



## AGENDA

### CAPITAL IMPROVEMENT ADVISORY COMMITTEE JUNE 16, 2016 @ 7:00 P.M.

Notice is hereby given; the Capital Improvement Advisory Committee for the City of Parker will hold a Regular Meeting on Thursday, June 16, 2016 at 7:00 P.M. at Parker City Hall, 5700 E. Parker Road, Parker, Texas, 75002.

#### CALL TO ORDER – Roll Call and Determination of a Quorum

#### PLEDGE OF ALLEGIANCE

AMERICAN PLEDGE: I pledge allegiance to the flag of the United States of America; and to the republic for which it stands, one nation under God, indivisible with liberty and justice for all.

TEXAS PLEDGE: Honor the Texas flag; I pledge allegiance to thee, Texas, one state under God, one and indivisible.

**PUBLIC COMMENTS** The Commission invites any person with business before the Commission to speak. No formal action may be taken on these items at this meeting. Please keep comments to 3 minutes.

#### ROUTINE ITEMS

1. WORK SESSION TO DISCUSS LAND USE ASSUMPTIONS ON LAND USE, ZONING, POPULATION, DENSITY SERVICE AREAS, GROWTH PATTERNS, AND BUILD OUT AND RELATED MATTERS RELATED TO LAWFUL IMPACT FEES.
2. CONSIDERATION AND/OR ANY APPROPRIATE ACTION ON WORK SESSION.
3. FUTURE AGENDA ITEMS
4. ADJOURN

In addition to any specifically identified Executive Sessions, the Planning and Zoning Commission may convene into Executive Session at any point during the open meeting to discuss any item posted on this Agenda. The Open

Meetings Act provides specific exceptions that require that a meeting be open. Should Commission elect to convene into Executive Session, those exceptions will be specifically identified and announced. Any subsequent action, as a result of this Executive Session, will be taken and recorded in open session.

I certify that this Notice of Meeting was posted on or before June 10, 2016 by 5:00 p.m. at the Parker City Hall.

Date Notice Removed

Patti Scott Grey, City Secretary

The Parker City Hall is Wheelchair accessible. Sign interpretations or other special assistance for disabled attendees must be requested 48 hours in advance by contacting the City Secretary's Office at 972-442-6811.





# Land Use Assumptions Report of the Capital Improvements Advisory Committee of the City of Parker

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## Executive Summary

The Capital Improvements Advisory Committee (the "Committee") was appointed by the City of Parker City Council to review the subjects identified below and render an opinion on the land use assumptions necessary for the City to create and adopt lawful impact fees for the City of Parker public water system. The Committee has reviewed the Comprehensive Plan, the land use data, the current development within Parker, the current zoning within Parker, and the existing water (and sewer) plans for future growth and development. The Committee's report on the Land Use Assumptions required by Texas Local Government Code with relation to the Committee's work on impact fee research is contained within.

Members of this Committee include several regular members of the Planning and Zoning Commission, experienced developers within the City of Parker and key City personnel.

**Table 1 - Capital Improvements Advisory Committee Members**

Name	Role
<b>Russell Wright</b>	P&Z Chairman
<b>Joe Lozano</b>	P&Z Vice-Chairman
<b>Cleburne Raney</b>	P&Z Member
<b>Jasmat Sutaria</b>	P&Z Member
<b>Wei Wei Jueng</b>	P&Z Member
<b>JR Douglas</b>	P&Z Alternate, Developer
<b>Steve Sallman</b>	Developer
<b>Jim Shepherd</b>	City Attorney
<b>Jeff Flanigan</b>	City Administrator
<b>Carrie Smith</b>	City Secretary

## Analysis of Existing Conditions

Each member of the Committee is personally familiar with the existing development within the City of Parker. The areas of the City of Parker that are not yet developed were presented by the City Administrator and the relevant maps and data were reviewed. This data review included the population (Exhibit 1), Existing Zoning (Exhibit 2), the Comprehensive Plan (Exhibit 3), Current Development Map (Exhibit 4), and the Water Master Plan Map (Exhibit 5) for the City as it relates to the undeveloped areas of Parker and its ETJ.

## Determination of Service Area

The City Council's charge to the Committee was to determine the capital improvements needed and necessary for future development. The Committee reviewed the requirements to exclude the provisions and related costs to current development and concentrated on the capital improvements necessary to serve future development based on the existing conditions noted above, and the anticipated use of the comprehensive plan and related development plans of the City, all as required by the Texas Local Government Code. The service area for a water impact fee would be the entire City and its ETJ with respect to new development in any portion of this area.

There is a portion of the City's water service area CCN, (Certificate of Convenience and Necessity) that lies within the City of Wylie. This was discussed as whether it should be included in the impact fee Service Area. The City Administrator noted that the water infrastructure in that area is already built out to specifications that would not necessitate additional infrastructure capital improvements. Therefore, it was concluded by the committee to not include this area within the Service Area.



