (slow-fast)
  3. Combine Timing and Land use patterns to obtain maximum-minimum development scenerios
- C. Wastewater projections - Point/Non-point
  1. Utilize maximum-minimum development scenerios to develop wastewater loads
  2. Utilize land use patterns to develop non-point pollution sources

IV. WASTEWATER TREATMENT FACILITIES

- A. Criteria for Defining Strategies
  1. Costs
    - a) Capital
    - b) Operational
  2. Water rights impacts
  3. River quality benefits
    - a) Secondary treatment base condition
    - b) AWT incremental costs vs. incremental benefits.
- B. Strategy for managing non-point pollutants
- C. Strategy for managing point discharges
  1. Facility locations
  2. Treatment levels
  3. Flow allocations
- D. Summary of alternatives examined
  1. Type
  2. Location
  3. Costs/Benefits

OUTLINE  
FIRST, SECOND, AND THIRD CREEKS  
CLEAN WATER PLAN  
Continued

V. INSTITUTIONAL ARRANGEMENTS

- A. Areawide Planning Process
- B. Regulatory Agencies
- C. Management Agencies
- D. Operating Agencies

VI. SUMMARY OF PLAN

- A. Objectives
- B. System to Obtain Objectives
  - 1. Facilities
  - 2. Standards
  - 3. Management

TECHNICAL ADDENDUM

- A. Segment 15 Study - Water Quality
- B. System Alternatives
  - 1. Base conditions for secondary treatment
  - 2. Locations/flow options as input to river quality model
  - 3. South Platte River model
  - 4. Selection of treatment schemes to satisfy water quality constraints
  - 5. AWT incremental costs, if necessary
  - 6. Alternative selection matrix - cost/solution
- C. Barr Lake Analysis
  - 1. Point
  - 2. Non-point
- D. Institutional Input

EXHIBIT

MEMORANDUM OF UNDERSTANDING

SUMMARY OF THE CONTRACT  
(MEMORANDUM OF UNDERSTANDING)  
BY AND BETWEEN  
THE CITY OF BRIGHTON  
AND  
GRAND HOMES

This Agreement, while initially relating to the Bromley Park area, has been expanded to include the Third Creek Project. The same terms and conditions applicable to the Bromley Park Project have been utilized and are available for the Third Creek development. These basic conditions include, but are not limited to, the following:

- Brighton to supply the water service
- Brighton to supply the sewer service
- Brighton to acquire the water rights
- The District to build the major streets
- The District to construct major parks
- The District to develop the water rights
- The District to install major sewer interceptors
- The District to provide drainage facilities
- The District to designate school sites

This document is nearing completion. Both parties anticipate the signing of this Agreement in the near future.