SERVICE PLAN FOR THE

FORMATION OF THE

STONEGATE VILLAGE METROPOLITAN DISTRICT

NOVEMBER, 1982

Job Number 5062912

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ERRATA

Service Plan for the Formation of the Stonegate Village Metropolitan District

CHAPTER	PAGE #	PARAGRAPH	CORRECTION
List of Tables		Section 7 Line 7.1	"Operatins" should be "Operations".
II	3	2 Item 4	"treatment" should be "disposal".
II	4	1 Line 2	"management" should be "maintenance".
SECTION	**PAGE #**	**PARAGRAPH**	**CORRECTION**
3	3.4	Footnote Line 2	Should read: "while the Maximum Day Demand is 4 times the Average Day Demand and the Maximum Hour Demand is 6 times the Average Day Demand."
3	3.10	Footnote Top of Page	Footnote should appear at the bottom of Page 3.9.
3	3.14	Bottom of Page	Reference to Table "3.23" should be Table "3.18".
3	3.16	3 Line 2	"units" should be "unit".
3	3.23 - 3-28		Replace these pages with pages provided.
4	4.1	1 - Line 9	Insert "," between procedure and effluent.
5	5.2	Table 5.1	Linear footage of street and roadway improvements should be shown as follows: 1. 35,725 2. 22,525 3. 7,875 4. 22,775
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VI	3	2 Line 16	"requirest" should be "require".

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4. 22,775

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NUMBER	DESCRIPTION
A	Legal Description
B	Overall Master Water Plan
C	Overall Master Sanitary Sewer Plan
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CHAPTER I

INTRODUCTION

This Service Plan is submitted in accordance with section 32-1-201 et seq., C.R.S. 1973, as amended (the "Control Act").

The name of the proposed special district is "Stonegate Village Metrpolitan District" (the "District").

The purposes of the District are as follows: parks and recreation, sanitation, street improvement, transportation and water.

The District is located generally southeast of the City and County of Denver in Douglas County, Colorado and lies within Sections 16 and 17, all in Township 6 South, Range 66 West of the 6th P.M. The District contains approximately 639 acres.

The services to be provided by the District are as follows:

1. to provide parks and recreation facilities and services, both active and passive, together with all necessary, incidental and appurtenant facilities, for the District, its users and inhabitants;

2. to provide a complete sanitary and storm sewage collection, transmission, treatment and disposal system, including flood and surface drainage, together with all necessary, incidental and appurtenant facilities, for the District, its users and inhabitants;

3. to provide, if feasible, for the establishment, operation and maintenance of a system to transport the public by bus, rail or any other means of conveyance, or any combination thereof, together with all necessary, incidental and appurtenant facilities, for the District, its users and inhabitants; and

4. to provide a complete water supply, treatment, storage, transmission and distribution system for domestic and other public and private purposes, together with all necessary, incidental and appurtenant facilities, for the District, its users and inhabitants.

This Service Plan was prepared under the direction of Stonegate Developments Inc., 7315 East Orchard Road, Suite 400, Englewood, Colorado 80111. The following consultants were involved:

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CHAPTER II

PURPOSE

The purpose of the District is to provide, on a planned, flexible and cost-efficient basis, essential services to and for the benefit of the inhabitants and users of the District. As noted in detail in Chapter I, such services shall include parks and recreation, sanitation, street improvement, transportation and water.

The prospect of obtaining one or more of the services set forth above from existing governmental entities in the general area has been investigated in depth. It has been determined that the interests of the inhabitants and users of the District would be best served by the organization of Stonegate Village Metropolitan District for the following reasons:

1. greater flexibility in the timing of improvements;

2. better availability and lower cost of water;

3. greater financial strength leading to more favorable bond rates and lower mill levies;

4. ready availability of land for effluent treatment;

5. local decision-making opportunities; and

6. professional management.

The following existing service providers in the general area have been investigated:

Cottonwood Water and Sanitation District
Parker Water and Sanitation District/Town of Parker
Arapahoe Water and Sanitation District
Lincoln Park West Metropolitan District

Distance, topography and cost rule out consideration of the latter two entities as realistic alternatives. With respect to the first two entities, most if not all of the factors heretofor set forth as reasons for the organization of the District would not be fulfilled through association with, inclusion in, or service from those entities, a result which would work to the detriment of the inhabitants and users of the District.

The District strongly supports the concept of ultimate regional management and operation of water, sewer and transportation facilities in the Upper Cherry Creek Basin by a financially-sound and professionally managed regional entity. The District would be prepared to assist in all appropriate studies and planning efforts and would be ready and willing to cooperate in facilitating inter-governmental institutional efforts toward this goal.

CHAPTER III

SERVICE AREA

The District is located generally southeast of the City and County of Denver in Douglas County, Colorado and lies within Sections 16 and 17, all in Township 6 South, Range 66 West of the 6th P.M. the District contains approximately 639 acres.

A legal description of the area to be included in the District is set forth in Exhibit A.

A map of the District is attached as Exhibit B.

The District lies wholly within Douglas County, Colorado. No portion of the District is within any other special district providing the same services. No portion of the District is within any incorporated city or town.

CHAPTER IV

DEVELOPMENT ANTICIPATION

The land within the District is currently undeveloped. In July 1982, Stonegate was rezoned P.D., and the land within the District is planned to be developed for primarily residential use. Population projections are based upon current zoning, the applicable Land Use Plan and market research/absorption studies submitted under separate cover.

The following table sets forth the general projected land use and population within the District at ultimate development.

TYPE OF LAND USE	ACRES	DWELLING UNITS	PROJECTED POPULATION (2.8 Cap./Unit)
A. Residential Development			
1. Single-Family Detached			
(6000 S.F. Lots)	130.58	948	2,654
(8500 S.F. Lots)	91.13	467	1,308
(4000 S.F. Zero Lots/ Cluster)	21.85	238	666
2. Townhouses	47.39	847	2,372
RESIDENTIAL TOTALS	290.95	2,500	7,000
B. Other			
1. Designated Open Space	167.75		
2. Public Dedicated Areas	45.0		
3. Community Center	16.0		
4. Community Parks	29.4		
5. Roadways	89.9		
TOTAL	638.995	2,500	7,000

The following table sets forth projected land use and population within the District phased according to the anticipated development schedule.

			NUMBER OF DWELLING UNITS		POPULATION	
PHASE	YEAR	UNIT TYPE	PHASE	ACCUM	PHASE	ACCUM
1	1983 -84	SF	260	260	728	728
2	1985	SF	243	503	680	1,408
3	1986	SF	239	742	670	2,078
4	1987	SF/TH	285	1,027	798	2,878
5	1988	SF/TH	304	1,331	851	3,727
6	1989	SF/ZL TH	295	1,626	826	4,553
7	1990	SF/TH	296	1,922	829	5,382
8	1991	SF/ZL TH	296	2,218	829	6,211
9	1992	TH	282	2,500	789	7,000

Assessed valuation projections are set forth in Chapter VI of this Service Plan (FINANCIAL ANALYSIS).

CHAPTER V

CAPITAL IMPROVEMENT SCHEDULE

The facilities to be provided by the District are set forth in this Chapter V. Phasing schedules, costs and standards of construction are presented where applicable. In all cases, standards imposed by Douglas County or other governmental agencies will be met or exceeded.

Capital improvement schedules and/or facilities to be provided shall be addressed separately consistent with the District's purposes.

It is intended that the Stonegate Center Metropolitan District would own, operate and construct water, sewer, street and transportation facilities of a regional nature designed for the use and benefit of its inhabitants and users, and the inhabitants and users of the Stonegate Village Metropolitan District. An inter-governmental agreement will be executed by both special districts providing for joint funding based upon the ratio of relative use and benefit, providing for ownership and operation of the facilities by Stonegate Center Metropolitan District, and securing rights in capacity and use for the inhabitants and users of the District. The amount and phasing of General Obligation bond issues by the two special districts will be based upon relative development and service requirements. See Chapter VI (FINANCIAL ANALYSIS) of this Service Plan and Chapter VI (FINANCIAL ANALYSIS) of the Service Plan submitted for Stonegate Center Metropolitan District.

SECTION 1

PARKS AND RECREATION FACILITIES

In addition to installing a complete water and sanitary sewer system and roadway improvements the District shall also install and own the following ammenities:

a. Swimming pool;

b. Tennis courts (8 unlighted and 4 lighted);

c. Recreation center;

d. Swimming lake;

e. Parking lots.

Table 6.1 summarizes the anticipated costs and phasing for the above mentioned ammenities.

TABLE 6.1
AMMENITIES CONSTRUCTION COST AND PHASING

YEAR	SWIMMING POOL	TENNIS COURTS	RECREA-TION CENTER	SWIMMING LAKE	PARKING LOTS	TOTALS
1983		$145,140		$324,794		$ 469,934
1984			$221,400			221,400
1985						
1986		$184,500			$233,249	417,749
1987	$175,275					175,275
1988		83,640				83,640
1989						
1990						
1991						
TOTALS	$175,275	$413,280	$221,400	$324,794	$233,249	$1,367,998*

* Includes 13% for Contingencies and 10% for Engineering

SECTION 2

TRANSPORTATION SYSTEM

The District may undertake the establishment, operation, and maintenance of a transportation system for the purpose of providing transportation within or without the District's boundaries. This may be accomplished by the District alone or in conjunction with other special districts, the Regional Transportation District, or other governmental or private entities. The District may enter into contracts for the acquisition, construction operation, and maintenance of the transportation system.

The transportation system will be financed by the issuance of General Obligation bonds which must be approved by the electors of the District, or the leasing of necessary equipment and facilities or any combination thereof. The debt service on the bonds or lease rentals will be paid in whole or in part from the District's mill levies. Until the District authorizes an initial engineering and feasibility study, the acquisition and construction costs and methods of financing for such a project remain unknown.

SECTION 3

PROPOSED WATER DISTRIBUTION SYSTEM

3.1 GENERAL

The water to serve the area shall be obtained through a series of wells and transported by a raw water main network to an area consisting of a chlorine contact chamber, storage tank and Booster Pump station where the water will be treated, stored and pumped into the main distribution system. The wells, raw water transmission network, chlorine contact chamber, storage tanks and Booster Pump station shall be installed, owned and maintained by the Stonegate Center Metropolitan District. The proposed water distribution system is shown on Exhibit "B" - Overall Master Water Plan.

3.2 WATER SYSTEM DESIGN CRITERIA

The water usage for this Service Plan is based on past factual data as established for developments of the type proposed for the District and data published by the Denver Water Board which estimates future usage based on historical metered usage. In order to calculate the various required demands, the areas of outside irrigation must be determined. Table 3.1 shows the anticipated areas of outside irrigation based on residential lot size data developed by Stonegate Developments, Inc.

TABLE 3.1

AREAS OF OUTSIDE IRRIGATION

Type of Development	Units	Lot Size (sq.ft.)	Irrigated Area (sq.ft.)	Total Area (sq.ft.)
Single Family Detatched	948	6,000	3,000	2,844,000
	467	8,500	4,500	2,101,500
	238	4,000	2,000	476,000
Townhouses	847	2,500	575	487,025
TOTALS	2,500			5,908,525

The total amount of land to be irrigated in the residential area is 5,908,525 square feet or 135.64 Acres. The in-house domestic Average Day Domestic Demand is anticipated to be 85 gallons per day per capita. Table 3.2 establishes the Average Day Demand including outside irrigation based upon an ultimate population of 7,000 people and precipitation data supplied by NOAA Climatological Data, Colorado Springs station, Colorado.

TABLE 3.2

AVERAGE DAY WATER DEMANDS

ULTIMATE DEVELOPMENT

Month	Growing Days	Avg. Precip[1] In/Mo	Irrg'n Water Req'd[2] In/Mo	Net Irrg'n Water Req'd[3] Ac-Ft/Mo	Average Domestic Demand Ac-Ft/Mo	Total Domestic Demand Ac-Ft/Mo	Total Demand Ac-Ft/Mo	Gal. Per Capita Per Day
Jan.	0	0.31	0	0	55.5	55.5	55.5	85.0
Feb.	0	0.34	0	0	55.5	55.5	55.5	85.0
Mar.	0	0.77	0	0	55.5	55.5	55.5	85.0
Apr.	14	1.45	2.0	6.22	55.5	61.72	61.72	94.52
May	31	2.12	4.3	24.64	55.5	80.14	80.14	122.73
June	30	2.31	4.3	22.49	55.5	77.99	77.99	119.44
July	31	3.10	4.3	13.56	55.5	69.06	69.06	105.76
Aug.	31	2.58	4.3	19.44	55.5	74.94	74.94	114.77
Sept.	30	1.11	4.3	36.06	55.5	91.56	91.56	140.22
Oct.	21	0.92	2.9	22.38	55.5	77.88	77.88	119.27
Nov.	0	0.45	0	0	55.5	55.5	55.5	85.0
Dec.	0	0.27	0	0	55.5	55.5	55.5	85.0
		AVERAGE TOTAL				67.57 810.79	67.57 810.79	103.48

1 Source: NOAA Climatological Data, Colorado Springs Station. Normal Precipitaton thru 1978

2. $\frac{\text{One Inch}}{\text{Week}} \times \frac{(4.3 \text{ Weeks})}{(\text{Month})} \times \frac{(\text{No. of Gr. Days})}{(30.4 \text{ days})}$

3 Net irrigation water required (ac-ft/mo)= $\frac{\text{Irrig water req'd-avg Precip (135.64)}}{12}$

4. 85 GAL/Capita-Day = 55.5 Ac-ft/Mo

For the purpose of this report the Average Day Water Demand in gallons per capita per day is estimated to be 100.

The following demands are used to determine the required sizes of the water facilities to be constructed.

1) Well Capacities: Maximum Day Demand
2) Line Sizes: Maximum Hour Demand (Maximum Velocity - 5 f.p.s.)
3) Storage Requirement: 24 Hours of Maximum Day Demand Plus Fire Flow
4) Pumping Requirements: Maximum Hour Demand plus Fire Flow

Shown below in Table 3.3 are the figures used in this Service Plan for computing the Average Day, Maximum Day and Maximum Hour water demands.

TABLE 3.3
WATER DEMAND CRITERIA

TYPE OF DEVELOPMENT	AVERAGE DAY DEMAND	MAXIMUM DAY DEMAND	MAXIMUM HOUR DEMAND
1. Residential[1]	100 G/D/C	400 G/D/C	600 G/D/C
2. Schools	25 G/D/C	62 G/D/C	78 G/D/C
3. Community Center	25 G/D/C	62 G/D/C	78 G/D/C

1. The Average Day Demand is as established in Table 3.2, while the Maximum Day Demand is 4 (Average Day Demand) and the Maximum Hour Demand is 6 (Average Day Demand).

3.3 WATER DEMANDS - ULTIMATE DEVELOPMENT

This portion of the Service Plan develops the water demand at ultimate development for the District using data contained in Tables 2.1 and 3.3.

Table 3.4 shows the calculations for determining the ultimate water demand for the residential areas, and Table 3.5 shows the school and community center areas.

TABLE 3.4
RESIDENTIAL WATER DEMAND
ULTIMATE DEVELOPMENT

TYPE OF DEVELOPMENT	Projected Population	Average Day Demand (GPM)	Maximum Day Demand (GPM)	Maximum Hour Demand (GPM)
1. Single Family Detatched	4,628	321.39	1,285.56	1,928.33
2. Townhouses	2,372	164.72	658.89	988.33
TOTALS	7,000	486.11	1,944.45	2,916.66

TABLE 3.5
SCHOOL AND COMMUNITY CENTER WATER DEMANDS
ULTIMATE DEVELOPMENT

TYPE OF DEVELOPMENT	Gross Acres	Average Day Demand (GPM)	Maximum Day Demand (GPM)	Maximum Hour Demand (GPM)
1. Schools[1]	45	41.67	103.33	130.00
2. Community Center[2]	16	0.43	1.08	1.35
TOTALS	61	42.10	104.41	131.35

1. The anticipated capacity of the 2-10 acre Grammar School sites is 1200 students and the 25 acre Junior High School is 1200 students, as per Douglas County requirements, for a total student enrollment of 2,400 at ultimate development.

