

APPENDIX 3: Pre-Qualified Concept Plans

North Plains

Memorandum

Date: May 5, 2009
To: Don Otterman, City Manager
From: Frank Angelo
cc:
Re: City of North Plains Urban Reserves – Revised Forecasts & Design Types

I have updated the previous Urban Reserve work for North Plains based on new information from the Johnson Reid Employment Opportunities Analysis. As well, I have preliminarily assigned the "Design Types" that the Washington County Reserve Steering Committee identified for the "Pre-qualifying Urban Reserve Concept Plans (see attached Figures). This memo summarizes the key elements of the population and employment forecasts, the resulting demand for residential and non-residential land, and the assignment of Design Types. Based on our discussion I have finalized the information in a technical memo for your use. The following presents the numbers – the final memorandum will provide more background and description of methodology.

Population Forecast

We began our review of these areas by looking back at the Urban Growth Boundary (UGB) expansion that began in 2000 and was acknowledged by the Land Conservation and Development Commission (LCDC) in 2002. At that time the city brought approximately 149 acres into the UGB which included both future residential and non-residential lands. In projecting population growth, the city used a 4.5 percent annual growth rate to determine the city's future land needs to 2021. The resulting 2021 population using this growth rate assumption was 4,401. For purposes of our analysis on potential future URAs for North Plains, we continued to use that growth rate (4.5 percent annually) to project the population growth from 2021 to 2035 and 2060. As we have discussed, a 4.5% annually population growth rate for the entire forecast period could be considered high. This forecast should be viewed as a "high-end" population estimate for the planning period. However, our discussions indicated that you would rather have a more robust population estimate at this stage of the Reserves planning process. Over the next few months the Reserves planning process will refine population and employment forecasts and these refinements can be inserted into the City's analysis of potential Urban Reserve areas. However, for this analysis, we used the more robust 4.5% annual population growth rate. The resulting population forecast is shown below in Table 1.

**Table 1: North Plains Population Forecast (2008 population = 1,905)**

<i>Annual Rate of Population Growth</i>	<i>Population Forecast</i>		
	2021	2035	2060
4.5%	4,041 ¹	7,483	22,490

As you can see, with a growth rate of 4.5 percent, the city's population would significantly increase to a 2060 population of 22,490. As shown below in Table 2, APG applied that rate to calculate the residential land need for the city's population in both 2035 and 2060.

Residential Land Needs

Based on this population forecast, the next step was to translate anticipated population growth into **Residential Land** needs. For this analysis we used 8.4 dwelling units per acre to translate the anticipated number of households into acres. We also deducted an estimate of available residential acreage inside the City's existing UGB against the residential land demand for the 2008 – 2035 planning period. Based on these assumptions, the following summarizes the residential land need between 2008 – 2035 and 2035 – 2060.

Table 2: Summary of Projected Residential Land Use Need

	<i>Population Increase from 2008</i>	<i>Forecasted Population</i>	<i>Dwelling Units (2.5 Persons Per Household)</i>	<i>Units / Acre (8.4 DUs/ Ac)</i>	<i>Gross Acres</i>	<i>Deduct Acres in Current UGB</i>	<i>Total Gross Acres</i>
2008 -2035	5,578	7,483	2,231	266	333	128	205
2036 - 2060	15,007	22,490	6,003	715	894	0	894
Total			8,234	980	1,227	128	1,099

Non- Residential Land Needs

For the **Employment Land** need forecast, we relied upon the Johnson Reid Employment Opportunity Analysis that was prepared for western Washington County cities. We relied on the Baseline Forecast from this analysis. We assumed that the Baseline employment acreage estimates in the Johnson Reid report were net employment acres, since this was not specified in the report. Therefore, we converted the net employment acreage demand to gross acres. As with the residential land needs, we deducted an estimate of available employment acreage inside the City's existing UGB against the employment land demand for the 2008 – 2035 planning period. The following table summarizes the non-residential land needs between 2008 – 2035 and 2035 – 2060.

¹ From acknowledged UGB Amendment - 2002



Table 3: Summary of Projected Employment Land Use Need²

	<i>Employment Net Acres 2008 - 2035</i>	<i>Employment Gross Acres 2008 - 2035</i>	<i>Deduct Current UGB Acres 2008 - 2035</i>	<i>2008 -2035 Gross Acres</i>	<i>Employment Net Acres 2035 - 2060</i>	<i>Employment Gross Acres 2035 - 2060</i>	<i>2008 - 2060 Total Gross Acres</i>
Commercial /Office	97.9	122	59	63	345.5	432	495
Industrial	83.2	104	50	54	220.2	275	329
Total	181.1	226	109	117	565.7	707	824

For the **Park and Open Space** land need forecast, we relied upon the ratios included in the City's Parks and Recreation Capital Facilities Master Plan Update (July 5, 2005) prepared by Don Ganer & Associates, Inc. The following table summarizes the park and open space land needs between 2008 – 2035 and 2035 – 2060 based on the adopted acres to population ratios.

