

**A CONSULTATION ASSIGNMENT  
PRESENTED IN A SUMMARY REPORT  
OF A  
LAND COST ANALYSIS FOR THE  
NORTHERN DEVELOPMENT IMPACT FEE AREAS  
AS DEFINED BY THE CITY OF PHOENIX  
PHOENIX, ARIZONA**

**Effective Date: October 1, 2018**

Prepared for:

City of Phoenix  
Mr. Steve Laney SR/WA  
Review Appraiser  
251 West Washington Street, 8th Floor  
Phoenix, Arizona 85003

Prepared by:

Brekan Nava Group  
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BNG #18-08-24A

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October 23, 2018

City of Phoenix  
Mr. Steve Laney SR/WA  
Review Appraiser  
251 West Washington Street, 8th Floor  
Phoenix, Arizona 85003

RE: A Consultation Assignment regarding the projection of land costs within the Northern Development Impact Fee Areas as defined by the City of Phoenix (BNG #18-08-24A).

Dear Mr. Laney:

In accordance with your request, we have prepared this consultation report which provides estimates of projected land costs within the Northern Impact Fee Areas defined by the City of Phoenix. They are the Northeast, Northwest and Deer Valley Impact Fee Areas. More specifically, the analysis is broken down within these areas into the Planning Villages of North Gateway (NBCC and West), Deer Valley, Desert View and Rio Vista. The Deer Valley Village has been combined with the North Gateway Village due to its small size. Thus, only four areas are considered.

The purpose of this study is to provide a basis for projections and a mechanism for recognizing the possible increase or decrease in land values over the coming year for certain types of lands to be acquired through impact fees as part of the Infrastructure Financing Plans for these districts. The intended use of this report is for internal decision making to allow the City a better means of aligning future acquisition costs and the monies collected through the City's impact fee program. The intended users of this report are the Real Estate and Planning Departments of the City of Phoenix.

***Although land values on a per acre and a per square foot basis have been estimated by the consultant and are presented herein, it should be made clear that these are not intended as appraisals of any particular property.*** The value estimates presented herein are of only a *typical land use type* based on specific hypothetical criteria for a given land use and do not reflect the value of any particular site. A typical land use type was determined from data and descriptions provided through conversations with representatives of relevant City departments and it includes both residential and commercial uses. Summaries of the physical, legal and economic characteristics of the typical land use type and information regarding the Northern Impact Fee Area are presented in the attached document.

The purpose of this analysis is to assist the City of Phoenix in establishing reasonable estimates of the costs for certain land use types to be acquired through impact fees as part of the Infrastructure Financing Plans. ***However, it must be made clear that land values presented herein have been derived on a macro basis and for various land use types, assuming typical market terms and conditions, and are not intended to represent actual prices to be paid for any specific parcel of land.***

Mr. Steve Laney SR/WA

October 23, 2018

BNG #18-08-24A

Page 2

The *effective date* of the land cost estimates presented herein is October 1, 2018. Based on the data and analysis summarized in the attached report, our conclusions are as follows:

Use	Typical Size-Acs	Typical Underlying Use	Desert View/SF	Desert View/Acre	North Gateway-NBCC/SF	North Gateway-NBCC/Acre	North Gateway-West/SF	North Gateway--West/Acre	Rio Vista/SF	Rio Vista/Acre
<b>Acquisitions</b>										
Fire Stations	1-3.5	Commercial	\$15.00	\$650,000	\$11.00	\$480,000	\$7.00	\$300,000	\$6.00	\$260,000
Police Stations	5-10	Commercial	\$15.00	\$650,000	\$11.00	\$480,000	\$7.00	\$300,000	\$6.00	\$260,000
Libraries	1-3	Commercial	\$15.00	\$650,000	\$11.00	\$480,000	\$7.00	\$300,000	\$6.00	\$260,000

Use	Typical Size-Acs	Typical Underlying Use	Desert View/SF	Desert View/Acre	North Gateway-NBCC/SF	North Gateway-NBCC/Acre	North Gateway-West/SF	North Gateway--West/Acre	Rio Vista/SF	Rio Vista/Acre
Neighborhood	20	Residential	\$4.50	\$200,000	\$4.50	\$200,000	\$3.50	\$150,000	\$2.50	\$110,000
Community Pa	30	Residential	\$4.50	\$200,000	\$4.50	\$200,000	\$3.50	\$150,000	\$2.50	\$110,000
Water Wells	.25-.50	Residential	\$3.50	\$150,000	\$3.50	\$150,000	\$2.50	\$110,000	\$1.50	\$70,000
Water Booster	1	Residential	\$3.50	\$150,000	\$3.50	\$150,000	\$2.50	\$110,000	\$1.50	\$70,000
Water Pressur	1	Residential	\$3.50	\$150,000	\$3.50	\$150,000	\$2.50	\$110,000	\$1.50	\$70,000
Water Reserv	2-6	Residential	\$3.50	\$150,000	\$3.50	\$150,000	\$2.50	\$110,000	\$1.50	\$70,000
Waste Water l	1	Residential	\$3.50	\$150,000	\$3.50	\$150,000	\$2.50	\$110,000	\$1.50	\$70,000
Storm Drainag	20-40	Residential	\$4.50	\$200,000	\$4.50	\$200,000	\$3.50	\$150,000	\$2.50	\$110,000
Channels	40'-100'	Residential	\$4.50	\$200,000	\$4.50	\$200,000	\$3.50	\$150,000	\$2.50	\$110,000
<b>Easements-(Full Fee Simple Value)</b>										
Water Transm	50'-80'	Residential	\$4.50	\$200,000	\$4.50	\$200,000	\$3.50	\$150,000	\$2.50	\$110,000
Waterwater G:	40'-80'	Residential	\$4.50	\$200,000	\$4.50	\$200,000	\$3.50	\$150,000	\$2.50	\$110,000
Wastewater L:	40'-80'	Residential	\$4.50	\$200,000	\$4.50	\$200,000	\$3.50	\$150,000	\$2.50	\$110,000

We appreciate this opportunity to have been of service and look forward to working with you again. Should you have any questions regarding this matter, please do not hesitate to call.

Sincerely,  
BREKAN – NAVA GROUP



Albert Nava, MAI SGA  
President

Arizona Certified General Real Estate Appraiser No. 30806



Stephen L. Mastorakos  
Senior Appraiser

Arizona Certified General Appraiser No. 30446

**TABLE OF CONTENTS**

Scope of Work ..... 1  
Methodology ..... 3  
Definitions..... 4  
Infrastructure Financing Plans Overview..... 9  
Description of the Northern Growth Area ..... 13  
Descriptions of Typical Sites ..... 23  
Land Cost Estimates ..... 26  
Certification ..... 30  
Qualifications of the Consultants..... 32

**ADDENDUM**

Sales Data ..... Exhibit A

## SCOPE OF WORK

Brekan Nava Group has been engaged by the City of Phoenix to provide estimates of land cost per acre, based on such factors as the size requirements for different types of Infrastructure Financing Facility Types; Facility Type and attributes; probable zoning designation of the site(s); and other land pricing factors. The infrastructure Financing Facility Types to be studied in this analysis include the following:

- Fire stations
- Police stations
- Libraries
- Neighborhood Parks
- Community Parks
- Water Wells
- Water Booster Stations
- Water Pressure Reducing Valve Stations
- Water Reservoirs
- Waste Water Lift Stations
- Storm Drainage Basins
- Channels

The areas of study presented in this report are known as the Northern Impact Fee Areas, or more specifically the Planning Villages of North Gateway (NBCC and West), Deer Valley, Desert View and Rio Vista. The Deer Valley Village has been combined with the North Gateway Village due to its small size. Thus, only four areas are considered. Specifically, the following has been requested:

1. Provide a detailed discussion of the factors that affect land costs in the Impact Areas.
2. Interviewed representatives from the Planning Department to obtain descriptions of the typical site needs and locational requirements of these facility types. Develop prototype descriptions for each type of site; assign specific attributes to those sites, such as but not limited to minimum land sizes, locational requirements, including street access and estimate land costs for each of the prototypical sites. Also, note that representatives of the respective departments were contacted for recent land acquisition data to assist in this land cost study.
3. Calculate average land costs for the following land uses to be applied for the estimation of land costs for each of the Infrastructure Financing Facility Types requested listed above:
  - Raw land,
  - Single-family residential,
  - Multifamily residential,
  - Commercial office,
  - Retail commercial,
  - Industrial,
  - Institutional and/or public facilities,
  - Other eligible land uses

Residential, commercial and industrial land costs based on an estimate of the cost per square foot for the land obtained from pertinent land sales in or near the Impact Fee areas. All land cost estimates shall consider the location factors arising from City facility needs.

4. Define a method of estimating land costs that improves on the process of simply providing a weighted average of all large land sale costs. Consideration should be given to the likely placing of public facilities.

This report has been prepared in a summary format presenting only the results of our investigations. All supporting documentation has been retained in our files.

## METHODOLOGY

Members of the Brekan Nava Group have spoken on several occasions with members of the City of Phoenix Planning Department and the Department of Real Estate to determine the complexity of the issues. Relevant data was gathered from a number of sources and analyzed. Macro data gathered included information on social, economic, governmental, and environmental trends and conditions which might affect the lands in the various Financing Districts. Sources of data included CoStar Comps for historical land sales, conversations with brokers active in these areas and the consultants' own data base. Additionally, representatives of the Real Estate and Planning Departments were consulted for details concerning any pertinent recent land sales or purchases by the City. Included within the report are the following.

- An overview of the City of Phoenix' infrastructure financing plans;
- A brief description of the Northern Impact Fee Areas;
- Descriptions of the typical sites;
- A summary of the data and analysis considered to determine costs estimates for each of the typical sites within each financing district, and;
- A summary of the mechanism for adjusting impact fees or credits based on possible increases or decreases as determined from the market.

*Although land values on a per acre basis have been estimated by the consultants and are presented herein, it should be made clear that these are not intended as appraisals of any particular property.* The value estimates presented herein are of only a *typical land use type* based on specific hypothetical criteria for a given land use and do not reflect the value of any particular site.

A typical land use type was determined from data and descriptions provided through conversations with representatives of relevant City departments and the Planning Department's Northern Impact Fee Area Infrastructure-Financing Plans.

The purpose of this analysis is to assist the City of Phoenix in establishing reasonable estimates of the costs for certain land use types to be acquired through impact fees as part of the Infrastructure Financing Plans. ***However, it must be made clear that land values presented herein have been derived on a macro basis, assuming typical market terms and conditions, and are not intended to represent actual prices to be paid for any specific parcel of land.***

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## DEFINITIONS

The following definitions are for specific terms that may be used herein. The source is the Northern Infrastructure-Financing Plan prepared by the City of Phoenix, Planning Department.

*Impact Fees:* Fees charged to contribute to costs associated with infrastructure and public services that need to be expanded as a direct result of new development in the growth areas of the City of Phoenix, as defined in the General Plan. These growth areas still require substantial investment and construction of capital facilities before or in conjunction with future development.

*Impact Fees Areas:* Since not all areas have the same capital facility requirements, the growth areas are divided into separate fee areas, so that the fees charged in any one fee area pay only for infrastructure which provides a direct benefit to that particular fee area. For example: the Parks Impact Fee for Estrella South funds only parks in the Southwest service area. It does not fund parks in the Northern service areas, which are unlikely to be used on a regular basis by the residents of Estrella South. In addition, fees vary by use and size of development.

*Capital Facilities:* Necessary public services that are permanent additions to the City's assets, which are primarily financed by long-term debt instruments, impact fees, and not from the City's annual operating budget. This term refers to buildings, systems, equipment, or land required for provision of a public service. For example, capital facilities for water may refer to a transmission pipe, or booster station, or pressure reducing valve. The term "infrastructure" is often used interchangeably with "capital facilities." Capital Facilities include the purchase of land, studies leading to design, as well as the design and construction of buildings and facilities.

*Capital Facility Category:* A classification of capital facilities as set out in Sec. 29-5.B.1 of the Phoenix City Code that generally corresponds with the capital program area of the most recent City of Phoenix Capital Improvement Program.

*Equivalent Dwelling Unit (EDU):* This term is utilized so that all types of uses - apartments, retail, industrial, etc. can be measured against the base standard of one EDU, which is one standard single-family home. So if a shopping plaza is said to have 45 EDU's, it means that the plaza places the same demand on infrastructure as 45 single-family homes.