2. The maximum capacity of the Community Center is anticipated to be 25.

3.4 REQUIRED FIRE FLOW

As previously mentioned, fire protection shall be supplied by the Parker Fire Protection District utilizing the facilities constructed by the District and the Stonegate Center Metropolitan District.

An estimate of the fire flow required for a given fire area is determined by the following formula, as established by the Insurance Services Office:

$$F = 18C(A)^{0.5}$$

Where F = the required fire flow in g.p.m.

C = Coefficient related to the type of construction:

C = 1.5 for wood frame construction

= 1.0 for ordinary construction

= 0.8 for non-combustible construction

= 0.6 for fire-resistive construction

A = The total floor area including all stories, but excluding basements, in the building being considered.

For the purposes of this report the following values were used for:

1. Single Family Detached: C = 1.5

A = 3100 S.F.

2. Townhouses: C = 1.5

A = 10,000 S.F. (Based on 10 houses per unit at 1,000 S.F. each)

Therefore, utilizing the above formula and figures, the required fire flow for the District will be:

1. Single Family Detached: Fire Flow = $18C(A)^{0.5}$

$= 18(1.5)(3100)^{0.5}$

$= 1503.3$ g.p.m.

$= 1500$ g.p.m.

2. Townhouses: Fire Flow = $18C(A)^{0.5}$

$= 18(1.5)(10,000)^{0.5}$

$= 2700$ g.p.m.

Since the District's water source will be supplied through facilities of the Stonegate Center Metropolitan District a total fire flow of 4000 g.p.m., which is required for the Stonegate Center development, will be available.

3.5 SUMMARY OF WATER DEMANDS

The information contained in Table 3.6 shows the projected ultimate water demands for the District in Gallons Per Day.

TABLE 3.6

ULTIMATE WATER DEMANDS

TYPE OF DEVELOPMENT	Average Day Demand (GPD)	Maximum Day Demand (GPD)	Maximum Hour Demand (GPD)
1. Residential			
a. Single	462,800	1,851,200	2,776,800
b. Townhouses	237,200	948,800	1,423,200
Sub Total	700,000	2,800,000	4,200,000
2. Other			
a. Schools	60,000	148,800	187,200
b. Community Center	625	1,550	1,950
Sub Total	60,625	150,350	189,150
TOTAL	760,625	2,950,350	4,389,150

In addition to the above demands an additional 405,000 gallons per day will be required to meet the District's fire flow requirements of 2,700 g.p.m. for 2.5 hours. As stated previously a total of 960,000 gallons per day will be available to meet the fire flow demand of 4,000 gpm for 4 hours for the Stonegate Center Metropolitan District.

3.6 WATER AVAILABILITY

Water for the District shall be supplied from 25 deep wells of which 15 are located within the boundaries of the Stonegate Center Metropolitan District and 10 within the boundaries of the District. Since all the wells shall be developed, owned and maintained by the Stonegate Center Metropolitan District, easements shall be granted to Stonegate Center Metropolitan District for access to the wells. Table 3.7 lists each aquifer and the water available annually. The figures shown in Table 3.7 have been calculated using Senate Bill 213 criteria.

TABLE 3.7
AVAILABILITY OF WATER

AQUIFER	NUMBER OF WELLS	DEPTH TO BASE (feet)	SAND THICKNESS (feet)	SPECIFIC YIELD	WATER AVAIL. ANN/AQUIFER Ac/Ft	GPM
1. Dawson	6	600	150	0.15	330	205
2. Denver	8	1200	80	0.10	150	93
3. Arapahoe	7	1800	290	0.15	1393 (1266)*	786
4. Laramie-Fox Hills	4	2300	175	0.125	360	224
TOTALS	25				2245 (2106)**	1308

* Amount of water available in Arapahoe aquifer is affected by two Arapahoe wells Well No. 1 (17693-F) located within the District's boundaries, and Well No. 13 (17691-F) located within the boundaries of the Stonegate Center Metropolitan District.

** Estimated amount of water that can be developed legally and economically.

The total number of acre feet of water which may be utilized from the wells in accordance with the Colorado Division of Water Resources conditions of well approvals is 2106 acre feet (1308 gpm).

Table 3.8 converts the demands shown in Table 3.6 into acre feet usage per year for the District.

TABLE 3.8
ACRE FEET USAGE PER YEAR
ULTIMATE DEVELOPMENT

TYPE OF DEVELOPMENT	AVERAGE DAY DEMAND AcFt/Yr	MAXIMUM DAY DEMAND AcFt/Yr	MAXIMUM HOUR DEMAND AcFt/Yr
1. Residential	783.55	3,134.20	4,701.30
2. Other	67.86	168.30	211.73
TOTALS	851.41	3,302.50	4,913.03

In addition to the figures shown in Table 3.8, the Stonegate Center Metropolitan District will be using an annual demand of 736.93 AcFt/Yr for Average Day Demand, 1105.40 AcFt/Yr

for Maximum Day Demand, and 2289.18 AcFt/Yr for Maximum Hour Demand as established in Table 3.5 of its Service Plan.

Therefore, the water requirements for the District would be 851.41 acre feet per year and including the demand from the Stonegate Center Metropolitan District, 736.93 acre feet per year, would amount to a total of 1588.34 acre feet per year, which is within the range of the 2106 acre feet per year permitted. Of course, should the watering restrictions be changed, the water usage would increase.

3.7 PROPOSED WELL FACILITIES

The information contained in Table 3.9 pertains to the proposed well facilities that is anticipated for utilization at ultimate development. As previously mentioned, all of the wells listed and the raw water transmission network shall be installed, owned and maintained by the Stonegate Center Metropolitan District.

TABLE 3.9
PROPOSED WELL FACILITIES

Well No.	Designation/ Permit No.	Aquifer	Prop. Max. Pumping Rate (GPM) (Conditional)	AC FT AN.	District Location
1	17693 F**	Arapahoe		600	Village Metro
2	LFH1-24914-F	Laramie/FH	150	150	Village Metro
3	TKD 14	Denver	100	40	Village Metro
4	TOW-6	Dawson	100	125	Village Metro
5	KA-18	Arapahoe	500	80	Village Metro
6	TDW-5	Dawson	100	125	Village Metro
7	TKD-13	Denver	100	40	Village Metro
8	LFH324913-F	Laramie/FH	150	50	Village Metro
9	TDW-3*	Dawson	100	75	Village Metro
10	TKD-11	Denver	100	40	Village Metro
11	KA19	Arapahoe	500	180	Center Metro
12	LFH424915-F	Laramie/FH	150	50	Center Metro
13	17691-F	Arapahoe		345	Center Metro
14	LFH2-24912-F**	Laramie/FH	150	150	Center Metro
15	KA-16	Arapahoe	500	80	Center Metro
16	TKD-10	Denver	100	40	Center Metro
17	KA-17	Arapahoe	500	80	Center Metro
18	TKD-12	Denver	100	40	Center Metro
19	TDW-4	Dawson	100	125	Center Metro
20	TDW-1*	Dawson	100	75	Center Metro
21	TKO-7	Denver	100	40	Center Metro
22	TKD-9	Denver	100	40	Center Metro
23	KA-15	Arapahoe	500	80	Center Metro
24	TDW-2*	Dawson	100	75	Center Metro
25	TKD-8	Denver	100	40	Center Metro

* Application for permit withdrawn - will reapply if necessary

** To be determined by field testing

3.8 ULTIMATE WELL PUMPING REQUIREMENTS

Table 3.10 shows the ultimate well pumping requirements for the District at ultimate development using the criteria established for Maximum Day Demand.

TABLE 3.10
ULTIMATE WELL PUMPING REQUIREMENTS

TYPE OF DEVELOPMENT	MAXIMUM DAY DEMAND (GPM)
1. Residential 2. Other	1,944.45 104.41
TOTAL	2,048.86

In addition to the 2,048.86 gpm required for the District, an additional 685.78 gpm will be required for meeting the Maximum Day Demand for the Stonegate Center Metropolitan District for a total well pumping requirement of 2,734.64 gpm to serve both Districts at ultimate development.

Although the wells and raw water network shall be installed, owned and maintained by the Stonegate Center Metropolitan District, the District shall participate in the construction cost of these facilities as established in Section 3.12 - Computation of Construction Costs.

3.9 ULTIMATE STORAGE REQUIREMENTS

Table 3.11 shows the total storage requirement for the District at ultimate development using the criteria established for Maximum Day Demand flow plus fire flow for 2.5 hours.

TABLE 3.11
ULTIMATE STORAGE REQUIREMENTS

TYPE OF DEVELOPMENT	MAXIMUM DAY DEMAND (GPD)
1. Residential	2,800,000
2. Other	150,350
SUBTOTAL	2,950,350
3. Fire Flow: 2700 gpm for 2.5 hours	405,000
TOTAL	3,355,350

In addition to the 2,950,350 gallon storage requirement for the District (less fire flow), an additional 1,947,525 gallons of storage will be required for meeting the Maximum Day Demand plus fire flow (4000 gpm for 4.0 hours) for the Stonegate Center Metropolitan District for a total storage requirement of 4,897,875 gallons to serve both Districts.

Table 3.23 shows the required storage per phased construction of the District.

Although the storage tank and chlorine contact chamber shall be installed, owned and maintained by the Stonegate Center Metropolitan District, the District shall participate in the construction costs of these facilities as established in Section 3.12 - Computation of Construction Costs.

3.10 ULTIMATE BOOSTER PUMP STATION REQUIREMENTS

Table 3.12 shows the Booster Pump Station requirements for the District at ultimate development using the criteria established for Maximum Hour Demand plus Fire Flow.

TABLE 3.12
ULTIMATE BOOSTER PUMP STATION REQUIREMENTS

TYPE OF DEVELOPMENT	MAXIMUM HOUR DEMAND (GPM)
1. Residential	2,916.66
2. Other	131.35
SUBTOTAL	3,048.01
3. Fire Flow	2,700.00
TOTAL	5,748.01

In addition to the 3,048.01 gpm pumping requirement for the District (less fire flow), an additional 5,420.19 gpm of pumping will be required for meeting the maximum hour demand plus fire flow for the Stonegate Center Metropolitan District for a total pumping requirement of 8,468.20 gpm to serve both Districts. Table 3.19 shows the required Booster Pump Station pumping per phased construction of the District.

Although the Booster Pump Station shall be installed, owned and maintained by the Stonegate Center Metropolitan District, the District shall participate in the construction costs of these facilities as established in Section 3.12 - Computation of Construction Costs.

3.11 CONSTRUCTION PHASING

This section describes the water facility phasing program from the year 1983-84 through 1992. All proposed water facilities shall be installed and operational by 1988.

Table 3.13 through 3.19 presents the anticipated Phasing plan for the District considering the units population water demands, well pumping requirements, storage requirements and Booster Pump Station requirements per phase. Each phase is shown on Exhibit "B" - Overall Master Water Plan.

TABLE 3.13
CONSTRUCTION PHASING
AREA TO BE SERVED

		Residential				Community Center	Public Dedication
Phase	Year	S.F. Detached (Units)	Detached O-Lots (Units)	Townhouses (Units)	Total Units	(Acres)	(Acres)
1	1983-84	260	-0-	-0-	260	16	10
2	1985	243	-0-	-0-	243	-0-	-0-
3	1986	239	-0-	-0-	239	-0-	25
4	1987	185	-0-	100	285	-0-	-0-
5	1988	155	-0-	149	304	-0-	-0-
6	1989	105	112	78	295	-0-	-0-
7	1990	102	-0-	194	296	-0-	10
8	1991	126	126	44	296	-0-	-0-
9	1992	-0-	-0-	282	282	-0-	-0-
TOTALS		1415	847	238	2500	16	45

TABLE 3.14

RESIDENTIAL WATER DEMANDS
PHASED CONSTRUCTION

			NUMBER OF DWELLING UNITS		POPULATION		AVE. DAY DEMAND GPM		MAX DAY DEMAND GPM		MAX HOUR DEMAND GPM	
PHASE	YEAR	UNIT TYPE	PHASE	ACCUM	PHASE	ACCUM	PHASE	ACCUM	PHASE	ACCUM	PHASE	ACCUM
1	1983 -84	SF	260	260	728	728	51	51	202	202	303	303
2	1985	SF	243	503	680	1,408	47	98	189	391	283	586
3	1986	SF	239	742	670	2,078	46	144	186	577	280	866
4	1987	SF/TH	285	1,027	798	2,878	56	200	223	800	333	1199
5	1988	SF/TH	304	1,331	851	3,727	59	259	236	1036	355	1554
6	1989	SF/ZL TH	295	1,626	826	4,553	57	316	229	1265	344	1898
7	1990	SF/TH	296	1,922	829	5,382	58	374	230	1495	345	2243
8	1991	SF/ZL TH	296	2,218	829	6,211	58	431	230	1725	345	2588
9	1992	TH	282	2,500	789	7,000	54	486	219	1944	329	2917

The above demands indicate what demands are anticipated per phase when full occupancy for each phase has been reached. Full occupancy per phase is anticipated to be reached approximately 18 months following the installation of the water facilities for that particular phase.

TABLE 3.15

OTHER WATER DEMANDS

PHASED CONSTRUCTION

			AREA (ACRES)		AVE. DAY DEMAND GPM		MAX DAY DEMAND GPM		MAX HOUR DEMAND GPM	
PHASE	YEAR	TYPE OF DEVELOPMENT	PHASE	ACCUM	PHASE	ACCUM	PHASE	ACCUM	PHASE	ACCUM
1	1983	Community Cntr	16	16	0.4	0.4	1.1	1.1	1.4	1.4
	-84	Grammar School	10	26	10.4	10.8	25.8	26.9	32.5	33.9
2	1985		0	26	0	10.8	0	26.9	0	33.9
3	1986	Jr High School	25	51	20.8	31.6	51.7	78.6	65	98.9
4	1987		0	51	0	31.6	0	78.6	0	98.9
5	1988		0	51	0	31.6	0	78.6	0	98.9
6	1989		0	51	0	31.6	0	78.6	0	98.9
7	1990	Grammar School	10	61	10.4	42	25.8	104.4	32.5	131.4
8	1991		0	61	0	42	0	104.4	0	131.4
9	1992		0	61	0	42	0	104.4	0	131.4

TABLE 3.16
TOTAL WATER DEMANDS
PHASED CONSTRUCTION

PHASE	YEAR	RESIDENTIAL						OTHER						TOTALS					
		Avg. Day Demand-GPM		Max. Day Demand-GPM		Max. Hour Demand-GPM		Avg. Day Demand-GPM		Max. Day Demand-GPM		Max. Hour Demand-GPM		Avg. Day Demand-GPM		Max. Day Demand-GPM		Max. Hour Demand-GPM	
		Phase	Accum	Phase	Accum	Phase	Accum	Phase	Accum	Phase	Accum	Phase	Accum	Phase	Accum	Phase	Accum	Phase	Accum
1	1983-84	51	51	202	202	303	303	11	11	27	27	34	34	62	62	229	229	337	337
2	1985	47	98	189	391	283	586	0	11	0	27	0	34	47	109	189	418	283	620
3	1986	46	144	186	577	280	866	21	32	52	79	65	99	67	176	238	656	345	965
4	1987	56	200	223	800	333	1199	0	32	0	79	0	99	56	232	223	879	333	1298
5	1988	59	259	236	1036	355	1554	0	32	0	79	0	99	59	291	236	1115	355	1653
6	1989	57	316	229	1265	344	1898	0	32	0	79	0	99	57	348	229	1344	344	1997
7	1990	58	374	230	1495	345	2243	10	42	25	104	32	131	68	416	255	1599	377	2374
8	1991	58	432	230	1725	345	2588	0	42	0	104	0	131	58	474	230	1829	345	2719
9	1992	54	486	219	1944	329	2917	0	42	0	104	0	131	54	528	219	2048	329	3048

TABLE 3.17

WELL PUMPING REQUIREMENTS
PHASED CONSTRUCTION

PHASE	YEAR	RESIDENTIAL MAX. DAY DEMAND-GPM		OTHER MAX. DAY DEMAND-GPM		WELL PUMPING REQUIREMENTS MAX. DAY DEMAND-GPM		ADDITIONAL PUMPING REQUIRED GPM
		PHASE	ACCUM	PHASE	ACCUM	PHASE	ACCUM	
1	1983 -84	202	202	27	27	229	229	
2	1985	189	391	0	27	189	418	189
3	1986	186	577	52	79	238	656	238
4	1987	223	800	0	79	223	879	223
5	1988	236	1036	0	79	236	1115	236
6	1989	229	1265	0	79	229	1344	229
7	1990	220	1495	25	104	255	1599	255
8	1991	230	1725	0	104	230	1829	230
9	1992	219	1944	0	104	219	2048	219

TABLE 3.18

STORAGE REQUIREMENTS
PHASED CONSTRUCTION

		RESIDENTIAL MAX. DAY DEMAND-GPD		OTHER MAX. DAY DEMAND-GPD		FIRE FLOW *		TOTAL STORAGE REQUIREMENT GPD	
PHASE	YEAR	PHASE	ACCUM	PHASE	ACCUM	PHASE	ACCUM	PHASE	ACCUM
1	1983 -84	291200	291200	38750	38750	180000	180000	509950	509950
2	1985	272000	563200	-0-	38750		180000	272000	781950
3	1986	268000	831200	74400	113150		180000	342400	1124350
4	1987	319200	1150400	-0-	113150	405000	405000	319200	1668550
5	1988	340400	1490800	-0-	113150		405000	340400	2008950
6	1989	330400	1821200	-0-	113150		405000	330400	2339350
7	1990	331600	2152800	37200	150350		405000	368800	2708150
8	1991	331600	2484400	-0-	150350		405000	331600	3039750
9	1992	315600	2800000	-0-	150350		405000	315600	3355350

* Fire Flow for Phases 1-3 is based on 1500 gpm for 2 hours and for Phases 4-9 is based on 2700 gpm for 2.5 hours.