## Growth Projections

Based on the review of the factors set forth in the sections above, *Analysis of Existing Conditions* and *Determination of Service Area* the Committee project the 10 year growth patterns as they relate to water system capital improvements are as set forth on the attached Exhibit A. The Committee's findings are based on the following discussions and calculations.

## Density Calculations

The Committee agrees with the Comprehensive Plan of Parker with regard to the future development of Parker and its ETJ. Consequently, for those areas zoned SF-Single Family, the Committee has projected single family residential units on lots of two acres, with three residents per household. For those areas zoned of projected to be zoned SFT-Single Family Transitional, the Committee anticipates 1 acre minimum lots, with a 1.5 acre average size of lots in the subdivision. The population estimate for SFT is also three residents per unit. Additional zoning categories such as Special Activities, Agricultural, Manufactured Housing and non-conforming uses, were all considered in the analysis.

The raw data in Table 2 was used as the basis of the analysis. The Meters column indicates the number of water meters the City was billing in that year. The Estimated Residents is based on the assumption of three residents per household, as indicated above. The % Change is expressed as the delta (change in number of meters) from the prior year divided by the number of meters in the prior year, e.g.  $98/688=14.2\%$ .

**Table 2 - Historical Water Meters (i.e. Service Units) for 2000 - Jan 2016**

Year	Meters	Est. Residents	Delta	% Change	Std. Dev.
2000	688	2064	688.0		
2001	786	2358	98.0	14.2%	5.1%
2002	938	2814	152.0	19.3%	4.6%
2003	1022	3066	84.0	9.0%	2.1%
2004	1075	3225	53.0	5.2%	1.4%
2005	1121	3363	46.0	4.3%	
2006	1180	3540	59.0	5.3%	
2007	1210	3630	30.0	2.5%	
2008	1258	3774	48.0	4.0%	
2009	1273	3819	15.0	1.2%	
2010	1295	3885	22.0	1.7%	
2011	1320	3960	25.0	1.9%	
2012	1351	4053	31.0	2.3%	
2013	1385	4155	34.0	2.5%	
2014	1404	4212	19.0	1.4%	
2015	1435	4305	31.0	2.2%	
2016	1501	4503	66.0	4.6%	

Referring to the standard deviation of a sample<sup>1</sup> Table 2, we can see the standard deviation for years 2001 and 2002 are significantly greater than several of the later years, so it was concluded that this extreme rate of growth for the City of Parker will likely not repeat itself. However, the Committee concluded the economic factors of many companies moving into the surrounding areas will likely increase the growth rate for the next several years, which might indicate above average growth for four to five years (5-6%), followed by slower growth (2-3%).

<sup>1</sup> Excel function STDEV.S is used to calculate the standard deviation of a sample.



When the absolute number of water meters are graphed over the years for which data exists, a curve as shown in Figure 1 develops. For comparison purposes, linear and 3<sup>rd</sup> order polynomial trendlines are added.