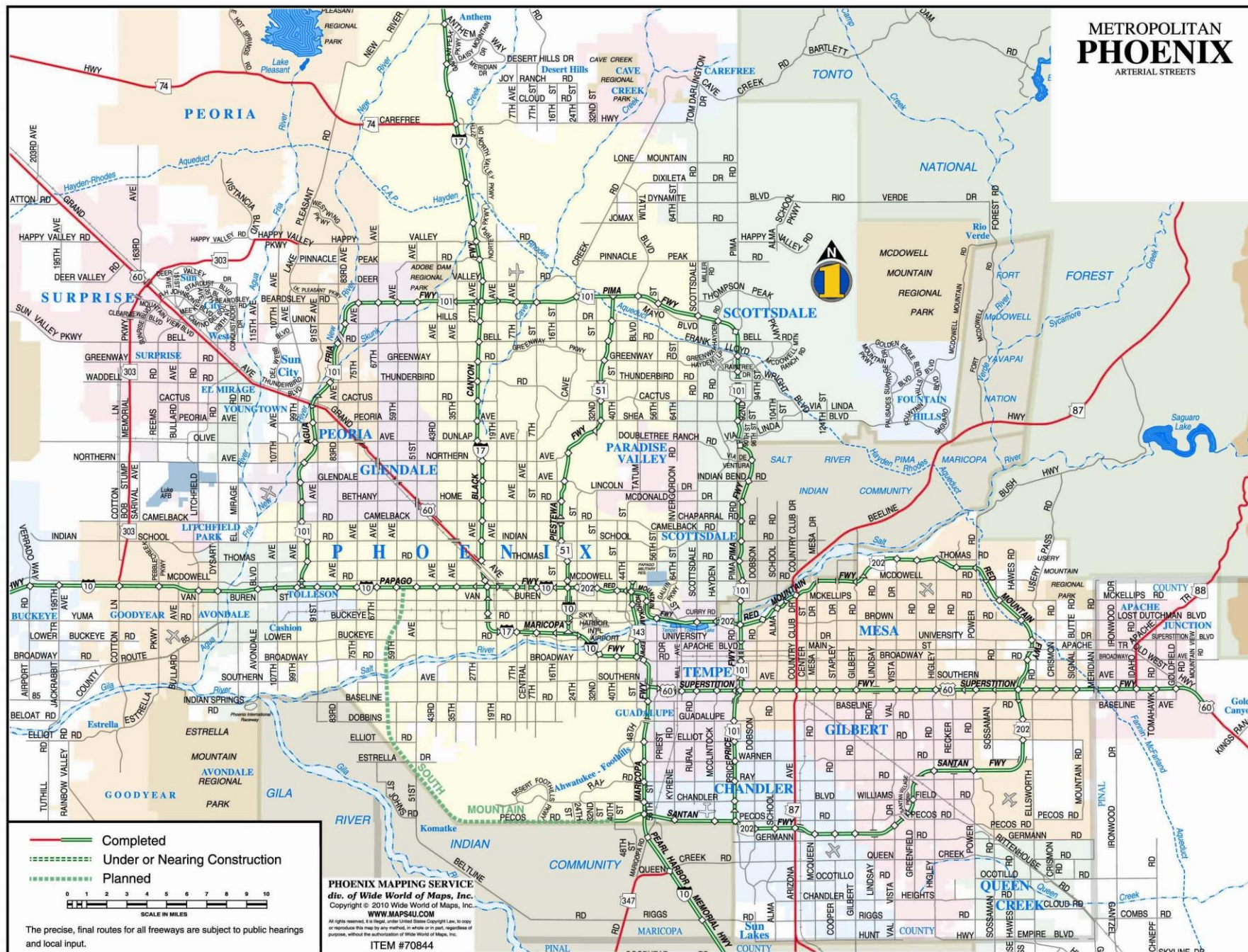
*Net Costs:* This is the amount actually charged to the customer, and is equal to the Gross Impact Fee minus any applicable Offsets. However, if credits apply, the amount charged to the customer will be further reduced.

*Gross Costs:* This term refers to the impact fee amount before applicable Offsets are subtracted, which is generally NOT the same amount that the customer is actually charged. However, in the few cases where no Offset applies, the Gross Impact Fee will then be the same as the Net Impact Fee.

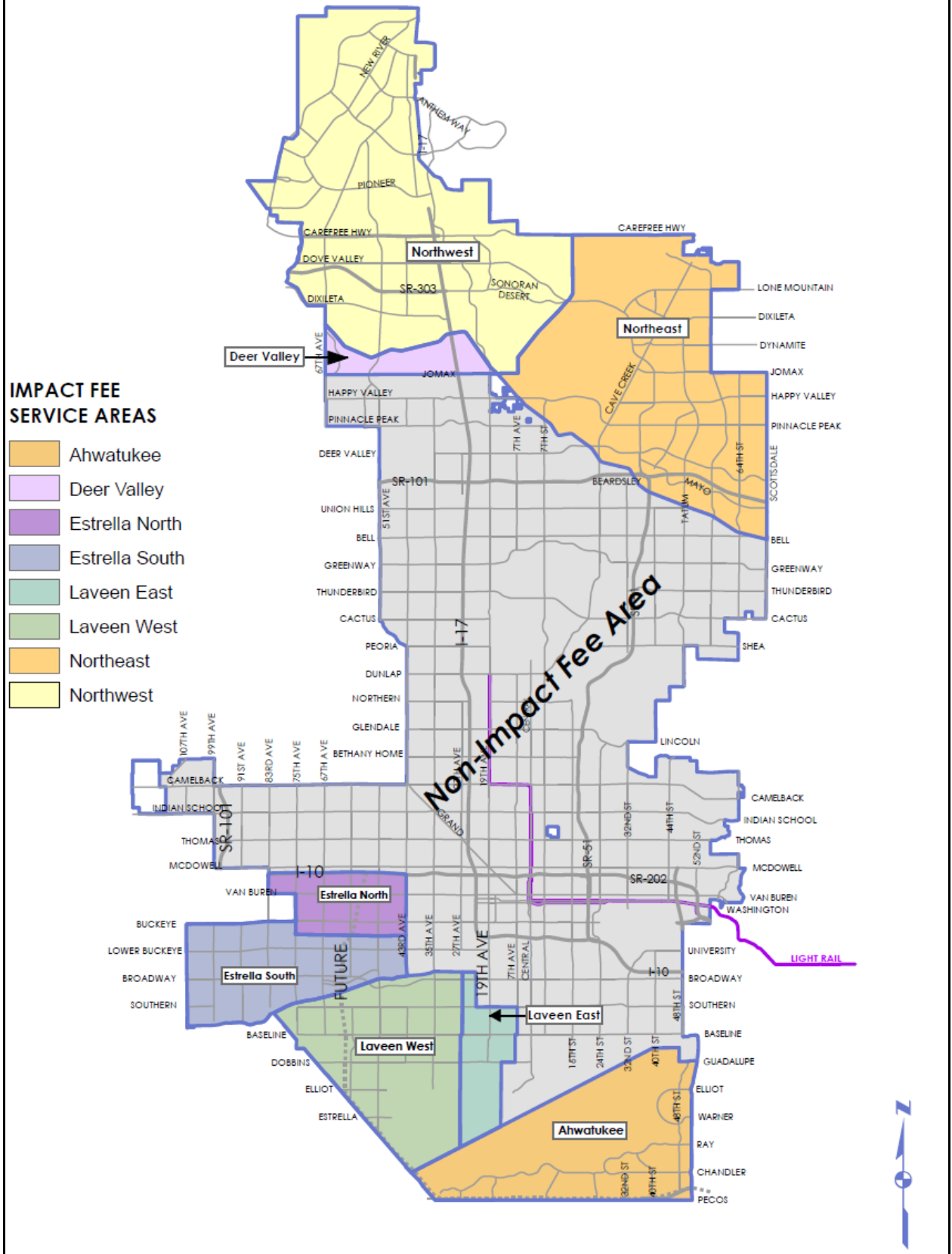
*Offset:* An amount of money which is subtracted from the Gross Impact Fee to avoid double payment for the same capital facilities. In other words, if part of a new fire station is also being paid for by property taxes, a property tax offset will be estimated and subtracted from the Gross Impact Fee before the fee is charged to the customer.

*Standard of Service:* The amount and quality of service provided by a capital facility for the population and land uses it serves.

On the following 2 pages are the Phoenix metro area map, and a city of Phoenix map showing the Impact Fee Areas.

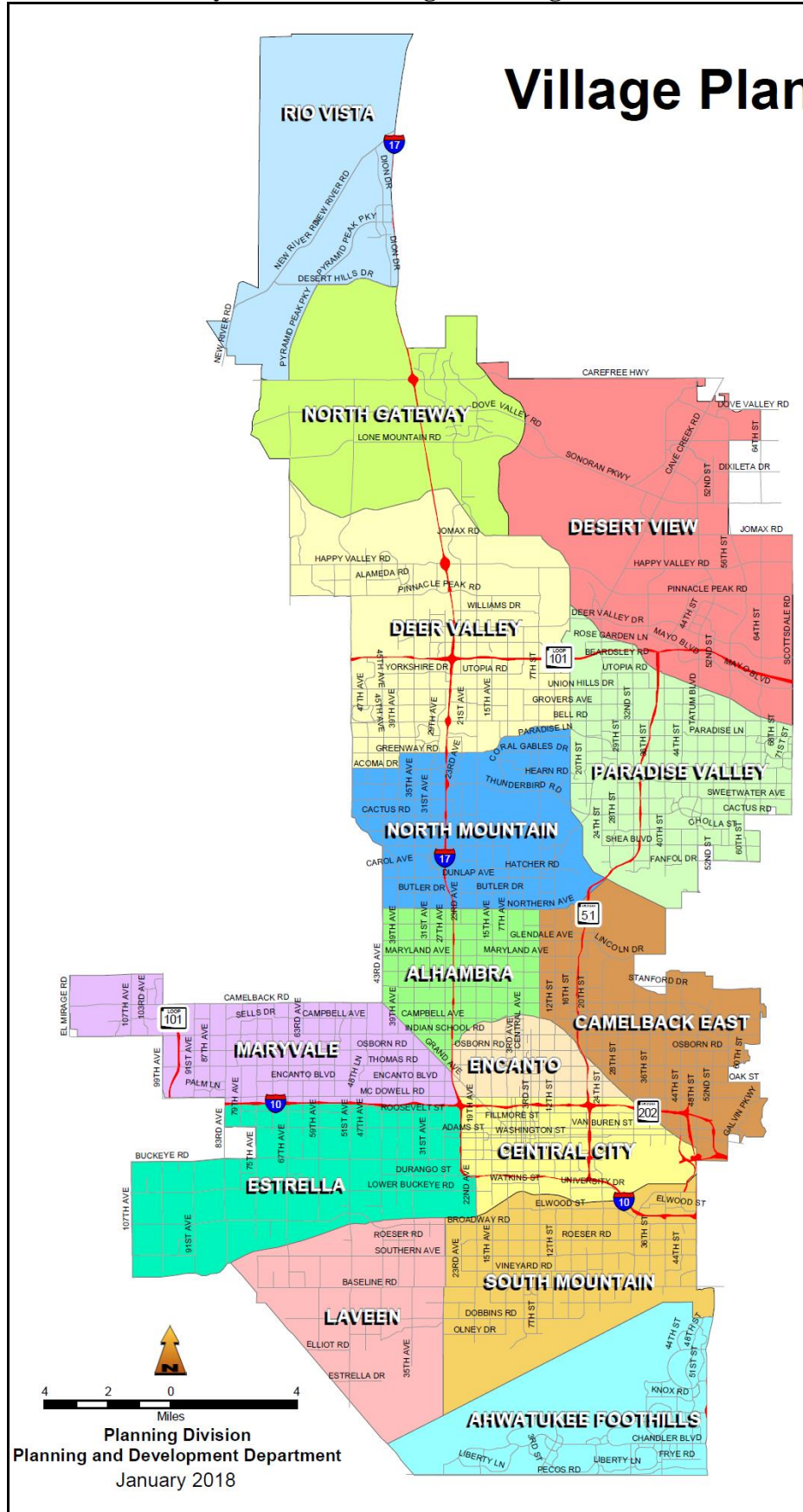


### City of Phoenix Impact Fee Service Areas





City of Phoenix Village Planning Areas



## INFRASTRUCTURE FINANCING PLANS OVERVIEW

Chapter 29 of the Phoenix City Code requires that new development pay its fair share of the costs associated with the provision of public facilities necessary to support the new development. Before assessing development impact fees, the City must adopt a Specific Infrastructure-Financing Plan for the planning area in which the development impact fees will apply. Specific Infrastructure Plans must be adopted and amended as a specific plan in accordance with Section 9-461.09, Arizona Revised Statutes, and the City’s impact fee must be consistent with the requirements established in Section 9-463.05, Arizona Revised Statutes.

The City has devised a series of Infrastructure Financing Plans to assist in meeting this requirement. There is an Infrastructure Financing Plan covering the Northern and Southern growth areas and sub areas where impact fees are assessed. Some of the sub areas have been subdivided to better allocate specific types of facility costs. As such, a total of four northern districts have been defined for the assessment of development impact fees. Costs are estimated across 15 Capital Facilities Categories representing the needs of different departments or divisions of City government in the seven developing Districts.