TABLE 3.19

BOOSTER PUMP STATION REQUIREMENTS
PHASED CONSTRUCTION

		RESIDENTIAL MAX. HOUR DEMAND-GPM		OTHER MAX. HOUR DEMAND-GPM		FIRE FLOW * GPM	TOTAL PUMPING REQUIREMENTS GPM	
PHASE	YEAR	PHASE	ACCUM	PHASE	ACCUM		PHASE	ACCUM
1	1983 -84	303	303	34	34	1500	1837	1837
2	1985	283	586	-0-	34		283	2120
3	1986	280	866	65	99		345	2465
4	1987	333	1199	-0-	99	2700	1533	3998
5	1988	355	1554	-0-	99		355	4353
6	1989	344	1898	-0-	99		344	4697
7	1990	345	2243	32	131		377	5074
8	1991	345	2588	-0-	131		345	5419
9	1992	329	2917	-0-	131		329	5748

* Fire Flow for Phases 1-3 is based on 1500 gpm and for Phases 4-9 is based on 2700 gpm

3.12 COMPUTATION OF CONSTRUCTION COSTS

This section computes the construction costs for the installation of a complete water system. The costs shown are based on 1981 figures and the quantities shown on Exhibit "B" Overall Master Water Plan.

Table 3.20 computes the costs for the installation of the transmission system and the interior distribution system. The interior distribution system shall be paid for by individual developers and shall not be a District cost.

TABLE 3.20
WATER MAIN DISTRIBUTION SYSTEM
CONSTRUCTION COST

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL PRICE
A	TRANSMISSION SYSTEM				
1.	12" D.I.P. Water Main	8950	LF	15.67	$ 140,246.50
2.	12" Gate Valve & Box	22	EA	825.00	18,150.00
3.	Fire Hydrant Assembly	18	EA	1,500.00	27,000.00
	SubTotal				$ 185,396.50
	28% Engineering and Contingencies				51,911.02
					$ 237,307.52
B	INTERIOR DISTRIBUTION SYSTEM (In Tract)				
1.	6" P.V.C. Water Main	17,130	LF	8.34	$142,864.20
2.	8" P.V.C. Water Main	43,090	LF	10.39	447,705.10
3.	6" Gate Valve & Box	61	EA	330.00	20,130.00
4.	8" Gate Valve & Box	127	EA	475.00	60,325.00
5.	Fire Hydrant Assembly	123	EA	1,500.00	184,500.00
	SubTotal				$ 855,524.30
	28% Engineering and Contingencies				239,546.80
					$1,095,071.10
C	Water Services Laterials (40 ft/Unit)	2,500	EA	272.55	$681,375.00
	TOTALS				$2,013,753.62

Table 3.21 computes the cost of the District for the construction of the Regional Water Facilities such as wells, raw water network, storage tanks, chlorine contact chambers and Booster Pump Station. A breakdown of the anticipated costs for these facilities are shown in Table 3.22 through Table 3.24.

TABLE 3.21
DISTRICT COST OF REGIONAL FACILITIES

DESCRIPTION	TOTAL CONSTRUCTION COST	DISTRICT COST
1. Drilling of New Wells	$2,265,680.00 *	$1,085,520.00*
2. Well Houses, Pumps, Controls	542,720.00	230,656.00
3. Raw Water Transmission Network	556,965.00	390,045.00
4. Storage Tanks	1,568,000.00	832,000.00
5. Chlorine Contact Chambers	51,200.00	51,200.00
6. Booster Pump Stations	740,110.00	693,580.00
7. 16" Dist. System	685,898.00	685,898.00
8. Other Regional Water Facilities	1,202,623.00	767,293.00
TOTALS	$ 7,613,196.00	$4,736,192.00

* Includes $210,000.00 for wells drilled in 1981.

TABLE 3.22
WELL CONSTRUCTION COSTS

AQUIFER	NO. OF NEW WELLS	COST PER WELL	TOTAL COST
SECTION A Drilling of New Wells			
Arapahoe	5	110,000.00	$ 550,000.00
Dawson	6	40,000.00	240,000.00
Denver	8	67,000.00	536,000.00
Laramie-F.H.	2	140,000.00	280,000.00
SubTotal	21		$ 1,606,000.00
28% Engineering and Contingencies			449,680.00
			$ 2,055,680.00
SECTION B Well Houses, Pumps and Controls			
Arapahoe	7	17,800.00	$ 124,600.00
Dawson	6	12,500.00	75,000.00
Denver	8	14,100.00	112,800.00
Laramie-F.H.	4	27,900.00	111,600.00
SubTotal	25		$ 424,000.00
28% Engineering and Contingencies			118,720.00
			$ 542,720.00
WELL CONSTRUCTION COSTS			$ 2,598,400.00
WELLS DRILLED IN 1981			210,000.00
TOTAL WELL CONSTRUCTION COSTS			$2,808,400.00

TABLE 3.23
RAW WATER MAIN NETWORK
CONSTRUCTION COST

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL COST
1.	4" PVC Water Main	2920	LF	5.70	$16,644.00
2.	6" PVC Water Main	8380	LF	6.90	57,822.00
3.	8" PVC Water Main	14290	LF	9.25	132,182.50
4.	10" PVC Water Main	10280	LF	10.25	105,370.00
5.	12" PVC Water Main	6100	LF	14.00	85,400.00
6.	16" Water Main	550	LF	18.11	9,960.50
7.	4" Gate Valve & Box	10	EA	175.00	1,750.00
8.	6" Gate Valve & Box	14	EA	300.00	4,200.00
9.	8" Gate Valve & Box	17	EA	400.00	6,800.00
10.	10" Gate Valve & Box	12	EA	500.00	6,000.00
11.	12" Gate Valve & Box	12	EA	750.00	9,000.00
	Subtotal				$435,129.00
	28% Engineering and Contingencies				121,836.12
	TOTAL				$556,965.12

It is noted that the sizes shown above are based on the anticipated pumping rate, in gpm, of each of the 25 wells and may change once the wells have been field tested.

TABLE 3.24
STORAGE TANKS, CHLORINE CONTACT CHAMBER
AND BOOSTER PUMP STATION
CONSTRUCTION COST

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL COST
1.	2.6 MG Storage Tank	1	EA	$650,000.00	$650,000.00
2.	2.3 MG Storage Tank	1	EA	575,000.00	575,000.00
3.	Chlorine Contact Chamber	LS	LF LS	40,000.00	40,000.00
4.	Booster Pump Station				
a.	Pumps, with Power	8468	GPM	37.55	$318,000.00
b.	Pump Station Vault	LS	LS	45,000.00	45,000.00
c.	Interior Piping	LS	LS	30,000.00	30,000.00
d.	Electrical System	LS	LS	30,000.00	30,000.00
e.	Standby Power	LS	LS	90,000.00	90,000.00
f.	Master Controls	LS	LS	65,000.00	65,000.00
	Subtotal				$1,843,000.00
	28% Engineering and Contingencies				516,310.00
	TOTAL				$2,359,310.00

Table 3.25 summarizes the anticipated construction cost to install a complete water system capable of serving the District's Ultimate Water Demands.

TABLE 3.25
SUMMARY OF WATER FACILITIES
CONSTRUCTION COST

ITEM	DESCRIPTION	TOTAL COST *
1.	Major Water Facilities (Participation)	$4,736,192.00
2.	In-Tract Distribution System	1,095,071.00
3.	Water Services	681,375.00
	Total Water System Cost	$6,512,638.00
	Less In-Tract Facilities	<1,776,446.00>
	TOTAL COST TO DISTRICT	$4,736,192.00

* Includes 28% Contingencies

3.13 PRELIMINARY COST ESTIMATE TO DEVELOP A WATER SYSTEM

This section presents a general summary of the total construction and engineering costs to develop a complete water system for the District. Table 3.26 has been prepared to bring together all the water construction costs set forth in this report and to make allowances for contingencies and engineering fees. It should be noted that these are construction costs only and that consideration should be given to the periodical costs mentioned in Section 6.2, such as maintenance and periodic operating expenses.

Also construction and material costs are increasing rapidly. The increases are sporadic and are not necessarily tied to any easily determined indicator. Therefore, the costs shown below are based on 1981 figures.

TABLE 3.26
TOTAL COST FOR THE INSTALLATION OF
A COMPLETE WATER SYSTEM

1.	Water System Construction Cost	$3,700,150.00
2.	15% Contingencies	555,023.00
3.	13% Engineering, Survey, Inspection	481,019.00
	Subtotal	
	TOTAL	$4,736,192.00

3.14 PHASED CONSTRUCTION COST

Table 3.27 outlines and computes the anticipated water main cost per phase based upon 1981 construction costs and quantities shown on Exhibit "B" - Overall Master Water Plan and which is summarized in Table 3.20 Water Main Distribution System Construction Costs.

TABLE 3.27
PHASED CONSTRUCTION COSTS
WATER MAIN
(IN-TRACT)

PHASE	ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL COST
Phase 1	1	6" PVC Water Main	4010	LF	$ 8.34	$ 33,443.40
	2	8" PVC Water Main	7000	LF	10.39	72,730.00
(Single	3	6" Gate Valve	12	EA	330.00	3,960.00
Family)	4	8" Gate Valve	24	EA	475.00	11,400.00
	5	Fire Hydrant Assembly	22	EA	1,500.00	33,000.00
		SUBTOTAL				$154,533.40
		15% Contingency				23,180.01
		TOTAL				$177,713.41
Phase 2	1	6" PVC Water Main	1290	LF	$ 8.34	$10,748.60
	2	8" PVC Water Main	9670	LF	10.39	100,471.30
(Single	3	6" Gate Valve	6	EA	330.00	1,980.00
Family)	4	8" Gate Valve	21	EA	475.00	9,975.00
	5	Fire Hydrant Assembly	22	EA	1,500.00	33,000.00
		SUBTOTAL				$156,184.90
		15% Contingency				$ 23,427.74
		TOTAL				$179,612.64

TABLE 3.27 (cont'd)
PHASED CONSTRUCTION COSTS
WATER MAIN
(IN-TRACT)

PHASE	ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL COST
Phase 3	1	6" PVC Water Main	2110	LF	$ 8.34	$17,597.40
	2	8" PVC Water Main	5000	LF	10.39	51,950.00
(Single	3	6" Gate Valve	7	EA	330.00	2,310.00
Family)	4	8" Gate Valve	14	EA	475.00	6,650.00
	5	Fire Hydrant Assembly	15	EA	1,500.00	22,500.00
		SUBTOTAL				$101,007.40
		15% Contingency				15,151.11
		TOTAL				$116,158.51
Phase 4	1	6" PVC Water Main	2630	LF	$ 8.34	$ 21,934.20
	2	8" PVC Water Main	2900	LF	10.39	30,131.00
(Single	3	6" Gate Valve	9	EA	330.00	2,970.00
Family)	4	8" Gate Valve	12	EA	475.00	5,700.00
	5	Fire Hydrant Assembly	12	EA	1,500.00	18,000.00
		SUBTOTAL				$78,735.20
		15% Contingency				11,810.28
		TOTAL				$90,545.48
Phase 4	1	8" PVC Water Main	850	LF	$ 10.39	$8,831.50
	2	8" Gate Valve	4	EA	475.00	1,900.00
(Town-	3	Fire Hydrant	3	EA	1,500.00	4,500.00
houses)		SUBTOTAL				15,231.50
		15% Contingency				$2,284.73
		TOTAL				$17,516.23
Phase 5	1	6" PVC Water Main	1940	LF	$ 8.34	$ 16,179.60
	2	8" PVC Water Main	4180	LF	10.39	43,430.20
(Single	3	6" Gate Valve	8	EA	330.00	2,640.00
Family)	4	8" Gate Valve	10	EA	475.00	4,750.00
	5	Fire Hydrant Assembly	12	EA	1,500.00	18,000.00
		SUBTOTAL				$ 84,999.80
		15% Contingency				12,749.97
		TOTAL				$97,749.77

TABLE 3.27 (cont'd)
PHASED CONSTRUCTION COSTS
WATER MAIN
(IN-TRACT)

PHASE	ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL COST
Phase 5 (Town-houses)	1	8" PVC Water Main	580	LF	$ 10.39	$ 6,026.20
	2	8" Gate Valve	2	EA	475.00	950.00
	3	Fire Hydrant	1	EA	1,500.00	1,500.00
		SUBTOTAL				$ 8,476.20
		15% Contingency				$ 1,271.43
		TOTAL				$ 9,747.63
Phase 6 (Single Family)	1	6" PVC Water Main	1230	LF	$ 8.34	$ 10,258.20
	2	8" PVC Water Main	1790	LF	10.39	18,598.10
	3	6" Gate Valve	4	EA	330.00	1,320.00
	4	8" Gate Valve	6	EA	475.00	2,850.00
	5	Fire Hydrant Assembly	6	EA	1,500.00	9,000.00
		SUBTOTAL				$ 42,026.30
		15% Contingency				$ 6,303.95
		TOTAL				$ 48,330.25
Phase 6 (Town-houses)	1	8" PVC Water Main	580	LF	$10.39	$ 6,026.20
	2	8" Gate Valve	2	EA	475.00	950.00
	3	Fire Hydrant Assembly	1	EA	1,500.00	1,500.00
		SUBTOTAL				$ 8,476.20
		15% Contingency				$ 1,271.43
		TOTAL				$ 9,747.63
Phase 6 (Zero Lot)	1	6" PVC Water Main	770	LF	$ 8.34	$ 6,421.80
	2	8" PVC Water Main	2350	LF	10.39	24,416.50
	3	6" Gate Valve	3	EA	330.00	990.00
	4	8" Gate Valve	6	EA	475.00	2,850.00
	5	Fire Hydrant Assembly	6	EA	1,500.00	$ 9,000.00
		SUBTOTAL				$ 43,678.30
		15% Contingency				$ 6,551.75
		TOTAL				$ 50,230.05

