

CHAPTER THREE- EXISTING CONDITIONS

WATER SERVICE

General

The entire City of Grandview is provided water by the Jackson County Public Water District No. 1 (JCPWSD#1). The present service area consists of approximately 15 square miles. The population served is approximately 26,000, with an average daily demand of approximately 2,400,000 gallons and a maximum daily demand during the summer of approximately 8,000,000 gallons. Residential sales account for approximately 77 percent of total sales.

Water Supply Source and Storage

Treated water is supplied to JCPWSD#1 by the Water Services Department of Kansas City, Missouri. Water is delivered through two connection points. One connection point is located on the west side of Grandview near Prospect Avenue and Main Street, and the second connection is in the northeast area at Harry Truman Drive and Food Lane. There is a 5 million gallon ground-level reservoir at the Prospect Avenue connection point and a 2 million gallon underground reservoir at the Harry Truman Drive connection point. The water from the Kansas City system is delivered to one of these two reservoirs with water level near ground level. There are two pump stations, one at each of the ground level reservoirs that pump the water into the Grandview distribution system at a pressure level that floats at the water level of two elevated storage tanks that are part of the distribution system. One 1.5 million gallon elevated storage tank is located at Byars Road and 143rd Street and one 0.25 million gallon elevated storage tank is located near the central business district at 7th Street and Lena Avenue.

Each of the two pumping stations has standby power. The total of 8.75 million gallons of storage can provide approximately 3 days of average daily demand, with some left for fire reserves.

Water Pressures

System pressures range from approximately 55 pounds per square inch (psi) in central Grandview to 100 plus psi in the eastern half of Grandview. These larger pressures are a result of lower ground elevations in the east portion of Grandview. The majority of the commercial and industrial areas are in the lower pressure areas, while most of the residential areas are within the higher pressure areas.

NATURAL FEATURES AND UTILITY PLAN MAP

Fire Protection

Fire protection levels are reviewed by both the Water District and the Grandview Fire Department. Overall, the system provides adequate fire flow throughout the service area.

System Distribution Piping

The District contains approximately 130 miles of distribution pipeline ranging in size from 2 inch through 16 inch. Pipeline material is mostly cast iron and ductile iron. The age of the piping ranges from 65 years to new. In recent years replacement of pipe has been related primarily to city street projects requiring pipe relocation. Analysis by the Ductile Iron Pipe Research Association has indicated that much of the District contains environments corrosive to iron pipe. In recent years the District has begun installing polyethylene encasement, which is now specified as standard installation. Also, field personnel have been instructed to recognize corrosive effects and to include on all leak repair reports. There are areas which have been identified as high-maintenance due to corrosion effects, and are scheduled (as time and finances permit) for replacement.

Extension of Water Service

The only large area within Grandview that doesn't presently have water service is the undeveloped portions of the southeastern part of the City. Transmission mains to serve this area will need to be extended from the vicinity of the 1.5 million gallon elevated storage tank located at Byars Road & 143rd Street. A water main extension from the existing distribution network to the west would also be advisable. Once the distribution piping is in place it is anticipated that the present water supply, pumping, and storage systems can adequately serve this southeastern part of the City. The details of this extension of this service will need to be carefully designed to assure continued adequate and reliable water service to both old and new parts of the City.

SEWER SYSTEM

General Description

The City of Grandview is responsible for the sanitary sewer system that serves the City. The City does not own a wastewater treatment facility, but rather conveys the wastewater to the Little Blue Valley Sanitary Sewer District and Kansas City for treatment. Wastewater in the northwest one-third of Grandview flows to the Kansas City collection system that, in turn, conveys it to the Little Blue Wastewater Treatment Plant located near the Missouri River. Wastewater in the southeast two-thirds of Grandview is conveyed to the interceptor sewer owned by the Little Blue Valley Sewer District. This interceptor sewer conveys the wastewater to their treatment plant

located in the Atherton Bottoms near the Missouri River, north of the City of Independence. There are no lift stations in the Grandview sanitary sewer collection system.

History

Most of the sanitary sewer system is 50 years or older. The older pipes in the system are vitrified clay pipe (VCP). Newer portions of the system are made of polyvinyl chloride pipe.