<b>Acquisitions</b>
Fire Stations
Police Stations
Libraries
Neighborhood Parks
Community Parks
Water Wells
Water Booster Stations
Water Pressure Reducing Valve Stations
Water Reservoirs
Waste Water Lift Stations
Storm Drainage Basins
Channels
<b>Easements-(Full Fee Simple Value)</b>
Water Transmission Mains
Waterwater Gravity Sewer Mains
Wastewater Lift Station Force Mains

The City uses Equivalent Dwelling Units (EDUs) to standardize the demand generated by each land use type – single-family housing, stores, hotels, office buildings, etc. – for new capital facilities. Each specific development proposal can then be converted into EDUs which are multiplied by the cost per EDU for providing capital facilities. The result of this calculation is the total cost associated with providing new and expanded facilities for the proposed development, despite the kind or mix of land uses included.

The total impact fee for a given development is calculated as the sum of the fees for each Capital Facilities Category for that development. Individual Capital Facilities Category fees are calculated by estimating the number of EDUs that it represents within a given Capital Facilities Category and multiplying that number by the estimated cost per EDU within that category.

**Impact Fee Credits**

Once a net fee has been calculated (net of offsets), the City estimates the value of developer contributions to public infrastructure. This value is a credit that reduces the developer's/landowner's impact fees. Street, water and wastewater credits are the most common types of credits claimed by developers of large commercial or residential projects because such projects often require significant expansions to the road network and water and wastewater infrastructure. Credits are usually based on costs identified in the Infrastructure Plan.

The tables on the following pages list the Fiscal Year 2018 Impact Fees for the various property types for the City of Phoenix.

City of Phoenix  
 Development Impact Fees  
 Schedule C: Development Impact Fee Assessments by Service Area and Land Use  
 Adjusted Net Impact Fees Effective September 5, 2016  
 For Fiscal Year Ended June 30, 2018

Fee Program Land Use Category	Unit <sup>2</sup>	Fee Area (See Schedule F Map)							
		Northwest	Deer Valley	Northeast	Estrella North	Estrella South	Laveen East	Laveen West	Ahwatukee
<b>Fire</b>									
Single Family	Dwelling	\$444	\$444	\$519	\$616	\$616	\$616	\$616	\$513
Multifamily	Dwelling	\$289	\$289	\$337	\$400	\$400	\$400	\$400	\$333
Comm/Retail	1000 sq ft	\$346	\$346	\$405	\$480	\$480	\$480	\$480	\$400
Office	1000 sq ft	\$315	\$315	\$368	\$437	\$437	\$437	\$437	\$364
Ind/WH	1000 sq ft	\$124	\$124	\$145	\$172	\$172	\$172	\$172	\$144
Pub/Inst	1000 sq ft	\$306	\$306	\$358	\$425	\$425	\$425	\$425	\$354
<b>Police</b>									
Single Family	Dwelling	\$500	\$500	\$506	\$489	\$489	\$489	\$489	\$459
Multifamily	Dwelling	\$325	\$325	\$329	\$318	\$318	\$318	\$318	\$298
Comm/Retail	1000 sq ft	\$390	\$390	\$395	\$381	\$381	\$381	\$381	\$358
Office	1000 sq ft	\$355	\$355	\$359	\$347	\$347	\$347	\$347	\$326
Ind/WH	1000 sq ft	\$140	\$140	\$142	\$137	\$137	\$137	\$137	\$129
Pub/Inst	1000 sq ft	\$345	\$345	\$349	\$337	\$337	\$337	\$337	\$317
<b>Parks</b>									
Single Family	Dwelling	\$1,120	\$1,120	\$1,953	\$2,291	\$2,291	\$2,291	\$2,291	\$703
Multifamily	Dwelling	\$728	\$728	\$1,269	\$1,489	\$1,489	\$1,489	\$1,489	\$457
Comm/Retail	1000 sq ft	\$56	\$56	\$98	\$115	\$115	\$115	\$115	\$35
Office	1000 sq ft	\$78	\$78	\$137	\$160	\$160	\$160	\$160	\$49
Ind/WH	1000 sq ft	\$22	\$22	\$39	\$46	\$46	\$46	\$46	\$14
Pub/Inst	1000 sq ft	\$56	\$56	\$98	\$115	\$115	\$115	\$115	\$35
<b>Libraries</b>									
Single Family	Dwelling	\$0	\$0	\$232	\$112	\$112	\$112	\$112	\$0
Multifamily	Dwelling	\$0	\$0	\$151	\$73	\$73	\$73	\$73	\$0
Comm/Retail	1000 sq ft	\$0	\$0	\$12	\$6	\$6	\$6	\$6	\$0
Office	1000 sq ft	\$0	\$0	\$16	\$8	\$8	\$8	\$8	\$0
Ind/WH	1000 sq ft	\$0	\$0	\$5	\$2	\$2	\$2	\$2	\$0
Pub/Inst	1000 sq ft	\$0	\$0	\$12	\$6	\$6	\$6	\$6	\$0
<b>Major Arterials</b>									
Single Family	Dwelling	\$2,208	\$2,208	\$2,392	\$573	\$573	\$573	\$573	\$0
Multifamily	Dwelling	\$1,546	\$1,546	\$1,675	\$401	\$401	\$401	\$401	\$0
Comm/Retail	1000 sq ft	\$3,027	\$3,027	\$3,279	\$785	\$785	\$785	\$785	\$0
Office	1000 sq ft	\$1,389	\$1,389	\$1,505	\$361	\$361	\$361	\$361	\$0
Ind/WH	1000 sq ft	\$979	\$979	\$1,061	\$254	\$254	\$254	\$254	\$0
Pub/Inst	1000 sq ft	\$1,337	\$1,337	\$1,449	\$347	\$347	\$347	\$347	\$0
Lodging	Room	\$905	\$905	\$981	\$235	\$235	\$235	\$235	\$0
Mini Warehouse	1000 sq ft	\$442	\$442	\$478	\$115	\$115	\$115	\$115	\$0
<b>Storm Drainage</b>									
Single Family	Dwelling	\$0	\$0	\$0	\$1,278	\$1,278	\$1,277	\$1,277	\$0
Multifamily	Acre	\$0	\$0	\$0	\$5,112	\$5,112	\$5,108	\$5,108	\$0
Comm/Retail	Acre	\$0	\$0	\$0	\$5,112	\$5,112	\$5,108	\$5,108	\$0
Office	Acre	\$0	\$0	\$0	\$5,112	\$5,112	\$5,108	\$5,108	\$0
Ind/WH	Acre	\$0	\$0	\$0	\$5,112	\$5,112	\$5,108	\$5,108	\$0
Pub/Inst	Acre	\$0	\$0	\$0	\$5,112	\$5,112	\$5,108	\$5,108	\$0

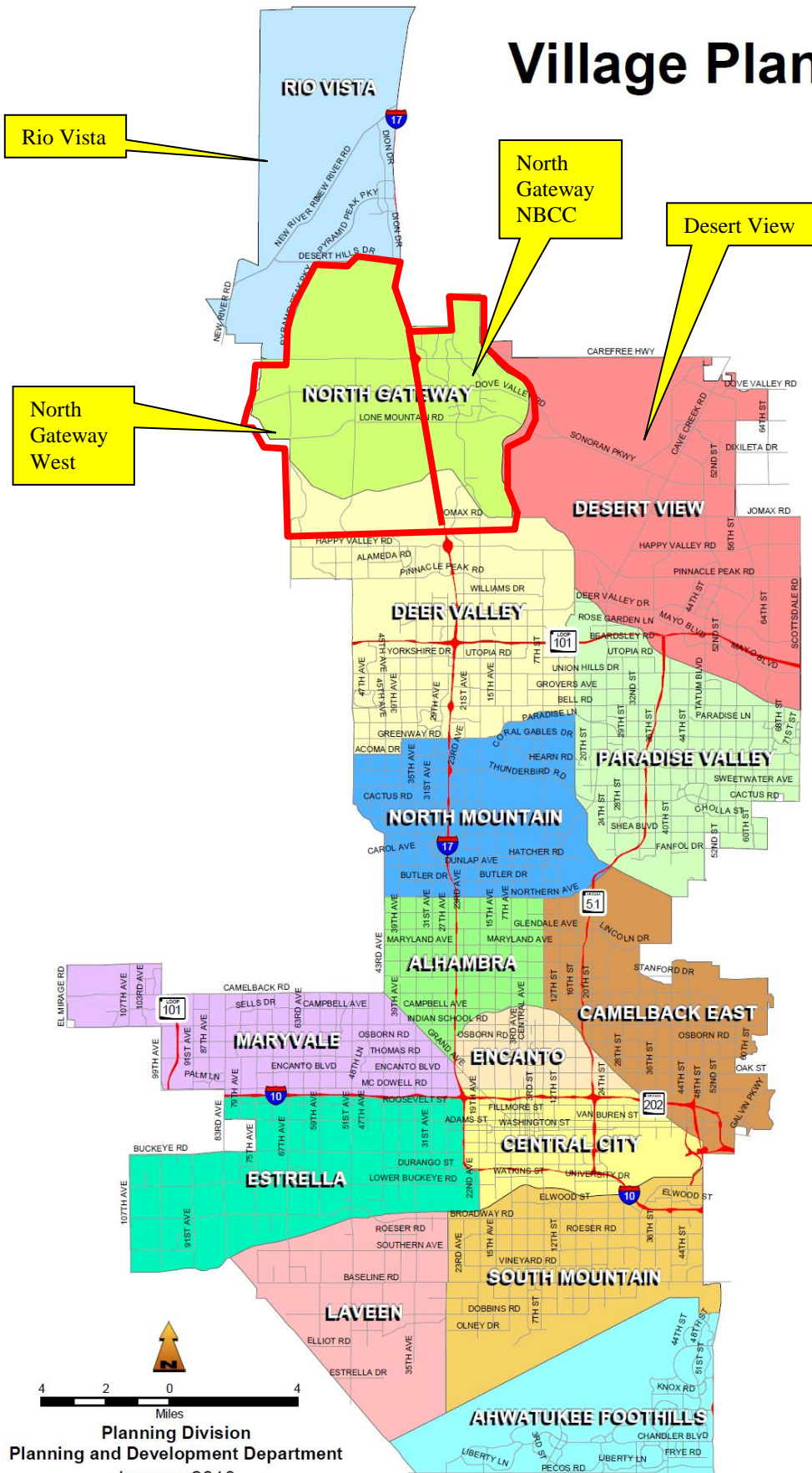
Water									
Multifamily Unit (Domestic)	Dwelling	\$2,123	\$2,123	\$2,123	\$1,198	\$1,198	\$1,198	\$1,198	\$1,198
Single Family Unit - up to 1.0"	Dwelling	\$5,935	\$5,935	\$5,935	\$3,499	\$3,499	\$3,499	\$3,499	\$3,499
Single Family Unit - 1.5"	Dwelling	\$21,162	\$21,162	\$21,162	\$13,050	\$13,050	\$13,050	\$13,050	\$13,050
Single Family Unit - 2.0"	Dwelling	\$34,232	\$34,232	\$34,232	\$21,248	\$21,248	\$21,248	\$21,248	\$21,248
3/4" Displacement (Non-Res)	Meter	\$13,254	\$13,254	\$13,254	\$8,090	\$8,090	\$8,090	\$8,090	\$8,090
1.0" Displacement (Non-Res)	Meter	\$21,634	\$21,634	\$21,634	\$13,010	\$13,010	\$13,010	\$13,010	\$13,010
1.5" Displacement (Non-Res)	Meter	\$43,377	\$43,377	\$43,377	\$26,179	\$26,179	\$26,179	\$26,179	\$26,179
2.0" Displacement (Non-Res)	Meter	\$69,346	\$69,346	\$69,346	\$41,819	\$41,819	\$41,819	\$41,819	\$41,819
2.0" Turbine Class II	Meter	\$80,500	\$80,500	\$80,500	\$47,809	\$47,809	\$47,809	\$47,809	\$47,809
3.0" Compound Class II	Meter	\$152,436	\$152,436	\$152,436	\$92,169	\$92,169	\$92,169	\$92,169	\$92,169
3.0" Turbine Class II	Meter	\$184,686	\$184,686	\$184,686	\$109,803	\$109,803	\$109,803	\$109,803	\$109,803
4.0" Compound Class II	Meter	\$262,084	\$262,084	\$262,084	\$158,798	\$158,798	\$158,798	\$158,798	\$158,798
4.0" Turbine Class II	Meter	\$328,355	\$328,355	\$328,355	\$199,247	\$199,247	\$199,247	\$199,247	\$199,247
6.0" Compound Class II	Meter	\$595,839	\$595,839	\$595,839	\$363,445	\$363,445	\$363,445	\$363,445	\$363,445
6.0" Turbine Class II	Meter	\$701,347	\$701,347	\$701,347	\$425,933	\$425,933	\$425,933	\$425,933	\$425,933
8.0" Compound Class II	Meter	\$690,847	\$690,847	\$690,847	\$415,433	\$415,433	\$415,433	\$415,433	\$415,433
8.0" Turbine Class II	Meter	\$1,239,015	\$1,239,015	\$1,239,015	\$757,028	\$757,028	\$757,028	\$757,028	\$757,028
Wastewater									
Multifamily Unit (Domestic)	Dwelling	\$1,468	\$532	\$1,468	\$532	\$1,454	\$532	\$1,378	\$532
Single Family Unit - up to 1.0"	Dwelling	\$3,130	\$1,221	\$3,130	\$1,221	\$3,102	\$1,221	\$2,947	\$1,221
Single Family Unit - 1.5"	Dwelling	\$11,821	\$5,464	\$11,821	\$5,464	\$11,728	\$5,464	\$11,212	\$5,464
Single Family Unit - 2.0"	Dwelling	\$19,281	\$9,106	\$19,281	\$9,106	\$19,132	\$9,106	\$18,306	\$9,106
3/4" Displacement (Non-Res)	Meter	\$7,793	\$3,497	\$7,793	\$3,497	\$7,730	\$3,497	\$7,381	\$3,497
1.0" Displacement (Non-Res)	Meter	\$12,525	\$5,347	\$12,525	\$5,347	\$12,420	\$5,347	\$11,837	\$5,347
1.5" Displacement (Non-Res)	Meter	\$25,178	\$10,879	\$25,178	\$10,879	\$24,968	\$10,879	\$23,807	\$10,879
2.0" Displacement (Non-Res)	Meter	\$40,223	\$17,334	\$40,223	\$17,334	\$39,887	\$17,334	\$38,029	\$17,334
2.0" Turbine Class II	Meter	\$45,915	\$18,731	\$45,915	\$18,731	\$45,516	\$18,731	\$43,309	\$18,731
3.0" Compound Class II	Meter	\$88,710	\$38,579	\$88,710	\$38,579	\$87,975	\$38,579	\$83,904	\$38,579
3.0" Turbine Class II	Meter	\$105,510	\$43,219	\$105,510	\$43,219	\$104,596	\$43,219	\$99,539	\$43,219
4.0" Compound Class II	Meter	\$152,850	\$66,945	\$152,850	\$66,945	\$151,590	\$66,945	\$144,615	\$66,945
4.0" Turbine Class II	Meter	\$191,813	\$84,431	\$191,813	\$84,431	\$190,238	\$84,431	\$181,519	\$84,431
6.0" Compound Class II	Meter	\$350,063	\$156,776	\$350,063	\$156,776	\$347,228	\$156,776	\$331,534	\$156,776
6.0" Turbine Class II	Meter	\$410,063	\$181,002	\$410,063	\$181,002	\$406,703	\$181,002	\$388,105	\$181,002
8.0" Compound Class II	Meter	\$399,563	\$170,502	\$399,563	\$170,502	\$396,203	\$170,502	\$377,605	\$170,502
8.0" Turbine Class II	Meter	\$729,263	\$328,392	\$729,263	\$328,392	\$723,383	\$328,392	\$690,835	\$328,392