TABLE 3.27 (cont'd)
PHASED CONSTRUCTION COSTS
WATER MAIN
(IN-TRACT)

PHASE	ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL COST
Phase 7	1	6" PVC Water Main	450	LF	$ 8.34	$ 3,753.00
	2	8" PVC Water Main	2780	LF	10.39	28,884.20
(Single-	3	6" Gate Valve	2	EA	330.00	660.00
Family)	4	8" Gate Valve	7	EA	475.00	3,325.00
	5	Fire Hydrant Assembly	7	EA	1,500.00	10,500.00
		SUBTOTAL				$ 47,122.20
		15% Contingency				$ 7,068.33
		TOTAL				$ 54,190.53
Phase 7	1	8" PVC Water Main	580	LF	$10.39	$ 6,026.20
	2	8" Gate Valve	2	EA	475.00	950.00
(Town-	3	Fire Hydrant Assembly	1	EA	1,500.00	1,500.00
houses)		SUBTOTAL				$ 8,476.20
		15% Contingency				$ 1,271.43
		TOTAL				$ 9,747.63
Phase 8	1	6" PVC Water Main	1460	LF	$ 8.34	$ 12,176.40
	2	8" PVC Water Main	1400	LF	10.39	14,546.00
(Single-	3	6" Gate Valve	5	EA	330.00	1,650.00
Family)	4	8" Gate Valve	7	EA	475.00	3,325.00
	5	Fire Hydrant Assembly	6	EA	1,500.00	$ 9,000.00
		SUBTOTAL				$ 40,697.40
		15% Contingency				$ 6,104.61
		TOTAL				$ 46,802.01
Phase 8	1	8" PVC Water Main	580	LF	$10.39	$ 6,026.20
	2	8" Gate Valve	2	EA	475.00	950.00
(Town-	3	Fire Hydrant Assembly	1	EA	1,500.00	1,500.00
houses)		SUBTOTAL				$ 8,476.20
		15% Contingency				$ 1,271.43
		TOTAL				$ 9,747.63

TABLE 3.27 (cont'd)
PHASED CONSTRUCTION COSTS
WATER MAIN
(IN-TRACT)

PHASE	ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL COST
Phase 8	1	6" PVC Water Main	1240	LF	$ 8.34	$ 10,341.60
	2	8" PVC Water Main	1720	LF	10.39	17,870.80
(Zero	3	6" Gate Valve	5	EA	330.00	1,650.00
Lot)	4	8" Gate Valve	5	EA	475.00	2,375.00
	5	Fire Hydrant Assembly	6	EA	1,500.00	$ 9,000.00
		SUBTOTAL				$ 41,237.40
		15% Contingency				$ 6,185.61
		TOTAL				$ 47,423.01
Phase 9	1	8" PVC Water Main	1130	LF	$10.39	$ 11,740.70
	2	8" Gate Valve	3	EA	475.00	1,425.00
(Town-	3	Fire Hydrant Assembly	2	EA	1,500.00	3,000.00
houses)		SUBTOTAL				$ 16,165.70
		15% Contingency				$ 2,424.86
						$ 18,590.56

TABLE 3.28
SUMMARY OF IN-TRACT PHASED WATER MAIN CONSTRUCTION COSTS

PHASE	UNITS	CONSTRUCTION COSTS	15% CONTINGENCIES	WATER SERVICE COST	TOTAL COST
Phase 1 (1983-84)	260	154,533.40	23,180.01	70,863.00	248,576.41
Phase 2 (1985)	243	156,184.90	23,427.72	66,229.65	245,842.27
Phase 3 (1986)	239	101,007.40	15,151.11	65,139.45	181,297.96
Phase 4 (1987)	285	93,966.70	14,095.01	77,676.75	185,738.46
Phase 5 (1988)	304	93,476.00	14,021.40	82,855.20	190,352.60
Phase 6 (1989)	295	94,180.80	14,127.13	80,402.25	188,710.18
Phase 7 (1990)	296	55,598.40	8,339.76	80,674.80	144,612.96
Phase 8 (1991)	296	90,411.00	13,561.65	80,674.80	184,647.45
Phase 9 (1992)	282	16,165.70	2,424.86	76,859.10	95,449.66
TOTALS		$855,524.30	$128,328.65	$681,375.00	$1,665,227.95

Tables 3.29 through 3.31 presents the phased construction costs for the Regional Water Facilities which will be installed at District cost and which are summarized in Table 3.32.

TABLE 3.30
PHASED RAW WATER CONSTRUCTION COSTS

YEAR	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL PRICE
1983	1. 6" Water Main	2940	LF	$6.90	$20,286.00
	2. 8" Water Main	1360	LF	9.25	12,580.00
	3. 10" Water Main	1600	LF	10.25	16,400.00
	4. 12" Water Main	3600	LF	14.00	50,400.00
	5. 16" Water Main	550	LF	18.11	9,960.50
	6. 6" Gate Valve	6	EA	300.00	1,800.00
	7. 8" Gate Valve	5	EA	400.00	2,000.00
	8. 10" Gate Valve	3	EA	500.00	1,500.00
	9. 12" Gate Valve	7	EA	750.00	$ 5,250.00
	Subtotal				$120,176.50
	28% Contingencies				$33,649.42
	TOTAL				$153,825.92
1985	1. 4" Water Main	300	LF	$5.70	$1,710.00
	2. 6" Water Main	920	LF	6.90	6,348.00
	3. 8" Water Main	160	LF	9.25	1,480.00
	4. 10" Water Main	2840	LF	10.25	29,110.00
	5. 12" Water Main	1900	LF	14.00	26,600.00
	6. 4" Gave Valve	2	EA	175.00	350.00
	7. 6" Gate Valve	3	EA	300.00	900.00
	8. 8" Gate Valve	2	EA	400.00	800.00
	9. 10" Gate Valve	3	EA	500.00	1,500.00
	10. 12" Gate Valve	3	EA	750.00	2,250.00
	Subtotal				$71,048.00
	28% Contingencies				19,893.44
	TOTAL				$90,941.44
1987	1. 4" Water Main	560	LF	$5.70	$3,192.00
	2. 6" Water Main	160	LF	6.90	1,104.00
	3. 8" Water Main	1200	LF	9.25	11,100.00
	4. 4" Gate Valve	4	EA	175.00	700.00
	5. 6" Gate Valve	1	EA	300.00	300.00
	6. 8" Gate Valve	2	EA	400.00	800.00
	Subtotal				$17,196.00
	28% Contingencies				4,814.88
	TOTAL				$22,010.88
1988	1. 6" Water Main	1100	LF	$6.90	$7,590.00
	2. 8" Water Main	7450	LF	9.25	68,912.50
	3. 10" Water Main	1600	LF	10.25	16,400.00
	4. 6" Gate Valve	1	EA	300.00	300.00
	5. 8" Gate Valve	4	EA	400.00	1,600.00
	6. 10" Gate Valve	3	EA	500.00	1,500.00
	Subtotal				$96,302.50
	28% Contingencies				26,964.70
	TOTAL				$123,267.20

TABLE 3.31
PHASED BOOSTER PUMP STATION,
STORAGE TANK, CHLORINE CHAMBER
AND DISTRIBUTION COSTS

YEAR	BOOSTER PUMP STATION	STORAGE TANKS	CHLORINE CHAMBER	REGIONAL WATER DISTRIBUTION SYSTEM	T O T A L S
1982					$85,061.00*
1983	$452,970.05	$832,000.00	$51,200.00	$479,137.02	1,730,246.07*
1984					
1985					
1986	120,440.05			75,521.60	195,961.65
1987	120,170.05			217,815.04	337,985.09
1988				150,731.84	150,731.84
TOTALS	$693,580.15	$832,000.00	$512,000.00	$923,205.50	$2,499,985.65

* Totals for 1983 equal $1,815,307.07, of which $85,061.00 is shown in 1982 as engineering costs.

TABLE 3.32
SUMMARY OF DISTRICT PHASED
WATER CONSTRUCTION COSTS

YEAR	DISTRICT DISTRIBUTION SYSTEM	REGIONAL DISTRIBUTION SYSTEM	DRILLING NEW WELLS	PUMP HOUSE CONTROLS	RAW WATER	STORAGE TANK	CHLORINE CHAMBER	BOOSTER PUMP STATION	T O T A L S
1981			$210,000.00						$210,000.00
1982									85,061.00*
1983	86,264.00	392,873.00	140,800.00	58,496.00	153,826.00	832,000.00	51,200.00	452,970.00	2,083,368.00*
1984									
1985		105,554.00	277,760.00	56,832.00	90,941.00				531,087.00
1986	75,522.00							120,440.00	195,962.00
1987		464,441.00	277,760.00	56,832.00	22,011.00			120,170.00	941,214.00
1988	75,522.60	253,015.00	179,200.00	58,496.00	123,267.00				689,500.00
TOTALS	$237,308.00	$1,215,883.00	$1,085,520.00	$230,656.00	$390,045.00	$832,000.00	$51,200.00	$593,580.00	$4,736,192.00

* Totals for 1983 equal $2,168,429.00 of which $85,061.00 is shown in 1982 as engineering costs.

SECTION 4
PROPOSED SANITARY SEWER COLLECTION AND OUTFALL SYSTEM

4.1 GENERAL

This section contains information pertaining to the District's proposed sanitary sewer collection system to be constructed in order to transport wastewater to the proposed Jordan Road Outfall Sewer which will be constructed by the Stonegate Center Metropolitan District. The wastewater shall be transported by the Jordan Road Outfall Sewer to a wastewater treatment plant which will also be constructed by the Stonegate Center Metropolitan District for treatment. Through the process of a Land Application procedure effluent from the treatment plant will be used to irrigate all non-residential areas within the District. This method of irrigation shall also be installed, owned and maintained by the Stonegate Center Metropolitan District.

The proposed sanitary sewer system is shown in Exhibit "C" Overall Master Sanitary Sewer Plan.

4.2 GENERAL TOPOGRAPHY

The topography of the District, as shown on Exhibit "C" is cut by numerous drainage areas including Newlin Gulch that flows northeast through the area from the southwest corner of the District. The District varies in elevation from

5795 at the northeast corner of the District to a high elevation of approximately 5945 in the west central portion. The surface slopes range between one and six percent throughout the District with the flatter slopes being in the center area and the steeper slopes generally along the perimeter of the District.

The majority of the area south of West Parker Road and west of Jordan Road may be served by gravity flow utilizing a proposed outfall main which be constructed in Jordan Road, while portions of Phase 5, 6 and 7 (Single-Family) and all of the area east of Jordan Road may be served by gravity to M.H. No. A-6 as shown on Exhibit "D" where it will connect to facilities of the Stonegate Center Metropolitan District and through the use of a sanitary sewer lift station and force main, which will be owned and maintained by the Stonegate Center Metropolitan District will be pumped approximately 2730 LF to the outfall sewer in Jordan Road.

4.3 SANITARY SEWER SYSTEM DESIGN CRITERIA

Table 4.1 shows the criteria used for the determination of the projected wastewater flows and line sizing associated with the collection system within the District. The average day flows are based upon past factual data as established for development of the type and size proposed for the District.

TABLE 4.1
SANITARY SEWER SYSTEM
DESIGN CRITERIA

1.	Residential Average Day Flow		70 gals/day/capita
2.	Commercial Average Day Flow		20 gals/day/capita
3.	Community Center Average Day Flow		20 gals/day/capita
4.	Public Dedicated Areas (Schools) Average Day Flow		20 gal/day/capita
5.	Peaking Factor: Collection Lines	4.0	
	: Commercial	1.5	
6.	Infiltration/Inflow	100 gpd/inch	diam./mile of pipe
7.	Friction Factor (n)		0.013
8.	Minimum Pipe Size/slope		8"/0.4%
9.	Minimum Velocity		2.0 f.p.s.
10.	Maximum Velocity		10.0 f.p.s.

4.4 COMPUTATION OF SANITARY SEWER FLOWS

Table 4.2 through Table 4.6 show the projected average day and peak sanitary sewer flows for the District utilizing information contained in Table 2.1 and Table 4.1. The various junction points, sewer alignment and flows are shown on Exhibit "C" - Overall Master Sanitary Sewer Plan.

TABLE 4.2
COMPUTATION OF PROJECTED SANITARY SEWER FLOWS
LINE "A"

FROM	TO	AREA (ACS)	NO.OF UNITS	POPULATION INCR	POPULATION TOTAL ACCUM	AVG. DAY FLOW G.P.D. INCR	AVG. DAY FLOW G.P.D. TOTAL ACCUM	PEAK FLOW FACTOR	TOTAL PEAK FLOW G.P.D. INCR	TOTAL PEAK FLOW G.P.D. TOTAL ACCUM	INFILTRATION G.P.D. INCR	INFILTRATION G.P.D. TOTAL ACCUM	TOTAL FLOW G.P.D. INCR	TOTAL FLOW G.P.D. TOTAL ACCUM	SANITARY SEWER DESIGN PIPE SIZE (IN)	SANITARY SEWER DESIGN LENGTH (FT)	TOTAL FLOW MGD INCR	TOTAL FLOW MGD TOTAL
Phase 5,6,7	A-1	39.7	121	339	-	23730	-	4.0	94920	-	886	-	95806		8"	5850	0.10	-
Phase 5,A-1	A-2	36.0	112	314	653	21980	45710	4.0	87920	182840	831	1717	88751	184557	8"	5840	0.09	0.18
A-2	A-3	10 (1)	-	-	-	12000 (1)	57710	4.0	48000	230840	220	1937	48220	232777	8"	1450	0.05	0.23
A-3	A-4	31.7	465	1302	1955	91140	148850	4.0	364560	595400	298	2235	364858	597635	8"	1970	0.36	0.60
A-4.1	A-4	25.4	382	1070	-	74900	-	4.0	299600	-	182	-	299782	-	8"	1200	0.30	-
A-4	A-5	4.6 (2)	-	201 (2)	3025	4020 (2)	227770	3.95588	6030 (2)	901030 (2)	106	2523	6136 (2)	903553 (2)	10"	560	0.01	0.90
Phase 6,8	A-5	39.7	238	666	-	46620	-	4.0	186480	-	917	-	187897	-	8"	6050	0.19	-
A-5	A-6	-	1318	-	3691 201(C) 3892(T)	-	294390 (3)	3.96337	-	1087510 (3)	136	3576	136	1091086 (3)	10"	720	-	1.09

[1]Public dedicted areas (Proposed 10 acre school site - 600 pupils @ 20 g/d/c/ = 12000 gpd Average Day Flow)
[2]See Table 4.3 4020 GPD (ADF) and 6030 GPD (PF) is from commercial area.
[3]See Table 4.3 4020 GPD (ADF) and 6030 GPD (PF) is from commercial area.

TABLE 4.3
COMPUTATION OF PROJECTED COMMERCIAL SANITARY SEWER FLOWS
LINE "A"

LINE NO. A		COMMERCIAL						AVG. DAY FLOW G.P.D.		PEAK FLOW FACTOR	TOTAL PEAK FLOW G.P.D.		INFILTRATION G.P.D.		TOTAL FLOW G.P.D.		SANITARY SEWER DESIGN		TOTAL FLOW MGD	
		AREA		POPULATION																
FROM	TO	(ACS)	BLDG SF	OFF	WAREHS	INCR	ACCUM	INCR	TOTAL ACCUM		INCR	TOTAL ACCUM	INCR	TOTAL ACCUM	INCR	TOTAL ACCUM	PIPE SIZE (IN)	LENGTH (FT)	INCR	TOTAL
A-4	A-5	4.6	50094	168	33	201		4020 (1)		1.5	6030 (1)				6030 (1)					

[1]See Table 4.2

The above flows are generated by areas located within the Stonegate Center Metropolitan District.