The Little Blue Valley sewer District interceptor sewer was constructed in 1973. Before that date, the City had its own trickling filter treatment plant. The City's plant was retired when the interceptor sewer went into service.

Extension of Service

The existing sanitary interceptor sewer parallels the Little Blue River that flows through the southeast part of Grandview. There also is an interceptor sewer that follows Oil Creek through this area, which serves the City of Belton. This interceptor sewer enters Grandview from Belton at Shalimar Park. Construction of branch interceptor sewers that connect to the existing interceptor sewers will be required before the undeveloped southeast parts of Grandview can have sewer service.

STORM WATER

The surface topography of Grandview falls from a ridgeline that runs diagonally from the northeast to the southwest. The southeast part of the City drains toward the Little Blue River, and the northeast part of the City drains toward the Big Blue River. The City is therefore well drained because storm water has a relative short distance to travel to reach a river. Storm sewers in Grandview are generally limited to curbed streets with storm sewers that convey water to the nearest drainage creek. Most City streets have curbs, gutters and storm sewers.

COMMUNITY DEVELOPMENT DEPARTMENT STAFF AND TREND DATA

Department of Community Development

The stated mission of the Department of Community Development is to help better develop, conserve and redevelop Grandview neighborhoods and the Grandview community. The department is divided into three functional divisions as follows:

- Development Services Division;
- Building Services Division; and
- Neighborhood Services Division.

- **Development Services Division.** Director of Community Development, City Planner, and two Support Specialists.
- **Building Services Division.** One Building Official and two Building Inspectors.
- **Neighborhood Services Division.** Neighborhood Services Supervisor and three Neighborhood Services Officers.

Supporting Commissions, Committees, Boards and Alliances

- Planning Commission
- Zoning Board of Adjustment
- Construction code Appeals Board
- Business Awards Committee
- Rental Housing Association of Grandview
- Grandview Neighborhood Alliance

Table 18: Residential Construction 1990-2000

YEAR	SINGLE FAMILY	DUPLEX UNITS	MULTI FAMILY UNITS	TOTAL UNITS
1990	29	0	0	29
1991	42	0	0	42
1992	25	0	4	29
1993	18	0	0	18
1994	17	0	0	17
1995	42	0	0	42
1996	38	4	200	242
1997	39	0	0	39
1998	59	8	0	67
1999	22	10	9	41
2000	35	0	14	49
2001	18	4	446	468
TOTALS	384	26	673	1083
AVERAGES	32	2	56	90

Source: Building Services Division Monthly Reports

THE CITY OF GRANDVIEW, MISSOURI – COMPREHENSIVE PLAN

Chapter Three – Existing Conditions

Table 19: Neighborhood Services Division Miscellaneous Code Enforcement

VIOLATION	FY 98-99	FY 99-00	FY 00-01
Total Cases Started	4,624	5,501	8,933
Total Cases Abated	3,567	3,754	8,106

Source: Neighborhood Services Division Monthly Reports

Table 20: Non-Residential Construction 1990-2000

YEAR (FY)	TOTAL PERMITS	TOTAL VALUE(S)	BUILDING AREA ADDED (SQ. FT.)
1990	46	5,603,600	259,283
1991	49	2,693,500	112,486
1992	47	8,017,386	422,245
1993	40	2,147,375	70,221
1994	56	7,304,800	243,112
1995	49	4,718,700	74,814
1996	46	17,063,000	295,181
1997	37	12,985,100	314,470
1998	25	11,340,500	89,000
1999	22	23,241,000	670,000
2000	35	11,000,000	165,000
2001	24	6,555,000	218,500
TOTALS	476	112,669,962	2,934,312
AVERAGES	40	9,389,163	244,531