## **DESCRIPTION OF THE NORTHERN GROWTH AREAS**

The Northern Growth Areas are part of the Northeast, Northwest and Deer Valley Impact Fee Areas according to the City of Phoenix (See Map on previous page). These are further subdivided into four Village Planning Areas, the Desert View, Deer Valley, North Gateway and Rio Vista, also as established by the City. According to information from the Planning Department, the areas to be analyzed for this report are portions of the above-delineated Village Planning Areas, the Rio Vista, North Gateway West, North Gateway NBCC and Desert View areas. (See Map on following page).

# Village Plan

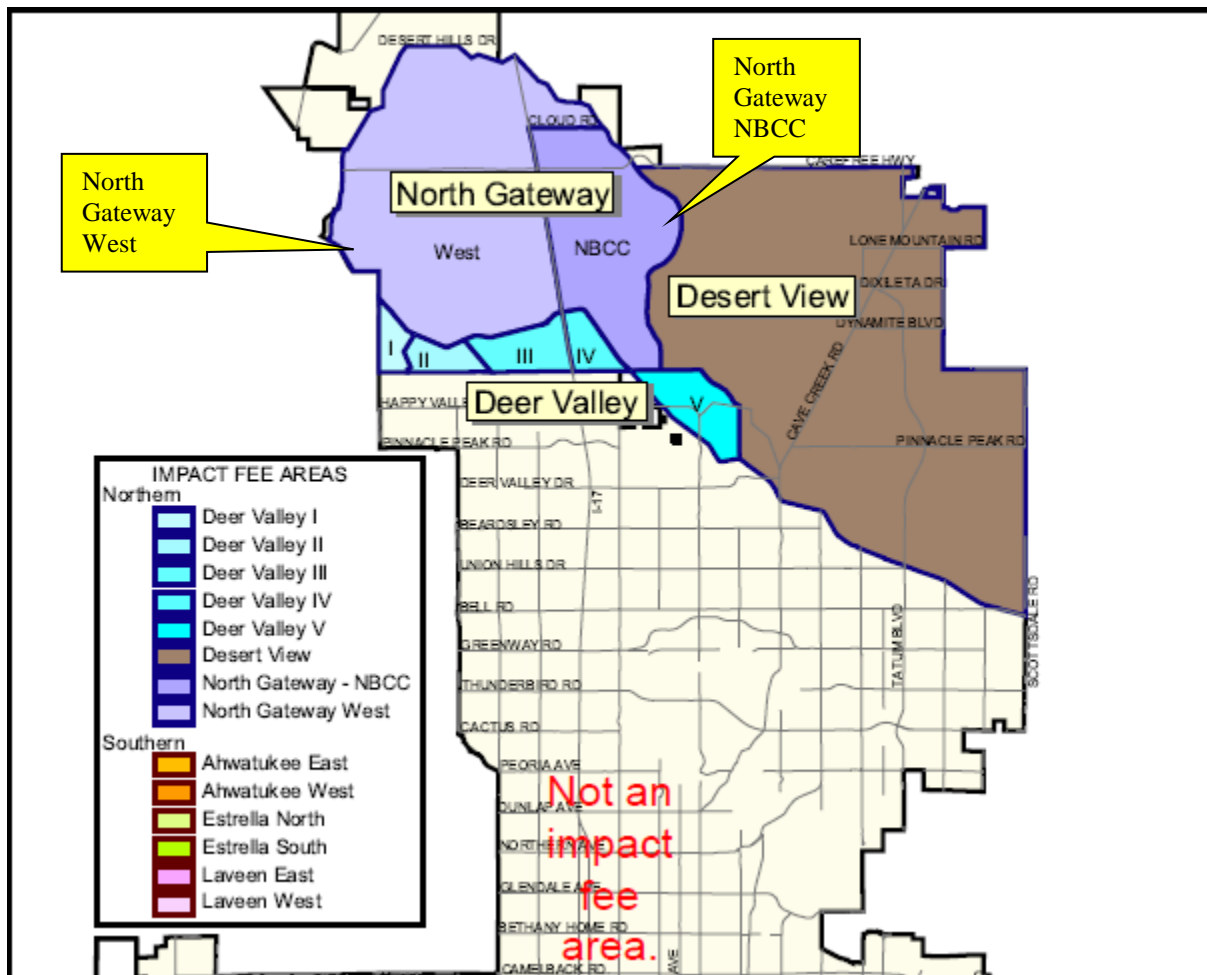


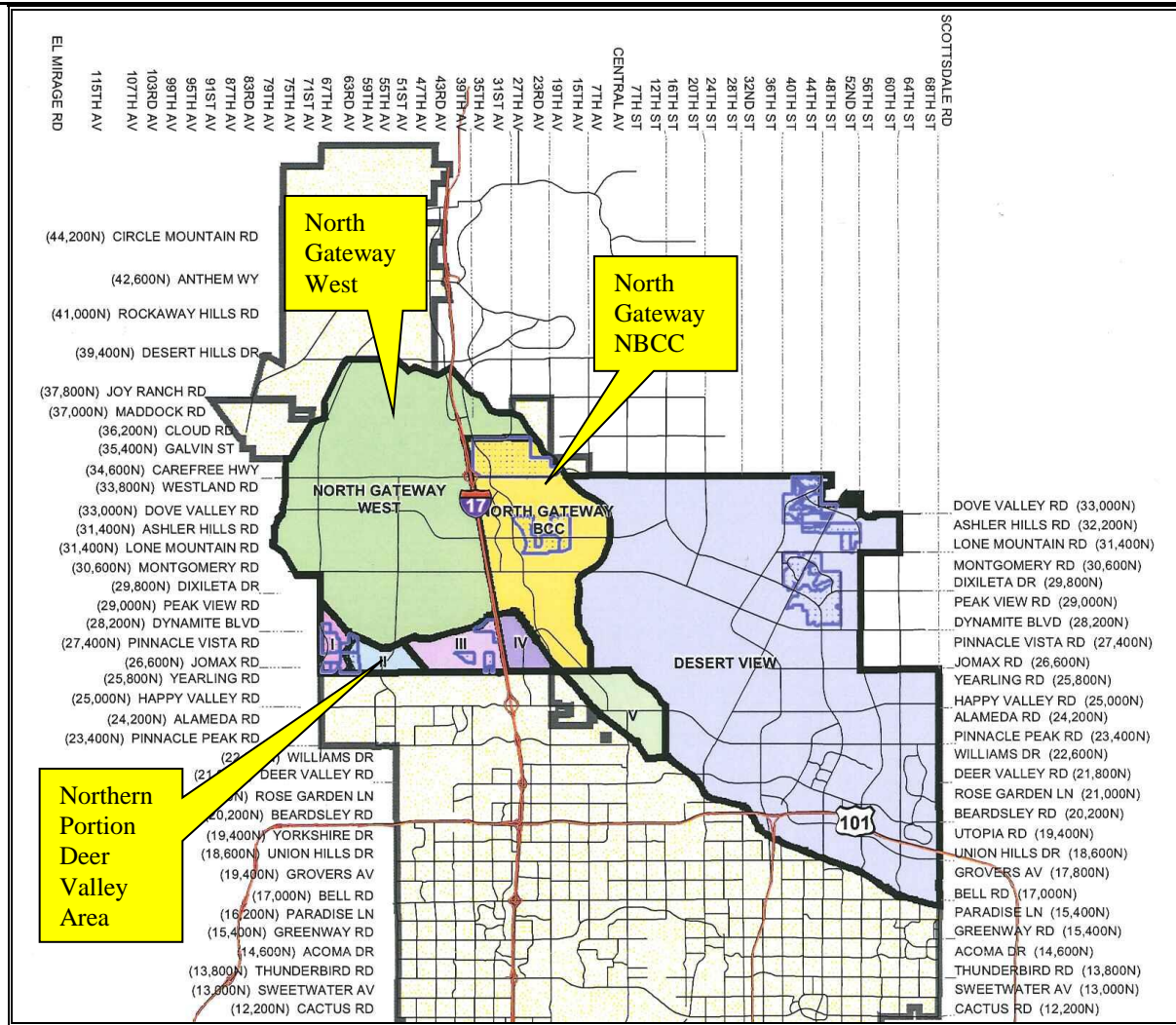
Planning Division  
Planning and Development Department  
January 2018

The following pages and maps describe the basic characteristics of each area. **Information concerning acreages and expected development densities for the various subfee areas was provided by Planning Department information.** The social, economic, governmental and environmental forces influencing property values in each area were analyzed. More specifically, the average base home pricing for new development in each area was estimated based on the average home pricing in these areas as reported by the Phoenix MLS.

The first area considered is the North Gateway Area, which is divided by the Planning Department into the West and North Black Canyon Corridor, NBCC, areas, as shown in the following map, and which includes a portion of the Deer Valley area (sections I, II, III and IV)

**North Gateway Village (West and NBCC)**





The North Gateway Village serves as the northern gateway into Phoenix, and strives to offer a high-quality regional employment center, emerging retail development and diverse residential communities to support the various employment opportunities. The area is composed of quality employers, master-planned communities, and natural amenities such as scenic washes, mountains, trails, natural wildlife and open Sonoran Desert. The area also offers close proximity to various recreational opportunities as well as easy access to multiple freeways for travel across the State.

This area encompasses approximately 45 square miles of the northern portion of the City and is generally north of Jomax Road, along the I-17 corridor. It is a developing portion of the metro area dominated by State owned land (69%). Almost all of the West section is undeveloped State-owned land while the NBCC portion is substantially more developed. The only existing construction of any consequence in the West portion is a Federal prison north of the Joy Ranch alignment and the Ben Avery Shooting Range located at the northwest corner of I-17 and the Carefree Highway. The most notable development within the North Black Canyon Corridor includes Tramonto, a master-planned community at the northeast corner of I-17 and the Carefree Highway, the Sonoran Foothills and a portion of the Dynamite Mountain Ranch master-planned communities. Both of the latter two projects are south of the Carefree Highway and generally following the North Valley Parkway thoroughfare north of Happy Valley Road.