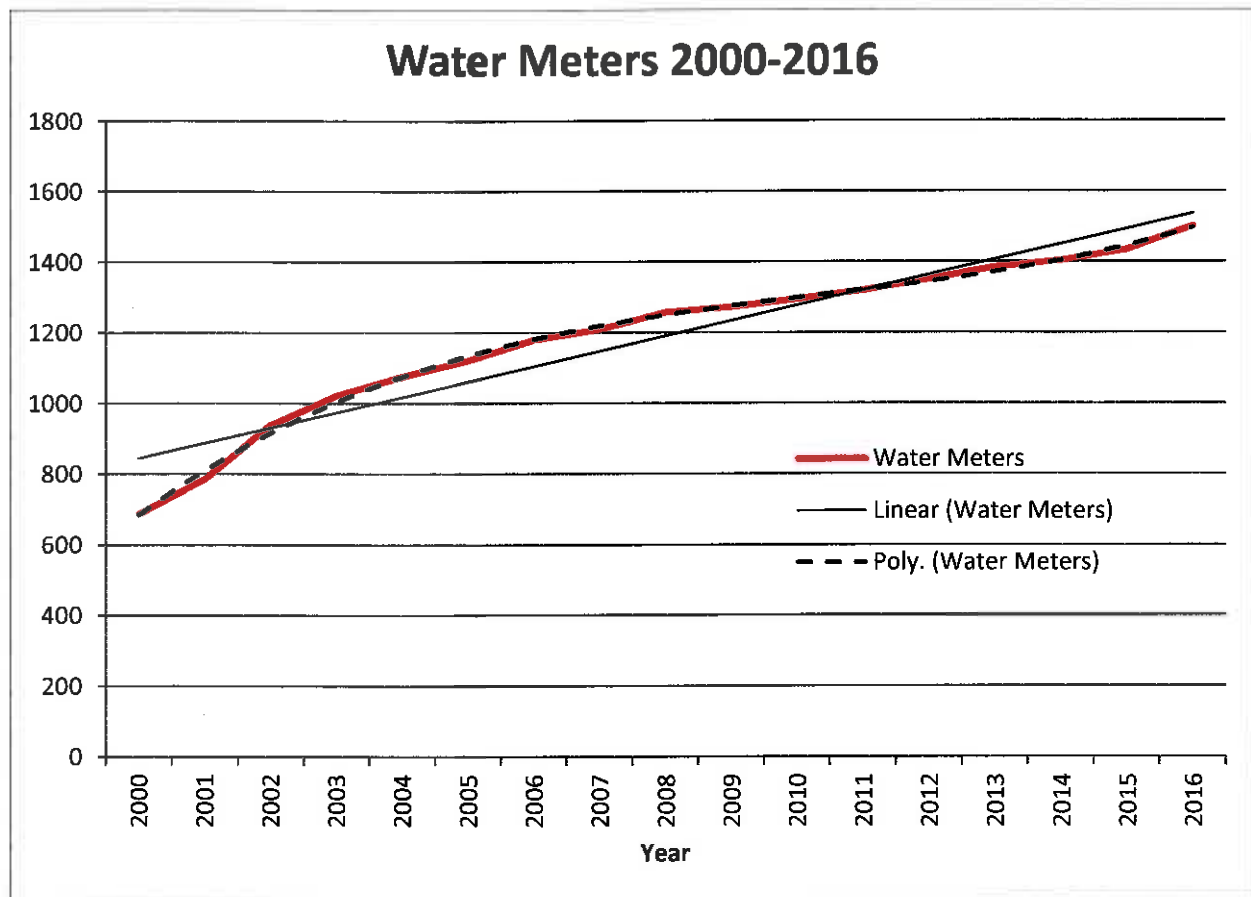
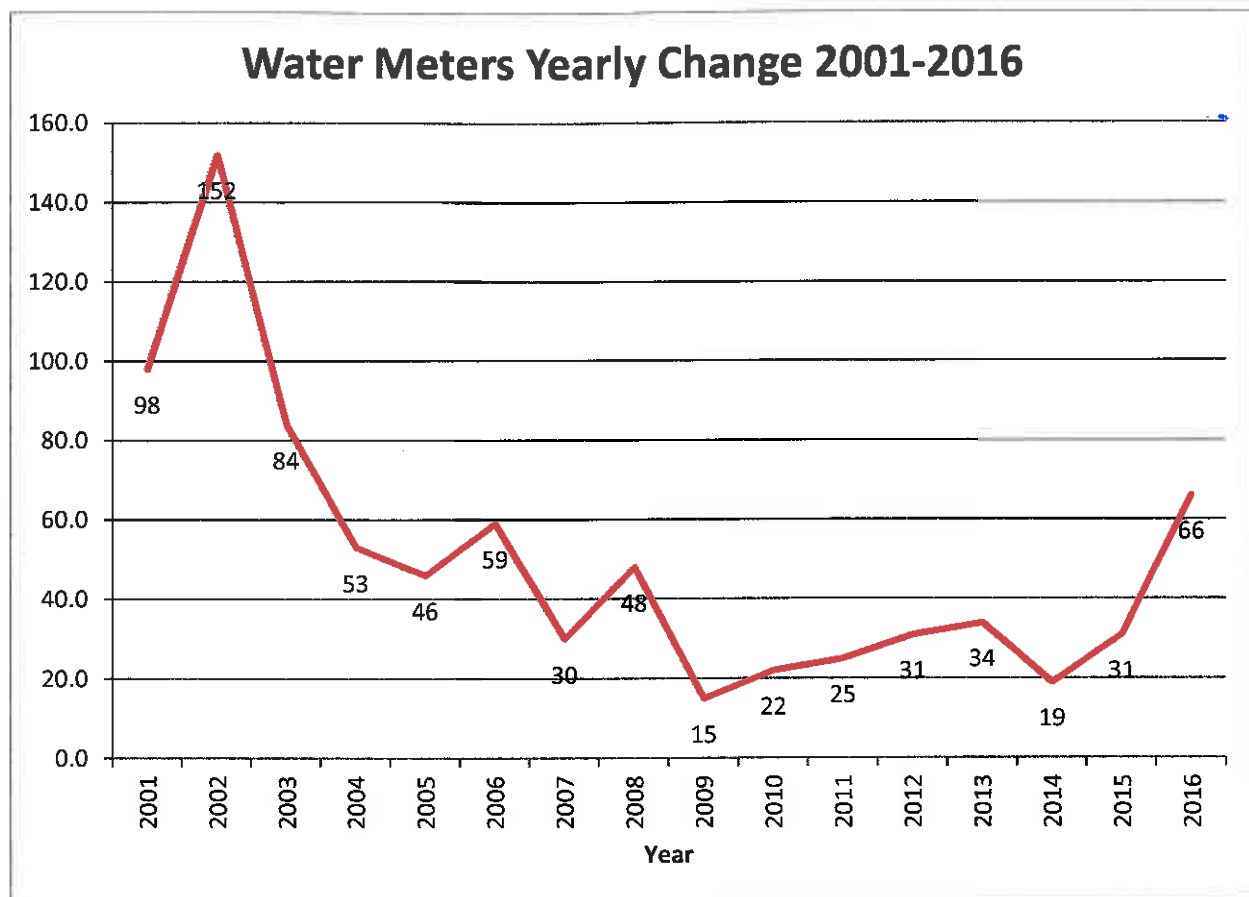


Figure 1 - Water Meter Graph





**Figure 2 - Water Meters Delta from Prior Year**

For selected time periods, average year on year growth rates can be established. Several time periods were used to show the difference in growth rate when some of the outlying data is included or excluded.