TABLE 4.4
COMPUTATION OF PROJECTED SANITARY SEWER FLOWS
LINE "B"

LINE NUMBER "B" FROM	TO	AREA (ACS)	NO.OF UNITS	POPULATION INCR	POPULATION TOTAL ACCUM	AVG. DAY FLOW G.P.D. INCR	AVG. DAY FLOW G.P.D. TOTAL ACCUM	PEAK FLOW FACTOR	TOTAL PEAK FLOW G.P.D. INCR	TOTAL PEAK FLOW G.P.D. TOTAL ACCUM	INFILTRATION G.P.D. INCR	INFILTRATION G.P.D. TOTAL ACCUM	TOTAL FLOW G.P.D. INCR	TOTAL FLOW G.P.D. TOTAL ACCUM	SANITARY SEWER DESIGN PIPE SIZE (IN)	SANITARY SEWER DESIGN LENGTH (FT)	TOTAL FLOW MGD INCR	TOTAL FLOW MGD TOTAL
Phase 1	B-1	74.4	260	728	-	50960	-	4.0	203840	-	1708	-	205548	-	8"	11270	0.21	-
Phase 3-4 25 Ac School Site	B-2	108.5	424	1187	-	107090 (1)	-	4.0	428360 (1)	-	2168	-	430528 (1)	-	8"	14310	0.43	-
B-2 CmCtr 10 Ac School Site	B-3	40.5	50	140	1327	22300 (2)	129390 (1 -2)	4.0	89200	517560	547 26	2741	89773	520301 (2)	10" 8"	2890 170	0.17	0.52
Phase 6,7,8	B-3	60.7	256	717	-	50190	-	4.0	200260	-	1632	-	201892	-	8"	10770	0.20	-
B-3	B-4	23.0	85	238	2282	16660	196240 (3)	4.0	66640	784960 (3)	246 452	5071	67338	790031 (3)	10" 8"	1300 2980	0.07	0.79
B-1	B-4	27.5	99	277	-	27610 (4)	78570 (4)	3.73845	89890 (4)	293730 (4)	614	2322	90504 (4)	296052 (4)	8"	4050	0.09	0.30
B-4	B-5	1.8	8	22	3309 411(C) 3720(T)	1540	276350 (5)	3.92564	6160	1084850 (5)	161	7554	6321	1092404 (5)	10"	850	-	1.09

[1]Public Dedicated Areas (Proposed 25 acre school site - 1200 pupils @ 20 GPD = 24000 GPD (ADF)
[2]Public Dedicated Areas (Proposed 10 acre school site - 600 pupils @ 20 GPD = 12000 GPD (ADF)
[3]Public Dedicated Areas (Proposed 10 acre school site - 600 pupils @ 20 GPD - 12000 GPD (ADF)
[4]See Table 4.5 for commercial flows. Includes 8220 GPD (ADF) and 1330 GPD (PF) for commercial areas (Accum Flow).
[5]See comments (2) and (4) for flows other than residential.

TABLE 4.5
COMPUTATION OF PROJECTED COMMERCIAL SANITARY SEWER FLOWS
LINE "B"

LINE NO. B		COMMERCIAL						AVG. DAY FLOW G.P.D.		PEAK FLOW FACTOR	TOTAL PEAK FLOW G.P.D.		INFILTRATION G.P.D.		TOTAL FLOW G.P.D.		SANITARY SEWER DESIGN		TOTAL FLOW MGD	
		AREA		POPULATION																
FROM	TO	(ACS)	BLDG SF	OFF	WAREHS	INCR	ACCUM	INCR	TOTAL ACCUM		INCR	TOTAL ACCUM	INCR	TOTAL ACCUM	INCR	TOTAL ACCUM	PIPE SIZE (IN)	LENGTH (FT)	INCR	TOTAL
B-1	B-4	9.4	102366 (1)	343	68	411	-	8220 (1)	-	1.5	12330 (1)	-	-	-	-	-	-	-	-	-

[1]See Table 4.4
[2]See Table 4.4
[3]See Table 4.4
[4]See Table 4.4

The above flows are generated by areas located in the Stonegate Center Metropolitan District.

TABLE 4.6

TOTAL SANITARY SEWER FLOWS
ENTERING FACILITIES OF THE STONEGATE
CENTER METROPOLITAN DISTRICT

LINE NO.	DEVELOPMENT	AVG. DAY FLOW GPD	PEAK FLOW FACTOR	PEAK FLOW GPD	INFILTRATION GPD	TOTAL FLOW GPD
A	Stonegate Village Stonegate Center	270,370 4,020	4.0 1.5	1,081,480 6,030	3,576	1,085,056 6,030
	SubTotal	274,390		1,087,510	3,576	1,091,086
B	Stonegate Village Stonegate Center	268,130 8,220	4.0 1.5	1,072,520 12,330	7,554	1,080,074 12,330
	SubTotal	276,350		1,084,850	7,5[illegible]	1,092,404
	TOTAL	550,740		2,172,360	11,130	2,183,490

From Table 4.6 and the preceeding tables, it can be seen that the projected total flow from the District will be 2,165,130 gallons per day, of which 1,080,074 gallons per day may be serviced by gravity flow and 1,085,056 gallons per day will have to be pumped from Lift Station #2 to the Jordan Road Outfall as shown on Exhibit "B". An additional total flow of 18,360 gallons per day will also be generated in District lines by areas within the Stonegate Center Metropolitan District.

4.5 COMPUTATION OF CONSTRUCTION COSTS

This section computes the construction costs for the installation of a complete sanitary sewer system. The costs shown are based on 1981 figures and the quantities shown on Exhibit "C" Overall Master Sanitary Sewer Plan.

Table 4.7 computes the costs for the installation of the main collector system and the interior collection system.

TABLE 4.7
SANITARY SEWER COLLECTION SYSTEM
CONSTRUCTION COSTS

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL PRICE
A	Main Collector System Line "A" M.H. A-1 to A-6				
1.	8" PVC Sanitary Sewer	3900	LF	$ 10.83	$ 42,237.00
2.	10" PVC Sanitary Sewer	1390	LF	12.00	16,680.00
3.	4'-0" Dia. Sanitary Sewer Manhole	19	EA	1,000.00	19,000.00
	Subtotal				$ 77,917.00
	15% Contingency				$ 11,687.55
					$ 89,604.55
B	Main Collection System Line "B" M.H. B-1,B-2 to M.H. B-5				
1.	8" PVC Sanitary Sewer	3420	LF	10.83	37,038.60
2.	10" PVC Sanitary Sewer	5040	LF	12.00	60,480.00
3.	4'-0" Dia. Sanitary Sewer Manhole	44	EA	1,000.00	44,000.00
	Subtotal				$ 141,518.60
	15% Contingency				$ 21,227.79
					$ 162,746.39
C	Interior Collection System (In-Tract)				
1	8" PVC Sanitary Sewer	58290	LF	10.83	$ 631,280.70
2	4'-0" I.O. Sanitary Sewer Manholes	309	EA	1,000.00	309,000.00
	Subtotal				$ 940,280.70
	15% Contingency				$ 141,042.11
					$1,081,322.81
D	Sanitary Sewer Service	2500	EA	300.00	$743,200.00
	T O T A L				$2,076,873.75

Table 4.8 computes the cost of the District for the construction of Regional Sanitary Sewer Facilities.

TABLE 4.8
DISTRICT COST OF REGIONAL
SANITARY SEWER FACILITIES

DESCRIPTION	TOTAL CONSTRUCTION COST With 28% Contingencies	TOTAL DISTRICT COST
1. Sewage Treatment Plant	$ 2,118,592.00	$ 1,926,336.00
2. Land Application Process	6,704,870.00	3,394,910.00
3. Jordan Road Outfall	214,336.00	214,336.00
4. 8" F-M L.S.#2	295,891.00	295,891.00
5. Other Regional Sanitary Sewer Facilities	922,194.00	570,460.00
TOTALS	$ 10,255,883.00	$ 6,401,933.00

Table 4.9 summarizes the anticipated construction costs to install a complete sanitary sewer system capable of serving the District at ultimate development.

TABLE 4.9
SUMMARY OF SANITARY SEWER FACILITIES
CONSTRUCTION COSTS

ITEM	DESCRIPTION	COST
1.	Regional Sanitary Sewer Facilities	$6,401,933.00
2.	Main Collector System	280,878.00
3.	Interior Sewer System	1,203,559.00
4.	Sewer Services	743,200.00
	TOTAL SANITARY SEWER SYSTEM COST	8,629,570.00
	LESS IN-TRACT FACILITIES	<1,946,759.00>
	TOTAL COST TO DISTRICT	$6,682,811.00

* Includes 28% Contingencies and Engineering

4.6 PRELIMINARY COST ESTIMATE TO DEVELOP A SANITARY SEWER SYSTEM

This section presents a General Summary of the Total Construction and Engineering Costs to develop a complete sanitary sewer system for the District. Table 4.10 has been prepared to bring together all the sanitary sewer construction costs set forth in their report and to make allowance for contingencies and engineering fees.

TABLE 4.10
TOTAL COST FOR THE INSTALLATION OF A
COMPLETE SANITARY SEWER SYSTEM

1.	Sanitary Construction Costs	$5,220,946.00
2.	15% Contingencies	783,142.00
3.	13% Engineering, Survey, Inspection	678,723.00
	TOTAL COSTS TO DISTRICT	$6,682,811.00

4.7 PHASED CONSTRUCTION COST

The tables contained in this section outlines and computes the anticipated sanitary sewer cost per phase based upon 1981 construction costs and the quantities shown on Exhibit "C" Overall Master Sanitary Sewer Plan and which is summarized in Table 4.7 Sanitary Sewer System Construction Costs.

TABLE 4.11
SANITARY SEWER COLLECTION SYSTEM - LINE A
CONSTRUCTION COSTS
IN TRACT

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL PRICE
Section A	From M.H. A-1 to M.H. A-6				
1.	8" PVC Sanitary Sewer	3900	LF	$ 10.83	$ 42,237.00
	10" PVC Sanitary Sewer	1390	LF	12.00	16,680.00
	4'-0" Dia. Sanitary Sewer Manhole	19	EA	1,000.00	19,000.00
	Subtotal				$ 77,917.00
	15% Contingency				11,687.55
					$89,604.55
Section B	Phase 4, 9 (TH)				
1	8" PVC Sanitary Sewer	1200	LF	10.83	$ 12,996.00
2	4'-0" Dia. Sanitary Sewer Manhole	4	EA	1,000.00	4,000.00
	Subtotal				$ 16,996.00
	15% Contingency				2,549.40
					$ 19,545.40
Section C	Phase 6 (SF, Zero Lot)				
1	8" PVC Sanitary Sewer	3045	LF	10.83	$ 32,977.53
2	4'-0" I.O. Sanitary Sewer Manholes	18	EA	1,000.00	18,000.00
	Subtotal				$ 50,977.35
	15% Contingency				7,646.80
					$ 58,623.95
Section D	Phase 8 (SF, Zero Lot)				
1	8" PVC Sanitary Sewer	3005	LF	10.83	$ 32,544.15
2	4'-0" I.O. Sanitary Sewer Manholes	18	EA	1,000.00	18,000.00
	Subtotal				$ 50,544.15
	15% Contingency				7,581.62
					$ 58,125.77

* District Cost

TABLE 4.11 (cont'd)
SANITARY SEWER COLLECTION SYSTEM - LINE A
CONSTRUCTION COSTS
IN TRACT

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL PRICE
Section E	Phase 5 (SF)				
1	8" PVC Sanitary Sewer	8290	LF	10.83	$ 89,780.70
2	4'-0" I.O. Sanitary Sewer Manhole	44	EA	1,000.00	44,000.00
	Subtotal				$ 133,780.70
	15% Contingency				20,067.11
					$ 153,847.81
Section F	Phase 6 (SF)				
1	8" PVC Sanitary Sewer	1730	LF	10.83	$ 18,735.90
2	4'-0" I.O. Sanitary Sewer Manhole	9	EA	1,000.00	9,000.00
	Subtotal				$ 27,735.90
	15% Contingency				4,160.39
					$ 31,896.29
Section G	Phase 7 (SF)				
1	8" PVC Sanitary Sewer	1190	LF	10.83	$ 12,887.70
2	4'-0" I.O. Sanitary Sewer Manhole	5	EA	1,000.00	5,000.00
	Subtotal				$ 17,887.70
	15% Contingency				2,683.16
					$ 20,570.86

TABLE 4.12
SUMMARY OF CONSTRUCTION COST
LINE A

	PORTION	CONSTRUCTION COST	15% CONTINGENCIES	TOTAL COSTS
1	Section A - MH A-1 to MH A-6	$ 77,917.00	$ 11,687.55	$ 89,604.55
2	Section B - Phase 4 & 9 (TH)	16,996.00	2,549.40	19,545.40
3	Section C - Phase 6 (SF Zero Lot) Section F - Phase 6 (SF)	50,977.35 27,735.90 78,713.25	7,646.60 4,160.39 11,806.99	58,623.95 31,896.29 90,520.24
4	Section D - Phase 8 (SF Zero Lot)	50,544.15	7,581.62	58,125.77
5	Section E - Phase 5 (SF)	133,780.70	20,067.11	153,847.81
6	Section G - Phase 7 (SF)	17,887.70	2,683.16	20,570.86
	TOTAL	$ 375,838.80	$ 56,375.82	$ 432,214.62

Section A shall be installed at District cost and Sections B through G are In-Tract sewer and shall be installed at Developers cost.

TABLE 4.13
SANITARY SEWER COLLECTION SYSTEM - LINE B
CONSTRUCTION COSTS
(IN-TRACT)

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL PRICE
Section A*	From MH B-1, B-2 to MH B-5				
1	8" PVC Sanitary Sewer	3420	LF	$ 10.83	$ 37,038.60
2	10" PVC Sanitary Sewer	5040	LF	12.00	60,480.00
3	4'-0" I.D. Sanitary Sewer Manholes	44	EA	1,000.00	44,000.00
	Subtotal				$ 141,518.60
	15% Contingency				21,227.79
					$ 162,746.39
Section B	Phase 1 (SF)				
1	8" PVC Sanitary Sewer	11,270	LF	10.83	$ 122,054.10
2	4'-0" Dia. Sanitary Sewer Manhole	60	EA	1,000.00	60,000.00
	Subtotal				$ 182,054.10
	15% Contingency				27,308.12
					$ 209,362.22
Section C	Phase 2 (SF)				
1	8" PVC Sanitary Sewer	4790	LF	10.83	$ 51,875.70
2	4'-0" I.D. Sanitary Sewer Manholes	25	EA	1,000.00	25,000.00
	Subtotal				$ 76,875.70
	15% Contingency				11,531.36
					$ 88,407.06
Section D	Phase 3 (SF)				
1	8" PVC Sanitary Sewer	8370	LF	10.83	$ 90,647.10
2	4'-0" I.D. Sanitary Sewer Manholes	44	EA	1,000.00	44,000.00
	Subtotal				$ 134,647.10
	15% Contingency				20,197.07
					$ 154,844.17

* District Cost

TABLE 4.13 (Cont'd)
SANITARY SEWER COLLECTION SYSTEM - LINE B
CONSTRUCTION COSTS
(IN-TRACT)

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL PRICE
Section E	Phase 4 (SF)				
1	8" PVC Sanitary Sewer	5940	LF	10.83	$ 64,330.20
2	4'-0" I.D. Sanitary Sewer Manhole	32	EA	1,000.00	32,000.00
	Subtotal				$ 96,330.20
	15% Contingency				14,449.53
					$ 110,779.73
Section F	Phase 6 (SF)				
1	8" PVC Sanitary Sewer	2950	LF	10.83	$ 31,948.50
2	4'-0" I.D. Sanitary Sewer Manhole	14	EA	1,000.00	14,000.00
	Subtotal				45,948.50
	15% Contingency				$ 6,892.28
					$ 52,840.78
Section G	Phase 7 (SF)				
1	8" PVC Sanitary Sewer	2870	LF	10.83	$ 31,082.10
2	4'-0" I.D. Sanitary Sewer Manhole	15	EA	1,000.00	15,000.00
	Subtotal				$ 46,082.10
	15% Contingency				6,912.32
					$ 52,994.42
Section H	Phase 8 (SF)				
1	8" PVC Sanitary Sewer	3640	LF	10.83	$ 39,421.20
2	4'-0" I.D. Sanitary Sewer Manhole	21	EA	1,000.00	21,000.00
	Subtotal				$ 60,421.20
	15% Contingency				9,063.18
					$ 69,484.38

"ABLE 4.14
SUMMARY OF CONSTRUCTION COST
LINE B

	PORTION	CONSTRUCTION COST	15% CONTINGENCIES	TOTAL COSTS
1	Section A- MH B-1, B-2 to MH B-5	$ 141,518.60	$ 21,227.79	$ 162,746.39
2	Section B- Phase 1 (SF)	182,054.10	27,308.12	209,362.22
3	Section C- Phase 2	76,875.70	11,531.36	88,407.06
4	Section D- Phase 3 (SF)	134,647.10	20,197.07	154,844.17
5	Section E- Phase 4 (SF)	96,330.20	14,449.53	110,779.73
	Section F- Phase 6 (SF)	45,948.50	6,892.28	52,840.78
6	Section G- Phase 7 (SF)	46,082.10	6,912.32	52,994.42
7	Section H- Phase 8 (SF)	60,421.20	9,063.18	69,484.38
	TOTAL	$ 783,877.50	$ 117,581.63	$ 901,459.13

Section A shall be installed at District cost and Sections B through H are In-Tract sewer and shall be installed at developer's cost.