For the NBCC area, the current average price (last 12 months) of newer single-family housing (built after 2016) is \$407,472, with all sales averaging \$381,103. This is roughly the same as metro area average for

newer single-family housing, \$407,747, but slightly above the metro area all-sales average of \$343,440. The sale price per square foot of housing in the subject market area at \$163.18 for newer homes and \$147.44 for all homes, is generally at or below the metro area, with average sale prices of \$160.60 and \$166.26 per square foot. This is partially the result of the subject area having a larger average home size, 2,624 square feet, versus a metro area average of 2,139 square feet.

For the West area, the current average price (last 12 months) of newer single-family housing (built after 2016) is \$430,645, with all sales averaging \$376,160. This is above the metro area average for newer single-family housing, \$407,747, for the metro area all-sales average of \$343,440. The sale price per square foot of housing in the subject market area at \$160.49 for newer homes and \$144.79 for all homes, is generally at or below the metro area, with average sale prices of \$160.60 and \$166.26 per square foot. Again, this is partially the result of the subject area having a larger average home size, 2,669 square feet, versus a metro area average of 2,139 square feet.

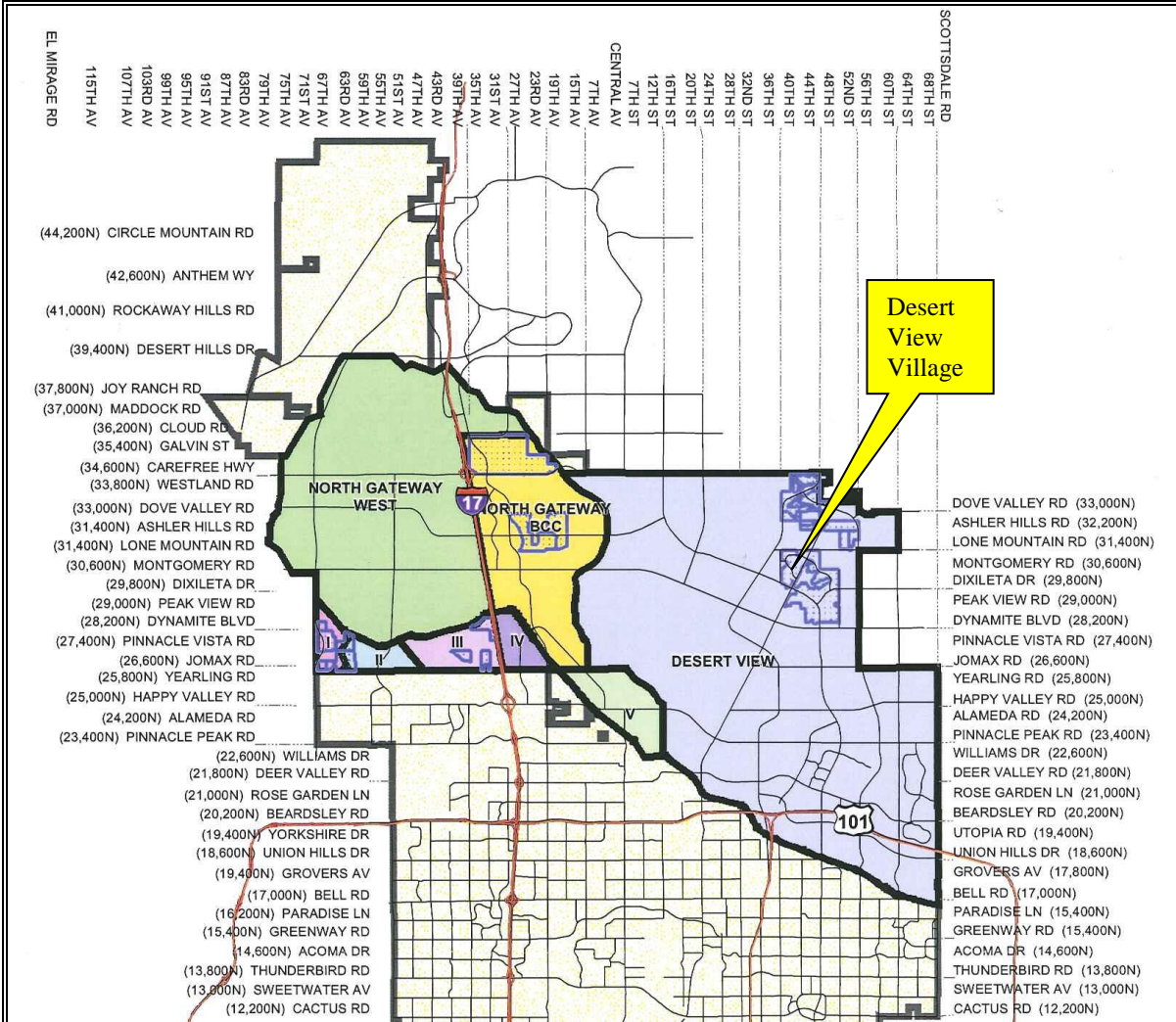
Based on information provided by the City of Phoenix Planning Department, the North Gateway area encompasses roughly 29,515 acres of land. This can be further broken down as 20,661 acres in the West subfee area and 8,854 acres in the North Black Canyon Corridor (BCC). Of the 8,854 acres in the NBCC, almost half or roughly 4,200 acres are comprised of non-developable land (major washes, mountains, existing freeways, etc.). This leaves about 4,654 acres of potentially developable land. It is estimated that about 29% of developable land will be developed with low to medium density residential uses, 0-5 dwellings per acre.

The population estimated for this area in 2015 by the City of Phoenix was 21,090 persons, and over the next 15 years to 2030 it is expected to grow to an estimated 35,600 persons. This is a growth rate of 68.8%, or 4.6% per year on average.

Due to the low density and high residential character of the West portion, this area will be considered separately from the NBCC portion, east of Interstate 17.



## Desert View Village



This approximate 67-square mile area encompasses the northeastern portion of the City commonly known as Desert View. This area is generally bounded by the Carefree Highway on the north, the 56<sup>th</sup> Street alignment and Scottsdale Road (City of Scottsdale) on the east, the CAP canal on the south and 7<sup>th</sup> Avenue on the west.

In the Desert View Village, the scenic Sonoran Desert is the unifying element across diverse landscapes and mountain vistas. The Desert View Village ranges from an urban core with higher densities along the Loop 101 freeway, within and adjacent to Desert Ridge area, to more equestrian, low-density, horse properties and rural land uses.

This is a developing area dominated by State owned land (55%). Roughly the western two-thirds of the portion north of Jomax Road is State owned while the portion south of Jomax Road has seen substantially more development. Developing land uses in the Desert View area are mostly included within large master-planned developments although scattered high-end residential in smaller gated subdivisions are found throughout. The most prominent residential developments are Tatum Ranch, Desert Ridge MPC, and Tatum Highlands, with the new Sky Crossing project, 1,000 plus acres, underway.

The overall plan indicates “Plan cores, centers and corridors are to include a variety of land uses: office, retail shopping, entertainment and cultural, housing, hotel and resort, and where appropriate, some types of industry. (Loop 101 Corridor: High Street and Desert Ridge). • Support General Plan Land Use Map and zoning changes that will facilitate the location of employment generating uses in each of the designated employment centers. (Loop 101 Corridor, Biomedical Corridor) • Support necessary changes to land use and zoning in and around biomedical clusters. (Biomedical Corridor, Mayo Clinic Hospital) • Support special investment zones where incentives are available to attract new business development. (Biomedical Corridor, Mayo Clinic Hospital) • Support the expansion of education and training facilities where appropriate. (Biomedical Corridor, Mayo Clinic Hospital)”

The portion of Desert View situated south of Jomax Road and traversed by the Pima Freeway (Loop 101) has also been developed with substantial commercial construction. The 1.2 million-square foot Desert Ridge Marketplace regional center is situated at the northeast corner of Loop 101 and Tatum Boulevard, the Wildfire Golf Course and Marriott Desert Ridge resort is situated within the Desert Ridge MPC, and the Mayo Hospital are in this vicinity.

After consulting with City staff, the Desert View area is estimated to encompass about 43,128 acres of land of which roughly 15,800 acres are comprised of non-developable areas. Thus, only about 27,328 acres are potentially developable land. It is anticipated that roughly 75 percent of developable land will be devoted to single-family uses, yielding about 20,500 gross acres of land intended for single-family development. Assuming 15 percent is set aside for arterials, collectors and project open space, net area available for single-family residential development is estimated at about 17,425 acres. It is estimated that the Desert View area’s residential land will be developed at an overall density of approximately 2.5 units per net acre (north of Jomax Road) and 4.0 units per acre (south of Jomax Road).

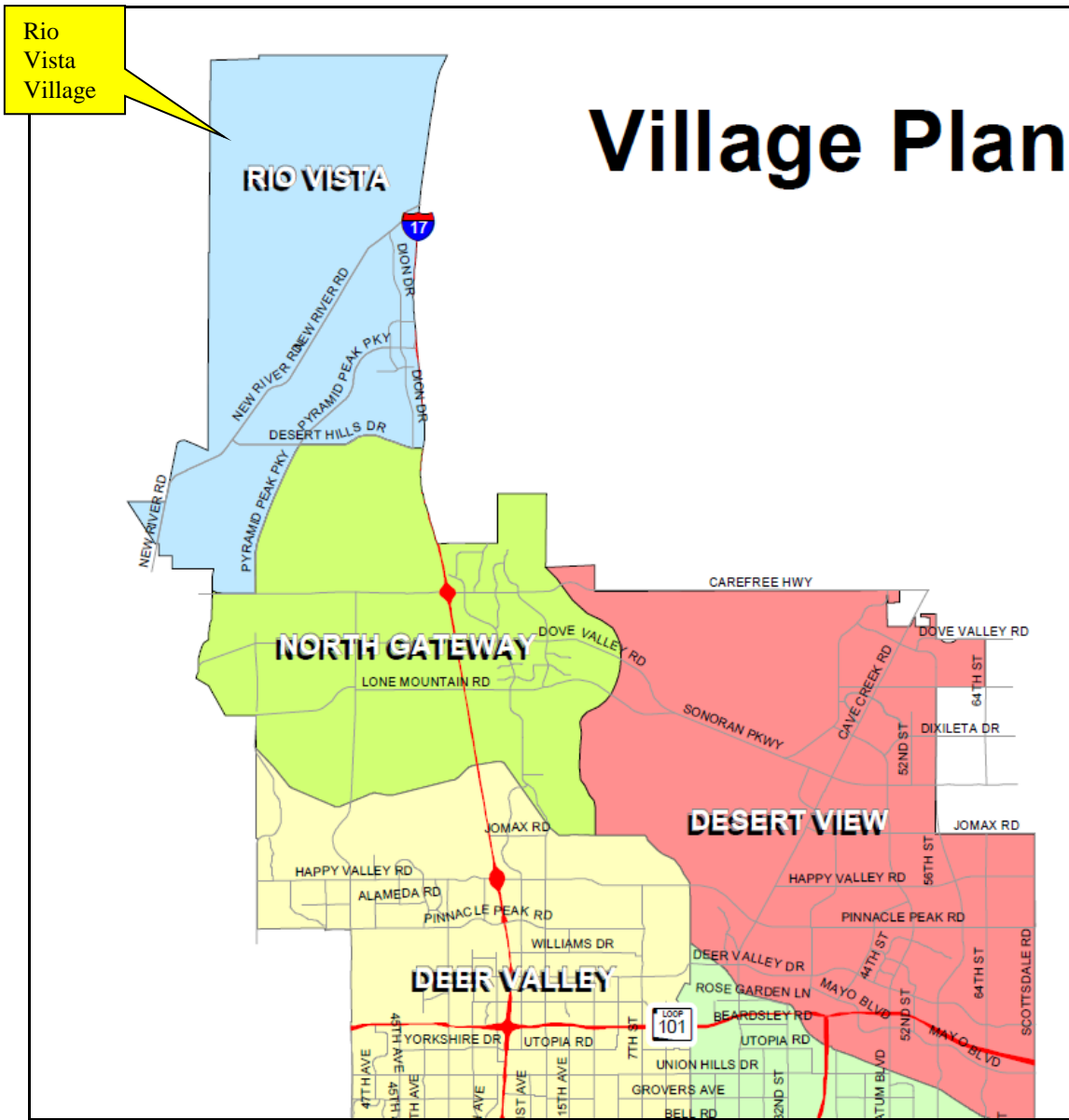
For the Desert View area, the current average price (last 12 months) of newer single-family housing (built after 2016) is \$657,470, with all sales averaging \$504,510. This is well above the metro area average for newer single-family housing, \$407,747, and above the metro area all-sales average of \$343,440. The sale price per square foot of housing in the subject market area at \$224.58 for newer homes and \$199.36 for all homes, is well above the metro area, with average sale prices of \$160.60 and \$166.26 per square foot, respectively. This is despite the fact that the subject area has a larger average home size, 2,563 square feet, versus a metro area average of 2,139 square feet. For newer homes, the spread is even greater with the Desert View area having an average home size of 2,929 square feet, versus the metro area at 2,139 square feet.

