City of Rohnert Park

2011 Update to the Public Facilities Finance Plan

Final

Winzler & Kelly
October 2011

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Resolution updating the PFF Schedule: adopted 5/8/12

RESOLUTION NO. 2012-44

A RESOLUTION OF THE CITY COUNCIL OF ROHNERT PARK UPDATING THE PUBLIC FACILITIES FEE SCHEDULE FOR ALL DEVELOPMENT WITHIN THE CITY OF ROHNERT PARK BY REPEALING AND REPLACING THE FEE SCHEDULE ESTABLISHED BY RESOLUTION NO. 2011-112

WHEREAS, the General Plan of the City of Rohnert Park requires that new development pay its proportionate share of the cost of capital improvements made necessary by that new development; and

WHEREAS, on November 8, 2011 the City Council of the City of Rohnert Park conducted a duly noticed public hearing to receive and consider public comments on the *2011 Update to its Public Facilities Finance Plan* (*2011 Update)* and the recommended Public Facilities (PF) set forth in it, and upon completion of that hearing the City Council unanimously adopted Resolution 2011-109 accepting the *2011 Update;* and

WHEREAS, the City Council, by enacting Ordinance No. 840 on November 22, 2011, determined that a single fee program covering all planned facilities provides a more clear and easily administered method for complying with such General Plan policies;

WHEREAS, pursuant to Resolution No. 2011-112 the City Council of the City of Rohnert Park the Council established Public Facilities fees based upon the *2011 Update,* which was made available for public review at the Office of the City Clerk for at least fourteen days prior to the public hearing on said Resolution;

WHEREAS, the City set the amount of the fee based on the 2011 Update and adopted a fee schedule set forth in Attachment 1 to Resolution No. 2011-112;

WHEREAS, due to a clerical error, the Attachment 1 presented to the City Council was not the most current version of the Public Facilities fee schedule;

WHEREAS, the City Council wishes to correct the clerical error by updating the fee schedule with the fee schedule set forth in Attachment 1A, attached hereto;

WHEREAS, the PF fees set forth in Attachment 1A are designed to supersede those same PF fees in Attachment 1, but shall have no effect on the remainder of Resolution No. 2011-112;

WHEREAS, adopting an accurate Public Facilities fee schedule is to the benefit of all parties involved in developing property because it assures that each development supports its fair share of needed facilities;

WHEREAS, the City Council finds and determines as follows:

A. The *2011 Update* complies with California Government Code Section 66001 by establishing the basis for imposition of fees on new development. In particular, the *2011 Update:*

   1. Identifies the purpose of the fee;

   2. Identifies the use to which the fee will be put;

   3. Shows a reasonable relationship between the fee's use and the type of development project on which the fee is imposed;

4. Shows a reasonable relationship between the need for the public facility and the type of development project on which the fee is imposed because the new facilities are sized to accommodate the increased population and increased vehicle trips that will be generated by each type of development; and

5. Shows a reasonable relationship between the amount of the fee and the cost of the public facility or portion of the public facility attributable to the development on which the fee is imposed because the proposed fees are proportional to the new population and new traffic generated by each type of development.

B. The fees collected pursuant to this Resolution shall be used to finance the public facilities described or identified in the *2011 Update* or other public facility master plans as may from time to time be adopted by the City Council.

C. After considering the specific project descriptions and cost estimates identified in the *2011 Update*, the City Council approves such project descriptions and cost estimates, and finds them reasonable as the basis for calculating and imposing an updated PF Fee.

D. The projects and fee methodology identified in the *2011 Update* continue to be consistent with the City's General Plan including recent updates to the General Plan.

E. The *2011 Update* categorically exempt from environmental review pursuant to the California Environmental Quality Act guidelines section 15061(b)(3). The intent of the PF Program, the *2011 Update* and the proposed PF fees is to provide one means of mitigating potential environmental impacts which have been identified in environmental analyses of other planning efforts, including the General Plan EIR.

WHEREAS, notice of the public hearing before the City Council on this correction to the PF Fees was published twice in the newspaper for at least ten (10) days pursuant to Government Code 6062(a) and was mailed to interested persons who requested the information fourteen (14) days in advance;

WHEREAS, for at least ten (10) days prior to the public hearing a copy of the 2011 Update and the corrected PF Fee Schedule was made available for public review at the City Clerk's office;

NOW, THEREFORE, IT IS HEREBY RESOLVED by the City Council of the City of Rohnert Park, that Resolution No. 2011-112 is amended as follows:

1. **Amendment of Paragraph 2.** Paragraph 2 (Amount of Fee) of Resolution No. 2011-112 is amended in its entirety to read as follows:

> The PF Fee for various classes of land use and various benefiting areas are set forth in Attachment 1A, which is attached hereto and incorporated by this reference. The land use classes set forth are intended to be generally consistent with the Land Use Framework outline in the General Plan including recent updates to the General Plan and that Land Use Framework should be consulted as necessary to support accurate determination of fees.

2. **Attachments.** Attachment 1 to Resolution No. 2011-112 is hereby repealed in its entirety and replaced by Attachment 1A, which is attached hereto and incorporated by this reference.

BE IT FURTHER RESOLVED by the City Council of the City of Rohnert Park, that:

1. **Recitals**. The recitals to this Resolution and true and correct and material to the adoption of

this Resolution.

2. **Effect on Resolution 2011-12**. Except as expressly provided for herein, the adoption of this Resolution shall have no effect on the Resolution 2011-112, which shall remain in full force and effect.

3. **Judicial Action to Challenge this Resolution**. Any judicial action or proceeding to attack, review, set aside, void or annul this Resolution shall be brought within 120 days of the date of adoption of this Resolution.

4. **Severability**. If any provision or clause, or paragraph of this resolution or the imposition of a PF fee for any project with the *2011 Update* or the application thereof to any person or circumstance shall be held invalid, such invalidity shall not affect the other provisions of this resolution or other fees levied by this resolution which can be given effect without the invalid provisions or application of fees, and to this end the provisions of the resolution are declared to be severable.

5. **Effective Date.** Pursuant to Government Code section 60017, this Resolution shall take effect sixty (60) days after its adoption.

DULY AND REGULARLY ADOPTED by the City Council of the City of Rohnert Park this 8th day of May, 2012 by the following vote:

AYES: **FIVE (5)** **Councilmember Ahanotu, Belforte, Callinan, Stafford and Mayor Mackenzie**

NOES: **NONE (0)**

ABSENT: **NONE (0)**

ASBSTAIN: **NONE (0)**

CITY OF ROHNERT PARK

Mayor

ATTEST:

Interim Deputy City Clerk

ROHNERT PARK 19 62 CALIFORNIA

AHANOTU: AYE BELFORTE: AYE CALLINAN: AYE STAFFORD: AYE MACKENZIE: AYE
AYES: (5) NOES: (0) ABSENT: (0) ABSTAIN: (0)

Exhibit(s): Attachment 1A

Attachment 1A

Public Facilities Fee Schedule

Table 1 Residential Fees

	Public Facilities Fee Zones									
Land Use Designation	Infill East of Hwy 101	Infill West of Hwy 101	Northeast SPA	University District SPA	Southeast SPA	Sonoma Mountain Village PD	Northwest SPA	Wilfred Dowdell SPA	Stadium Lands PD	Canon Manor SPA
Single Family Residential (Unit)	$17,967	$19,445	$27,873	$28,270	$25,590	$21,945	NA	NA	NA	$20,130
Multi-Family Residential (Unit)	$11,569	$12,520	$17,340	$17,434	$16,560	$14,181	$12,873	NA	$12,964	$13,144
Senior Housing (Unit)	$10,983	$11,907	NA	NA	NA	NA	NA	NA	NA	NA
Assisted Living (Unit)	$9,551	$10,013	NA	NA	NA	NA	NA	NA	NA	NA

Table 2 Non-Residential Fees Applied to Enclosed Thousand Square Feet (TSF)

	Public Facilities Fee Zones									
Land Use Designation	Infill[2] East of Hwy 101	Infill[2] West of Hwy 101	Northeast SPA	University District SPA	Southeast SPA	Sonoma Mountain Village PD	Northwest SPA	Wilfred Dowdell SPA	Stadium Lands PD	Canon Manor SPA
General Office (enclosed tsf)	$8,264	$9,586	NA	$8,678	$8,678	$8,678	$9,586	$9,586	$9,586	NA
Hotel/Motel (enclosed tsf)	$5,916	$6,593	NA	$6,068	$6,068	$6,068	$6,401	$6,401	$6,401	NA
Retail (enclosed tsf)	$12,413	$13,253	NA	$12,676	$12,676	$12,676	$13,253	$13,253	$13,253	NA
Light Industrial (enclosed tsf)	$2,661	$2,966	NA	$2,756	$2,756	$2,756	$2,966	$2,966	$2,966	NA
Heavy Industrial (enclosed tsf)	$2,661	$2,966	NA	$2,756	$2,756	$2,756	$2,966	$2,966	$2,966	NA
Warehouse (enclosed tsf)	$2,140	$2,446	NA	$2,236	$2,236	$2,236	$2,446	$2,446	$2,446	NA

Attachment 1A

Public Facilities Fee Schedule

Table 3 Non-Residential Fees Applied to Gallons of Wastewater Generated (GAL)

	Public Facilities Fee Zones									
Land Use Designation	Infill[2] East of Hwy 101	Infill[2] West of Hwy 101	Northeast SPA	University District SPA	Southeast SPA	Sonoma Mountain Village PD	Northwest SPA	Wilfred Dowdell SPA	Stadium Lands PD	Canon Manor SPA
General Office (gallon)	$64.30	$64.30	NA	$109.49	$106.42	$106.42	$64.30	$64.30	$64.30	$106.42
Hotel/Motel (gallon)	$64.30	$64.30	NA	$109.49	$106.42	$106.42	$64.30	$64.30	$64.30	$106.42
Retail (gallon)	$64.30	$64.30	NA	$109.49	$106.42	$106.42	$64.30	$64.30	$64.30	$106.42
Light Industrial (gallon)	$64.30	$64.30	NA	$109.49	$106.42	$106.42	$64.30	$64.30	$64.30	$106.42
Heavy Industrial (gallon)	$64.30	$64.30	NA	$109.49	$106.42	$106.42	$64.30	$64.30	$64.30	$106.42
Warehouse (gallon)	$64.30	$64.30	NA	$109.49	$106.42	$106.42	$64.30	$64.30	$64.30	$106.42

Table 4 Non-Residential Fees Applied to Disturbed Site Area (TSF)

	Public Facilities Fee Zones									
Land Use Designation	Infill[2] East of Hwy 101	Infill[2] West of Hwy 101	Northeast SPA	University District SPA	Southeast SPA	Sonoma Mountain Village PD	Northwest SPA	Wilfred Dowdell SPA	Stadium Lands PD	Canon Manor SPA
General Office (disturbed tsf)	NA	NA	NA	$267	NA	NA	$243	$243	$243	NA
Hotel/Motel (disturbed tsf)	NA	NA	NA	$267	NA	NA	$243	$243	$243	NA
Retail (disturbed tsf)	NA	NA	NA	$267	NA	NA	$243	$243	$243	NA
Light Industrial (disturbed tsf)	NA	NA	NA	$267	NA	NA	$243	$243	$243	NA
Heavy Industrial (disturbed tsf)	NA	NA	NA	$267	NA	NA	$243	$243	$243	NA
Warehouse (disturbed tsf)	NA	NA	NA	$267	NA	NA	$243	$243	$243	NA

Attachment 1A

Public Facilities Fee Schedule Notes

1. See 2011 Update to the Public Facilities Finance Plan for detailed presentation of calculations (Adopted 11/8/11 by City Council Resolution 2011-109)
2. "Infill Development" is all development (new, remodel or reconstruction) outside of the defined Specific Plan Areas or Planned Developments
3. Non-residential fees are calculated by summing the values from Tables 2, 3 and 4 for the type of land use proposed
4. "Mixed Use" fees are calculated by summing the fees calculated for each type of land use within the mixed use proposal
5. NA or Not Applicable means that a particular fee component does not apply within the defined geographic area because:
    a. New development within that geographic does not create impacts to certain infrastructure systems; or
    b. Approved Specific Plans do not include certain land use classes, hence fee components have not been computed
6. Enclosed Thousand Square Feet is calculated based on the gross floor area, as defined in Chapter 17.04 of the Municipal Code including any patio area under a horizontal projection of the roof, the floor above or other covering, when such area is used for activities integral to the commercial business.
7. Disturbed Thousand Square Feet is calculated based on the total area approved for grading on the property.

RESOLUTION NO. 2011-112

A RESOLUTION OF THE CITY COUNCIL OF ROHNERT PARK UPDATING THE PUBLIC FACILITIES FEE FOR ALL DEVELOPMENT WITHIN THE CITY OF ROHNERT PARK AND REPEALING RESOLUTION NOS. 2006-165 AND 2008-126

WHEREAS, the General Plan of the City of Rohnert Park requires that new development pay its proportionate share of the cost of capital improvements made necessary by that new development; and

WHEREAS, the City of Rohnert Park implements this requirement through its *Public Facilities Finance Plan* and the setting and collection of Public Facilities (PF) fees and sewer capacity fees, which are reviewed from time to time to assure that they accurately estimate costs and the allocation of those costs; and

WHEREAS, on November 8, 2011 the City Council of the City of Rohnert Park conducted a duly noticed public hearing to receive and consider public comments on the *2011 Update to its Public Facilities Finance Plan (2011 Update)* and the recommended Public Facilities (PF) set forth in it, and upon completion of that hearing the City Council unanimously adopted Resolution 2011-109 accepting the *2011 Update;* and

WHEREAS, for at least fourteen days prior to the public hearing, a copy of the *2011 Update* was available for public review at the Office of the City Clerk; and

WHEREAS, since the most recent adoption of the PF Fee Schedule (Resolution 2008-126) and the Sewer Capacity Charge Schedule (Resolution 2006-165) , the City has completed environmental review of a number of planned developments and approved changes in both land use and infrastructure required for mitigation; and

WHEREAS, since the most recent adoption of the PF Fee Schedule and the Sewer Capacity Charge Schedule (Resolution 2006-165) , the City and the Santa Rosa Subregional System have constructed some projects and updated costs for facilities included in the PF Fee Program and the Sewer Capacity Charge Program and this has resulted in changes to estimated costs; and

WHEREAS, since the adoption of the PF Fee Schedule and the Sewer Capacity Charge Schedule, the City has determined that a single fee program covering all planned facilities will provide a more clear and easily administered method for complying with the General Plan policies requiring that new development pay for the impacts it creates and implemented that decision with the passage of Ordinance No. 840 on November 22, 2011; and

WHEREAS, it is to the benefit of all parties involved in developing property that the PF Fee Program is consistent with current projections of land use, infrastructure and costs to assure that each development supports its fair share of needed facilities; and

WHEREAS, the City Council finds and determines as follows:

A. The *2011 Update* complies with California Government Code Section 66001 by establishing the basis for imposition of fees on new development. In particular, the *2011 Update:*

   1. identifies the purpose of the fee;
   2. identifies the use to which the fee will be put;
   3. shows a reasonable relationship between the fee's use and the type of development project on which the fee is imposed;

4. shows a reasonable relationship between the need for the public facility and the type of development project on which the fee is imposed because the new facilities are sized to accommodate the increased population and increased vehicle trips that will be generated by each type of development; and

5. shows a reasonable relationship between the amount of the fee and the cost of the public facility or portion of the public facility attributable to the development on which the fee is imposed because the proposed fees are proportional to the new population and new traffic generated by each type of development.

B. The fees collected pursuant to this Resolution shall be used to finance the public facilities described or identified in the *2011 Update* or other public facility master plans as may from time to time be adopted by the City Council.

C. After considering the specific project descriptions and cost estimates identified in the *2011 Update*, the City Council approves such project descriptions and cost estimates, and finds them reasonable as the basis for calculating and imposing an updated PF Fee.

D. The projects and fee methodology identified in the *2011 Update* continue to be consistent with the City's General Plan including recent updates to the General Plan.

E. The *2011 Update* categorically exempt from environmental review pursuant to the California Environmental Quality Act guidelines section 15061(b)(3). The intent of the PF Program, the *2011 Update* and the proposed PF fees is to provide one means of mitigating potential environmental impacts which have been identified in environmental analyses of other planning efforts, including the General Plan EIR.

NOW, THEREFORE, it is hereby resolved by the City Council of the City of Rohnert Park, that:

1. **Amount of Fee.** The PF Fee for various classes of land use and various benefiting areas are set forth in Attachment 1. The land uses classes set forth are intended to be generally consistent with the Land Use Framework outline in the General Plan including recent updated to the General Plan and that Land Use Framework should be consulted as necessary to support accurate determination of fees.

2. **Use of Fee**. The fee shall be solely used: (a) for the purposes described in the *2011 Update*; (b) for reimbursing the City for the development's fair share of those capital improvements already constructed by the City; or (c) for reimbursing developers who have constructed public facilities described in the *2011 Update* or other facility master plans adopted from time to time by the City Council where those facilities were beyond that needed to mitigate the impacts of the developers' project or projects.

3. **Automatic Increase**. The PF Fee will automatically increase on July 1 in each year hereafter in accordance with any increases in the Engineering News Record Construction Cost Index for the San Francisco Bay Area for the fiscal year ending on such July 1.

4. **Fee Review**. Annually, as part of the budget process, the City Manager shall review the estimated cost of the described capital improvements, the continued need for those improvements and the reasonable relationship between such need and the impacts of the various types of development pending or anticipated and for which this fee is charged. The City Manager shall report his or her findings to the City Council at a noticed public hearing and recommend any adjustment to this fee or other action as may be needed.

5. **Judicial Action to Challenge this Resolution**. Any judicial action or proceeding to attack, review, set aside, void or annul this resolution shall be brought within 120 days of the date of adoption of this resolution.

6. **Severability**. If any provision or clause, or paragraph of this resolution or the imposition of a PF

fee for any project with the *2011 Update* or the application thereof to any person or circumstance shall be held invalid, such invalidity shall not affect the other provisions of this resolution or other fees levied by this resolution which can be given effect without the invalid provisions or application of fees, and to this end the provisions of the resolution are declared to be severable.

7. **Repeal**. Resolution Number 2006-165 and Resolution Number 2008-126 are hereby repealed.
8. **Effective Date.** This Resolution shall take effect thirty (30) days after its adoption.

DULY AND REGULARLY ADOPTED by the City Council of the City of Rohnert Park this 22nd day of November, 2011.

CITY OF ROHNERT PARK

Mayor

ATTEST:

City Clerk, Acting

APPROVED AS TO FORM:

Asst City Attorney, Alexandra M. Bukey

AHANOTU: AYE	CALLINAN: ABSENT	MACKENZIE: AYE	STAFFORD: AYE	BELFORTE: AYE
AYES: (4)	NOES: (0)	ABSENT: (1)	ABSTAIN: (0)	

11/22/11

Attachment 1

This Attachment 1 to Resolution No. 2011-112 is voided by Resolution No. 2012-44 adopted by the City Council at its meeting of May 8, 2012.

Land Use Designation	Infill East of Hwy 101	Infill West of Hwy 101	Northeast SPA	University District SPA	Southeast SPA	Sonoma Mountain Village PD	Northwest SPA	Wilfred Dowdell SPA	Stadium Lands PD	Canon Manor SPA
Single Family Residential (Unit)	$17,967	$19,445	$27,873	$28,270	$25,590		NA	NA	NA	$20,130
Multi-Family Residential (Unit)	$11,569	$12,520	$17,340	$17,434	$16,560			NA		$13,144
Senior Housing (Unit)	$10,983	$11,907	NA	NA	NA	NA	NA	NA	NA	NA
Assisted Living (Unit)	$9,551	$10,013	NA	NA	NA	NA	NA	NA	NA	NA

Table 2 Non-Residential Fees Applied to Enclosed Thousand Square Feet (TSF)

	Public Facilities Fee Zones									
Land Use Designation	Infill[2] East of Hwy 101	Infill[2] West of Hwy 101	Northeast SPA	University District SPA	Southeast SPA	Sonoma Mountain Village PD	Northwest SPA	Wilfred Dowdell SPA	Stadium Lands PD	Canon Manor SPA
General Office (enclosed tsf)	$8,264	$9,586	NA	$8,678	$8,678	$8,678	$9,586	$9,586	$9,586	NA
Hotel/Motel (enclosed tsf)	$5,916	$6,401	NA	$6,068	$6,068	$6,068	$6,401	$6,401	$6,401	NA
Retail (enclosed tsf)	$12,418	$13,253	NA	$12,676	$12,676	$12,676	$13,253	$13,253	$13,253	NA
Light Industrial (enclosed tsf)	$2,661	$2,966	NA	$2,756	$2,756	$2,756	$2,966	$2,966	$2,966	NA
Heavy Industrial (enclosed tsf)	$2,661	$2,966	NA	$2,756	$2,756	$2,756	$2,966	$2,966	$2,966	NA
Warehouse (enclosed tsf)	$2,140	$2,446	NA	$2,236	$2,236	$2,236	$2,446	$2,446	$2,446	NA

Attachment 1

This Attachment 1 to Resolution No. 2011-112 is voided by Resolution No. 2012-44 adopted by the City Council at its meeting of May 8, 2012.

Land Use Designation	Infill East of Hwy 101	Infill West of Hwy 101	Northeast SPA	University District SPA	Southeast SPA	Sonoma Mountain Village PD	Northwest SPA	Wilfred Dowdell SPA	Stadium Lands PD	Canon Manor SPA
General Office (gallon)	$62.43	$62.43	NA	$106.30	$103.32	$103.32	$62.43	$62.43	$62.43	$103.32
Hotel/Motel (gallon)	$62.43	$62.43	NA	$106.30	$103.32	$103.32	$62.43	$62.43	$62.43	$103.32
Retail (gallon)	$62.43	$62.43	NA	$106.30	$103.32	$103.32	$62.43	$62.43	$62.43	$103.32
Light Industrial (gallon)	$62.43	$62.43	NA	$106.30	$103.32	$103.32	$62.43	$62.43	$62.43	$103.32
Heavy Industrial (gallon)	$62.43	$62.43	NA	$106.30	$103.32	$103.32	$62.43	$62.43	$62.43	$103.32
Warehouse (gallon)	$62.43	$62.43	NA	$106.30	$103.32	$103.32	$62.43	$62.43	$62.43	$103.32

Table 2 Non-Residential Fees Applied to Disturbed Site Area (TSF)

	Public Facilities Fee Zones									
Land Use Designation	Infill[2] East of Hwy 101	Infill[2] West of Hwy 101	Northeast SPA	University District SPA	Southeast SPA	Sonoma Mountain Village PD	Northwest SPA	Wilfred Dowdell SPA	Stadium Lands PD	Canon Manor SPA
General Office (enclosed tsf)	NA	NA	NA	$267	NA	NA	$236	$236	$236	NA
Hotel/Motel (enclosed tsf)	NA	NA	NA	$267	NA	NA	$236	$236	$236	NA
Retail (enclosed tsf)	NA	NA	NA	$267	NA	NA	$236	$236	$236	NA
Light Industrial (enclosed tsf)	NA	NA	NA	$267	NA	NA	$236	$236	$236	NA
Heavy Industrial (enclosed tsf)	NA	NA	NA	$267	NA	NA	$236	$236	$236	NA
Warehouse (enclosed tsf)	NA	NA	NA	$267	NA	NA	$236	$236	$236	NA

Attachment 1

Public Facilities Fee Schedule Notes

This Attachment 1 to Resolution No. 2011-112 is voided by Resolution No. 2012-44 adopted by the City Council at its meeting of May 8, 2012.

1. See 2011 Updat ouncil Resolution ___)
2. "Infill Developm Planned Developments
3. Non-residential fees are calculated by summing the values from Tables 2, 3 and 4 for the type of land use proposed
4. "Mixed Use" fees are calculated by summing the fees calculated for each type of land use within the mixed use proposal
5. NA or Not Applicable means that a particular fee component does not apply within the defined geographic area because:
    a. New development within that geographic does not create impacts to certain infrastructure systems; or
    b. Approved Specific Plans do not include certain land use classes, hence fee components have not been computed
6. Enclosed Thousand Square Feet is calculated based on the gross floor area, as defined in Chapter 17.04 of the Municipal Code including any patio area under a horizontal projection of the roof, the floor above or other covering, when such area is used for activities integral to the commercial business.
7. Disturbed Thousand Square Feet is calculated based on the total area approved for grading on the property.

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Executive Summary

ES.1 Introduction and Purpose

In 2004, the City of Rohnert Park (City) adopted its Public Facilities Finance Plan (PFFP) which outlined a comprehensive program for managing the cost of constructing the infrastructure improvements that will support new development. The PFFP implemented the City's General Plan policies that call for new development to pay a "fair-share" of the costs of improvements required to serve new development. The fair share analysis described in the General Plan is consistent with California Government Code Section 66000 et. seq. (the Mitigation Fee Act, hereinafter the Act). The Act requires that an agency develop a nexus or reasonable relationship between the mitigation fees it charges and the infrastructure required to serve new development. New development can only be required to pay its share of the costs; agencies must develop other funding sources for improvements or rehabilitation required to serve the existing customer base.

The PFFP was updated in 2006 (the 2006 PFFP Update) in order to reflect some land use changes and updated project costs. In 2006, the City also adopted its Sewer Capacity Charge Program, which currently provides a system for the City to collect capacity charges to support expansions to the wastewater treatment and disposal and water reclamation facilities, operated by the Santa Rosa Subregional System, which provides service to the City.

Since 2006, there have been changes in both the planned development within the City and its sphere of influence and changes in the way the Subregional System plans to implement its long-term capital improvement program and recover costs. In addition, the City has completed the construction of some facilities included in the 2006 PFFP Update and actual construction and financing costs are available (in 2006 only estimates were available). Finally, in order to enhance clarity and administrative ease, the City is proposing to combine the PFFP and Sewer Capacity Charge programs into a single program.

Because of these changes and in order to bring additional clarity to its fee program, the City undertook this update (the 2011 Update) to bring forward current planned land uses and cost estimates and to combine the PF Fee and Sewer Capacity Charge Programs into a single, comprehensive program.

This 2011 PFFP Update reflects:

- Changes to planned land use, particularly a significant planned development proposal known as Sonoma Mountain Village;
- Combination of all facilities included in the PFFP Program and Sewer Capacity Charge Program into a single fee program;
- Updated cost estimates for all facilities including actual construction and financing costs, for the Sewer Interceptor Outfall Project Phase 1, the Eastside Trunk Sewer Phase 1 and City Hall.
- Elimination of roadway and intersection improvements that more detailed engineering analysis have indicated are not necessary to mitigate impacts from development;
- Addition of roadway and intersection improvements that detailed engineering analysis indicated are necessary to mitigate impacts from development; and
- Addition of regional drainage improvements at the request of the development community.

This update also presents strategies for phasing and bond financing that allow facility construction to align with demands from new development.

The City adopts and administers its Public Facilities Fees (PF Fees) in accordance with the Act. Because of this, throughout this document, the terms PF Fee, development impact fee and mitigation fee are used interchangeably.

ES.2 Scope of Analysis

The City's General Plan sets land-use patterns and planned population growth. The General Plan describes potential development within five designated specific plan areas (SPAs): the Northwest SPA, the Wilfred Dowdell SPA, the Northeast SPA, the University District SPA and the Southeast SPA. In addition, the City is anticipating infill development in two planned development areas known as the Stadium Lands and Sonoma Mountain Village.

The City's General Plan also discusses the Canon Manor SPA, a rural-residential development located east of the City's incorporated area. The City provides sewer service to the Canon Manor SPA, under a contract with the County of Sonoma. Land uses in Canon Manor impact the size of the Eastside Trunk Sewer, the Sewer Interceptor Outfall Project and the Subregional System. In addition the City has incurred project management costs associated with supporting the development and construction of the sewer collection system that serves Canon Manor. Therefore, the Canon Manor development is included in the "fair share" analysis for sewer improvements. The City has, and will continue, to collect PF Fees from development in Canon Manor to mitigate its impacts.

This 2011 Update analyzes development impacts, mitigation fee burdens and potential bond financing programs for the following categories of capital improvements:

- Roadways
- Public Facilities
- Sewer System Facilities
- Water System Facilities
- Drainage System Facilities

ES.3 Capital Facilities included in the Public Facilities Finance Plan

In July of 2000, the City Council adopted a General Plan with a planning horizon through year 2020. The General Plan outlined projected growth and land use patterns and identified major infrastructure systems that the City would need to support these land use patterns. In July of 2002, the City Council approved a 5-year Capital Improvement Program ("CIP") that further refined planned upgrades and modifications to the City's infrastructure for the benefit of the existing population and to support new development. The CIP has been regularly updated to reflect cost increases.

In addition, the City continues to process development applications and review these applications under the California Environmental Quality Act (CEQA). The CEQA documents for proposed development projects provide detailed analysis of the development, its impacts and feasible mitigations for the impacts. These CEQA documents provide additional and more refined analysis of the capital improvements necessary to support planned development. This 2011 Update focuses on capital

improvements identified in the General Plan, the CIP or development-specific CEQA documents, where new development has a “fair-share” contribution.

The PF program does not include all the infrastructure required to serve new development. There are roadways, signals and utilities that are required for each specific development that are outside the scope of the PF Program. Infrastructure and capital improvements included in the PF Program must meet the criteria outlined below.

- The infrastructure or capital facility is part of a coordinated “network” that provides service to existing and new development or to more than one new development. Infrastructure that supports a single development is not included in the PF Fee Program.
- The infrastructure or capital facility is required to mitigate the impact of new development. Infrastructure that serves only existing development is not included in the PF Fee Program.
- Right-of-way and environmental mitigation costs are included in the PF Fee Program only if they do not overlap project specific requirements for dedications or mitigations.

Under the Act, the City may use its PF Fees to finance all or part of a project, provided the City does the following:

- Identifies the purpose of the fee;
- Identifies the uses of the fee typically by reference to an approved Capital Improvement Program, General Plan or other public document;
- Establishes a reasonable relationship (or nexus) between the use of the fee and the type of development;
- Establishes a reasonable relationship (or nexus) between the need for capital improvements and the type of development;
- Establishes, when a fee is imposed on a development project, a reasonable relationship between the amount of the fee and the costs of the capital improvements attributable to the development that will pay the fee.

Table ES -1, following, lists the improvements included in this 2011 Update and their cost estimates. Figure ES-1 illustrates their location.

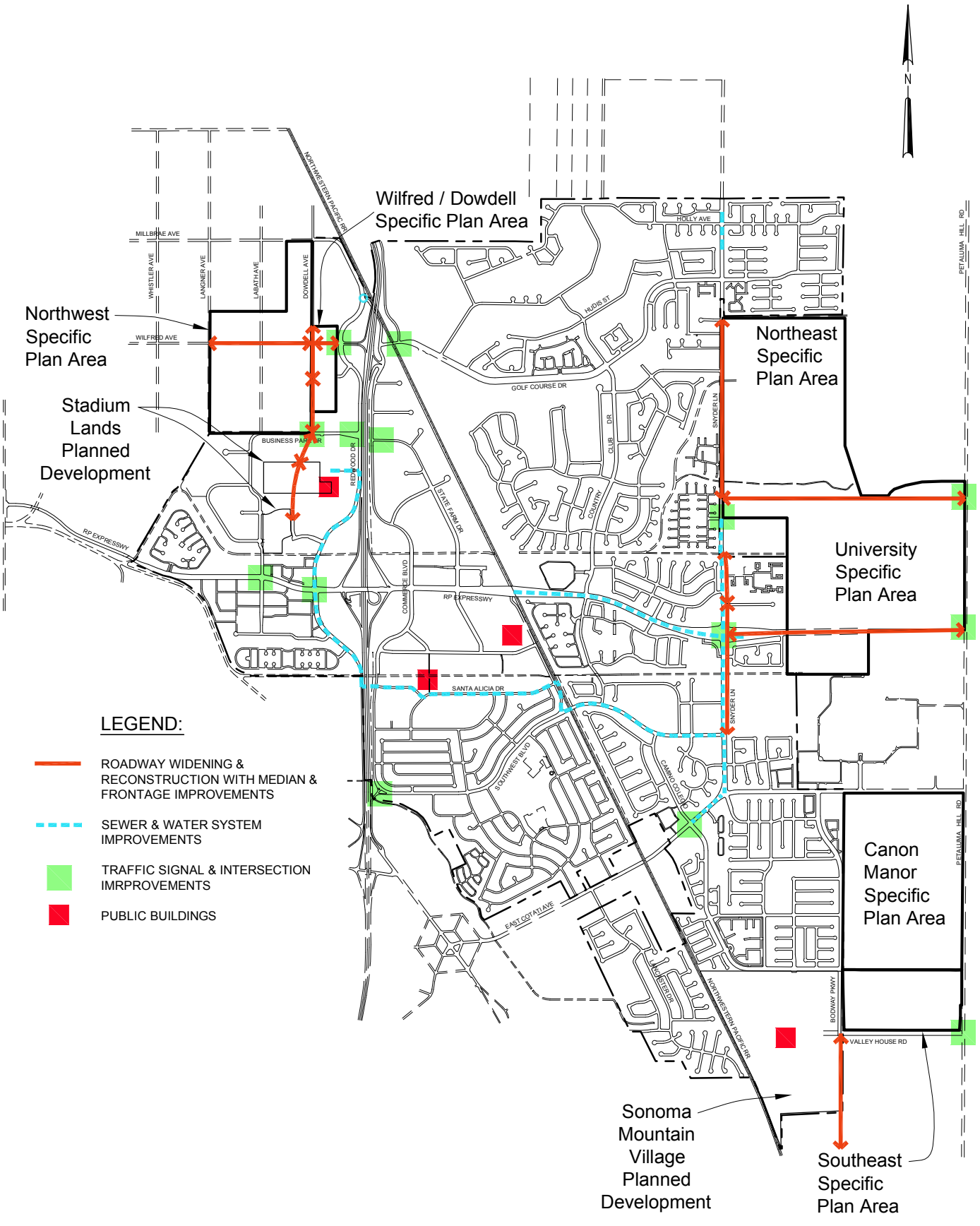

FIGURE ES-1
PFFP Improvements

WINZLER & KELLY

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Table ES-1 - Summary Cost Estimate

	2011 Total Costs	New Development	% of Program	2006 Total Cost
Roadways	$ 19,490,000	$ 18,588,800	5.50%	$ 23,180,200
Mitigation & Right of Way	$ 1,362,150	$ 1,362,150	0.38%	$ -
Bridges	$ 2,923,200	$ 2,923,200	0.83%	$ 2,999,000
Traffic Control & Intersection Improvements	$ 8,167,875	$ 8,167,875	2.31%	$ 7,873,500
Public Safety	$ 13,182,856	$ 7,170,121	3.72%	$ 18,037,200
Public Facilities				
Public Buildings & Master Plans	$ 11,652,200	$ 5,341,724	3.29%	$ 12,174,500
Westside Utilities	$ 1,605,749	$ 1,605,749	0.45%	$ -
Median & Frontage Improvements	$ 18,260,890	$ 18,260,890	5.16%	$ 14,951,513
Sewer System				
Eastside Trunk Sewer Phase 1 Construction	$ 13,761,943	$ 9,122,458	3.89%	$ 19,496,000
Eastside Trunk Sewer Phase 1 Interest	$ 7,843,392	$ 7,113,957	2.22%	$ -
Eastside Trunk Sewer Phase 2*	$ 10,637,139	$ 10,210,435	3.00%	$ -
Eastside Trunk Sewer Phase 2a*	$ 1,150,329	$ 1,039,579	0.32%	$ -
Eastside Trunk Sewer Phase 3	$ 2,805,235	$ 2,805,235	0.79%	$ -
Interceptor Outfall Phase 1	$ 23,132,623	$ 7,009,184	6.53%	$ 18,531,300
Interceptor Outfall Phase 2	$ 6,681,263	$ 1,739,566	1.89%	
Subregional System	$ 202,132,150	$ 52,628,114	57.09%	$ 295,186,400
Canon Manor Project Management	$ 435,328	$ 96,959	0.12%	$ -
Water System	$ 2,457,025	$ 2,457,025	0.69%	$ 2,322,800
Drainage	$ 6,368,331	$ 6,368,331	1.80%	$ -
Total PF Program	**$ 354,049,678**	**$ 164,011,351**	**100%**	**$ 414,752,413**
ENR CCI (San Francisco, CA - September 2011) = 10192.79				

The cost estimates for each improvement have been updated based on independent cost estimating efforts. For City Hall, the Interceptor Outfall Project Phase 1 and the Eastside Trunk Sewer Project Phase 1, which are constructed, actual costs including the cost of financing are used. For the Eastside Trunk Sewer Phase 2 and 2a, the design level cost estimate is used. This estimate is expected to be accurate within +/- 20%.

For all other facilities, the cost estimates in this 2011 Update are Class 5 (planning-level) estimates of probable construction cost as defined by the Association for the Advancement of Cost Engineering, International (AACE) as follows:

> *Generally prepared on very limited information, where little more than proposed plan type, its location, and the capacity are known, and for strategic planning purposes such as but not limited to market studies, assessment of viability, evaluation of alternate schemes, project screening, location and evaluation of resource needs and budgeting, long-range capital planning, etc. Some examples of estimating methods used would include cost/capacity curves and factors, scale-up factors, and parametric and modeling techniques.*

Unless specifically noted, the cost estimates do not include right of way acquisition. It is assumed that the needed new right-of-way associated with roadways will be dedicated by the adjoining property owners as a condition of development. This is consistent with General Plan Policy TR-4 which requires right of way dedication as a condition of development.[1]

The following facilities include land acquisition costs in the cost estimate:

- The new City Hall building, which the City purchased
- The corporation yard expansion
- The first phases of the Interceptor Outfall and Eastside Trunk Sewer projects
- The extension of Dowdell Avenue from Business Park Drive to 850’ south of Business Park Drive
- The Copeland Creek and Northwest detention basins.

When analysis of a capital project under CEQA identifies an adverse impact on an undisturbed, environmentally sensitive area, mitigation is typically required. PFFP facilities that likely require environmental mitigation are:

- Bodway Parkway
- Dowdell Avenue
- Keiser Avenue
- Rohnert Park Expressway
- Snyder Lane between G Section & Medical Center Drive
- Wilfred Avenue

[1] Our Place…Rohnert Park 2020 A Plan for the Future, General Plan, Forth Edition; adopted July 2000, pg 4-11.

Unless specifically noted, the cost estimates do not include the cost of environmental mitigation (wetlands, habitat, etc.). It is assumed that the environmental mitigation will be generally covered by developers as part of their requirements to provide environmental mitigation for their project.

The proposed detention basins will also be constructed in undeveloped areas. However, these basins can be designed to provide sensitive habitat and hence be self-mitigating. For this reason environmental mitigation costs are not included in the cost estimates for the detention basins.

ES.4 Summary of the Nexus Analysis for Capital Facilities

Roadway Improvements: The roadway improvement fee component funds planned improvements to the citywide traffic circulation network. The PFFP includes three types of roadways: existing roadways within the existing City limits that need to be widened to accommodate development (Snyder Lane); new roadways that need to be constructed to accommodate development (Bodway Parkway and portions of Dowdell Avenue); and existing County roadways that are annexed for the benefit of development (Keiser Avenue, Rohnert Park Expressway, Wilfred Avenue and portions of Dowdell Avenue). The cost allocation methodology is different for each type of roadway in order to reflect the different impacts caused by development.

When improvements are planned for existing roadways within the City's 1999 limits, namely Snyder Lane, costs are allocated to new and existing development based on trip generation. This is because development triggers an incremental improvement of an existing facility.

When new roadways are required to serve new development, namely Bodway Parkway and Dowdell Avenue, costs are allocated only to new development based on trip generation potential. This is because the new traffic generated by development triggered the need for the roadway.

When improvements are planned for roadways outside the City's 1999 limits, which are annexed only for the benefit of development, costs are also allocated only to new development, based on trip generation potential. This is because the new development triggered the need for annexation and upgrading of these roadways. This method is used for improvements to portions of Dowdell Avenue, Keiser Avenue, Rohnert Park Expressway and Wilfred Avenue.

Environmental Mitigation and Right-of-Way: This fee component funds environmental mitigation for wetlands and habitat along Bodway Parkway, portions of Dowdell Avenue extension and the Sonoma State University frontage along Rohnert Park Expressway. It also funds right-of-way acquisition for a portion of Dowdell Avenue, where there are no project proponents to dedicate property. All other environmental mitigation and right-of-way is contiguous to planned development and the PF Fee program assumes that the costs of this mitigation and right-of-way dedication will be required of the developer as part of the approval of the planned development. Environmental mitigation and right-of-way costs are allocated on the same basis as the contiguous roadway segment to all new development, because the City would not undertake the construction that required this mitigation or right-of-way except for new development.

Bridges: The bridge mitigation fee component funds the widening of bridges on Dowdell at Business Park Drive, and Snyder at Five, Crane, Hinebaugh and Copeland Creeks. These bridge widenings are

necessary to support the roadway widenings for new development. Bridge widening costs are spread, based on trip generation, to all new development because the City would not undertake the construction that required this mitigation except for new development.

Traffic Control & Intersection Improvements: The traffic control and intersection fee component funds improvements outlined in the City's Traffic Operations Study and the EIRs for various developments. These improvements are necessary to maintain the level of service of the City's circulation system. The improvements included in the PF Fee Program mitigate cumulative impacts from collective new development. Traffic control & intersection improvements that serve the entrance to a single development or that are internal to a Specific Plan Area or Planned Development are not included in the PF Fee Program. These improvements are the responsibility of the individual developer. Traffic control & intersection improvement costs are allocated based on trip generation, to all new development because the City would not undertake the construction that required this mitigation except for new development.

Public Safety: The public safety fee component funds planned improvements including a new Westside Public Safety Station, a new Southside Public Safety Station, and a Training Center currently proposed to be located with the new Westside Public Safety Station. The public safety component is calculated separately for the areas east and west of Highway 101 because different facilities are impacted by development. The analysis spreads the costs of the Westside Public Safety Station to all new and existing development west of Highway 101 based on population equivalency. The analysis spreads the costs of the Southside Public Safety Station to all new development east of Highway 101 based on population equivalency. The analysis spreads the costs of the Training Facilities to all new and existing development in the City based on population equivalency.

Public Facilities: The public facilities component funds the new City Hall, an expansion of the existing corporation yard to serve public safety and public works, water and drainage master plans and the median and frontage improvements along the new and widened roadways. It also funds backbone water, sewer and drainage utilities in Dowdell Avenue to serve new development in the westside SPAs and PDs.

The City Hall, corporation yard improvements and water and drainage master plans serve all new and existing development in the City. The analysis spreads the costs of these facilities to all areas and land uses based on population equivalency.

The median and frontage improvements include curb, gutter, sidewalk, median curb, utility undergrounding and landscaping as necessary to comply with the community design standards outlined in the General Plan and adopted as part of the City standards. All of these improvements are necessary to support new development and ensure compliance with City design standards. The analysis spread the costs of these improvements to all new land uses based on population equivalency.

The Dowdell Avenue utilities serve new development west of Highway 101 and are necessary to provide backbone utility service in this area. The analysis spread the costs of these improvements to all new land uses based on population equivalency, which provides a reasonable estimate of flow contribution to the proposed utilities.

Sewer System: The sewer system fee component funds the Interceptor Outfall Project (Phases 1 and 2), the Eastside Trunk Sewer Project (Phases 1, 2, 2a, and 3), improvements to the Santa Rosa Subregional System and Canon Manor Project Management.

The City has completed the Sewer Interceptor Outfall Project Phase 1 and the Eastside Trunk Sewer Project Phase 1 and it financed the construction through the issuance of bonded debt. Because the City has incurred construction costs and interest costs for these facilities, the sewer system fee component includes principal and interest on the debt that City has already incurred.

For remaining phases of both projects, estimated construction costs are used to calculate the fee component. Interest costs are not applied because the City has not incurred any interest costs for these future project phases.

For the Subregional System costs, the fee component is based on Santa Rosa's cost allocation model which includes the City's total cost share for existing facilities that provide some capacity for new development, and planned facilities that the Subregional System will need to construct in order to have enough capacity for General Plan buildout in Rohnert Park.

For the Canon Manor Project Management costs, the fee component is based on actual costs to date.

The sewer system fee component is calculated by allocating costs to the areas and land uses that create the demand for the capacity. Specifically,

- Eastside Trunk Sewer Phase 1 extends from the City's terminal pump station down Redwood Drive and across Highway 101 to the intersection of Commerce and Avram. The cost allocation for Phase 1 includes a $5,386,890[2] allocation to existing users because the Eastside Trunk Sewer has been sized to provide some capacity relief for the existing collection system. The remaining costs are allocated to all new development in the Northeast, University District, Southeast and Canon Manor SPAs and the Sonoma Mountain Village PD. These new developments will all contribute flow to the Eastside Trunk Sewer Phase 1.

- The estimated cost of Eastside Trunk Sewer Phase 2, which runs from the intersection of Commerce and Avram along Avram, Santa Alicia and Southwest Boulevard to its intersection with Snyder Lane, is allocated to all new development in the Northeast, University District, Southeast and Canon Manor SPAs, and the Sonoma Mountain Village PD. These properties contribute flow to the Eastside Trunk Sewer Phase 2.

- The estimated cost of Eastside Trunk Sewer Phase 2a, which runs from the intersection of Southwest and Snyder to the intersection of Snyder and East Cotati, is allocated to all new development in Southeast and Canon Manor SPAs, and the Sonoma Mountain Village PD. These properties contribute flow to the Eastside Trunk Sewer Phase 2a

[2] The existing users share of the construction cost of Eastside Trunk Sewer Phase 1 is $4,639,455 (see Table 5-14). The City made a $3,706,219 cash contribution to construction and financed the remained through Tax Increment Bonds. The existing users share of interest cost on those bonds is $729,435.

- The estimated cost of Eastside Trunk Sewer Phase 3, which runs from the intersection of Snyder and Southwest to the intersection of Snyder and Rohnert Park Expressway, is allocated to all new development in the Northeast and University District SPAs. These properties contribute flow to the Eastside Trunk Sewer Phase 3.
- The cost of the existing Interceptor Outfall Project Phase 1 and the estimated cost of the Interceptor Outfall Project Phase 2 are allocated to all development, new and existing including Canon Manor because all development contributes flow to these facilities.
- The City's share of the Subregional Systems costs is allocated to all development, new and existing including Canon Manor, because all development contributes flow to these facilities.
- The actual costs of Canon Manor Project Management are allocated to all existing and new development in the Canon Manor SPA, because all development in Canon Manor contributed to the need for the project and its attendant management costs.

Water System: The water system mitigation fee component funds improvements to the aqueduct turn-out that serves west Rohnert Park and a new water main that improves pressures and fire flows for new development on the eastside of Rohnert Park. The westside improvements are spread to all new westside development based on population because the new development creates the need for the improvements. The eastside transmission main is spread to all new development on the eastside of Rohnert Park based on population, because the new development creates the need for increased fire flow delivery and pressure.

Drainage: The drainage fee component funds detention basins in the Copeland Creek watershed and the "northeast" watershed, which includes Hinebaugh Creek and its tributaries. The detention basins are necessary to mitigate the impacts of additional impervious area created by new development. The Copeland Creek basin is spread to all land uses in the University District SPA, based on area, because it is the additional impervious area in the University District SPA that creates the need for this basin. While this basin only serves to mitigate impacts from the University District SPA, it may serve as part of a larger regional drainage and restoration project and hence is included in the PF Fee Program. The Northeast Basin is spread to all land uses in the Northeast, Northwest, and Wilfred Dowdell SPAs and the Stadium Lands PD based on area, because it is the additional impervious area created by these developments that creates the need for the basin.

ES.5 Summary of Base Mitigation Fee Burdens

Table ES-2, on the following pages presents the results of the PF Fee calculations for all components. The PF Fees presented include a 3% administration allowance. These fee burdens represent the "fair share" cost of planning, design and construction for the facilities included in this 2011 Update, in current dollars. Fee calculations have been prepared for infill development and each SPA or PD. For the SPAs and PDs, where the proposed development is well understood, the tables include a summary of the estimated fee burden for the whole SPA or PD.

Table ES-2 Summary of Proposed Public Facility Fee Components (1)

							Traffic	Westside			Eastside	
Land Use Class	**Training Facilities**	**City Hall**	**Corporation Yard Expansion**	**Median and Frontage Improvements**	**Drainage Master Plan**	**Water Master Plan**	**Roadways**	**Westside Safety Station**	**Westside Water Main Imps**	**Westside Utilities Dowdell**	**Southside Safety Station**	**Eastside Water Main Improvements**
Single Family Residential (units)	$256	$376	$393	$2,695	$11	$9	$2,380	$1,083	$95	$969	$711	$449
Multi-Family Residential (units)	$160	$235	$246	$1,684	$7	$5	$1,547	$677	$59	$605	$444	$281
Senior Housing (units)	$160	$235	$246	$1,684	$7	$5	$952	$677	$59	$605	$444	$281
Assisted Living (units)	$80	$117	$123	$842	$3	$3	$952	$338	$30	$303	$222	$140
General Office (enclosed tsf)	$229	$336	$351	$2,408	$10	$8	$4,046	$968	$85	$866	$636	$402
Hotel/Motel (enclosed tsf)	$84	$123	$129	$884	$4	$3	$4,284	$355	$31	$318	$233	$147
Retail (enclosed tsf)	$146	$214	$223	$1,533	$6	$5	$9,520	$616	$54	$551	$404	$256
Light Industrial (enclosed tsf)	$53	$77	$81	$556	$2	$2	$1,666	$223	$20	$200	$147	$93
Heavy Industrial (enclosedtsf)	$53	$77	$81	$556	$2	$2	$1,666	$223	$20	$200	$147	$93
Warehouse (enclosed tsf)	$53	$77	$81	$556	$2	$2	$1,161	$223	$20	$200	$147	$93

Drainage

	Northeast	**University District**	**Southeast**	**Sonoma Mountain Village**	**Northwest**	**Wilfred Dowdell**	**Stadium Lands**
Single Family Residential (units)	$ 1,710	$ 2,096	$ -	$ -	$ -	$ -	$ -
Multi-Family Residential (units)	$ 427	$ 518	$ -	$ -	$ 343	$ -	$ 414
Non-Residential Land Use (disturbed tsf)		$ 259	$ -	$ -	$ 236	$ 236	$ 236

Sewer not SMV

	Interceptor Outfall	ESTS 1	ESTS 2	ESTS 2a	ESTS 3	Subregional	Canon Manor PM
Single Family Residential (units)	$ 1,513	$ 3,809	$ 2,495	$ 648	$ 1,154	$ 9,100	$ 1,979
Multi-Family Residential (units)	$ 988	$ 2,487	$ 1,629	$ 423	$ 753	$ 5,942	$ 1,292
Non-Residential Land Use (gallon)	$ 9	$ 22	$ 15	$ 4	$ 7	$ 54	$ 12

Sewer SMV

	Interceptor Outfall	ESTS 1	ESTS 2	ESTS 2a	ESTS 3	Subregional
Single Family Residential (units)	$ 1,208	$ 3,042	$ 1,993	$ 517	$ -	$ 7,267
Multi-Family Residential (units)	$ 789	$ 1,986	$ 1,301	$ 338	$ -	$ 4,745
Non-Residential Land Use (gallon)	$ 9	$ 22	$ 15	$ 4	$ -	$ 54

(1) Proposed PF Fees funds facilities historically funded *in part* by the sewer capacity charge program. *Separate* sewer capacity charges will no longer be collected upon approval of this fee schedule.

Table ES-2a Summary of Proposed Mitigation Fees
Eastside Infill - 2011 PFFP

	Traffic Fee Component	Public Safety Fee Component	Public Facilities Fee Component	Sewer Fee Component	Water Fee Component	Drainage Fee Component	3% Administrative Allowance	Total Mitigation Fee per Unit	Number of Units in SPA	SPA Fee per Land Use
Land Use Class										
Single Family Residential (units)	$ 2,380	$ 967	$ 3,483	$ 10,613	$ -	$ -	$ 523	$ 17,967		$ -
Multi-Family Residential (units)	$ 1,547	$ 605	$ 2,177	$ 6,930	$ -	$ -	$ 338	$ 11,596		$ -
Senior Housing (units)	$ 952	$ 605	$ 2,177	$ 6,930	$ -	$ -	$ 320	$ 10,983		$ -
Assisted Living (units)	$ 952	$ 302	$ 1,088	$ 6,930	$ -	$ -	$ 278	$ 9,551		$ -
General Office (enclosed tsf)	$ 4,046	$ 864	$ 3,113	see below	$ -	$ -				
Hotel/Motel (enclosed tsf)	$ 4,284	$ 317	$ 1,143	see below	$ -	$ -				
Retail (enclosed tsf)	$ 9,520	$ 550	$ 1,981	see below	$ -	$ -				
Light Industrial (enclosed tsf)	$ 1,666	$ 199	$ 718	see below	$ -	$ -				
Heavy Industrial (enclosedtsf)	$ 1,666	$ 199	$ 718	see below	$ -	$ -				
Warehouse (enclosed tsf)	$ 1,161	$ 199	$ 718	see below	$ -	$ -				

Note: Sewer Component by gallon for nonresidential uses $ 62.43 gallon (does not include administrative allowance)
Population-based water and storm drain master plan components are included in the Public Facilities Fee Component.