TABLE 4.15
SUMMARY OF PHASED CONSTRUCTION COST

PHASE	UNITS	CONSTRUCTION COST	15% CONTINGENCIES	SEWER ** LATERAL COST	TOTAL COSTS
Line A * Collection Sewer		77,917.00	11,687.55	--	89,604.55
Line B * Collection Sewer		141,518.60	21,227.79	--	162,746.39
Phase 1 (1983-84)	260	182,054.10	27,308.12	77,292.80	286,655.02
Phase 2 (1985)	243	76,875.70	11,531.36	72,239.04	160,646.10
Phase 3 (1986)	239	134,647.10	20,197.07	71,049.92	225,894.09
Phase 4 (1987)	285	104,828.20	15,724.23	84,724.80	205,277.23
Phase 5 (1988)	304	133,780.70	20,067.11	90,373.12	244,220.93
Phase 6 (1989)	295	124,661.75	18,699.26	87,697.60	231,058.61
Phase 7 (1990)	296	63,969.80	9,595.47	87,994.88	161,560.15
Phase 8 (1991)	296	110,965.35	16,644.80	87,994.88	215,605.03
Phase 9 (1992)	282	8,498.00	1,274.70	83,832.96	93,605.66
TOTALS	2500	1,159,716.30	$ 173,957.45	$ 743,200.00	$2,076,873.75

* District Cost
** Based on 40 feet per unit at $297.28 per unit

TABLE 4.16
SUMMARY OF DISTRICT PHASED CONSTRUCTION COSTS

YEAR	DISTRICT OUTFALL	REGIONAL SANITARY SEWER SYSTEM	JORDAN ROAD OUTFALL	LIFT STATION FORCE MAINS	WASTEWATER TREATMENT PLANT	EFFLUENT IRRIGATION	T O T A L S
1982					$17,744.00		$17,744.00
1983	181,144.00		214,336.00		1,230,576.00	1,484,676.00	3,110,732.00
1984							
1985		126,507.00				317,440.00	443,947.00
1986					192,256.00	236,262.00	428,518.00
1987		278,885.00		295,891.00		1,214,836.00	1,789,612.00
1988	99,734.00	165,068.00			485,760.00	141,696.00	892,258.00
TOTALS	$280,878.00	$570,460.00	$214,336.00	$295,891.00	$1,926,336.00	$3,394,910.00	$6,682,811.00

SECTION 5

PROPOSED STREET AND ROADWAY IMPROVEMENTS

5.1 GENERAL

This section discussed the various local residential streets, local collector streets and minor arterials that will be installed by the District within the District boundaries as well as participation in the major improvement in West Parker Road and Jordan Road in conjunction with the Stonegate Center Metropolitan District. All improvements shall meet the requirements of Douglas County and all other regulatory agencies and shall include combination curbs, gutter and sidewalks, traffic signs, street signs, handicap ramps and street lighting in addition to the standard paving.

5.2 COMPUTATION OF LINEAR FEET OF STREET AND ROADWAY IMPROVEMENTS

Table 5.1 shows the linear footage of streets and roadways to be installed in the District based on the overall street and roadway layout of the District as shown on Exhbits "D" - Overall Roadway and Bridge Plan.

TABLE 5.1
LINEAR FOOTAGE OF STREET AND ROADWAY IMPROVEMENTS

TYPE OF STREET/ROADWAY	LINEAR FOOTAGE
1. Local- Residential (50 foot R.O.W.)	
2. Local Collectors (60 foot R.O.W.)	
3. Minor Arterial (80 foot R.O.W.)	
4. Major Arterial West Parker and Jordan Roads (120 foot R.O.W.)	

5.3 COMPUTATION OF CONSTRUCTION COSTS

The tables in this section compute the anticipated construction costs for the street and roadway improvements to be made and are shown in 1981 costs. The costs include bridges, drainage systems, grading, traffic control, R.O.W. landscaping and utility relocations.

TABLE 5.2
COMPUTATION OF CONSTRUCTION COSTS

LOCATION	CONSTRUCTION COST	CONTINGENCY	TOTAL COST
1. Jordan Road South of Lincoln	$1,216,434.00	$316,273.00	$1,532,707.00
2. 50% of Lincoln West of Jordan	583,584.00	151,732.00	735,316.00
3. 20% of Lincoln East of Jordan	1,612,828.00	419,335.00	2,032,163.00
4. 13% of Jordan North of Lincoln		131,358.00	131,358.00
5. Stonegate Way	1,109,361.00	288,434.00	1,397,795.00
TOTALS	$4,522,207.00	$1,307,132.00	$5,829,339.00

Table 5.3 shows the various items included in the construction costs shown in Table 5.2.

TABLE 5.3
ROADWAY BREAKDOWN
CONSTRUCTION COSTS

LOCATION	ROADWAY COST	BRIDGE COST	DRAINAGE SYSTEM COST	GRADING COST	TRAFFIC CONTROL COST	R.O.W. LAND-SCAPING COST	UTILITY RELOCA-TION COST	SUBTOTAL CONST. COST	26% CONTIN-GENCY	TOTAL COST
1. Jordan Road South of Lincoln	500196	560000	3354	57183	30000	65701	-	1216434	316273	1532707
2. 50% of Lincoln West of Jordan	415150	-	17539	54338	30000	66557	-	583584	151732	735316
3. 20% of Lincoln East of Jordan	180500	1328000	6765	23625	30000	28938	15000	1612828	419335	2032163
4. 13% of Jordan North of Lincoln								-	131358*	131358
5. Stonegate Way	1109361**							1109361	288434	1397795
SUBTOTAL	2205207	1888000	27658	135146	90000	161196	15000	4522207		
26% Contingency	573354	490880	7191	35138	23400	41911	3900		1307132	
TOTAL COST	2778561	2378880	34849	170284	113400	203107	18900			5829339

* Includes additional contingencies
** Includes all items

The roadway costs shown in Table 5.2 and 5.3 are based upon a Linear Footage Cost as established in Table 5.4.

TABLE 5.4
SUMMARY OF LINEAR FOOTAGE COSTS

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL COST
	LOCAL RESIDENTIAL STREETS				
1.	2-1/2" A.C. Pavement	32	SF	$0.52	$16.64
2.	6-1/2" Aggregate Base	32	SF	0.28	8.96
3.	Combination Curb, Gutter and Sidewalk	2	LF	10.70	21.40
4.	Prime Coat	32	SF	0.033	1.06
5.	Fine Grading	32	SF	0.033	1.06
6.	Traffic Signs (2 signs/300' @ $125.00)	1	LF	0.83	0.83
7.	Street Signs (4 signs/300' @ $175.00)	1	LF	2.33	2.33
8.	Street Cut Grading	2	CY	1.35	2.70
9.	Compaction (T-99 Standard)	32	SF	0.065	2.08
10.	Handicap Ramps (4/300' @ $65.00)	1	LF	0.87	0.87
11.	Street Lights (1 double/225' @ $1,000.00)	1	LF	4.44	4.44
					$62.37
	15% Contingency				9.36
	11% Engineering				6.86
	TOTAL COST / L.F.				$78.59
	LOCAL COLLECTORS				
1.	2-1/2" A.C. Pavement	36	SF	$0.52	$18.72
2.	6-1/2" Aggregate Base	36	SF	0.28	10.08
3.	Combination Curb, Gutter and Sidewalk	2	LF	10.70	21.40
4.	Prime Coat	36	SF	0.033	1.19
5.	Fine Grading	36	SF	0.033	1.19
6.	Traffic Signs (2 signs/300' @ $125.00)	1	LF	0.83	0.83
7.	Street Signs (4 signs/300' @ $175.00)	1	LF	2.33	2.33
8.	Street Cut Grading	2.5	CY	1.35	3.37
9.	Compaction (T-99 Standard)	36	SF	0.065	2.34
10.	Handicap Ramps (4/300' @ $65.00)	1	LF	0.87	0.87
11.	Street Lights (1 double/225' @ $1,000.00)	1	LF	4.44	4.44
					$66.75
	15% Contingency				10.01
	11% Engineering				7.34
	TOTAL COST / L.F.				84.10

TABLE 5.4 (Cont'd)
SUMMARY OF LINEAR FOOTAGE COSTS

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL COST
	MINOR ARTERIALS				
1.	3" A.C. Pavement	56	SF	$0.63	$35.28
2.	8" Aggregate Base	56	SF	0.34	19.04
3.	Vertical Curb and Gutter	2	LF	6.39	12.78
4.	4" P.C.C. Sidewalk	9	SF	1.34	12.06
5.	Prime Coat	56	SF	0.033	1.85
6.	Traffic Signs (2 signs/300' @ $125.00)	1	LF	0.83	0.83
7.	Street Signs (4 signs/500' @ $175.00)	1	LF	1.40	1.40
8.	Street Grading	3.4	CY	1.35	4.59
9.	Fine Grading	56	SF	0.065	3.64
10.	Compaction (T-99 Standard)	56	SF	0.065	3.64
11.	Handicap Ramps (4/500' @ $65.00)	1	LF	0.52	0.52
12.	Street Lights (1 double/225' @ $1,000)	1	LF	4.44	4.44
					$98.28
	11% Contingency				10.81
	15% Engineering				14.74
	TOTAL COST / L.F.				$123.83
	MAJOR ARTERIALS (W.PARKER AND JORDAN ROAD)				
1.	4" A.C. Pavement	77	SF	$0.84	64.68
2.	12" Base Course	77	SF	0.51	39.27
3.	Vertical Curb and Gutter	2	LF	6.39	12.78
4.	Prime Coat	77	SF	0.033	2.54
5.	Traffic Signs (2 signs/500' @ $125.00)	1	LF	0.50	0.50
6.	Street Signs (4 sings/1500' @ $175.00)	1	LF	0.47	0.47
7.	Street Grading	4.7	CY	1.35	6.35
8.	Fine Grading	77	SF	0.033	2.54
9.	Compaction (T-99 Standard)	77	SF	0.065	5.01
10.	Handicap Ramps (4/1000' @ $65.00)	1	LF	0.26	0.26
11.	Street Lights (1 Single/100' @ $600)	1	LF	6.00	6.00
12.	Street Painting	8	LF	0.50	4.00
					144.04
	15% Contingency				21.66
	11% Engineering				15.88
	TOTAL COST / L.F.				$181.94

TABLE 5.4 (Cont'd)
SUMMARY OF LINEAR FOOTAGE COSTS

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL COST
	MAJOR ARTERIALS (JORDAN ROAD - 1/2 SECTION)				
1.	4" A.C. Pavement	38.5	SF	$0.84	$32.34
2.	12" Base Course	38.5	SF	0.51	19.64
3.	Vertical Curb and Gutter	1	LF	6.39	6.39
4.	2" x 6" Redwood Header	1	LF	4.50	4.50
5.	Prime Coat	38.5	SF	0.033	1.27
6.	Traffic Signs (1 sign/500' @ $125.00)	1	LF	0.25	0.25
7.	Street Signs (2 signs/1500' @ $175.00)	1	LF	0.23	0.23
8.	Street Grading	2.9	CY	1.35	3.92
9.	Fine Grading	38.5	SF	0.033	1.27
10.	Compaction (T-99 Standard)	38.5	SF	0.065	2.50
11.	Handicap Ramps (2/1000' @ $65.00)	1	LF	0.13	0.13
12.	Street Lights (1 Single/200' @ $600.00)	1	LF	3.00	3.00
13.	Street Painting	4	LF	0.50	2.00
14.	Slope Treatment	5	SF	0.40	2.00
					$79.44
	15% Contingency				11.92
	11% Engineering				8.74
	TOTAL COST / L.F.				$100.10

5.4 PRELIMINARY COST ESTIMATE FOR ROADWAY IMPROVEMENTS

This section presents a general summary of the total construction and engineering costs for roadway improvements for the District. Table 5.5 has been prepared to bring together all the roadway costs previously calculated. These costs are based on 1981 figures.

TABLE 5.5
TOTAL COST FOR ROADWAY IMPROVEMENTS

1.	Roadway Construction Costs	4,522,207.00
2.	15% Contingency	754,115.00
3.	11% Engineering	553,017.00
	TOTAL	5,829,339.00

5.5 PHASED CONSTRUCTION COSTS

Table 5.6 outlines the anticipated roadway improvement cost per phase based on 1981 construction costs.

TABLE 5.6
ROADWAY IMPROVEMENTS
PHASED CONSTRUCTION COST

YEAR	Jordan Road South of Lincoln	LOCATION				
		50% of Lincoln W. of Jordan	20% of Lincoln E. of Jordan	13% of Jordan N.of Lincoln	Stonegate Way	TOTALS
1982		$ 49,300				$ 49,300
1983		686,016		131,358	421,685	1,239,059
1984						
1985						
1986					$786,379	786,379
1987						
1988	1532707		$ 2032163		189731	3754601
TOTALS	$1532707	$ 735316	$ 2032163	$ 131358	$1397795	$ 5829339

Tables 5.7 and 5.8 show the various breakdown of items per phase included in the costs shown in Table 5.6.