Source: Building Services Division Monthly Reports

Figure 10: Non-Residential Construction—Building Area Added (Sq. Ft.) 1991-2001

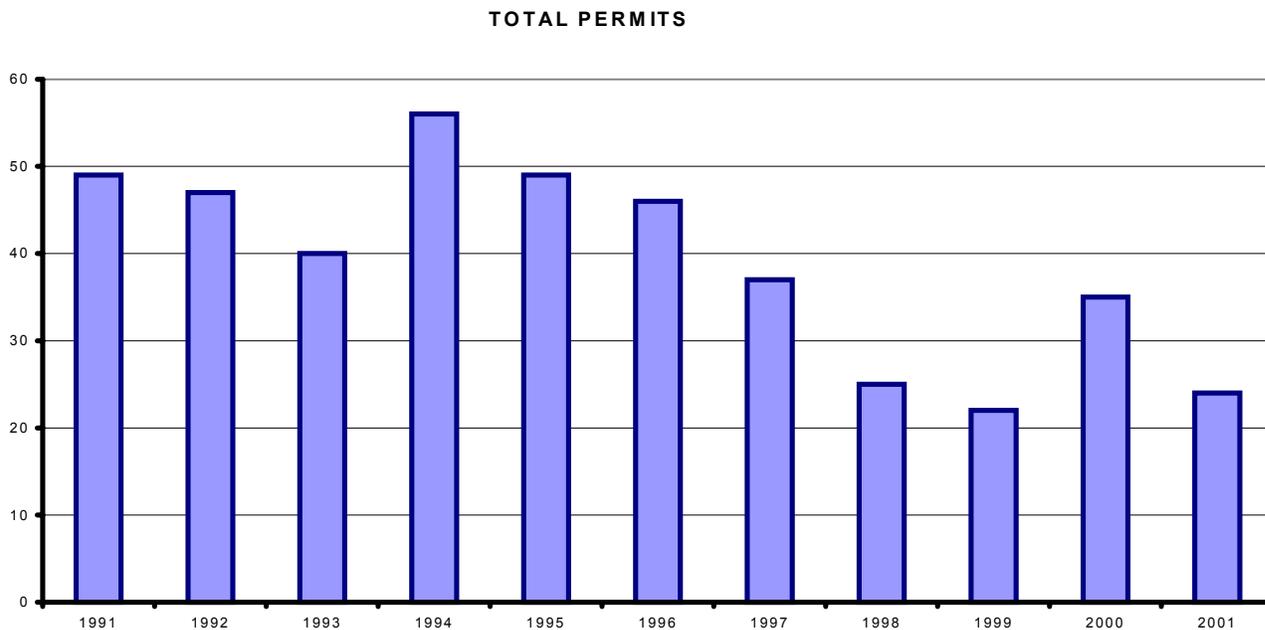
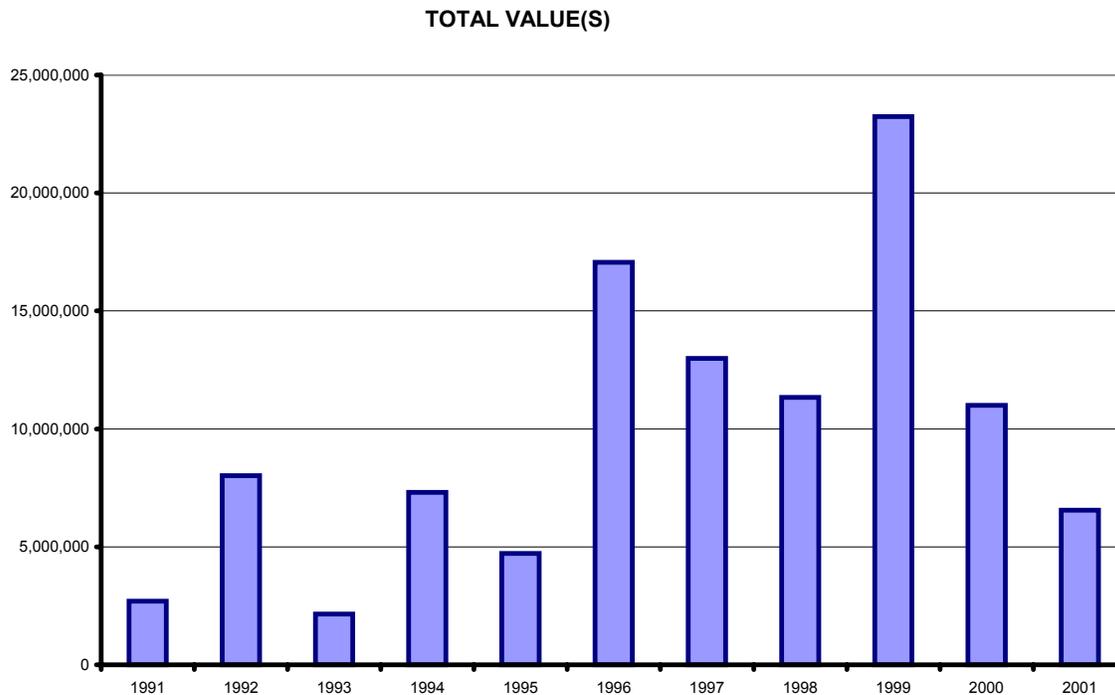