Table ES-2b Summary of Proposed Mitigation Fees
Westside Infill Projects 2011 PFFP

	Traffic Fee Component	Public Safety Fee Component	Public Facilities Fee Component	Sewer Fee Component	Water Fee Component	Drainage Fee Component	3% Administrative Allowance	Total Mitigation Fee per Unit	Number of Units in SPA	SPA Fee per Land Use
Land Use Class										
Single Family Residential (units)	$ 2,380	$ 1,339	$ 4,452	$ 10,613	$ 95	$ -	$ 566	$ 19,445		$ -
Multi-Family Residential (units)	$ 1,547	$ 837	$ 2,782	$ 6,930	$ 59	$ -	$ 365	$ 12,520		$ -
Senior Housing (units)	$ 952	$ 837	$ 2,782	$ 6,930	$ 59	$ -	$ 347	$ 11,907		$ -
Assisted Living (units)	$ 952	$ 418	$ 1,391	$ 6,930	$ 30	$ -	$ 292	$ 10,013		$ -
General Office (enclosed tsf)	$ 4,046	$ 1,197	$ 3,979	see below	$ 85	$ -	$ 279			$ -
Hotel/Motel (enclosed tsf)	$ 4,284	$ 439	$ 1,461	see below	$ 31	$ -	$ 186			$ -
Retail (enclosed tsf)	$ 9,520	$ 761	$ 2,532	see below	$ 54	$ -	$ 386			$ -
Light Industrial (enclosed tsf)	$ 1,666	$ 276	$ 918	see below	$ 20	$ -	$ 86			$ -
Heavy Industrial (enclosedtsf)	$ 1,666	$ 276	$ 918	see below	$ 20	$ -	$ 86			$ -
Warehouse (enclosed tsf)	$ 1,161	$ 276	$ 918	see below	$ 20	$ -	$ 71			$ -

Note: Sewer Component by gallon for nonresidential uses $ 62.43 per gallon (does not include administrative allowance)
Non-resential fee calculated by assuming flow rate of 40 gallons/1000 sqare feet
Actual non-residential fees paid will be determined based on propoposed use
Population-based water and storm drain master plan components are included in the Public Facilities Fee Component.

Table ES-2c Summary of Proposed Mitigation Fees
Northeast SPA 2011 PFFP

Total Fee Burden for SPA **$ 29,111,240**

	Traffic Fee Component	Public Safety Fee Component	Public Facilities Fee Component	Sewer Fee Component	Water Fee Component	Drainage Fee Component	3% Administrative Allowance	Total Mitigation Fee per Unit	Number of Units in SPA	SPA Fee per Land Use
Land Use Class										
Single Family Residential (units)	$ 2,380	$ 967	$ 3,483	$ 18,071	$ 449	$ 1,710	$ 812	$ 27,873	920	$ 25,643,160
Multi-Family Residential (units)	$ 1,547	$ 605	$ 2,177	$ 11,799	$ 281	$ 427	$ 505	$ 17,340	200	$ 3,468,080
Senior Housing (units)	$ 952	$ 605	$ 2,177	$ 11,799	$ 281	$ -	$ 474	$ -		$ -
Assisted Living (units)	$ 952	$ 302	$ 1,088	$ 11,799	$ 140	$ -	$ 428	$ -		$ -
General Office (enclosed tsf)	$ 4,046	$ 864	$ 3,113	$ 4,252	$ 402	$ -	$ 380	$ -		$ -
Hotel/Motel (enclosed tsf)	$ 4,284	$ 317	$ 1,143	$ 4,252	$ 147	$ -	$ 304	$ -		$ -
Retail (enclosed tsf)	$ 9,520	$ 550	$ 1,981	$ 4,252	$ 256	$ -	$ 497	$ -		$ -
Light Industrial (enclosed tsf)	$ 1,666	$ 199	$ 718	$ 4,252	$ 93	$ -	$ 208	$ -		$ -
Heavy Industrial (enclosedtsf)	$ 1,666	$ 199	$ 718	$ 4,252	$ 93	$ -	$ 208	$ -		$ -
Warehouse (enclosed tsf)	$ 1,161	$ 199	$ 718	$ 4,252	$ 93	$ -	$ 193	$ -		$ -

Note Sewer Component by gallon for nonresidential uses $ 106.30 gallon (does not include administrative allowance)
Non-resential fee calculated by assuming flow rate of 40 gallons/1000 sqare feet
Actual non-residential fees paid will be determined based on propoposed use
Population-based water and storm drain master plan components are included in the Public Facilities Fee Component.

Table ES-2d Summary of Proposed Mitigation Fees
University District 2011 PFFP

Total Fee Burden for SPA **$ 41,464,113**

	Traffic Fee Component	Public Safety Fee Component	Public Facilities Fee Component	Sewer Fee Component	Water Fee Component	Drainage Fee Component	3% Administrative Allowance	Total Mitigation Fee per Unit	Number of Units in SPA	SPA Fee per Land Use
Land Use Class										
Single Family Residential (units)	$ 2,380	$ 967	$ 3,483	$ 18,071	$ 449	$ 2,096	$ 823	$ 28,270	883	$ 24,962,410
Multi-Family Residential (units)	$ 1,547	$ 605	$ 2,177	$ 11,799	$ 281	$ 518	$ 508	$ 17,434	762	$ 13,284,858
Senior Housing (units)	$ 952	$ 605	$ 2,177	$ 11,799	$ 281	$ 518	$ 490		0	$ -
Assisted Living (units)	$ 952	$ 302	$ 1,088	$ 11,799	$ 140	$ 518	$ 444		0	$ -
General Office (enclosed tsf)	$ 4,046	$ 864	$ 3,113	$ 4,252	$ 402		$ 380	$ 13,057	0	$ -
Hotel/Motel (enclosed tsf)	$ 4,284	$ 317	$ 1,143	$ 4,252	$ 147		$ 304	$ 10,448	0	$ -
Retail (enclosed tsf)	$ 9,520	$ 550	$ 1,981	$ 4,252	$ 256		$ 497	$ 17,055	175	$ 2,984,704
Light Industrial (enclosed tsf)	$ 1,666	$ 199	$ 718	$ 4,252	$ 93		$ 208	$ 7,136	0	$ -
Heavy Industrial (enclosedtsf)	$ 1,666	$ 199	$ 718	$ 4,252	$ 93		$ 208	$ 7,136	0	$ -
Warehouse (enclosed tsf)	$ 1,161	$ 199	$ 718	$ 4,252	$ 93		$ 193	$ 6,617	0	$ -
Nonresidential (distrubed tsf)						$ 259	$ 8	$ 267	871	$ 232,141

Note: Sewer Component by gallon for nonresidential uses $ 106.30 gallon (does not include administrative allowance)
Non-resential fee calculated by assuming flow rate of 40 gallons/1000 sqare feet
Actual non-residential fees paid will be determined based on propoposed use
Population-based water and storm drain master plan components are included in the Public Facilities Fee Component.

Table ES-2e Summary of Proposed Mitigation Fees
Southeast SPA 2011 PFFP

Total Fee Burden for SPA $ 11,593,153

	Traffic Fee Component	Public Safety Fee Component	Public Facilities Fee Component	Sewer Fee Component	Water Fee Component	Drainage Fee Component	3% Administrative Allowance	Total Mitigation Fee per Unit	Number of Units in SPA	SPA Fee per Land Use
Land Use Class										
Single Family Residential (units)	$ 2,380	$ 967	$ 3,483	$ 17,565	$ 449	$ -	$ 745	$ 25,590	394	$ 10,082,425
Multi-Family Residential (units)	$ 1,547	$ 605	$ 2,177	$ 11,469	$ 281	$ -	$ 482	$ 16,560	81	$ 1,341,400
Senior Housing (units)	$ 952	$ 605	$ 2,177	$ 11,469	$ 281	$ -	$ 464	$ 15,948	0	$ -
Assisted Living (units)	$ 952	$ 302	$ 1,088	$ 11,469	$ 140	$ -	$ 419	$ 14,371	0	$ -
General Office (enclosed tsf)	$ 4,046	$ 864	$ 3,113	$ 4,133	$ 402	$ -	$ 377	$ 12,935	0	$ -
Hotel/Motel (enclosed tsf)	$ 4,284	$ 317	$ 1,143	$ 4,133	$ 147	$ -	$ 301	$ 10,325	0	$ -
Retail (enclosed tsf)	$ 9,520	$ 550	$ 1,981	$ 4,133	$ 256	$ -	$ 493	$ 16,933	10	$ 169,328
Light Industrial (enclosed tsf)	$ 1,666	$ 199	$ 718	$ 4,133	$ 93	$ -	$ 204	$ 7,014	0	$ -
Heavy Industrial (enclosedtsf)	$ 1,666	$ 199	$ 718	$ 4,133	$ 93	$ -	$ 204	$ 7,014	0	$ -
Warehouse (enclosed tsf)	$ 1,161	$ 199	$ 718	$ 4,133	$ 93	$ -	$ 189	$ 6,494	0	$ -

Note Sewer Component by gallon for nonresidential uses $ 103.32 gallon (does not include administrative allowance)
Non-resential fee calculated by assuming flow rate of 40 gallons/1000 sqare feet
Actual non-residential fees paid will be determined based on propoposed use
Population-based water and storm drain master plan components are included in the Public Facilities Fee Component.

Table ES-2f Summary of Proposed Mitigation Fees
Sonoma Mountain Village 2011 PFFP

Total Fee Burden for SPA $ 35,097,676

	Traffic Fee Component	Public Safety Fee Component	Public Facilities Fee Component	Sewer Fee Component	Water Fee Component	Drainage Fee Component	3% Administrative Allowance	Total Mitigation Fee per Unit	Number of Units in SPA	SPA Fee per Land Use
Land Use Class										
Single Family Residential (units)	$ 2,380	$ 967	$ 3,483	$ 14,026	$ 449	$ -	$ 639	$ 21,945	700	$ 15,361,640
Multi-Family Residential (units)	$ 1,547	$ 605	$ 2,177	$ 9,158	$ 281	$ -	$ 413	$ 14,181	994	$ 14,095,623
Senior Housing (units)	$ 952	$ 605	$ 2,177	$ 9,158	$ 281	$ -	$ 395	$ 13,568	0	$ -
Assisted Living (units)	$ 952	$ 302	$ 1,088	$ 9,158	$ 140	$ -	$ 349	$ 11,991	0	$ -
General Office (enclosed tsf)	$ 4,046	$ 864	$ 3,113	$ 3,305	$ 402	$ -	$ 352	$ 12,082	426	$ 5,146,815
Hotel/Motel (enclosed tsf)	$ 4,284	$ 317	$ 1,143	$ 3,305	$ 147	$ -	$ 276	$ 9,472	126	$ 1,193,522
Retail (enclosed tsf)	$ 9,520	$ 550	$ 1,981	$ 3,305	$ 256	$ -	$ 468	$ 16,080	262	$ 4,209,710
Light Industrial (enclosed tsf)	$ 1,666	$ 199	$ 718	$ 3,305	$ 93	$ -	$ 179	$ 6,161	0	$ -
Heavy Industrial (enclosedtsf)	$ 1,666	$ 199	$ 718	$ 3,305	$ 93	$ -	$ 179	$ 6,161	0	$ -
Warehouse (enclosed tsf)	$ 1,161	$ 199	$ 718	$ 3,305	$ 93	$ -	$ 164	$ 5,641	0	$ -
Credit for existing development	$ (1,666)	$ (199)	$ (718)	$ (4,133)	$ (93)	$ -	$ (204)	$ (7,014)	700	$ (4,909,634)

Note Sewer Component by gallon for nonresidential uses $ 103.28 gallon (does not include administrative allowance)
Non-resential fee calculated by assuming flow rate of 40 gallons/1000 sqare feet
Actual non-residential fees paid will be determined based on propoposed use
Population-based water and storm drain master plan components are included in the Public Facilities Fee Component.

Table ES-2g Summary of Proposed Mitigation Fees
Northwest SPA - 2011 PFFP

Total Fee Burden for SPA $ 25,801,443

	Traffic Fee Component	Public Safety Fee Component	Public Facilities Fee Component	Sewer Fee Component	Water Fee Component	Drainage Fee Component	3% Administrative Allowance	Total Mitigation Fee per Unit	Number of Units in SPA	SPA Fee per Land Use
Land Use Class										
Single Family Residential (units)	$ 2,380	$ 1,339	$ 4,452	$ 10,613	$ 95	$ 343	$ 577	$ 19,798	0	$ -
Multi-Family Residential (units)	$ 1,547	$ 837	$ 2,782	$ 6,930	$ 59	$ 343	$ 375	$ 12,873	900	$ 11,585,455
Senior Housing (units)	$ 952	$ 837	$ 2,782	$ 6,930	$ 59	$ 343	$ 357	$ 12,260	0	$ -
Assisted Living (units)	$ 952	$ 418	$ 1,391	$ 6,930	$ 30	$ 343	$ 302	$ 10,366	0	$ -
General Office (enclosed tsf)	$ 4,046	$ 1,197	$ 3,979	$ 2,497	$ 85	$ -	$ 354	$ 12,157	230	$ 2,796,192
Hotel/Motel (enclosed tsf)	$ 4,284	$ 439	$ 1,461	$ 2,497	$ 31	$ -	$ 261	$ 8,974	0	$ -
Retail (enclosed tsf)	$ 9,520	$ 761	$ 2,532	$ 2,497	$ 54	$ -	$ 461	$ 15,825	450	$ 7,121,451
Light Industrial (enclosed tsf)	$ 1,666	$ 276	$ 918	$ 2,497	$ 20	$ -	$ 161	$ 5,538	520	$ 2,879,954
Heavy Industrial (enclosedtsf)	$ 1,666	$ 276	$ 918	$ 2,497	$ 20	$ -	$ 161	$ 5,538	0	$ -
Warehouse (enclosed tsf)	$ 1,161	$ 276	$ 918	$ 2,497	$ 20	$ -	$ 146	$ 5,019	0	$ -
Nonresidential (distrubed tsf)	$ -	$ -	$ -	$ -	$ -	$ 236	$ 7	$ 243	5837	$ 1,418,391

Note Sewer Component by gallon for nonresidential uses $ 62.43 gallon (does not include administrative allowance)
Non-resential fee calculated by assuming flow rate of 40 gallons/1000 sqare feet
Actual non-residential fees paid will be determined based on propoposed use
Population-based water and storm drain master plan components are included in the Public Facilities Fee Component.

Table ES-2h Summary of Proposed Mitigation Fees
Wilfred Dowdell SPA 2011 PFFP

Total Fee Burden for SPA $ 5,041,482

	Traffic Fee Component	Public Safety Fee Component	Public Facilities Fee Component	Sewer Fee Component	Water Fee Component	Drainage Fee Component	3% Administrative Allowance	Total Mitigation Fee per Unit	Number of Units in SPA	SPA Fee per Land Use
Land Use Class										
Single Family Residential (units)	$ 2,380	$ 1,339	$ 4,452	$ 10,613	$ 95	$ -	$ 566	$ -	0	$ -
Multi-Family Residential (units)	$ 1,547	$ 837	$ 2,782	$ 6,930	$ 59	$ -	$ 365	$ -	0	$ -
Senior Housing (units)	$ 952	$ 837	$ 2,782	$ 6,930	$ 59	$ -	$ 347	$ -	0	$ -
Assisted Living (units)	$ 952	$ 418	$ 1,391	$ 6,930	$ 30	$ -	$ 292	$ -	0	$ -
General Office (enclosed tsf)	$ 4,046	$ 1,197	$ 3,979	$ 2,497	$ 85	$ -	$ 354	$ 12,157	0	$ -
Hotel/Motel (enclosed tsf)	$ 4,284	$ 439	$ 1,461	$ 2,497	$ 31	$ -	$ 261	$ 8,974	0	$ -
Retail (enclosed tsf)	$ 9,520	$ 761	$ 2,532	$ 2,497	$ 54	$ -	$ 461	$ 15,825	302	$ 4,779,285
Light Industrial (enclosed tsf)	$ 1,666	$ 276	$ 918	$ 2,497	$ 20	$ -	$ 161	$ 5,538	0	$ -
Heavy Industrial (enclosedtsf)	$ 1,666	$ 276	$ 918	$ 2,497	$ 20	$ -	$ 161	$ 5,538	0	$ -
Warehouse (enclosed tsf)	$ 1,161	$ 276	$ 918	$ 2,497	$ 20	$ -	$ 146	$ 5,019	0	$ -
Nonresidential (distrubed tsf)	$ -	$ -	$ -	$ -	$ -	$ 236	$ 7	$ 243	1079	$ 262,197

Note Sewer Component by gallon for nonresidential uses $ 62.43 gallon (does not include administrative allowance)
Non-resential fee calculated by assuming flow rate of 40 gallons/1000 sqare feet
Actual non-residential fees paid will be determined based on propoposed use
Population-based water and storm drain master plan components are included in the Public Facilities Fee Component.

Table ES-2i Summary of Proposed Mitigation Fees
Stadium Lands PD - 2011 PFFP

Total Fee Burden for SPA $ 6,754,421

	Traffic Fee Component	Public Safety Fee Component	Public Facilities Fee Component	Sewer Fee Component	Water Fee Component	Drainage Fee Component	3% Administrative Allowance	Total Mitigation Fee per Unit	Number of Units in SPA	SPA Fee per Land Use
Land Use Class										
Single Family Residential (units)	$ 2,380	$ 1,339	$ 4,452	$ 10,613	$ 95	$ -	$ 566	$ -	0	$ -
Multi-Family Residential (units)	$ 1,547	$ 837	$ 2,782	$ 6,930	$ 59	$ 414	$ 377	$ 12,946	338	$ 4,375,805
Senior Housing (units)	$ 952	$ 837	$ 2,782	$ 6,930	$ 59	$ 414	$ 359	$ -	0	$ -
Assisted Living (units)	$ 952	$ 418	$ 1,391	$ 6,930	$ 30	$ 414	$ 304	$ -	0	$ -
General Office (enclosed tsf)	$ 4,046	$ 1,197	$ 3,979	$ 2,497	$ 85	$ -	$ 354	$ 12,157	0	$ -
Hotel/Motel (enclosed tsf)	$ 4,284	$ 439	$ 1,461	$ 2,497	$ 31	$ -	$ 261	$ 8,974	0	$ -
Retail (enclosed tsf)	$ 9,520	$ 761	$ 2,532	$ 2,497	$ 54	$ -	$ 461	$ 15,825	140	$ 2,215,562
Light Industrial (enclosed tsf)	$ 1,666	$ 276	$ 918	$ 2,497	$ 20	$ -	$ 161	$ 5,538	0	$ -
Heavy Industrial (enclosedtsf)	$ 1,666	$ 276	$ 918	$ 2,497	$ 20	$ -	$ 161	$ 5,538	0	$ -
Warehouse (enclosed tsf)	$ 1,161	$ 276	$ 918	$ 2,497	$ 20	$ -	$ 146	$ 5,019	0	$ -
Nonresidential (distrubed tsf)	$ -	$ -	$ -	$ -	$ -	$ 236	$ 7	$ 243	671	$ 163,053.00

*** note Sewer Component by gallon for nonresidential uses** $ 62.43 gallon (does not include administrative allowance)

*** Non-resential fee calculated by assuming flow rate of 40 gallons/1000 sqare feet**

Actual non-residential fees paid will be determined based on propoposed use

Population-based water and storm drain master plan components are included in the Public Facilities Fee Component.

Table ES-2j Summary of Proposed Mitigation Fees
Canon Manor SPA 2011 PFFP

Total Fee Burden for SPA $ 986,386

	Traffic Fee Component	Public Safety Fee Component	Public Facilities Fee Component	Sewer Fee Component	Water Fee Component	Drainage Fee Component	3% Administrative Allowance	Total Mitigation Fee per Unit	Number of Units in SPA	SPA Fee per Land Use
Land Use Class										
Single Family Residential (units)	$ -	$ -	$ -	$ 19,544	$ -	$ -	$ 586	$ 20,130	49	$ 986,386
Multi-Family Residential (units)	$ -	$ -	$ -	$ 12,761	$ -	$ -	$ 383	$ 13,144	0	$ -
Senior Housing (units)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0	$ -
Assisted Living (units)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0	$ -
General Office (enclosed tsf)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0	$ -
Hotel/Motel (enclosed tsf)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0	$ -
Retail (enclosed tsf)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0	$ -
Light Industrial (enclosed tsf)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0	$ -
Heavy Industrial (enclosedtsf)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0	$ -
Warehouse (enclosed tsf)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0	$ -

Units in Canon Manor are remaining units that have not paid fees to the City

In some cases, the City may require certain backbone infrastructure to be constructed in advance of development so that the infrastructure can be available to serve development immediately. In these cases, the City is able to finance the construction through bond sales secured by either special assessments or special taxes levied on the developing property. In cases where infrastructure is financed through bonds, secured by assessment or special tax liens levied on property, the City will not collect mitigation fees from the same property owners for the same facilities.

The PF Fee Program is intended to function as a comprehensive program for funding all capital improvements included in the program. While the nexus findings contained in this 2011 Update have been developed for each proposed improvement individually, this 2011 Update recommends that the City continue its practice of collecting a single PF Fee. This single fee concept allows the City to use available cash flow to fund needed facilities without undue restrictions.

The PF Fees do not cover all water improvements necessary to serve new development. Additional water facilities are included in the City's Water Capacity Charge Programs.

ES.6 Approval Process and Annual Updates

The City Council approves all PF Fees. The Council renders its decision on the proposed fees after calling a Public Hearing and considering testimony and evidence presented at a Public Hearing. The Act allows agencies to update their mitigation fees and requires annual public accountings for the fees and their use. All annual reporting is made at a public meeting.

In a City with a large planned growth element, these annual findings are especially relevant. The fee calculations and revenue projections provided in this 2011 Update are based on planning projections for new development and budgetary estimates for the capital improvements. As capital improvement budgets are updated through the design and construction process and as land use projections are updated as development proceeds, it is very important to update the mitigation fees to reflect current costs and growth patterns in order to assure that the PF Fee program is generating enough revenue to fund the planned capital facilities.

ES.7 Bond Financing Districts

The City will approve development in accordance with its Growth Management Ordinance. This Ordinance has the effect of limiting the number of residential building permits that the City can issue, in order to maintain an average annual growth rate of approximately 1% per year. Hence, this Ordinance will limit the amount of PF Fee revenue that the City can collect in a single year, because PF Fees are collected at the time a building permit is issued by the City. In addition, some of the capital improvements included in the PF Fee Program need to be constructed prior to the occupancy of newly developed property. These conditions, combined with the market-driven nature of real estate development, means that the City may not be able to collect PF Fee revenue at the same rate that PF Fees program expenditures occur.

The 2011 Update includes provisions to fund all or a portion of the proposed mitigation fees, before the issuance of building permits, with assessment or special tax bonds in order to facilitate orderly construction of public facilities. Developers may reduce or completely pay-off their calculated PF Fee

burden by participating in a bond financing program. Development that occurs either before or after the bond financing takes place would continue to pay PF Fees in order to support their “fair share” of these capital improvements. Table ES-3 outlines the PF facilities that are needed early in the planned development program and are therefore logical to include in a bond financing program. The costs shown do not include the costs of bond issuance, which will be developed at the time of the bond sales. Because the costs of issuance benefit only the specific property that participates in the bond financing, these costs will not be included in future revisions of the PF Fees. Bond financing will likely occur serially, meaning that not all financed facilities will be constructed at once and the City may conduct multiple bond sales.

Table ES 3(a) – Potential Bond Financed Facilities – Eastside

		2011 Total Costs	2011 Allocations New Development	2011 Allocations Existing Development
Roadways & Bridges				
No.	**Name**			
1	Bodway Parkway: between Valley House and Railroad	$ 994,500	$ 994,500	$ -
	Environmental Mitigation	$ 400,800	$ 400,800	$ -
6	Keiser Avenue: between Snyder Lane & Petaluma Hill Road	$ 2,588,500	$ 2,588,500	$ -
7	Rohnert Park Expressway: between Syder Lane & Petaluma Hill road	$ 4,658,400	$ 4,658,400	$ -
	Environmental Mitigation	$ 223,200	$ 223,200	$ -
8	Snyder Lane: between G Section & north side of Creekside Middle School	$ 3,284,500	$ 2,810,300	$ 474,200
	Bridge @ Five Creek	$ 539,400	$ 539,400	$ -
	Bridge @ Crane Creek	$ 539,400	$ 539,400	$ -
9	Snyder Lane: between south side of Creekside Middle School and Medical Center Drive	$ 828,700	$ 711,500	$ 117,200
	Bridge @ Hinebaugh Creek	$ 539,400	$ 539,400	$ -
10	Snyder Lane: between Medical Center Drive and Southwest Blvd	$ 2,020,900	$ 1,711,100	$ 309,800
	Bridge @ Copeland Creek	$ 435,000	$ 435,000	$ -
Traffic Control Devices & Intersection Improvements				
6	Petaluma Hill Road @ Keiser Avenue	$ 1,290,859	$ 1,290,859	$ -
7	Petaluma Hill Road @ RPX	$ 263,336	$ 263,336	$ -
8	Petaluma Hill Road @ Valley House	$ 1,290,859	$ 1,290,859	$ -
12	Snyder Lane @ Keiser	$ 780,003	$ 780,003	$ -
13	Snyder Lane @ RPX	$ 270,819	$ 270,819	$ -
Public Safety				
	New Southside Station	$ 3,640,300	$ 3,640,300	$ -
Public Facilities				
	Median and Frontage Improvements			
	Bodway Parkway: between Valley House and Railroad	$ 1,159,938	$ 1,159,938	$ -
	Keiser Avenue: between Snyder Lane & Petaluma Hill Road	$ 2,961,684	$ 2,961,684	$ -
	Rohnert Park Expressway: between Syder Lane & Petaluma Hill Road	$ 4,736,232	$ 4,736,232	$ -
	Snyder Lane: between G Section & north side of Creekside Middle School	$ 2,761,880	$ 2,761,880	$ -
	Snyder Lane: between south side of Creekside Middle School and Medical Center Drive	$ 358,589	$ 358,589	$ -
	Snyder Lane: between Medical Center Drive and Southwest Blvd	$ 945,371	$ 945,371	$ -
Water System Improvements				
	Eastside Transmission Main	$ 2,299,700	$ 2,299,700	$ -
Storm Drainage Facilities - Proposed Additions				
	Copeland Detention Basin (10 acres)	$ 2,470,731	$ 2,470,731	$ -
	Northeast Detention Basin (6.5 acres)	$ 3,897,600	$ 3,897,600	$ -
Total Plan		**$ 46,180,601**	**$ 45,279,401**	**$ 901,200**
ENR CCI (San Francisco, CA - September 2011) = 10192.79				

Table ES 3(b) – Potential Bond Financed Facilities -Westside

		2011 Total Costs	2011 Allocations New Development	2011 Allocations Existing Development
Roadways & Bridges				
No.	**Name**			
2	Dowdell Avenue: between 375' north & 750' south of Wilfred Avenue	$ 870,000	$ 870,000	$ -
3	Dowdell Avenue: between 750' south of Wilfred Avenue and Business Park Drive	$ 845,600	$ 845,600	$ -
	Bridge @ Business Park Drive	$ 870,000	$ 870,000	$ -
11	Wilfred Avenue: between 1999 City Limits and Dowdell Avenue	$ 453,500	$ 453,500	$ -
12	Wilfred Avenue: between Dowdell Avenue and UGB	$ 1,892,300	$ 1,892,300	$ -
Traffic Control Devices & Intersection Improvements				
9	Redwood Drive @ Business Park Drive	$ 516,567	$ 516,567	$ -
11	Redwood Drive @ Wilfred	$ 1,068,099	$ 1,068,099	$ -
				$ -
Public Safety				
	New Westside Station	$ 3,722,112	$ 1,795,002	$ 1,927,110
Median and Frontage Improvements				
	Dowdell Avenue: between 375' north & 750' south of Wilfred Avenue	$ 754,076	$ 754,076	$ -
	Dowdell Avenue: between 750' south of Wilfred Avenue and Business Park Drive	$ 837,863	$ 837,863	$ -
	Wilfred Avenue: between 1999 City Limits and Dowdell Ave	$ 508,706	$ 508,706	$ -
	Wilfred Avenue: between Dowdell Ave and UGB	$ 2,122,534	$ 2,122,534	$ -
Total Plan		**$ 14,461,357**	**$ 12,534,247**	**$ 1,927,110**
ENR CCI (San Francisco, CA - September 2011) = 10192.79				

1 Authority, Methodology and Structure of the Plan

1.1 Authority

In California, an agency's ability to levy mitigation fees, also known as development impact fees, is governed by California Government Code Section 66000 et. seq. (the Mitigation Fee Act, hereinafter the Act). The Act requires a "nexus" or reasonable relationship between mitigation fees levied by an agency and infrastructure required to support development. New development can only be required to pay its share of the costs. The Act specifically states that mitigation fees may not be used for general revenue purposes. In addition, the Act requires regular accounting for expenditures from the mitigation fee funds, in part in order to assure that services and infrastructure keep pace with demand.

The City is proposing to change the facilities included in the PFFP and update the costs associated with those facilities, in part to allow for better alignment between the mitigation fee program and the mitigation measures outlined in project-specific EIRs. Because of these changes, the City must comply with the requirements for establishing mitigation fees. Specifically this 2011 Update:

- Identifies the purpose of the City's overall Public Facilities Fee Program and the purpose of each fee component;
- Identifies the uses of the fee;
- Establishes a reasonable relationship (or nexus) between the use of the fee and the type of development;
- Establishes a reasonable relationship (or nexus) between the need for capital improvements and the type of development;
- Establishes a reasonable relationship (or nexus) between the amount of the fee and the costs of the capital improvements attributable to the development on which the fee is imposed.

1.2 Methodology[3]

The methodology for calculating mitigation fees, including the methodology used to determine the cost of facilities included in the fee program, must meet the Act's test for reasonableness. Because of the unique circumstances of individual agencies, there are numerous methodologies for calculating mitigation fees but each is grounded in the basic principal of reasonable allocation of costs to benefitting entities. Several major publications regarding mitigation fees and charges for various infrastructure needs are recognized in the industry including:

- Development Impact Fees, Arthur C. Nelson, 1998.

[3] This discussion is sourced from *City of Santa Rosa Water and Wastewater Demand Fee Study* date March 6, 2007 (The Reed Group)

- Principles of Water Rates, Fees, and Charges, Manual M1, American Water Works Association, 5th Edition, 2000.
- Comprehensive Guide to Water and Wastewater Finance and Pricing, Second Edition, George A. Raftelis, 1993.
- System Development Charges for Water, Wastewater, and Stormwater Facilities, Arthur C. Nelson, 1995.

These publications describe a number of methodologies but all the methodologies are grounded in two primary approaches – the incremental cost methodology and the system buy-in methodology. The two approaches are described below to illustrate the different perspectives. A method that combines both perspectives is also described.

1.2.1 Incremental Cost Method

The incremental cost methodology is commonly used for establishing fees in communities experiencing considerable new growth. The approach is based on the cost of new or planned capital facilities. The cost of growth-related facilities is allocated to the new development to be served by the facilities. Under this approach, new customers pay for the incremental investment necessary for system expansion. Consequently, new customers pay fully for additional capacity in new facilities to avoid imposing a burden on existing customers. For many of the facilities in the 2011 Update, this is an appropriate method for allocating costs.

1.2 2 System Buy-In Method

The system buy-in method is based on the average investment in the capital facilities by current customers. Raftelis describes the system buy-in methodology as follows: “Under this approach, capital recovery charges are based upon the ‘buy-in’ concept that existing users, through service charges, tax contributions, and other up-front charges, have developed a valuable public capital facility. The charge to users is designed to recognize the current value of providing the capacity necessary to serve additional users. The charge is computed by establishing fixed asset value under a historical or reproduction cost basis and deducting relevant liabilities (long-term debt, loans, etc.) from this amount. The number of units of service is then divided into this difference (considered to be the utility’s equity) to establish the capital recovery charge.”

More simply, the buy-in fee is determined by taking the current value of assets (historical cost escalated to current dollars and adjusted for depreciation) divided by the current number of customers (expressed in equivalent residential units). By paying fees calculated on this basis, new development buys into the existing capital facilities on par with existing development.

1.2.3 Combined Method – Future System Buy-in

This method combines both existing and planned facilities into fee calculations. This is because new development benefits from surplus capacity in existing facilities, but also requires new facilities to provide required capacity. The challenge in using a combined approach for fee calculation is to make certain that new development is not paying for needed capacity in both existing and new facilities. For example, in Rohnert Park, it is not appropriate to require new development to "buy into" the existing sewer collection system. There is not capacity in that collection system and new development is required to construct the Eastside Trunk Sewer and the westside backbone utilities in order to create this capacity. However, it is appropriate for new development to support a share of the Interceptor Outfall Project because it is sized to accommodate the wastewater generated at General Plan buildout.

One approach that combines both existing and new facilities is the future system buy-in methodology, which is similar to the system buy-in method described previously, except that it views and assesses the system at some point in the future. Where the typical system buy-in approach divides the existing system value by the current number of units of development, the future buy-in approach considers what the system will be like at some future planning horizon and divides this by the total number of units of development to be served at that point in time.

1.2.4 Methodology Used

In this 2011 Update, the Incremental Cost Method is commonly used and is applied to allocate costs for all roadways, environmental mitigation, bridges, traffic signals and intersection improvements, the Southside Public Safety Station, Median and Frontage Improvements, Eastside Trunk Sewer Phases 2, 2a and 3, and water system and drainage improvements.

The System Buy-in Method is used to allocate costs for Phase 1 of the Interceptor Outfall Project, Phase 1 of the Eastside Trunk Sewer Project, City Hall and Canon Manor project management. These facilities are all constructed but have been designed with capacity to serve the new development.

The Future System Buy-in Method is used to allocate costs for the Westside Public Safety Station, the Public Safety Training Facilities, the Corporation Yard Expansion and the Subregional System facilities. These facilities will be constructed to provide service for new and existing development at some point in the future.

1.3 Structure of the Plan

This chapter presented the authority under which the City develops, adopts, and updates its PF Fee Program as well as discussion of the fee calculation methodology that will be applied.

Chapter 2 presents an overview of the land use and cost estimating assumptions that are used throughout this 2011 Update.

Chapters 3 through 7 present descriptions, cost estimates and fee calculations for each component of the City's PF Fee Program. These chapters also present the nexus findings, required by the Act, for each component part of the City's PF Fee Program.

Chapter 8 provides some initial guidance on financing facilities in the PFFP in order to have capacity available in time for new development.

2 Land Uses & Basis of Cost Estimates

2.1 Introduction

This chapter outlines the existing and proposed, residential and nonresidential land uses within the City and its sphere of influence. The land use classes are used to model the impacts created by new and existing development in order to provide for fair allocation of costs. Land use information is current through mid-2011 and was updated from the 2006 PFFP based upon:

- City of Rohnert Park Building Permit Records through September 2011
- City of Rohnert Park Log of General Plan Amendments through August 2011
- City of Rohnert Park Comparison of Specific Plans and Planned Developments as of April 22, 2009
- Specific Plan, Draft and/or Final Environmental Impact Reports for:
  - Northeast Specific Plan Area (May 2008)
  - Northwest Specific Plan Area (May 2008 partial plan)
  - Southeast Specific Plan Area (July 2009)
  - University District Specific Plan Area (May 2006)
  - Wilfred Dowdell Specific Plan Area (September 2008)
  - Stadium Land Planned Development (February 2008)
  - Stadium Area Planned Development Zoning District (February 2005)
  - Sonoma Mountain Village Planned Development (August 2009)
- Developer representatives, personal communications
- City of Rohnert Park Planning Department personal communication

2.2 Existing and Proposed Land Uses

The City's General Plan identified six major SPAs:

Northeast SPA	Canon Manor SPA
University District SPA	Wilfred Dowdell SPA
Southeast SPA	Northwest SPA

The City's General Plan anticipated annexation and development of all of the SPAs except Canon Manor. To date the University District and Wilfred Dowdell SPAs have been approved and annexed and the Northeast and Southeast SPAs are moving through the development approval process. Since the adoption of the General Plan in 2000, a casino has been proposed just inside the City's sphere of influence in the Northwest SPA; however, this proposed land use is not in the General Plan, is still under review and remains uncertain. Therefore, Northwest SPA land uses are modeled as proposed by the

General Plan. As information becomes available regarding the proposed casino, the PFFP should be updated to take into account that land use and its impacts.

Because the City provides sewer service to the Canon Manor SPA, which is outside the City boundaries, the 220 single family residences, which can be developed in Canon Manor, are included in the fee calculations for sewer system improvements. Canon Manor land uses are not included in the modeling for other types of facilities because the City does not provide other services in Canon Manor.

This 2011 Update also takes into account two major infill development projects: the Stadium Lands PD and the Sonoma Mountain Village PD. The City has approved Specific Plans and Environmental Documents for each of these planned developments. Each of these planned developments includes enough specificity to allow for the calculation of the mitigation fee burden associated with the proposed land uses. The Stadium Lands PD includes new residential and retail land uses on property that had previously been zoned for municipal purposes. The Sonoma Mountain Village PD includes new residential and retail land uses on property that had previously been zoned for industrial purposes. As a result of these changes, this 2011 Update includes more residential and retail land use and less industrial land use than the 2006 PFFP Update and the General Plan. Appendix A provides an update of the land uses by the traffic area zones that were established by the General Plan. This table, which was used to develop the General Plan, has been updated with each version of the PFFP in order to provide clear tracking of the changes in land use.

Figure 2-1 illustrates the various planning areas included in this 2011 Update. Table 2-1 outlines the various land uses used in the PFFP model, with breakdowns for each SPA or major development area. Of particular note in Table 2-1 is the reduction in square footage in light industrial land use between the current baseline and planned buildout. This is a result of land use conversions within the Sonoma Mountain Village PD where light industrial buildings are planned to be converted to mixed use and commercial development. As a result of these planned conversions, the future land use pattern cannot be modeled by simply adding planned development to existing development.

Table 2-2 provides a comparative summary of the base land uses and planned build-out land uses that have been included in the 2004, 2006 and 2011 versions of the PFFP.

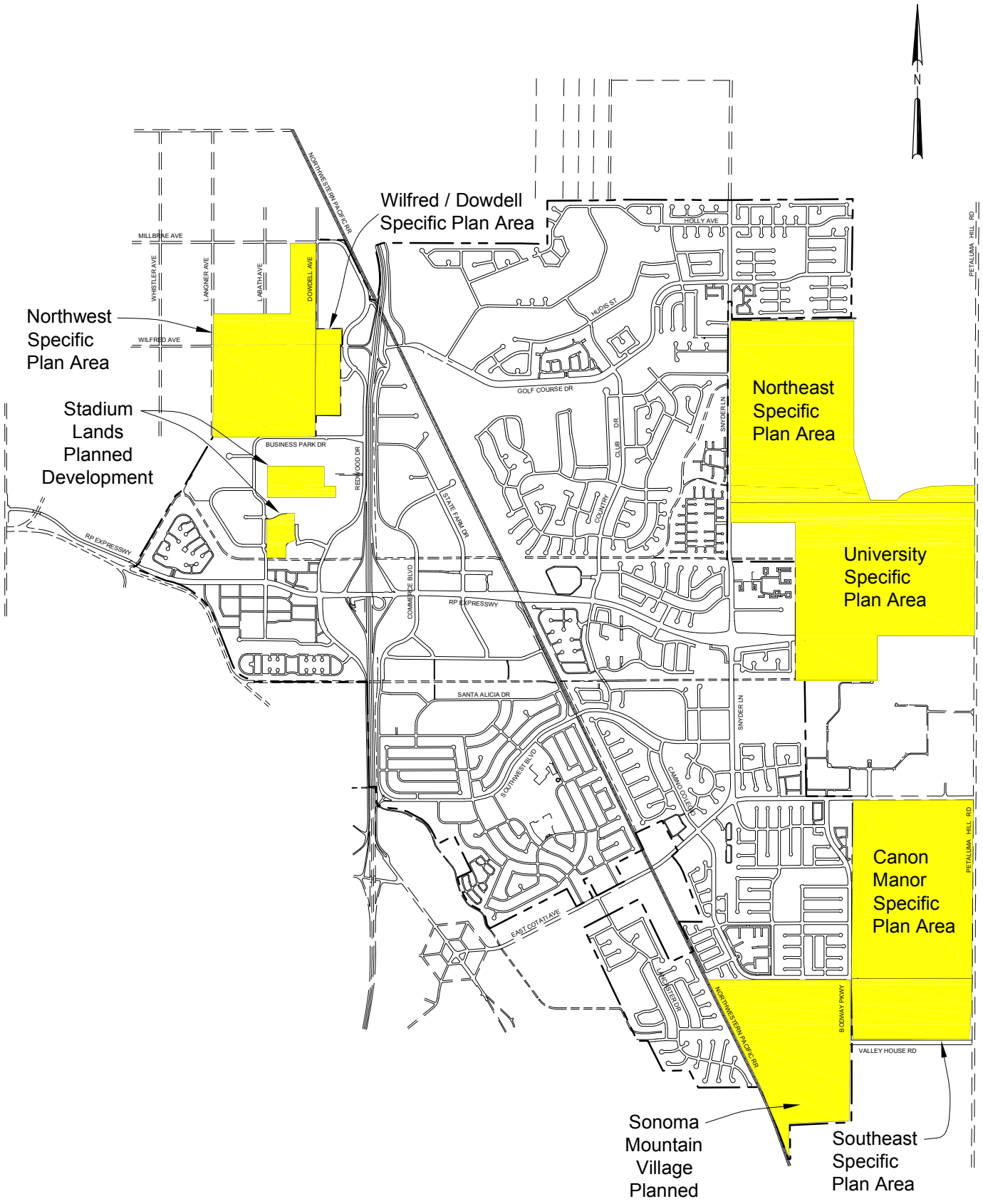

FIGURE 2-1
Major Planned Developments

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Table 2-1 - Summary Land Use Breakdowns

				Specific Plan Area							
Land Use Class	2011 Base	Planned Buildout	New Development	NE SPA	UD SPA	SE SPA	WD SPA	NW SPA	Stadium Lands	Sonoma Mountain Village	Canon Manor
Residential											
Single Family Residential (units)	7,719	10,665	2,946	920	883	394	0	0	0	700	49
Multi-Family Residential (units)	8,594	12,109	3,465	200	762	81	0	900	338	994	0
Senior Housing (units)	207	209	2	0	0	0	0	0	0	0	0
Assisted Living (units)	0	135	135	0	0	0	0	0	0	0	0
Non-Residential											
General Office (square feet)	1,028,506	1,765,355	736,849	0	0	0	0	230,000	0	426,000	0
Hotel/Motel (square feet)	519,483	645,483	126,000	0	0	0	0	0	0	126,000	0
Retail (square feet)	2,030,210	3,619,503	1,492,488	0	175,000	10,000	302,114	450,000	140,000	261,801	0
Light Industrial (square feet)*	1,638,472	1,492,923	589,451	0	0	0	0	520,000	0	0	0
Heavy Industrial (square feet)	0	0	0	0	0	0	0	0	0	0	0
Warehouse (square feet)	1,589,632	1,589,632	0	0	0	0	0	0	0	0	0
Total Non Residential (square feet)	**6,806,303**	**9,112,896**	**2,944,788**	**0**	**175,000**	**10,000**	**302,114**	**1,200,000**	**140,000**	**813,801**	**0**

* Reduction in Light Industrial square footage is a result of land use conversions within the Sonoma Mountain Village Development Area

Table 2-2 – Comparative Land Use Totals in PFFP Updates

Land Use Class	**Base**			**Planned Buildout**		
	2004	2006	2011*	2004	2006	2011
Single Family Residential (units)	7,764	7,764	7,719	9,720	9,977	10,665
Multi-Family Residential (units)	8,213	8,574	8,594	10.974	10,971	12,109
Senior Housing (units)	207	207	207	268	209	209
Assisted Living (units)	0	0	0	135	135	135
General Office (square feet)	1,017,615	1,017,615	1,028,506	1,518,737	1,339,357	1,765,355
Hotel Motel (square feet)	457,603	457,603	519,438	581,399	521,399	645,438
Retail (square feet)	1,965,662	2,004,106	2,030,210	3,293,828	3,328,713	3,619,503
Light Industrial (square feet)	1,638,472	1,638,472	1,638,472	2,962,629	2,948,029	1,492,923
Heavy Industrial (square feet)	0	0	0	0	0	0
Warehouse (square feet)	1,489,632	1,589,632	1,589,632	1,560,644	1,589,632	1,589,632

*Single family units in the unincorporated Northeast and Northwest SPAs have been removed from the calculations because they are not existing customers of the City and will be replaced as these SPAs develop.

2.3 Growth Management and Absorption Rates

The City has an adopted Growth Management Ordinance [4] that is intended to provide for orderly build out of residential development over the 20-year planning horizon contemplated by the General Plan. In its simplest form, the Growth Management Ordinance has the effect of limiting the number of residential building permits issued to 225 per year. There are exceptions for affordable housing and provisions to carry over building permits (i.e., if 50 are issued in one year, 400 may be issued the following year, providing a 2-year average of 225 per year). Because the Growth Management Ordinance clearly sets forth the residential development pattern, this 2011 Update does not include an analysis of probable development patterns.

2.4 Basis of Cost Estimates

Capital facility needs and costs were gathered from a range of sources including:

- City Rohnert Park General Plan
- Draft and/or Final Environmental Impact Reports (EIRs) for:
  - Northeast Specific Plan Area (May 2008)
  - Southeast Specific Plan Area (July 2009)
  - University District Specific Plan Area (May 2006)
  - Wilfred Dowdell Specific Plan Area (September 2008)
  - Stadium Land Planned Development (February 2008)
  - Sonoma Mountain Village Planned Development (August 2009)
- City of Rohnert Park Traffic Operations Consistency Study (November 2008)
- City of Rohnert Park Review of Traffic Capacity Needs Study for Two Future Road Projects (March 2010)
- City of Rohnert Park, Storm Drainage Plan
- LCA Architects, Conceptual Public Safety Station Plans (2010);
- City of Rohnert Park Engineering Department, personal communication;
- City of Rohnert Park Public Safety Department, personal communication;
- Cost Estimating Information provided by Brookfield Homes (various dates);
- City of Rohnert Park's Sewer Model Studies completed in 2004 and 2005;
- Actual construction costs and financing documents for the City of Rohnert Park's Eastside Trunk Sewer Phase 1;

[4] Chapter 17.66 of the Rohnert Park Municipal Code.

- Estimated construction costs for the City of Rohnert Park's Eastside Trunk Sewer Phase 2 based on 90 % design documents;
- Actual construction costs and financing documents for the City of Rohnert Park's Interceptor Outfall Project Phase 1;
- Estimated construction costs for the City of Rohnert Park's Interceptor Outfall Project Phase 2 based on the conceptual design report;
- Present worth value of existing Subregional System facilities as presented in the *City of Santa Rosa Water and Wastewater Demand Fee Study* dated March 6, 2007;
- Estimated construction costs, including financing costs for the Subregional System's planned facilities based on the IRWP Master Plan as presented in the *City of Santa Rosa Water and Wastewater Demand Fee Study* dated March 6, 2007; and
- Five-year financing plan and rate plan as presented in *City of Rohnert Park Sewer Financial Plan and Rate Plan* dated March 3, 2011.[5]

With the exception of City Hall, the Sewer Interceptor Outfall Project Phase 1 and the Eastside Trunk Sewer Project Phase 1, which are constructed, and the Eastside Trunk Sewer Phase 2, which is in the detailed design phase, the facilities in this 2011 Update are primarily in the planning stages. Cost estimates have been developed by reviewing the proposed design criteria, reviewing available local construction cost information for similar facilities, and utilizing standard estimating guidance such as the RS Means Construction Cost Data. As with the original PFFP, most cost estimates are Class 5 (planning-level) estimates of probable construction cost as defined by the Association for the Advancement of Cost Engineering, International (AACE) as follows:

> *Generally prepared on very limited information, where little more than proposed plan type, its location, and the capacity are known, and for strategic planning purposes such as but not limited to market studies, assessment of viability, evaluation of alternate schemes, project screening, location and evaluation of resource needs and budgeting, long-range capital planning, etc. Some examples of estimating methods used would include cost/capacity curves and factors, scale-up factors, and parametric and modeling techniques.*

The cost estimates for Eastside Trunk Sewer Phases 2 and 2a are based on detailed site surveys, geotechnical reports and 90% design documents. The cost estimate for Eastside Trunk Sewer Phase 3 is based on 60% design documents. These cost estimates can generally be classified as Class 3 cost

[5] While this 2011 Update and the Financial Plan and Rate Plan have identical assumptions, the Financial Plan and Rate Plan refers to both the PF Fees and Sewer Capacity Charges. This 2011 Update combines the two programs into a single PF Fee to enhance clarity around the program(s) and fund administration. However, this 2011 Update includes the same sewer infrastructure that is currently split between the PF Fee Program and the Sewer Capacity Charge Program.

estimates and expected accuracy ranges from -10% to -20% on the low side and +10% to +30% on the high side.

These costs are indexed to the Engineering News Record Construction Cost Index (ENR CCI) for the San Francisco Bay Area for September which is 10192.79.

2.5 Land Acquisition, Rights-of-Way and Environmental Mitigation Costs

In general, the PF program assumes that rights-of-way will be dedicated in accordance with the City's General Plan Policy. This 2011 Update includes right-of-way acquisition costs for City Hall, the corporation yard expansion, the Sewer Interceptor Outfall Project Phase 1, the Eastside Trunk Sewer Phase 1, right-of-way purchased or budgeted for by the Santa Rosa Subregional System, right-of-way for the proposed stormwater detention basins and right-of-way for a portion of Dowdell Avenue extension, where there is developed property on either side and no project proponents to dedicate land.

In general, the PF program assumes that environmental mitigation costs for wetlands and other sensitive habitats, which occur in the undeveloped SPAs and PDs will be covered by the specific overall environmental mitigation program for the particular SPA or PD. The exceptions are Bodway Parkway extension (which runs outside the limits of any SPA or PD), a portion of Dowdell Avenue extension where there are no project proponents, and the portion of Rohnert Park Expressway that fronts Sonoma State University. The PF program includes costs for environmental mitigation in these three areas. Table 2-3 summarizes the assumptions about right-of-way needs and acquisition strategies used in this 2011 Update.

Table 2-3 –Environmental Mitigation & Right-of-Way Acquisition Assumptions

	Proposed ROW	Existing ROW	New ROW Required	Additional Dedication Required	PFFP Funded ROW	PFFP Funded Mitigation
Roadways						
Segment 1 Bodway Parkway	56’	56’	0’	NA	No	Yes
Segment 2 Dowdell Avenue	84’	50’	34’	Yes	No	No
Segment 3 Dowdell Avenue	84’	50’	34’	Yes	No	No
Segment 4 Dowdell Avenue	68’	0’	68’	Yes	Yes	Yes
Segment 5 Dowdell Avenue	68’	68’	0’	NA	No	No
Segment 6 Keiser Avenue	56’	40’	16’	Yes	No	No
Segment 7 Rohnert Park Expressway	104’	+/- 70’	34’	Yes	No	Portion
Segment 8 Snyder Lane	104’	90’	14’	Yes	No	No
Segment 9 Snyder Lane	+/- 70’	+/- 70’	0’	NA	No	No
Segment 10 Snyder Lane	+/- 70’	+/- 70’	0’	NA	No	No
Segment 11 Wilfred Avenue	104’	+/- 40’	64’	Yes	No	No
Segment 12 Wilfred Avenue	104’	+/- 40’	64’	Yes	No	No
Public Safety						
Southside Station*	1.28 ac	0 ac	1.28 ac	Yes	No	No
Westside Station**	1.28 ac	1.12 ac	0 ac	No	No	No
Training Facilities**	1.72 ac	1.72 ac	0 ac	No	No	No
Public Facilities						
City Hall	0.5 ac	0.5 ac	0 ac	No	Yes	No
Corporation Yard	0.5 ac	0 ac	0.5 ac	No	Yes	No
Sewer Facilities						
Sewer Interceptor Outfall 1			Yes	No	In costs	In costs
Sewer Interceptor Outfall 2			No	No	NA	In costs
Eastside Trunk 1			Yes	No	In costs	In costs
Eastside Trunk 2 & 3			No	No	NA	In costs
Santa Rosa Subregional Imps			Yes	No	In costs	In costs
Water Facilities						
Water Transmission Main			No	No	NA	NA
Drainage Facilities* **						
Copeland Creek Basin	10 ac	0 ac	10 ac	No	Yes	No
Northeast Basin	6.5 ac	0 ac	6.5 ac	No	Yes	No

*Sonoma Mountain Village has been conditioned to dedicate the site for the Southside Station
**Stadium Lands PD has dedicated three acres for the development of the Westside Public Safety Facilities
***Assumes Drainage Facilities are designed to be self mitigating. Copeland Creek Basin right-of-way has been dedicated at a cost of $1.00 per acre

3 Roadway Facilities

3.1 Introduction

This chapter and the accompanying Appendix B provide narrative description, graphical representation and cost estimates for the proposed roadway improvements as they are currently understood. Because some of the proposed facilities are still the subject of review under CEQA, the descriptions and illustrations included in this 2011 Update are intended to present the basis of the cost estimates, not to commit the City to a particular construction strategy.