Near the core, the Loop 101 between Tatum Boulevard and Scottsdale Road, Desert View offers high-end retail and office space as well as condominiums and master planned communities. These land uses compliment the equestrian ranch properties, with vast amounts of open space and large lot single-family residences located throughout dark sky areas located further north in the village. The Village has natural washes that generally flow from the northeast to southwest. The Village also has many biking, walking, equestrian and multi-use trails that provide an abundance of opportunities for recreation in the lower density areas. The Desert View Village is unique in character, assets and opportunities, and continues to remain one of the more desirable places to live in Phoenix.

The population estimated for this area in 2015 by the City of Phoenix was 49,190 persons, and over the next 15 years to 2030 it is expected to grow to an estimated 119,240 persons. This is a growth rate of 142.4%, or nearly 9.5% per year on average. These are very strong growth rates.



Rio Vista



The Rio Vista Village is an approximate 41-square mile area that is generally bounded by the Table Mesa Road alignment on the north, Interstate 17 on the east, and an irregular area on the south and east bounded by Desert Hills Drive, Pyramid Peak Parkway and Carefree Highway, and New River Road and the 75th Avenue alignment. The Rio Vista Village, meaning river view, is predominately undeveloped with the exception of the Anthem Commerce Park, Anthem Outlets and Anthem West, a single-family residential community. New River Wash and the lush Sonoran Desert landscape offer numerous open space and recreational possibilities throughout the Village. The area is truly unique with panoramic views of the Black and Daisy Mountains. A majority of the vacant land in the Village is owned by the Arizona State Land Department (71%), with another 34% currently under Maricopa County jurisdiction. Interstate 17 serves as a major north-south transportation route for metro Phoenix connecting the Valley to Northern Arizona. It is the least developed of the northern Villages.

For the Rio Vista area, the current average price (last 12 months) of newer single-family housing (built after 2016) is \$375,709, with all sales averaging \$329,055. This is below the same as metro area average for newer single-family housing, \$407,747, and the metro area all-sales average of \$343,440. The sale price per square foot of housing in the subject market area at \$150.76 for newer homes and \$138.76 for all homes, is below the metro area, with average sale prices of \$160.60 and \$166.26 per square foot, respectively. This is due to the fact that the subject area has a larger average home size, 2,622 square feet, versus a metro area average of 2,139 square feet for newer homes.

The population estimated for this area in 2015 by the City of Phoenix was only 3,860 persons, and over the next 15 years to 2030 it is expected to grow to an estimated 9,400 persons. This is a growth rate of 143.5%, or 9.5% per year on average. These are very strong growth rates.

Overall, this area is primarily semi-rural and undeveloped and would likely have the lowest overall Impact Fee land values.

## DECRPTIONS OF TYPICAL SITES

The Scope of Work requires cost estimates for four different land uses that will be used to project costs for the following typical sites. Included in this requirement are costs for fire, libraries and police. It is recognized that these uses can be found in more than one land use type (*i.e.* streets can be built on commercial or residential land). However, this analysis considers the most likely land use where City facilities will be constructed.

Fire stations, libraries and police stations will tend to be located in commercial areas. The following paragraphs present descriptions of the various typical sites (including acreage requirements) derived through conversations with representatives of the City of Phoenix Planning Department.

### **Fire Station**

This is generally a 1 to 3.5-acre site typically fronting a major arterial roadway. It may also front one or two collector streets. Although a fire station could be found in a residential area, it is most likely to be located in a commercially zoned area in proximity to the surrounding residential base. Commercial sites tend to be zoned C-1, C-2 or C-3 and are mostly located along major arterials, sometimes more than one. The tract does not require any extraordinary work to mediate topographical, floodplain, archeological, environmental or soils issues. Finished commercial sites have all utilities and infrastructure in place and tend to sell on the basis of dollars per square foot.

### **Police**

A police site tends to be about 5 to 10 acres and typically fronts on two paved streets, one of which is an arterial. Although it may be built on residentially zoned land, a police station is most likely to be built on commercially zoned land in an area with established residential support and supporting commercial development. This tract does not require any extraordinary work to mediate topographical, floodplain, archeological, environmental or soils issues. Finished commercial sites have all utilities and infrastructure in place.

### **Libraries**

The library site is generally 1 to 3 acres and can be located in a larger commercial development, or on an off-arterial location near arterial access. This site is typically located in proximity to public transportation in areas that are, for the most part, built out. The library site is most likely to be built on commercially zoned land in an area with established residential support and supporting commercial development. This tract does not require any extraordinary work to mediate topographical, floodplain, archeological, environmental or soils issues. Finished commercial sites have all utilities and infrastructure in place and tend to sell on the basis of dollars per square foot.

### **Parks**

Parks are subdivided into two categories – Neighborhood and Community.

*Neighborhood* parks are planned to serve an area within a radius of about one-half mile and a population of 4,000 to 7,000 people. They are typically 15 to 20-acre sites and are bordered by local or collector

streets. They may include restrooms and passive and active recreation improvements including lighted basketball and volleyball courts, playgrounds, picnic areas, and open space for informal play. Planned unit developments may also provide some recreational open space at the neighborhood level, but these areas tend to be small and are limited in the types of recreation offered. This area is generally in an early stage of development, with undeveloped residential land in the immediate area and adjacent to the site. All required utilities are available to the site. The most likely zoning of a typical neighborhood park site would be low-density residential.

*Community* parks are designed to accommodate large volumes of vehicular traffic drawing from an area of 1.5 miles and serving a population of up to 50,000 people. They tend to be 20 to 30 acres and are intended to serve many neighborhoods. Most community parks include lighted multi-use fields, basketball and volleyball courts, playgrounds, picnic areas and restroom facilities. Some may include swimming pools, lighted tennis courts and picnic ramadas. Community park sites generally front two paved streets. One may be an existing arterial that may not yet be fully developed when acquired and the second is a residential collector. The area is generally in an early stage of stage of development, with undeveloped residential land in the immediate area and adjacent to the site. All required utilities are available. Although a community park site could be located in a commercial area, the most likely zoning of a typical community park site would be low-density residential.

### **Water Facilities**

There are several categories of water facilities in the City of Phoenix.

#### *Wells*

These are small sites, typically 0.25 to 0.50 acre, that can be located on both residential and commercially zoned land, depending on where the well has to be located at a water source.

#### *Booster Stations*

These are typically on approximate 1 acre sites and are often located near a zone break (zones are based on elevation contours), typically on sites that could have been used for single family residential but also on sites that are suitable for commercial, industrial, multi-family or open space uses. Access roads, usually gravel, are generally required to connect facilities to nearby streets to allow City vehicles to provide maintenance, repairs, rehabilitation, etc.

#### *Pressure Reducing Valve Station*

These are typically on approximate 1 acre sites and are often located near a zone break (zones are based on elevation contours), typically on sites that could have been used for single family residential but also on sites that are suitable for commercial, industrial, multi-family or open space uses. Access roads, usually gravel, are generally required to connect facilities to nearby streets to allow City vehicles to provide maintenance, repairs, rehabilitation, etc.

#### *Reservoir*

These are typically on sites having between 2 and 8 acres, depending on size (reservoirs can be between 1 and 40 million gallon capacities), generally located on a site above the water zone being served, typically on sites that could have been used for single family residential but also on sites that are suitable for commercial, industrial, multi-family or open space uses. Access roads, usually gravel, are generally required to connect facilities to nearby streets to allow City vehicles to provide maintenance, repairs, rehabilitation, etc.

#### *Water Transmission Mains (16" or larger)*

Easements are sometimes required when lines cannot be located in street ROWs, usually between 50 and 80 feet wide, often running for miles, and can pass through single family residential, multifamily residential, commercial, industrial, agricultural and open space areas. Access roads, usually gravel, are generally required to connect facilities to nearby streets to allow City vehicles to provide maintenance, repairs, rehabilitation, etc.

### **Wastewater Facilities**

There are several categories of wastewater facilities in the City of Phoenix.

#### *Lift Stations*

These are typically on approximate 1 acre sites and are often located near a ridge line, highway, canal, or other barrier that makes gravity sewers impossible, typically on sites that could have been used for single family residential but also on sites that are suitable for commercial, industrial, multi-family or open space uses. Access roads, usually gravel, are generally required to connect facilities to nearby streets to allow City vehicles to provide maintenance, repairs, rehabilitation, etc.

#### *Large Gravity Sewers (15" and larger) and Lift Station Force Mains*

Easements are sometimes required when lines cannot be located in street ROWs, usually between 40 and 80 feet wide, often running for miles, and can pass through single family residential, multifamily residential, commercial, industrial, agricultural and open space areas. Access roads, usually gravel, are generally required to connect facilities to nearby streets to allow City vehicles to provide maintenance, repairs, rehabilitation, etc.

### **Storm Drainage Facilities**

There are several categories of storm drainage facilities in the City of Phoenix.

#### *Basins (100-year Flood Event Facilities)*

These are typically on 20 to 40-acre sites that could have been used for single family residential but also on sites that are suitable for commercial, industrial, multi-family or open space uses. Otherwise unusable open can be chosen if available, but in areas where development has already occurred, remaining land zoned for residential or even commercial uses must sometimes be acquired. Access roads, usually gravel, are generally required to connect facilities to nearby streets to allow City vehicles to provide maintenance, repairs, rehabilitation, etc.

#### *Channels*

Some drains can be located underground, but large conduits must often be located in open channels that require adjacent buffers. Rights-of-way or easements are usually between 40 and 100 feet wide, often running for miles, and can pass through single family residential, multifamily residential, commercial, industrial, agricultural and open space areas. Access roads, usually gravel, are generally required to connect facilities to nearby streets to allow City vehicles to provide maintenance, repairs, rehabilitation, etc.

## LAND COST ESTIMATES

We have been asked to estimate land costs for the various sites described in the preceding section. Because of the differences in land uses where the various sites may be located, we have segmented land costs into two basic land types. The first land use type is commercial/industrial which tends to be sold on a per square foot basis and the second land use type is residential which also tends to be sold on a per square foot basis.

### **Commercial/Industrial Uses**

#### **Fire Stations, Police Stations, Libraries**

The sites addressed in this group are fire station, library, and police station sites. Although these facilities may be built in residential areas, they tend to be found on arterial streets and will most likely be in commercial areas. Additionally, these are generally smaller sites, 1 to 10 acres.

These costs were estimated from a review of comparables sales within or near the noted Impact Fee areas. While not all of the sales were from within the noted Impact Fee areas, they are in comparable areas within the same general portion of the Phoenix metro area and would be reasonably comparable to sites within the Impact Fee areas.

The commercial sales all occurred in 2016, 2017 and 2018; and are commercially and industrially zoned. There were 19 sales considered, ranging in size from 1.26 to 8.18 acres. Of these sales, 11 occurred in 2018, 4 in 2017 and 4 in 2016.

Sales prices researched ranged widely from \$6.01 to \$18.52 per square foot with most in the \$8.00 to \$12.00 per square foot range. All have frontage on at least one major arterial (directly or indirectly through another commercial parcel) and are provided good access and visibility. Excluded from this analysis were small corner sites located on major arterials and pad sites in anchored centers. These sites tend to be purchased for gas stations, fast food restaurants, banks and other end users that desire high traffic generation and buyers may pay premiums for specific locations based on projected sales volume. It is not likely that the City of Phoenix would have to purchase such a site, and these values would have unreasonably skewed values upward.

History has proven that land costs tend to be higher as one travels east towards the City of Scottsdale. Thus, land costs in the Desert View Impact Fee area are expected to be higher than those in North Gateway and Rio Vista Impact Fee areas.

Our research uncovered 4 commercial land sales in 2016, 4 sales in 2017 and 11 in 2018 in these areas. This does not necessary indicate a strong increase in commercial sales in 2018, only that the appraisers emphasized more recent sales, but included some sales from previous years in order to reflect on any value trends.

The average price was \$10.31 per square foot in 2016 for sales averaging 3.7 acres, \$8.22 per square foot in 2017 for sales averaging 3.3 acres and \$10.76 per square foot for sales averaging 3.6 acres in 2018. Thus, there does not appear to be any significant overall value trends during this period.

Sales in 2018 included 3 sales located in the City of Scottsdale that were at the high end of the range, \$16.42 to \$18.52 per square foot. These were included to provide an upper value range reflective of land parcels in the eastern portion of the Northeast, or Desert View Impact Fee area.