Table 4: Summary of Projected Park and Open Space Land Use Need³

	<i>Ratio: Acres to Population</i>	<i>2008 - 2035 Population Increase = 5,578 (5.578/1,000)</i>	<i>2036 - 2060 Population Increase = 15,005 (15.0/1,000)</i>	<i>2008 - 2060 Park Land Need</i>
Neighborhood Parks	2.0 acs/1,000	11.16	30	41.16
Community Parks	3.0 acs/1,000	16.73	45	61.73
Greenway/Open Space	4.5 acs/1,000	25.1	67.5	92.6
Total		52.99	142.5	195.49

For the **School Facility Land** need forecast, we relied upon the student enrollment ratios provided in Washington County's Pre-qualifying Concept Plans Paper distributed at the Washington County Reserves Steering Committee. The following table summarizes the school facility land needs between 2008 – 2035 and 2035 – 2060 based on the adopted acres to population ratios.

² Baseline Forecast from Johnson Reid Employment Opportunity Analysis - 2009

³ City of North Plains Population to Park/Recreation Ratios, Master Plan Update 2007



Table 5: Summary of Projected School Facility Land Use Need⁴

	<i>Students / DU</i>	<i>2008 – 2035 DU's</i>	<i>2008 – 2035 Students</i>	<i>2036 – 2060 DU's</i>	<i>2036 – 2060 Students</i>	<i>2008 – 2060 Students</i>	<i>School Acres Needed</i>
Elementary School (600 Students / 10 acres)	0.205	2,231	457	6,003	1,231	1,688	30
Middle School (1,000 Students / 15 acres)	0.0875	2,231	195	6,003	525	720	15
High School (2,000 Students / 30 acres)	0.0975	2,231	218	6,003	585	803	30
Total							75

Summary of All Use Categories Land Needs

Based on the above forecasts and land need estimates, the following table summarizes the land needs for all land use categories between 2008 – 2035 and 2035 – 2060.

Table 6: Projected Summary of Expansion Needs for all Land Uses (2035 and 2060)

<i>Land Use Category</i>	2035, Population 7,483		2060, Population 22,490		Total	
	<i>Net Acres</i>	<i>Gross Acres</i>	<i>Net Acres</i>	<i>Gross Acres</i>	<i>Net Acres</i>	<i>Gross Acres</i>
Residential	154	205	715	894	872	1,099
Commercial/Office	52	63	346	432	398	495
Industrial	43	54	220	275	263	329
Schools	8	10	52	65	60	75
Neighborhood Parks	11	14	30	38	41	52
Community Parks	17	21	45	56	62	77
Greenway Parks	25	31	68	85	93	116
Total	310	398	1,476	1,845	1,786	2,243

⁴ Based of student enrollment formula from Washington Co. Reserve Steering Committee – 2009



Design Types – Pre-qualifying Concept Plan

North Plains Urban Reserve Areas

Based on the population and employment forecasts, the resulting land needs noted in the above tables and our discussions, a recommendation on future Urban Reserve areas has been developed. Figure 1: North Plains Urban Reserve Areas shows this recommendation. This recommendation includes the following acreage recommendations:

- Northwest Urban Reserve 899 acres
- East Urban Reserve 562 acres
- South Urban Reserve 909 acres
- Total Urban Reserve 2,370 acres

In addition to these Urban Reserve areas, the City has also expressed an interest in including the Pumpkin Ridge Golf Course within an Urban Reserve. We have shown the 348 acres associated with the Pumpkin Ridge Golf Course as Open Space/Recreation Urban Reserve. The intent of identifying this as Open Space/Recreation Urban Reserve is to indicate that the golf course and the acreage will not be available to the residential or non-residential land use inventory to accommodate future population and employment growth in the city. The intent is to include Pumpkin Ridge Golf Course within the city's Urban Reserve area, but to restrict its use to Open Space/Recreation as a golf course.