**Table 3 - Selected Year on Year Growth Rates**

Period	# Periods	Avg. YoY Growth Rate
2001-2016	16	5.1%
2003-2016	14	3.4%
2001-2011	10	6.2%
2003-2013	10	3.6%



Table 4 shows the analysis of the estimated number of lots, which correspond directly to service units in the City, for areas covered by zoning or development agreements and all undeveloped land. The estimated lots for those areas already approved are actual numbers. For the undeveloped areas a factor of 0.9<sup>2</sup> is used to allow for those areas dedicated for roads, rights-of-way and other unusable areas.

**Table 4 - Future Service Area Impact**

<b>Future Service Area</b>	<b>Acres</b>	<b>Lots/Acre</b>	<b>Est. Lots/Service Units</b>	<b>Est. Residents</b>
<b>Approved by Zoning or Development Agreement</b>	1500	0.646	969	2907
<b>Undeveloped in ETJ</b>	720	1	720	2160
<b>Undeveloped Zoned SF</b>	500	0.5	250	750
<b>Undeveloped Zoned SFT</b>	400	0.67	268	804
<b>Totals</b>	3120	NA	2207	6621

<sup>2</sup> Formula used: Number of acres \* Lots/Acre \* 0.9

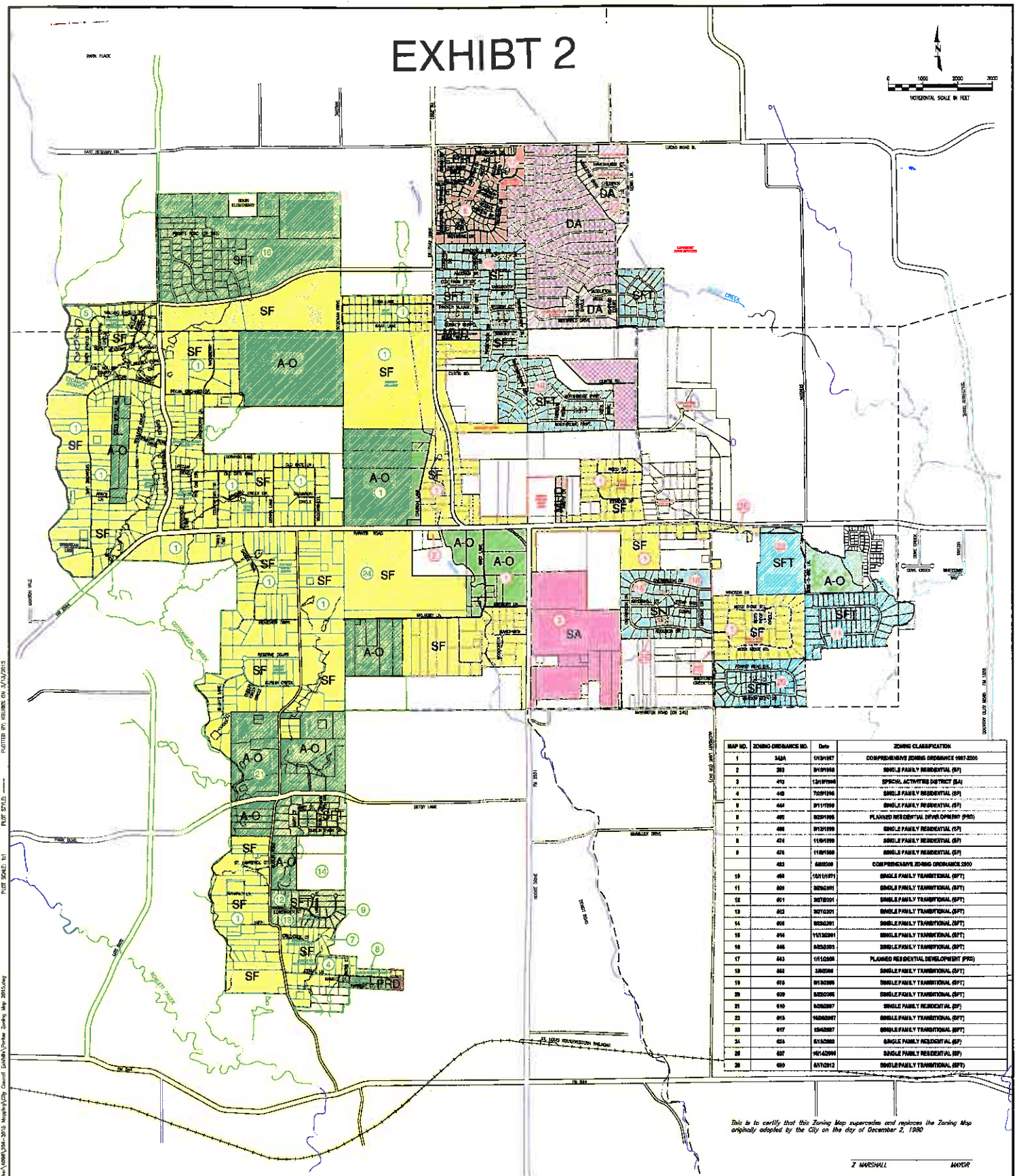
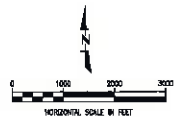