3.2 Roadway Facilities Description

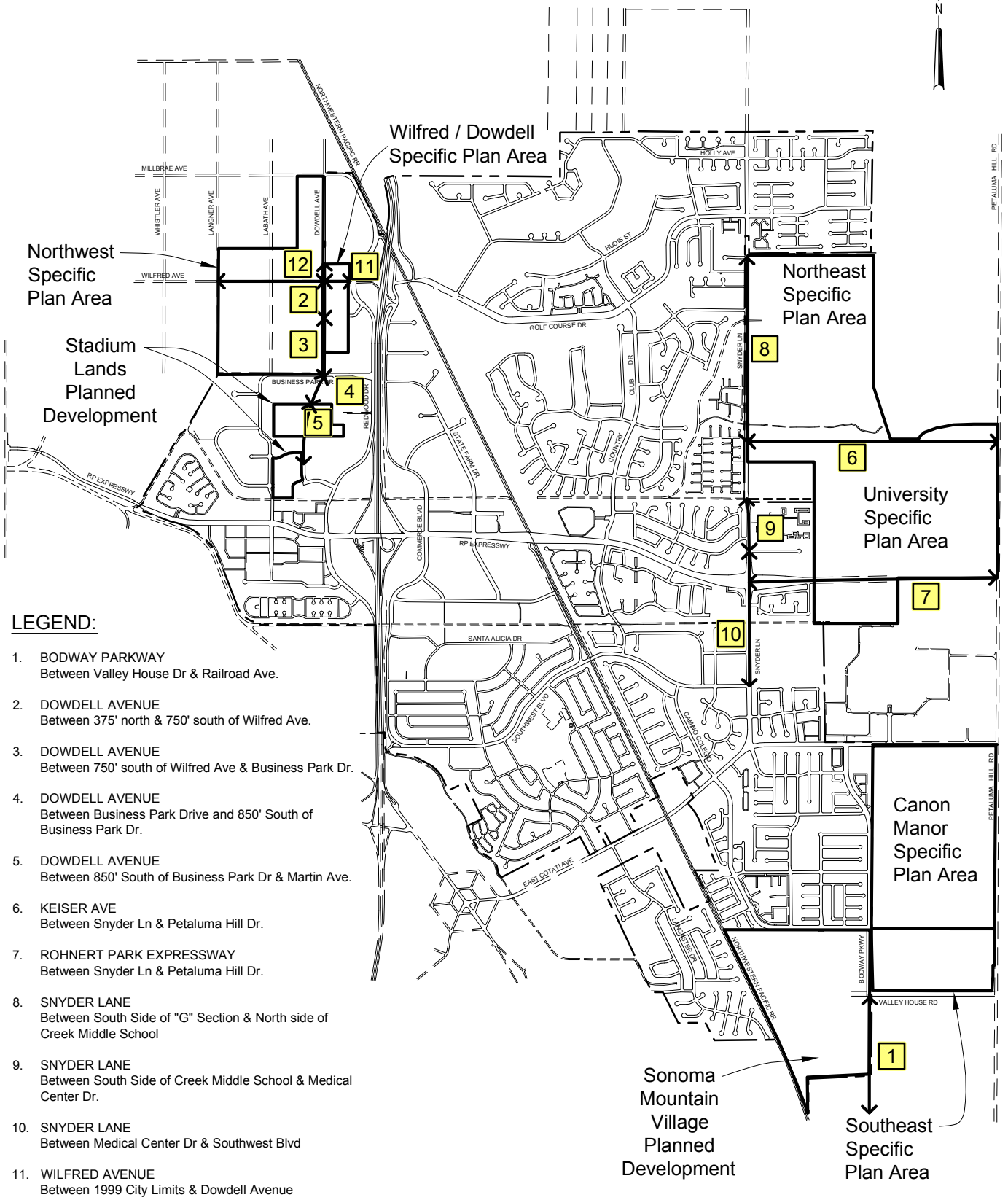
Roadway improvements include new and widened roadways, right-of-way and environmental mitigation associated with these roadways, modified intersections including traffic signals, and bridge widenings all located on the City's arterial/collector network. These improvements have all been identified in the City's General Plan or project-specific EIRs as necessary to mitigate the impacts of development. The planned roadway improvements include intersection and traffic signal improvements necessary to maintain levels of service consistent with the City's General Plan. Bridges are widened as necessary to accommodate warranted roadway widening. Bicycle lanes are included consistent with General Plan recommendations and City standards.

As part of the 2011 Update, the City commissioned a traffic capacity needs analysis and determined that improvements to Commerce Boulevard, Golf Course Drive and Seed Farm Drive, which were included in the 2006 Update, were not necessary to mitigate the impacts of development. However, a new signal at the intersection of Commerce Boulevard and Southwest Boulevard was necessary to serve development. Based on this additional technical study, the 2011 Update does not include widenings of Commerce Boulevard, Golf Course Drive and the extension of Seed Farm Drive. Intersection modifications at Commerce and Avram, Commerce and Alison, Seed Farm and Rohnert Park Expressway and Seed Farm and Enterprise, which were necessitated by the widenings and extension, have also been removed. The recommended new signal at Commerce and Southwest Boulevard has been added to the 2011 Update consistent with the additional traffic study. This study is included as Appendix C.

As part of the development review process, the City commissioned a Traffic Operations Consistency Study which studied the need for signal and intersection improvements. This study concluded that three proposed signals along Bodway Parkway and proposed signals at Dowdell and Wilfred, Eleanor and Rohnert Park Expressway, Labath and Wilfred, Petaluma Hill Road and East Cotati, and Snyder Lane at Eleanor, all of which were included in the 2006 Update, were not necessary to mitigate cumulative development impacts. These signals have been removed from the 2011 Update. However, this study did recommend a number of new signal and intersection improvements. These have been added to this 2011 Update because they are consistent with the required mitigation measures included in the CEQA documents for the various development projects. Not all signals included in the Traffic Operations Consistency Study are included in the PF Program. Signals that provide regional benefit (e.g., signals in the community of Penngrove) and signals and intersection modifications that serve a single development are not included in the PF Program. To date, the City has secured regional transportation

fee contributions through Development Agreements with individual project proponents. This contribution allows individual project proponents to mitigate their “fair share” of regional facilities.

Figure 3-1 illustrates the location of the roadways and bridge widenings included in this 2011 Update. Figure 3-2 illustrates the location of the traffic signal and intersection modifications. Descriptions of the improvements are provided below and Appendix B includes illustrations of the various roadway cross sections and intersection improvements and cost estimates for each. Table 3-1, provides a summary cost estimate of the proposed roadway improvements. Table 3-2 provides a listing of signals and intersection improvements included in the Traffic Operations Study but not included in the PF Program.



LEGEND:

1. BODWAY PARKWAY
   Between Valley House Dr & Railroad Ave.
2. DOWDELL AVENUE
   Between 375' north & 750' south of Wilfred Ave.
3. DOWDELL AVENUE
   Between 750' south of Wilfred Ave & Business Park Dr.
4. DOWDELL AVENUE
   Between Business Park Drive and 850' South of Business Park Dr.
5. DOWDELL AVENUE
   Between 850' South of Business Park Dr & Martin Ave.
6. KEISER AVE
   Between Snyder Ln & Petaluma Hill Dr.
7. ROHNERT PARK EXPRESSWAY
   Between Snyder Ln & Petaluma Hill Dr.
8. SNYDER LANE
   Between South Side of "G" Section & North side of Creek Middle School
9. SNYDER LANE
   Between South Side of Creek Middle School & Medical Center Dr.
10. SNYDER LANE
    Between Medical Center Dr & Southwest Blvd
11. WILFRED AVENUE
    Between 1999 City Limits & Dowdell Avenue
12. WILFRED AVENUE
    Between Dowdell Aenue and Urban Growth Boundary

FIGURE 3-1
Roadway Improvements
Key Map

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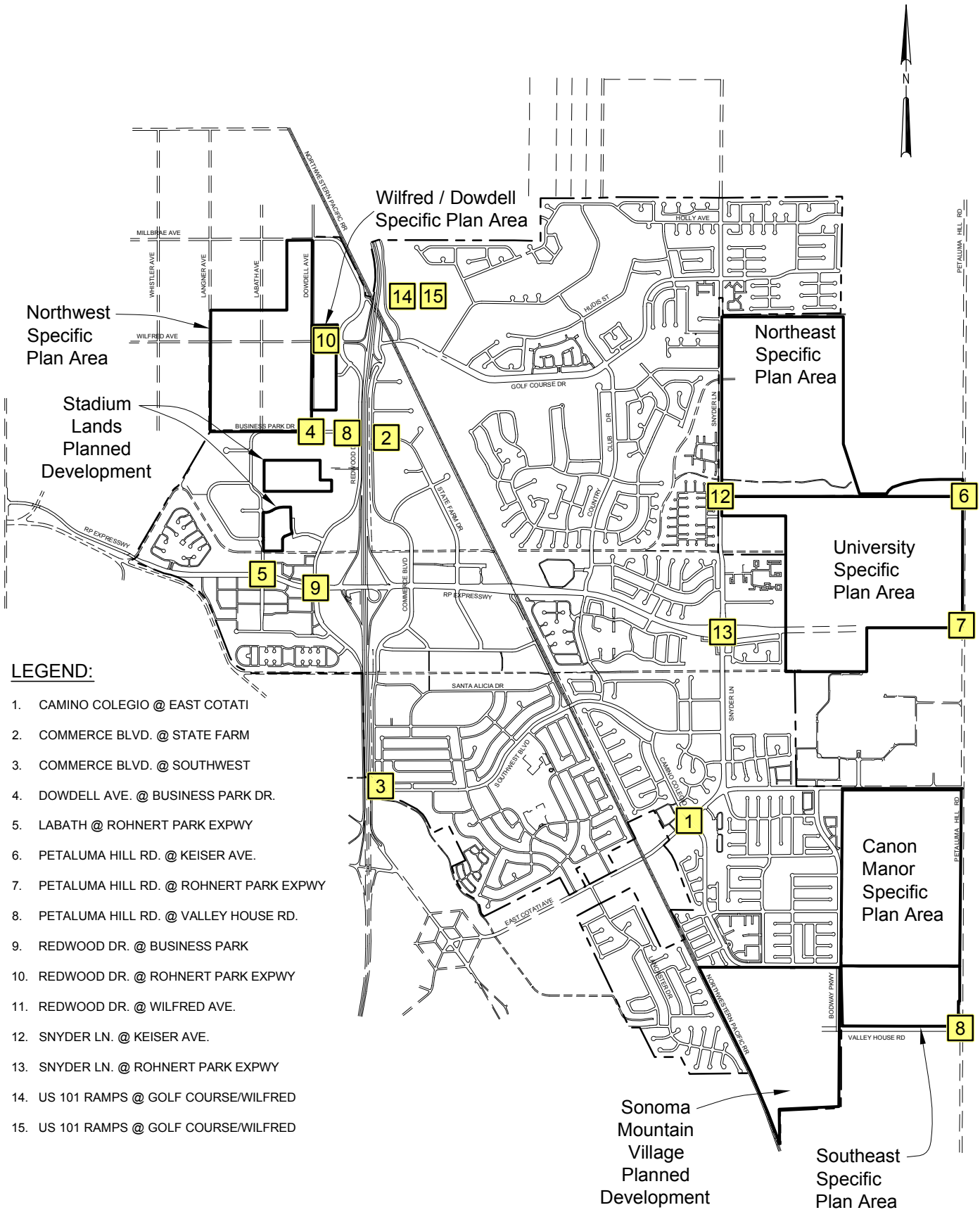

LEGEND:

1. CAMINO COLEGIO @ EAST COTATI
2. COMMERCE BLVD. @ STATE FARM
3. COMMERCE BLVD. @ SOUTHWEST
4. DOWDELL AVE. @ BUSINESS PARK DR.
5. LABATH @ ROHNERT PARK EXPWY
6. PETALUMA HILL RD. @ KEISER AVE.
7. PETALUMA HILL RD. @ ROHNERT PARK EXPWY
8. PETALUMA HILL RD. @ VALLEY HOUSE RD.
9. REDWOOD DR. @ BUSINESS PARK
10. REDWOOD DR. @ ROHNERT PARK EXPWY
11. REDWOOD DR. @ WILFRED AVE.
12. SNYDER LN. @ KEISER AVE.
13. SNYDER LN. @ ROHNERT PARK EXPWY
14. US 101 RAMPS @ GOLF COURSE/WILFRED
15. US 101 RAMPS @ GOLF COURSE/WILFRED

FIGURE 3-2
Traffic Control Devices & Intersection Improvements Key Map

WINZLER & KELLY

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Table 3-1 - Roadway Improvements and Costs (ENR CCI = 10192.79)

Roadways		2011 Total Costs	New Development	Existing Development
No.	**Name**			
1	Bodway Parkway: between Valley House and Railroad	$ 994,500	$ 994,500	$ -
2	Dowdell Avenue: between 375' north & 750' south of Wilfred Avenue	$ 870,000	$ 870,000	$ -
3	Dowdell Avenue: between 750' south of Wilfred Avenue and Business Park Drive	$ 845,600	$ 845,600	$ -
4	Dowdell Avenue: between Business Park Drive and 850' south of Business Park Drive	$ 465,000	$ 465,000	$ -
5	Dowdell Avenue: between 850' south of Business Park Drive and Martin Avenue	$ 588,100	$ 588,100	
6	Keiser Avenue: between Snyder Lane & Petaluma Hill Road	$ 2,588,500	$ 2,588,500	$ -
7	Rohnert Park Expressway: between Snyder Lane & Petaluma Hill Road	$ 4,658,400	$ 4,658,400	$ -
8	Snyder Lane: between G Section & north side of Creekside Middle School	$ 3,284,500	$ 2,810,300	$ 474,200
9	Snyder Lane: between south side of Creekside Middle School and Medical Center Drive	$ 828,700	$ 711,500	$ 117,200
10	Snyder Lane: between Medical Center Drive and Southwest Blvd	$ 2,020,900	$ 1,711,100	$ 309,800
11	Wilfred Avenue: between 1999 City Limits and Dowdell Avenue	$ 453,500	$ 453,500	$ -
12	Wilfred Avenue: between Dowdell Avenue and UGB	$ 1,892,300	$ 1,892,300	$ -
	Total Roadways	**$ 19,490,000**	**$ 18,588,800**	**$ 901,200**
Mitigation & Right of Way				
1	Bodway Parkway: between Valley House and Railroad	$ 400,800	$ 400,800	$ -
4	Dowdell Avenue: between Business Park Drive and 850' south of Business Park Drive	$ 738,150	$ 738,150	
7	Rohnert Park Expressway: between Snyder Lane & Petaluma Hill Road	$ 223,200	$ 223,200	$ -
	Total Mitigation	**$ 1,362,150**	**$ 1,362,150**	$ -
Bridges				
	Bridge @ Business Park Drive	$ 870,000	$ 870,000	$ -
	Bridge @ Five Creek	$ 539,400	$ 539,400	$ -
	Bridge @ Crane Creek	$ 539,400	$ 539,400	$ -
	Bridge @ Hinebaugh Creek	$ 539,400	$ 539,400	$ -
	Bridge @ Copeland Creek	$ 435,000	$ 435,000	$ -
	Total Bridges	**$ 2,923,200**	**$ 2,923,200**	**$ -**
Traffic Control Devices & Intersection Improvements				
1	Camino Colegio @ East Cotati	$ 7,480	$ 7,480	$ -
2	Commerce Blvd @ State Farm Drive	$ 516,567	$ 516,567	$ -
3	Commerce @ Southwest	$ 521,839	$ 521,839	$ -
4	Dowdell Avenue @ Business Park Drive	$ 905,967	$ 905,967	$ -
5	Labath @ Rohnert Park Expressway	$ 203,832	$ 203,832	$ -
6	Petaluma Hill Road @ Keiser Avenue	$ 1,290,859	$ 1,290,859	$ -
7	Petaluma Hill Road @ RPX	$ 263,336	$ 263,336	$ -
8	Petaluma Hill Road @ Valley House	$ 1,290,859	$ 1,290,859	$ -
9	Redwood Drive @ Business Park Drive	$ 516,567	$ 516,567	$ -
10	Redwood Drive @ Rohnert Park Expressway	$ 199,212	$ 199,212	$ -
11	Redwood Drive @ Wilfred	$ 1,068,099	$ 1,068,099	$ -
12	Snyder Lane @ Keiser	$ 780,003	$ 780,003	$ -
13	Snyder Lane @ RPX	$ 270,819	$ 270,819	$ -
14	US 101 NB Ramps @ Golf Course/Commerce	$ 166,218	$ 166,218	$ -
15	US 101 SB Ramps @ Wilfred/Redwood	$ 166,218	$ 166,218	$ -
	Total Traffic Control & Intersection Improvements	**$ 8,167,875**	**$ 8,167,875**	**$ -**

Table 3-2 Signal & Intersection Improvements not Included in the PF Program

Location	***Source Reference***	***Reason for not including in 2011 Update***
Eleanor @ Rohnert Park Expressway	University District EIR	Access to development
Labath @ Wilfred	General Plan	Access to development
La Salle Avenue @ East Cotati	Traffic Operations Study	Regional Improvement
Petaluma Hill Road @ East Railroad	Traffic Operations Study	Regional Improvement
Petaluma Hill Road @ Adobe Road	Traffic Operations Study	Regional Improvement
Old Redwood Highway @ East Cotati Ave	Traffic Operations Study	Regional Improvement
Old Redwood Highway @ North McDowell	Traffic Operations Study	Regional Improvement
Old Redwood Highway @ Railroad	Traffic Operations Study	Regional Improvement
Old Redwood Highway @ US 101 Ramps	Traffic Operations Study	Regional Improvement
Redwood @ Commerce	Wilfred Dowdell EIR	Access to development
Snyder Lane @ Eleanor	Northeast SPA EIR	Access to development

New Roadways: The 2011 PFFP includes two roadways that need to be newly constructed: a 2-lane extension of Bodway Parkway between Valley House Drive and Railroad Avenue and a 2 to 4-lane extension of Dowdell Avenue between its current terminus 750-south of Wilfred Avenue to a connection with Martin Drive at Costco.

Reconstructed Roadways in Annexed Areas: In order to implement both its General Plan and several of the Specific Plans, the City will annex four sections of roadways. These historical county roadways need to be completely reconstructed to serve planned development. Dowdell Avenue, between 375' north of its intersection with Wilfred and its current terminus, Rohnert Park Expressway between Snyder Lane and Petaluma Hill Road, and Wilfred Avenue between Redwood Drive and the City's Urban Growth Boundary will be reconstructed as 4-lane roadways. Keiser Avenue between Snyder Lane and Petaluma Hill Road will be reconstructed as a 2-lane roadway.

Widened Roadways within the City Limits: Snyder Lane, currently a two-lane roadway, will be widened to four lanes between Southwest Blvd and G section.

Environmental Mitigation and Right-of-Way: Environmental mitigation costs for the Bodway Parkway Extension, for portions of Dowdell Avenue and for the portion of the Rohnert Park Expressway that fronts Sonoma State University are included because these projects are not contiguous with any SPAs or PDs. Right-of-way acquisition for portions of Dowdell Avenue is included because this segment is not contiguous with any SPA or PD.

Bridge Widenings: In order to complete the widening of Dowdell Avenue and Snyder Lane, it is necessary to widen five bridges that are along these roadway segments.

New Traffic Signals: The City's Traffic Operations Consistency Study and various development EIRs have identified seven new signals as mitigation for development. These are located at Commerce Blvd and State Farm Drive, Commerce Blvd and Southwest Blvd, Dowdell at Business Park Drive, Petaluma Hill Road at Keiser, Redwood Drive at Business Park Drive, Redwood Drive at Wilfred and Snyder Lane at Keiser.

Intersection and Signal Modifications: The City's Traffic Operations Consistency Study and various development EIRs have also identified intersection modifications, which may include signal modifications, at Camino Colegio and East Cotati, Labath and Rohnert Park Expressway, Petaluma Hill Road and Rohnert Park Expressway, Petaluma Hill Road and Valley House, Redwood Drive and Rohnert Park Expressway, Snyder Lane at Rohnert Park Expressway and the US 101 Ramps at Wilfred/Redwood as necessary to serve new development.

3.3 Nexus Findings for Roadway Facilities

3.3.1 Definition of Improvements

According to the General Plan, project specific EIRs and the City's recent review of traffic capacity needs, the roadway improvements described above, including environmental mitigation, right-of-way, bridge widening and traffic signal and intersection modifications, are necessary to mitigate the impacts of new development. The improvements have a total cost of $31,943,225 including $19,490,000 for roadways, $1,362,150 for environmental mitigation and right-of-ways, $2,923,200 for bridges and $8,167,875 for traffic signals and intersection modifications. Cost shares between new and existing development are described below.

3.3.2 Cost Allocation Factors

For roadway improvements, trip generation rates are used to create an equivalency relationship between the various land use types in the City. This 2011 Update uses the trip generation rates outlined in Table 3-3 below, which are brought forward from the General Plan. For the purposes of this 2011 Update, residential land uses are classified according to the City's Municipal Code, which is consistent with the definition used in the various traffic studies supporting the EIRs for the SPAs and PDs. Specifically:

- "Single Family Residential" means any use meeting the definition of "dwelling, single-family detached" in Chapter 17.04 of the Municipal Code.
- Multi-Family Residential" means any use meeting the definition of "dwelling, single-family attached", "dwelling, multi-family" or "mobile home" in Chapter 17.04 of the Municipal Code.

Table 3-3 Trip Generation Rates (weekday)

Land Use	Number of Trips	Unit
Single Family Residential	10.00	Dwelling Unit
Multi-Family Residential	6.50	Dwelling Unit
Senior Housing	4.00	Dwelling Unit
Assisted Living Facility	4.00	Dwelling Unit
Office	17.00	1,000 square feet
Hotel	18.00	1,000 square feet
Hotel w/ Conference Center	20.40	1,000 square feet
Retail-Strip Commercial	40.00	1,000 square feet
Retail-Shopping Center	40.00	1,000 square feet
Industrial-Light	7.00	1,000 square feet
Industrial-Heavy	7.00	1,000 square feet
Warehouse	4.88	1,000 square feet
Educational	1.40	Student
Institutional & Government	6.48	1,000 square feet
Recreational	4.10	Acre

3.3.3 Impact Zone Allocation

The proposed roadway improvements are part of the citywide circulation system. Costs are allocated on a citywide basis. Zones are not used to allocate improvement costs; however, costs are allocated to new and existing development as described below.

3.3.4 Fee Component Calculations

Roadway Improvements: The estimated cost for roadway improvements in the 2011 Update is $31,943,225. This includes the surface costs associated with roadway construction, mitigation costs and right-of-way costs associated with roadway construction, the costs of widened bridges, and the costs of modified intersections. This does not include the costs associated with curbs, gutters, sidewalks, medians, landscaping and underground utilities. These costs are included in the "Median Frontage Improvement" category described in Chapter 4.

Because the City has a developed and functioning circulation system and because the roadway improvements included in the 2011 Update are all necessitated by traffic from new development, the Incremental Cost Method, described in Section 1, is used in the fee component calculations. Specifically:

- New roadways, including Bodway Parkway extension and Dowdell Avenue extension are required to mitigate the impacts of new development. Project specific EIRs and the City's Traffic

Operations Consistency Study demonstrate the need for these improvements as cumulative development builds out in the City. The City would not undertake these improvements except to provide for development; therefore, the costs are entirely allocated to new development.

- For annexed county roadways that need to be completely reconstructed, the costs of roadway reconstruction are allocated to new development. This includes existing Dowdell Avenue, Keiser Avenue, Rohnert Park Expressway and Wilfred Avenue. The City would not annex these roadways except to provide for development. Reconstruction of the roadways to meet City standards is necessary to mitigate the impacts of planned development.

- For improvements to existing roadways within the City's existing limits, costs are allocated to existing and new development proportional to the trips generated at buildout. This method is used for Snyder Lane. The General Plan traffic model and subsequent work for project specific EIRs indicate that approximately one-half the traffic on Snyder Lane is from existing development and approximately one-half is generated by new development. The City's proposed construction strategy is to widen Snyder to four lanes by adding two new lanes and overlaying the existing two lanes. Costs for the overlay are allocated to existing development and costs for the widening are allocated to new development.

Table 3-4, following, illustrates the cost allocation between new and existing development for each roadway segment. Based on this allocation, the 2011 Update uses a budget of $19,490,000 to calculate the portion of the PF Fee component associated with widening and reconstruction. The City will fund $901,200 of the total costs and $18,588,800 is allocated to new development.

Table 3-4 - Cost Allocation for Roadway Improvements

Roadways No.	Name	2011 Total Costs	New Development	Existing Development
1	Bodway Parkway: between Valley House and Railroad	$ 994,500	$ 994,500	$ -
2	Dowdell Avenue: between 375' north & 750' south of Wilfred Avenue	$ 870,000	$ 870,000	$ -
3	Dowdell Avenue: between 750' south of Wilfred Avenue and Business Park Drive	$ 845,600	$ 845,600	$ -
4	Dowdell Avenue: between Business Park Drive and 850' south of Business Park Drive	$ 465,000	$ 465,000	$ -
5	Dowdell Avenue: between 850' south of Business Park Drive and Martin Avenue	$ 588,100	$ 588,100	
6	Keiser Avenue: between Snyder Lane & Petaluma Hill Road	$ 2,588,500	$ 2,588,500	$ -
7	Rohnert Park Expressway: between Snyder Lane & Petaluma Hill Road	$ 4,658,400	$ 4,658,400	$ -
8	Snyder Lane: between G Section & north side of Creekside Middle School	$ 3,284,500	$ 2,810,300	$ 474,200
9	Snyder Lane: between south side of Creekside Middle School and Medical Center Drive	$ 828,700	$ 711,500	$ 117,200
10	Snyder Lane: between Medical Center Drive and Southwest Blvd	$ 2,020,900	$ 1,711,100	$ 309,800
11	Wilfred Avenue: between 1999 City Limits and Dowdell Avenue	$ 453,500	$ 453,500	$ -
12	Wilfred Avenue: between Dowdell Avenue and UGB	$ 1,892,300	$ 1,892,300	$ -
	Total Roadways	**$ 19,490,000**	**$ 18,588,800**	**$ 901,200**

Environmental Mitigation and Right-of-Way: The estimated cost for environmental mitigation and right-of-way in the 2011 Update is $1,362,150. The City would not need to acquire property or mitigation environmental impacts except to provide roadway capacity for new development. Therefore, the costs are entirely allocated to new development.

Bridge Widenings: The estimated cost for bridge widenings in the 2011 Update is $2,923,200. The City would not construct or widen the bridges except to provide roadway capacity for new development. Therefore, the costs are entirely allocated to new development.

Intersection Improvements: The estimated cost for intersection improvements in the 2011 Update is $8,167,875. The City would not make these improvements except to provide roadway capacity for new development. Therefore, the costs are entirely allocated to new development.

Based on the allocation for roadways, bridges and traffic signals, the cost carried into the mitigation fee calculation is $31,042,025 including $18,588,800 for roadways, $1,362,150 for environmental mitigation and right-of-way, $2,923,200 for bridges and $8,167,875 for signals. Table 3-5, presents the traffic mitigation fee component, based on the allocation strategy described above. The resulting fee component per land use category is shown per dwelling unit for residential land uses and per thousand square feet for non-residential land uses. Canon Manor is not included in this calculation.

Table 3-5 – PF Fee Component for Roadway Improvements

New Development Share	**$31,042,025**
Cost per Trip Unit	**$237.58**

Land Use Class	Total New Units	Trip Generation Rate	Total Trip Units	Cost per Land Use Class	Cost per Use Factor
Single Family Residential (units)	2,897	10.00	28,970	$2,380	$ 238
Multi-Family Residential (units)	3,465	6.50	22,523	$1,547	$ 238
Senior Housing (units)	2	4.00	8	$952	$ 238
Assisted Living (units)	135	4.00	540	$952	$ 238
General Office (tsf)	737	17.00	12,526	$4,046	$ 238
Hotel/Motel (tsf)	126	18.00	2,268	$4,284	$ 238
Strip Retail (tsf)	1,492	40.00	59,700	$9,520	$ 238
Light Industrial (tsf)	589	7.00	4,126	$1,666	$ 238
Heavy Industrial (tsf)	0	7.00	0	$1,666	$ 238
Warehouse (tsf)	0	4.88	0	$1,161	$ 238
Total			130,660		

Notes:
(1) Total Cost Allocated to New Development is

$	18,588,800	Roadway
$	2,923,200	Bridge
$	8,167,875	Signal
$	1,362,150	mitigation and right-of-way

(2) Cost per Trip Unit is Total Cost/Total Trips

3.3.5 Nexus Findings for Roadway Improvements

Purpose of Fee Component: The purpose of the roadway fee component is to provide a citywide transportation network, with the levels of service required by the General Plan. The elements include widening and reconstruction of existing roadways and bridges, construction of new roadways, and construction of intersection modifications and traffic signal improvements necessary to serve new development.

Use of Fee: Revenue from fees will be used to fund the design and construction of improvements to the citywide transportation network to accommodate new development as described in this 2011 Update.

Relationship between Use of Fee and Type of Development: Each type of developments' impact on the roadway system is measured by its Trip Generation Rate. Additional trips require that capacity be added to the transportation system if the levels of service outlined in the General Plan are to be maintained.

Relationship between Need for Improvements and Type of Development: The development of new and infill residential and non-residential land uses will generate additional vehicular trips. The capacity of the City's primary circulation system will need to be increased to maintain the level of service

goals outlined in the General Plan. The fees will be used to expand capacity allowing traffic flow patterns and levels of service to meet the goals established in the General Plan.

Relationship Between Amount of Fee Component and Cost or Portion of Facility Attributed to Development Upon Which Fee Component is Imposed: The roadway costs are apportioned between new and existing development as follows:

- 100% of the costs for environmental mitigation and right-of-way, bridge widenings and intersection modifications are apportioned to new development because the City would not widen bridges or modify intersections except to mitigate the impacts of new development.
- For Bodway Parkway extension and Dowdell Avenue extension, which are new roads, 100% of the costs are allocated to new development because the City would not construct these roads except to mitigate the impacts of new development.
- For existing Dowdell Avenue, Keiser Avenue, Rohnert Park Expressway, and Wilfred Avenue, which are county roads being annexed to serve development, 100% of the costs are allocated to new development because the City would not annex and reconstruct these roads except to mitigate the impacts of new development.
- For Snyder Lane, which is within the current City limits and being widened to serve new development, the cost of widening is allocated to new development and costs for overlaying and repairing existing lanes are allocated to existing development.

Within the various new development land use classes, the Trip Generation Rate of each land use is used to measure its relative impacts and costs are allocated based on Trip Generation Rate.

4 Public Safety & Public Facilities

4.1 Introduction

This chapter and the accompanying Appendix B provide narrative description, graphical representation and cost estimates for the proposed public facilities improvements including public safety facilities, system master plans, City Hall, improvements to the corporation yard, westside backbone utilities and median and frontage landscaping along the roadways included in the PFFP. Because some of the proposed facilities are still the subject of review under CEQA, the descriptions and illustrations included in this 2011 Update are intended to present the basis of the cost estimates, not to commit the City to a particular construction strategy.

4.2 Public Safety Improvements

The original PFFP public safety improvements included expansion of Station 4 (Maurice) and construction of a new Westside Public Safety Station with training and maintenance facilities. After initial program review, it has become clear that expanding Station 4, which is located in a modified residential dwelling, is not a practical alternative particularly with the increased land uses associated with the Sonoma Mountain Village PD. A new Southside Public Safety Station is included in the 2011 Update. In addition, the 2006 Update included both maintenance facilities for public safety and an expansion of the corporation yard for public works. This 2011 Update combines the maintenance functions at the corporation yard and removes the public safety maintenance facilities. Finally, as part of this 2011 update, the Westside Public Safety Station and Training Facility were reviewed with a goal of reducing the overall cost of the facilities. This review resulted in a significant reduction in the cost of the Public Safety Station and a modest increase in the cost of the proposed Training Facilities as a part of overall space programming. The proposed changes result in over $1,000,000 in cost savings for the combined facilities.

Figure 4-1 illustrates the location of the proposed facilities. Descriptions of the basic design parameters are included below. Table 4-1 provides a summary of the proposed improvements and changes made since the 2006 Update. Appendix B provides detailed cost estimates.

Table 4-1 - Public Safety Improvements and Costs (ENR CCI 10192.79)

	2006 Total Cost	2011 Total Costs	Change 2006 to 2011
Public Safety - Savings from Proposed Changes			
New Southside Station	$ 4,964,000	$ 3,640,300	$ (1,323,700)
New Westside Station	$ 8,571,000	$ 3,722,112	$ (4,848,888)
Training Facilities	$ 2,228,700	$ 5,820,444	$ 3,591,744
~~Maintenance Facilities~~	~~$ 2,273,500~~	$ -	$ (2,273,500)
Total Public Safety Facilities	**$ 18,037,200**	**$ 13,182,856**	**$ (4,854,344)**

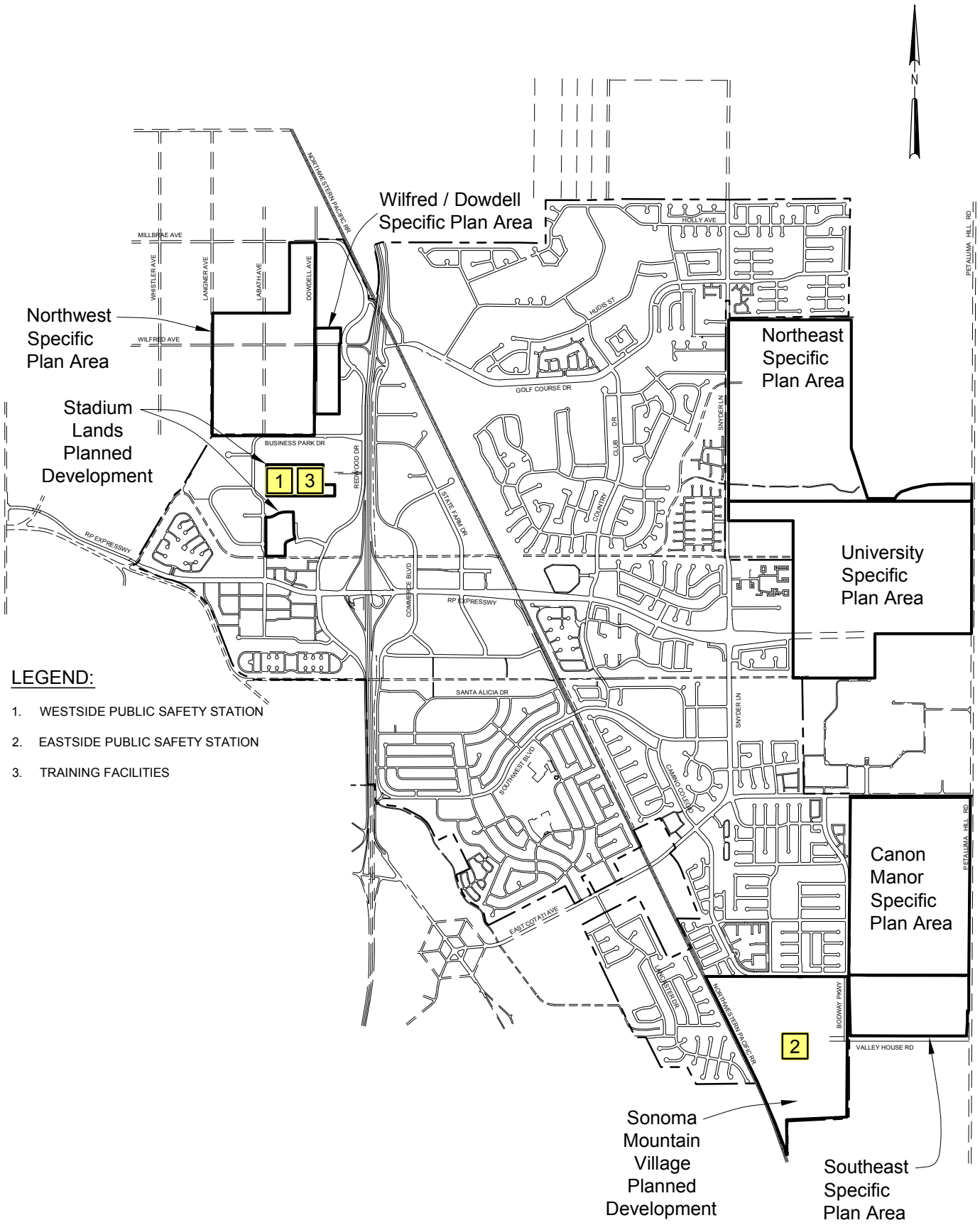

FIGURE 4-1
Public Safety Improvements
Key Map

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Southside Public Safety Station: This is a three bay fire station located east of Highway 101 within the Sonoma Mountain Village PD. The facility will include storage and office areas. This improvement replaces the envisioned Station 4 expansion, which is no longer considered a feasible option.

Westside Public Safety Station: This improvement includes building a three bay station with dormitory space for four to six firefighters. This station is necessary to meet the five-minute response time criteria established by industry standards and the Insurance Service Office Inc. The station will be located west of Hwy 101 within the limits of the Stadium Lands PD.

Training Facilities: These facilities will include a two by 30-person classroom with a divider, a 90,000 square foot exterior training area, and a four story training tower with burn center, and shipping container–style shooting range. The facilities will be located adjacent to the new Westside Station.

Public safety improvements are included if their construction is necessary to maintain the current level of service (measured in either response time or staff-to-population ratio) or if their construction is part of the City's overall plan for service.

4.3 Public Facilities Improvements

Public facilities improvements include median and frontage improvements on the roadways included in the PFFP, the new City Hall, the expansion of the corporation yard to support both public safety and public works needs, master plans for the water and storm drainage systems and westside backbone utilities in Dowdell Avenue. The median and frontage improvements are related to community design standards, not circulation, and it is more appropriate to include them in this category of improvement.

Because three roadway segments have been removed between the 2006 and 2011 Updates, the accompanying median and frontage improvements have also been removed from the 2011 Update. In addition, after review of the program requirements, the expansion to the Senior Center and the Community Center Campus improvements have been removed from the 2011 Update. While the water system master plan was included in the 2006 Update, the storm drainage master plan is a new addition.

Figure 4-2 illustrates the location of the proposed public facilities. Descriptions of the basic design parameters are included below. Table 4-2 provides a summary cost estimate and illustrates the changes between the 2006 Update and the 2011 Update. Appendix B provides detailed cost estimates.

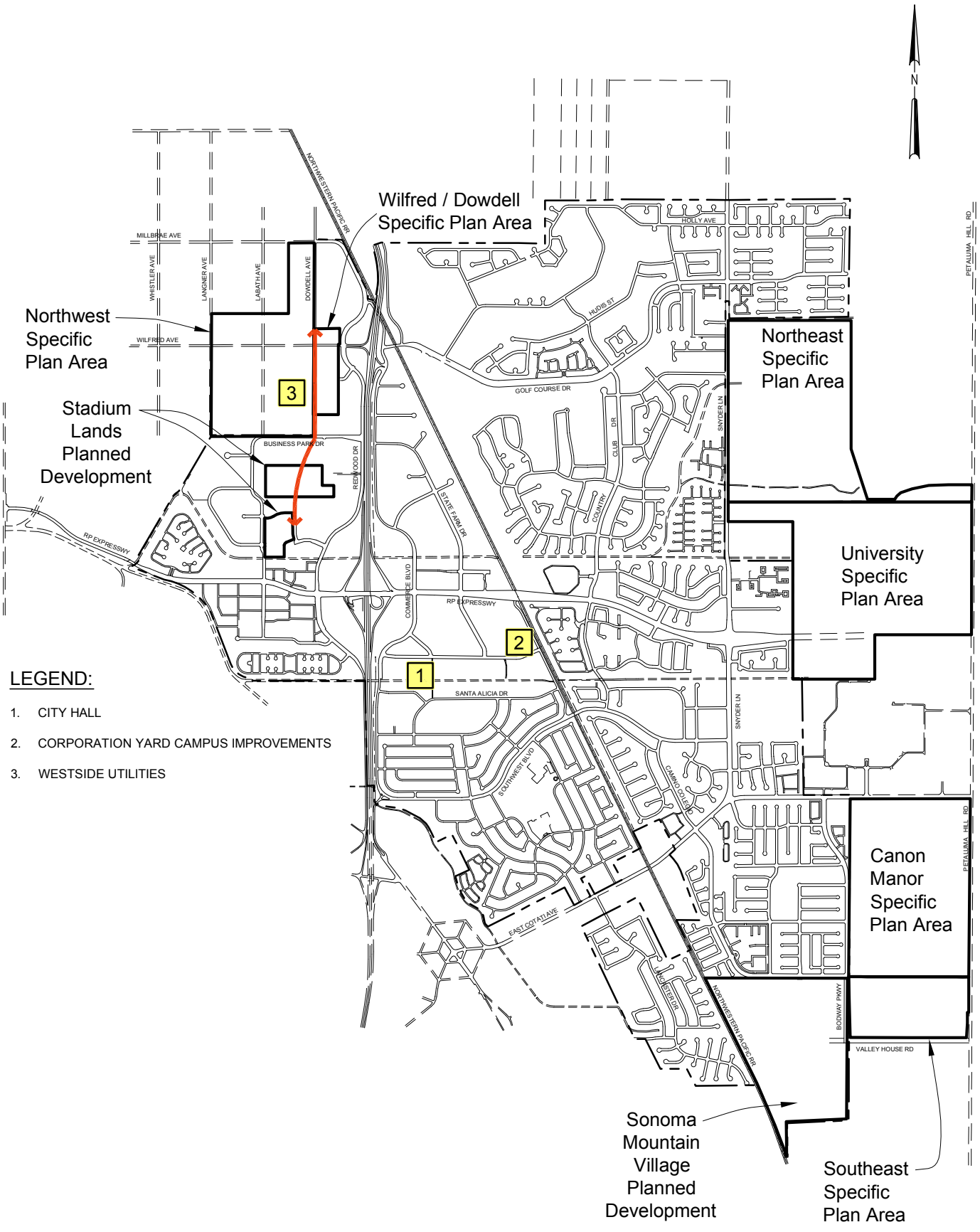

FIGURE 4-2
Public Facilities Improvements Key Map

WINZLER & KELLY

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Table 4-2 -Public Facilities Improvements and Costs (ENR CCI 10192.79)

Public Facilities - Completed Facilities	2006 Total Cost	2011 Total Costs	Change 2006 to 2011
City Hall	$ 8,200,000	$ 8,540,000	$ 340,000
Master Plans (Water & Drainage - completed)	$ 200,000	$ 450,000	$ 250,000
Public Facilities - Proposed Changes			
Corporation Yard Expansion	$ 1,678,500	$ 2,662,200	$ 983,700
Westside Utilities (see Dowdell Ave Segment 2-5 estimates for detail)	$ -	$ 1,605,749	$ 1,605,749
~~Senior Center Expansion~~	~~$ 121,000~~	$ -	$ (121,000)
~~Community Center Campus Improvements~~	~~$ 2,175,000~~	$ -	$ (2,175,000)
Median & Frontage Improvements (see roadway segment estimates for detail)			
Bodway Parkway: between Valley House and Railroad	$ 915,798	$ 1,159,938	$ 244,140
~~Commerce Blvd (Enterprise to Southwest)~~	$ 960,752	$ -	$ (960,752)
Dowdell Avenue: between 375' north & 750' south of Wilfred Avenue	$ 468,068	$ 754,076	$ 286,009
Dowdell Avenue: between 750' south of Wilfred Avenue and Business Park Drive	$ 815,050	$ 837,863	$ 22,813
Dowdell Avenue: between Business Park Drive and 850' south of Business Park Drive	$ -	$ 491,904	$ 491,904
Dowdell Avenue: between 850' south of Business Park Drive and Martin Avenue	$ -	$ 622,113	$ 622,113
~~Golf Course Drive (Fairway to Country Club)~~	~~$ 1,287,132~~	$ -	$ (1,287,132)
Keiser Avenue: between Snyder Lane & Petaluma Hill Road	$ 2,934,738	$ 2,961,684	$ 26,946
Rohnert Park Expressway: between Syder Lane & Petaluma Hill road	$ 4,004,370	$ 4,736,232	$ 731,862
~~Seed Farm Drive (Rohnert Park Expressway to Enterprise)~~	~~$ 457,899~~		$ (457,899)
Snyder Lane: between G Section & north side of Creekside Middle School	$ 1,697,916	$ 2,761,880	$ 1,063,964
Snyder Lane: between south side of Creekside Middle School and Medical Center Drive	$ 276,122	$ 358,589	$ 82,467
Snyder Lane: between Medical Center Drive and Southwest Blvd	$ 1,133,668	$ 945,371	$ (188,297)
Wilfred Avenue: between 1999 City Limits and Dowdell Avenue	$ -	$ 508,706	$ 508,706
Wilfred Avenue: between Dowdell Avenue and UGB	$ -	$ 2,122,534	$ 2,122,534
Total Public Facilities	**$ 27,326,013**	**$ 31,518,839**	**$ 4,192,826**

City Hall: This completed facility at 130 Avram Avenue houses all administrative departments and includes the City Council Chambers. Construction was completed in 2009.

Master Plans: These completed master plans for the water system and drainage system are used to guide decisions for improvements in the water and storm drainage systems to serve both existing and planned development.

Corporation Yard: This 2011 Update budgets for an expansion of the existing corporation yard to include needed maintenance space for public works and public safety. The City may consider relocating and expanding the corporation yard, in which case the budgeted costs for new development can be applied to the larger relocation improvement. While the cost of this individual improvement has gone up, the expanded facility allows for combined use by public works and public safety and saves over $1,000,000.

Westside Utilities (Dowdell Avenue): These backbone water, sewer and drainage facilities provide a north south utility network for the westside SPAs and PD. These backbone utilities are a shared infrastructure system that will allow the westside specific plan areas and planned development area to connect to the existing utility network.

Median and Frontage Improvements: The median and frontage improvements include curb, gutters, sidewalks, landscaping, streetlighting, and utility undergrounding along the roadways included in this 2011 Update. These improvements are necessary to comply with City standards for development.

4.4 Nexus Findings for Public Safety & Public Facilities

4.4.1 Definition of Improvements

The public facilities improvements described above, including new public safety stations, City Hall, the master plans, improvements to the Corporation Yard and median and frontage improvements are necessary to mitigate the impacts of planned development according to the General Plan, project specific EIRs and City's background and planning documents. These improvements have a total cost of $44,701,695 including $13,182,856 for public safety facilities and $31,518,839 for other public facilities.

4.4.2 Cost Allocation Factors

For public facilities improvements, which are sized to serve population, Common Use Factors (CUFs) have been developed that reflect the impacts of population. These CUFs are used to create an equivalency relationship between the various land use types in the City. Table 4-3 presents the CUFs that are used in the PF Program.

The new Southside Public Safety Station and Median and Frontage Improvements are allocated using the Incremental Cost Methodology, because the need for these facilities is driven by new development. All other public facilities are allocated using the Future System Buy-in Methodology, because the facilities are being designed to serve General Plan buildout.

For the purposes of this 2011 Update, residential land uses are classified according to the City's Municipal Code. Specifically:

- "Single Family Residential" means any use meeting the definition of "dwelling, single-family detached" in Chapter 17.04 of the Municipal Code.
- "Multi-Family Residential" means any use meeting the definition of "dwelling, single-family attached", "dwelling, multi-family" or "mobile home" in Chapter 17.04 of the Municipal Code.

Table 4-3 Common Use Factors for Residential Land Uses

Land Use	CUF	Unit
Single Family Residential	3.20	Dwelling Unit
Multi-Family Residential	2.00	Dwelling Unit
Senior Housing	2.00	Dwelling Unit
Assisted Living Facility	1.00	Dwelling Unit
Office	2.86	1,000 square feet
Hotel	1.05	1,000 square feet
Retail	1.82	1,000 square feet
Industrial-Light	0.66	1,000 square feet
Industrial-Heavy	0.66	1,000 square feet
Warehouse	0.66	1,000 square feet

4.4.3 Impact Zone Allocation

The public safety facilities are allocated to impact zones. The areas west of Highway 101 support the construction of the Westside Public Safety Station. The areas east of Highway 101 support the construction of the new Southside Public Safety Station. The Training and Maintenance facilities are allocated citywide because they provide citywide service.

The proposed public facilities improvements, except for the westside backbone utilities, support the delivery of city-wide services and are allocated citywide. The westside backbone utilities support the delivery of utility service to new development west of Highway 101. Costs for the westside backbone utilities are allocated to these developments.

4.4.4 Fee Component Calculations

The component calculations for public facilities improvements are outlined in Tables 4-4 through 4-12 below. The tables outline the allocation of the total cost to each land use, including new and existing land uses within the City. The resulting fee per land use category is shown per dwelling unit for residential land uses and per thousand square feet for non-residential land uses.