TABLE 5.7
ROADWAY BREAKDOWN CONSTRUCTION COSTS
PHASED CONSTRUCTION

	1982			1983			1986			1988			1992			TOTALS		
LOCATION / TYPE	CONST	CONT	TOTAL	CONST	CONT	TOTAL	CONST	CONT	TOTAL	CONST	CONT	TOTAL	CONST	CONT	TOTAL	CONST	CONT	TOTAL
1. Jordan Road South of Jordan																		
a. Roadway										500196	130051	630247				500196	130051	630247
b. Bridges										560000	145600	705600				560000	145600	705600
c. Drainage System										3354	872	4226				3354	872	4226
d. Grading										57183	14868	72051				57183	14868	72051
e. Traffic Control										30000	7800	37800				30000	7800	37800
f. R.O.W. Landscaping										65701	17082	82783				65701	17082	82783
SUBTOTAL										1216434	316273	1532707				1216434	316273	1532707
2. 50% of Lincoln West of Jordan																		
a. Roadway		49300	49300	415150	58639	473789										415150	107939	523089
b. Drainage System				17539	45;60	22099										17539	4560	22099
c. Grading				54338	14128	68466										54338	14128	68466
d. Traffic Control				30000	7800	37800										30000	7800	37800
e. R.O.W. Landscaping				66557	17305	83862										66557	17305	83862
SUBTOTAL		49300	49300	583584	102432	686016										583584	151732	735316
3. 20% of Jordan West of Jordan																		
a. Roadway										180500	46930	227430				180500	46930	227430
b. Bridge										1328000	345280	1673280				132800	345280	1673280
c. Drainage System										6765	1759	8524				6765	1759	8524
d. Grading										23625	6142	29767				23625	6142	29767
e. Traffic Control										30000	7800	37800				30000	7800	37800
f. R.O.W. Landscaping										28938	7524	36462				28938	7524	36462
g. Utility Relocation										15000	3900	18900				15000	3900	18900
SUBTOTAL										1612828	419335	2032163				1612828	419335	2032163
4. 13% of Lincoln * North of Jordan			131358	131358													131358	131358
SUBTOTAL			131358	131358													131358	131358
5. Stonegate Way **				334671	87014	421685	624110	162269	786379	150580	39151	189731				1109361	288434	1397795
SUBTOTAL				334671	87014	421685	624110	162269	786379	150580	39151	189731				1109361	288434	1397795
TOTALS		49300	49300	320804	1239059	1107701	624110	162269	786379	2979842	774759	3754601				4522207	1307132	5829339

* Includes additional contingencies
** Includes all items

TABLE 5.8
ROADWAY BREAKDOWN CONSTRUCTION COSTS
PHASED CONSTRUCTION

	1982			1983			1986			1988			1992			TOTALS		
TYPE	CONST	CONT	TOTAL	CONST	CONT	TOTAL	CONST	CONT	TOTAL	CONST	CONT	TOTAL	CONST	CONT	TOTAL	CONST	CONT	TOTAL
1. Roadways		49300	49300	415150	58639	473789				680696	176981	857677				1095846	284920	1380766
2. Bridges										1888000	490880	2378880				1888000	490880	2378880
3. Drainage System				17539	4560	2209				10119	2631	12750				27658	7191	34849
4. Grading				54338	14128	68466				80808	21010	101818				135146	35138	170284
5. Traffic Control				30000	7800	37800				60000	15600	75600				90000	23400	113400
6. R.O.W. Landscaping				66557	17305	83862				94639	24606	119245				161196	41911	203107
7. Utility Relocation										15000	3900	18900				15000	3900	18900
TOTALS		49300	49300	918255 (1)	320804 (2)	1239059 (3)	624110 (4)	162269 (4)	786379 (4)	2979842 (5)	774759 (6)	3754601 (7)				4522207 (8)	1307132 (8)	5829339 (8)

(1) Includes $334671 for Stonegate Way - all items
(2) Includes $87014 for Stonegate Way - all items and additional contingencies for Jordan Road North of Lincoln Way
(3) Includes $421685 for Stonegate Way - all items and additional contingencies for Jordan Road North of Lincoln Way
(4) Stonegate Way - all items
(5) Includes $150580 for Stonegate Way - all items
(6) Includes $39151 for Stonegate Way - all items
(7) Includes $189731 for Stonegate Way - all items
(8) Includes Stonegate Way and additional contingencies for Jordan Road North of Lincoln Way

SECTION 6

SUMMARY OF CONSTRUCTION COSTS AND SCHEDULES

This section summarizes all of the construction costs previously calculated for the installation of all parks and recreation, improvements, water and sanitary sewer facilities and street improvements including contingencies and engineering, and sets such costs on a per phase basis.

TABLE 6.1
SUMMARY OF CONSTRUCTION COSTS

TYPE OF IMPROVEMENT		
1.	Water Facilities	$4,736,192.00
2.	Sewer Facilities	6,682,811.00
3.	Roadway Improvements	5,829,339.00
4.	Parks and Recreation	1,367,998.00
	TOTAL	$ 18,616,340.00

6.2 PHASED CONSTRUCTION COSTS

Table 6.2 presents the phased construction costs for the water, sanitary sewer, roadway improvements and parks and recreation.

TABLE 6.2
SUMMARY OF PHASED DISTRICT CONSTRUCTION COSTS

1981 DOLLARS

	RES. WATER COST	RES. SEWER COST	TOTAL RES. W&S COST	RES. AMEN. COST	RESIDENT EXEMPT FACIL.	RES. ROADS	TOTAL RES. COSTS
1981	210000		210000		210000		210000
1982	85061	17744	102805		102805	49300	152105
1983	2083368	3110732	5194100	469934	5664034	1239059	6903093
1984			0	221400	221400		221400
1985	531087	443947	975034		975034		975034
1986	195962	428518	624480	417749	1042229	786379	1828608
1987	941214	1789612	2730826	175275	2906101		2906101
1988	689500	892258	1581758	83640	1665398	3754601	5419999
1989			0		0		0
1990			0		0		0
1991			0		0		0
1992			0		0		0
1993			0		0		0
1994			0		0		0
1995			0		0		0
1996			0		0		0
1997			0		0		0
TOTAL	4736192	6682811	11419003	1367998	12787001	5829339	18616340

ESCALATED DOLLARS

	RES. WATER COST	RES. SEWER COST	TOTAL RES. W&S COST	RES. AMEN. COST	RESIDENT EXEMPT FACIL.	RES. ROADS	TOTAL RES. COSTS
1981	210000	0	210000	0	210000	0	210000
1982	87613	18276	105889	0	105889	50779	156668
1983	2295872	3428027	5723898	517867	6241765	1365443	7607208
1984	0	0	0	265901	265901	0	265901
1985	695193	581127	1276320	0	1276320	0	1276320
1986	279638	611495	891133	596128	1487261	1122163	2609424
1987	1464529	2784636	4249165	272728	4521893	0	4521893
1988	1169392	1513270	2682662	141853	2824515	6367803	9192318
1989	0	0	0	0	0	0	0
1990	0	0	0	0	0	0	0
1991	0	0	0	0	0	0	0
1992	0	0	0	0	0	0	0
1993	0	0	0	0	0	0	0
1994	0	0	0	0	0	0	0
1995	0	0	0	0	0	0	0
1996	0	0	0	0	0	0	0
1997	0	0	0	0	0	0	0
TOTAL	6202236	8936831	15139067	1794478	16933544	8906188	25839733

SECTION 7

OPERATING AND MAINTENANCE COSTS

In addition to the aforementioned construction costs set forth in this Chapter V, operating and maintenance costs will be incurred by the District. Although the streets will be maintained by the County, the District will face periodic operating and maintenance costs, particularly with respect to the water and sewer systems. It is estimated that the annual expenses for the District for such items will range up to approximately $310,000 per year at full development using 1981 figures, all of which are intended to be covered by service and user fees. These figures are accounted for in the FINANCIAL ANALYSIS provided in Chapter VI.

TABLE 7.1
YEARLY OPERATIONS AND MAINTENANCE COSTS

YEAR	ACCUM TAPS	FIXED COSTS	VARIABLE COSTS		TOTAL COSTS
			WATER	SEWER	
1983	0	$16,700.00	$12,982.00	$12,809.00	$42,491.00
1984	69	21,710.00	12,982.00	12,809.00	47,501.00
1985	207	37,930.00	22,878.00	11,965.00	72,773.00
1986	413	51,000.00	36,819.00	11,788.00	99,607.00
1987	680	61,600.00	48,747.00	14,111.00	124,458.00
1988	928	72,000.00	60,904.00	15,253.00	148,157.00
1989	1185	77,200.00	72,936.00	14,999.00	165,135.00
1990	1460	85,530.00	86,890.00	15,187.00	187,607.00
1991	1735	91,700.00	101,197.00	15,305.00	208,202.00
1992	2010	100,050.00	110,445.00	14,797.00	225,292.00
1993	2324	106,250.00	111,185.00	14,797.00	232,232.00
1994	2500	112,550.00	110,442.00	14,797.00	237,789.00
1995	2500	113,850.00	110,841.00	14,797.00	239,488.00
1996	2500	122,050.00	111,253.00	14,797.00	248,100.00
1997	2500	123,150.00	111,508.00	14,797.00	249,455.00
1998	2500	133,800.00	110,114.00	14,797.00	258,711.00
1999	2500	134,400.00	111,537.00	14,797.00	260,734.00
2000	2500	146,600.00	111,313.00	14,797.00	272,710.00
2001	2500	146,900.00	111,072.00	14,797.00	272,769.00
2002	2500	147,550.00	110,667.00	14,797.00	273,014.00
2003	2500	150,550.00	110,091.00	14,797.00	275,438.00
2004	2500	161,850.00	111,083.00	14,797.00	287,730.00
2005	2500	163,350.00	110,475.00	14,797.00	288,622.00
2006	2500	166,450.00	110,311.00	14,797.00	291,558.00
2007	2500	167,650.00	109,921.00	14,797.00	292,368.00
2008	2500	169,750.00	111,256.00	14,797.00	295,803.00
2009	2500	172,950.00	110,468.00	14,797.00	298,215.00
2010	2500	183,350.00	111,634.00	14,797.00	309,781.00

CHAPTER VI

FINANCIAL ANALYSIS

The estimated costs of the facilities and improvements to be constructed, installed, acquired or with respect to which a contract has been executed are set forth in Section 6.1 and 6.2 of this Service Plan.

The estimated costs of organization of the District, including legal services, are $25,000. These costs have been advanced and will be paid by the District out of its initial General Obligation bond issue.

Engineering and investment banker fees are addressed, respectively, in Chapters V and VI of this Service Plan.

After consultation with the engineers, and upon advice of Hanifen, Imhoff Inc., financial advisor to the District, it has been decided that the improvements to be constructed by the District will be financed primarily 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 twenty 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 5%. The exact interest rates and discounts will be established at the time the bonds are sold by the District and will reflect market conditions at the time of sale.

The following guidelines will be followed to ensure the economic viability of the District:

Financing. It will be the intention of the District to provide street improvements, water, sanitary sewerage, transportation, and parks and recreation facilities on a phased basis to coincide with the needs of the inhabitants and users of the District consistent with sound financial planning. General Obligation bonds will be issued as needed to provide capital for the District's facilities. The District will have four main sources of income:

(1) Tap Fee Charges: A one-time payment for connection to the District's water and sewer system;

(2) Service Charges: Periodic (monthly, bi-monthly or quarterly) billings to water and sanitation users;

(3) Tax Revenues: Ad valorem taxes will be levied against all property within the District. This is a means of ensuring that all property owners share in the costs of those District facilities which benefit all properties within the District, and

(4) Capitalized Interest and Reserve Fund: Proceeds received directly from bond issues to provide funds for interest payments for the early years in each bond issue, as well as to provide a reserve fund to protect the bondholder and the District from any shortfalls in the event of project delays.

The District will set the rates of the four income sources noted above so that they are well balanced and provide income to service all debt requirements as well as administrative, operation and maintenance expenses. It will also be important for the District's Board of Directors to invest, in legal investments, any monies, which may include construction funds, capitalized interest, reserve funds and bond proceeds, to assist in the sound financial planning for the District. These rates and charges have been estimated in the financing plan and are competitive with similar districts in the area.

Capital Improvements. General Obligation bond issues to provide funds for implementation of the capital improvement plan have been projected to be phased in two basic increments. Capital improvements and corresponding bond issues have been estimated to directly correlate with the District's buildout. All figures have a base year of 1981 costs, to increase 3% in 1982, 7% in 1983, and 9% thereafter. Subsequent financial planning will be adjusted to reflect cost increases or decreases as they become known. A contingency factor has been included to reflect legal, engineering and administrative costs, as well as unforeseen construction costs. The financing plan summarizes the capital improvement costs allocated to specific facilities. These costs are reflected in the estimated schedule of bond sales reflected in the financing plan.

Principal and Interest. The debt repayment schedule shown in the financing plan indicates a debt amortization model based upon estimated interest rates and are illustrated in the estimated principal and interest schedules that follow. The electors of the District will be asked to authorize the issuance of General Obligation bonds or other legal debt. The maximum allowable net effective interest rate will be 18%, with a 5% maximum discount rate.

Assessed Valuation. The estimated current assessed valuation of the property within the District is $11,184.30. Assessed valuation projections have been based on phased project buildout projections. Ultimate assessed valuation has been based on an assessment value of 10% of market values, and has been aggregated to give year-to-year assessed valuation totals. It is the intent of the District to utilize a conservative approach in order not to overstate the taxing ability of the District.

SHARED COSTS OF REGIONAL FACILITIES

As noted in Chapter V of this Service Plan, it is intended that the District and Stonegate Center Metropolitan District will jointly fund all regional water, sewer, street and transportation facilities which are of common benefit to the inhabitants and users of both special districts in order to realize economies of scale and to allow funding to be tied to relative development and service requirements. Each special district shall issue and be liable for repayment of its own bonds issued for such purposes. The amount and timing of such funding will be based upon relative development within each special district and an equitable allocation of service requirements, and is set forth in the Schedule of Estimated Bond Sales contained in this Chapter VI. Facilities and improvements which specifically benefit only the District will be funded by the District alone.

ESTIMATED BOND SALES

The schedule of estimated bond sales to finance capital improvements is based upon the District's estimates of capital improvement requirements and growth, and is so scheduled as to maintain an equitable and competitive balance between the major sources of income (tap fee income, service charges, property tax revenues and capitalized interest and reserve fund). Capital project requirements will be financed through the phased sale of bonds. The plan presently projects an estimated need for total bond financing, in escalated dollars*, of $40.425 million for water, sewer, street improvements, and for park and recreation. Transportaiton system costs, if any, are unknown at this time and will not be incurred unless economically feasible. Recognizing that inflation may be greater than 9%, or that the Board of Directors may determine a different structure of phasing, the District will requirest authorization from its electors to issue up to $53 million in bonds or other legal debt.

OPERATING EXPENSES

Administrative, operating and maintenance expenses incurred by the District, which are estimated to total $310,000 annually at full development using 1981 figures, shall be paid out of service charges.

* 1981 Base year dollar construction costs are escalated 3% in 1982, 7% in 1983 and 9% thereafter.