North Plains Urban Reserve Design Types

Based on Washington County's Pre-qualifying Concept Plans Paper distributed at the Washington County Reserves Steering Committee we have prepared recommendations for the Design Type categories identified for a Pre-qualifying Concept Plan. These are shown on Figure 2: North Plains Urban Reserve Design Types. This recommendation includes the following acreage recommendations by Design Type:

- Inner Neighborhood 1,528 acres
- Employment 325 acres
- Industrial 517 acres
- Total 2,370 acres

The total acreage of 2,370 acres is 127 acres more than the estimated demand. At this stage in the Reserves planning process, this difference is not that large of an issue, the Reserve areas can be expected to be reviewed and refined based on updated information. Also, note that Figure 2 shows Inner Neighborhood south of Highway 26 on an approximately 100 acre site. This Inner Neighborhood site is the subject of a Measure 37/49 claim and is the location of a private airstrip. The Design Type recommendation reflects the Measure 37/49 intent for residential use on these properties.

If you have any questions on this information or if we can be of further assistance, please let me know.

Figure 1: North Plains Urban Reserve Areas

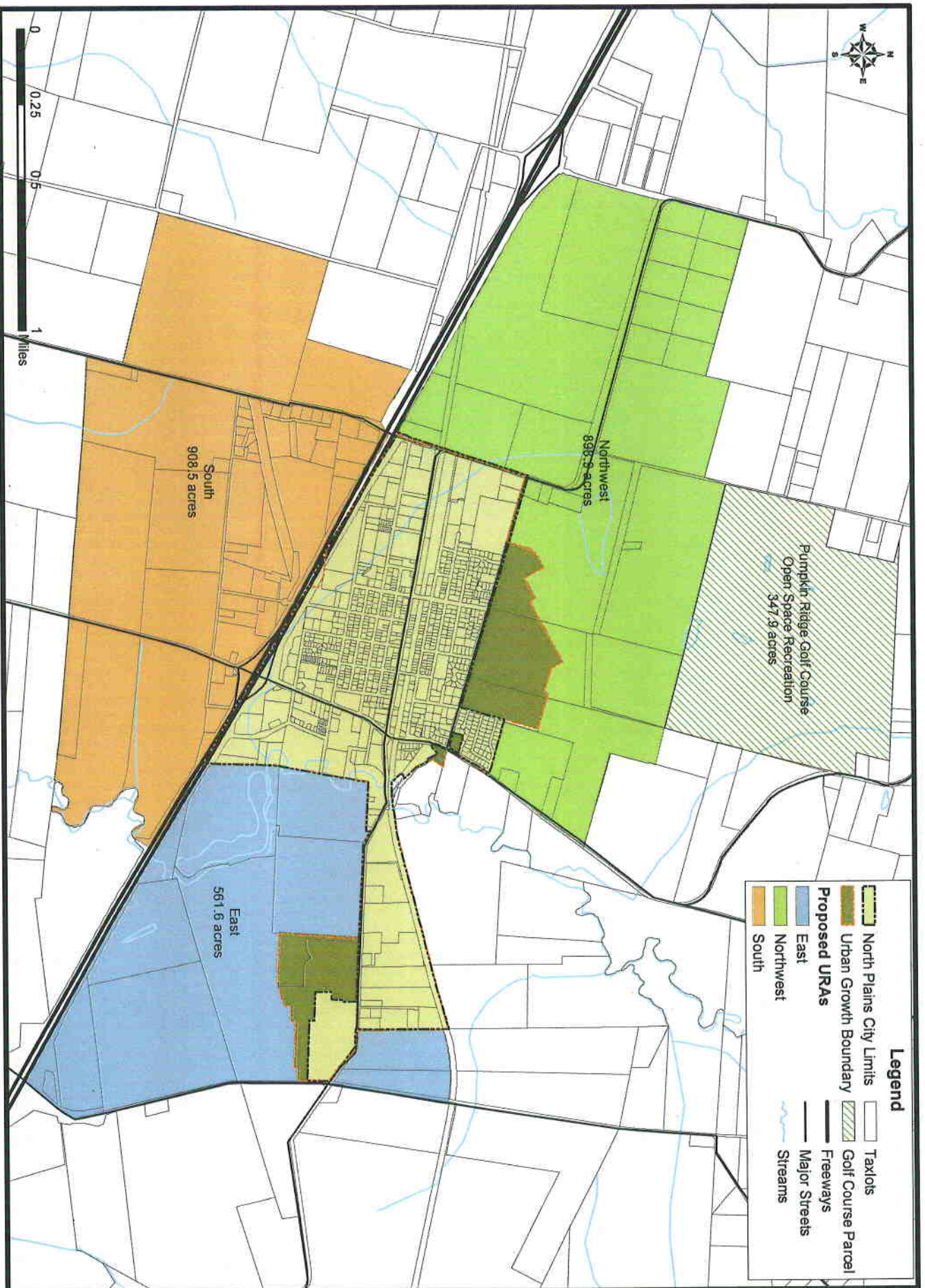


Figure 2: North Plains Urban Reserve Design Types