Table 4-4 - PF Fee Component for Southside Station

Total Cost: $ 3,640,300
Cost per CUF $222.25

Land Use Class	Units			CUF (2)	Total Common Use Factors			Percent Share		Cost Share		Cost Per Land Use Class (3)
	Existing	New	Total		Existing	New	Total	Existing	New	Existing	New	New
Single Family Residential (units)	0	2,897	2,897	3.20	0	9,270	9,270	0.00%	56.60%	$ -	$ 2,060,339	$ 711
Multi-Family Residential (units)	0	2,227	2,227	2.00	0	4,454	4,454	0.00%	27.19%	$ -	$ 989,898	$ 444
Senior Housing (units)	0	2	2	2.00	0	4	4	0.00%	0.02%	$ -	$ 854	$ 444
Assisted Living (units)	0	135	135	1.00	0	135	135	0.00%	0.82%	$ -	$ 30,004	$ 222
General Office (tsf)	0	507	507	2.86	0	1,450	1,450	0.00%	8.85%	$ -	$ 322,170	$ 636
Hotel/Motel (tsf)	0	126	126	1.05	0	132	132	0.00%	0.81%	$ -	$ 29,404	$ 233
Retail (tsf)	0	501	501	1.82	0	911	911	0.00%	5.56%	$ -	$ 202,492	$ 404
Light Industrial (tsf)	0	35	35	0.66	0	23	23	0.00%	0.14%	$ -	$ 5,143	$ 147
Heavy Industrial (tsf)	0	0	0	0.66	0	0	0	0.00%	0.00%	$ -	$ -	$ 147
Warehouse (tsf)	0	0	0	0.66	0	0	0	0.00%	0.00%	$ -	$ -	$ 147
Total					0	16,379	16,379	0.00%	100.00%	$ -	$ 3,640,304	

Notes:
(1) Cost per Common Use Factor is Total Cost/Total Common Use Factors
(2) Common Use Factor is people/land use unit
(3) Cost per Land Use Unit is Cost per Common Use Factor x Common Use Factor for the Land Use

Table 4-5 - PF Fee Component for Westside Station

Total Cost: $ 3,722,112
New Development Share $ 1,795,002
Cost per CUF $338.37

Land Use Class	Units			CUF (2)	Total Common Use Factors			Percent Share		Cost Share		Cost Per Land Use Class (3)
	Existing	New	Total		Existing	New	Total	Existing	New	Existing	New	New
Single Family Residential (units)	0	0	0	3.20	0	0	0	0.00%	0.00%	$ -	$ -	$ 1,083
Multi-Family Residential (units)	1,034	1,238	2,272	2.00	2,068	2,476	4,544	18.80%	22.51%	$ 699,739	$ 837,792	$ 677
Senior Housing (units)	0	0	0	2.00	0	0	0	0.00%	0.00%	$ -	$ -	$ 677
Assisted Living (units)	0	0	0	1.00	0	0	0	0.00%	0.00%	$ -	$ -	$ 338
General Office (tsf)	70	230	300	2.86	199	658	857	1.81%	5.98%	$ 67,310	$ 222,577	$ 968
Hotel/Motel (tsf)	193	0	193	1.05	202	0	202	1.84%	0.00%	$ 68,440	$ -	$ 355
Retail (tsf)	1,211	992	2,203	1.82	2,204	1,805	4,009	20.04%	16.41%	$ 745,766	$ 610,826	$ 616
Light Industrial (tsf)	545	554	1,099	0.66	360	366	725	3.27%	3.33%	$ 121,655	$ 123,808	$ 223
Heavy Industrial (tsf)	0	0	0	0.66	0	0	0	0.00%	0.00%	$ -	$ -	$ 223
Warehouse (tsf)	1,004	0	1,004	0.66	663	0	663	6.02%	0.00%	$ 224,199	$ -	$ 223
Total					5,695	5,305	11,000	51.77%	48.23%	$ 1,927,110	$ 1,795,002	

Notes: 3722112
(1) Cost per Common Use Factor is Total Cost/Total Common Use Factors
(2) Common Use Factor is people/land use unit
(3) Cost per Land Use Unit is Cost per Common Use Factor x Common Use Factor for the Land Use

Table 4-6 - PF Fee Component for Training Facilities

Total Cost: $ 5,820,444
New Development Share: $ 1,734,818
Cost per CUF $ 80.00

Land Use Class	Units			CUF (2)	Total Common Use Factors			Percent Share		Cost Share		Cost Per Land Use Class (3)
				(2)								
	Existing	New	Total		Existing	New	Total	Existing	New	Existing	New	New
Single Family Residential (units)	7,548	2,897	10,445	3.20	24,154	9,270	33,424	33.20%	12.74%	$ 1,932,372	$ 741,664	$ 256
Multi-Family Residential (units)	8,594	3,465	12,109	2.00	17,188	6,930	24,118	23.63%	9.53%	$ 1,375,100	$ 554,424	$ 160
Senior Housing (units)	207	2	209	2.00	414	4	418	0.57%	0.01%	$ 33,122	$ 307	$ 160
Assisted Living (units)	0	135	135	1.00	0	135	135	0.00%	0.19%	$ -	$ 10,800	$ 80
General Office (tsf)	1,029	737	1,765	2.86	2,942	2,107	5,049	4.04%	2.90%	$ 235,333	$ 168,598	$ 229
Hotel/Motel (tsf)	519	126	645	1.05	545	132	678	0.75%	0.18%	$ 43,639	$ 10,584	$ 84
Retail (tsf)	2,030	1,492	3,620	1.82	3,695	2,716	6,411	5.08%	3.73%	$ 295,612	$ 217,316	$ 146
Light Industrial (tsf)	1,638	589	1,493	0.66	1,081	389	1,470	1.49%	0.53%	$ 86,516	$ 31,124	$ 53
Heavy Industrial (tsf)	0	0	0	0.66	0	0	0	0.00%	0.00%	$ -	$ -	$ 53
Warehouse (tsf)	1,590	0	1,590	0.66	1,049	0	1,049	1.44%	0.00%	$ 83,937	$ -	$ 53
Total					51,068	21,684	72,752	70.19%	29.81%	$ 4,085,626	$ 1,734,818	

Notes:
(1) Cost per Common Use Factor is Total Cost/Total Common Use Factors
(2) Common Use Factor is people/land use unit
(3) Cost per Land Use Unit is Cost per Common Use Factor x Common Use Factor for the Land Use

Table 4-7 - PF Fee Component for City Hall

Total Cost $ 8,540,000
New Development Share: $ 2,545,399
Cost per CUF $117.38

(1)

Land Use	Units			CUF (2)	Total Common Use Factors			Percent Share		Cost Share		Cost Per Land Use Unit (3)
				(2)								(3)
	Existing	New	Total		Existing	New	Total	Existing	New	Existing	New	New
Single Family Residential (units)	7,548	2,897	10,445	3.20	24,154	9,270	33,424	33.20%	12.74%	$ 2,835,257	$ 1,088,201	$ 376
Multi-Family Residential (units)	8,594	3,465	12,109	2.00	17,188	6,930	24,118	23.63%	9.53%	$ 2,017,604	$ 813,474	$ 235
Senior Housing (units)	207	2	209	2.00	414	4	418	0.57%	0.01%	$ 48,598	$ 451	$ 235
Assisted Living (units)	0	135	135	1.00	0	135	135	0.00%	0.19%	$ -	$ 15,847	$ 117
General Office (tsf)	1,029	737	1,765	2.86	2,942	2,107	5,049	4.04%	2.90%	$ 345,290	$ 247,375	$ 336
Hotel/Motel (tsf)	519	126	645	1.05	545	132	678	0.75%	0.18%	$ 64,029	$ 15,530	$ 123
Retail (tsf)	2,030	1,492	3,620	1.82	3,695	2,716	6,411	5.08%	3.73%	$ 433,734	$ 318,855	$ 214
Light Industrial (tsf)	1,638	589	1,493	0.66	1,081	389	1,470	1.49%	0.53%	$ 126,939	$ 45,667	$ 77
Heavy Industrial (tsf)	0	0	0	0.66	0	0	0	0.00%	0.00%	$ -	$ -	$ 77
Warehouse (tsf)	1,590	0	1,590	0.66	1,049	0	1,049	1.44%	0.00%	$ 123,155	$ -	$ 77
Total					51,068	21,684	72,752	70.19%	29.81%	$ 5,994,601	$ 2,545,399	

Notes:
(1) Cost per Common Use Factor is Total Cost/Total Common Use Factors
(2) Common Use Factor is people/land use unit
(3) Cost per Land Use Unit is Cost per Common Use Factor x Common Use Factor for the Land Use

Table 4-8 - PF Fee Component for Water System Master Plan

Total Cost:		**$ 200,000**
New Development Share:		**$ 59,611**
Cost per CUF	**$**	**2.75**

Land Use Class	Units			CUF (2)	Total Common Use Factors			Percent Share		Cost Share		Cost Per Land Use Unit (3)
	Existing	New	Total		Existing	New	Total	Existing	New	Existing	New	New
Single Family Residential (units)	7,548	2,897	10,445	3.20	24,154	9,270	33,424	33.20%	12.74%	$ 66,399	$25,485	$ 8.80
Multi-Family Residential (units)	8,594	3,465	12,059	2.00	17,188	6,930	24,118	23.63%	9.53%	$ 47,251	$19,051	$ 5.50
Senior Housing (units)	207	2	209	2.00	414	4	418	0.57%	0.01%	$ 1,138	$ 11	$ 5.50
Assisted Living (units)	0	135	135	1.00	0	135	135	0.00%	0.19%	$ -	$ 371	$ 2.75
General Office (tsf)	1,029	737	1,765	2.86	2,942	2,107	5,049	4.04%	2.90%	$ 8,086	$ 5,793	$ 7.86
Hotel/Motel (tsf)	519	126	645	1.05	545	132	678	0.75%	0.18%	$ 1,499	$ 364	$ 2.89
Retail (tsf)	2,030	1,492	3,523	1.82	3,695	2,716	6,411	5.08%	3.73%	$ 10,158	$ 7,467	$ 5.00
Light Industrial (tsf)	1,638	589	2,228	0.66	1,081	389	1,470	1.49%	0.53%	$ 2,973	$ 1,069	$ 1.81
Heavy Industrial (tsf)	0	0	0	0.66	0	0	0	0.00%	0.00%	$ -	$ -	$ 1.81
Warehouse (tsf)	1,590	0	1,590	0.66	1,049	0	1,049	1.44%	0.00%	$ 2,884	$ -	$ 1.81
Total					51,068	21,684	72,752	70.19%	29.81%	$ 140,389	$59,611	

Notes:
(1) Cost per Common Use Factor is Total Cost/Total Common Use Factors
(2) Common Use Factor is people/land use unit
(3) Cost per Land Use Unit is Cost per Common Use Factor x Common Use Factor for the Land Use

Table 4-9 - PF Fee Component for Drainage Master Plan

Total Cost:		**$ 250,000**
New Development Share:		**$ 74,514**
Cost per CUF	**$**	**3.44**

(1)

Land Use Class	Units		CUF (2)	Total Common Use Factors			Percent Share		Cost Share		Cost Per Land Use Class
	Existing	New	(2)	Existing	New	Total	Existing	New	Existing	New	(3) New
Single Family Residential (units)	7,548	2,897	3.20	24,154	9,270	33,424	33.20%	12.74%	$ 82,999	$ 31,856	$ 11.00
Multi-Family Residential (units)	8,594	3,465	2.00	17,188	6,930	24,118	23.63%	9.53%	$ 59,063	$ 23,814	$ 6.87
Senior Housing (units)	207	2	2.00	414	4	418	0.57%	0.01%	$ 1,423	$ 13	$ 6.87
Assisted Living (units)	0	135	1.00	0	135	135	0.00%	0.19%	$ -	$ 464	$ 3.44
General Office (tsf)	1,029	737	2.86	2,942	2,107	5,049	4.04%	2.90%	$ 10,108	$ 7,242	$ 9.83
Hotel/Motel (tsf)	519	126	1.05	545	132	678	0.75%	0.18%	$ 1,874	$ 455	$ 3.61
Retail (tsf)	2,030	1,492	1.82	3,695	2,716	6,411	5.08%	3.73%	$ 12,697	$ 9,334	$ 6.25
Light Industrial (tsf)	1,638	589	0.66	1,081	389	1,470	1.49%	0.53%	$ 3,716	$ 1,337	$ 2.27
Heavy Industrial (tsf)	0	0	0.66	0	0	0	0.00%	0.00%	$ -	$ -	$ 2.27
Warehouse (tsf)	1,590	0	0.66	1,049	0	1,049	1.44%	0.00%	$ 3,605	$ -	$ 2.27
Total				51,068	21,684	72,752	70.19%	29.81%	$ 175,486	$ 74,514	

Notes:
(1) Cost per Common Use Factor is Total Cost/Total Common Use Factors
(2) Common Use Factor is people/land use unit
(3) Cost per Land Use Unit is Cost per Common Use Factor x Common Use Factor for the Land Use

Table 4-10 - PF Fee Component for Corporation Yard

Total Cost: $ 2,662,200
New Development Share: $ 2,662,200
Cost per CUF $ 122.77

Land Use	Units			CUF (2)	Total Common Use Factors			Percent Share		Cost Share		Cost Per Land Use Unit (3)
	Existing	New	Total		Existing	New	Total	Existing	New	Existing	New	New
Single Family Residential (units)	0	2,897	10,445	3.20	0	9,270	9,270	0.00%	42.75%	$ -	$ 1,138,135	$ 393
Multi-Family Residential (units)	0	3,465	12,109	2.00	0	6,930	6,930	0.00%	31.96%	$ -	$ 850,802	$ 246
Senior Housing (units)	0	2	209	2.00	0	4	4	0.00%	0.02%	$ -	$ 471	$ 246
Assisted Living (units)	0	135	135	1.00	0	135	135	0.00%	0.62%	$ -	$ 16,574	$ 123
General Office (tsf)	0	737	1,765	2.86	0	2,107	2,107	0.00%	9.72%	$ -	$ 258,726	$ 351
Hotel/Motel (tsf)	0	126	645	1.05	0	132	132	0.00%	0.61%	$ -	$ 16,243	$ 129
Retail (tsf)	0	1,492	3,620	1.82	0	2,716	2,716	0.00%	12.53%	$ -	$ 333,486	$ 223
Light Industrial (tsf)	0	589	1,493	0.66	0	389	389	0.00%	1.79%	$ -	$ 47,762	$ 81
Heavy Industrial (tsf)	0	0	0	0.66	0	0	0	0.00%	0.00%	$ -	$ -	$ 81
Warehouse (tsf)	0	0	1,590	0.66	0	0	0	0.00%	0.00%	$ -	$ -	$ 81
Total					0	21,684	21,684	0.00%	100.00%	$ -	$ 2,662,200	

Notes:
(1) Cost per Common Use Factor is Total Cost/Total Common Use Factors
(2) Common Use Factor is people/land use unit
(3) Cost per Land Use Unit is Cost per Common Use Factor x Common Use Factor for the Land Use

Table 4-11 – PF Fee Component for Westside Utilities

Total Cost: $ 1,605,749
New Development Share $ 1,605,749
Cost per CUF $ 302.69

Land Use Class	Units			CUF	Total Common Use Factors			Percent Share		Cost Share		Cost Per Land Use Class
	Existing	New	Total	(2)	Existing	New	Total	Existing	New	Existing	New	(3) New
Single Family Residential (units)	0	0	0	3.20	0	0	0	0.00%	0.00%	$ -	$ -	$ 969
Multi-Family Residential (units)	0	1,238	1,238	2.00	0	2,476	2,476	0.00%	46.67%	$ -	$ 749,461	$ 605
Senior Housing (units)	0	0	0	2.00	0	0	0	0.00%	0.00%	$ -	$ -	$ 605
Assisted Living (units)	0	0	0	1.00	0	0	0	0.00%	0.00%	$ -	$ -	$ 303
General Office (tsf)	0	230	230	2.86	0	658	658	0.00%	12.40%	$ -	$ 199,110	$ 866
Hotel/Motel (tsf)	0	0	0	1.05	0	0	0	0.00%	0.00%	$ -	$ -	$ 318
Retail (tsf)	0	992	992	1.82	0	1,805	1,805	0.00%	34.03%	$ -	$ 546,424	$ 551
Light Industrial (tsf)	0	554	554	0.66	0	366	366	0.00%	6.90%	$ -	$ 110,754	$ 200
Heavy Industrial (tsf)	0	0	0	0.66	0	0	0	0.00%	0.00%	$ -	$ -	$ 200
Warehouse (tsf)	0	0	0	0.66	0	0	0	0.00%	0.00%	$ -	$ -	$ 200
Total					0	5,305	5,305	0.00%	100.00%	$ -	$ 1,605,749	

Notes:
(1) Cost per Common Use Factor is Total Cost/Total Common Use Factors
(2) Common Use Factor is people/land use unit
(3) Cost per Land Use Unit is Cost per Common Use Factor x Common Use Factor for the Land Use

Table 4-12 - PF Fee Component for Median & Frontage Improvements

Total Cost: $ 18,260,890
New Development Share: $ 18,260,890
Cost per CUF: $ 842.13

Land Use Class	Units			CUF	Total Common Use Factors			Percent Share		Cost Share		(1) Cost Per Land Use Class
	Existing	New	Total	(2)	Existing	New	Total	Existing	New	Existing	New	(3) New
Single Family Residential (units)	0	2,897	2,897	3.20	0	9,270	9,270	0.00%	42.75%	$ -	$ 7,806,837	$ 2,695
Multi-Family Residential (units)	0	3,465	3,465	2.00	0	6,930	6,930	0.00%	31.96%	$ -	$ 5,835,927	$ 1,684
Senior Housing (units)	0	2	2	2.00	0	4	4	0.00%	0.02%	$ -	$ 3,234	$ 1,684
Assisted Living (units)	0	135	135	1.00	0	135	135	0.00%	0.62%	$ -	$ 113,687	$ 842
General Office (tsf)	0	737	737	2.86	0	2,107	2,107	0.00%	9.72%	$ -	$ 1,774,686	$ 2,408
Hotel/Motel (tsf)	0	126	126	1.05	0	132	132	0.00%	0.61%	$ -	$ 111,413	$ 884
Retail (tsf)	0	1,492	1,492	1.82	0	2,716	2,716	0.00%	12.53%	$ -	$ 2,287,488	$ 1,533
Light Industrial (tsf)	0	589	589	0.66	0	389	389	0.00%	1.79%	$ -	$ 327,618	$ 556
Heavy Industrial (tsf)	0	0	0	0.66	0	0	0	0.00%	0.00%	$ -	$ -	$ 556
Warehouse (tsf)	0	0	0	0.66	0	0	0	0.00%	0.00%	$ -	$ -	$ 556
Total					0	21,684	21,684	0.00%	100.00%	$ -	$ 18,260,890	

Notes:
(1) Cost per Common Use Factor is Total Cost/Total Common Use Factors
(2) Common Use Factor is people/land use unit
(3) Cost per Land Use Unit is Cost per Common Use Factor x Common Use Factor for the Land Use

4.4.5 Nexus Findings for Public Facilities Improvements

Purpose of Fee Components: The public facilities fee component funds:

- Capital improvements needed to support the delivery of public safety services within the response standards established by the General Plan;
- Capital improvements needed to expand public facilities and support the delivery of general public services at service levels established by the General Plan; and
- Improvements to curb, gutter, sidewalks, median sidewalk, streetlighting, drainage, utility underground and landscaping in accordance with the design standards established in the General Plan and by the City's standards.

Use of Fee: Revenue from fees will be used to:

- Design and construct one Public Safety Station to serve the area west of Highway 101; design and construct one Public Safety Station to serve new development east of Highway 101; design and construct Public Safety training facilities to serve the entire City;
- Design and construct City Hall (complete) and the expanded corporation yard to serve the entire City;
- Prepare water and drainage system master plans;
- Design and construct backbone water, sewer and storm drainage facilities to support westside development; and
- Design and construct curb, gutter, sidewalk, median, streetlighting, landscaping and underground utilities to allow new roadways serving new development to meet General Plan and City design standards.

Relationship between Use of Fee and Type of Development: The development of new and infill residential and non-residential land uses will result in increased population in the City. This increased population will consist of new residents, workers and visitors. This new population will require services from the City. The City will use fee revenue to fund the expansion of its public safety facilities and its general public facilities in order to house the staff and equipment and provide services to new residents, workers and visitors.

Relationship between Need for Improvements and the Type of Development: Each type of new development's impact on public safety and general public facilities is measured by its CUF. The CUF allows the relative impact of residential and non-residential land uses to be modeled so that each development's impact on each proposed improvement can be calculated.

Relationship between Amount of Fee and Cost of or Portion of Facility Attributed to Development Upon Which Fee is Imposed: CUFs are used to measure the relative benefit of public safety facilities, and public facilities and to attribute cost shares to benefiting populations. Population based fees are calculated using the following steps:

1. The cost of each improvement is allocated either citywide or to impact zones, as appropriate.
2. Costs are then allocated between new and existing development (either within the impact zone or citywide) based on the total population equivalency of new development and existing development.
3. New developments' share of costs is then allocated to each land use class based on the population equivalency of that class in order to arrive at the fee component. The formula for allocation is illustrated below.

Fee Component per New Land Use Class	=	Total New Development Share of Improvement	x	CUF per Land Use Class/Total CUFS for New Development

For each Population Based Fee Component, the allocation to impact zones and the allocation between new and existing development is described below. The allocation among new development land use classes consistently follows the formula outlined above.

Westside Public Safety Station: The cost is allocated only to land uses west of Highway 101 because the station serves this area. This facility will address an existing service need as well as provide capacity for new service. Therefore costs are allocated between new and existing development.

Southside Public Safety Station: The cost is allocated only to land uses east of Highway 101 because the station serves this area. This facility is required because of the impacts of new development. Therefore the costs are allocated only to new development.

Public Safety Training Facilities: The cost is allocated to all land uses in the City because the training facilities will be utilized by all Public Safety staff. This facility will address an existing service need as well as provide capacity for new service. Therefore costs are allocated between new and existing development.

City Hall: The cost is allocated to all land uses in the City because the City Hall houses the staff and functions that serve the entire City. This facility addresses an existing service need as well as providing capacity for new service. Therefore costs are allocated between new and existing development.

Water and Drainage Master Plans: These costs are allocated to all land uses in the City, new and existing, because the comprehensive planning effort supports infrastructure for all users.

Corporation Yard Expansion: This cost is allocated citywide because the expansion will allow for service to be provided to the whole City. This expansion is required because of the impacts of new development. Therefore the costs are allocated only to new development.

Westside Backbone Utilities (Dowdell Avenue): This cost is allocated to the area west of Highway 101 because the new utilities will provide service for new development. The new backbone utilities are required because of the impacts of new development. Therefore the costs are allocated only to new development.

Median and Frontage Improvements: This cost is allocated citywide because the median and frontage improvements are consistent with General Plan guidance regarding community form. The improvements are required because of the impacts of new development on medians and frontages. Therefore the costs are allocated only to new development.

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5 Sewer Facilities

5.1 Introduction

This chapter provides narrative description, graphical representation and cost estimates for the proposed sewer facility improvements including sewer collection system infrastructure owned and operated by the City and wastewater treatment, disposal and reuse infrastructure owned by the Santa Rosa Subregional System. Because some of the proposed facilities are still the subject of review under CEQA, the descriptions and illustrations included in this 2011 Update are intended to present the basis of the cost estimates, not to commit the City to a particular construction strategy.

5.2 Description of Sewer Facilities

The City owns and operates a sewer collection system, pump station and outfall. The City, together with the cities of Cotati, Santa Rosa and Sebastopol and portions of unincorporated Sonoma County, contracts with the Santa Rosa Subregional System for wastewater treatment, disposal and reuse. The Subregional System's current facilities include the Laguna Water Reclamation Plant, the Geysers Pipeline, a network of recycled water storage and distribution facilities and facilities to dispose of treated effluent to the Laguna de Santa Rosa. These existing facilities, which have been constructed and financed by Santa Rosa and its partners, provide a total existing capacity of 21.3 million gallons per day (MGD). The Subregional System partners currently utilize approximately 18 MGD of capacity. The City provides sewer service to the Canon Manor SPA, including collecting, pumping and treatment capacity. The agreement between the City and the County of Sonoma for Canon Manor service is included Appendix D.

From 2003 to 2005, the City conducted a comprehensive assessment of the capacity of its collection facilities which included flow monitoring and modeling. This analysis indicated that the City's existing facilities were at capacity and could not accommodate planned growth without expansion. The City has defined two major projects, the Eastside Trunk Sewer Project and the Interceptor Outfall Project, that are necessary to provide collection system capacity for General Plan buildout, including the Canon Manor area. Each of these projects has been pursued in phases.

Like the City, the Subregional System has defined its long-term needs for both capacity expansion and improved reliability. Beginning in 2001, Santa Rosa, in its role as Managing Partner of the Subregional System, began the process of developing a long term plan to manage regulatory change and planned growth. This effort, which came to be known as the Incremental Recycled Water Program or IRWP, included a detailed review of the historic flows from each member agency. These historic flow patterns were applied to the General Plan population and land use projections in order to generate an estimate of future capacity needs. The Subregional System then developed a range of programs for managing the flow that it is currently permitted to discharge to the Russian River and for managing additional flows. The IRWP envisions a total capacity expansion from 21.3 MGD to 25.9 MGD which will result in approximately 2,200 million gallons per year (MGY) of additional recycled water.

In November 2003, Santa Rosa certified the Environmental Impact Report for the IRWP and in March 2004 it adopted its IRWP Master Plan which outlined four capacity expansion strategies and improvements to the treatment and discharge system to meet regulatory requirements. The capacity expansion strategies include Indoor Water Conservation, expansion of delivery to the Geysers, Urban Reuse and Agricultural Reuse. To date, Santa Rosa and its partners have moved forward with Water Conservation and the Geysers Expansion and have completed planning on discrete Urban Reuse projects for Cotati, Rohnert Park and Santa Rosa.

Descriptions of the basic design parameters and cost estimates are included below. Figure 5-1 illustrates the City's Capacity Expansion Projects.

5.2.1 City Sewer Infrastructure

Eastside Trunk Sewer: The General Plan identified the need for the Eastside Trunk Sewer to provide capacity for new development, including connections in Canon Manor. During predesign of the Eastside Trunk Sewer, the City identified several locations where it could tie-in existing portions of its collection system and resolve existing sewer capacity limitations that created potential for overflows. The Eastside Trunk Sewer, as proposed, now serves all new eastside development, Canon Manor and some existing sewer customers. Because of the design of the Eastside Trunk Sewer, these developments do not use capacity in the City's existing collection system and hence have no "fair share" allocation of existing collection system facilities.

Phase 1: Phase 1 of the Eastside Trunk Sewer, which extends from the City's terminal pump station to the intersection of Commerce Blvd. and Avram Avenue, includes 5,700 feet of 42-inch diameter gravity sewer. Construction was completed in 2009 at a total cost of $13,761,934. This project benefits mainly new development but the City did oversize the sewer to allow it to reroute some flows from existing development. The City financed construction through a $3,706,219 cash contribution with the remaining costs covered by tax increment bond refunding (Series 2007R Tax Allocation Bonds) through its redevelopment agency. Series 2007R had a total principal value of $22,305,000: $10,055,724 of this principal amount was dedicated to the construction of Eastside Trunk Sewer Phase 1.

Because the City financed the Eastside Trunk Sewer Phase 1 with its Tax Allocation Bonds, the fee component calculation is based on both the actual cost of construction and the present value of the stream of interest payments owed on the Series 2007R Tax Allocation Bonds. Interest costs are taken from the debt service schedule for Series 2007R Tax Allocation Bonds. Because 45.1% of this bond issue was devoted to constructing the Eastside Trunk Sewer Phase 1, 45.1% of the interest costs are included the valuation.

The detailed present value calculation, including interest rates used, is included in Appendix B. Table 5-1 below presents a summary of the costs for Eastside Trunk Sewer Phase 1 that are included in the PF Fee Program.

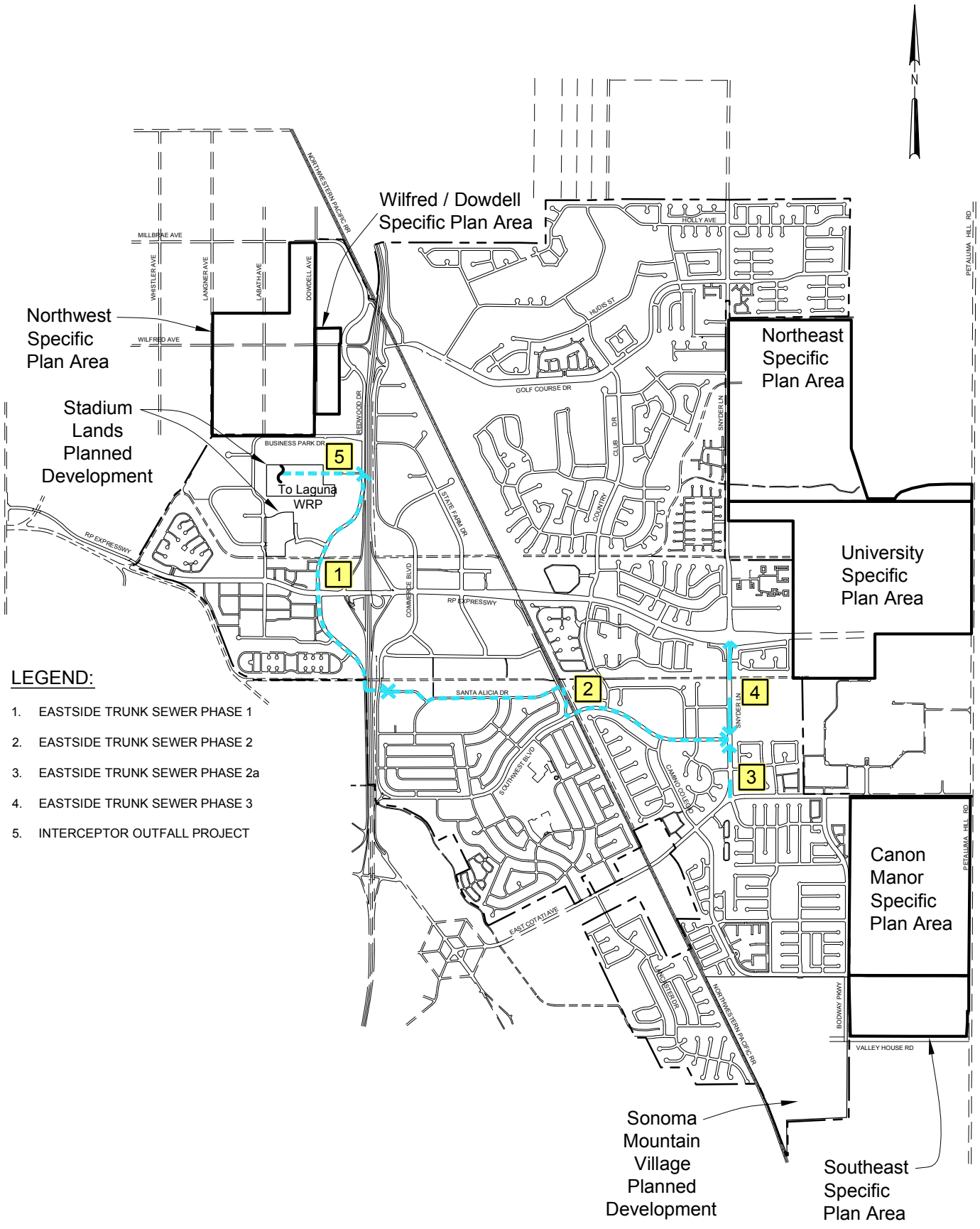

FIGURE 5-1
Sewer Improvements
Key Map

WINZLER & KELLY

J:\02056 - Rohnert Park\02056-09-003 Finance Plan Update\CAD\Sewer Improvements.dwg Jul 25, 2011 - 2:15pm

Table 5-1 – Eastside Trunk Phase 1 – Costs included in the PF Fee Program (actual costs)

Project Construction Cost	***$13,761,943***
Present Value of Interest Payments on 2007R Tax Allocation Bonds	***$7,843,392***
Cash Contribution by City	***($3,706,219)***
Total Cost included in Fee Calculation	***$17,899,116***

Phase 2 Main Reach: Phase 2 of the Eastside Trunk Sewer extends from the intersection of Commerce Blvd and Avram Avenue, east along Santa Alicia Drive and Southwest Blvd to Snyder Lane. Phase 2a includes approximately 8,600 feet of 24-inch diameter gravity sewer. The pipeline is estimated to cost approximately $10,600,000. This projects benefits mainly new development but the City did oversize the sewer to allow it to reroute some existing flows.

Phase 2a: Phase 2a of the Eastside Trunk Sewer extends from the intersection of Snyder Lane and Southwest Blvd south to the intersection of Snyder Lane and East Cotati Avenue. Phase 2a includes approximately 1,300 feet of 18-inch gravity sewer. The pipeline is estimated to cost approximately $1,150,329. This project benefits mainly new development but the City did oversize the sewer to allow it to reroute some existing flows.

Phase 3: Phase 3 of the Eastside Trunk Sewer extends from the intersection of Snyder Lane and Southwest Blvd north along Snyder Lane to its intersection with Rohnert Park Expressway. Phase 3 includes approximately 2,000 feet of 24-inch diameter gravity sewer. The pipeline is estimated to cost approximately $2,800,000. This phase of the project is sized only to benefit new development.

Detailed cost estimates are presented in Appendix B for Phase 2, 2a and 3. Table 5-2 summarizes the cost estimates

Table 5-2 – Eastside Trunk Sewer Phase 2, 2a and 3 Cost Estimate (ENR CCI 10192.79)

Eastside Trunk Sewer Phase 2 (Commerce @ Avram to Snyder @ Southwest)	***$10,637,139***
Eastside Trunk Sewer Phase 2a (Snyder @ Southwest to Snyder @ East Cotati)	***$1,150,329***
Eastside Trunk Sewer Phase 3 (Snyder @ Southwest to Snyder @ RPX)	***$2,805,235***

Interceptor Outfall Project: The Interceptor Outfall Project includes a new 30-inch sewer interceptor/outfall extending from the City's terminal pump station to the Santa Rosa's Subregional Water Reclamation Facility and rehabilitation of the existing pump station and 24-inch interceptor/outfall. The City's Sewer Model Study indicated that the project was necessary to provide a reliable pumping and force-main system with adequate capacity for the City's sewer service area, including the Canon Manor service area. This project has also been developed to include two phases.

Phase 1: Phase 1 of the Interceptor Outfall Project is the 30-inch pressure sewer constructed in 2005. The City financed construction with the sale of certificates of participation secured by its sewer enterprise fund. In order to account for the present value of principal and interest on Phase 1, the City computed the reconstruction-cost-new-less-depreciation for the project as $13,517,373. The City has computed the present value of the interest costs associated with Interceptor Outfall Project Phase 1 as $9,615,250. Interest costs are taken from the debt service schedule for the certificates of participation.

Phase 2: Phase 2 of the Interceptor Outfall Project includes upgrades to existing terminal pump station and rehabilitation of the original 24-inch force main. The phase 2 project is estimated to cost $6,681,263.

The detailed cost estimates including the present value calculation and interest rates used are included in Appendix B. Table 5-3 summarizes the costs that are included in the PF Fee Program for the Interceptor Outfall Project Phase 1.

Table 5-3 – Interceptor Outfall Project – Costs included in the PF Fee Program

Interceptor Outfall Project Phase 1 – Construction	***$13,517,373***
Interceptor Outfall Project Phase 1 – Interest	***9,615,250***
Interceptor Outfall Project Phase 2 (ENR CCI 10192.79)	***$6,681,263***
Total Costs	***$29,813,886***

5.2.2 Subregional System Facilities

Through the IRWP Master Plan process, the Subregional System developed current and future wastewater flow projections for each of its member agencies using General Plan information, projections made by the Association of Bay Area Governments (ABAG). Table 5-4, below, presents the IRWP Capacity Expansion calculations.

Table 5-4 IRWP Capacity Expansion Calculations[6]

	Cotati	Rohnert Park	Santa Rosa	Sebastopol	South Park	Total
Annual Wastewater Flow (MGD)						
2004	0.61	3.91	14.16	0.71	0.62	20.01
2020	0.76	5.15	18.44	0.84	0.70	25.89
Existing Ownership Share						
MGD	0.76	3.43	15.61	0.84	0.70	21.34
Percentage	3.56%	16.07%	73.15%	3.94%	3.28%	100.00%
Future Ownership Share						
MGD	0.76	5.15	18.44	0.84	0.70	25.89
Percentage	2.94%	19.89%	71.22%	3.24%	2.70%	100.00%

Table 5-4 illustrates that the City has a 16% share in the existing capacity of the Subregional System and that this share is anticipated to grow to almost 20% as the Subregional System builds out to full capacity.

In 2007, Santa Rosa undertook a comprehensive update of its water and sewer capacity charges. This effort, which was performed by the Reed Group, is documented in *City of Santa Rosa Water and Wastewater Demand Fee Study Final Report* (March 6, 2007) (Santa Rosa Study). As part of that effort, Santa Rosa prepared a comprehensive valuation of existing facilities and planned facilities. The Santa Rosa Study developed the Present Value of Existing and Planned Facilities for the following types of assets:

- Replacement Cost less Depreciated Value for Existing Facilities with a baseline of June 30, 2006;
- Present Value of Interest and Issuance Costs for Past Debt Issuance with a baseline of June 30, 2006;
- Present Value of the 5-Year Capital Improvement Program (CIP) through June 2006;
- Present Value of the 5-Year CIP through June 2012 with a 75% allowance for bond financing costs;
- Present Value of the proposed Santa Rosa Urban Reuse Project with a 75% allowance for bond financing costs;
- Present value of IRWP facilities that will be constructed after 2012 with a 75% allowance for bond financing costs.

[6] City of Santa Rosa Incremental Recycled Water Program Economic and Financial Assessment (Hilton, Farnkopf & Hobson, LLC, February 2004) Schedule 9A

As part of the Santa Rosa Study, existing facilities and CIP proposals were reviewed in order to avoid double-counting of facilities and the 75% financing factor was documented based on a review of prior bond sales. Because of this, the Santa Rosa Study provides a good baseline of the Present Value of Existing and Proposed Subregional System Facilities. However, this 2011 Update makes two adjustments to bring the estimate of value up to a current baseline. Specifically,

- Replacement Cost less Depreciated Value for Existing Facilities was adjusted to account for four additional years of depreciation. For this purposes of this analysis, equipment was assumed to have a 20-year life, all other existing capital assets were assumed to have a 50-year life and land was not depreciated;
- Present Value of Interest and Issuance Costs for Past Debt Issuance were adjusted to account for a baseline of June 2011.

In 2008, the City and Santa Rosa entered into the Fifth Amendment to the Agreement for Use of Santa Rosa Subregional Sewerage System. The purpose of the Amendment was to: revise the cost allocation methodology to better account for each agency's contributions and future needs; allocate the cost and additional capacity provided by the Geysers Expansion Project; and agree to fund addition projects necessary to expand treatment use capacity. As a result of this amendment, the City secured some additional capacity from the Geysers Expansion Project. The amendment also provided the City, Santa Rosa and South Park County Sanitation District with more flexibility in tailoring future capacity expansion projects to their needs. As a result of this Fifth Amendment, two other adjustments are made to the baseline costs included in the Santa Rosa Study. Specifically,

- The cost of the proposed Rohnert Park Urban Reuse Project was substituted for the cost of the proposed Santa Rosa Urban Reuse Project.
- The costs of Subregional expansion projects beyond the 2012 CIP have been removed from the costs included in the fee program. Because of the Geysers Expansion Project, the ability to implement the Rohnert Park Urban Reuse Project, the change in cost allocation methods for dry weather and wet weather flow contributions and the extensive water conservation efforts the City has and will continue to undertake to comply with SBx7-7 (described in Section 5.3.2 below), the City does not believe it will need to participate in these long-term future expansion projects to secure adequate capacity for development.

Table 5-5 illustrates the original values used in the Santa Rosa Study and the adjustments made for this analysis. In general, even with adjustments to take into account the passage of time, the City's share of the Subregional System facilities is very similar.

Table 5 - 5 Adjusted Present Value of Subregional System Facilities (ENR CCI 10192.79)

	Santa Rosa Demand Fee Study (June 2006 Baseline)	Rohnert Park Capacity Fee Analysis (June 2011 Baseline)	Allocation Factor	Rohnert Park Share
Depreciatated Replacement Cost of Existing Facilities				
Land and Land Rights	$ 14,494,000	$ 14,494,000		
Buildings	$ 147,666,000	$ 135,852,720		
Capital Improvements	$ 159,180,000	$ 146,445,600		
Equipment	$ 17,889,000	$ 14,311,200		
Infrastructure Assets	$ 231,000	$ 212,520		
Construction in Progress	$ 60,272,000	$ 60,272,000		
Subtotal Depreciated Replacement Cost of Existing Facilities	**$ 399,732,000**	**$ 371,588,040**	**19.70%**	**$ 73,202,800**
Present Value of Interest on Past Debt for Existing Facilities	**$ 237,621,000**	**$ 293,249,260**	**19.70%**	**$ 57,770,100**
Present Value of Past Debt Issuance Costs	**$ 15,307,000**	**$ 18,184,627**	**19.70%**	**$ 3,582,400**
Planned Future System Improvements				
5-Year CIP through 6/30/2006	**$ 15,379,000**	**$ 15,379,000**	**19.70%**	**$ 3,029,700**
5-Year CIP through 2012 - Wastewater Capital Fund				
Reclamation Improvements (Land Purchase)	$ 2,800,000	$ 2,800,000		
Laguna WTP Upgrades Phase 2	$ 3,128,000	$ 3,128,000		
Electrical Upgrade	$ 2,700,000	$ 2,700,000		
West College Reclaimed Water Line	$ 90,000	$ 90,000		
Environmental Grant Funding	$ 250,000	$ 250,000		
Headworks Improvements	$ 2,500,000	$ 2,500,000		
Laguna WTP Headworks Pipeline Repairs	$ 5,600,000	$ 5,600,000		
Subregional Plant Energy Options	$ 1,500,000	$ 1,500,000		
Engine Upgrades	$ 1,125,000	$ 1,125,000		
Reclamation Pond Erosion	$ 150,000	$ 150,000		
Subtotal Capital Fund	**$ 19,843,000**	**$ 19,843,000**	**19.70%**	**$ 3,909,100**
5-Year CIP through 2012 - Proposed Bond Construction				
UV Expansion	$ 9,300,000	$ 9,300,000	14.37%	$ 1,336,400
West College Wet Weather	$ 5,300,000	$ 5,300,000	14.37%	$ 761,600
IRWP Urban Reuse	$ -	$ -		$ -
IRWP Discharge Relocation	$ 91,300,000	$ 91,300,000	14.37%	$ 13,119,800
Tertiary Filtration	$ 18,800,000	$ 18,800,000	14.37%	$ 2,701,600
Power Generation Project	$ 14,000,000	$ 14,000,000	14.37%	$ 2,011,800
Long Term Dewatering	$ 2,200,000	$ 2,200,000	19.70%	$ 433,400
Subtotal Proposed Bond Construction	**$ 140,900,000**	**$ 140,900,000**		**$ 20,364,600**
Financing Factor Factors on Proposed Bonds (75%)	**$ 105,675,000**	**$ 105,675,000**		**$ 15,273,450**
		$ -		
Subtotal Planned Future System Improvements (2006 CIP + 2012 Capital CIP + 2012 Bonded CIP + Financing Factor	**$ 281,797,000**	**$ 281,797,000**		**$ 42,576,850**
Total Depreciated Value of Existing + Planned Future System Improvements	**$ 934,457,000**	**$ 964,818,927**		**$ 177,132,150**
Other Identified Projects				
Rohnert Park Reuse	**$ 25,000,000**	**$ 25,000,000**	100.00%	**$ 25,000,000**
Total	**$ 959,457,000**	**$ 989,818,927**		**$ 202,132,150**

5.2.3 Canon Manor Project Management

The City has assisted in the development of the Canon Manor sewer project for approximately 10 years. The City tracks the administrative time associated with this work in a separate project number and has accrued costs to date of $435,328. These costs represent the costs of providing service specifically to development in Canon Manor.

5.3 Nexus Findings for Sewer Facilities

5.3.1 Definition of Improvements

The specific facilities in the sewer facilities component are:

- The City's Eastside Trunk Sewer Project which provides capacity for all new development in the Specific Plan and Planned Development areas east of Highway 101, including new connections in the Canon Manor subdivision and some existing development east of Highway 101;
- The City's Interceptor Outfall Project which provides capacity for all development, new and existing, within the City and its Sphere of Influence, including all SPAs, all PDs, infill development and new connections in the Canon Manor subdivision.
- The Subregional System's treatment, disposal and reuse facilities which provide capacity for all development, new and existing, within the Subregional System's service area, including all SPAs, all PDs, infill development and new connections in the Canon Manor subdivision.

5.3.2 Cost Allocation Factors

For capital improvements associated with sewer capacity, costs are allocated by flow contributions to the sewer system. Flow contributions determine the ultimate size and cost of the sewer system so this method allows for a reasonable calculation of the impacts caused by various types of development.

In its 2006 Sewer Capacity Charge Analysis, the City developed flow factors based on the comprehensive work performed by the Subregional System during its IRWP Master Plan. The IRWP calculations developed flow factors for residential units and flow factors per employee in order to model nonresidential contributions to the sewer system. These flow factors were designed to model indoor water use because water used indoors is the water that ultimately flows into the sewer. While a number of peaking factors are applied to these base factors in order to appropriately size collection and treatment facilities, the base indoor water use factors provide a reasonable methodology for understanding the sewer flow impacts from various land uses.

In 2009, the California State Legislature approved and the Governor signed Senate Bill x 7-7 (SBx7-7 or the Water Conservation Act of 2009), which called for a 20% reduction in urban water use across the state by the year 2020. As a result of this legislation, the City has been working with other water purveyors in its region to develop new indoor water use factors that reflect the demand reduction that is required by law. Because of the legislation, these reduced demand levels must be achieved by new and existing development. As part of this work, the City participated with a study by Maddaus Water

Management[7] that reviewed historic water use patterns and existing and planned water conservation strategies in order to develop new flow factors for single family and multi-family residential units. For the purposes of projecting nonresidential flows, the per employee flow factor developed in the IRWP Master Plan has been reduced by 10%. This 10% reduction is consistent with the nonresidential conservation target established in SBx7-7.[8] These flow factors, which are presented in Table 5-6 below, are the basis for converting land uses to sewer flow in this 2011 Analysis.

Table 5-6 – General Flow Equivalency Factors

Land Use Category	Unit	Flow Equivalency Factor per Unit (gpd)
Single Family Residential	EA	170
Multi-Family Residential	EA	111
Senior Housing	EA	111
Assisted Living	EA	111
Nonresidential Land Use	Employee	23

In addition to revising the flow factors for all development consistent with SBx7-7, the City has required specific flow rates from the proposed Sonoma Mountain Village development. Sonoma Mountain Village is unique among the SPAs and PDs because the development proposal includes redevelopment of existing industrial campus, which had purchased capacity rights within the City's system, together with the development of new land uses.

The City's General Plan, its Basis of Design Report for the Eastside Trunk Sewer and its approval documents for the Sonoma Mountain Village Planned Development limit total sewer flows from the development to 241.8 acre-feet per year or 215,850 gpd [9] and limit the use of the existing capacity right to the existing building footprints, which total 700,000 square feet[10].

Based on these approval documents and conditions, the total new contribution from new development within the Sonoma Mountain Village Planned Development is estimated to be 188,034 gallons per day, which is the volume of flow that the Sonoma Mountain Village Water Plan associates with development outside of the existing building footprints.

[7] FINAL 2010 Urban Water Management Plan Water Demand Analysis and Water Conservation Measures Update, Maddaus Water Management Study

[8] Water Code Section 10608.20(b)(2)(C)

[9] *Sonoma Mountain Village Water Plan*, August 5, 2009, Table B.

[10] Sonoma Mountain Village Draft Environmental Impact Report, August 2009, page 2-52.

In order to convert the current and planned land uses into sewer flows the following methodology is employed:

1. Sonoma Mountain Village's proposed land use pattern is allocated across existing uses with capacity rights and new uses. This is done by subtracting the existing nonresidential square footage from the total nonresidential square footage as illustrated in Table 5-7. The new land uses pattern is subject to capacity charges based on the estimated flow contribution of 188,034 gallons per day.

Table 5-7 – Sonoma Mountain Village – New and Existing Allocation

	Proposed Final Land Use Pattern	Existing Land Uses with Capacity Charge Credits	New Land Use Pattern Subject to Capacity Charges
Land Use Class			
Residential			
Single Family Residential (units)	700	-	700
Multi-Family Residential (units)	994	-	994
Senior Housing (units)	0	-	-
Assisted Living (units)	0	-	-
Non-Residential (square feet)	813,801	(700,000)	113,801

2. Because non-residential flow contributions are allocated by employee, the new employees projected in the General Plan are allocated to each SPA, Planned Development and Infill development based on the total new non-residential square footage associated with each. This calculation is illustrated in Table 5-8.

Table 5-8 – Nonresidential Land Uses – Employee Allocations

Nonresidential Land Uses	Square Footage			Percentage of Square Footage Associated with New Development	Employees Associated with New Development		
	2011 Base	Planned Buildout	New Development		2010 Base	Planned Buildout	New Development
Citywide Totals	6,806,303	9,112,896	2,306,593		21,900	27,308	5,408
NE SPA	-	-	-	0.00%			-
UD SPA	-	175,000	175,000	7.59%			410
SE SPA	-	10,000	10,000	0.43%			23
WD SPA	-	302,114	302,114	13.10%			708
NW SPA	-	1,200,000	1,200,000	52.02%			2,814
Stadium Lands	-	140,000	140,000	6.07%			328
Sonoma Mountain Village	700,000	813,801	113,801	4.93%			267
Subtotal SPAs and PDs	**700,000**	**2,640,915**	**1,940,915**	**84.15%**			**4,551**
Infill	**6,106,303**	**6,471,981**	**365,678**	**15.85%**			**857**
Totals	**6,806,303**	**9,112,896**	**2,306,593**	**100.00%**			**5,408**

3. Because Sonoma Mountain Village's planned development will be managed to an agreed-upon flow cap, Sonoma Mountain Village's new land uses are subtracted from total new land uses before flow factors are applied. This calculation is illustrated in Table 5-9.

Table 5-9 – Contributing Land Uses without Sonoma Mountain Village

Land Use Class	2011 Base	Planned Buildout	New Development
Single Family Residential (units)	7,719	9,965	2,246
Multi-Family Residential (units)	8,594	11,115	2,521
Senior Housing (units)	207	209	2
Assisted Living (units)	0	135	135
Nonresidential Employees	21,900	27,041	5,141

4. Because cost allocations will be based on flow contribution, which is indicative of infrastructure impacts, the general flow equivalency factors illustrated in Table 5-9 are applied to all land uses except Sonoma Mountain Village to create flow factors for each type of development. Sonoma Mountain Village's contribution is applied as a fixed flow contribution of 188,034 gallons per day. The percentage share for each type of land use is calculated based on flow contribution as illustrated in Table 5-10.

Table 5-10 – Flow Contribution – All Land Uses

Land Use Class	Units			Unit Flow	Flow per Land Use Class			% Share		
	Existing	New	Total		Existing	New	Total	Existing	New	Total
Single Family Residential (units)	7,719	2,246	9,965	170	1,312,230	381,820	1,694,050	35%	10%	45%
Multi-Family Residential (units)	8,594	2,521	11,115	111	953,934	279,831	1,233,765	25%	7%	33%
Senior Housing (units)	207	2	209	111	22,977	213	23,190	1%	0%	1%
Assisted Living (units)	-	135	135	111	-	14,985	14,985	0%	0%	0%
Nonresidential Employees)	21,900	5,141	27,041	23	503,700	118,247	621,947	13%	3%	16%
Sonoma Mountain Village (New)	-		-	-		188,034	188,034	0%	5%	5%
Total					2,792,841	983,130	3,775,971	74%	26%	100%

5. The calculation illustrated in Table 5-10 can also be performed for each SPA and planned development. Table 5-11 illustrates the breakdown in flow contributions to each SPA and planned development.

Table 5-11 – Flow Contribution by SPA and Planned Development

	Flows by SPA (gpd)								
Land Use Class	NE SPA	UD SPA	SE SPA	WD SPA	NW SPA	SL	So Mo	Canon Manor	Infill
Single Family Residential (units)	156,400	150,110	66,980	-	-	-		8,330	-
Multi-Family Residential (units)	22,200	84,582	8,991	-	99,900	37,518		-	26,640
Senior Housing (units)	-	-	-	-	-	-		-	213
Assisted Living (units)	-	-	-	-	-	-		-	14,985
Nonresidential Employees)	-	9,437	539	16,292	64,711	7,550		-	19,719
Sonoma Mountain Village (New)	-	-	-	-	-	-	188,034	-	
Total	178,600	244,129	76,510	16,292	164,611	45,068	188,034	8,330	61,557

6. The capacity of one facility considered in this analysis, the Eastside Trunk Sewer, is impacted mainly by the flow contributions from the eastside SPAs and PDs, particularly the Northeast, University District, Southeast and Canon Manor SPAs and the Sonoma Mountain Village PD. In order to allocate cost shares for this facility, the relative flow contributions of these developments will be used. Table 5-12 illustrates the relative flow contributions for the Eastside Trunk Sewer allocation.

Table 5-12 – Flow Contributions for Eastside Trunk Sewer

Land Use Class	**Units**			**Unit Flow**	**Flow per Land Use Class**			**% Share**		
	Existing	New	Total		Existing	New	Total	Existing	New	Total
Single Family Residential (units)	171	2,246	2,417	170	29,070	381,820	410,890	4%	53%	57%
Multi-Family Residential (units)	-	1,043	1,043	111	-	115,773	115,773	0%	16%	16%
Senior Housing (units)	-	-	-	111	-	-	-	0%	0%	0%
Assisted Living (units)		-	-	111	-	-	-	0%	0%	0%
Nonresidential (Employees)	-	434	434	23	-	9,976	9,976	0%	1%	1%
Sonoma Mountain Village (New)			-	-	-	188,034	188,034	0%	26%	26%
Total					29,070	695,603	724,673	4%	96%	100%

This calculation can also be performed for each contributing SPA and Planned Development as illustrated in Table 5-13.

Table 5-13 – Flow Contributions for Eastside Trunk Sewer by Contributing Development

	Flows by SPA (gpd)				
Land Use Class	NE SPA	UD SPA	SE SPA	So Mo	Canon Manor
Single Family Residential (units)	156,400	150,110	66,980	-	8,330
Multi-Family Residential (units)	22,200	84,582	8,991	-	-
Senior Housing (units)	-	-	-	-	-
Assisted Living (units)	-	-	-	-	-
Nonresidential (Employees)	-	9,437	539	-	-
Sonoma Mountain Village (New)	-	-	-	188,034	-
Total	178,600	244,129	76,510	188,034	8,330

5.3.3 Impact Zone Allocation

The Sewer Interceptor Outfall Project (both Phases) and the Subregional System Facilities support the collection, treatment, disposal and reuse of wastewater generated from the City and all PDs and SPAs including the Canon Manor SPA. Costs are allocated on a citywide basis.

As noted above, the Eastside Trunk Sewer has been designed to benefit primarily new development but it does include re-routing of flows from the existing collection system in order to provide capacity relief within the existing system. During the development of the design for the Eastside Trunk Sewer, the City developed a weighted-reach model that took into account the impacts of both new development and the capacity relief flows in the Eastside Trunk Sewer in a reach-by-reach basis. Table 5-14 below illustrates this weighted–reach model, which was developed prior to any Canon Manor connections. Based on this weighted-reach method, the existing users' capacity relief share in the Eastside Trunk Sewer Project is $4,639,445.

Table 5-14 – Existing & New Development Cost Share for Eastside Trunk Sewer by Contributing Development

Phase & Reach Description	Length	Cost	Flow above Reach (in		Flow in Reach (in gpm)		Total Flow (in gpm)			Percent of Total Flow		Percent of Length	Weighted Cost Share (Flow % x Length % x Cost)	
			New	Existing	New	Existing	Total	New	Existing	New	Existing		New	Existing
2a Snyder from East Cotati to Southwest	1,500	$ 1,150,329	0	0	2150	294	2444	2150	294	88%	12%	10%	$ 2,137,717	$ 292,320
2 Southwest from Snyder to C section tie-in	2,899	$ 3,597,838	2150	294	3860	0	6304	6010	294	95%	5%	18%	$ 4,477,423	$ 219,029
2 Southwest from C Section tie-in to Commerce	5,672	$ 7,039,302	6010	294	0	384	6688	6010	678	90%	10%	36%	$ 8,257,262	$ 931,518
1 Commerce to Pump Station	5,700	$ 13,761,943	6010	678	0	2504	9192	6010	3182	65%	35%	36%	$ 6,037,553	$ 3,196,588
Total Cost without Financing	15,771	$ 25,549,411											$ 20,909,956	$ 4,639,455

The costs of the Eastside Trunk Sewer are allocated as described below.

- For Phase 1 the total cost of the project was $13,761,943. The City made a cash contribution of $3,706,219 and financed the remaining $10,055,724. The cash contribution is credited against the total capacity relief share (City Share) for all Phases. Crediting $3,706,219 towards the $4,639,455 capacity relief share leaves a remaining capacity relief share of $933,236 or 9.3% of the financed costs. Therefore, 9.3% of principal and interest are the "capacity relief share" and are subtracted from the principal and interest cost of the project before allocations are made to new development. The remaining 90.7% of the principal and interest are allocated to the new eastside development including the Northeast, University District, Southeast and Canon Manor SPAs and the Sonoma Mountain Village PD. This allocation is illustrated in Table 5-15 below.

Table 5-15 – Eastside Trunk Sewer Phase 1 – Allocation of Principal and Interest

	Total	Capacity Relief Share (9.3%)	New Development Share (90.7%)
Principal	$10,055,724	$933,236	$9,122,488
Interest	$7,843,392	$729,435	$7,113,957
Total	$17,899,116	$1,662,701	$16,236,415

- Phase 2 of the Eastside Trunk Sewer includes a "main reach" along Avram Avenue, Santa Alicia Drive, Seed Farm Drive and Southwest Boulevard that provides service to all eastside SPAs and PDs, including the Canon Manor SPA. Project costs for the main reach are allocated to planned eastside development. Phase 2a or the "south reach" provides service to the Southeast and Canon Manor SPAs and the Sonoma Mountain Village PD. Project costs for the southern reach are allocated only to these new developments.

- Phase 3 is a "northern reach" that provides service to the University District and Northeast SPAs. Project costs for the northern reach are allocated only to these new developments.

5.3.4 Fee Component Calculations

Eastside Trunk Sewer Phase 1: The new development share of the Eastside Trunk Sewer Phase 1, which is calculated in Table 5-15 is allocated to the Northeast, University District, Southeast and Canon Manor SPAs and the Sonoma Mountain Village. Table 5-16 presents the fee component calculation for the Eastside Trunk Sewer Project Phase 1. Because development in Canon Manor SPA has been paying fees to account for its share of the City's sewer facilities, the City has an available fund balances in its PF Fee and Sewer Capacity Charge Funds to offset the "existing users" share that appear in these calculations.