# EXHIBT 1

<b>Year</b>	<b>January Water Meters</b>	<b>x 3 per household</b>
2000	688	2064
2001	786	2358
2002	938	2814
2003	1022	3066
2004	1075	3225
2005	1121	3363
2006	1180	3540
2007	1210	3630
2008	1258	3774
2009	1273	3819
2010	1295	3885
2011	1320	3960
2012	1351	4053
2013	1385	4155
2014	1404	4212
2015	1435	4305
2016	1501	4503



# EXHIBT 2



MAP NO.	ZONING ORDINANCE NO.	Date	ZONING CLASSIFICATION
1	34A	01/31/87	COMPREHENSIVE ZONING ORDINANCE 1987-2000
2	383	01/09/88	SINGLE FAMILY RESIDENTIAL (SF)
3	413	12/10/88	SPECIAL ACTIVITIES DISTRICT (SA)
4	438	02/09/89	SINGLE FAMILY RESIDENTIAL (SF)
5	444	01/17/89	SINGLE FAMILY RESIDENTIAL (SF)
6	465	03/01/89	PLANNED RESIDENTIAL DEVELOPMENT (PRD)
7	485	01/21/89	SINGLE FAMILY RESIDENTIAL (SF)
8	494	11/01/89	SINGLE FAMILY RESIDENTIAL (SF)
9	494	11/01/89	SINGLE FAMILY RESIDENTIAL (SF)
10	494	11/01/89	SINGLE FAMILY RESIDENTIAL (SF)
11	494	11/01/89	SINGLE FAMILY RESIDENTIAL (SF)
12	494	11/01/89	SINGLE FAMILY RESIDENTIAL (SF)
13	494	11/01/89	SINGLE FAMILY RESIDENTIAL (SF)
14	494	11/01/89	SINGLE FAMILY RESIDENTIAL (SF)
15	494	11/01/89	SINGLE FAMILY RESIDENTIAL (SF)
16	494	11/01/89	SINGLE FAMILY RESIDENTIAL (SF)
17	494	11/01/89	SINGLE FAMILY RESIDENTIAL (SF)
18	494	11/01/89	SINGLE FAMILY RESIDENTIAL (SF)
19	494	11/01/89	SINGLE FAMILY RESIDENTIAL (SF)
20	494	11/01/89	SINGLE FAMILY RESIDENTIAL (SF)
21	494	11/01/89	SINGLE FAMILY RESIDENTIAL (SF)
22	494	11/01/89	SINGLE FAMILY RESIDENTIAL (SF)
23	494	11/01/89	SINGLE FAMILY RESIDENTIAL (SF)
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26	494	11/01/89	SINGLE FAMILY RESIDENTIAL (SF)
27	494	11/01/89	SINGLE FAMILY RESIDENTIAL (SF)
28	494	11/01/89	SINGLE FAMILY RESIDENTIAL (SF)
29	494	11/01/89	SINGLE FAMILY RESIDENTIAL (SF)
30	494	11/01/89	SINGLE FAMILY RESIDENTIAL (SF)

This is to certify that this Zoning Map supercedes and replaces the Zoning Map originally adopted by the City on the day of December 2, 1980

Z MARSHALL  
CARRIE SMITH CITY SECRETARY

**LEGEND**

- STREAMS
- STREETS
- CITY LIMITS
- RAILROAD
- SURVEY LINES
- ETU BOUNDARY LINES

**PRIVATE OWNERS**  
SOUTH MANOR, TRAILS END, WINDREAR LANE, ANN LANE,  
CHERRY MYRTLE, REGAL WAY, ANDREAS LANE

PASSED BY PARKER CITY COUNCIL  
March 5, 2015, ORD. # 791

This document was prepared under 22 TAC 603.21, and does not reflect the results of an on the ground survey, and is not to be used to convey or establish interests in real property except those right and interests simplified or established by the creation or reconfiguration of the boundary of the political subdivision for which it was prepared.