Figure 11: Non-Residential Construction—Total Values 1991-2001



Figures 10 and 11: Indicates that, while the total square footages built may not be increasing at a significant rate, the value per square has been increasing.

Figure 12: Non-Residential Construction—Total Permits 1991-2001

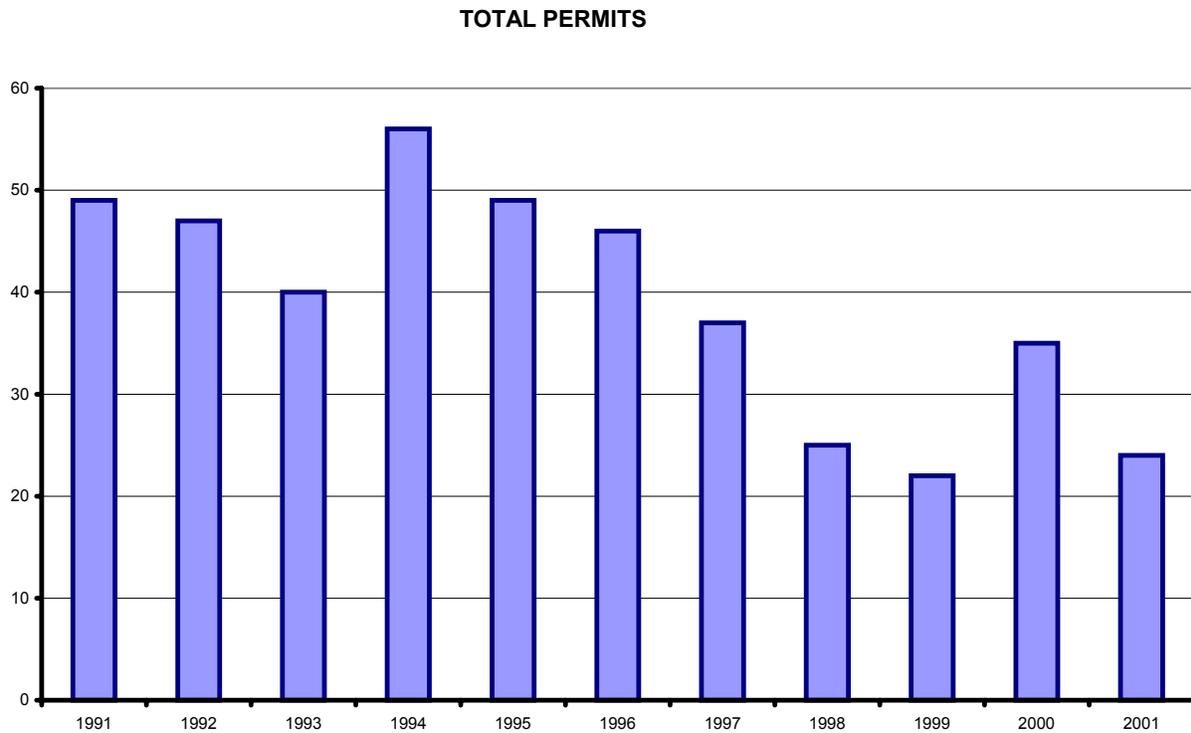


Figure 12: Indicates that the decrease of total non-residential permits issued in the last decade. As Grandview continues its development it is very likely that fewer total permits will be issued and that many of the permits will be for redevelopment.