Table 5-16 PF Fee Component for Eastside Trunk Sewer Phase 1

Total Cost:	**$**	**16,236,415**
New Development Share (allows for Canon Manor development)	**$**	**15,585,097**
Cost per Gallon		**$22.41**

Land Use Class	Units (1)			Flow per Unit in gallons (2)	Total Flow per Land Use Class in gallons			Percent Share		Cost Share		Cost Per Land Use Unit (3)
	Existing	New	Total		Existing	New	Total	Existing	New	Existing	New	New
Single Family Residential (units)	171	2,246	2,417	170	29,070	381,820	410,890	4.01%	52.69%	$ 651,318	$ 8,554,736	$ 3,809
Multi-Family Residential (units)	0	1,043	1,043	111	0	115,773	115,773	0.00%	15.98%	$ -	$ 2,593,912	$ 2,487
Senior Housing (units)	0	0	0	111	0	0	0	0.00%	0.00%	$ -	$ -	$ 2,487
Assisted Living (units)	0	0	0	111	0	0	0	0.00%	0.00%	$ -	$ -	$ 2,487
Nonresidential Land Use Employees (less SMV)	0	434	434	23	0	9,976	9,976	0.00%	1.38%	$ -	$ 223,518	$ 22
SMV Flows	0	0	0	0	0	188,034	188,034	0.00%	25.95%	$ -	$ 4,212,931	$ 22
Total					29,070	695,603	724,673	4.01%	95.99%	$ 651,318	$ 15,585,097	

Notes:
(1) "Existing" units are existing homes in Canon Manor
(2) Units are from Maddaus
(3) Cost per Unit is Total Cost/Total Units

Eastside Trunk Sewer Phase 2 Main Reach: The total estimated cost the Eastside Trunk Sewer Phase 2 Main Reach is $10,637,139. There is an existing users share associated with development in Canon Manor that has already paid fees. Table 5-17 presents the fee component calculation for the Eastside Trunk Sewer Project Main Reach.

Table 5-17 PF Fee Component for Eastside Trunk Sewer Phase 2 Main Reach

Total Cost:	**$**	**10,637,139**
New Development Share (allows for Canon Manor development)		**$ 10,210,435**
Cost per Gallon		**$14.68**

Land Use Class	Units (1)			Flow per Unit in gallons (2)	Total Flow per Land Use Class in gallons			Percent Share		Cost Share		Cost Per Land Use Unit (3)
	Existing	New	Total		Existing	New	Total	Existing	New	Existing	New	New
Single Family Residential (units)	171	2,246	2,417	170	29,070	381,820	410,890	4.01%	52.69%	$ 426,705	$ 5,604,557	$ 2,495
Multi-Family Residential (units)	0	1,043	1,043	111	0	115,773	115,773	0.00%	15.98%	$ -	$ 1,699,378	$ 1,629
Senior Housing (units)	0	0	0	111	0	0	0	0.00%	0.00%	$ -	$ -	$ 1,629
Assisted Living (units)	0	0	0	111	0	0	0	0.00%	0.00%	$ -	$ -	$ 1,629
Nonresidential Land Use Employees (less SMV)	0	434	434	23	0	9,976	9,976	0.00%	1.38%	$ -	$ 146,436	$ 15
SMV Flows	0	0	0	0	0	188,034	188,034	0.00%	25.95%	$ -	$ 2,760,063	$ 15
Total					29,070	695,603	724,673	4.01%	95.99%	$ 426,705	$ 10,210,435	

(1)

Notes:
(1) "Existing" units are existing homes in Canon Manor
(2) Units are from Maddaus
(3) Cost per Unit is Total Cost/Total Units

Eastside Trunk Sewer Phase 2a (South Reach): The total estimated cost the Eastside Trunk Sewer Phase 2a is $1,150,329. There is an existing users share associated with new development in Canon Manor that has already paid fees. Table 5-18 presents the fee component calculation for the Eastside Trunk Sewer Project Phase 2a.

Table 5-18 PF Fee Component for Eastside Trunk Sewer Phase 2a (South Reach)

Total Cost: $ 1,150,329
New Development Share (allows for Canon Manor development) $ 1,039,579
Cost per Gallon $3.81

Land Use Class	Units (1)			Flow per Unit in gallons (2)	Total Flow per Land Use Class in gallons			Percent Share		Cost Share		Cost Per Land Use Unit (3)
	Existing	New	Total		Existing	New	Total	Existing	New	Existing	New	New
Single Family Residential (units)	171	443	614	170	29,070	75,310	104,380	9.63%	24.94%	$110,749	$ 286,911	$ 648
Multi-Family Residential (units)	0	81	81	111	0	8,991	8,991	0.00%	2.98%	$ -	$ 34,253	$ 423
Senior Housing (units)	0	0	0	111	0	0	0	0.00%	0.00%	$ -	$ -	$ 423
Assisted Living (units)	0	0	0	111	0	0	0	0.00%	0.00%	$ -	$ -	$ 423
Nonresidential Land Use Employees (less SMV)	0	23	23	23	0	539	539	0.00%	0.18%	$ -	$ 2,054	$ 4
SMV Flows	0	0	0	0	0	188,034	188,034	0.00%	62.27%	$ -	$ 716,360	
Total					29,070	272,874	301,944	9.63%	90.37%	$ 110,749	$ 1,039,579	

Notes:
Notes:
(1) "Existing" units are existing homes in Canon Manor
(2) Units are from Maddaus
(3) Cost per Unit is Total Cost/Total Units

Eastside Trunk Sewer Phase 3(North Reach): The total estimated cost of the Eastside Trunk Sewer Phase 3 is $2,805,235. Table 5-19 presents the fee component calculation for the Eastside Trunk Sewer Project Phase 3.

Table 5-19 PF Fee Component for Eastside Trunk Sewer Phase 3

Total Cost: $ 2,805,235
New Development Share: $ 2,805,235
Cost per Gallon $6.79

Land Use Class	Units (1)			Flow per Unit in gallons (2)	Total Flow per Land Use Class in gallons			Percent Share		Cost Share		Cost Per Land Use Unit (3)
	Existing	New	Total		Existing	New	Total	Existing	New	Existing	New	New
Single Family Residential (units)	0	1,803	1,803	170	0	306,510	306,510	0.00%	74.16%	$ -	$ 2,080,448	$ 1,154
Multi-Family Residential (units)	0	962	962	111	0	106,782	106,782	0.00%	25.84%	$ -	$ 724,787	$ 753
Senior Housing (units)	0	0	0	111	0	0	0	0.00%	0.00%	$ -	$ -	$ 753
Assisted Living (units)	0	0	0	111	0	0	0	0.00%	0.00%	$ -	$ -	$ 753
Nonresidential Land Use Employees (less SMV)	0	0	0	23	0	0	0	0.00%	0.00%	$ -	$ -	$ 7
SMV Flows	0	0	0	0	0	0	0	0.00%	0.00%	$ -	$ -	
Total					0	413,292	413,292	0.00%	100.00%	$ -	$ 2,805,235	

Notes:
(1) "Existing" units are existing homes in Canon Manor
(2) Units are from Maddaus
(3) Cost per Unit is Total Cost/Total Units

Sewer Interceptor Outfall Project: The Sewer Interceptor Outfall Project will also be constructed in two phases both of which are designed to serve all development, new and existing in the City.

The first phase of the project has been designed, constructed and financed through Certificates of Participation at a total cost of $23,132,623 including the costs of interest. The City allocated 30.3% of the costs to new development and 69.7% of the costs to existing development based on the best estimates of flow contribution at the time. Because design, construction and bonding are all complete, this ratio between new and existing development's share is retained. Table 5-20 below presents the fee component calculation for the Interceptor Outfall Project Phase 1, with the initial allocation retained. The allocated cost is for new development only.

Table 5-20 – PF Fee Component for the Interceptor Outfall Project Phase 1

Total Cost: $23,132,623
New Development Share: $ 7,009,185
Cost per gallon: $7.13

Land Use Class	Units			Flow per Unit in gallons (2)	Total Flow per Land Use Class in gallons			Percent Share		Cost Share		Cost Per Land Use Unit (3)
	Existing	New	Total		Existing	New	Total	Existing	New	Existing	New	New
Single Family Residential (units)	0	2,246	2,246	170	0	381,820	381,820	0.00%	38.84%	$ -	$ 2,722,169	$ 1,212
Multi-Family Residential (units)	0	2,521	2,521	111	0	279,831	279,831	0.00%	28.46%	$ -	$ 1,995,043	$ 791
Senior Housing (units)	0	2	2	111	0	213	213	0.00%	0.02%	$ -	$ 1,519	$ 791
Assisted Living (units)	0	135	135	111	0	14,985	14,985	0.00%	1.52%	$ -	$ 106,835	$ 791
Nonresidential Land Use Employees (less SMV)	0	5,141	5,141	23	0	118,247	118,247	0.00%	12.03%	$ -	$ 843,038	$ 7
SMV Flows						188,034	188,034	0.00%	19.13%	$ -	$ 1,340,580	$ 7
Total					0	983,130	983,130	0.00%	100.00%	0	7,009,184	

Notes:
(1) Cost per Unit is Total Cost/Total Units
(2) Units are from Maddaus

Since the construction of Phase 1 of the Interceptor Outfall Project, the City has revised overall flow projections to comply with the water conservation mandates described earlier in this section. This has resulted in a slight decrease in the anticipated flow from planned development. Because Phase 2 of the Interceptor Outfall Project is not yet complete, the revised, slightly lower flow contributions are used to calculate new development's share as illustrated in Table 5-21 below.

Table 5-21 – PF Fee Component for the Interceptor Outfall Project Phase 2

Total Cost: $ 6,681,263
New Development Share: $ 1,739,566
Cost per gallon: $1.77

Land Use Class	Units			Flow per Unit in gallons (2)	Total Flow per Land Use Class in gallons			Percent Share		Cost Share		Cost Per Land Use Unit (3) (1)
	Existing	New	Total		Existing	New	Total	Existing	New	Existing	New	New
Single Family Residential (units)	7,719	2,246	9,965	170	1,312,230	381,820	1,694,050	34.75%	10.11%	$ 2,321,881	$ 675,598	$ 301
Multi-Family Residential (units)	8,594	2,521	11,115	111	953,934	279,831	1,233,765	25.26%	7.41%	$ 1,687,906	$ 495,137	$ 196
Senior Housing (units)	207	2	209	111	22,977	213	23,190	0.61%	0.01%	$ 40,656	$ 377	$ 196
Assisted Living (units)	0	135	135	111	0	14,985	14,985	0.00%	0.40%	$ -	$ 26,515	$ 196
Nonresidential Land Use Employees (less SMV)	21,900	5,141	27,041	23	503,700	118,247	621,947	13.34%	3.13%	$ 891,255	$ 209,229	$ 2
SMV Flows					0	188,034	188,034	0.00%	4.98%	$ -	$ 332,710	$ 2
Total					2,792,841	983,130	3,775,971	73.96%	26.04%	$ 4,941,698	$ 1,739,566	

Notes:
(1) Cost per Unit is Total Cost/Total Units
(2) Units are from Maddaus

Subregional System Facilities: As described above, the Subregional System's infrastructure has been planned, designed and constructed to serve existing and planned development in the City and Canon Manor. Therefore, the fee component contribution is calculated using all flow contributions. Table 5-22 below presents this calculation.

Table 5-22 – PF Fee Component for the Subregional System

Total Cost: $ 202,132,150
New Development Share: $ 52,628,114
Cost per Gallon: $53.53

Land Use Class	Units			Flow per Unit in gallons (2)	Total Flow per Land Use Class in gallons			Percent Share		Cost Share		Cost Per Land Use Unit (3) (1)
	Existing	New	Total		Existing	New	Total	Existing	New	Existing	New	New
Single Family Residential (units)	7,719	2,246	9,965	170	1,312,230	381,820	1,694,050	34.75%	10.11%	$ 70,245,203	$ 20,439,270	$ 9,100
Multi-Family Residential (units)	8,594	2,521	11,115	111	953,934	279,831	1,233,765	25.26%	7.41%	$ 51,065,200	$ 14,979,680	$ 5,942
Senior Housing (units)	207	2	209	111	22,977	213	23,190	0.61%	0.01%	$ 1,229,986	$ 11,409	$ 5,942
Assisted Living (units)	0	135	135	111	0	14,985	14,985	0.00%	0.40%	$ -	$ 802,165	$ 5,942
Nonresidential Land Use Employees (less SMV)	21,900	5,141	27,041	23	503,700	118,247	621,947	13.34%	3.13%	$ 26,963,649	$ 6,329,912	$ 54
SMV Flows						188,034	188,034	0.00%	4.98%	$ -	$ 10,065,679	$ 54
Total					2,792,841	983,130	3,775,971	73.96%	26.04%	149,504,038	52,628,114	

Notes:
(1) Cost per Unit is Total Cost/Total Units
(2) Units are from Maddaus

Canon Manor Project Management: As described above the City has incurred unique project management costs associated with the Canon Manor sewer project. These costs are above and beyond the costs associated with the PF Fee or Sewer Capacity Charge Projects in general. The costs were incurred to develop the project which benefits all property in Canon Manor, including property that is currently connected to the City's sewer system (existing users) and property that can still develop and connect to the system. Table 5-23 presents the PF Fee component for Canon Manor Project Management which is allocated by flow contribution to all development in Canon Manor.

Table 5-23 – PF Fee Component for Canon Manor Project Management

Total Cost:	**$ 435,328**
New Development Share: $	**96,959**
Cost per gallon:	**$11.64**

Land Use Class	Units			Flow per Unit in gallons (2)	Total Flow per Land Use Class in gallons			Percent Share		Cost Share		Cost Per Land Use Unit (3)
	Existing	New	Total		Existing	New	Total	Existing	New	Existing	New	New
Single Family Residential (units)	171	49	220	170	29,070	8,330	37,400	77.73%	22.27%	$ 338,369	$ 96,959	$ 1,979
Multi-Family Residential (units)	0	0	0	111	0	0	0	0.00%	0.00%	$ -	$ -	$ 1,292
Senior Housing (units)	0	0	0	111	0	0	0	0.00%	0.00%	$ -	$ -	$ 1,292
Assisted Living (units)	0	0	0	111	0	0	0	0.00%	0.00%	$ -	$ -	$ 1,292
Nonresidential Land Use Employees (less SMV)	0	0	0	23	0	0	0	0.00%	0.00%	$ -	$ -	$ 12
Total					29,070	8,330	37,400	77.73%	22.27%	338,369	96,959	

Notes:
(1) Cost per Unit is Total Cost/Total Units
(2) Units are from Maddaus

5.3.5 Nexus Findings for Sewer Improvements

Purpose of Fee Component: The purpose of the sewer fee component is to provide wastewater collection, treatment, disposal and reuse capacity. The elements include the Eastside Trunk Sewer, including financing costs for Phase 1, the Interceptor Outfall Project, including financing costs for Phase 1, buy-in the Subregional System facilities and Canon Manor Project Management, including planned facilities that provide capacity.

Use of Fee: Revenue from fees will be used to fund the design and construction and financing costs of the Eastside Trunk Sewer, the Interceptor Outfall Project, Subregional System facilities and manage the implementation of the Canon Manor Project.

Relationship between Use of Fee and Type of Development: Each type of development's impact on the sewer system is measured by its indoor water use rate. Additional indoor water use contributes flow to the sewer system and requires that capacity be added if the levels of service outlined in the General Plan are to be maintained.

Relationship between Need for Improvements and Type of Development: The development of new and infill residential and non-residential land uses will generate flow. The capacity of the City's sewer system will need to be increased to maintain the level of service goals outlined in the General Plan. The fees will be used to expand capacity to meet the level of goals established in the General Plan.

Relationship Between Amount of Fee Component and Cost or Portion of Facility Attributed to Development Upon Which Fee Component is Imposed: The sewer facility costs are apportioned between new and existing development as follows:

- For Eastside Trunk Sewer Phase 1: Existing developments' share is subtracted from the total cost of construction and financing. The remaining construction and financing costs are allocated to the Northeast, University District, Southeast and Canon Manor SPAs and the Sonoma Mountain Village PD based on their respective flow contribution to the sewer because these developments contribute flow to the sewer.
- For Eastside Trunk Sewer Phase 2 (Main Reach): The estimated cost of construction is allocated to the Northeast, University District, Southeast and Canon Manor SPAs and the Sonoma Mountain Village PD based on their respective flow contribution to the sewer because these developments contribute flow to the sewer.
- For Eastside Trunk Sewer Phase 2a (South Reach): The estimated cost of construction is allocated to the Southeast and Canon Manor SPAs and the Sonoma Mountain Village PD based on their respective flow contribution to the sewer because these developments contribute flow to the sewer.
- For Eastside Trunk Sewer Phase 3 (North Reach): The estimated cost of construction is allocated to the Northeast and University District SPAs based on their respective flow contribution to the sewer because these developments contribute flow to the sewer.
- For the Interceptor Outfall Project: The cost of construction including financing for Phase 1 is allocated to all development (new and existing) based on their respective flow contribution at the time the project was constructed, because all development contributes flow to the sewer. The estimated cost of construction for Phase 2 is allocated to all development (new and existing) based on their current planned flow contribution to the sewer because all development contributes flow to the sewer.
- For the Subregional System: The estimated Future Buy-In cost for all facilities, including financing is allocated to all development (new and existing) based on their respective flow contribution. All development contributes flow to the Subregional System.
- For Canon Manor Project Management: The actual cost of project management services provided is allocated to all development (new and existing) based on their respective flow contribution in the Canon Manor SPA.

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6 Water System Facilities

6.1 Introduction

This chapter and the accompanying Appendix B provide narrative description, graphical representation and cost estimates for the proposed water system facilities as they are currently understood. Because some of the proposed facilities are still the subject of review under CEQA, the descriptions and illustrations included in this 2011 Update are intended to present the basis of the cost estimates, not to commit the City to a particular construction strategy.

6.2 Water System Facilities Description

Water system improvements include approximately 1.6 miles of transmission system pipeline from eight to sixteen inches in diameter and pressure regulating stations on the eastside of the City and pipeline upgrades that improve pressure within the westside of the City as identified in the City's CIP. Figure 6-1 illustrates the proposed improvements. Table 6-1 includes estimates for the proposed facilities. Appendix B provides detailed cost estimates.

Table 6-1 –Water System Improvements and Costs (ENR CCI 10192.79)

Water System Improvements	2006 Total Cost	2010 Total Costs	Change 2006 to 2010
Westside Water System Improvements	$ 87,500	$ 157,325	$ 69,825
Eastside Transmission Main	$ 2,235,300	$ 2,299,700	$ 64,400
Total Water System Facilities	**$ 2,322,800**	**$ 2,457,025**	**$ 134,225**

The water system improvements are all intended to provide adequate service for new development. While new development will place day-to-day demands on the water system, the primary design factor that contributes the need for and sizing of the improvements is fire flow. All new development proposals, including the SPAs and the PDs are of a scale and density that requires a design fire flow of 3,000 gallons per minute (GPM). The water system improvements are intended to allow the whole water system to deliver this flow rate to new development in order to provide that development with water supply and fire flows.

6.3 Nexus Findings for Water Facilities

6.3.1 Definition of Improvements

The water system improvements include the Westside Water System Improvements and the Eastside Transmission Main.

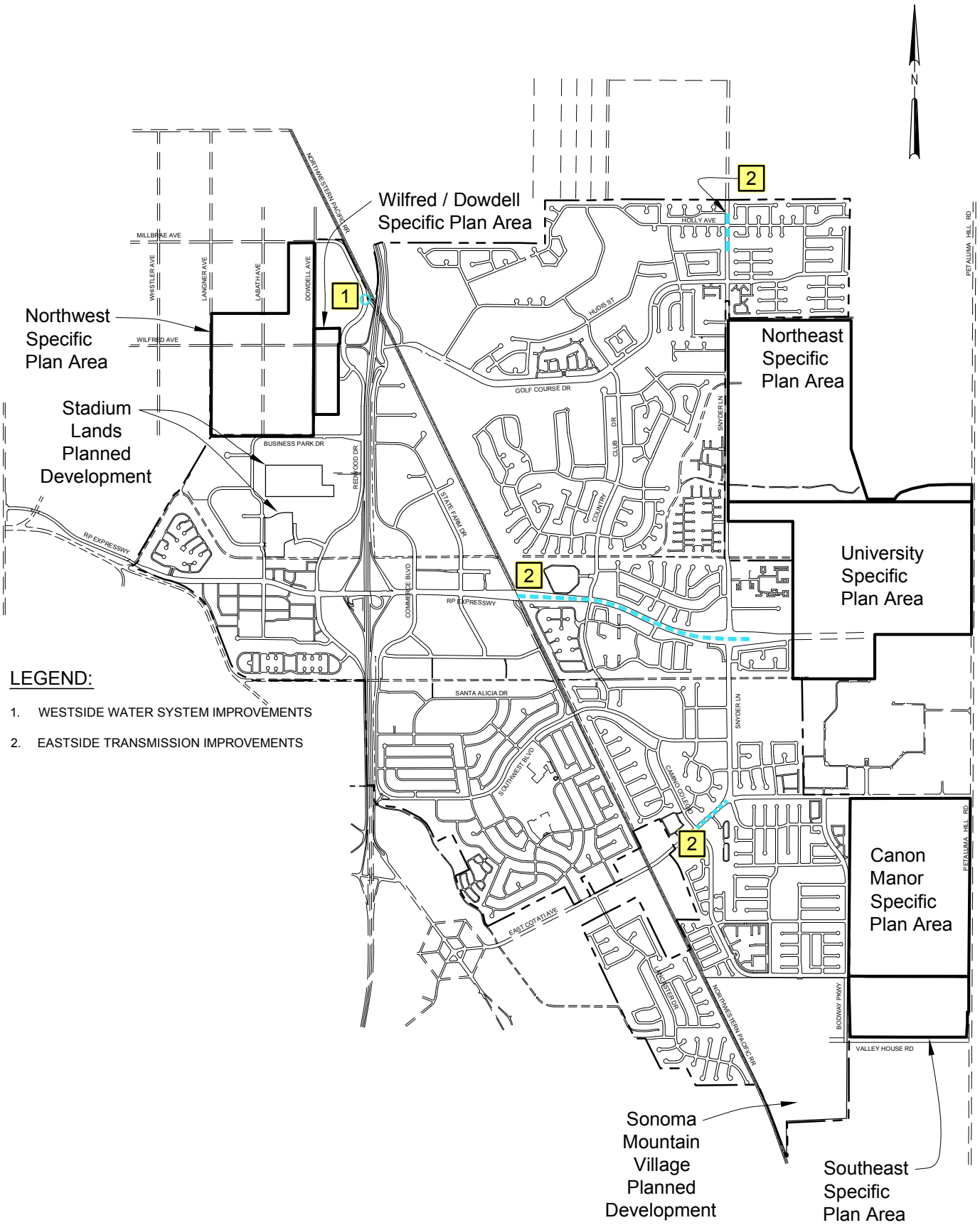

FIGURE 6-1
Water Improvements
Key Map

WINZLER & KELLY

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6.3.2 Cost Allocation Factors

As noted above, the water system improvements are designed to provide all new development with adequate fire protection. Essentially each new person, whether a resident or a worker, is provided with the same level of fire protection by the system. Because of this, the Common Use Factors (CUFs) that were developed in Chapter 4 to reflect the impacts of population are used to allocate the cost of water system improvements. These CUFs are used to create an equivalency relationship between the various land use types in the City. Table 6-2 presents the CUFs that are used in the PF Program.

For the purposes of this 2011 Update, residential land uses are classified according to the City's Municipal Code. Specifically:

- "Single Family Residential" means any use meeting the definition of "dwelling, single-family detached" in Chapter 17.04 of the Municipal Code.
- "Multi-Family Residential" means any use meeting the definition of "dwelling, single-family attached", "dwelling, multi-family" or "mobile home" in Chapter 17.04 of the Municipal Code.

Table 6-2 Common Use Factors for Residential Land Uses

Land Use	CUF	Unit
Single Family Residential	3.20	Dwelling Unit
Multi-Family Residential	2.00	Dwelling Unit
Senior Housing	2.00	Dwelling Unit
Assisted Living Facility	1.00	Dwelling Unit
Office	2.86	1,000 square feet
Hotel	1.05	1,000 square feet
Retail	1.82	1,000 square feet
Industrial-Light	0.66	1,000 square feet
Industrial-Heavy	0.66	1,000 square feet
Warehouse	0.66	1,000 square feet

6.3.3 Impact Zone Allocation

The water system facilities are allocated to impact zones. The areas west of Highway 101 support the construction of transmission system improvements that improve water pressures in that area. The areas east of Highway 101 support the construction of the eastside transmission system improvements.

6.3.4 Fee Component Calculations

The estimated cost for water system improvements in the Finance Plan is $2,457,025. Tables 6-3 and 6-4 outline the allocation of estimated costs to each land use. The resulting fee per land use is shown per dwelling unit for residential land uses and per acre for non-residential land uses.

Westside Water System Improvements: This cost is allocated to all new development west of Highway 101 because it will address the needs of new development.

Eastside Transmission Main: This cost is allocated to all new development east of Highway 101 because it will address the needs of new development.

Table 6-3 - PF Fee Component for Westside Water System Improvements

Total Cost:	**$**	**157,325**
New Development Share	**$**	**157,325**
Cost per CUF	**$**	**29.66**
		(1)

Land Use Class	Units			CUF	Total Common Use Factors			Percent Share		Cost Share		Cost Per Land Use Class
	Existing	New	Total	(2)	Existing	New	Total	Existing	New	Existing	New	(3) New
Single Family Residential (units)		0	0	3.20	0	0	0	0.00%	0.00%	$ -	$ -	$ 95
Multi-Family Residential (units)		1,238	1,238	2.00	0	2,476	2,476	0.00%	46.67%	$ -	$ 73,429	$ 59
Senior Housing (units)		0	0	2.00	0	0	0	0.00%	0.00%	$ -	$ -	$ 59
Assisted Living (units)		0	0	1.00	0	0	0	0.00%	0.00%	$ -	$ -	$ 30
General Office (tsf)		230	230	2.86	0	658	658	0.00%	12.40%	$ -	$ 19,508	$ 85
Hotel/Motel (tsf)		0	0	1.05	0	0	0	0.00%	0.00%	$ -	$ -	$ 31
Retail (tsf)		992	992	1.82	0	1,805	1,805	0.00%	34.03%	$ -	$ 53,537	$ 54
Light Industrial (tsf)		554	554	0.66	0	366	366	0.00%	6.90%	$ -	$ 10,851	$ 20
Heavy Industrial (tsf)		0	0	0.66	0	0	0	0.00%	0.00%	$ -	$ -	$ 20
Warehouse (tsf)		0	0	0.66	0	0	0	0.00%	0.00%	$ -	$ -	$ 20
Total					0	5,305	5,305	0.00%	100.00%	$ -	$ 157,325	

Notes:
(1) Cost per Common Use Factor is Total Cost/Total Common Use Factors
(2) Common Use Factor is people/land use unit
(3) Cost per Land Use Unit is Cost per Common Use Factor x Common Use Factor for the Land Use

Table 6-4 - PF Fee Component for Eastside Transmission Main

Total Cost: $ 2,299,700
New Development Share: $ 2,299,700
Cost per CUF: $140.40

Land Use Class	Units			CUF (2)	Total Common Use Factors			Percent Share		Cost Share		Cost Per Land Use Unit (3) (1)
	Existing	New	Total		Existing	New	Total	Existing	New	Existing	New	New
Single Family Residential (units)	0	2,897	2,897	3.20	0	9,270	9,270	0.00%	56.60%	$ -	$ 1,301,585	$ 449
Multi-Family Residential (units)	0	2,227	2,227	2.00	0	4,454	4,454	0.00%	27.19%	$ -	$ 625,352	$ 281
Senior Housing (units)	0	2	2	2.00	0	4	4	0.00%	0.02%	$ -	$ 539	$ 281
Assisted Living (units)	0	135	135	1.00	0	135	135	0.00%	0.82%	$ -	$ 18,954	$ 140
General Office (tsf)	0	507	507	2.86	0	1,450	1,450	0.00%	8.85%	$ -	$ 203,526	$ 402
Hotel/Motel (tsf)	0	126	126	1.05	0	132	132	0.00%	0.81%	$ -	$ 18,575	$ 147
Retail (tsf)	0	501	501	1.82	0	911	911	0.00%	5.56%	$ -	$ 127,921	$ 256
Light Industrial (tsf)	0	35	35	0.66	0	23	23	0.00%	0.14%	$ -	$ 3,249	$ 93
Heavy Industrial (tsf)	0	0	0	0.66	0	0	0	0.00%	0.00%	$ -	$ -	$ 93
Warehouse (tsf)	0	0	0	0.66	0	0	0	0.00%	0.00%	$ -	$ -	$ 93
Total					0	16,379	16,379	0.00%	100.00%	$ -	$ 2,299,700	

Notes:
(1) Cost per Common Use Factor is Total Cost/Total Common Use Factors
(2) Common Use Factor is people/land use unit
(3) Cost per Land Use Unit is Cost per Common Use Factor x Common Use Factor for the Land Use

6.3.5 Nexus Findings for Water System Improvements

Purpose of Fee Components: The water system fee component funds extensions to the water system on the east and west side of the City.

Use of Fee: Revenue from fees will be used to design and construct improvements to the eastside transmission main and the westside system improvements.

Relationship between Use of Fee and Type of Development: The development of new and infill residential and non-residential land uses will result in increased population in the City. This increased population will consist of new residents, workers and visitors. This new population will require water service. The City will use fee revenue to fund the expansion of its water system to provide services to new residents, workers and visitors.

Relationship between Need for Improvements and the Type of Development: Each type of new development's impact on the water system is measured by its CUF. The CUF allows the relative impact of residential and non-residential land uses to be modeled so that each development type's impact on each proposed improvement is can be calculated.

Relationship between Amount of Fee and Cost of or Portion of Facility Attributed to Development Upon Which Fee is Imposed: CUFs are used to measure the relative benefit of water system improvements and to attribute cost shares to benefiting populations. Population based fees are calculated using the following steps:

- The cost of each improvement is allocated either citywide or to impact zones, as appropriate.
- Costs are then allocated between new and existing development (either within the Impact Zone or citywide) based on the total population equivalency of new development and existing development.
- New developments' share of costs is then allocated to each land use class based on the population equivalency of that class in order to arrive at the fee component. The formula for allocation is illustrated below.

Fee Component per New Land Use Class	=	Total New Development Share of Improvement	x	CUF per Land Use Class/Total CUFS for New Development

For each Population Based Fee Component, the allocation to Impact Zones and the allocation between new and existing development is described below. The allocation among new development land use classes consistently follows the formula outlined above.

Westside Water System Improvements: This cost is allocated to all new development west of Highway 101 because it will address the needs of new development.

Eastside Transmission Main: This cost is allocated to all new development east of Highway 101 because it will address the needs of new development.

7 Drainage Improvements

7.1 Introduction

This chapter and the accompanying Appendix B provide narrative description, graphical representation and cost estimates for the proposed drainage improvements as they are currently understood. Because some of the proposed facilities are still the subject of review under CEQA, the descriptions and illustrations included in this 2011 Update are intended to present the basis of the cost estimates, not to commit the City to a particular construction strategy.

7.2 Drainage Facilities Description

In 2007 the City completed a master plan and modeling studies of its storm drainage facilities. These facilities include the City's storm drain pipes and its creek and channel system. The Copeland and Hinebaugh Flood Control Channels run east-west through the City and provide the backbone system for conveying stormwater from the City to the Laguna de Santa Rosa west of the City. The City's storm drainage studies indicate that the current drainage system is generally adequate for existing development. The City recently constructed improvements at Martin Avenue and pipeline improvements in G section to mitigate current deficiencies in the system. However, the analysis also indicates that flow from new development will result in the need for more capacity in the drainage system. Two new upstream detention basins on the Copeland and Hinebaugh Creek systems are recommended to reduce peak flow throughout the City's drainage system and provide capacity for new development. These facilities, which were not included in the 2006 Update, have been added as a result of the storm drainage studies. Table 7-1 presents summary cost estimates and detailed estimates are in Appendix B. The City has been working the University District developer to site the Copeland Creek detention basin. The Northeast basin has been sized conceptually but has not yet been located.

Table7-1 –Drainage Improvements and Costs (ENR CCI 10192.79)

Drainage System Improvements	2006 Total Cost	2010 Total Costs	Change 2006 to 2010
Copeland Detention Basin	$ -	$ 2,470,731	$ 2,470,731
Northeast Detention Basin	$ -	$ 3,897,600	$ 3,897,600
Total Drainage System Improvements	**$ -**	**$ 6,368,331**	**$ 6,368,331**

7.3 Nexus Findings for Drainage Improvements

7.3.1 Definition of Facilities Included

The drainage improvements include the Copeland and Northeast Detention Basins that the City's storm drainage model studies indicate are necessary to mitigate the impacts of planned development.

7.3.2 Cost Allocation Factors

Each planned development's share of the detention basins is calculated by reviewing the total impervious area within the proposed development and the system into which it drains. Within each planned development area, costs are allocated to each land use category based on the percent of acreage dedicated to that land use and the total units planned to be constructed. Based on this review, the costs of the Northeast Detention Basin are allocated to the Northeast, Northwest, and Wilfred Dowdell SPAs and the Stadium Lands PD and the costs of the Copeland Detention Basin are allocated to the University District SPA. The Southeast SPA and Sonoma Mountain Village PD will provide on-site detention to mitigate 100-year storm peak flows. These developments also drain into a separate drainage channel than the remaining SPAs. The impervious area factors are outlined Table 7-2.

Table7-2 – Impervious Area Factors

Development Area	Northeast SPA	University District SPA	Northwest SPA	Wilfred Dowdell SPA	Stadium Lands PD
Total Area (ac)	215.70	297.00	170.00	24.77	30.00
Parks/Open Space (ac)	54.36	77.80	6.00	0.00	1.00
Impervious Area (ac)	**161.34**	**219.20**	**164.00**	**24.77**	**29.00**

7.3.3 Impact Zone Calculations

The proposed drainage basins support development that directs stormwater runoff to the Copeland and Hinebaugh Creek drainage systems. As described above, the costs of the Northeast Detention Basin are allocated to the Northeast, Northwest, and Wilfred Dowdell SPAs and the Stadium Lands PD and the costs of the Copeland Detention Basin are allocated to the University District SPA. The Southeast SPA and Sonoma Mountain Village PD detain their stormwater and do not contribute to these drainage systems. Therefore, costs are allocated to all areas of the City except the Southeast SPA and Sonoma Mountain Village PD.

7.3.4 Fee Component Calculations

The estimated cost for storm drainage facilities in the 2011 Update is $ 6,368,331.Tables 7-3, and 7-4 outline the allocation of new development's cost to each category of land use. The resulting fee per land use category is shown per dwelling unit for residential land uses and per disturbed thousand square feet for non-residential land uses.

Table 7-3 – Drainage Fee Component for Northeast Detention Basin

Total Cost: $3,897,600
Cost per Impervious Acre $10,281

Development Area

	Northeast			Northwest			Wilfred Dowdell			Stadium Lands		
Total Area (acre)	215.7			170			24.77			30		
Parks/Open Space (acre)	54.36			6						1		
Impervious Area (acre)	161.34			164			24.77			29		
SPA Share (acre)	$1,658,700			$1,686,100			$254,700			$298,100		
	acres	unit	fee	acres	unit	fee	acres	unit	fee	acres	unit	fee
Single Family Residential (unit)	153	920	$1,710									
Multi-Family Residential (unit)	8.3	200	$427	30	900	$343				13.6	338	$414
Senior Housing (unit)												
Assisted Living (unit)												
Non-residential (distrubed tsf)				134	5837	$236	24.77	1079	$236	15.4	671	$236

Table 7-4 – Drainage Fee Component for Copeland Detention Basin

Total Cost: $2,470,731
Cost per Impervious Acre $11,272

Development Area

	University District		
Total Area (acre)	297		
Parks/Open Space (acre)	77.8		
Impervious Area (acre)	219.2		
SPA Share (acre)	$11,272		
	acres	unit	fee
Single Family Residential (unit)	164.2	883	$2,096
Multi-Family Residential (unit)	35	762	$518
Senior Housing (unit)			
Assisted Living (unit)			
Non-residential (disturbed tsf)	20	871	$259

7.3.5 Nexus Findings for Drainage Improvements

Purpose of Fee Component: This fee component funds two regional detention basins designed to assure there is adequate capacity in the drainage system to support planned growth.

Use of Fee: Revenue from fees will be used to design and construct the planned regional detention basins on the Copeland and Northeast drainage systems.

Relationship between Use of Fee and Type of Development: The development of new residential and non-residential land uses will result in an increase in impervious area and runoff into the City's drainage system. The storm drainage master plan indicates that the existing system does not have

enough capacity for all planned development. The proposed detention basins will reduce peak flows into the drainage system providing capacity for development. Because of the City's development pattern, infill development, with the exception of the two large planned developments at Stadium Lands and Sonoma Mountain Village, does not contribute to an increase in impervious area. These projects are developed within existing impervious area often devoted to parking lots.

Relationship between Need for Improvements and the Type of Development: Each type of new development's impact on the drainage system is measured by its impervious area. The impervious area allows the relative impact of residential and non-residential land uses to be modeled so that each development type's impact on each proposed improvement can be calculated.

Relationship between Amount of Fee and Cost of or Portion of Facility Attributed to Development Upon Which Fee is Imposed: Impervious area is used to model impacts and cost allocation for the detention basins because it is the increase in impervious area that contributes to reduced capacity in the drainage system. The fee component for the detention basins is calculated using the following steps:

1. The total impervious area contributed by each development area is added together to calculate total new impervious area. Open space allocations within new development areas are not included in this total.
2. The cost of the detention basins is allocated to each new development area based on the ratio of its new impervious area to the total new impervious area.
3. The cost of detention basins within each new development area is allocated to each existing land use based on the ratio of area devoted to that land use to the total impervious area in the development.
4. The fee component for each land use type is calculated by dividing the total cost allocated to the land use type by the units of land use within that area.

8 Funding and Financing Strategy for Capital Improvements

8.1 Introduction

This 2011 Update has described and calculated mitigation fees in the City necessary to support planned new development. Fee revenue will be used to construct infrastructure that mitigates the impacts of development. The PFFP includes a wide variety of public infrastructure. Some of the infrastructure has been constructed and financed by the City and these costs are included in the mitigation fees. Some of this infrastructure, particularly the Eastside Trunk Sewer, the eastside transmission main, portions of the roadway system and the storm drainage system must be installed prior to development in order to provide basic service to the SPAs and avoid reductions of service for existing development in the City. However, some of the proposed infrastructure provides for citywide needs at buildout and is not needed immediately. The City can fund the construction of these types of improvements as revenue is available.

This chapter outlines the City's options for using fee revenue and land secured debt and suggests priority facilities that could be included in a land-secured financing program. Where appropriate, this chapter also discusses strategies for funding the "existing users" share of proposed improvements.

8.2 "Pay-as-you-go" Mitigation Fees for New Development

Mitigation fees are typically collected at the time a building permit is issued. As a result, the fee revenue can vary from year to year and the City may need to accumulate fee revenue over time in order to execute projects. This is known as the "pay-as-you-go" approach. Some of the projects in this 2011 Update lend themselves to this approach because they allow the City to maintain service over time as it grows. Table 8-1 below, outlines the infrastructure that can be constructed over time, using Mitigation Fee revenue. This revenue will be collected from infill development and may be collected from development within the SPAs and PDs. Within the SPAs, mitigation fee revenue is most likely to be collected from discrete assessor's parcels in the Northwest, Northeast, and University District SPAs that are not included in the current master development proposals.

Table 8-1 – Pay-as-you-Go Facilities in the PF Program

		2011 Total Costs	2011 Allocations New Development	2011 Allocations Existing Development
Roadways & Bridges				
No.	**Name**			
4	Dowdell Avenue: between Business Park Drive and 850' south of Business Park Drive	$ 465,000	$ 465,000	$ -
5	Dowdell Avenue: between 850' south of Business Park Drive and Martin Avenue	$ 588,100	$ 588,100	$ -
Mitigation & Right of Way				
	Dowdell Avenue: between Business Park Drive and 850' south of Business Park Drive	$ 738,150	$ 738,150	$ -
Traffic Control Devices & Intersection Improvements				
1	Camino Colegio @ East Cotati	$ 7,480	$ 7,480	$ -
2	Commerce Blvd @ State Farm Drive	$ 516,567	$ 516,567	$ -
3	Commerce @ Southwest	$ 521,839	$ 521,839	$ -
4	Dowdell @ Business Park Drive	$ 905,967	$ 905,967	$ -
5	Labath @ Rohnert Park Expressway	$ 203,832	$ 203,832	$ -
10	Redwood Drive @ Rohnert Park Expressway	$ 199,212	$ 199,212	$ -
14	US 101 NB Ramps @ Golf Course/Commerce	$ 166,218	$ 166,218	$ -
15	US 101 SB Ramps @ Wilfred/Redwood	$ 166,218	$ 166,218	$ -
Public Safety				
	Training Facilities	$ 5,820,444	$ 1,734,818	$ 4,085,626
Public Facilites				
	City Hall (completed)	$ 8,540,000	$ 2,545,399	$ 5,994,601
	Master Plans (completed)	$ 450,000	$ 134,125	$ 315,875
	Westside Utilities (Dowdell Ave)	$ 1,605,749	$ 1,605,749	$ -
	Corporation Yard Expansion (includes Public Safety Maintenance)	$ 2,662,200	$ 2,662,200	$ -
	Median & Frontage Improvements			
	Dowdell Avenue: between Business Park Drive and 850' south of Business Park Drive	$ 491,904	$ 491,904	$ -
	Dowdell Avenue: between 850' south of Business Park Drive and Martin Avenue	$ 622,113	$ 622,113	$ -
Sewer System Improvements				
	Eastside Trunk Sewer Phase 1	$ 21,605,335	$ 16,236,415	$ 5,368,920
	Eastside Trunk Sewer Phase 2 Main Reach	$ 10,637,139	$ 10,210,435	$ 426,705
	Eastside Trunk Sewer Phase 2a (South Reach)	$ 1,150,329	$ 1,039,579	$ 110,749
	Eastside Trunk Sewer Phase 3 (North Reach)	$ 2,805,235	$ 2,805,235	$ -
	Interceptor Outfall Project	$ 23,132,623	$ 7,009,184	$ 16,123,439
	Subregional System Improvements	$ 202,132,150	$ 52,628,114	$ 149,504,036
	Canon Manor Project Management	$ 435,328	$ 96,959	$ 338,369
Water System Improvements				
	Westside Water System Improvements	$ 157,325	$ 157,325	$ -
Total Pay-as-you-Go Program		**$ 286,726,457**	**$ 104,458,137**	**$ 182,268,320**
ENR CCI (San Francisco, CA - September 2011) = 10192.79				

8.3 Land Secured Bond Financing for New Development

As noted above, a number of capital facilities included in this 2011 Update must be constructed early in the development program. These facilities are logically separated by eastside and westside improvements and are listed in Tables 8-2a and 8-2b, below. This 2011 Update proposes to fund the construction of these facilities with the proceeds from land-secured municipal bond sale(s). These costs represent the costs of construction only and do not include the overhead associated with public financing. Financing overheard would be recovered from bond proceeds. Financing overhead costs can include:

- Bond Reserve Funds, typically budgeted at 10%;
- Underwriter's Discount, typically budgeted at 2%;
- Issuance Costs (legal, engineering, administration), typically budgeted at 5%;
- Capitalized Interest, budgeted for a maximum of 3 years.

The City has two options for land-secured bonds that can finance new development's fair share of infrastructure improvements. These are Benefit Assessments and Mello-Roos Special Taxes.

Table 8-2a – Facilities to Include in an Eastside Land Secured Bond Program

		2011 Total Costs	2011 Allocations New Development	2011 Allocations Existing Development
Roadways & Bridges				
No.	**Name**			
1	Bodway Parkway: between Valley House and Railroad	$ 994,500	$ 994,500	$ -
	Environmental Mitigation	$ 400,800	$ 400,800	$ -
6	Keiser Avenue: between Snyder Lane & Petaluma Hill Road	$ 2,588,500	$ 2,588,500	$ -
7	Rohnert Park Expressway: between Syder Lane & Petaluma Hill road	$ 4,658,400	$ 4,658,400	$ -
	Environmental Mitigation	$ 223,200	$ 223,200	$ -
8	Snyder Lane: between G Section & north side of Creekside Middle School	$ 3,284,500	$ 2,810,300	$ 474,200
	Bridge @ Five Creek	$ 539,400	$ 539,400	$ -
	Bridge @ Crane Creek	$ 539,400	$ 539,400	$ -
9	Snyder Lane: between south side of Creekside Middle School and Medical Center Drive	$ 828,700	$ 711,500	$ 117,200
	Bridge @ Hinebaugh Creek	$ 539,400	$ 539,400	$ -
10	Snyder Lane: between Medical Center Drive and Southwest Blvd	$ 2,020,900	$ 1,711,100	$ 309,800
	Bridge @ Copeland Creek	$ 435,000	$ 435,000	$ -
Traffic Control Devices & Intersection Improvements				
6	Petaluma Hill Road @ Keiser Avenue	$ 1,290,859	$ 1,290,859	$ -
7	Petaluma Hill Road @ RPX	$ 263,336	$ 263,336	$ -
8	Petaluma Hill Road @ Valley House	$ 1,290,859	$ 1,290,859	$ -
12	Snyder Lane @ Keiser	$ 780,003	$ 780,003	$ -
13	Snyder Lane @ RPX	$ 270,819	$ 270,819	$ -
Public Safety				
	New Southside Station	$ 3,640,300	$ 3,640,300	$ -
Public Facilities				
	Median and Frontage Improvements			
	Bodway Parkway: between Valley House and Railroad	$ 1,159,938	$ 1,159,938	$ -
	Keiser Avenue: between Snyder Lane & Petaluma Hill Road	$ 2,961,684	$ 2,961,684	$ -
	Rohnert Park Expressway: between Syder Lane & Petaluma Hill Road	$ 4,736,232	$ 4,736,232	$ -
	Snyder Lane: between G Section & north side of Creekside Middle School	$ 2,761,880	$ 2,761,880	$ -
	Snyder Lane: between south side of Creekside Middle School and Medical Center Drive	$ 358,589	$ 358,589	$ -
	Snyder Lane: between Medical Center Drive and Southwest Blvd	$ 945,371	$ 945,371	$ -
Water System Improvements				
	Eastside Transmission Main	$ 2,299,700	$ 2,299,700	$ -
Storm Drainage Facilities - Proposed Additions				
	Copeland Detention Basin (10 acres)	$ 2,470,731	$ 2,470,731	$ -
	Northeast Detention Basin (6.5 acres)	$ 3,897,600	$ 3,897,600	$ -
Total Plan		**$ 46,180,601**	**$ 45,279,401**	**$ 901,200**
ENR CCI (San Francisco, CA - September 2011) = 10192.79				

Table 8-2b– Facilities to Include in a Westside Land Secured Bond Program

			2011 Allocations	
		2011 Total Costs	New Development	Existing Development
Roadways & Bridges				
No.	**Name**			
2	Dowdell Avenue: between 375' north & 750' south of Wilfred Avenue	$ 870,000	$ 870,000	$ -
3	Dowdell Avenue: between 750' south of Wilfred Avenue and Business Park Drive	$ 845,600	$ 845,600	$ -
	Bridge @ Business Park Drive	$ 870,000	$ 870,000	$ -
11	Wilfred Avenue: between 1999 City Limits and Dowdell Avenue	$ 453,500	$ 453,500	$ -
12	Wilfred Avenue: between Dowdell Avenue and UGB	$ 1,892,300	$ 1,892,300	$ -
Traffic Control Devices & Intersection Improvements				
9	Redwood Drive @ Business Park Drive	$ 516,567	$ 516,567	$ -
11	Redwood Drive @ Wilfred	$ 1,068,099	$ 1,068,099	$ -
				$ -
Public Safety				
	New Westside Station	$ 3,722,112	$ 1,795,002	$ 1,927,110
Median and Frontage Improvements				
	Dowdell Avenue: between 375' north & 750' south of Wilfred Avenue	$ 754,076	$ 754,076	$ -
	Dowdell Avenue: between 750' south of Wilfred Avenue and Business Park Drive	$ 837,863	$ 837,863	$ -
	Wilfred Avenue: between 1999 City Limits and Dowdell Ave	$ 508,706	$ 508,706	$ -
	Wilfred Avenue: between Dowdell Ave and UGB	$ 2,122,534	$ 2,122,534	$ -
Total Plan		**$ 14,461,357**	**$ 12,534,247**	**$ 1,927,110**
ENR CCI (San Francisco, CA - September 2011) = 10192.79				

8.3.1 Benefit Assessments

Benefit Assessments for capital improvements are most commonly established under the auspices of the Municipal Improvement Act of 1913, Division 12 of the Streets and Highways Code (the "1913 Act"). Since 1996, benefit assessments must comply with the provisions of Articles XIIIC and XIIID of the State Constitution (Proposition 218). Benefit assessments may be used to fund capital improvements that specially benefit property provided that: (i) assessments are levied based on the special benefits provided by the project; (ii) any assessment does not exceed the reasonable cost of the proportional special benefit conferred on a parcel; and (iii) the cost of general benefits conferred by improvements are not included within the assessment.

The establishment of a benefit assessment requires a public hearing and a property owner ballot. Assessment ballots are weighted by the amount of the assessment. If the majority of the weighted

ballots (more than 50%) approve the proposed assessment, the City may impose the assessment. Confirmed 1913 Act assessments may be paid in cash before bonds are issued. 1913 Act assessments are also commonly used to secure municipal bonds issued under the Improvement Bond Act of 1915, Division 10 of the Streets and Highways Code (the "1915 Act"). The City has used 1913/1915 Act combinations to fund capital improvements for the Camino Colegio Assessment District Project No. 1985-1 ("AD 85-1"), the Wilfred Avenue Interchange Area Assessment District Project No. 1987-10 ("AD 87-10") and the Millbrae Avenue Assessment District Project No. 1988-1 ("AD 88-1").

Assessment bonds may be refunded to allow property owners to take advantage of lower interest rates under the Refunding Act of 1984 for 1915 Improvement Act Bonds, Section 9523 of the Streets and Highways Code (the "1984 Act"). The City has used the 1984 Act on several occasions to refund existing assessment bonds to reduce assessment payments by property owners.

The City has formed an assessment district under the auspices of the 1913 Act to secure new developments' share of its Interceptor Outfall project. This existing fixed lien has been placed on property within the Northeast SPA, the University District SPA, the Southeast SPA and the Stadium Lands and Sonoma Mountain Village PD.

8.3.2 Mello-Roos Community Facilities Districts

Mello-Roos Community Facilities Districts ("CFDs") are established under the Mello-Roos Community Facilities Act of 1982, Section 53111 et. seq. of the Government Code (the "Mello-Roos Act"). CFDs use special taxes, which are not required to be based on special benefits and therefore are not subject to the Proposition 218 requirements for benefit assessments.

The establishment of a CFD also requires a public hearing and a vote. If there are fewer than twelve registered voters within proposed boundaries of the CFD, property owners vote; otherwise the registered voters vote. In the City's case, there are existing dwelling units within some of the SPAs and there may well be more than 12 resident registered voters with some of the SPAs. The resident registered voter requirements may be an important consideration for the City and the development community when selecting a financing vehicle.

A two-thirds vote approval (of those actually voting) is required to confirm the special tax and authorize bonds. If the vote is by property owners, each has one vote for each acre or part of acre owned in the CFD. If the vote is by voters, each has one vote. Special taxes may be paid off in cash if the special tax formula makes such provisions. Special tax revenue can also be used to secure municipal bonds, issued under Mello-Roos Act. Mello-Roos bonds also may be refunded under the provisions of Mello-Roos. The Mello Roos Act requires that the City adopt local goals and policies before forming CFDs. A copy of the City's adopted goals and policies is included in Appendix E.