The highest number of sales, 10, were generally in or near the North Gateway area. The remaining 8 sales occurred in the Desert View area and none were in the Rio Vista area.

**Conclusions**

The preceding analysis presents cost estimates for the various Capital Facilities Categories in the Northern Impact Fee Areas requested by the City of Phoenix Planning Department. Conclusions are felt to be reasonable considering data from the current market and the generalization of the assignment. Definitions of the “typical sites” used herein were taken from City documentation and conversations with representatives of the Planning and Appraisal Departments of the City. Given the macro scale of the assignment the values presented herein are not intended to be an appraisal of any particular site(s).

The following exhibit summarizes the costs concluded by use and Impact Fee area for the commercially-zoned land uses.

Use	Typical Size- Acres	Typical Underlying Use	Desert View/SF	Desert View/Acre	North Gateway NBCC/SF	North Gateway- NBCC/Acre	North Gateway West/SF	North Gateway-- West/Acre	Rio Vista/SF	Rio Vista/Acre
<b><u>Acquisitions</u></b>										
Fire Stations	1-3.5	Commercial	\$15.00	\$650,000	\$11.00	\$480,000	\$7.00	\$300,000	\$6.00	\$260,000
Police Stations	5-10	Commercial	\$15.00	\$650,000	\$11.00	\$480,000	\$7.00	\$300,000	\$6.00	\$260,000
Libraries	1-3	Commercial	\$15.00	\$650,000	\$11.00	\$480,000	\$7.00	\$300,000	\$6.00	\$260,000

**Residential Uses**

The sites addressed in this group are all of those typically requiring residentially-zoned parcels, such as neighborhood and community parks, water facilities, waste water facilities, storm drainage basins and channels. In addition, there are water and wastewater transmission mains that are typically acquired via easements but require a land value for the easement areas.

These uses require sites ranging from 0.50 to 40 acres, with most uses between 1 and 6 acres. The locations are typically within entitled, residential communities, but some of the uses, such as well sites and reservoirs may be in more or less developed areas depending on the source of water and required location.

As with the commercial uses, these costs were estimated from a review of comparables sales within or near the noted Impact Fee areas. While not all of the sales were from within the noted Impact Fee areas, they are in comparable areas within the same general portion of the Phoenix metro area and would be reasonably comparable to sites within the Impact Fee areas.

The residential sales all occurred in 2016, 2017 and 2018; and are single and low-density multi-family zoned sites. They have been broken down into large parcels sales, 10 or more acres, and small parcel sales, under 10 acres.

There were 15 large parcel sales considered, ranging in size from 10.00 to 78.05 acres, although all but one are under 41 acres. Of these sales, 6 occurred in 2018, 7 in 2017 and 2 in 2016.

Sales prices ranged widely from \$2.22 to \$8.38 per square foot with most in the \$2.00 to \$6.00 per square foot range. The 2018 sales had an average sale price of \$4.16 per square foot, while the average for 2017 was \$3.96 and for 2016 it was \$4.76 per square foot.

All of the sales were for residential or related uses, and many were already entitled for such uses, or in the process of entitlement. Several were unentitled and planned to be held for future development but reflected sale prices for residential land in those areas.

There were 7 small parcel sales considered, ranging in size from 4.77 to 9.90 acres, and of these sales, 1 occurred in 2018, 3 in 2017 and 3 in 2016.

Sales prices for these smaller sales ranged from \$0.91 to \$7.98 per square foot with most in the \$2.00 to \$5.00 per square foot range. The 2018 sale had a sale price of \$4.97 per square foot, while the average for 2017 was \$4.13 and for 2016 it was \$5.10 per square foot. Overall, there appeared to be a reasonable consistency between the large and small parcel sales on a per square foot basis.

Again, all of the sales were for residential or related uses, and many were already entitled for such uses, or in the process of entitlement.

History has proven that land costs tend to be higher closer to the City of Scottsdale in the eastern portion of the Desert View area. Thus, land costs in the Desert View Impact Fee area are expected to be higher than those in North Gateway and Rio Vista Impact Fee areas.

Our research does not indicate a significant trend in residential sales during the sale period, but the most recent sales, in 2018, were emphasized, with some sales from previous years considered in order to reflect on any value trends.

It should be noted that sales in 2018 included 5 sales located in the cities of Scottsdale and Carefree, but that these sales showed a consistency with the other sale in 2018 and those in previous years in the Phoenix market.

## **Conclusions**

The preceding analysis presents cost estimates for the various Capital Facilities Categories in the Northern Impact Fee Areas requested by the City of Phoenix Planning Department. Conclusions are felt to be reasonable considering data from the current market and the generalization of the assignment. Definitions of the “typical sites” used herein were taken from City documentation and conversations with representatives of the Planning and Appraisal Departments of the City. Given the macro scale of the assignment the values presented herein are not intended to be an appraisal of any particular site(s).



The following exhibit summarizes the costs concluded by use and Impact Fee area for the residentially-zoned land uses.

Use	Typical Size-Acs	Typical Underlying Use	Desert View/SF	Desert View/Acre	North Gateway NBCC/SF	North Gateway-NBCC/Acre	North Gateway West/SF	North Gateway-- West/Acre	Rio Vista/SF	Rio Vista/Acre
Neighborhood	20	Residential	\$4.50	\$200,000	\$4.50	\$200,000	\$3.50	\$150,000	\$2.50	\$110,000
Community Pa	30	Residential	\$4.50	\$200,000	\$4.50	\$200,000	\$3.50	\$150,000	\$2.50	\$110,000
Water Wells	.25-.50	Residential	\$3.50	\$150,000	\$3.50	\$150,000	\$2.50	\$110,000	\$1.50	\$70,000
Water Booster	1	Residential	\$3.50	\$150,000	\$3.50	\$150,000	\$2.50	\$110,000	\$1.50	\$70,000
Water Pressur	1	Residential	\$3.50	\$150,000	\$3.50	\$150,000	\$2.50	\$110,000	\$1.50	\$70,000
Water Reserv	2-6	Residential	\$3.50	\$150,000	\$3.50	\$150,000	\$2.50	\$110,000	\$1.50	\$70,000
Waste Water l	1	Residential	\$3.50	\$150,000	\$3.50	\$150,000	\$2.50	\$110,000	\$1.50	\$70,000
Storm Drainag	20-40	Residential	\$4.50	\$200,000	\$4.50	\$200,000	\$3.50	\$150,000	\$2.50	\$110,000
Channels	40'-100'	Residential	\$4.50	\$200,000	\$4.50	\$200,000	\$3.50	\$150,000	\$2.50	\$110,000
<b>Easements-(Full Fee Simple Value)</b>										
Water Transm	50'-80'	Residential	\$4.50	\$200,000	\$4.50	\$200,000	\$3.50	\$150,000	\$2.50	\$110,000
Waterwater G	40'-80'	Residential	\$4.50	\$200,000	\$4.50	\$200,000	\$3.50	\$150,000	\$2.50	\$110,000
Wastewater L	40'-80'	Residential	\$4.50	\$200,000	\$4.50	\$200,000	\$3.50	\$150,000	\$2.50	\$110,000

## CERTIFICATION

We certify that, to the best of our knowledge and belief:

- the statements of fact contained in this report are true and correct.
- the reported analyses, opinions, and conclusions are limited only by the reported assumptions and limiting conditions, and are my personal, impartial, and unbiased professional analyses, opinions, and conclusions.
- we have no personal interest with respect to the parties involved.
- we have no bias with respect to the property that is the subject of this report or to the parties involved with this assignment.
- our engagement in this assignment was not contingent upon developing or reporting predetermined results.
- our compensation for completing this assignment is not contingent upon the development or reporting of a predetermined value or direction in value that favors the cause of the client, the amount of the value opinion, the attainment of a stipulated result, or the occurrence of a subsequent event directly related to the intended use of this appraisal.
- the appraisal assignment was not based on a requested minimum valuation, a specific valuation, or the approval of a loan.
- our analyses, opinions, and conclusions were developed, and this report has been prepared, in conformity with the *Uniform Standards of Professional Appraisal Practice*.
- no one provided significant real property appraisal assistance to the persons signing this certification.
- to the best of our knowledge and belief, the reported analyses, opinions and conclusions were developed, and this report has been prepared, in conformity with the requirements of the Code of Professional Ethics and the Standards of Professional Appraisal Practice of the Appraisal Institute.
- the use of this report is subject to the requirements of the Appraisal Institute relating to review by its duly authorized representatives.
- as of the date of this report, I, Albert Nava, MAI SGA, has completed the continuing education program for Designated members of the Appraisal Institute.
- Albert Nava MAI, SGA and Stephen L. Mastorakos have the knowledge and experience to competently appraise the property that is the subject of this report.

Respectively Submitted,

BREKAN NAVA GROUP

A handwritten signature in blue ink, appearing to read 'Albert Nava', with a long horizontal flourish extending to the right.

Albert Nava, MAI, SGA

President

*Arizona Certified General Appraiser No. 30806*

A handwritten signature in black ink, appearing to read 'Stephen L. Mastorakos', with a long horizontal flourish extending to the right.

Stephen L. Mastorakos

Senior Appraiser

*Arizona Certified General Appraiser No. 30446*

**QUALIFICATIONS OF  
ALBERT NAVA, MAI, SGA**

*Arizona Certified General Real Estate Appraiser No. 30806  
Nevada Certified General Real Estate Appraiser No. A.0206866-CG  
California Certified General Real Estate Appraiser BRE A No. 3004725*

**EXPERIENCE**

Brekan Nava Allen Group, formerly Ralph J. Brekan & Co., Inc. (since February 1995)  
Partner & President

Bach Thoreen McDermott Incorporated (November 1992 - February 1995)  
Senior Consultant

Robert B. Jones & Company (1981 - November 1992)  
(1989-November 1992) *Vice President and Valuation Department Head.* Managed the daily activities of Robert B. Jones & Co., including both valuation and administrative departments answering directly to company president.  
(1986-1989) *Valuation Department Head.* Managed the daily activities of the valuation department including the scheduling of work in-progress, supervision of staff appraisers, and review of company work product.  
(1982-1986) *Senior Associate.*  
(1981-1982) *Staff Associate.*  
Appraisal responsibilities included appraisal of high-rise and suburban office buildings, shopping centers, industrial properties, apartments, hotels, recreational and special purpose properties, vacant land, subdivisions, market and feasibility studies, highest and best use studies.

State National Bank of El Paso (1977 - 1981)  
*Corporate Officer - Staff Appraiser; Real Estate and Construction Lending Division*

**PROFESSIONAL ACTIVITIES**

Member: Appraisal Institute  
Appraisal Institute, Phoenix Chapter (2006 President)  
Appraisal Institute, Experience Subcommittee  
Appraisal Institute, Admissions Committee  
Appraisal Institute, Ethics and Review Committee

Society of Golf Appraisers (SGA)

Certification: Currently certified in the Appraisal Institute's program of continuing education for its designated members (MAIs who meet minimum standards of this program are awarded periodic educational certification)

Certified General Real Property Appraiser in the State of Arizona  
Certified General Real Property Appraiser in the State of Nevada

**EDUCATION**

University of Texas at El Paso, 1977; B.B.A. with emphasis on accounting

**INSTRUCTOR** Various seminars for local taxing authorities and internal seminars for the Appraisal Institute.

## SCOPE OF WORK

Sample of appraisal and consulting assignments completed:

Land:	All types of residential, multifamily, commercial, industrial, including mixed-use developments.
Residential:	Multifamily apartments and condominiums, congregate care facilities, Section 42 (LIHTC) affordable housing, Section 8 housing, public housing
Commercial:	Retail centers (strip, neighborhood, community, regional), low-rise to high-rise office (50+stories), restaurants, hotels
Industrial:	Various warehouse, distribution, manufacturing, flex, mini-storage, R&D facilities
Special Purpose:	Golf courses and country clubs, marinas, health care facilities (including skilled nursing), underground bomb shelter, steel fabrication plant, religious facilities

**QUALIFICATIONS OF  
STEPHEN L. MASTORAKOS**

*Arizona Certified General Real Estate Appraiser No. 30446*

**EXPERIENCE**

Brekan Nava Group, Tempe, Arizona (Since June 2007)  
Senior Appraiser

Mastorakos Appraisal Services, Phoenix, Arizona  
Owner

RE VAL USA, LLC, Phoenix, Arizona (October 2003 to April 2006)  
Partner

Mastorakos Hurd, Inc., Phoenix, Arizona (July 1992 to February 2000)  
Partner

Ralph J. Brekan & Co., Inc., Scottsdale, Arizona (March 1990 to July 1992)  
Senior Appraiser

Real Estate Science Corp., Phoenix, Arizona (July 1983 to March 1990)  
Staff Appraiser

**EDUCATION**

University of Kansas – Lawrence, Kansas – 1972 to 1973  
Southern Methodist University – Dallas, Texas – 1973 to 1976,  
Bachelor of Business Administration Degree