Figure 13: Residential Construction—Single Family Units 1991-2001

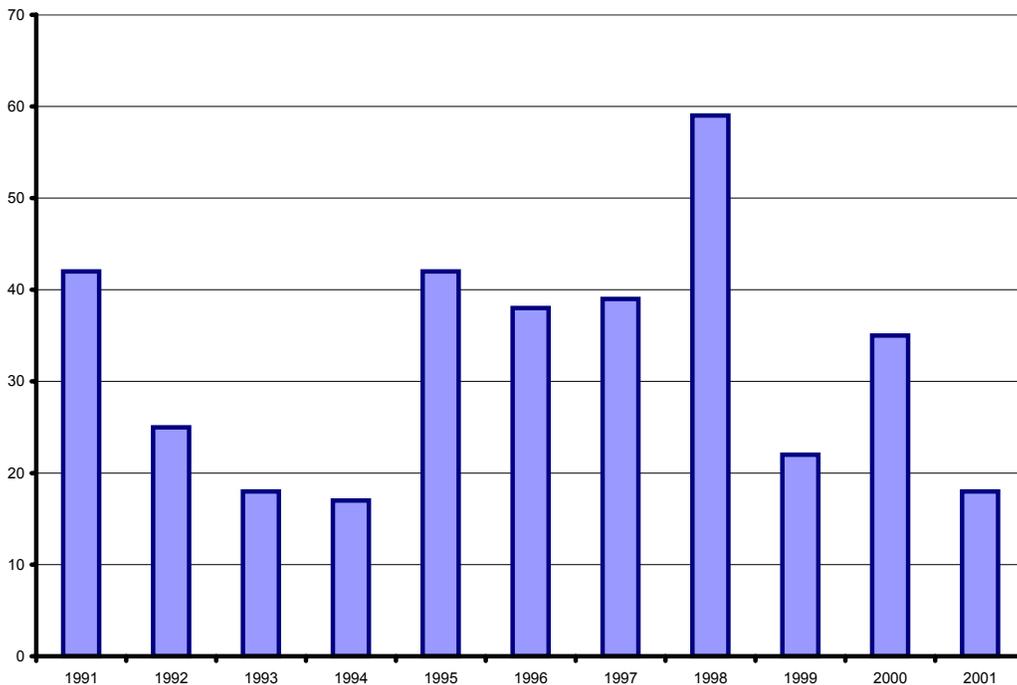


Figure 14: Residential Construction –Duplex Units 1991-2001

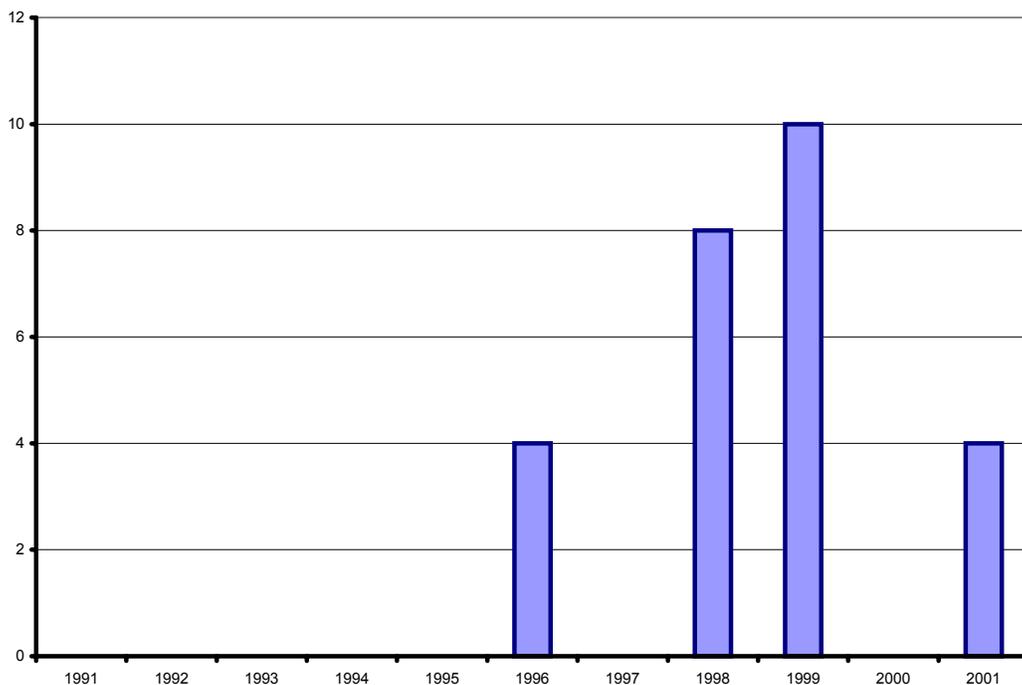
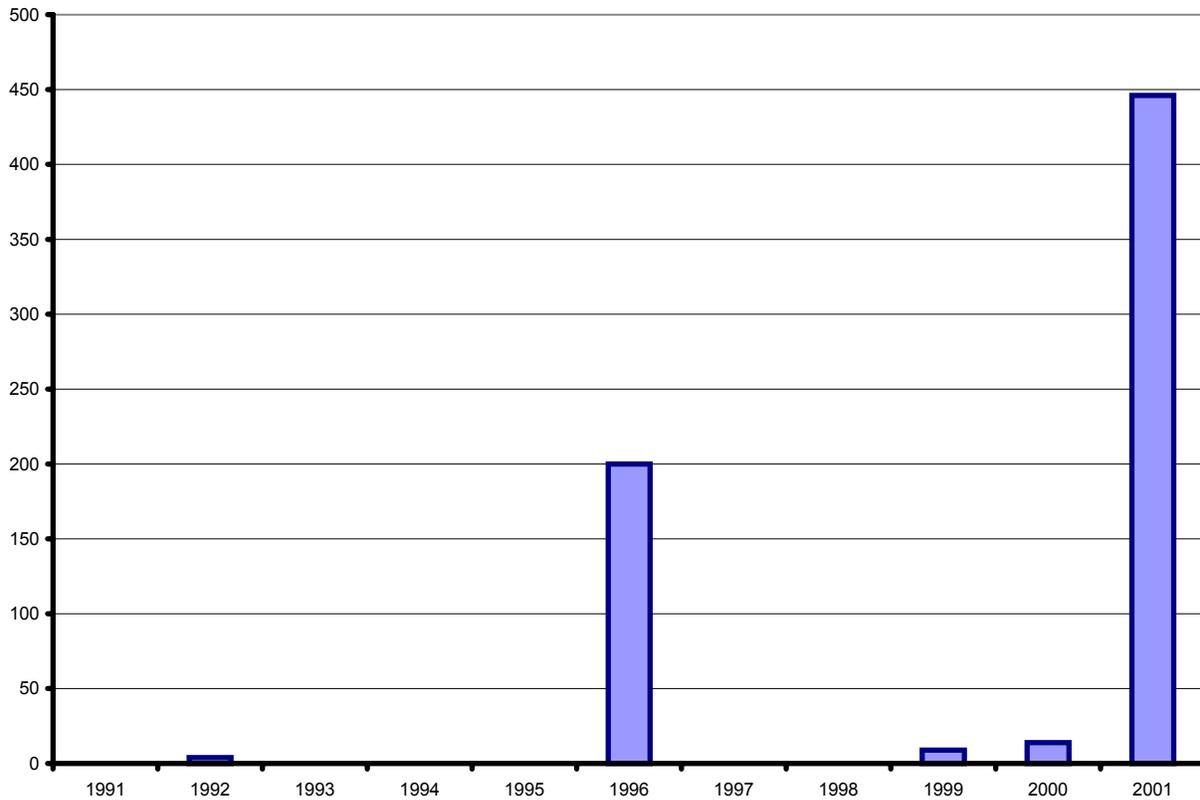


Figure 15: Residential Construction—Multi-Family Units 1990-2000



Figures 13, 14 and 15: Indicate the amount of residential construction within the last decade. The limited number of residential units developed in Grandview is common in the later growth stages of a first ring suburbs. However, due to the large amount of undeveloped and/or underdeveloped land in the southeast portion of the City, Grandview could continue to see a stable or increasing number of permits issued in the future.