Appendix A – Land Use Update

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2010 Update - 97 Formula

	Single-Family Residential (1)	Multi-Family Residential (2)	Senior Housing (3)	Assisted Living Facility	General Offices (4)	Hotel/Motel	Strip Retail	Shopping Center/ Retail (5)	Light Industrial (6)	Heavy Industrial	Warehouse (7)	
	(units)	(units)	(units)	(units)	(sq ft)	(sq ft)	(sq ft)	(sq ft)	(sq ft)	(sq ft)	(sq ft)	
East Side												
97base	18											
125-A												
total	18	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2002base	19											
125-A												
Total	19	0	0	0	0	0	0	0	0	0	0	
97base	749	110										
125-B												
total	749	110	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2002base	945	533			0.0			0.0				
125-B												
Total	945	533	0	0	0	0	0	0	0	0	0	
97base	5											Northeast SPA Historically
125-C												
total	5	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2002base	7											
125-C	263											
Total	270	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
97base	10											
125-D	607	161	14									
total	617	161	14	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2002base	11	2										
125-D	443	300										
Total	454	302	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
97base	1											
125-E	6											
total	7	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2002base	4											
125-E	58											
Total	62	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2010base	0											NE SPA Summarized
125-C,D,E	920	200										
Total	920	200	0	0	0	0	0	0	0	0	0	
97base	0											University District
125-F	116	426	37		64,416.0			38,649.6				
total	116	426	37	0	64,416.0	0.0	0.0	38,649.6	0.0	0.0	0.0	
2002base	1											
125-F	266	212			0.0			130,000.0				
Total	267	212	0	0	0.0	0.0	0.0	130,000.0	0.0	0.0	0.0	
97base	0											
125-G	259	408	36		97,680.0			58,608.0				
total	259	408	36	0	97,680.0	0.0	0.0	58,608.0	0.0	0.0	0.0	
2002base	0											
125-G	454	365			0.0	0.0		60,000.0				
Total	454	365	0	0	0.0	0.0	0.0	60,000.0	0.0	0.0	0.0	
97base	0											
247-B		178	16		38,544.0			23,126.4				
total	0	178	16	0	38,544.0	0.0	0.0	23,126.4	0.0	0.0	0.0	
2002base												
247-B	104	153			0.0			25,000.0				
Total	104	153	0	0	0.0	0.0	0.0	25,000.0	0.0	0.0	0.0	
97base	1											
247-C		26	2		25,872.0			15,523.2				
total	1	26	2	0	25,872.0	0.0	0.0	15,523.2	0.0	0.0	0.0	
2002base	1											
247-C	56				0.0			35,000.0				
Total	57	0	0	0	0.0	0.0	0.0	35,000.0	0.0	0.0	0.0	
2010base	0											UD Summarized
125-F,G and 247-B,C	883	762						175,000.0				
Total	883	762	0	0	0	0	0	175,000	0	0	0	
Infill												
2002base						213,331.0	1,000.0	50,610.0				
124-A												
Total	0	0	0	0	0.0	213,331.0	1,000.0	50,610.0	0.0	0.0	0.0	
2002base	624											
124-B												
Total	624	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2002base	198	201					1,576.0					
124-C												
Total	198	201	0	0	0.0	0.0	1,576.0	0.0	0.0	0.0	0.0	
97base	8	241			74,000.0							
125-H					148,262.4							
total	8	241	0	0	222,262.4	0.0	0.0	0.0	0.0	0.0	0.0	
2002base	34	199	207		78,461.0			0.0				
125-H				135	4,688.6							
Total	34	199	207	135	83,149.6	0.0	0.0	0.0	0.0	0.0	0.0	

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	Single-Family Residential (1)	Multi-Family Residential (2)	Senior Housing (3)	Assisted Living Facility	General Offices (4)	Hotel/Motel	Strip Retail	Shopping Center/ Retail (5)	Light Industrial (6)	Heavy Industrial	Warehouse (7)	
	(units)	(units)	(units)	(units)	(sq ft)	(sq ft)	(sq ft)	(sq ft)	(sq ft)	(sq ft)	(sq ft)	
97base		212						136,500.0				
126-A								67,716.0				
total	0	212	0	0	0.0	0.0	0.0	204,216.0	0.0	0.0	0.0	
2002base		208			28,411.0	55,387.0		437,363.0			4,147.0	
126-A								39,322.8				
Total	0	208	0	0	28,411.0	55,387.0	0.0	476,685.8	0.0	0.0	4,147.0	
2005base	0	208	0	0	28,411	55,387	0	442,949	0	0	4,147	
126-A	0	0	0	0	0	0	0	33,737	0	0	0	
Total	0	208	0	0	28,411.0	55,387.0	0.0	476,685.8	0.0	0.0	4,147.0	
97base												
126-B								45,144.0				
total	0	0	0	0	0.0	0.0	0.0	45,144.0	0.0	0.0	0.0	
2002base		294			18,419.0						86,000.0	
126-B								7,246.8				
Total	0	294	0	0	18,419.0	0.0	0.0	7,246.8	0.0	0.0	86,000.0	
2002base					24,981.0		94,686.0		31,201.0		105,222.0	
127-A									23,207.6			
Total	0	0	0	0	24,981.0	0.0	94,686.0	0.0	54,408.6	0.0	105,222.0	
2002base					80,438.0		11,675.0		195,858.0		196,094.0	
127-B					43,956.3				11,850.3			
Total	0	0	0	0	124,394.3	0.0	11,675.0	0.0	207,708.3	0.0	196,094.0	
2010 base					88,917.0		11,675.0		195,858.0		196,094.0	
127-B					35,477.3				11,850.3			
Total	0	0	0	0	124,394	0	11,675	0	207,708	0	196,094	
97base					3,400.0		84,600.0					
127-C		45	4		45,408.0			27,244.8				
total	0	45	4	0	48,808.0	0.0	84,600.0	27,244.8	0.0	0.0	0.0	
2002base					30,404.0		16,600.0					
127-C		98			23,020.2						71,011.5	
Total	0	98	0	0	53,424.2	0.0	16,600.0	0.0	0.0	0.0	71,011.5	
2005base	0	0	0	0	30,404	0	16,600	0	0	0	100,000	
127-C	0	98	0	0	23,020	0	0	0	0	0	0	
Total	0	98	0	0	53,424.2	0.0	16,600.0	0.0	0.0	0.0	100,000.0	
97base					228,000.0				26,000.0		70,600.0	
127-D									40,986.0		4,554.0	
total	0	0	0	0	228,000.0	0.0	0.0	0.0	66,986.0	0.0	75,154.0	
2002base					312,978.0				131,658.0		177,215.0	
127-D					0.0				0.0		0.0	
Total	0	0	0	0	312,978.0	0.0	0.0	0.0	131,658.0	0.0	177,215.0	
2002base	267	374			54,253.0							
128-A		22	2									
Total	267	396	2	0	54,253.0	0.0	0.0	0.0	0.0	0.0	0.0	
2005base	267	384	0	0	54,253	0	0	0	0	0	0	
128-A	0	12	2	0	0	0	0	0	0	0	0	
Total	267	396	2	0	54,253.0	0.0	0.0	0.0	0.0	0.0	0.0	
2002base	278	167										
128-B												
Total	278	167	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2002base	38	55										
130-A												
Total	38	55	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2002base	134	277			18,992.0							
130-B												
Total	134	277	0	0	18,992.0	0.0	0.0	0.0	0.0	0.0	0.0	
2002base	222	403			6,921.0		17,225.0	10,429.0				
131-A		50					1,456.1					
Total	222	453	0	0	6,921.0	0.0	18,681.1	10,429.0	0.0	0.0	0.0	
2010 base	222	403			6,921.0		17,431.0	10,429.0				
131-A		50					1,250.1					
Total	222	453	0	0	6,921	0	18,681	10,429	0	0	0	
2002base	604	322			6,181.0							
131-B												
Total	604	322	0	0	6,181.0	0.0	0.0	0.0	0.0	0.0	0.0	
2002base	610	150										
134-C												
Total	610	150	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
97base	clarify base											
135-B		19	2					59,400.0				
total	0	19	2	0	0.0	0.0	0.0	59,400.0	0.0	0.0	0.0	
2002base	802	567			2,000.0	0.0	27,363.0	0.0				
135-B												
Total	802	567	0	0	2,000.0	0.0	27,363.0	0.0	0.0	0.0	0.0	
2005base	802	587	0	0	2,000	0	53,467	0	0	0	0	
135-B	0	0	0	0	0	0	0	0	0	0	0	
Total	802	587	0	0	2,000.0	0.0	53,467.0	0.0	0.0	0.0	0.0	
2002base	281	439										
135-C												
Total	281	439	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

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	Single-Family Residential (1)	Multi-Family Residential (2)	Senior Housing (3)	Assisted Living Facility	General Offices (4)	Hotel/Motel	Strip Retail	Shopping Center/ Retail (5)	Light Industrial (6)	Heavy Industrial	Warehouse (7)	
	(units)	(units)	(units)	(units)	(sq ft)	(sq ft)	(sq ft)	(sq ft)	(sq ft)	(sq ft)	(sq ft)	
97base	27								550,000.0			
135-D									317,196.0		35,244.0	
total	27	0	0	0	0.0	0.0	0.0	0.0	867,196.0	0.0	35,244.0	
2002base	144								735,000.0			
135-D									720,106.2			
Total	144	0	0	0	0.0	0.0	0.0	0.0	1,455,106.2	0.0	0.0	
2010base	144								735,000.0			
135-D	700	994			426,000.0	126,000.0		261,801.0	0.0			
Total	844	994	0	0	426,000.0	126,000.0	0.0	261,801.0	0.0	0.0	0.0	
97base									650,000.0			
239-A									40,095.0		4,455.0	
total	0	0	0	0	0.0	0.0	0.0	0.0	690,095.0	0.0	4,455.0	
2002base							5,760.0		296,686.0		756,754.0	
239-A									34,392.6			
Total	0	0	0	0	0.0	0.0	5,760.0	0.0	331,078.6	0.0	756,754.0	
97base							20,000.0		280,000.0			
239-B									368,874.0		40,986.0	
total	0	0	0	0	0.0	0.0	20,000.0	0.0	648,874.0	0.0	40,986.0	
2002base					22,725.0		9,038.0	185,030.0	248,069.0		52,032.0	
239-B		167						140,000.0				
Total	0	167	0	0	22,725.0	0.0	9,038.0	325,030.0	248,069.0	0.0	52,032.0	
2010 Base					22,725.0		9,038.0	231,028.0	248,069.0		52,032.0	
239-B		338						140,000.0				
Total	0	338	0	0	22,725	0	9,038	371,028	248,069	0	52,032	
97base						160.0		126,080.0				
239-C								55,836.0				
total	0	0	0	0	0.0	160.0	0.0	181,916.0	0.0	0.0	0.0	
2002base						36,368.0		234,741.0				
239-C								52,628.4				
Total	0	0	0	0	0.0	36,368.0	0.0	287,369.4	0.0	0.0	0.0	
2005base	0	0	0	0	0	36,368	0	243,795	0	0	0	
239-C	0	0	0	0	0	0	0	43,574	0	0	0	
Total	0	0	0	0	0.0	36,368.0	0.0	287,369.4	0.0	0.0	0.0	
2010 base						98,248.0		252,644.0				
239-C								34,725.4				
Total	0	0	0	0	0	98,248	0	287,369	0	0	0	
2002base						39,000.0	149,047.0	14,504.0				
240-D												
Total	0	0	0	0	0.0	39,000.0	149,047.0	14,504.0	0.0	0.0	0.0	
97base								68,440.0				
240-E								92,664.0				
total	0	0	0	0	0.0	0.0	0.0	161,104.0	0.0	0.0	0.0	
2002base								100,869.0			105,000.0	
240-E								29,224.8				
Total	0	0	0	0	0.0	0.0	0.0	130,093.8	0.0	0.0	105,000.0	
2010base								106,034.0			105,000.0	
240-E								24,059.8				
Total	0	0	0	0	0	0	0	130,094	0	0	105,000	
2002base		300										
240-G		213	19									
Total	0	513	19	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2005base	0	532	0	0	0	0	0	0	0	0	0	
240-G	0	0	0	0	0	0	0	0	0	0	0	
Total	0	532	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
97base												
242-A						171,072.0						
total	0	0	0	0	0.0	171,072.0	0.0	0.0	0.0	0.0	0.0	
2002base		176					40,600.0					
242-A						0.0						
Total	0	176	0	0	0.0	0.0	40,600.0	0.0	0.0	0.0	0.0	
2002base	580	5										
242-B												
Total	580	5	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
97base	218	144										
242-C								10,692.0				
total	218	144	0	0	0.0	0.0	0.0	10,692.0	0.0	0.0	0.0	
2002base	267	145					4,300.0					
242-C		7					5,000.0					
Total	267	152	0	0	0.0	0.0	9,300.0	0.0	0.0	0.0	0.0	
2005base	267	152	0	0	0	0	4,300	44,154.0	0	0	0	
242-C	0	0	0	0	0	0	5,000	0	0	0	0	
Total	267	152	0	0	0.0	0.0	9,300.0	44,154.0	0.0	0.0	0.0	
2010base	267	152					9,411.0					
242-C							0.0					
Total	267	152	0	0	0.0	0.0	9,411.0	0.0	0.0	0.0	0.0	
2002base	454											
242-E												
Total	454	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

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	Single-Family Residential (1)	Multi-Family Residential (2)	Senior Housing (3)	Assisted Living Facility	General Offices (4)	Hotel/Motel	Strip Retail	Shopping Center/ Retail (5)	Light Industrial (6)	Heavy Industrial	Warehouse (7)
	(units)	(units)	(units)	(units)	(sq ft)	(sq ft)	(sq ft)	(sq ft)	(sq ft)	(sq ft)	(sq ft)
2002base		983									
242-F											
Total	0	983	0	0	0.0	0.0	0.0	88,308.0	0.0	0.0	0.0
2002base					14,534.0		97,471.0	144,269.0			
243-A											
Total	0	0	0	0	14,534.0	0.0	97,471.0	144,269.0	0.0	0.0	0.0
2002base					283,230.0						7,168.0
243-B											
Total	0	0	0	0	283,230.0	0.0	0.0	0.0	0.0	0.0	7,168.0
2002base		937			14,528.0		6,226.0	48,508.0			
243-C											
Total	0	937	0	0	14,528.0	0.0	6,226.0	48,508.0	0.0	0.0	0.0
2002base						113,517.0	10,975.0				
244-A					7,995.7		38,269.1				
Total	0	0	0	0	7,995.7	113,517.0	49,244.1	0.0	0.0	0.0	0.0
2010 base						113,517.0	11,239.0				
244-A					7,995.7		38,005.1				
Total	0	0	0	0	7,996	113,517	49,244	0	0	0	0
97base					42,000.0						
244-B		43	4		43,824.0			26,294.4			
total	0	43	4	0	85,824.0	0.0	0.0	26,294.4	0.0	0.0	0.0
2002base					7,934.0						
244-B		180			12,080.6		29,711.0				
Total	0	180	0	0	20,014.6	0.0	29,711.0	0.0	0.0	0.0	0.0
2005base	0	76	0	0	7,934	0	2,000	0	0	0	0
244-B	0	104	0	0	12,081	0	27,711	0	0	0	0
Total	0	180	0	0	20,014.6	0.0	29,711.0	0.0	0.0	0.0	0.0
2010base		100			10,347.0		6,665.0				
244-B		80			9,667.6		23,046.0				
Total	0	180	0	0	20,014.6	0.0	29,711.0	0.0	0.0	0.0	0.0
2002base		75									
245-A											
Total	0	75	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2002base	261	52									
245-B											
Total	261	52	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2002base		376			12,224.0						
246-A											
Total	0	376	0	0	12,224.0	0.0	0.0	0.0	0.0	0.0	0.0
2002base	94	574									
246-B											
Total	94	574	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2002base	137										
247-A											
Total	137	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2020base	159	74									
247-D											
Total	159	74	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97base	289	120					6,400.0				
248-A		47	4								
total	289	167	4	0	0.0	0.0	6,400.0	0.0	0.0	0.0	0.0
2002base	287	153					5,060.0				
248-A		7					0.0				
Total	287	160	0	0	0.0	0.0	5,060.0	0.0	0.0	0.0	0.0
2005base	287	169	0	0	0	0	5,060	0	0	0	0
248-A	0	0	0	0	0	0	0	0	0	0	0
Total	287	169	0	0	0.0	0.0	5,060.0	0.0	0.0	0.0	0.0
2002base	109	170					4,035.0	188,248.0			
248-B											
Total	109	170	0	0	0.0	0.0	4,035.0	188,248.0	0.0	0.0	0.0
Southeast											
97base	1										
252-B	505								138,996.0		15,444.0
total	506	0	0	0	0.0	0.0	0.0	0.0	138,996.0	0.0	15,444.0
2002base											
252-B	463	36					20,000.0		0.0		0.0
Total	463	36	0	0	0.0	0.0	20,000.0	0.0	0.0	0.0	0.0
2010base											
252-B	394	81						10,000.0			
Total	394	81	0	0	0	0	0	10,000	0	0	0
97base											
252-C									563,112.0		62,568.0
total	0	0	0	0	0.0	0.0	0.0	0.0	563,112.0	0.0	62,568.0
2002base											
252-C											
Total	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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	Single-Family Residential (1)	Multi-Family Residential (2)	Senior Housing (3)	Assisted Living Facility	General Offices (4)	Hotel/Motel	Strip Retail	Shopping Center/ Retail (5)	Light Industrial (6)	Heavy Industrial	Warehouse (7)	
	(units)	(units)	(units)	(units)	(sq ft)	(sq ft)	(sq ft)	(sq ft)	(sq ft)	(sq ft)	(sq ft)	
West Side												
97base	7											
74-B								10,692.0				
total	7	0	0	0	0.0	0.0	0.0	10,692.0	0.0	0.0	0.0	
2002base	6											
74-B		0	0		0.0			0.0	0.0			
Total	6	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
97base	23											
74-C								163,277.0				
total	23	0	0	0	0.0	0.0	0.0	163,277.0	0.0	0.0	0.0	
2002base	51											
74-C		328			84000	63,795.6	69,322.2	164,000.0	190,000.0			
Total	51	328	0	0	84,000.0	63,795.6	69,322.2	164,000.0	190,000.0	0.0	0.0	
97base	1											
74-D												
total	1	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2002base	1											
74-D												
Total	1	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
97base	6											
240-B					110,246.4			34,452.0	34,749.0		3,861.0	
total	6	0	0	0	110,246.4	0.0	0.0	34,452.0	34,749.0	0.0	3,861.0	
2002base	4											
240-B												
Total	4	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
97base	15											
240-C					348,480.0			350,301.0	336,798.0		37,422.0	
total	15	0	0	0	348,480.0	0.0	0.0	350,301.0	336,798.0	0.0	37,422.0	
2002base	17											
240-C		572	0		146000		120,757.8	286,000.0	330,000.0			
Total	17	572	0	0	146,000.0	0.0	120,757.8	286,000.0	330,000.0	0.0	0.0	
2010base	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
74-B,C,D and 240-B,C	0	900			230,000.0	0	0.0	752,114.0	520,000.0			NE & WD
Total	0	900	0	0	230,000	0	0	752,114	520,000	0	0	
2010 Update Totals:												
2010 Total Base	7,548.00	8,594.00	207.00	0.00	1,028,506.00	519,483.00	540,987.00	1,489,223.00	1,638,472.00	0.00	1,589,632.00	
New Development	2,897.00	3,465.00	1.92	135.00	736,849.44	126,000.00	61,051.10	1,431,437.00	589,450.50	0.00	0.00	
Buildout Projections	10,445.00	12,109.00	208.92	135.00	1,765,355.44	645,483.00	603,288.19	3,016,214.80	1,492,922.50	0.00	1,589,632.00	
ck	10,445.00	12,059.00	208.92	135.00	1,765,355.44	645,483.00	602,038.10	2,920,660.00	2,227,922.50	0.00	1,589,632.00	
Westside Fire Station (TAZ 74B,C,D 126A,B, 239A,B,C and 240 B,C,D,E,G)												
2010 Total Base	0.00	1,034.00	0.00	0.00	69,555.00	192,635.00	163,845.00	1,047,159.00	544,755.00	0.00	1,003,933.00	
New Development	0.00	1,238.00	0.00	0.00	230,000.00	0.00	0.00	991,882.80	554,392.60	0.00	0.00	
Buildout Projections	0.00	2,272.00	0.00	0.00	299,555.00	192,635.00	163,845.00	2,039,041.80	1,099,147.60	0.00	1,003,933.00	
Southside Fire Station (All Remaining Development)												
2010 Total Base	7,548.00	7,560.00	207.00	0.00	958,951.00	326,848.00	377,142.00	442,064.00	1,093,717.00	0.00	585,699.00	
New Development	2,897.00	2,227.00	1.92	135.00	506,849.44	126,000.00	61,051.10	439,554.20	35,057.90	0.00	0.00	
Buildout Projections	10,445.00	9,837.00	208.92	135.00	1,465,800.44	452,848.00	439,443.19	977,173.00	393,774.90	0.00	585,699.00	

(1) Includes housing units in Rural Residential, Low Density Residential, and Intermediate Density Residential districts.

(2) Includes housing units in High Density Residential and Mixed Use: Residential and Office districts.

(3) Assumes that 8% of multi-family housing will be senior housing. Approximately 8% of the Rohnert Park population was over the age of 65 in 1990 (US Department of Commerce, County and City Data Book, 1994).

(4) Includes all commercial floor area in the Professional/Office/Medical district and 50% of floor area in the Mixed Use: Commercial and Office district.

(4) Includes all commercial floor area in the Commercial district and 50% of floor area in the Mixed Use: Commercial and Office district. category

(6) Includes 90% of commercial floor area in the Industrial district.

(7) Includes 10% of commercial floor area in the Industrial district.

(8) There is no acreage for Public/Institutional uses other than for schools. The proposed SSU Concert Hall is approximately 97,000 (gross) square feet in size, including a 1,400-square foot concert hall,

300-square foot recital hall, practice hall, practice rooms, faculty offices, and public space.

(9) 0.25 students per household in single-family houses; 0.15 students per household in non-senior multifamily houses.

(10) 0.11 students per household in single-family houses; 0.06 students per household in non-senior multifamily houses.

(11) 0.09 students per household in single-family houses; 0.04 students per household in non-senior multifamily houses.

(12) Includes all land acreage in the Parks/Recreation district, including the 180-acre Golf Course and 50-acre Sports Complex.

(13) Includes all land acreage in the Agriculture/Open Space district, which includes open space areas east of the city limits, west of Petaluma Hill Road, north of Railroad Avenue, and south of the Holly Street extension.

For SPAs to that are to be annexed into the City, existing SFRs are not used in the fee calculations since the SFRs will be redeveloped

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Appendix B – Cost Estimates

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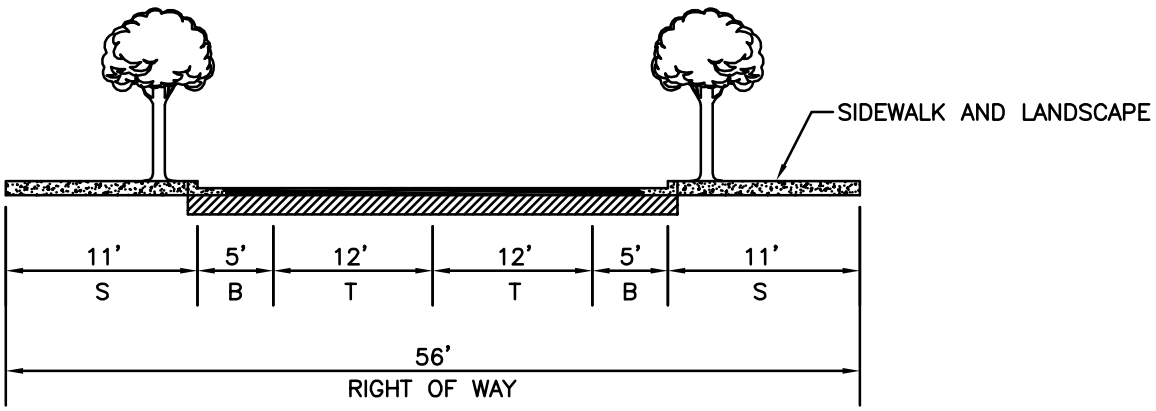
Roadways, Medians & Frontage

Segment 1

Bodway Parkway
(Modified Avenue)

Between Valley House Drive
and Railroad Avenue



LEGEND

P = Parking
B = Bikeway
T = Travel Lane
S = Sidewalk

NOTES:

1. CURB IS 0.5', GUTTER IS 1.5'.
2. EARTHWORK IS BASED ON 2 FOOT EXCAVATION.
3. DOES NOT INCLUDE WATER, SEWER, JOINT TRENCH.
4. DOES NOT INCLUDE ROW (CITY OWNED).
5. INCLUDES ENVIRONMENTAL MITIGATION (OUTSIDE DEVELOPMENT PROJECT LIMITS).
6. INCLUDES STORM DRAIN.

NOT TO SCALE

WINZLER & KELLY

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BODWAY PARKWAY

Between Valley House Dr and Railroad Ave.

Typical Street and Utility Cost Per Centerline Foot

Segment 1

Roadway Section: Revised Road Section: Enter Quantities Manually — New Road

Length: 2600 feet

Right of Way Width 56

Demolition Width 0 feet

Roadway Excavation Depth: 2 feet

Landscape Quality Level: B

Year to be Constructed:

Project Description: New 2-lane roadway

ITEM NO.	ITEM	QUANTITY	UNIT	UNIT COST*	TOTAL ITEM COST	20% CONTINGENCY 25% MANAGEMENT	TOTAL COST PER CL FOOT
Surface Costs:							
1	Mobilization	10.00	%	$ 239.82	$ 23.98	$ 10.79	$ 34.77
2	Clearing & Grubbing	56.00	SF	$ 0.27	$ 15.12	$ 6.80	$ 21.92
3	Demolition	0.00	SF	$ 9.13	$ -	$ -	$ -
4	Earthwork (curb to curb)	2.51	CY	$ 14.91	$ 37.42	$ 16.84	$ 54.26
5	Lime Treatment (curb to curb)	3.78	SY	$ 1.16	$ 4.38	$ 1.97	$ 6.35
6	Pavement (6"AC/13"AB)	31.00	SF	$ 5.90	$ 182.90	$ 82.31	$ 265.21
7	Pavement (6" AC/18" AB)	0.00	SF	$ 6.19	$ -	$ -	$ -
8	Overlay (2" AC)	0.00	SF	$2.39	$ -	$ -	$ -
					Subtotal Surface Costs per LF:		**$ 382.51**
Median and Frontage Costs:							
9	Mobilization	10.00	%	$ 279.70	$ 27.97	$ 12.59	$ 40.56
10	Curb & Gutter	2.00	LF	$ 26.50	$ 53.00	$ 23.85	$ 76.85
11	Median Curb	0.00	LF	$ 6.14	$ -	$ -	$ -
12	PCC Sidewalk (6')	12.00	SF	$ 6.14	$ 73.68	$ 33.16	$ 106.84
13	Street Lighting**	0.006250	EA	$ 5,000.00	$ 31.25	$ 14.06	$ 45.31
14	Landscaping (5' w/ 6" curb)	9.00	SF	$ 6.50	$ 58.50	$ 26.33	$ 84.83
15	Underground Utilities (storm drain only	1.00	LF	$ 63.27	$ 63.27	$ 28.47	$ 91.74
					Subtotal Median and Frontage Costs per LF:		**$ 446.13**
					Total Construction Cost per LF:		**$ 828.64**
Cost Breakdown:							
					TOTAL ESTIMATED ROADWAY CONSTRUCTION COST OF THIS SEGMENT:		**$ 994,526.00**
					TOTAL ESTIMATED MEDIAN AND FRONTAGE COST OF THIS SEGMENT*:**		**$ 1,159,938.00**
					TOTAL ESTIMATED ROADWAY COSTS INCLUDED IN THE FINANCE PLAN:		**$ 994,526.00**
Right-of-way Acquisition and Mitigation Costs:							
14	Environmental Mitigation*****	3.34	AC	$ 120,000.00	$ 400,800.00	$ -	$ 400,800.00
					TOTAL PROJECT COST (INCLUDING R-O-W ACQUISITION and MITIGATION) INCLUDED IN THE FINANCE PLAN:		**$ 1,395,326.00**

* Estimated costs include appurtenances and other items that are a part of the ultimate road segment. Estimated costs do not include interim items, private utility or joint trench costs, or items included in other fee programs.

** Street lights are placed 160' apart on alternate sides of the street for minor roadways and on both sides for major roadways.

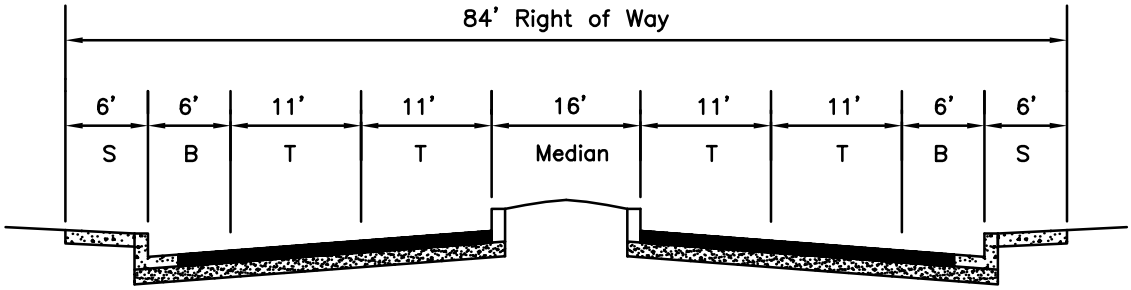
*** Median and frontage mitigation fee is calculated separately and, therefore, not included in the segments' total cost.

**** Environmental Mitigation Costs based on recent transactions for the Hazel Mitigation Bank

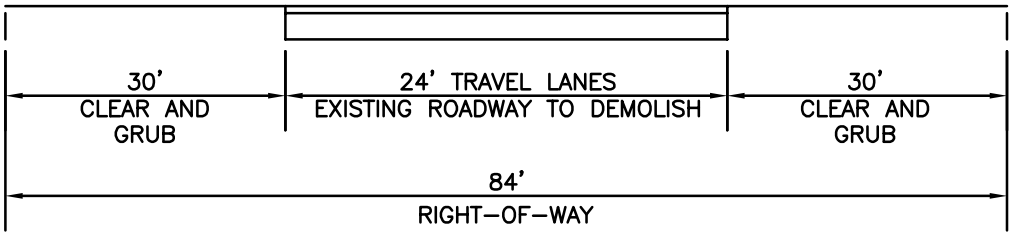
Segment 2

Dowdell Avenue 1
(Modified Parkway)

Between 375 ft North
and 750 ft South of Wilfred Avenue



SHOWN WITH 4 LANES, A MEDIAN AND BIKE LANES



LEGEND

P = Parking
B = Bikeway
T = Travel Lane
S = Sidewalk

NOTES:

1. EXISTING ROAD WILL BE COMPLETELY DEMOLISHED AND RECONSTRUCTED TO THE ROADWAY SECTION SPECIFICATIONS.
2. CURB IS 0.5', GUTTER IS 1.5'.
3. EARTHWORK IS BASED ON 2.0' EXCAVATION.
4. INCLUDES WATER, SEWER, STORM DRAIN, JOINT TRENCH.
5. DOES NOT INCLUDE ROW (ADJACENT TO PROPONENTS).
6. DOES NOT INCLUDE ENVIRONMENTAL MITIGATION (OVERLAPS WITH PROJECT SPECIFIC MITIGATION).

NOT TO SCALE

WINZLER & KELLY

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DOWDELL AVENUE 1

Segment 2

Between 375 ft North of Wilfred Av. and 750 ft South of Wilfred Av.

Typical Street and Utility Cost Per Centerline Foot

Roadway Section: Revised Road Section: Enter Quantities Manually — Reconstruction

Length: 1125 feet

Right of Way Width 84

Year to be Constructed:

Demolition Width 24 feet

Project Description: Demolish existing roadway and reconstruct.

Roadway Excavation Depth: 2 feet

Landscape Quality Level: B

ITEM NO.	ITEM	QUANTITY	UNIT	UNIT COST*	TOTAL ITEM COST	20% CONTINGENCY 25% MANAGEMENT	TOTAL COST PER CL FOOT
Surface Costs:							
1	Mobilization	10.00	%	$ 484.85	$ 48.49	$ 21.82	$ 70.31
2	Clearing & Grubbing	60.00	SF	$ 0.27	$ 16.20	$ 7.29	$ 23.49
3	Pavement Removal	24.00	SF	$ 2.80	$ 67.20	$ 30.24	$ 97.44
4	Earthwork (curb to curb)	5.33	CY	$ 14.91	$ 79.47	$ 35.76	$ 115.23
5	Lime Treatment (curb to curb)	8.00	SY	$ 1.16	$ 9.28	$ 4.18	$ 13.46
6	Pavement (6"AC/13"AB)	53.00	SF	$ 5.90	$ 312.70	$ 140.72	$ 453.42
7	Pavement (6" AC/18" AB)	0.00	SF	$ 6.19	$ -	$ -	$ -
8	Overlay (2" AC)	0.00	SF	$2.39	$ -	$ -	$ -
					Subtotal Surface Costs per LF:		**$ 773.35**
Median and Frontage Costs:							
9	Mobilization	10.00	%	$ 420.24	$ 42.02	$ 18.91	$ 60.93
10	Curb & Gutter	2.00	LF	$ 26.50	$ 53.00	$ 23.85	$ 76.85
11	Median Curb	2.00	LF	$ 6.14	$ 12.28	$ 5.53	$ 17.81
12	PCC Sidewalk (6' w/ 6" curb)	11.00	SF	$ 6.14	$ 67.54	$ 30.39	$ 97.93
13	Street Lighting**	0.012500	EA	$ 5,000.00	$ 62.50	$ 28.13	$ 90.63
14	Landscaping (16' w/ 2x 6" curb)	15.00	SF	$ 6.50	$ 97.50	$ 43.88	$ 141.38
15	Underground Utilities (Jnt Trench)	1.00	LF	$ 127.42	$ 127.42	$ 57.34	$ 184.76
					Subtotal Median and Frontage Costs per LF:		**$ 670.29**
Wet Utility Costs:							
16	Storm Drain - 18"	1.00	LF	$ 63.27	$ 63.27	$ 28.47	$ 91.74
17	Sanitary Sewer - 10"	1.00	LF	$ 49.03	$ 49.03	$ 22.06	$ 71.09
18	Water Main - 12"	1.00	LF	$ 72.62	$ 72.62	$ 32.68	$ 105.30
19	Recycled Water Main -12"	1.00	LF	$ 72.62	$ 72.62	$ 32.68	$ 105.30
					Subtotal Wet Utility Costs per LF:		$ 373.43
					Total Construction Cost per LF:		**$ 1,817.07**

Cost Breakdown:

TOTAL ESTIMATED ROADWAY CONSTRUCTION COST OF THIS SEGMENT:	**$ 870,018.75**
TOTAL ESTIMATED MEDIAN AND FRONTAGE COST OF THIS SEGMENT*:**	**$ 754,076.25**
TOTAL ESTIMATED WET UTILITY COSTS OF THIS SEGMENT**	**$ 420,108.75**
TOTAL ESTIMATED ROADWAY COSTS INCLUDED IN THE FINANCE PLAN:	**$ 870,018.75**

Right-of-way Acquisition and Mitigation Costs:

14	Environmental Mitigation*****	0.00	AC	$ 120,000.00	$ -	$ -	$ -

TOTAL PROJECT COST (INCLUDING R-O-W ACQUISITION and MITIGATION) INCLUDED IN THE FINANCE PLAN: $ 870,018.75

* Estimated costs include appurtenances and other items that are a part of the ultimate road segment. Estimated costs do not include interim items, private utility or joint trench costs, or items included in other fee programs.

** Street lights are placed 160' apart on alternate sides of the street for minor roadways and on both sides for major roadways.

*** Median and frontage mitigation fee is calculated separately and, therefore, not included in the segments' total cost.

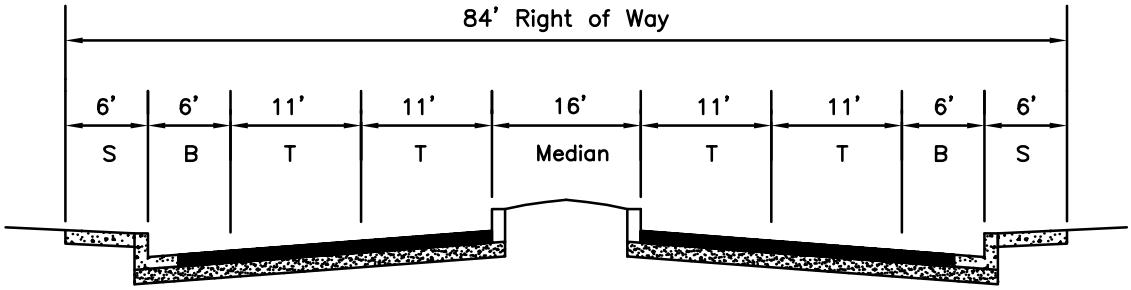
**** Wet Utility fee is calculated seperately and, therefore, not included in the segment's total cost.

***** Environmental Mitigation Costs based on recent transactions for the Hazel Mitigation Bank

Segment 3

Dowdell Avenue 2
(Modified Parkway)

Between 750 ft South of Wilfred Avenue
and Business Park Drive



SHOWN WITH 4 LANES, A MEDIAN AND BIKE LANES

LEGEND

P = Parking
B = Bikeway
T = Travel Lane
S = Sidewalk

NOTES:

1. CURB IS 0.5', GUTTER IS 1.5'.
2. EARTHWORK IS BASED ON 2 FOOT EXCAVATION.
3. INCLUDES WATER, SEWER, STORM DRAIN, JOINT TRENCH.
4. DOES NOT INCLUDE ROW (ADJACENT TO PROPONENTS).
5. DOES NOT INCLUDE ENVIRONMENTAL MITIGATION (OVERLAPS WITH PROJECT SPECIFIC MITIGATION).

NOT TO SCALE

WINZLER & KELLY

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DOWDELL AVENUE 2

Between 750 ft South of Wilfred Av. and Business Park Dr.

Typical Street and Utility Cost Per Centerline Foot

Segment 3

Roadway Section: Revised Road Section: Enter Quantities Manually — New Road

Length: 1250 feet

Right of Way Width 84

Demolition Width 0 feet

Roadway Excavation Depth: 2 feet

Landscape Quality Level: B

Year to be Constructed:

Project Description: New four lane roadway.

ITEM NO.	ITEM	QUANTITY	UNIT	UNIT COST*	TOTAL ITEM COST	20% CONTINGENCY 25% MANAGEMENT	TOTAL COST PER CL FOOT
Surface Costs:							
1	Mobilization	10.00	%	$ 424.13	$ 42.41	$ 19.08	$ 61.49
2	Clearing & Grubbing	84.00	SF	$ 0.27	$ 22.68	$ 10.21	$ 32.89
3	Demolition	0.00	SF	$ 9.13	$ -	$ -	$ -
4	Earthwork (curb to curb)	5.33	CY	$ 14.91	$ 79.47	$ 35.76	$ 115.23
5	Lime Treatment (curb to curb)	8.00	SY	$ 1.16	$ 9.28	$ 4.18	$ 13.46
6	Pavement (6"AC/13" AB)	53.00	SF	$ 5.90	$ 312.70	$ 140.72	$ 453.42
7	Pavement (6" AC/18" AB)	0.00	SF	$ 6.19	$ -	$ -	$ -
8	Overlay (2" AC)	0.00	SF	$2.39	$ -	$ -	$ -
					Subtotal Surface Costs per LF:		**$ 676.49**
Median and Frontage Costs:							
9	Mobilization	10.00	%	$ 420.24	$ 42.02	$ 18.91	$ 60.93
10	Curb & Gutter	2.00	LF	$ 26.50	$ 53.00	$ 23.85	$ 76.85
11	Median Curb	2.00	LF	$ 6.14	$ 12.28	$ 5.53	$ 17.81
12	PCC Sidewalk (6' w/ 6" curb)	11.00	SF	$ 6.14	$ 67.54	$ 30.39	$ 97.93
13	Street Lighting**	0.012500	EA	$ 5,000.00	$ 62.50	$ 28.13	$ 90.63
14	Landscaping (16' w/ 2x 6" curb)	15.00	SF	$ 6.50	$ 97.50	$ 43.88	$ 141.38
15	Underground Utilities (Jnt Trench)	1.00	LF	$ 127.42	$ 127.42	$ 57.34	$ 184.76
					Subtotal Median and Frontage Costs per LF:		**$ 670.29**
Wet Utility Costs:							
16	Storm Drain - 18"	1.00	LF	$ 63.27	$ 63.27	$ 28.47	$ 91.74
17	Sanitary Sewer - 10"	1.00	LF	$ 49.03	$ 49.03	$ 22.06	$ 71.09
18	Water Main - 12"	1.00	LF	$ 72.62	$ 72.62	$ 32.68	$ 105.30
19	Recycled Water Main -12"	1.00	LF	$ 72.62	$ 72.62	$ 32.68	$ 105.30
					Subtotal Wet Utility Costs per LF:		$ 373.43
					Total Construction Cost per LF:		**$ 1,720.21**

Cost Breakdown:

TOTAL ESTIMATED ROADWAY CONSTRUCTION COST OF THIS SEGMENT:	**$ 845,612.50**
TOTAL ESTIMATED MEDIAN AND FRONTAGE COST OF THIS SEGMENT*:**	**$ 837,862.50**
TOTAL ESTIMATED WET UTILITY COSTS OF THIS SEGMENT**	**$ 466,787.50**
TOTAL ESTIMATED ROADWAY COSTS INCLUDED IN THE FINANCE PLAN:	**$ 845,612.50**

ITEM NO.	ITEM	QUANTITY	UNIT	UNIT COST*	TOTAL ITEM COST	20% CONTINGENCY 25% MANAGEMENT	TOTAL COST PER CL FOOT
Right-of-way Acquisition and Mitigation Costs:							
14	Environmental Mitigation*****	0.00	AC	$ 120,000.00	$ -	$ -	$ -

TOTAL PROJECT COST (INCLUDING R-O-W ACQUISITION and MITIGATION) INCLUDED IN THE FINANCE PLAN: $ 845,612.50

* Estimated costs include appurtenances and other items that are a part of the ultimate road segment. Estimated costs do not include interim items, private utility or joint trench costs, or items included in other fee programs.

** Street lights are placed 160' apart on alternate sides of the street for minor roadways and on both sides for major roadways.

*** Median and frontage mitigation fee is calculated separately and, therefore, not included in the segments' total cost.

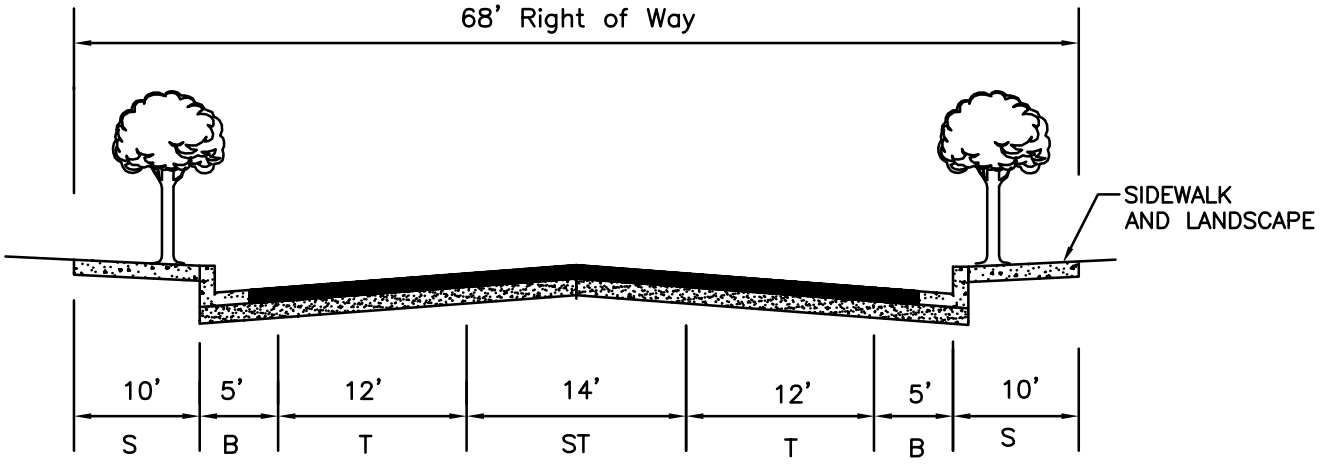
**** Wet Utility fee is calculated seperately and, therefore, not included in the segment's total cost.

***** Environmental Mitigation Costs based on recent transactions for the Hazel Mitigation Bank

Segment 4

Dowdell Avenue 3
(Modified Parkway)

Between Business Park Drive
and Martin Avenue



LEGEND

P = Parking
B = Bikeway
T = Travel Lane
S = Sidewalk
ST = Shared Turn lane

NOTES:

1. CURB IS 0.5', GUTTER IS 1.5'.
2. EARTHWORK IS BASED ON 2 FOOT EXCAVATION.

NOT TO SCALE

WINZLER & KELLY

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DOWDELL AVENUE 3

Segment 4

Between Business Park Dr and 850 feet South of Business Park Drive

Typical Street and Utility Cost Per Centerline Foot

Roadway Section: Revised Road Section: Enter Quantities Manually — New Road

Length: 850 feet

Right of Way Width 68

Year to be Constructed:

Demolition Width 0 feet

Project Description: New 2 lane roadway.

Roadway Excavation Depth: 2 feet

Landscape Quality Level: B

ITEM NO.	ITEM	QUANTITY	UNIT	UNIT COST*	TOTAL ITEM COST	20% CONTINGENCY 25% MANAGEMENT	TOTAL COST PER CL FOOT
Surface Costs:							
1	Mobilization	10.00	%	$ 342.97	$ 34.30	$ 15.44	$ 49.74
2	Clearing & Grubbing	68.00	SF	$ 0.27	$ 18.36	$ 8.26	$ 26.62
3	Demolition	0.00	SF	$ 9.13	$ -	$ -	$ -
4	Earthwork (curb to curb)	3.55	CY	$ 14.91	$ 52.93	$ 23.82	$ 76.75
5	Lime Treatment (curb to curb)	5.33	SY	$ 1.16	$ 6.18	$ 2.78	$ 8.96
6	Pavement (6'AC/13'AB)	45.00	SF	$ 5.90	$ 265.50	$ 119.48	$ 384.98
7	Pavement (6" AC/18" AB)	0.00	SF	$ 6.19	$ -	$ -	$ -
8	Overlay (2" AC)		SF	$2.39	$ -	$ -	$ -
					Subtotal Surface Costs per LF:		**$ 547.05**
Median and Frontage Costs:							
9	Mobilization	10.00	%	$ 362.82	$ 36.28	$ 16.33	$ 52.61
10	Curb & Gutter	2.00	LF	$ 26.50	$ 53.00	$ 23.85	$ 76.85
11	Median Curb	0.00	LF	$ 6.14	$ -	$ -	$ -
12	PCC Sidewalk (5' each side)	10.00	SF	$ 6.14	$ 61.40	$ 27.63	$ 89.03
13	Street Lighting**	0.012500	EA	$ 5,000.00	$ 62.50	$ 28.13	$ 90.63
14	Landscaping (5' w/ 6" curb)	9.00	SF	$ 6.50	$ 58.50	$ 26.33	$ 84.83
15	Underground Utilities (Jnt Trench)	1.00	LF	$ 127.42	$ 127.42	$ 57.34	$ 184.76
					Subtotal Median and Frontage Costs per LF:		**$ 578.71**
Wet Utility Costs:							
16	Storm Drain - 18"	1.00	LF	$ 63.27	$ 63.27	$ 28.47	$ 91.74
17	Sanitary Sewer - 10"	1.00	LF	$ 49.03	$ 49.03	$ 22.06	$ 71.09
18	Water Main - 12"	1.00	LF	$ 72.62	$ 72.62	$ 32.68	$ 105.30
19	Recycled Water Main -12"	1.00	LF	$ 72.62	$ 72.62	$ 32.68	$ 105.30
					Subtotal Wet Utility Costs per LF:		**$ 373.43**
					Total Construction Cost per LF:		**$ 1,704.47**
Cost Breakdown:							

TOTAL ESTIMATED ROADWAY CONSTRUCTION COST OF THIS SEGMENT: $ 464,992.50

TOTAL ESTIMATED MEDIAN AND FRONTAGE COST OF THIS SEGMENT*: $ 491,903.50**

TOTAL ESTIMATED WET UTILITY COSTS OF THIS SEGMENT** $ 317,415.50**

					TOTAL ESTIMATED ROADWAY COSTS INCLUDED IN THE FINANCE PLAN:		**$ 464,992.50**
Right-of-way Acquisition and Mitigation Costs:							
14	Environmental Mitigation*****	1.33	AC	$ 120,000.00	$ 159,600.00	$ -	$ 159,600.00
15	Right of Way	1.33	AC	$ 300,000.00	$ 399,000.00	$ 179,550.00	$ 578,550.00
					TOTAL PROJECT COST (INCLUDING R-O-W ACQUISITION and MITIGATION) INCLUDED IN THE FINANCE PLAN:		**$ 1,203,142.50**

* Estimated costs include appurtenances and other items that are a part of the ultimate road segment. Estimated costs do not include interim items, private utility or joint trench costs, or items included in other fee programs.

** Street lights are placed 160' apart on alternate sides of the street for minor roadways and on both sides for major roadways.

*** Median and frontage mitigation fee is calculated separately and, therefore, not included in the segments' total cost.

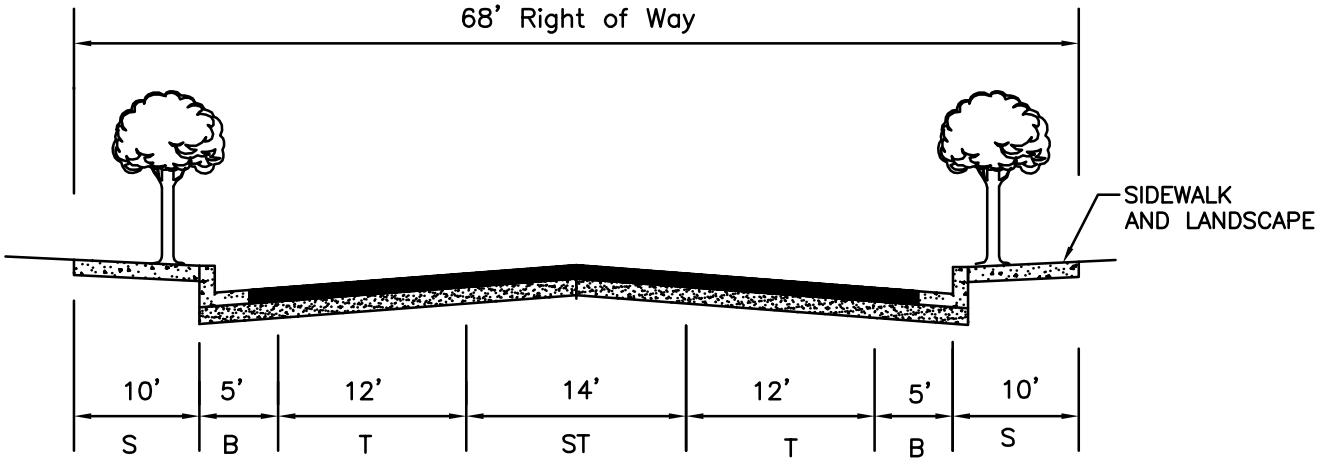
**** Wet Utility fee is calculated seperately and, therefore, not included in the segment's total cost.

***** Environmental Mitigation Costs based on recent transactions for the Hazel Mitigation Bank

Segment 5

Dowdell Avenue 4
(Modified Parkway)

Between 850' South of Business Park Drive and Martin Avenue



LEGEND

P = Parking
B = Bikeway
T = Travel Lane
S = Sidewalk
ST = Shared Turn lane

NOTES:

1. CURB IS 0.5', GUTTER IS 1.5'.
2. EARTHWORK IS BASED ON 2 FOOT EXCAVATION.
3. INCLUDES WATER, SEWER, STORM DRAIN, JOINT TRENCH.
4. DOES NOT INCLUDE ROW (ADJACENT TO PROPONENTS).
5. DOES NOT INCLUDE ENVIRONMENTAL MITIGATION (OVERLAPS WITH PROJECT SPECIFIC MITIGATION).

NOT TO SCALE

WINZLER & KELLY

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DOWDELL AVENUE 4

Segment 5

Between 850 feet South of Business Park Drive and Martin Avenue

Typical Street and Utility Cost Per Centerline Foot

Roadway Section: Revised Road Section: Enter Quantities Manually — New Road

Length: 1075 feet

Right of Way Width 68

Year to be Constructed:

Demolition Width 0 feet

Project Description: New 2 lane roadway.

Roadway Excavation Depth: 2 feet

Landscape Quality Level: B

ITEM NO.	ITEM	QUANTITY	UNIT	UNIT COST*	TOTAL ITEM COST	20% CONTINGENCY 25% MANAGEMENT	TOTAL COST PER CL FOOT
Surface Costs:							
1	Mobilization	10.00	%	$ 342.97	$ 34.30	$ 15.44	$ 49.74
2	Clearing & Grubbing	68.00	SF	$ 0.27	$ 18.36	$ 8.26	$ 26.62
3	Demolition	0.00	SF	$ 9.13	$ -	$ -	$ -
4	Earthwork (curb to curb)	3.55	CY	$ 14.91	$ 52.93	$ 23.82	$ 76.75
5	Lime Treatment (curb to curb)	5.33	SY	$ 1.16	$ 6.18	$ 2.78	$ 8.96
6	Pavement (6'AC/13'AB)	45.00	SF	$ 5.90	$ 265.50	$ 119.48	$ 384.98
7	Pavement (6" AC/18" AB)	0.00	SF	$ 6.19	$ -	$ -	$ -
8	Overlay (2" AC)		SF	$2.39	$ -	$ -	$ -
					Subtotal Surface Costs per LF:		**$ 547.05**
Median and Frontage Costs:							
9	Mobilization	10.00	%	$ 362.82	$ 36.28	$ 16.33	$ 52.61
10	Curb & Gutter	2.00	LF	$ 26.50	$ 53.00	$ 23.85	$ 76.85
11	Median Curb	0.00	LF	$ 6.14	$ -	$ -	$ -
12	PCC Sidewalk (5' each side)	10.00	SF	$ 6.14	$ 61.40	$ 27.63	$ 89.03
13	Street Lighting**	0.012500	EA	$ 5,000.00	$ 62.50	$ 28.13	$ 90.63
14	Landscaping (5' w/ 6" curb)	9.00	SF	$ 6.50	$ 58.50	$ 26.33	$ 84.83
15	Underground Utilities (Jnt Trench)	1.00	LF	$ 127.42	$ 127.42	$ 57.34	$ 184.76
					Subtotal Median and Frontage Costs per LF:		**$ 578.71**
Wet Utility Costs:							
16	Storm Drain - 18"	1.00	LF	$ 63.27	$ 63.27	$ 28.47	$ 91.74
17	Sanitary Sewer - 10"	1.00	LF	$ 49.03	$ 49.03	$ 22.06	$ 71.09
18	Water Main - 12"	1.00	LF	$ 72.62	$ 72.62	$ 32.68	$ 105.30
19	Recycled Water Main -12"	1.00	LF	$ 72.62	$ 72.62	$ 32.68	$ 105.30
					Subtotal Wet Utility Costs per LF:		$ 373.43
					Total Construction Cost per LF:		**$ 1,499.19**
Cost Breakdown:							
					TOTAL ESTIMATED ROADWAY CONSTRUCTION COST OF THIS SEGMENT:		**$ 588,078.75**
					TOTAL ESTIMATED MEDIAN AND FRONTAGE COST OF THIS SEGMENT*:**		**$ 622,113.25**
					TOTAL ESTIMATED WET UTILITY COSTS OF THIS SEGMENT**		**$ 401,437.25**
					TOTAL ESTIMATED ROADWAY COSTS INCLUDED IN THE FINANCE PLAN:		**$ 588,078.75**
Right-of-way Acquisition and Mitigation Costs:							
14	Environmental Mitigation*****	0.00	AC	$ 120,000.00	$ -	$ -	$ -
					TOTAL PROJECT COST (INCLUDING R-O-W ACQUISITION and MITIGATION) INCLUDED IN THE FINANCE PLAN:		**$ 588,078.75**

* Estimated costs include appurtenances and other items that are a part of the ultimate road segment. Estimated costs do not include interim items, private utility or joint trench costs, or items included in other fee programs.