**PROFESSIONAL LICENSING**

Arizona Certified General Real Estate Appraiser No. 30466  
Licensed Real Estate Salesperson – State of Arizona

**SCOPE OF WORK**

Sample of appraisal and consulting assignments completed:

Residential: Single and Multi-Family; Individual Homes and Subdivisions  
Commercial/Retail; Office: Restaurants; Automotive Sales and Service  
Industrial: Warehouse; Distribution; Manufacturing  
Vacant Land: All Types; Mixed-Use Plans  
Special Use: Religious facilities; Congregate Healthcare Facilities; Hotels; Motels

**GEOGRAPHICAL AREAS**

Assignments have been completed in the following states:

Arizona; Alabama; California; Florida; Georgia; Mississippi; Missouri; Nevada; New Mexico;  
Louisiana

# **ADDENDUM**

**EXHIBIT A**  
**SALES DATA**



## 2018 SALES DATA

### NORTHERN IMPACT AREA-COMMERCIAL LAND SALES

Map No.	Location	Zip Code	City	Sq.Ft	Acres	Sale Month	Sale Year	Price	S/SF	Zoning	Entitled	Flood Zone	Intended Use	APN
<b>Commercial Acreage</b>														
1	7300 E. Williams Dr.	85255	Scottsdale	54,817	1.26	9	2018	\$900,000	\$16.42	C-3	No	AO	Commercial development	212-02-983
2	2550 W. Louise Dr.	85027	Phoenix	356,188	8.18	9	2018	\$3,999,000	\$11.23	C-2	No	X	Commercial development	209-04-047B, 047C
3	34920 N. Cave Creek Rd.	85331	Carefree	124,388	2.86	7	2018	\$1,100,000	\$8.84	C-2	No	X	Commercial development	211-47-006J
4	SEC Happy Valley Rd. & 15th Ave.	85085	Phoenix	207,528	4.76	7	2018	\$1,382,220	\$6.66	CP/GCP	No	X	Industrial/Retail Dev.	210-08-026A, B
5	8399 E. Hartford Dr.	85255	Scottsdale	121,484	2.79	5	2018	\$2,249,920	\$18.52	I-1	No	AO	Office development	215-07-405
6	3005 E. Rose Garden Ln.	85050	Phoenix	180,432	4.14	3	2018	\$1,300,000	\$7.20	CP/GCP	No	X	Industrial development	213-12-395
7	2211 W. Deer Valley Rd.	85027	Phoenix	87,376	2.01	2	2018	\$1,400,000	\$16.02	C-3	No	X	Retail development	209-06-002A
8	34600 N. Cave Creek Rd..	85331	Cave Creek	108,900	2.50	Pending	2018	\$1,306,800	\$12.00	DR-43	No	X	Investment	21-46-006
9	9167 E. Hidden Spur Tr.	85255	Scottsdale	141,890	3.26	Pending	2018	\$2,341,185	\$16.50	I-1	No	AO	Retail, office development	217-55-715
10	5160 E. Carefree Hwy.	85331	Cave Creek	174,022	3.99	Pending	2018	\$1,500,000	\$8.62	GC	No	X	Commercial development	211-47-087A, 088A
11	34975 N. North Valley Pkwy.	85086	Phoenix	153,172	3.52	Pending	2018	\$919,987	\$6.01	C-2	No	X	Commercial development	203-27-783
Totals/Averages				1,710,197	39.26			\$18,399,112	\$10.76					

### NORTHERN IMPACT AREA

#### LARGE RESIDENTIAL LAND SALES (10+ ACRES)

Map No.	Location	Zip Code	City	Sq.Ft	Acres	Sale Month	Sale Year	Price	S/SF	Zoning	Entitled	Flood Zone	Intended Use	APN
<b>Residential Acreage</b>														
1	27619 N. 42nd St.	85331	Cave Creek	491,357	11.28	9	2018	\$2,750,000	\$5.60	R-43	No	AO	Hold for SFR Development	212-18-011G, 012C, C, 013A
2	29201 N. 114th St.	85262	Scottsdale	647,140	14.86	4	2018	\$2,800,000	\$4.33	R1-190	No	X	Hold for SFR Development	216-74-007K
3	8681 E. Stagecoach Pass	85266	Scottsdale	561,924	12.90	2	2018	\$2,145,000	\$3.82	R1-35	Yes	X	Church	216-79-005
4	SEC 118th St. & Red Bird Rd.	85262	Scottsdale	1,752,854	40.24	2	2018	\$6,695,000	\$3.82	R1-190	No	X	Hold for SFR Development	216-79-005
5	27441 N. Black Canyon Hwy	85085	Phoenix	540,827	12.42	1	2018	\$3,135,688	\$5.80	PUD	Yes	X	MFR Development	205-01-010G
6	8604 E. Hawknest Rd.	85266	Scottsdale	908,226	20.85	1	2018	\$2,850,000	\$3.14	R1-35	Prtl	AO, X	Hold for SFR Development	261-34-013C, L, M
Totals/Averages				4,902,328	112.54			\$20,375,688	\$4.16					

### NORTHERN IMPACT AREA

#### SMALL RESIDENTIAL LAND SALES (1-10 ACRES)

Map No.	Location	Zip Code	City	Sq.Ft	Acres	Sale Month	Sale Year	Price	S/SF	Zoning	Entitled	Flood Zone	Intended Use	APN
<b>Residential Acreage</b>														
1	SEC Peak View Rd. & 44th St.	85331	Phoenix	317,191	7.28	8	2018	\$1,575,000	\$4.97	R-130	No	X	SFR Development	211-40-008, 335A
Totals/Averages				317,191	7.28			\$1,575,000	\$4.97					

## 2017 SALES DATA

### NORTHERN IMPACT AREA-COMMERCIAL LAND SALES

Map No.	Location	Zip Code	City	Sq.Ft	Acres	Sale Month	Sale Year	Price	S/SF	Zoning	Entitled	Flood Zone	Intended Use	APN
<b>Commercial Acreage</b>														
11	29615 N. Cave Creek Rd.	85331	Phoenix	124,332	2.85	6	2017	\$1,000,000	\$8.04	C-2		X	Restaurant	211-38-184
12	4828 E. Carefree Hwy	85331	Cave Creek	166,269	3.82	6	2017	\$1,017,180	\$6.12	R-89		X	Commercial development	211-47-025A, 026C, D
13	Venture Dr., North of Anthem Way	85086	Anthem	177,681	4.08	5	2017	\$1,455,000	\$8.19	C-O		X	Hospital	203-04-544
14	N/NWC Happy Valley Rd. & 19th Ave.	85085	Phoenix	100,118	2.30	3	2017	\$1,201,416	\$12.00	C-2		X	Retail development	210-10-019A, 019C
<b>Totals/Averages</b>				568,400	13.05			\$4,673,596	\$8.22					

### NORTHERN IMPACT AREA

#### LARGE RESIDENTIAL LAND SALES (10+ACRES)

Map No.	Location	Zip Code	City	Sq.Ft	Acres	Sale Month	Sale Year	Price	S/SF	Zoning	Entitled	Flood Zone	Intended Use	APN
<b>Residential Acreage</b>														
7	W Side 75th Ave. @Pinnacle Peak Rd.	85383	Peoria	3,399,858	78.05	12	2017	\$7,558,933	\$2.22	R-35	Yes	AO	Hold for SFR Development	200-07-008M, N, 14-004N, R, 032,
8	E/NEC Lone Mountain Rd. & 40th St	85331	Phoenix	624,650	14.34	10	2017	\$3,100,000	\$4.96	S-1	No	X	Hold for SFR Development	211-36-008K, L, 009B, C, D
9	NEC Tom Darlington Dr. & Carefree Hwy	85377	Carefree	450,651	10.35	10	2017	\$2,250,000	\$4.99	R-70	No	AO, X	Hold for SFR Development	216-32-008J
10	26645 N. Black Canyon Hwy.	85085	Phoenix	459,558	10.55	9	2017	\$3,850,000	\$8.38	R-3A	No	X	Hold for MFR Development	205-04-002, 014
11	N. 19th Ave. @ Yearling Rd.	85085	Phoenix	823,680	18.91	8	2017	\$3,520,335	\$4.27	PUD	Yes	X	SFR Development	210-04-Variou
12	FNEC Happy Valley Rd. & Norterra Pkwy.	85085	Phoenix	744,118	17.08	8	2017	\$4,205,000	\$5.65	PUD	Yes	X	SFR Development	210-04-Variou
13	SEC North Valley Pkwy. & Copperhead Trl	85085	Phoenix	621,166	14.26	5	2017	\$3,730,000	\$6.00	PCD	No	X	Hold for SFR/Cml Dev.	210-19-NA, State Land
<b>Totals/Averages</b>				7,123,681	163.54			\$28,214,268	\$3.96					

### NORTHERN IMPACT AREA

#### SMALL RESIDENTIAL LAND SALES (1-10 ACRES)

Map No.	Location	Zip Code	City	Sq.Ft	Acres	Sale Month	Sale Year	Price	S/SF	Zoning	Entitled	Flood Zone	Intended Use	APN
<b>Residential Acreage</b>														
2	20837 n. 41St Ave.	85308	Glendale	418,041	9.60	11	2017	\$3,000,000	\$7.18	R1-8	Yes	X	Hold for SFR Development	206-18-005, 007
3	10701 W. Beardsley Rd.	85373	Sun City	402,930	9.25	12	2017	\$1,800,000	\$4.47	C-2	Yes	AO	Hold for SFR Development	200-35-229U
4	NWC Carefree Highway & 7th Ave.	85086	Phoenix	435,600	9.90	11	2017	\$395,000	\$0.91	R-43	No	X	Investment	211-54-013
<b>Totals/Averages</b>				1,256,571	28.85			\$5,195,000	\$4.13					

## 2016 SALES DATA

### NORTHERN IMPACT AREA-COMMERCIAL LAND SALES

Map No.	Location	Zip Code	City	Sq.Ft	Acres	Sale Month	Sale Year	Price	S/SF	Zoning	Entitled	Flood Zone	Intended Use	APN
<b>Commercial Acreage</b>														
15	7550 E. Paradise Ln.	85260	Scottsdale	110,140	2.53	12	2016	\$1,145,000	\$10.40	C-G	No	X	Self-Storage Facility	215-45-040
16	2938 E. Mohawk Ln.	85050	Phoenix	163,811	3.76	12	2016	\$1,350,000	\$8.24	CP/GCP	No	X	Light Industrial/Office	213-12-013E, F
17	S/SWC 23rd Ave. & Pinnacle Peak Rd.	85027	Phoenix	265,398	6.09	10	2016	\$2,925,000	\$11.02	A-1	No	X	Commercial development	210-05-001N
18	SEC 19th Ave. & Park View Ln.	85085	Phoenix	107,774	2.47	9	2016	\$1,250,000	\$11.60	LP/GCP	No	X	Commercial Mixed-Use	210-07-032C
Totals/Averages				647,123	14.86			\$6,670,000	\$10.31					

### NORTHERN IMPACT AREA

#### LARGE RESIDENTIAL LAND SALES (10+ACRES)

Map No.	Location	Zip Code	City	Sq.Ft	Acres	Sale Month	Sale Year	Price	S/SF	Zoning	Entitled	Flood Zone	Intended Use	APN
<b>Residential Acreage</b>														
14	NWC Pinnacle Peak Rd. & 23rd Ave.	85027	Phoenix	635,323	14.59	8	2016	\$3,800,000	\$5.98	R-2	Yes	X	Detached rental project	210-05-001H
15	36755 N. Lone Mountain Pkwy	85262	Scottsdale	435,600	10.00	7	2016	\$1,300,000	\$2.98	R-43	No	X	Hold for SFR Development	219-11-344A
Totals/Averages				1,070,923	24.59			\$5,100,000	\$4.76					

### NORTHERN IMPACT AREA

#### SMALL RESIDENTIAL LAND SALES (1-10 ACRES)

Map No.	Location	Zip Code	City	Sq.Ft	Acres	Sale Month	Sale Year	Price	S/SF	Zoning	Entitled	Flood Zone	Intended Use	APN
<b>Residential Acreage</b>														
5	NEC Roy Rogers Dr & 41st St.	85331	Phoenix	422,968	9.71	12	2016	\$1,818,000	\$4.30	R1-6	No	X	SFR Project	211-39-001M, various
6	W/SWC Ashler Hills Ddr. & Cave Creek Rd.	85331	Phoenix	207,781	4.77	11	2016	\$450,000	\$2.17	R-43	No	X	Hold for SFR Development	211-36-001B
7	SWC 105th St. & Acoma Dr.	85255	Scottsdale	328,756	7.55	11	2016	\$2,625,000	\$7.98	R1-10	Yes	X	SFR Development	217-16-908
Totals/Averages				959,505	22.03			\$4,893,000	\$5.10					