Hanifen, Imhoff Inc.
Investment Bankers

STONEGATE VILLAGE METROPOLITAN DISTRICT

ESTIMATED SCHEDULE OF BOND SALES

PHASE I - 3/1/83 (Regional)	
Construction (1981-1984)	$ 6,823,555
Capitalized Interest (2 years @ 12%)	2,731,200
Reserve Fund (1 year @ 12%)	1,365,600
Issuing Costs (4%)	455,200
Miscellaneous	4,445
Bond Issue	$11,380,000
PHASE IA - 4/1/83 (Roads)	
Construction (1981-1984)	$ 1,416,222
Capitalized Interest (2 years @ 12%)	567,600
Reserve Fund (1 year @ 12%)	283,800
Issuing Costs (4%)	94,600
Miscellaneous	2,778
Bond Issue	$ 2,365,000
PHASE II - 3/1/85 (Regional)	
Construction (1985-1988)	$10,109,989
Capitalized Interest (2 years @ 10%)	3,065,000
Reserve Fund (1 year @ 10%)	1,532,500
Issuing Costs (4%)	613,000
Miscellaneous	4,511
Bond Issue	$15,325,000
PHASE IIA - 4/1/85 (Roads)	
Construction (1985-1988)	$ 7,489,966
Capitalized Interest (2 years @ 10%)	2,271,000
Reserve Fund (1 year @ 10%)	1,135,500
Issuing Costs (4%)	454,200
Miscellaneous	4,334
Bond Issue	$11,355,000

STONEGATE VILLAGE METROPOLITAN DISTRICT

ESTIMATED FINANCING PLAN

YEAR	NUMBER OF TAPS	TAP CHARGES	TAP FEE INCOME	W&S UNIT REVENUE	O&M	W&S UNIT PROFIT	TOTAL WATER & SEWER REVENUE	ASSESSED VALUATION	MILL LEVY	TAX INCOME	CAPITALIZED INTEREST AND RESERVE FUND	1ST YEAR INTEREST AND CONST. FUND INT.	INTEREST INCOME	TOTAL INC. AVAILABLE FOR DEBT SERVICE	TOTAL DEBT SERVICE	ANNUAL SURPLUS	CUMULATIVE SURPLUS	YEAR
1982		5500.00	0	0	0	0	0		25	0				0		0	0	1982
1983		5995.00	0	0	46000	-46000	-46000		25	0	4948200	714403	0	5616603	824700	4791903	4791903	1983
1984	69	6534.55	450884	30000	55000	-25000	425884		25	0		247193	479190	1152268	1649400	-497132	4294770	1984
1985	138	7122.66	982927	98000	94000	4000	986927		25	0	8004000	1354931	429477	10775335	3199600	7575735	11870506	1985
1986	206	7763.70	1599322	213000	144000	69000	1668322	1025	25	25625		527999	1187051	3408996	4534200	-1125204	10745302	1986
1987	267	8462.43	2259469	382000	194000	188000	2447469	3351	25	83775			1074530	3605774	5058450	-1452676	9292626	1987
1988	248	9224.05	2287564	568000	248000	320000	2607564	7287	25	182175			929263	3719002	5058050	-1339048	7953578	1988
1989	257	10054.22	2583935	791000	302000	489000	3072935	13078	25	326950			795358	4195242	5061600	-866358	7087221	1989
1990	275	10959.09	3013750	1062000	374000	688000	3701750	19302	25	482550			708722	4893022	5058000	-164978	6922243	1990
1991	275	11945.41	3284988	1375000	451000	924000	4208988	26425	25	660625			692224	5561837	5060900	500937	7423180	1991
1992	275	13020.50	3580638	1737000	533000	1204000	4784638	35137	25	878425			742318	6405380	5058650	1346730	8769910	1992
1993	314	14192.35	4456398	2189000	596000	1593000	6049398	45089	25	1127225			876991	8053614	5059600	2994014	11763924	1993
1994	176	15469.66	2722660	2567000	668000	1899000	4621660	56638	25	1415950			1176392	7214003	5056900	2157103	13921026	1994
1995	0	16861.93	0	2798000	732000	2066000	2066000	70391	25	1759775			1392103	5217878	5053650	164228	14085254	1995
1996	0	18379.50	0	3049000	825000	2224000	2224000	81448	25	2036200			1408525	5668725	5052350	616375	14701629	1996
1997	0	20033.65	0	3324000	903000	2421000	2421000	88778	25	2219450			1470163	6110613	5059700	1050913	15752542	1997
1998	0	21836.68	0	3623000	1027000	2596000	2596000	96768	25	2419200			1575254	6590454	5057700	1532754	17285297	1998
1999	0	23801.98	0	3949000	1122000	2827000	2827000	105477	25	2636925			1728530	7192455	5058350	2134105	19419401	1999
2000	0	25944.16	0	4304000	1280000	3024000	3024000	114970	25	2874250			1941940	7840190	5062500	2777690	22197092	2000
2001	0	28279.14	0	4692000	1397000	3295000	3295000	125317	25	3132925			2219709	8647634	5061050	3586584	25783676	2001
2002	0	30824.26	0	5114000	1526000	3588000	3588000	136596	25	3414900			2578368	9581268	5059600	4521668	30305343	2002
2003	0	33598.44	0	5574000	1682000	3892000	3892000	148890	25	3722250			3030534	10644784	3192000	7452784	37758128	2003
2004	0	36622.30	0	6076000	1909000	4167000	4167000	162290	25	4057250			3775813	12000063	3197250	8802813	46560940	2004

STONEGATE VILLAGE METROPOLITAN DISTRICT
ESTIMATED PRINCIPAL & INTEREST SCHEDULE

DATE	PRINCIPAL	COUPON RATE	INTEREST	PAYMENT	YEARLY PAYMENT
9/01/83			682,800.00	682,800.00	682,800.00
3/01/84			682,800.00	682,800.00	
9/01/84			682,800.00	682,800.00	1,365,600.00
3/01/85	190,000	12.000%	682,800.00	872,800.00	
9/01/85			671,400.00	671,400.00	1,544,200.00
3/01/86	215,000	12.000%	671,400.00	886,400.00	
9/01/86			658,500.00	658,500.00	1,544,900.00
3/01/87	240,000	12.000%	658,500.00	898,500.00	
9/01/87			644,100.00	644,100.00	1,542,600.00
3/01/88	270,000	12.000%	644,100.00	914,100.00	
9/01/88			627,900.00	627,900.00	1,542,000.00
3/01/89	305,000	12.000%	627,900.00	932,900.00	
9/01/89			609,600.00	609,600.00	1,542,500.00
3/01/90	345,000	12.000%	609,600.00	954,600.00	
9/01/90			588,900.00	588,900.00	1,543,500.00
3/01/91	390,000	12.000%	588,900.00	978,900.00	
9/01/91			565,500.00	565,500.00	1,544,400.00
3/01/92	440,000	12.000%	565,500.00	1,005,500.00	
9/01/92			539,100.00	539,100.00	1,544,600.00
3/01/93	495,000	12.000%	539,100.00	1,034,100.00	
9/01/93			509,400.00	509,400.00	1,543,500.00
3/01/94	555,000	12.000%	509,400.00	1,064,400.00	
9/01/94			476,100.00	476,100.00	1,540,500.00
3/01/95	625,000	12.000%	476,100.00	1,101,100.00	
9/01/95			438,600.00	438,600.00	1,539,700.00
3/01/96	705,000	12.000%	438,600.00	1,143,600.00	
9/01/96			396,300.00	396,300.00	1,539,900.00
3/01/97	800,000	12.000%	396,300.00	1,196,300.00	
9/01/97			348,300.00	348,300.00	1,544,600.00
3/01/98	900,000	12.000%	348,300.00	1,248,300.00	
9/01/98			294,300.00	294,300.00	1,542,600.00
3/01/99	1,015,000	12.000%	294,300.00	1,309,300.00	
9/01/99			233,400.00	233,400.00	1,542,700.00
3/01/00	1,145,000	12.000%	233,400.00	1,378,400.00	
9/01/00			164,700.00	164,700.00	1,543,100.00
3/01/01	1,290,000	12.000%	164,700.00	1,454,700.00	
9/01/01			87,300.00	87,300.00	1,542,000.00
3/01/02	1,455,000	12.000%	87,300.00	1,542,300.00	1,542,300.00
TOTALS	11,380,000		18,438,000.00		29,818,000.00

STONEGATE VILLAGE METROPOLITAN DISTRICT
ESTIMATED PRINCIPAL & INTEREST SCHEDULE

DATE	PRINCIPAL	COUPON RATE	INTEREST	PAYMENT	YEARLY PAYMENT
10/01/83			141,900.00	141,900.00	141,900.00
4/01/84			141,900.00	141,900.00	
10/01/84			141,900.00	141,900.00	283,800.00
4/01/85	40,000	12.000%	141,900.00	181,900.00	
10/01/85			139,500.00	139,500.00	321,400.00
4/01/86	45,000	12.000%	139,500.00	184,500.00	
10/01/86			136,800.00	136,800.00	321,300.00
4/01/87	50,000	12.000%	136,800.00	186,800.00	
10/01/87			133,800.00	133,800.00	320,600.00
4/01/88	55,000	12.000%	133,800.00	188,800.00	
10/01/88			130,500.00	130,500.00	319,300.00
4/01/89	65,000	12.000%	130,500.00	195,500.00	
10/01/89			126,600.00	126,600.00	322,100.00
4/01/90	70,000	12.000%	126,600.00	196,600.00	
10/01/90			122,400.00	122,400.00	319,000.00
4/01/91	80,000	12.000%	122,400.00	202,400.00	
10/01/91			117,600.00	117,600.00	320,000.00
4/01/92	90,000	12.000%	117,600.00	207,600.00	
10/01/92			112,200.00	112,200.00	319,800.00
4/01/93	105,000	12.000%	112,200.00	217,200.00	
10/01/93			105,900.00	105,900.00	323,100.00
4/01/94	115,000	12.000%	105,900.00	220,900.00	
10/01/94			99,000.00	99,000.00	319,900.00
4/01/95	130,000	12.000%	99,000.00	229,000.00	
10/01/95			91,200.00	91,200.00	320,200.00
4/01/96	145,000	12.000%	91,200.00	236,200.00	
10/01/96			82,500.00	82,500.00	318,700.00
4/01/97	165,000	12.000%	82,500.00	247,500.00	
10/01/97			72,600.00	72,600.00	320,100.00
4/01/98	185,000	12.000%	72,600.00	257,600.00	
10/01/98			61,500.00	61,500.00	319,100.00
4/01/99	210,000	12.000%	61,500.00	271,500.00	
10/01/99			48,900.00	48,900.00	320,400.00
4/01/00	240,000	12.000%	48,900.00	288,900.00	
10/01/00			34,500.00	34,500.00	323,400.00
4/01/01	270,000	12.000%	34,500.00	304,500.00	
10/01/01			18,300.00	18,300.00	322,800.00
4/01/02	305,000	12.000%	18,300.00	323,300.00	323,300.00
TOTALS	2,365,000		3,835,200.00		6,200,200.00

STONEGATE VILLAGE METROPOLITAN DISTRICT

ESTIMATED PRINCIPAL & INTEREST SCHEDULE

DATE	PRINCIPAL	COUPON RATE	INTEREST	PAYMENT	YEARLY PAYMENT
9/01/85			766,250.00	766,250.00	766,250.00
3/01/86			766,250.00	766,250.00	
9/01/86			766,250.00	766,250.00	1,532,500.00
3/01/87	320,000	10.000%	766,250.00	1,086,250.00	
9/01/87			750,250.00	750,250.00	1,836,500.00
3/01/88	355,000	10.000%	750,250.00	1,105,250.00	
9/01/88			732,500.00	732,500.00	1,837,750.00
3/01/89	390,000	10.000%	732,500.00	1,122,500.00	
9/01/89			713,000.00	713,000.00	1,835,500.00
3/01/90	430,000	10.000%	713,000.00	1,143,000.00	
9/01/90			691,500.00	691,500.00	1,834,500.00
3/01/91	475,000	10.000%	691,500.00	1,166,500.00	
9/01/91			667,750.00	667,750.00	1,834,250.00
3/01/92	525,000	10.000%	667,750.00	1,192,750.00	
9/01/92			641,500.00	641,500.00	1,834,250.00
3/01/93	580,000	10.000%	641,500.00	1,221,500.00	
9/01/93			612,500.00	612,500.00	1,834,000.00
3/01/94	645,000	10.000%	612,500.00	1,257,500.00	
9/01/94			580,250.00	580,250.00	1,837,750.00
3/01/95	710,000	10.000%	580,250.00	1,290,250.00	
9/01/95			544,750.00	544,750.00	1,835,000.00
3/01/96	785,000	10.000%	544,750.00	1,329,750.00	
9/01/96			505,500.00	505,500.00	1,835,250.00
3/01/97	865,000	10.000%	505,500.00	1,370,500.00	
9/01/97			462,250.00	462,250.00	1,832,750.00
3/01/98	960,000	10.000%	462,250.00	1,422,250.00	
9/01/98			414,250.00	414,250.00	1,836,500.00
3/01/99	1,060,000	10.000%	414,250.00	1,474,250.00	
9/01/99			361,250.00	361,250.00	1,835,500.00
3/01/00	1,170,000	10.000%	361,250.00	1,531,250.00	
9/01/00			302,750.00	302,750.00	1,834,000.00
3/01/01	1,295,000	10.000%	302,750.00	1,597,750.00	
9/01/01			238,000.00	238,000.00	1,835,750.00
3/01/02	1,430,000	10.000%	238,000.00	1,668,000.00	
9/01/02			166,500.00	166,500.00	1,834,500.00
3/01/03	1,580,000	10.000%	166,500.00	1,746,500.00	
9/01/03			87,500.00	87,500.00	1,834,000.00
3/01/04	1,750,000	10.000%	87,500.00	1,837,500.00	1,837,500.00
TOTALS	15,325,000		20,009,000.00		35,334,000.00

STONEGATE VILLAGE METROPOLITAN DISTRICT
ESTIMATED PRINCIPAL & INTEREST SCHEDULE

DATE	PRINCIPAL	COUPON RATE	INTEREST	PAYMENT	YEARLY PAYMENT
10/01/85			567,750.00	567,750.00	567,750.00
4/01/86			567,750.00	567,750.00	
10/01/86			567,750.00	567,750.00	1,135,500.00
4/01/87	235,000	10.000%	567,750.00	802,750.00	
10/01/87			556,000.00	556,000.00	1,358,750.00
4/01/88	260,000	10.000%	556,000.00	816,000.00	
10/01/88			543,000.00	543,000.00	1,359,000.00
4/01/89	290,000	10.000%	543,000.00	833,000.00	
10/01/89			528,500.00	528,500.00	1,361,500.00
4/01/90	320,000	10.000%	528,500.00	848,500.00	
10/01/90			512,500.00	512,500.00	1,361,000.00
4/01/91	355,000	10.000%	512,500.00	867,500.00	
10/01/91			494,750.00	494,750.00	1,362,250.00
4/01/92	390,000	10.000%	494,750.00	884,750.00	
10/01/92			475,250.00	475,250.00	1,360,000.00
4/01/93	430,000	10.000%	475,250.00	905,250.00	
10/01/93			453,750.00	453,750.00	1,359,000.00
4/01/94	475,000	10.000%	453,750.00	928,750.00	
10/01/94			430,000.00	430,000.00	1,358,750.00
4/01/95	525,000	10.000%	430,000.00	955,000.00	
10/01/95			403,750.00	403,750.00	1,358,750.00
4/01/96	580,000	10.000%	403,750.00	983,750.00	
10/01/96			374,750.00	374,750.00	1,358,500.00
4/01/97	645,000	10.000%	374,750.00	1,019,750.00	
10/01/97			342,500.00	342,500.00	1,362,250.00
4/01/98	710,000	10.000%	342,500.00	1,052,500.00	
10/01/98			307,000.00	307,000.00	1,359,500.00
4/01/99	785,000	10.000%	307,000.00	1,092,000.00	
10/01/99			267,750.00	267,750.00	1,359,750.00
4/01/00	870,000	10.000%	267,750.00	1,137,750.00	
10/01/00			224,250.00	224,250.00	1,362,000.00
4/01/01	960,000	10.000%	224,250.00	1,184,250.00	
10/01/01			176,250.00	176,250.00	1,360,500.00
4/01/02	1,060,000	10.000%	176,250.00	1,236,250.00	
10/01/02			123,250.00	123,250.00	1,359,500.00
4/01/03	1,170,000	10.000%	123,250.00	1,293,250.00	
10/01/03			64,750.00	64,750.00	1,358,000.00
4/01/04	1,295,000	10.000%	64,750.00	1,359,750.00	1,359,750.00
TOTALS	11,355,000		14,827,000.00		26,182,000.00

CONCLUSION

It is submitted that this Service Plan for the Stonegate Center Metropolitan District meets the requirements of the Control Act. It is further submitted that:

(a) There is sufficient existing and projected need for organized service in the area to be serviced by the District.

(b) The existing service in the area to be served by the District is inadequate for present and projected needs;

(c) Adequate service will not be available to the area through other existing municipal or quasi-municipal corporations within a reasonable time and on a comparable basis;

(d) The District is capable of providing economical and sufficient service to the area within its proposed boundaries;

(e) The area to be included in the District does have, and will have, the financial ability to discharge the proposed indebtedness on a reasonable basis;

(f) The facility and service standards of the District are compatible with the facility and service standards of adjacent municipalities and special districts;

(g) The proposal is in substantial compliance with a master plan adopted pursuant to § 30-28-108, C.R.S. 1973; and

(h) The proposal is in compliance with any duly adopted county, regional, or state long-range water quality management plan for the area.

Therefore, it is requested that the Board of Commissioners of Douglas County, Colorado, adopt a Resolution approving the Service Plan for the Stonegate Center Metropolitan District as submitted.

By _____
Attorney for the Organizers of
Stonegate Center Metropolitan District