** Street lights are placed 160' apart on alternate sides of the street for minor roadways and on both sides for major roadways.

*** Median and frontage mitigation fee is calculated separately and, therefore, not included in the segments' total cost.

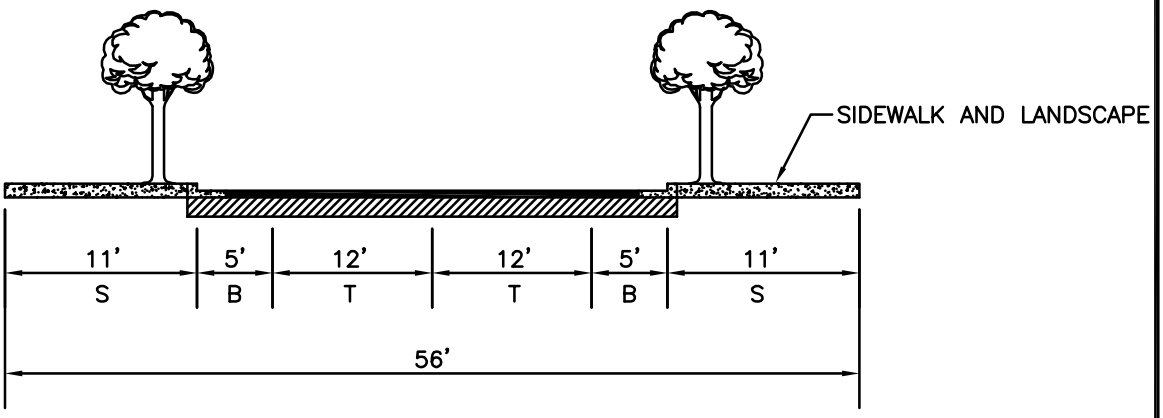
**** Wet Utility fee is calculated seperately and, therefore, not included in the segment's total cost.

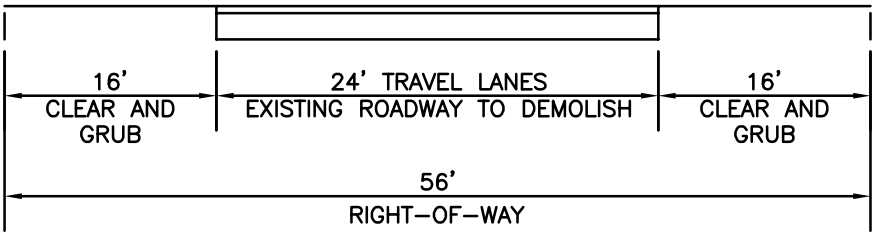
***** Environmental Mitigation Costs based on recent transactions for the Hazel Mitigation Bank

Segment 6

Keiser Avenue
(Modified Avenue)

Between Snyder Lane
and Petaluma Hill Road





LEGEND

P = Parking
B = Bikeway
T = Travel Lane
S = Sidewalk

NOTES:

1. EXISTING ROAD WILL BE COMPLETELY DEMOLISHED AND RECONSTRUCTED TO THE ROADWAY SECTION SPECIFICATIONS.
2. CURB IS 0.5', GUTTER IS 1.5'.
3. EARTHWORK IS BASED ON 2.0' EXCAVATION.
4. INCLUDES JOINT TRENCH. DOES NOT INCLUDE WATER, SEWER, STORM DRAINS.
5. DOES NOT INCLUDE ROW (ADJACENT TO PROPONENTS).
6. DOES NOT INCLUDE ENVIRONMENTAL MITIGATION (OVERLAPS WITH PROJECT MITIGATION).

NOT TO SCALE

WINZLER&KELLY

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KEISER AVENUE

Segment 6

Between Snyder Ln and Petaluma Hill Rd

Typical Street and Utility Cost Per Centerline Foot

Roadway Section: Revised Road Section: Enter Quantities Manually | Reconstruction

Length: 5400 feet

Right of Way Width 56

Demolition Width 24 feet

Roadway Excavation Depth: 2 feet

Landscape Quality Level: B

Year to be Constructed:

Project Description: Demolish existing roadway and reconstruct.

ITEM NO.	ITEM	QUANTITY	UNIT	UNIT COST*	TOTAL ITEM COST	20% CONTINGENCY 25% MANAGEMENT	TOTAL COST PER CL FOOT
Surface Costs:							
1	Mobilization	10.00	%	$ 300.54	$ 30.05	$ 13.52	$ 43.57
2	Clearing & Grubbing	32.00	SF	$ 0.27	$ 8.64	$ 3.89	$ 12.53
3	Pavement Removal	24.00	SF	$ 2.80	$ 67.20	$ 30.24	$ 97.44
4	Earthwork (curb to curb)	2.51	CY	$ 14.91	$ 37.42	$ 16.84	$ 54.26
5	Lime Treatment (curb to curb)	3.78	SY	$ 1.16	$ 4.38	$ 1.97	$ 6.35
6	Pavement (6"AC/13"AB)	31.00	SF	$ 5.90	$ 182.90	$ 82.31	$ 265.21
7	Pavement (6" AC/18" AB)	0.00	SF	$ 6.19	$ -	$ -	$ -
8	Overlay (2" AC)	0.00	SF	$2.39	$ -	$ -	$ -
					Subtotal Surface Costs per LF:		**$ 479.36**
Median and Frontage Costs:							
9	Mobilization	10.00	%	$ 343.85	$ 34.39	$ 15.48	$ 49.87
10	Curb & Gutter	2.00	LF	$ 26.50	$ 53.00	$ 23.85	$ 76.85
11	Median Curb	0.00	LF	$ 6.14	$ -	$ -	$ -
12	PCC Sidewalk (6' each side)	12.00	SF	$ 6.14	$ 73.68	$ 33.16	$ 106.84
13	Street Lighting**	0.006250	EA	$ 5,000.00	$ 31.25	$ 14.06	$ 45.31
14	Landscaping (5' w/ 6" curb)	9.00	SF	$ 6.50	$ 58.50	$ 26.33	$ 84.83
15	Underground Utilities	1.00	LF	$ 127.42	$ 127.42	$ 57.34	$ 184.76
					Subtotal Median and Frontage Costs per LF:		**$ 548.46**
					Total Construction Cost per LF:		**$ 1,027.82**
Cost Breakdown:							
					TOTAL ESTIMATED ROADWAY CONSTRUCTION COST OF THIS SEGMENT:		**$ 2,588,544.00**
					TOTAL ESTIMATED MEDIAN AND FRONTAGE COST OF THIS SEGMENT*:**		**$ 2,961,684.00**
					TOTAL ESTIMATED ROADWAY COSTS INCLUDED IN THE FINANCE PLAN:		**$ 2,588,544.00**
Right-of-way Acquisition and Mitigation Costs:							
14	Environmental Mitigation*****	0.00	AC	$ 120,000.00	$ -		$ -
					TOTAL PROJECT COST (INCLUDING R-O-W ACQUISITION and MITIGATION) INCLUDED IN THE FINANCE PLAN:		**$ 2,588,544.00**

* Estimated costs include appurtenances and other items that are a part of the ultimate road segment. Estimated costs do not include interim items, private utility or joint trench costs, or items included in other fee programs.

** Street lights are placed 160' apart on alternate sides of the street for minor roadways and on both sides for major roadways.

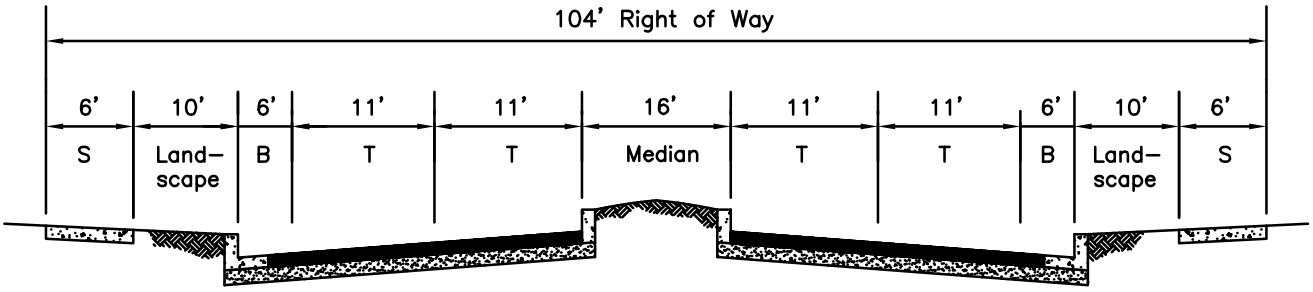
*** Median and frontage mitigation fee is calculated separately and, therefore, not included in the segments' total cost.

**** Environmental Mitigation Costs based on recent transactions for the Hazel Mitigation Bank

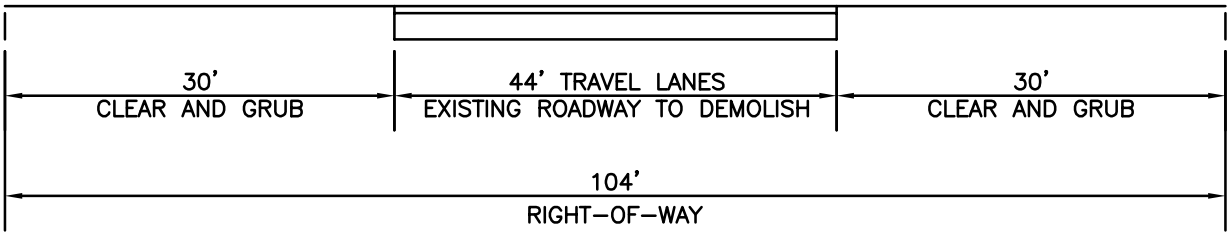
Segment 7

Rohnert Park Expressway (Modified Parkway)

Between Snyder Lane
and Petaluma Hill Road



SHOWN WITH 4 LANES, A MEDIAN AND BIKE LANES



LEGEND

P = Parking
B = Bikeway
T = Travel Lane
S = Sidewalk

NOTES:

1. EXISTING ROADWAY WILL BE COMPLETELY DEMOLISHED & RECONSTRUCTED TO ROADWAY SECTION SPECIFICATIONS.
2. CURB IS 0.5', GUTTER IS 1.5'.
3. EARTHWORK IS BASED ON 2 FOOT EXCAVATION.
4. INCLUDES JOINT TRENCH. DOES NOT INCLUDE WATER, SEWER, STORM DRAIN.
5. DOES NOT INCLUDE ROW (ADJACENT TO PROPONENTS).
6. INCLUDES ENVIRONMENTAL MITIGATION FOR FRONTAGE ALONG SSU.

NOT TO SCALE

WINZLER & KELLY

ROHNERT PARK EXPRESSWAY

Segment 7

Between Snyder Ln. and Petaluma Hill Rd.

Typical Street and Utility Cost Per Centerline Foot

Roadway Section: Parkway - 104' right-of-way | Reconstruction

Length: 5400 feet

Right of Way Width 104

Demolition Width 44 feet

Roadway Excavation Depth: 2 feet

Landscape Quality Level: B

Year to be Constructed:

Project Description: Revised Section at Commercial Core entry; 100' r-o-w, 16' landscaped median.

ITEM NO.	ITEM	QUANTITY	UNIT	UNIT COST*	TOTAL ITEM COST	20% CONTINGENCY 25% MANAGEMENT	TOTAL COST PER CL FOOT
Surface Costs:							
1	Mobilization	10.00	%	$ 540.85	$ 54.09	$ 24.34	$ 78.43
2	Clearing & Grubbing	60.00	SF	$ 0.27	$ 16.20	$ 7.29	$ 23.49
3	Pavement Removal	44.00	SF	$ 2.80	$ 123.20	$ 55.44	$ 178.64
4	Earthwork (curb to curb)	5.33	CY	$ 14.91	$ 79.47	$ 35.76	$ 115.23
5	Lime Treatment (curb to curb)	8.00	SY	$ 1.16	$ 9.28	$ 4.18	$ 13.46
6	Pavement (6"AC/13"AB)	53.00	SF	$ 5.90	$ 312.70	$ 140.72	$ 453.42
7	Pavement (6" AC/18" AB)	0.00	SF	$ 6.19	$ -	$ -	$ -
8	Overlay (2" AC)	0.00	SF	$2.39	$ -	$ -	$ -
					Subtotal Surface Costs per LF:		**$ 862.67**
Median and Frontage Costs:							
9	Mobilization	10.00	%	$ 549.88	$ 54.99	$ 24.75	$ 79.74
10	Curb & Gutter	2.00	LF	$ 26.50	$ 53.00	$ 23.85	$ 76.85
11	Median Curb	2.00	LF	$ 6.14	$ 12.28	$ 5.53	$ 17.81
12	PCC Sidewalk (6' each side)	12.00	SF	$ 6.14	$ 73.68	$ 33.16	$ 106.84
13	Street Lighting**	0.012500	EA	$ 5,000.00	$ 62.50	$ 28.13	$ 90.63
14	Landscaping (median + 10' less curbs	34.00	SF	$ 6.50	$ 221.00	$ 99.45	$ 320.45
15	Underground Utilities	1.00	LF	$ 127.42	$ 127.42	$ 57.34	$ 184.76
					Subtotal Median and Frontage Costs per LF:		**$ 877.08**
					Total Construction Cost per LF:		**$ 1,739.75**
Cost Breakdown:							
					TOTAL ESTIMATED ROADWAY CONSTRUCTION COST OF THIS SEGMENT:		**$ 4,658,418.00**
					TOTAL ESTIMATED MEDIAN AND FRONTAGE COST OF THIS SEGMENT*:**		**$ 4,736,232.00**
					TOTAL ESTIMATED ROADWAY COSTS INCLUDED IN THE FINANCE PLAN:		**$ 4,658,418.00**
Right-of-way Acquisition and Mitigation Costs:							
14	Environmental Mitigation*****	1.86	AC	$ 120,000.00	$ 223,200.00	$ -	$ 223,200.00
					TOTAL PROJECT COST (INCLUDING R-O-W ACQUISITION and MITIGATION) INCLUDED IN THE FINANCE PLAN:		**$ 4,881,618.00**

* Estimated costs include appurtenances and other items that are a part of the ultimate road segment. Estimated costs do not include interim items, private utility or joint trench costs, or items included in other fee programs.

** Street lights are placed 160' apart on alternate sides of the street for minor roadways and on both sides for major roadways.

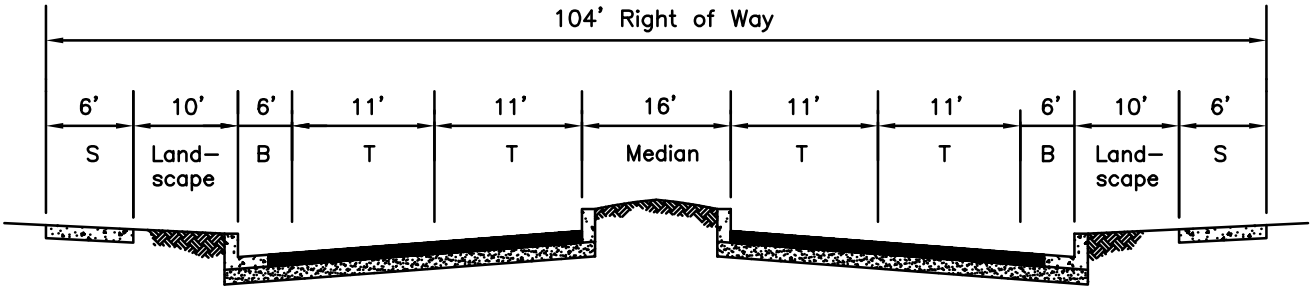
*** Median and frontage mitigation fee is calculated separately and, therefore, not included in the segments' total cost.

**** Environmental Mitigation Costs based on recent transactions for the Hazel Mitigation Bank

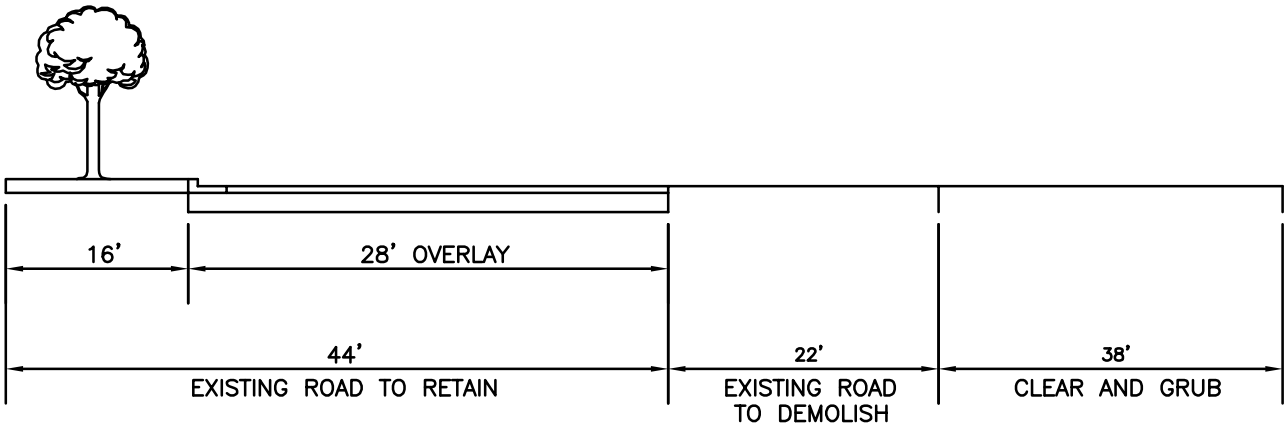
Segment 8

Snyder Lane 1
(Parkway)

Between South Side of "G" Section and
North Side of Creekside Middle School



SHOWN WITH 4 LANES, A MEDIAN AND BIKE LANES



LEGEND

P = Parking
B = Bikeway
T = Travel Lane
S = Sidewalk

NOTES:

1. OVERLAY THICKNESS VARIES IN ORDER TO ACCOMMODATE CROSS SLOPE.
2. CLEARING AND GRUBBING IS DETERMINED BY WIDTH OF NEW ROAD TO BE BUILT MINUS DEMOLITION WIDTH AND EXISTING ROAD TO BE RETAINED.
3. CURB IS 0.5', GUTTER IS 1.5'.
4. EARTHWORK IS BASED ON 2 FOOT EXCAVATION.
5. INCLUDES JOINT TRENCH. DOES NOT INCLUDE WATER, SEWER, STORM DRAIN.
6. DOES NOT INCLUDE ROW (ADJACENT TO PROPONENTS).
7. DOES NOT INCLUDE ENVIRONMENTAL MITIGATION (OVERLAPS PROJECT MITIGATION).

NOT TO SCALE

WINZLER & KELLY

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SNYDER LANE 1

Segment 8

Between South Side of "G" Section and North Side of Creekside Middle School

Typical Street and Utility Cost Per Centerline Foot

Roadway Section: Parkway - 104' right-of-way | Widening

Length: 4400 feet

Right of Way Width 104

Year to be Constructed:

Demolition Width 22 feet

Project Description: Retain west side landscape, sidewalk, curb & gutter, and travel lane. Demolish 14' travel lane, 8' Class I bikeway on east side. Expand new road section to the east (see General Plan Figure 3.1-4).

Roadway Excavation Depth: 2 feet

Landscape Quality Level: B

ITEM NO.	ITEM	QUANTITY	UNIT	UNIT COST*	TOTAL ITEM COST	20% CONTINGENCY 25% MANAGEMENT	TOTAL COST PER CL FOOT
Surface Costs:							
1	Mobilization	10.00	%	$ 468.02	$ 46.80	$ 21.06	$ 67.86
2	Clearing & Grubbing	38.00	SF	$ 0.27	$ 10.26	$ 4.62	$ 14.88
3	Demolition	22.00	SF	$ 9.13	$ 200.86	$ 90.39	$ 291.25
4	Earthwork (curb to curb)	3.26	CY	$ 14.91	$ 48.61	$ 21.87	$ 70.48
5	Lime Treatment (curb to curb)	4.89	SY	$ 1.16	$ 5.67	$ 2.55	$ 8.22
6	Pavement (6"AC/13"AB)	23.00	SF	$ 5.90	$ 135.70	$ 61.07	$ 196.77
7	Pavement (6" AC/18" AB)	0.00	SF	$ 6.19	$ -	$ -	$ -
8	Overlay (2" AC)	28.00	SF	$2.39	$ 66.92	$ 30.11	$ 97.03
					Subtotal Surface Costs per LF:		**$ 746.49**
Median and Frontage Costs:							
9	Mobilization	10.00	%	$ 393.54	$ 39.35	$ 17.71	$ 57.06
10	Curb & Gutter	1.00	LF	$ 26.50	$ 26.50	$ 11.93	$ 38.43
11	Median Curb	2.00	LF	$ 6.14	$ 12.28	$ 5.53	$ 17.81
12	PCC Sidewalk (6' one side)	6.00	SF	$ 6.14	$ 36.84	$ 16.58	$ 53.42
13	Street Lighting**	0.006250	EA	$ 5,000.00	$ 31.25	$ 14.06	$ 45.31
14	Landscaping (median + 10' less curb	24.50	SF	$ 6.50	$ 159.25	$ 71.66	$ 230.91
15	Underground Utilities	1.00	LF	$ 127.42	$ 127.42	$ 57.34	$ 184.76
					Subtotal Median and Frontage Costs per LF:		**$ 627.70**
					Total Construction Cost per LF:		**$ 1,374.19**
Cost Breakdown:							
					TOTAL ESTIMATED ROADWAY CONSTRUCTION COST OF THIS SEGMENT:		**$ 3,284,556.00**
					TOTAL ESTIMATED MEDIAN AND FRONTAGE COST OF THIS SEGMENT*:**		**$ 2,761,880.00**
					TOTAL ESTIMATED ROADWAY COSTS INCLUDED IN THE FINANCE PLAN:		**$ 3,284,556.00**
Right-of-way Acquisition and Mitigation Costs:							
14	Environmental Mitigation*****	0.00	AC	$ 120,000.00	$ -	$ -	$ -
					TOTAL PROJECT COST (INCLUDING R-O-W ACQUISITION and MITIGATION) INCLUDED IN THE FINANCE PLAN:		**$ 3,284,556.00**

* Estimated costs include appurtenances and other items that are a part of the ultimate road segment. Estimated costs do not include interim items, private utility or joint trench costs, or items included in other fee programs.

** Street lights are placed 160' apart on alternate sides of the street for minor roadways and on both sides for major roadways.

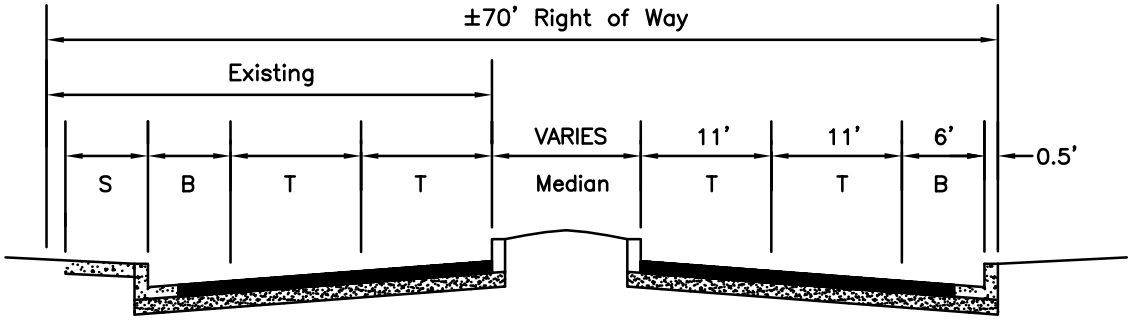
*** Median and frontage mitigation fee is calculated separately and, therefore, not included in the segments' total cost.

**** Environmental Mitigation Costs based on recent transactions for the Hazel Mitigation Bank

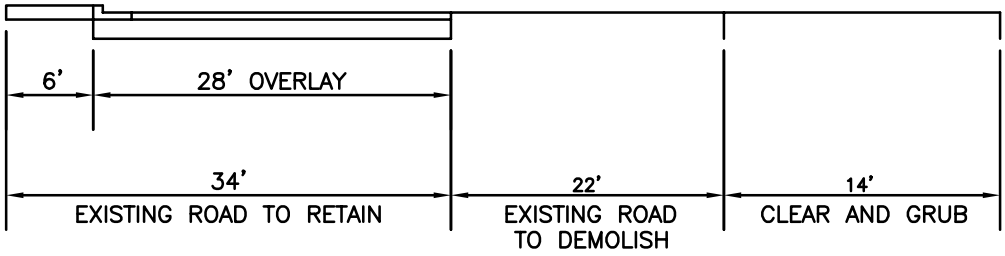
Segment 9

Snyder Lane 2
(Modified Parkway)

Between South Side of Creek Side
Middle School and Medical Center Drive



SHOWN WITH 4 LANES, A MEDIAN AND BIKE LANES



LEGEND

P = Parking
B = Bikeway
T = Travel Lane
S = Sidewalk

NOTES:

1. OVERLAY THICKNESS VARIES IN ORDER TO ACCOMMODATE CROSS SLOPE.
2. CLEARING AND GRUBBING IS DETERMINED BY WIDTH OF NEW ROAD TO BE BUILT MINUS DEMOLITION WIDTH AND EXISTING ROAD TO BE RETAINED.
3. CURB IS 0.5', GUTTER IS 1.5'.
4. EARTHWORK IS BASED ON 2 FOOT EXCAVATION.
5. MEDIAN WIDTH MAY BE ADJUSTED BASED ON ACTUAL R-O-W.
6. DOES NOT INCLUDE UTILITIES (IN PLACE).
7. DOES NOT INCLUDE ROW (CITY OWNED).
8. DOES NOT INCLUDE ENVIRONMENTAL MITIGATION (FULLY DEVELOPED FRONTAGE).

NOT TO SCALE

WINZLER & KELLY

SNYDER LANE 2

Segment 9

Between South Side of Creek Side Middle School and Medical Center Dr.

Typical Street and Utility Cost Per Centerline Foot

Roadway Section: Revised Road Section: Enter Quantities Manually | Widening

Length: 1100 feet

Right of Way Width 70

Year to be Constructed:

Demolition Width 22 feet

Project Description: Retain west side landscape, sidewalk, curb & gutter, and travel lane. Demolish 14' travel lane, 8' Class I bikeway on east side. Expand new road section to the east (see General Plan Figure 3.1-4).

Roadway Excavation Depth: 2 feet

Landscape Quality Level: B

ITEM NO.	ITEM	QUANTITY	UNIT	UNIT COST*	TOTAL ITEM COST	20% CONTINGENCY 25% MANAGEMENT	TOTAL COST PER CL FOOT
Surface Costs:							
1	Mobilization	10.00	%	$ 472.36	$ 47.24	$ 21.26	$ 68.50
2	Clearing & Grubbing	14.00	SF	$ 0.27	$ 3.78	$ 1.70	$ 5.48
3	Demolition	22.00	SF	$ 9.13	$ 200.86	$ 90.39	$ 291.25
4	Earthwork (curb to curb)	2.67	CY	$ 14.91	$ 39.81	$ 17.91	$ 57.72
5	Lime Treatment (curb to curb)	4.00	SY	$ 1.16	$ 4.64	$ 2.09	$ 6.73
6	Pavement (6"AC/13"AB)	26.50	SF	$ 5.90	$ 156.35	$ 70.36	$ 226.71
7	Pavement (6" AC/18" AB)	0.00	SF	$ 6.19	$ -	$ -	$ -
8	Overlay (2" AC)	28.00	SF	$2.39	$ 66.92	$ 30.11	$ 97.03
					Subtotal Surface Costs per LF:		**$ 753.42**
Median and Frontage Costs:							
9	Mobilization	10.00	%	$ 204.37	$ 20.44	$ 9.20	$ 29.64
10	Curb & Gutter	1.00	LF	$ 26.50	$ 26.50	$ 11.93	$ 38.43
11	Median Curb	2.00	LF	$ 6.14	$ 12.28	$ 5.53	$ 17.81
12	PCC Sidewalk	6.00	SF	$ 6.14	$ 36.84	$ 16.58	$ 53.42
13	Street Lighting**	0.006250	EA	$ 5,000.00	$ 31.25	$ 14.06	$ 45.31
14	Landscaping (median w/ 6" curbs)	15.00	SF	$ 6.50	$ 97.50	$ 43.88	$ 141.38
15	Underground Utilities	0.00	LF	$ 127.42	$ -	$ -	$ -
					Subtotal Median and Frontage Costs per LF:		**$ 325.99**
					Total Construction Cost per LF:		**$ 1,079.41**
Cost Breakdown:							
					TOTAL ESTIMATED ROADWAY CONSTRUCTION COST OF THIS SEGMENT:		**$ 828,762.00**
					TOTAL ESTIMATED MEDIAN AND FRONTAGE COST OF THIS SEGMENT*:**		**$ 358,589.00**
					TOTAL ESTIMATED ROADWAY COSTS INCLUDED IN THE FINANCE PLAN:		**$ 828,762.00**
Right-of-way Acquisition and Mitigation Costs:							
14	Environmental Mitigation*****	0.00	AC	$ 120,000.00	$ -	$ -	$ -
					TOTAL PROJECT COST (INCLUDING R-O-W ACQUISITION and MITIGATION) INCLUDED IN THE FINANCE PLAN:		**$ 828,762.00**

* Estimated costs include appurtenances and other items that are a part of the ultimate road segment. Estimated costs do not include interim items, private utility or joint trench costs, or items included in other fee programs.

** Street lights are placed 160' apart on alternate sides of the street for minor roadways and on both sides for major roadways.

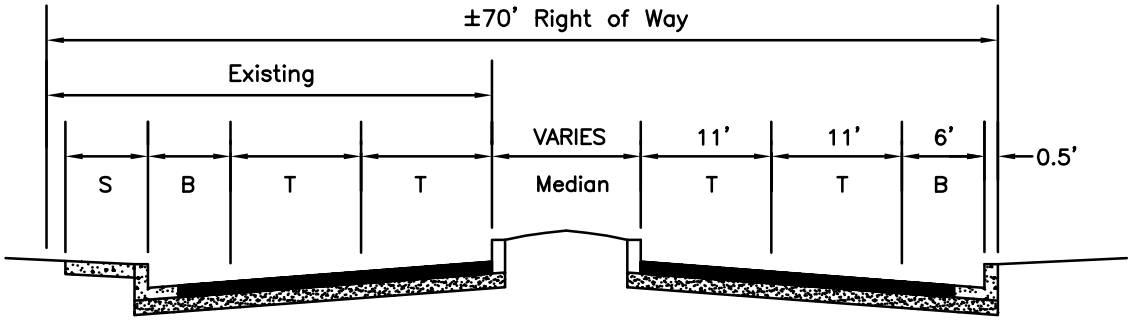
*** Median and frontage mitigation fee is calculated separately and, therefore, not included in the segments' total cost.

**** Environmental Mitigation Costs based on recent transactions for the Hazel Mitigation Bank

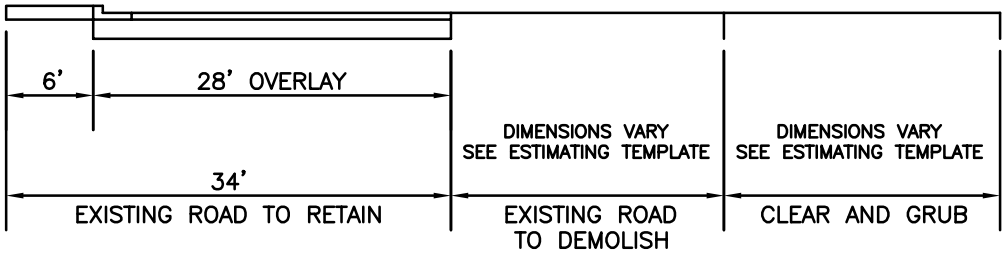
Segment 10

Snyder Lane 3
(Parkway)

Between Medical Center Drive
and Southwest Boulevard



SHOWN WITH 4 LANES, A MEDIAN AND BIKE LANES



LEGEND

P = Parking
B = Bikeway
T = Travel Lane
S = Sidewalk

NOTES:

1. OVERLAY THICKNESS VARIES IN ORDER TO ACCOMODATE CROSS SLOPE.
2. CLEARING AND GRUBBING IS DETERMINED BY WIDTH OF NEW ROAD TO BE BUILT MINUS DEMOLITION WIDTH AND EXISTING ROAD TO BE RETAINED.
3. CURB IS 0.5', GUTTER IS 1.5'.
4. EARTHWORK IS BASED ON 2 FOOT EXCAVATION.
5. DOES NOT INCLUDE UTILITIES (GENERALLY IN-PLACE - ESTS PHASE 3 SEPARATELY PRICED).
6. DOES NOT INCLUDE ROW (CITY OWNED).
7. DOES NOT INCLUDE ENVIRONMENTAL MITIGATION (DEVELOPED FRONTAGE).

NOT TO SCALE

WINZLER & KELLY

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SNYDER LANE 3

Segment 10

Between Medical Center Drive and Southwest Blvd

Typical Street and Utility Cost Per Centerline Foot

Roadway Section: Parkway - 104' right-of-way | Widening

Length: 2900 feet

Right of Way Width 70

Demolition Width 18 feet

Roadway Excavation Depth: 2 feet

Landscape Quality Level: B

Year to be Constructed:

Project Description: Retain west side landscape, sidewalk, curb & gutter. Reconstruct existing roadway. Expand new road section to the east (see General Plan Figure 3.1-4). Relocate but do not underground utilities from Copeland Creek to Southwest Blvd

ITEM NO.	ITEM	QUANTITY	UNIT	UNIT COST*	TOTAL ITEM COST	20% CONTINGENCY 25% MANAGEMENT	TOTAL COST PER CL FOOT
Surface Costs:							
1	Mobilization	10.00	%	$ 436.92	$ 43.69	$ 19.66	$ 63.35
2	Clearing & Grubbing	18.00	SF	$ 0.27	$ 4.86	$ 2.19	$ 7.05
3	Demolition	18.00	SF	$ 9.13	$ 164.34	$ 73.95	$ 238.29
4	Earthwork (curb to curb)	2.67	CY	$ 14.91	$ 39.81	$ 17.91	$ 57.72
5	Lime Treatment (curb to curb)	4.00	SY	$ 1.16	$ 4.64	$ 2.09	$ 6.73
6	Pavement (6"AC/13"AB)	26.50	SF	$ 5.90	$ 156.35	$ 70.36	$ 226.71
7	Pavement (6" AC/18" AB)	0.00	SF	$ 6.19	$ -	$ -	$ -
8	Overlay (2" AC)	28.00	SF	$2.39	$ 66.92	$ 30.11	$ 97.03
					Subtotal Surface Costs per LF:		**$ 696.88**
Median and Frontage Costs:							
9	Mobilization	10.00	%	$ 204.37	$ 20.44	$ 9.20	$ 29.64
10	Curb & Gutter	1.00	LF	$ 26.50	$ 26.50	$ 11.93	$ 38.43
11	Median Curb	2.00	LF	$ 6.14	$ 12.28	$ 5.53	$ 17.81
12	PCC Sidewalk	6.00	SF	$ 6.14	$ 36.84	$ 16.58	$ 53.42
13	Street Lighting**	0.006250	EA	$ 5,000.00	$ 31.25	$ 14.06	$ 45.31
14	Landscaping (median w/ 6" curb)	15.00	SF	$ 6.50	$ 97.50	$ 43.88	$ 141.38
15	Underground Utilities	0.00	LF	$ 127.42	$ -	$ -	$ -
					Subtotal Median and Frontage Costs per LF:		**$ 325.99**
					Total Construction Cost per LF:		**$ 1,022.87**
Cost Breakdown:							
					TOTAL ESTIMATED ROADWAY CONSTRUCTION COST OF THIS SEGMENT:		**$ 2,020,952.00**
					TOTAL ESTIMATED MEDIAN AND FRONTAGE COST OF THIS SEGMENT*:**		**$ 945,371.00**
					TOTAL ESTIMATED ROADWAY COSTS INCLUDED IN THE FINANCE PLAN:		**$ 2,020,952.00**
Right-of-way Acquisition and Mitigation Costs:							
14	Environmental Mitigation*****	0.00	AC	$ 120,000.00	$ -	$ -	$ -
					TOTAL PROJECT COST (INCLUDING R-O-W ACQUISITION and MITIGATION) INCLUDED IN THE FINANCE PLAN:		**$ 2,020,952.00**

* Estimated costs include appurtenances and other items that are a part of the ultimate road segment. Estimated costs do not include interim items, private utility or joint trench costs, or items included in other fee programs.

** Street lights are placed 160' apart on alternate sides of the street for minor roadways and on both sides for major roadways.

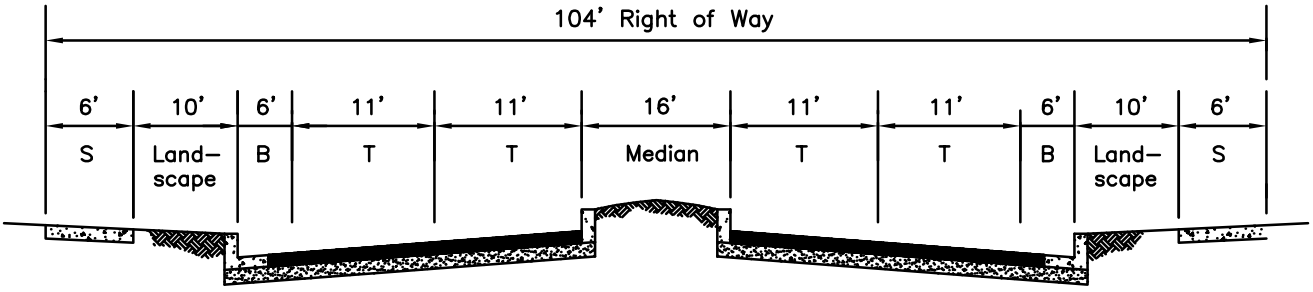
*** Median and frontage mitigation fee is calculated separately and, therefore, not included in the segments' total cost.

**** Environmental Mitigation Costs based on recent transactions for the Hazel Mitigation Bank

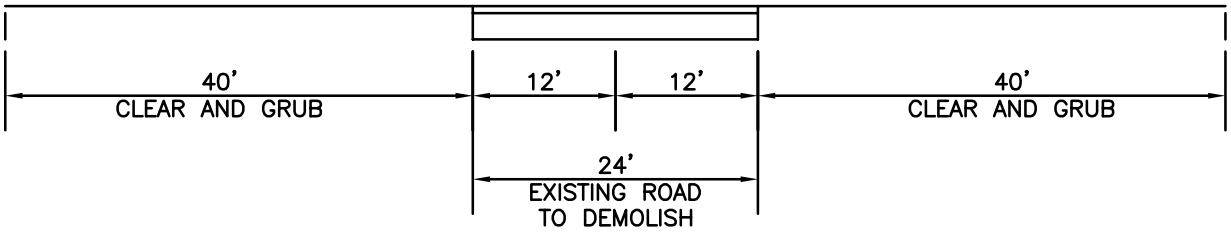
Segment 11

Wilfred Avenue 1
(Parkway)

Between 1999 City Limits and
Dowdell Avenue



SHOWN WITH 4 LANES, A MEDIAN AND BIKE LANES



LEGEND

P = Parking
B = Bikeway
T = Travel Lane
S = Sidewalk

NOTES:

1. EXISTING ROADWAY WILL BE COMPLETELY DEMOLISHED & RECONSTRUCTED TO ROADWAY SECTION SPECIFICATIONS.
2. CURB IS 0.5', GUTTER IS 1.5'.
3. EARTHWORK IS BASED ON 2 FOOT EXCAVATION.
4. INCLUDES JOINT TRENCH. DOES NOT INCLUDE WATER, SEWER, STORM DRAIN.
5. DOES NOT INCLUDE ROW (ADJACENT TO PROPONENTS).
6. DOES NOT INCLUDE ENVIRONMENTAL MITIGATION (OVERLAPS PROJECT MITIGATION).

NOT TO SCALE

WINZLER & KELLY

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WILFRED AVENUE 1

Segment 11

Between 1999 City Limits and Dowdell Avenue

Typical Street and Utility Cost Per Centerline Foot

Roadway Section: Parkway - 104' right-of-way | Reconstruction

Length: 580 feet

Right of Way Width 104

Year to be Constructed:

Demolition Width 24 feet

Project Description: Demolish existing roadway.

Roadway Excavation Depth: 2 feet

Landscape Quality Level: B

ITEM NO.	ITEM	QUANTITY	UNIT	UNIT COST*	TOTAL ITEM COST	20% CONTINGENCY 25% MANAGEMENT	TOTAL COST PER CL FOOT
Surface Costs:							
1	Mobilization	10.00	%	$ 490.25	$ 49.03	$ 22.06	$ 71.09
2	Clearing & Grubbing	80.00	SF	$ 0.27	$ 21.60	$ 9.72	$ 31.32
3	Pavement Removal	24.00	SF	$ 2.80	$ 67.20	$ 30.24	$ 97.44
4	Earthwork (curb to curb)	5.33	CY	$ 14.91	$ 79.47	$ 35.76	$ 115.23
5	Lime Treatment (curb to curb)	8.00	SY	$ 1.16	$ 9.28	$ 4.18	$ 13.46
6	Pavement (6"AC/13"AB)	53.00	SF	$ 5.90	$ 312.70	$ 140.72	$ 453.42
7	Pavement (6" AC/18" AB)	0.00	SF	$ 6.19	$ -	$ -	$ -
8	Overlay (2" AC)	0.00	SF	$2.39	$ -	$ -	$ -
					Subtotal Surface Costs per LF:		**$ 781.96**
Median and Frontage Costs:							
9	Mobilization	10.00	%	$ 549.88	$ 54.99	$ 24.75	$ 79.74
10	Curb & Gutter	2.00	LF	$ 26.50	$ 53.00	$ 23.85	$ 76.85
11	Median Curb	2.00	LF	$ 6.14	$ 12.28	$ 5.53	$ 17.81
12	PCC Sidewalk	12.00	SF	$ 6.14	$ 73.68	$ 33.16	$ 106.84
13	Street Lighting**	0.012500	EA	$ 5,000.00	$ 62.50	$ 28.13	$ 90.63
14	Landscaping (median + 10' w/ 6" curbs)	34.00	SF	$ 6.50	$ 221.00	$ 99.45	$ 320.45
15	Underground Utilities	1.00	LF	$ 127.42	$ 127.42	$ 57.34	$ 184.76
					Subtotal Median and Frontage Costs per LF:		**$ 877.08**
					Total Construction Cost per LF:		**$ 1,659.04**
Cost Breakdown:							
					TOTAL ESTIMATED ROADWAY CONSTRUCTION COST OF THIS SEGMENT:		**$ 453,536.80**
					TOTAL ESTIMATED MEDIAN AND FRONTAGE COST OF THIS SEGMENT*:**		**$ 508,706.40**
					TOTAL ESTIMATED ROADWAY COSTS INCLUDED IN THE FINANCE PLAN:		**$ 453,536.80**
Right-of-way Acquisition and Mitigation Costs:							
14	Environmental Mitigation*****	0.00	AC	$ 120,000.00	$ -	$ -	$ -
					TOTAL PROJECT COST (INCLUDING R-O-W ACQUISITION and MITIGATION) INCLUDED IN THE FINANCE PLAN:		**$ 453,536.80**

* Estimated costs include appurtenances and other items that are a part of the ultimate road segment. Estimated costs do not include interim items, private utility or joint trench costs, or items included in other fee programs.

** Street lights are placed 160' apart on alternate sides of the street for minor roadways and on both sides for major roadways.

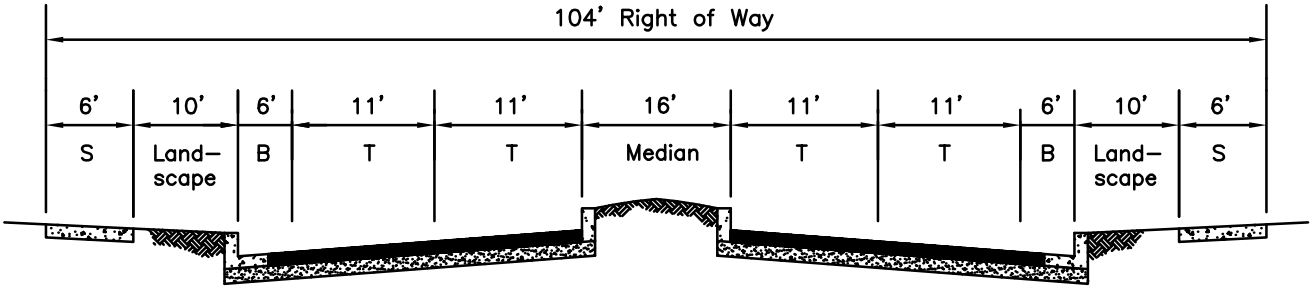
*** Median and frontage mitigation fee is calculated separately and, therefore, not included in the segments' total cost.

**** Environmental Mitigation Costs based on recent transactions for the Hazel Mitigation Bank

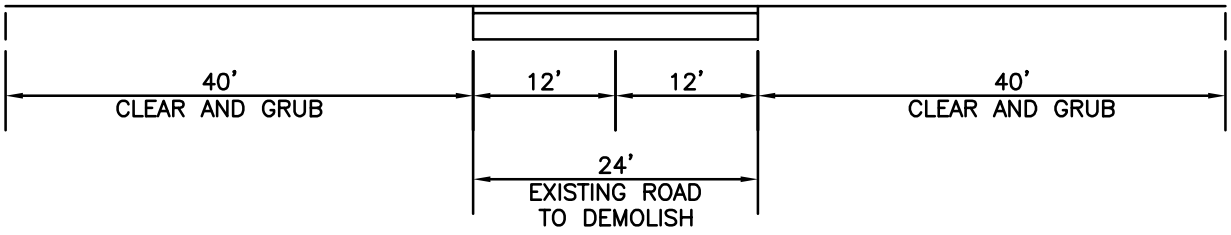
Segment 12

Wilfred Avenue 2
(Parkway)

Between Dowdell Avenue and
Urban Growth Boundary



SHOWN WITH 4 LANES, A MEDIAN AND BIKE LANES



LEGEND

P = Parking
B = Bikeway
T = Travel Lane
S = Sidewalk

NOTES:

1. EXISTING ROADWAY WILL BE COMPLETELY DEMOLISHED & RECONSTRUCTED TO ROADWAY SECTION SPECIFICATIONS.
2. CURB IS 0.5', GUTTER IS 1.5'.
3. EARTHWORK IS BASED ON 2 FOOT EXCAVATION.
4. INCLUDES JOINT TRENCH. DOES NOT INCLUDE WATER, SEWER, STORM DRAIN.
5. DOES NOT INCLUDE ROW (ADJACENT TO PROPONENTS).
6. DOES NOT INCLUDE ENVIRONMENTAL MITIGATION (OVERLAPS PROJECT MITIGATION).

NOT TO SCALE

WINZLER & KELLY

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WILFRED AVENUE 2

Segment 12

Between Dowdell Avenue and Urban Growth Boundary

Typical Street and Utility Cost Per Centerline Foot

Roadway Section: Parkway - 104' right-of-way | Reconstruction

Length: 2420 feet

Right of Way Width 104

Year to be Constructed:

Demolition Width 24 feet

Project Description: Demolish existing roadway.

Roadway Excavation Depth: 2 feet

Landscape Quality Level: B

ITEM NO.	ITEM	QUANTITY	UNIT	UNIT COST*	TOTAL ITEM COST	20% CONTINGENCY 25% MANAGEMENT	TOTAL COST PER CL FOOT
Surface Costs:							
1	Mobilization	10.00	%	$ 490.25	$ 49.03	$ 22.06	$ 71.09
2	Clearing & Grubbing	80.00	SF	$ 0.27	$ 21.60	$ 9.72	$ 31.32
3	Pavement Removal	24.00	SF	$ 2.80	$ 67.20	$ 30.24	$ 97.44
4	Earthwork (curb to curb)	5.33	CY	$ 14.91	$ 79.47	$ 35.76	$ 115.23
5	Lime Treatment (curb to curb)	8.00	SY	$ 1.16	$ 9.28	$ 4.18	$ 13.46
6	Pavement (6"AC/13"AB)	53.00	SF	$ 5.90	$ 312.70	$ 140.72	$ 453.42
7	Pavement (6" AC/18" AB)	0.00	SF	$ 6.19	$ -	$ -	$ -
8	Overlay (2" AC)	0.00	SF	$2.39	$ -	$ -	$ -
					Subtotal Surface Costs per LF:		**$ 781.96**
Median and Frontage Costs:							
9	Mobilization	10.00	%	$ 549.88	$ 54.99	$ 24.75	$ 79.74
10	Curb & Gutter	2.00	LF	$ 26.50	$ 53.00	$ 23.85	$ 76.85
11	Median Curb	2.00	LF	$ 6.14	$ 12.28	$ 5.53	$ 17.81
12	PCC Sidewalk	12.00	SF	$ 6.14	$ 73.68	$ 33.16	$ 106.84
13	Street Lighting**	0.012500	EA	$ 5,000.00	$ 62.50	$ 28.13	$ 90.63
14	Landscaping (median + 10' w/ 6" curbs)	34.00	SF	$ 6.50	$ 221.00	$ 99.45	$ 320.45
15	Underground Utilities	1.00	LF	$ 127.42	$ 127.42	$ 57.34	$ 184.76
					Subtotal Median and Frontage Costs per LF:		**$ 877.08**
					Total Construction Cost per LF:		**$ 1,659.04**
Cost Breakdown:							
					TOTAL ESTIMATED ROADWAY CONSTRUCTION COST OF THIS SEGMENT:		**$ 1,892,343.20**
					TOTAL ESTIMATED MEDIAN AND FRONTAGE COST OF THIS SEGMENT*:**		**$ 2,122,533.60**
					TOTAL ESTIMATED ROADWAY COSTS INCLUDED IN THE FINANCE PLAN:		**$ 1,892,343.20**
Right-of-way Acquisition and Mitigation Costs:							
14	Environmental Mitigation*****	0.00	AC	$ 120,000.00	$ -	$ -	$ -
					TOTAL PROJECT COST (INCLUDING R-O-W ACQUISITION and MITIGATION) INCLUDED IN THE FINANCE PLAN:		**$ 1,892,343.20**

* Estimated costs include appurtenances and other items that are a part of the ultimate road segment. Estimated costs do not include interim items, private utility or joint trench costs, or items included in other fee programs.

** Street lights are placed 160' apart on alternate sides of the street for minor roadways and on both sides for major roadways.

*** Median and frontage mitigation fee is calculated separately and, therefore, not included in the segments' total cost.

**** Environmental Mitigation Costs based on recent transactions for the Hazel Mitigation Bank

Rohnert Park Finance Plan
Bridges

Street Name	Bridge Location	Length (ft)	Additional Width (ft)*	Cost**	45% Contingency/ Management	Total Cost	Existing Roadway
Dowdell Avenue	Business Park Dr	40	50	$ 600,000	$ 270,000	$ 870,000	New Bridge, 2 lanes (30'), 2 Class II bikeways (8'), 2 sidewalks (8')
Snyder Lane	Copeland Creek	50	20	$ 300,000	$ 135,000	$ 435,000	3 lanes (44'), Class II bikeway (8') and 2 sidewalks (8')
Snyder Lane	Crane Creek	62	20	$ 372,000	$ 167,400	$ 539,400	3 lanes (44'), Class II bikeway (4') and sidewalk (4') on west, class I bikeway (8') on east
Snyder Lane	Five Creek	62	20	$ 372,000	$ 167,400	$ 539,400	3 lanes (44'), Class II bikeway (4') and sidewalk (4') on west, class I bikeway (8') on east
Snyder Lane	Hinebaugh Creek	62	20	$ 372,000	$ 167,400	$ 539,400	3 lanes (44'), Class II bikeway (4') and sidewalk (4') on west, class I bikeway (8') on east
Total				**$ 2,016,000**	**$ 907,200**	**$ 2,923,200**	

* Assumes total road width over bridge will be 72' and include 56' for 4 travel lanes, 16' for 2 Sidewalks/Class I Bikeways and no median.
** Cost per sq ft is $300.