## ZONING MAP CITY OF PARKER, TEXAS










**BIRKHOFF, HENDRICKS & CARTER, L.L.P.**  
PROFESSIONAL ENGINEERS  
Texas Firm #1056  
11910 Greenville Ave., Suite 600  
Dallas, Texas 75245 (214) 361-7900

**ZONING LEGEND**

- AGRICULTURAL - OPEN SPACE (A-O)
- SINGLE FAMILY RESIDENTIAL DISTRICT (SF)
- SINGLE FAMILY RESIDENTIAL DISTRICT 1.5AC. (SFT)
- PLANNED RESIDENTIAL DEVELOPMENT (PRD)
- SPECIAL ACTIVITIES DISTRICT (SA)
- MANUFACTURED HOME DISTRICT (MHO)
- DEVELOPER AGREEMENT (DA) (UNDER CONSTRUCTION)
- DEVELOPER AGREEMENT (DA) (FUTURE LOTS)












	STREAMS
	STADETS
	CITY LIMITS
	RAILROADS
	SURVEY LINES
	ETJ BOUNDARY LINES



PASSED BY PARKER CITY COUNCIL:  
MARCH 9, 2015, ORD. #721

	SINGLE FAMILY (SF)
	SINGLE FAMILY TRANSITIONAL (SFT)
	PLANNED RESIDENTIAL DEVELOPMENT (PRD)
	MANUFACTURED HOUSING (MH)
	SPECIAL ACTIVITIES (SA)
	DEVELOPMENT AGREEMENT (DA) (EX ANTICIPATED)
	DEVELOPMENT AGREEMENT (DA)

REVENUE/INVESTMENT SERVICES/LEADERSHIP/LEADERSHIP  
 REVENUE/INVESTMENT SERVICES/LEADERSHIP/LEADERSHIP  
 REVENUE/INVESTMENT SERVICES/LEADERSHIP/LEADERSHIP  
 REVENUE/INVESTMENT SERVICES/LEADERSHIP/LEADERSHIP



# EXHIBIT 4

Approved By Zoning or Development Agreement 1500 acres +/-

969 Lots



Undeveloped in ETJ

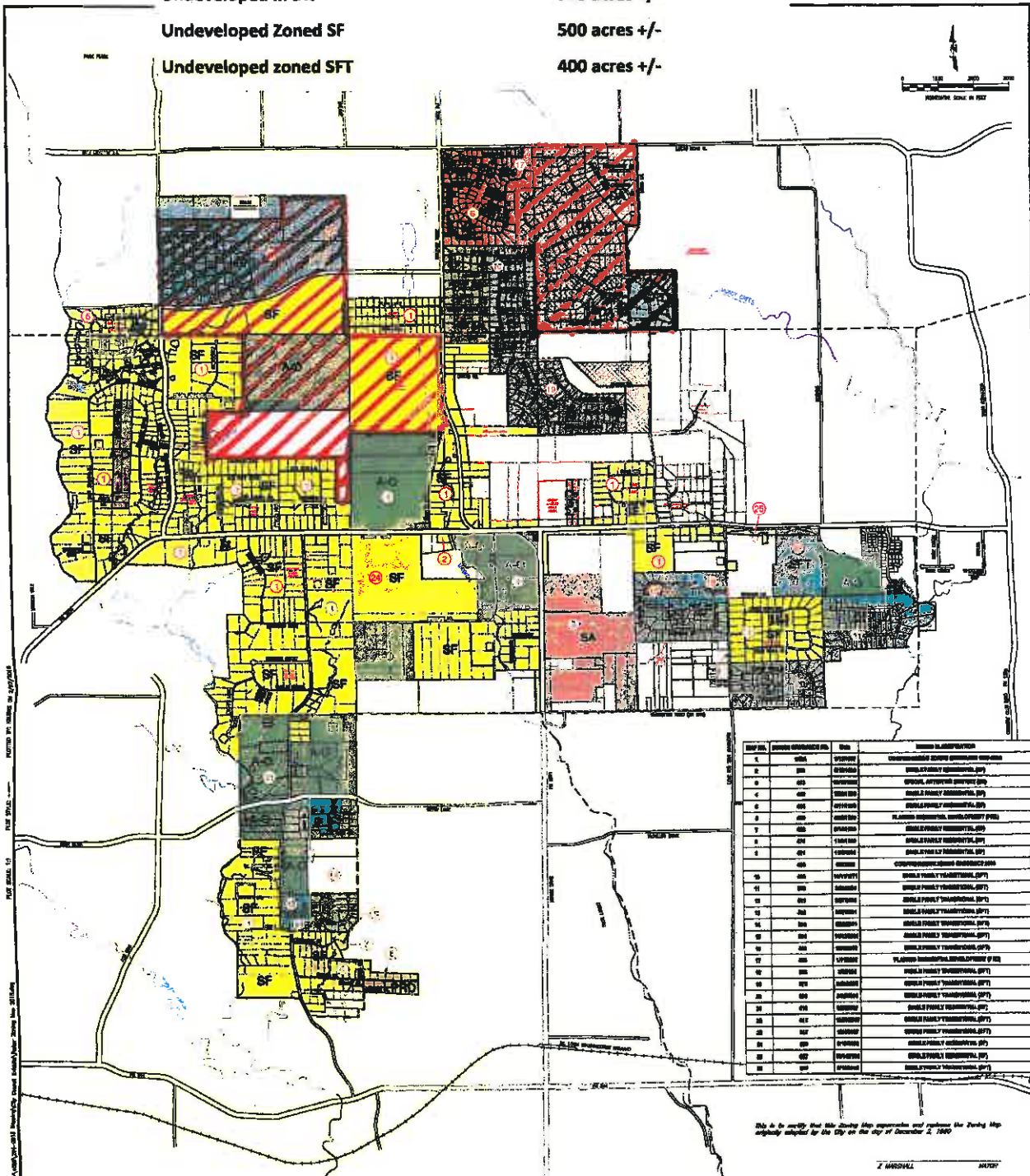
720 acres +/-

Undeveloped Zoned SF

500 acres +/-

Undeveloped zoned SFT

400 acres +/-



LOT NO.	OWNER	ADDRESS	AREA	REMARKS
1	WMA	10000	10000	10000
2	WMA	10000	10000	10000
3	WMA	10000	10000	10000
4	WMA	10000	10000	10000
5	WMA	10000	10000	10000
6	WMA	10000	10000	10000
7	WMA	10000	10000	10000
8	WMA	10000	10000	10000
9	WMA	10000	10000	10000
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96	WMA	10000	10000	10000
97	WMA	10000	10000	10000
98	WMA	10000	10000	10000
99	WMA	10000	10000	10000
100	WMA	10000	10000	10000

This is to certify that this Zoning Map represents and reflects the Zoning Map adopted by the City on the day of December 2, 1990

J. MARSHALL  
DAVE SMITH CITY SECRETARY

## ZONING MAP CITY OF PARKER, TEXAS



WINKROPP, HENDRICKS & CARTER, L.L.P.  
PROFESSIONAL ENGINEERS  
10100 Greenleaf Drive, Suite 100  
Dallas, Texas 75243 (214) 341-7900

SYMBOL	DESCRIPTION
[Hatched Box]	AGRICULTURAL - OPEN SPACE (A-O)
[Yellow Box]	SINGLE FAMILY RESIDENTIAL DISTRICT (SF)
[Blue Box]	SINGLE FAMILY RESIDENTIAL DISTRICT 1500 (SFT)
[Red Box]	PLANNED RESIDENTIAL DEVELOPMENT (PRD)
[Green Box]	SPECIAL ACTIVITIES DISTRICT (SA)
[Black Box]	MANUFACTURED HOME DISTRICT (MH)
[Dashed Box]	DEVELOPER AGREEMENT (DA) (UNDER CONSTRUCTION)
[Dotted Box]	DEVELOPER AGREEMENT (DA) (FUTURE LOTS)

January 2003

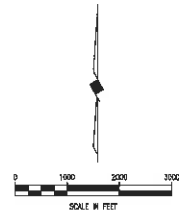


# EXHIBIT 5

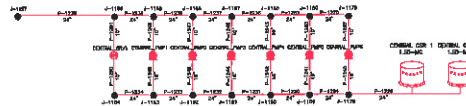
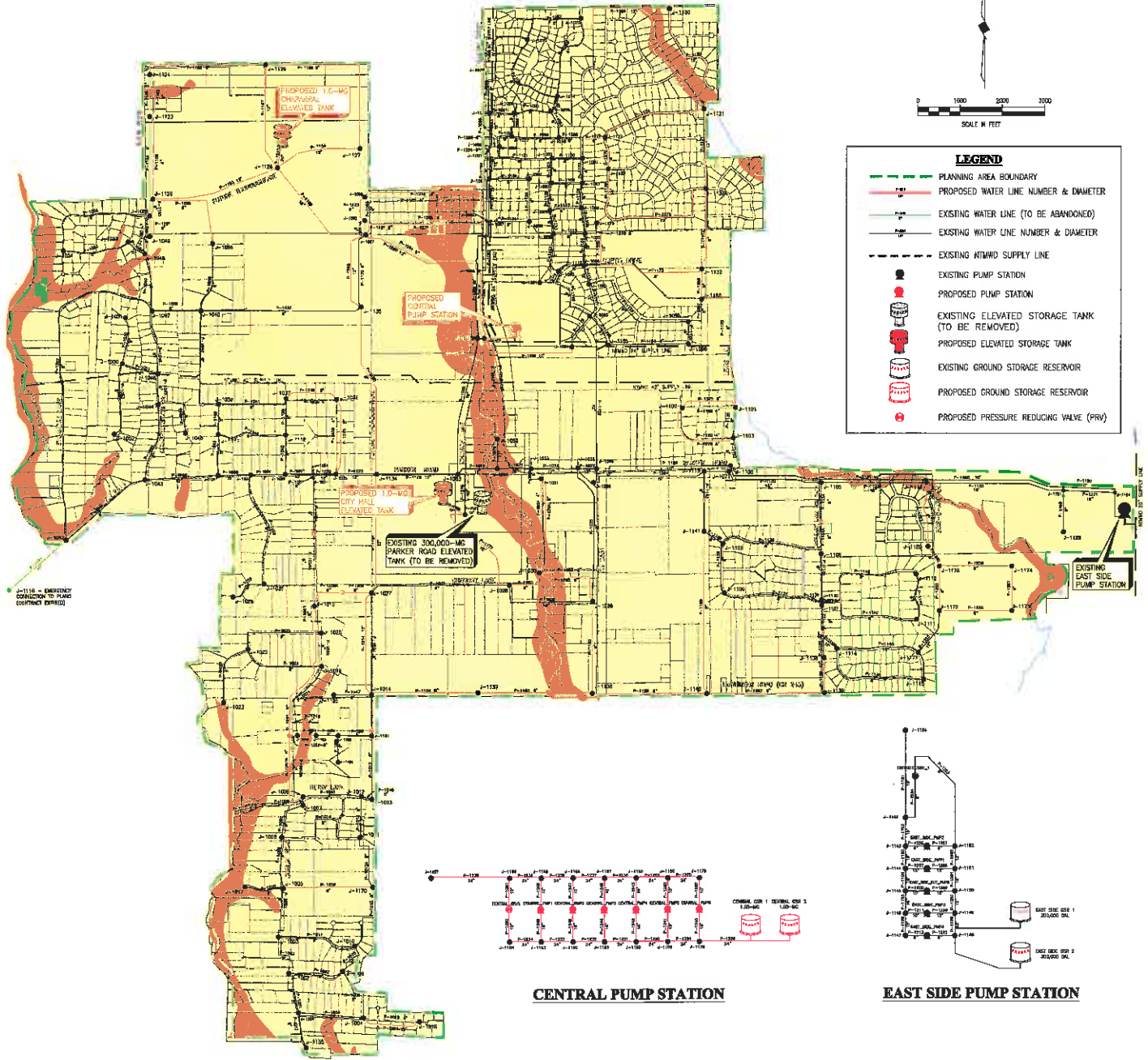


## WATER DISTRIBUTION SYSTEM MASTER PLAN MAP

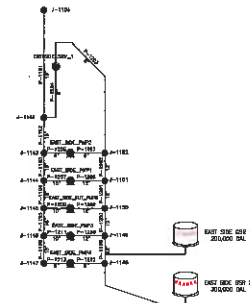
BERNHOFF, BERDECKS & CORWAY, L.L.P.  
CONSULTING ENGINEERS  
Dallas, Texas  
SEPTEMBER, 2009



LEGEND	
	PLANNING AREA BOUNDARY
	PROPOSED WATER LINE: NUMBER & DIAMETER
	EXISTING WATER LINE: (TO BE ABANDONED)
	EXISTING WATER LINE: NUMBER & DIAMETER
	EXISTING ATMWD SUPPLY LINE
	EXISTING PUMP STATION
	PROPOSED PUMP STATION
	EXISTING ELEVATED STORAGE TANK (TO BE REMOVED)
	PROPOSED ELEVATED STORAGE TANK
	EXISTING GROUND STORAGE RESERVOIR
	PROPOSED GROUND STORAGE RESERVOIR
	PROPOSED PRESSURE REDUCING VALVE (PRV)



CENTRAL PUMP STATION



EAST SIDE PUMP STATION



# EXHIBIT A

Year	Meters	Est. Residents	Delta	% Change	Std. Dev.
2000	688	2064	688.0		
2001	786	2358	98.0	14.2%	5.1%
2002	938	2814	152.0	19.3%	4.6%
2003	1022	3066	84.0	9.0%	2.1%
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2012	1351	4053	31.0	2.3%	
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2014	1404	4212	19.0	1.4%	
2015	1435	4305	31.0	2.2%	
2016	1501	4503	66.0	4.6%	
2017	1581		80.0		80
2018	1660.05		79.1		90
2019	1743.053		83.0		100
2020	1830.205		87.2		110
2021	1921.715		91.5		120
2022	1979.367		57.7		
2023	2038.748		59.4		
2024	2099.91		61.2		
2025	2162.908		63.0		
2026	2227.795		64.9		
2027	2294.629		66.8		
2028	2363.468		68.8		
2029	2434.372		70.9		
2030	2507.403		73.0		
2031	2582.625		75.2		
2032	2660.104		77.5		
2033	2739.907		79.8		
2034	2822.104		82.2		
2035	2906.767		84.7		
2036	2993.97		87.2		
2037	3083.789		89.8		
2038	3176.303		92.5		
2039	3271.592		95.3		
2040	3369.74		98.1		
2041	3470.832		101.1		
2042	3574.957		104.1		