Traffic Control & Intersection Improvements

LEGEND

EXISTING

PROPOSED

INTERSECTION 1
Camino Colegio at East Cotati

WINZLER & KELLY

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Camino Colegio @ East Cotati

I/S 1

Project Description

Restripe to add N/B shared left turn lane

ITEM NO.	ITEM	QUANTITY	UNIT	UNIT COST*	TOTAL ITEM COST	20% 25%	CONTINGENCY MANAGEMENT	TOTAL COST
Surface Costs:								
1	Mobilization	10.00	%	$ 4,710.00	$ 471.00	$	211.95	$ 680.00
2	Clearing & Grubbing		SF	$ 2.80	$ -	$	-	$ -
3	Pavement*		SF	$ 6.19	$ -	$	-	$ -
4	Grinding & Striping	1500	LF	$ 3.14	$ 4,710.00	$	2,119.50	$ 6,800.00
5	Handicap Ramps		EA	$ 1,629.54	$ -	$	-	$ -
6	Traffic Signals		EA	$ 320,650.00		$	-	$ -
							Total Costs	**$ 7,480.00**

* Budget accomodates 6AC/13AB with lime treament or 6AC/18 AB

LEGEND

EXISTING

PROPOSED

INTERSECTION 2
Commerce Boulevard at State Farm Drive

Commerce Blvd @ State Farm Drive

I/S 2

Project Description: Add new signal

ITEM NO.	ITEM	QUANTITY	UNIT	UNIT COST*	TOTAL ITEM COST	20% 25%	CONTINGENCY MANAGEMENT	TOTAL COST
Surface Costs:								
1	Mobilization	10.00	%	$ 323,909.08	$ 32,390.91	$	14,575.91	$ 46,967.00
2	Clearing & Grubbing		SF	$ 2.80	$ -	$	-	$ -
3	Pavement*		SF	$ 6.19	$ -	$	-	$ -
4	Grinding & Striping		LF	$ 3.14	$ -	$	-	$ -
5	Handicap Ramps	2	EA	$ 1,629.54	$ 3,259.08	$	1,466.59	$ 4,700.00
6	Traffic Signals	1	EA	$ 320,650.00	$ 320,650.00	$	144,293	$ 464,900.00
							Total Costs	**$ 516,567.00**

* Budget accomodates 6AC/13AB with lime treament or 6AC/18 AB

LEGEND

EXISTING

PROPOSED

INTERSECTION 3
Commerce Boulevad at South West Blvd

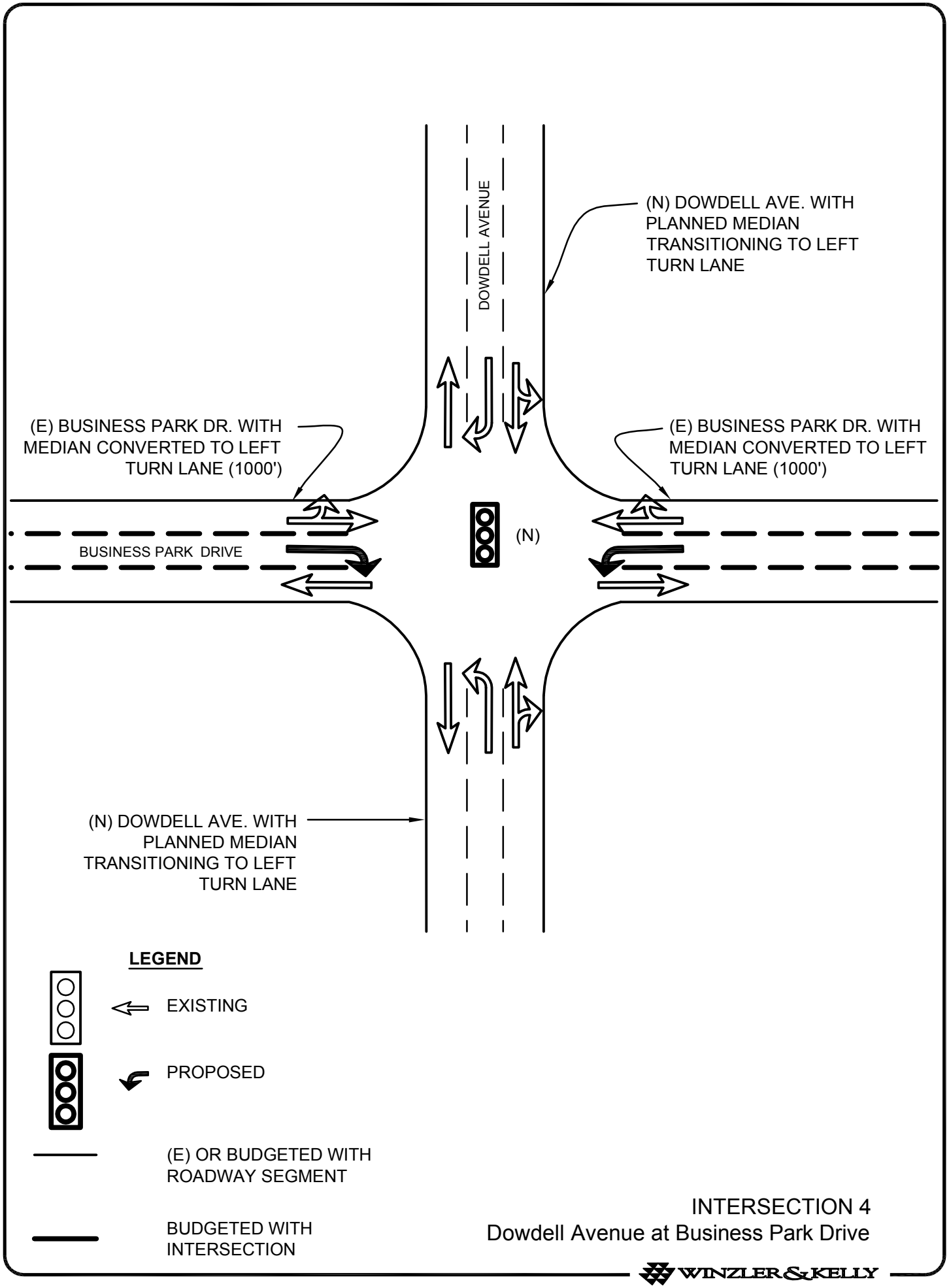
Commerce Blvd @ Southwest

I/S 3

Project Description | **Add new signal**

ITEM NO.	ITEM	QUANTITY	UNIT	UNIT COST*	TOTAL ITEM COST	20% 25%	CONTINGENCY MANAGEMENT	TOTAL COST
Surface Costs:								
1	Mobilization	10.00	%	$ 327,168.16	$ 32,716.82	$	14,722.57	$ 47,439.00
2	Clearing & Grubbing		SF	$ 2.80	$ -	$	-	$ -
3	Pavement*		SF	$ 6.19	$ -	$	-	$ -
4	Grinding & Striping		LF	$ 3.14	$ -	$	-	$ -
5	Handicap Ramps	4	EA	$ 1,629.54	$ 6,518.16	$	2,933.17	$ 9,500.00
6	Traffic Signals	1	EA	$ 320,650.00	$ 320,650	$	144,293	$ 464,900.00
							Total Costs	**$ 521,839.00**

* Budget accomodates 6AC/13AB with lime treament or 6AC/18 AB



INTERSECTION 4
Dowdell Avenue at Business Park Drive

WINZLER&KELLY

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Dowdell Avenue at Business Park Drive

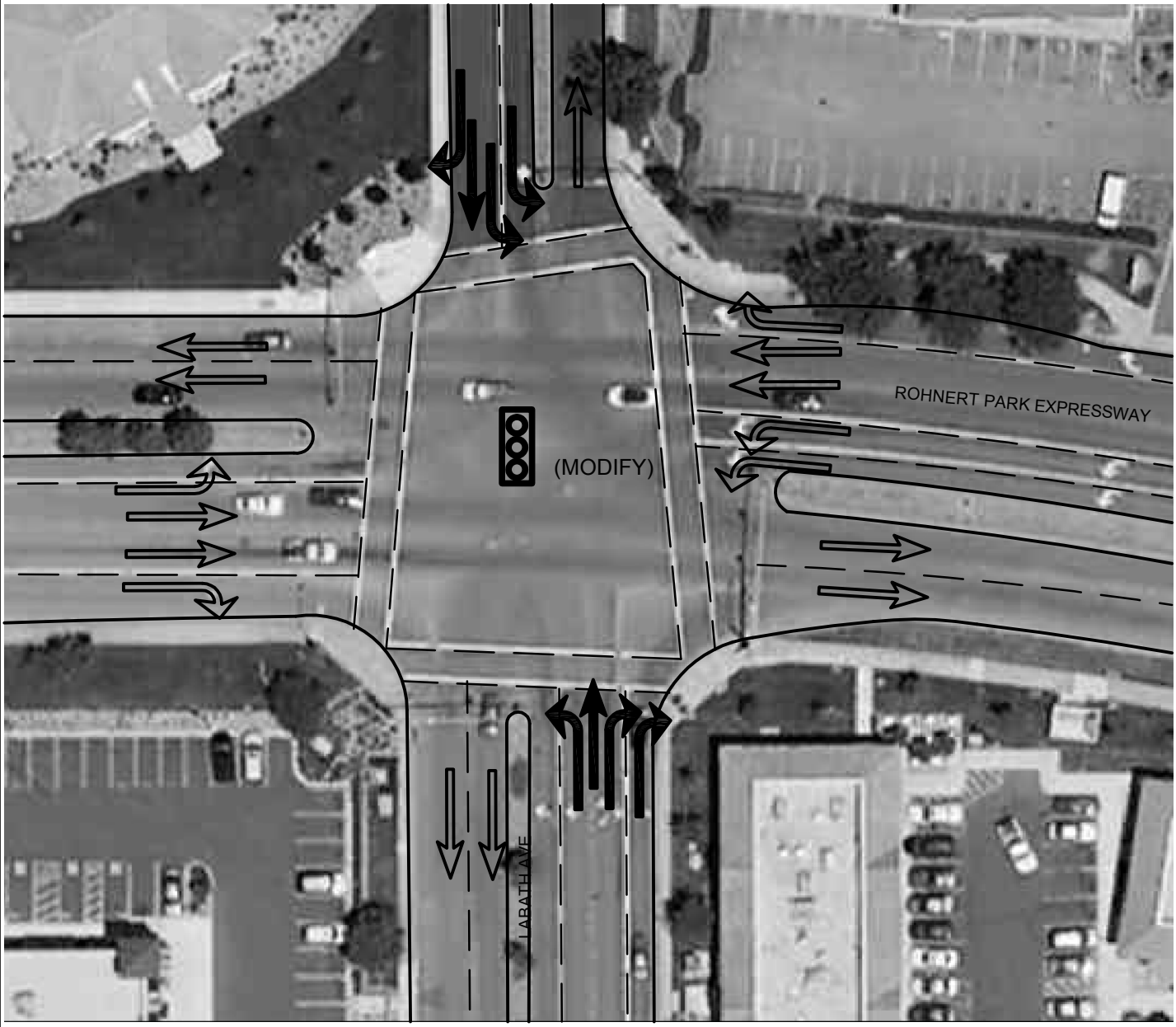
I/S 4

Project Description

Install new signal an new intersection of Dowdell extension and Business Park Drive. Demolish 2,000 linear feet of median in Dowdell and install new left turn lanes

ITEM NO.	ITEM	QUANTITY	UNIT	UNIT COST*	TOTAL ITEM COST	20% 25%	CONTINGENCY MANAGEMENT	TOTAL COST
Surface Costs:								
1	Mobilization	10.00	%	$ 568,048.16	$ 56,804.82	$	25,562.17	$ 82,367.00
2	Clearing & Grubbing	24000.00	SF	$ 2.80	$ 67,200.00	$	30,240.00	$ 97,400.00
3	Pavement*	24000	SF	$ 6.19	$ 148,560.00	$	66,852.00	$ 215,400.00
4	Grinding & Striping	8000	LF	$ 3.14	$ 25,120.00	$	11,304.00	$ 36,400.00
5	Handicap Ramps	4	EA	$ 1,629.54	$ 6,518.16	$	2,933.17	$ 9,500.00
6	Traffic Signals	1	EA	$ 320,650.00	$ 320,650.00	$	144,292.50	$ 464,900.00
7	Traffic Signals		EA	$ 99,550.00	$ -	$	-	$ -
							Total Costs	**$ 905,967.00**

* Budget accomodates 6AC/13AB with lime treament or 6AC/18 AB



LEGEND

EXISTING

PROPOSED

INTERSECTION 5
Labath at Rohnert Park Expressway

WINZLER&KELLY

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Labath @ Rohnert Park Expressway

I/S 5

Project Description

Restripe 2 northbound lanes and 4 southbound lanes and reprogram signal

ITEM NO.	ITEM	QUANTITY	UNIT	UNIT COST*	TOTAL ITEM COST	20% 25%	CONTINGENCY MANAGEMENT	TOTAL COST
Surface Costs:								
1	Mobilization	10.00	%	$ 127,810.00	$ 12,781.00	$	5,751.45	$ 18,532.00
2	Clearing & Grubbing		SF	$ 2.80	$ -	$	-	$ -
3	Pavement*		SF	$ 6.19	$ -	$	-	$ -
4	Grinding & Striping	9000	LF	$ 3.14	$ 28,260.00	$	12,717.00	$ 41,000.00
5	Handicap Ramps		EA	$ 1,629.54	$ -	$	-	$ -
6	Reprogram Signal	1	EA	$ 99,550.00	$ 99,550	$	44,798	$ 144,300.00
							Total Costs	**$ 203,832.00**

* Budget accomodates 6AC/13AB with lime treament or 6AC/18 AB

LEGEND

EXISTING

PROPOSED

INTERSECTION 6
Petaluma Hill Road at Keiser Avenue

WINZLER&KELLY

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Petaluma Hill Road @ Keiser

I/S 6

Project Description

Add Signal and widen for right turn lane on Keiser, right turn lane on Petaluma Hill Road and left turn lane on Petaluma Hill Road

ITEM NO.	ITEM	QUANTITY	UNIT	UNIT COST*	TOTAL ITEM COST	20% 25%	CONTINGENCY MANAGEMENT	TOTAL COST
Surface Costs:								
1	Mobilization	10.00	%	$ 809,369.08	$ 80,936.91	$	36,421.61	$ 117,359.00
2	Clearing & Grubbing	54000	SF	$ 2.80	$ 151,200.00	$	68,040.00	$ 219,200.00
3	Pavement*	54000	SF	$ 6.19	$ 334,260.00	$	150,417.00	$ 484,700.00
4	Grinding & Striping		LF	$ 3.14	$ -	$	-	$ -
5	Handicap Ramps	2	EA	$ 1,629.54	$ 3,259.08	$	1,466.59	$ 4,700.00
6	Traffic Signals	1	EA	$ 320,650.00	$ 320,650	$	144,293	$ 464,900.00
							Total Costs	**$ 1,290,859.00**

Note: turn lanes are assumed to be 12-feet wide and extend 1500 feet from intersection

* Budget accomodates 6AC/13AB with lime treament or 6AC/18 AB

LEGEND

EXISTING

PROPOSED

INTERSECTION 7
Petaluma Hill Road at Rohnert Park Expressway

WINZLER&KELLY

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Petaluma Hill Road @ RPX

I/S 7

Project Description: widen for right turn lane on Petaluma Hill Road

ITEM NO.	ITEM	QUANTITY	UNIT	UNIT COST*	TOTAL ITEM COST	20% 25%	CONTINGENCY MANAGEMENT	TOTAL COST
Surface Costs:								
1	Mobilization	10.00	%	$ 165,079.08	$ 16,507.91	$	7,428.56	$ 23,936.00
2	Clearing & Grubbing	18000	SF	$ 2.80	$ 50,400.00	$	22,680.00	$ 73,100.00
3	Pavement*	18000	SF	$ 6.19	$ 111,420.00	$	50,139.00	$ 161,600.00
4	Grinding & Striping		LF	$ 3.14	$ -	$	-	$ -
5	Handicap Ramps	2	EA	$ 1,629.54	$ 3,259.08	$	1,466.59	$ 4,700.00
6	Traffic Signals		EA	$ 320,650.00	$ -	$	-	$ -
							Total Costs	**$ 263,336.00**

Note: turn lane is assumed to be 12-feet wide and extend 1500 feet from intersection

* Budget accomodates 6AC/13AB with lime treament or 6AC/18 AB

LEGEND

EXISTING

PROPOSED

INTERSECTION 8
Petaluma Hill Road at Valley House Drive

WINZLER&KELLY

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Petaluma Hill Road @ Valley House

I/S 8

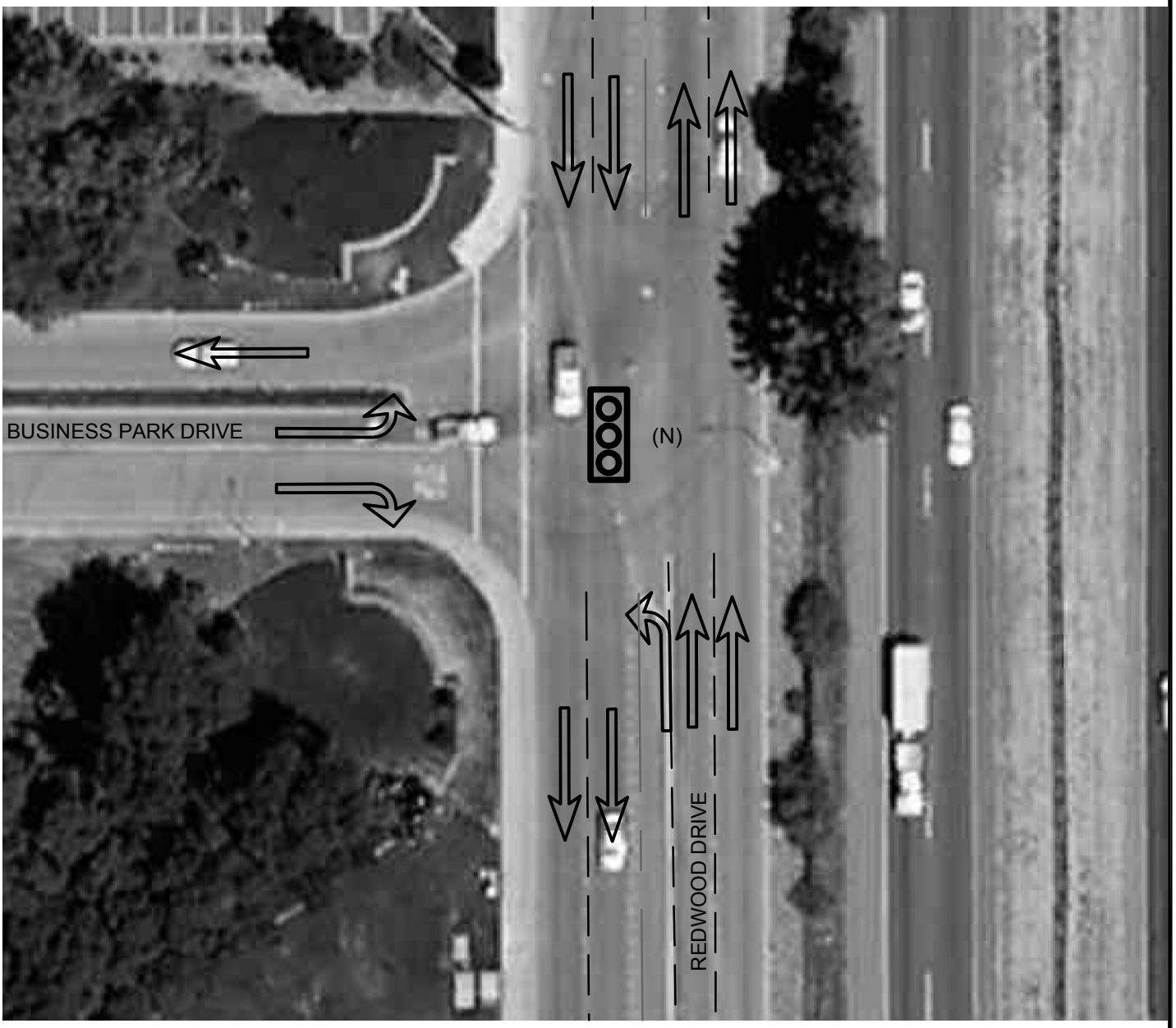
Project Description

Add Signal and widen for right turn lane on Railroad , left turn lane on Railroad and right turn lane on Petaluma Hill Road

ITEM NO.	ITEM	QUANTITY	UNIT	UNIT COST*	TOTAL ITEM COST	20% 25%	CONTINGENCY MANAGEMENT	TOTAL COST
Surface Costs:								
1	Mobilization	10.00	%	$ 809,369.08	$ 80,936.91	$	36,421.61	$ 117,359.00
2	Clearing & Grubbing	54000	SF	$ 2.80	$ 151,200.00	$	68,040.00	$ 219,200.00
3	Pavement*	54000	SF	$ 6.19	$ 334,260.00	$	150,417.00	$ 484,700.00
4	Grinding & Striping		LF	$ 3.14	$ -	$	-	$ -
5	Handicap Ramps	2	EA	$ 1,629.54	$ 3,259.08	$	1,466.59	$ 4,700.00
6	Traffic Signals	1	EA	$ 320,650.00	$ 320,650	$	144,293	$ 464,900.00
							Total Costs	**$ 1,290,859.00**

Note: turn lanes are assumed to be 12-feet wide and extend 1500 feet from intersection

* Budget accomodates 6AC/13AB with lime treament or 6AC/18 AB



LEGEND

EXISTING

PROPOSED

INTERSECTION 9
Redwood Drive at Business Park Drive

WINZLER & KELLY

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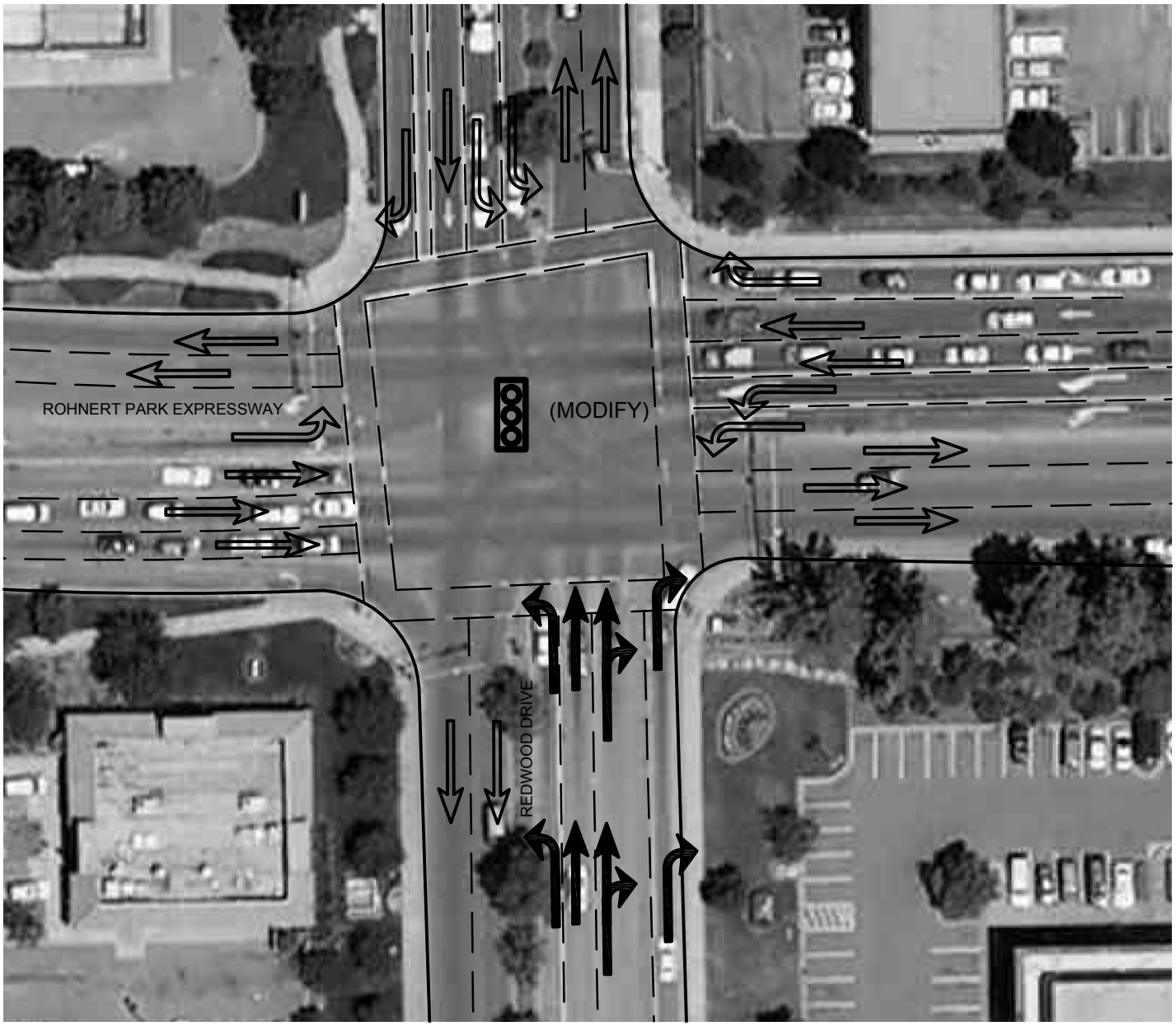
Redwood Drive @ Business Park Drive

I/S 9

Project Description | **New Signal**

ITEM NO.	ITEM	QUANTITY	UNIT	UNIT COST*	TOTAL ITEM COST	20% 25%	CONTINGENCY MANAGEMENT	TOTAL COST
Surface Costs:								
1	Mobilization	10.00	%	$ 323,909.08	$ 32,390.91	$	14,575.91	$ 46,967.00
2	Clearing & Grubbing		SF	$ 2.80	$ -	$	-	$ -
3	Pavement*		SF	$ 6.19	$ -	$	-	$ -
4	Grinding & Striping		LF	$ 3.14	$ -	$	-	$ -
5	Handicap Ramps	2	EA	$ 1,629.54	$ 3,259.08	$	1,466.59	$ 4,700.00
6	Traffic Signals	1	EA	$ 320,650.00	$ 320,650	$	144,293	$ 464,900.00
							Total Costs	**$ 516,567.00**

* Budget accomodates 6AC/13AB with lime treament or 6AC/18 AB



LEGEND

EXISTING

PROPOSED

INTERSECTION 10
Redwood Drive at Rohnert Park Expressway

WINZLER&KELLY

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Redwood Drive @ RPX

I/S 10

Project Description: **Restripe northbound lanes and modify signal**

ITEM NO.	ITEM	QUANTITY	UNIT	UNIT COST*	TOTAL ITEM COST	20% 25%	CONTINGENCY MANAGEMENT	TOTAL COST
Surface Costs:								
1	Mobilization	10.00	%	$ 124,908.16	$ 12,490.82	$	5,620.87	$ 18,112.00
2	Clearing & Grubbing		SF	$ 2.80	$ -	$	-	$ -
3	Pavement*		SF	$ 6.19	$ -	$	-	$ -
4	Grinding & Striping	6000	LF	$ 3.14	$ 18,840.00	$	8,478.00	$ 27,300.00
5	Handicap Ramps	4	EA	$ 1,629.54	$ 6,518.16	$	2,933.17	$ 9,500.00
6	Modify Signal	1	EA	$ 99,550.00	$ 99,550	$	44,798	$ 144,300.00
							Total Costs	**$ 199,212.00**

* Budget accomodates 6AC/13AB with lime treament or 6AC/18 AB

LEGEND

EXISTING OR BUDGETED WITH PFFP ROADWAYS
OR CURRENT CALTRANS CONSTRUCTION

PROPOSED

INTERSECTION 11
Redwood Drive at Wilfred Ave

WINZLER&KELLY

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Redwood Drive @ Wilfred

I/S 11

Project Description

Add left turn lane on eastbound Wilfred, right turn lane on eastbound Wilfred, right turn lane on southound Redwood and replace signal

ITEM NO.	ITEM	QUANTITY	UNIT	UNIT COST*	TOTAL ITEM COST	20% 25%	CONTINGENCY MANAGEMENT	TOTAL COST
Surface Costs:								
1	Mobilization	10.00	%	$ 669,648.16	$ 66,964.82	$	30,134.17	$ 97,099.00
2	Clearing & Grubbing	36000.00	SF	$ 2.80	$ 100,800.00	$	45,360.00	$ 146,200.00
3	Pavement*	36000.00	SF	$ 6.19	$ 222,840.00	$	100,278.00	$ 323,100.00
4	Grinding & Striping	6000	LF	$ 3.14	$ 18,840.00	$	8,478.00	$ 27,300.00
5	Handicap Ramps	4	EA	$ 1,629.54	$ 6,518.16	$	2,933.17	$ 9,500.00
6	Traffic Signals	1	EA	$ 320,650.00	$ 320,650	$	144,293	$ 464,900.00
							Total Costs	**$ 1,068,099.00**

* Budget accomodates 6AC/13AB with lime treament or 6AC/18 AB

LEGEND

EXISTING

PROPOSED

INTERSECTION 12
Snyder Lane at Keiser Ave

WINZLER&KELLY

Snyder Lane @ Keiser

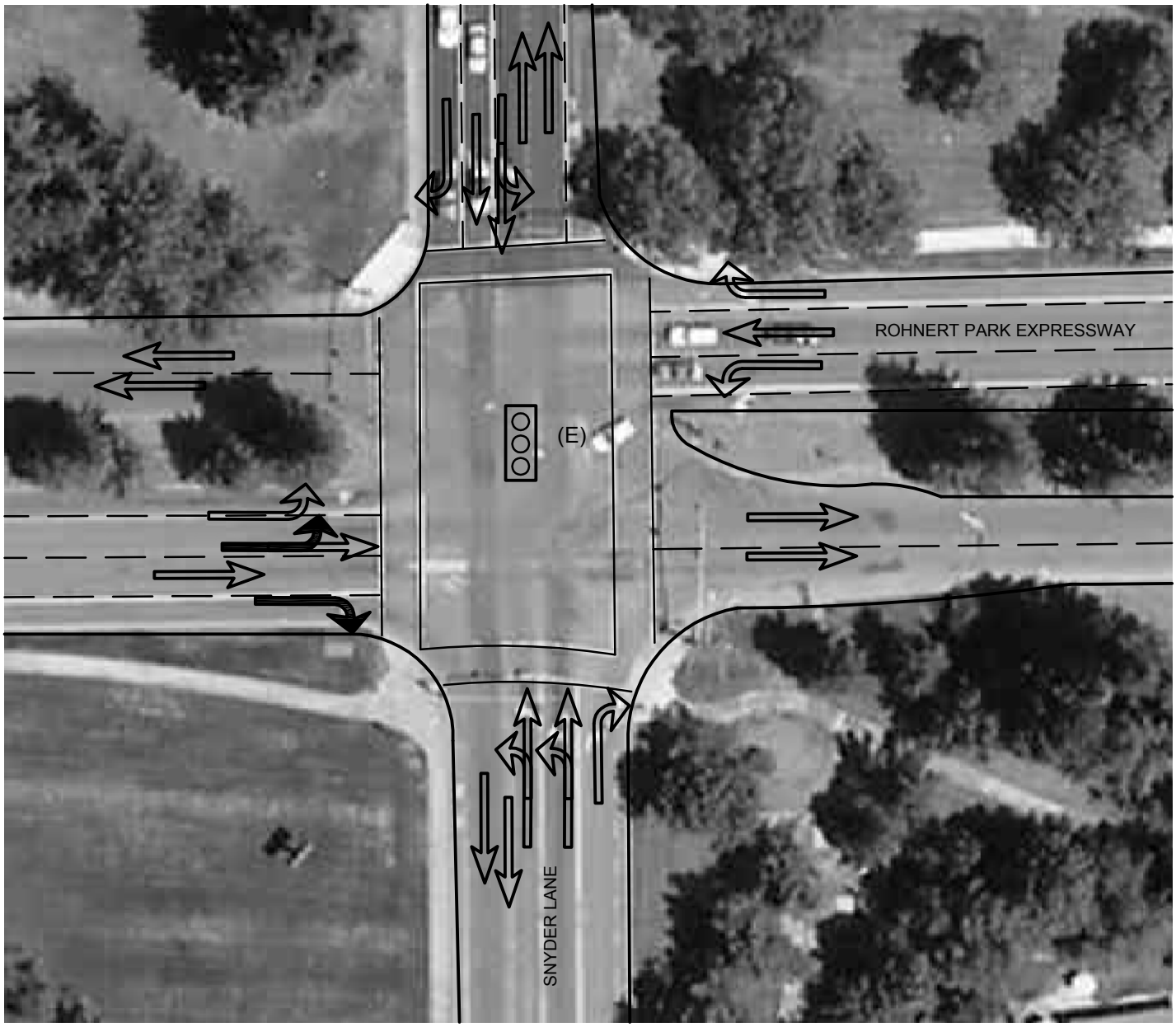
I/S 12

Project Description

Add left turn lane on eastbound Keiser and new signal

ITEM NO.	ITEM	QUANTITY	UNIT	UNIT COST*	TOTAL ITEM COST	20% 25%	CONTINGENCY MANAGEMENT	TOTAL COST
Surface Costs:								
1	Mobilization	10.00	%	$ 488,988.16	$ 48,898.82	$	22,004.47	$ 70,903.00
2	Clearing & Grubbing	18000.00	SF	$ 2.80	$ 50,400.00	$	22,680.00	$ 73,100.00
3	Pavement*	18000.00	SF	$ 6.19	$ 111,420.00	$	50,139.00	$ 161,600.00
4	Grinding & Striping		LF	$ 3.14	$ -	$	-	$ -
5	Handicap Ramps	4	EA	$ 1,629.54	$ 6,518.16	$	2,933.17	$ 9,500.00
6	Traffic Signals	1	EA	$ 320,650.00	$ 320,650	$	144,293	$ 464,900.00
							Total Costs	**$ 780,003.00**

* Budget accomodates 6AC/13AB with lime treament or 6AC/18 AB



LEGEND

EXISTING

PROPOSED

INTERSECTION 13
Snyder Lane at Rohnert Park Expressway

WINZLER&KELLY

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Snyder Lane @ Rohnert Park Expressway

I/S 13

Project Description

Add right turn lane on eastbound RPX, restripe one through lane to shared through/left on eastbound RPX

ITEM NO.	ITEM	QUANTITY	UNIT	UNIT COST*	TOTAL ITEM COST	20% 25%	CONTINGENCY MANAGEMENT	TOTAL COST
Surface Costs:								
1	Mobilization	10.00	%	$ 169,789.08	$ 16,978.91	$	7,640.51	$ 24,619.00
2	Clearing & Grubbing	18000	SF	$ 2.80	$ 50,400.00	$	22,680.00	$ 73,100.00
3	Pavement*	18000	SF	$ 6.19	$ 111,420.00	$	50,139.00	$ 161,600.00
4	Grinding & Striping	1500	LF	$ 3.14	$ 4,710.00	$	2,119.50	$ 6,800.00
5	Handicap Ramps	2	EA	$ 1,629.54	$ 3,259.08	$	1,466.59	$ 4,700.00
6	Traffic Signals		EA	$ 320,650.00	$ -	$	-	$ -
							Total Costs	**$ 270,819.00**

* Budget accomodates 6AC/13AB with lime treament or 6AC/18 AB

US 101 SB Ramps @ Redwood-Wilfred

I/S 14

Project Description

Restripe southbound through lane to shared through/right/left

ITEM NO.	ITEM	QUANTITY	UNIT	UNIT COST*	TOTAL ITEM COST	20% 25%	CONTINGENCY MANAGEMENT	TOTAL COST
Surface Costs:								
1	Mobilization	10.00	%	$ 104,260.00	$ 10,426.00	$	4,691.70	$ 15,118.00
2	Clearing & Grubbing		SF	$ 2.80	$ -	$	-	$ -
3	Pavement*		SF	$ 6.19	$ -	$	-	$ -
4	Grinding & Striping	1500	LF	$ 3.14	$ 4,710.00	$	2,119.50	$ 6,800.00
5	Handicap Ramps		EA	$ 1,629.54	$ -	$	-	$ -
6	Modify Signal	1	EA	$ 99,550	$ 99,550.00	$	44,797.50	$ 144,300.00
							Total Costs	**$ 166,218.00**

Note: Improvement area is under construction and not mapped

* Budget accomodates 6AC/13AB with lime treament or 6AC/18 AB

US 101 Northbound Ramps at Wilfred-Redwood

I/S 15

Project Description

Restripe nouthbound through lane to shared through/right/left

ITEM NO.	ITEM	QUANTITY	UNIT	UNIT COST*	TOTAL ITEM COST	20% 25%	CONTINGENCY MANAGEMENT	TOTAL COST
Surface Costs:								
1	Mobilization	10.00	%	$ 104,260.00	$ 10,426.00	$	4,691.70	$ 15,118.00
2	Clearing & Grubbing		SF	$ 2.80	$ -	$	-	$ -
3	Pavement*		SF	$ 6.19	$ -	$	-	$ -
4	Grinding & Striping	1500	LF	$ 3.14	$ 4,710.00	$	2,119.50	$ 6,800.00
5	Handicap Ramps		EA	$ 1,629.54	$ -	$	-	$ -
6	Modify Signal	1	EA	$ 99,550	$ 99,550	$	44,798	$ 144,300.00
							Total Costs	**$ 166,218.00**

Note: Improvement area is under construction and not mapped

* Budget accomodates 6AC/13AB with lime treament or 6AC/18 AB

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Other Improvements in the PFFP

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Rohnert Park
Public Safety Facilities

New Facilities	Quantity	Units	Unit Price	Total Construction Costs	45% Contingency Management	Total Costs
Southside Public Safety Station						
Land Acquisition	1.28	AC	$ -	$ -	$ -	$ -
Site Work	50000	SF	$ 11.20	$ 560,000.00	$ 252,000.00	$ 812,000
Station	7560	SF	$ 235.20	$ 1,778,112.00	$ 800,150.40	$ 2,578,262
Furnishing & Equipment	1	LS	$ 250,000.00	$ 250,000.00	$ -	$ 250,000
Total						**$ 3,640,300**
Westside Public Safety Station						
Land Acquisition	1.28	AC	$ -	$ -	$ -	$ -
Site Work	50000	SF	$ 11.20	$ 560,000.00	$ 252,000.00	$ 812,000
Station	7800	SF	$ 235.20	$ 1,834,560.00	$ 825,552.00	$ 2,660,112
Furnishing & Equipment	1	LS	$ 250,000.00	$ 250,000.00	$ -	$ 250,000
Total						**$ 3,722,112**
Citywide Improvements						
Training/Maintenance Land Acquisition	3.32	AC	$ -	$ -	$ -	$ -
Training/Maintenance Site Work	185000	SF	$ 11.20	$ 2,072,000	$ 932,400.00	$ 3,004,400.00
Training classroom/EOC facility	2440	SF	$ 308.00	$ 751,520	$ 338,184.00	$ 1,089,704.00
Furnishing & Equipment	1	LS	$ 350,000.00	$ 350,000	$ -	$ 350,000.00
Training Tower	1406	SF	$ 560.00	$ 787,360	$ 354,312.00	$ 1,141,672.00
K-9 Facility	5780	SF	$ 28.00	$ 161,840	$ 72,828.00	$ 234,668.00
Total						**$ 5,820,444**
Public Safety Facilities						**$ 13,182,856**

Notes:
Cost estimations based on data provided by LCA Architects December 2009 - March 2010

Rohnert Park Finance Plan
City Hall 2010

City Hall	Quantity	Unit	Total Cost
Constructed City Hall	1	LS	$8,538,263
Total			**$ 8,540,000**

Costs provided by City of Rohnert Park based on completed construction

Rohnert Park Finance Plan
Corporation Yard 2010

Corporation Yard Expansion	Quantity	Units	Cost per Unit		Total Cost
Land Acquisition	0.5	AC	$ 300,000		$ 150,000
Site Development					
Clearing & Grubbing and Demo	22,000	SF	$ 0.27		$ 5,940
Earthwork	400	CY	$ 14.91		$ 5,964
Site Paving (6"AC/18" AB)	22,000	SF	$ 6.19		$ 136,180
Site Lighting	3	EA	$ 5,000.00		$ 15,000
Fencing	1,500	LF	$ 63.25		$ 94,875
Additional Garage	2,800	SF	$ 200.00		$ 560,000
Public Safety Maintenance	7,750	SF	$ 112.00		$ 868,000
Subtotal					$ 1,835,959
20% Contingency					$ 367,192
25% Management/Design					$ 458,990
Total					**$ 2,662,200**

Notes:
1. Expansion costs assume Corp Yard is expanded at its current location. No relocation costs are included.
2. Site Development include clearing, grubbing and repaving. Costs assume that there is no significant earthwork or hazardous materials concerns.
3. Site Development costs do not include utility extensions or the installation of fuel storage and dispensing facilities.
4. Building costs are on a square foot basis for enclosed space with an allowance for special equipment to maintain public safety equipment

City of Rohnert Park
Eastside Trunk Sewer Phase 1
Construction and Interest Costs

	Project Cost	Additional Depreciation	Present Value for Charge Calculation
1st Year of Operation (2010)			
Project Cost	$ 13,761,943		
Cash Contribution for Estimated Existing Users Share	$ 3,706,219		
Financed Construction Costs	$ 10,055,724	0%	$10,055,724
Present Value of Interest on Past Debt			$ 7,843,392
Total			$ -

Present Value of Interest on Past Debt

Fiscal Year	Interest	LAIF Rate	PV Factor	Percent Allocated to ETS *	Adjusted Interest
FY 07-08	$ 1,247,868	1.04325	1.073	0.451	$ 603,864
FY 08-09	$ 1,563,979	1.02224	1.029	0.451	$ 725,459
FY 09-10	$ 1,549,979	1.00651	1.007	0.451	$ 703,323
FY 10-11	$ 973,919		1.000	0.451	$ 439,070
FY 11-12	$ 973,919		0.962	0.451	$ 422,386
FY 12-13	$ 973,919		0.925	0.451	$ 406,140
FY 13-14	$ 973,919		0.889	0.451	$ 390,333
FY 14-15	$ 973,919		0.855	0.451	$ 375,405
FY 15-16	$ 957,044		0.822	0.451	$ 354,662
FY 16-17	$ 923,969		0.790	0.451	$ 329,076
FY 17-18	$ 886,769		0.760	0.451	$ 303,833
FY 18-19	$ 851,019		0.731	0.451	$ 280,458
FY 19-20	$ 823,969		0.703	0.451	$ 261,142
FY 20-21	$ 798,869		0.676	0.451	$ 243,463
FY 21-22	$ 775,069		0.650	0.451	$ 227,125
FY 22-23	$ 752,313		0.625	0.451	$ 211,977
FY 23-24	$ 728,284		0.601	0.451	$ 197,327
FY 24-25	$ 702,838		0.577	0.451	$ 182,828
FY 25-26	$ 675,956		0.555	0.451	$ 169,131
FY 26-27	$ 645,375		0.534	0.451	$ 155,369
FY 27-28	$ 610,875		0.513	0.451	$ 141,280
FY 28-29	$ 574,750		0.494	0.451	$ 128,002
FY 29-30	$ 536,750		0.475	0.451	$ 114,941
FY 30-31	$ 496,750		0.456	0.451	$ 102,121
FY 31-32	$ 454,875		0.439	0.451	$ 90,026
FY 32-33	$ 411,000		0.422	0.451	$ 78,193
FY 33-34	$ 364,875		0.406	0.451	$ 66,785
FY 34-35	$ 316,500		0.390	0.451	$ 55,662
FY 35-36	$ 265,750		0.375	0.451	$ 44,940
FY 36-37	$ 181,250		0.361	0.451	$ 29,474
FY 37-38	$ 61,375		0.347	0.451	$ 9,596
Total	**$ 23,027,645**				**$ 7,843,392**

Tax Allocation Bond 2007R Total Principal Balance is 23,305,000.
Total Debt Service Costs are allocated based on the portion of the principal used for ESTS Phase 1

City of Rohnert Park
Eastside Trunk Sewer
Engineer's Opinion of Probable Cost

		Phase 2 Main Reach				Phase 2 South Reach			
Item	**Description**	**Quantity**	**Unit**	**Jul-11**	**Total**	**Quantity**	**Unit**	**Jul-11**	**Total**
1	Mobilization & Demobilization	0.87	ls	$ 450,000	$ 391,500	0.13	ls	$ 450,000	$ 58,500
2	Temporary Traffic Control	0.87	ls	$ 450,000	$ 391,500	0.13	ls	$ 450,000	$ 58,500
3	Environmental Mitigation	0.87	ls	$ 50,000	$ 43,500	0.13	ls	$ 50,000	$ 6,500
4	SWPPP Implemenation	0.87	ls	$ 75,000	$ 65,250	0.13	ls	$ 75,000	$ 9,750
5	Lead Compliance Plan	0.87	ls	$ 2,000	$ 1,740	0.13	ls	$ 2,000	$ 260
6	Dewatering	0.87	ls	$ 1,100,000	$ 957,000	0.13	ls	$ 1,100,000	$ 143,000
7	Clearing & Grubbing	0.87	ls	$ 6,000	$ 5,220	0.13	ls	$ 6,000	$ 780
8	Temporary Bypass Pumping	0.87	ls	$ 85,000	$ 73,950	0.13	ls	$ 85,000	$ 11,050
9	Soil Stabilization	1,100	lf	$ 120	$ 132,000	0.00	lf	$ 120	$ -
10	Shoring & Bracing of Excavations	1.00	ls	$ 700,000	$ 700,000	0.00	ls	$ 700,000	$ -
11	Potholing	218	ea	$ 600	$ 130,800	32	ea	$ 600	$ 19,200
12	24-Inch PVC Sanitary Sewer Pipe, Open Trench	8600	lf	$ 300	$ 2,580,000	0	lf	$ 300	$ -
13	18-Inch PVC Sanitary Sewer Pipe, Open Trench	0	lf	$ 240	$ -	1300	lf	$ 240	$ 312,000
14	8-inch PVE Sanitary Sewer Pipe	12	lf	$ 150	$ 1,800	0	lf	$ 150	$ -
15	4- and 6- inch PVC Sewer Lateral	7	ea	$ 5,000	$ 35,000	0	ea	$ 5,000	$ -
16	Remove and Replace Trench Foundation inc. Haul	300	cy	$ 200	$ 60,000	0	cy	$ 200	$ -
17	8-inch Sewer Main Connection and inside drop	4	ea	$ 3,500	$ 14,000	0	ea	$ 3,500	$ -
18	10-inch Sewer Main Connection and inside drop	2	ea	$ 4,000	$ 8,000	0	ea	$ 4,000	$ -
19	18-inch Sewer Main Connection	0	ea	$ 7,000	$ -	0	ea	$ 7,000	$ -
20	60-inch Precast Sewer Manholes with HDPE Liner	26	ea	$ 15,000	$ 390,000	4	ea	$ 15,000	$ 60,000
21	72-inch Precast Sewer Manholes with HDPE Liner	5	ea	$ 20,000	$ 100,000	0	ea	$ 20,000	$ -
22	48-inch Precast Sewer Manholes	0	ea	$ 15,000	$ -	0	ea	$ 15,000	$ -
23	Bore & Jack Under SMART Rail, 24-inch aqueduct and drainage ditch	1	ls	$ 250,000	$ 250,000	0	ls	$ 250,000	$ -
24	Tunneling Under Copeland Creek	0	ls	$ 250,000	$ -	0	ls	$ 250,000	$ -
25	Tunneling and Receiving Pits	1	ls	$ 275,000	$ 275,000	0	ls	$ 275,000	$ -
26	Abandonement and Removal of Sewer Mains	640	lf	$ 100	$ 64,000	0	lf	$ 100	$ -
27	Water Service- 3/4-inch	10	ea	$ 2,500	$ 25,000	0	ea	$ 2,500	$ -
28	Water Service - 1-inch	6	ea	$ 2,750	$ 16,500	0	ea	$ 2,750	$ -
29	Water Service - 1-inch with dual meter	5	ea	$ 3,000	$ 15,000	0	ea	$ 3,000	$ -
	Water Service - 11/2-inch	4	0	$ 3,000	$ 12,000	0	0	$ 3,000	$ -
30	Water Service - 2-inch	5	ea	$ 3,750	$ 18,750	0	ea	$ 3,750	$ -
31	Water Service- 2-inch commercial	3	ea	$ 3,750	$ 11,250	0	ea	$ 3,750	$ -
32	Water Service 4-inch commercial	1	ea	$ 5,500	$ 5,500	0	ea	$ 5,500	$ -
33	Landscape Restoration	1	ls	$ 6,000	$ 6,000	0	ls	$ 6,000	$ -
34	Temporary Resurfacing	435	ton	$ 130	$ 56,550	65	ton	$ 130	$ 8,450
35	Hot Mix Asphalt Digout Repair	261	ton	$ 200	$ 52,200	39	ton	$ 200	$ 7,800
36	Road Restoration	3741	ton	$ 130	$ 486,330	559	ton	$ 130	$ 72,670
37	Conform Grind/Edge Grind AC Pavement	9048	lf	$ 4	$ 36,192	1352	lf	$ 4	$ 5,408
38	2-Inch HMA Overlay	3480	ton	$ 115	$ 400,200	520	ton	$ 115	$ 59,800
39	Adjust Existing Utility Structure to Grade	52	ea	$ 400	$ 20,800	8	ea	$ 400	$ 3,200
40	Adjust Existing Manhole Structure to Grade	19	ea	$ 700	$ 13,300	3	ea	$ 700	$ 2,100
41	Reset Survey Monuments	16	ea	$ 2,500	$ 40,000	2	ea	$ 2,500	$ 5,000
42	Field Screening of Potentially Contaminated Soil and Groundwater	653	lf	$ 25	$ 16,325	97	lf	$ 25	$ 2,425
43	Trench Containment Cutoff	3	ea	$ 2,500	$ 7,500	1	ea	$ 2,500	$ 2,500
44	Contaminated Soil Disposal at Class II Landfill	1305	ls	$ 33	$ 43,065	195	ls	$ 33	$ 6,435
45	Handling Treatment and Disposal of Contaminated Groundwater	870000	gal	$ 0.05	$ 43,500	130000	gal	$ 0.05	$ 6,500
46	Vehicle Detector Loop Replacement	30	ea	$ 650	$ 19,500	5	ea	$ 650	$ 3,250
47	Traffic Striping: 6-inch	4872	lf	$ 1.00	$ 4,872	728	lf	$ 1.00	$ 728
48	Traffic Striping: 8-inch	870	lf	$ 1.50	$ 1,305	130	lf	$ 1.50	$ 195
49	Pavement Markings	5220	sf	$ 5.25	$ 27,405	780	sf	$ 5.25	$ 4,095
50	Retroreflective Pavement Markers	1218	ea	$ 5.25	$ 6,395	182	ea	$ 5.25	$ 956
51	Non-Reflective Pavement Markers	522	ea	$ 5.25	$ 2,741	78	ea	$ 5.25	$ 410
Construction Subtotal					**$ 8,058,439**				**$ 871,461**
Construction Contingency (20%)					$ 1,611,688				$ 174,292
SUBTOTAL					**$ 9,670,127**				**$ 1,045,753**
Design and Geotech					$ 147,048				$ 15,902
CM, Observation and Project Administration (10%)					$ 967,013				$ 104,575
TOTAL					**$ 10,637,139**				**$ 1,150,329**

City of Rohnert Park
Eastside Trunk Sewer
Engineer's Opinion of Probable Cost

		Phase 3			
Item	**Description**	**Quantity**	**Unit**	**May Adjustment**	**Total**
1	Mobilization & Demobilization	1	ls	$ 82,000	$ 82,000
2	Temporary Traffic Control	1	ls	$ 82,000	$ 82,000
3	Environmental Mitigation	1	ls	$ 50,000	$ 50,000
4	SWPPP Implemenation	1	ls	$ 25,000	$ 25,000
5	Lead Compliance Plan	1	ls	$ 2,000	$ 2,000
6	Dewatering	1	ls	$ 500,000	$ 500,000
7	Clearing & Grubbing	1	ls	$ 6,000	$ 6,000
8	Temporary Bypass Pumping	1	ls	$ 85,000	$ 85,000
9	Soil Stabilization	0	lf	$ 120	$ -
10	Shoring & Bracing of Excavations	0	ls	$ 700,000	$ -
11	Potholing	50	ea	$ 600	$ 30,000
12	24-Inch PVC Sanitary Sewer Pipe, Open Trench	0	lf	$ 300	$ -
13	18-Inch PVC Sanitary Sewer Pipe, Open Trench	2035	lf	$ 240	$ 488,400
14	8-inch PVE Sanitary Sewer Pipe	0	lf	$ 150	$ -
15	4- and 6- inch PVC Sewer Lateral	0	ea	$ 5,000	$ -
16	Remove and Replace Trench Foundation inc. Haul	0	cy	$ 200	$ -
17	8-inch Sewer Main Connection and inside drop	0	ea	$ 3,500	$ -
18	10-inch Sewer Main Connection and inside drop	0	ea	$ 4,000	$ -
19	18-inch Sewer Main Connection	1	ea	$ 7,000	$ 7,000
20	60-inch Precast Sewer Manholes with HDPE Liner	10	ea	$ 15,000	$ 150,000
21	72-inch Precast Sewer Manholes with HDPE Liner	0	ea	$ 20,000	$ -
22	48-inch Precast Sewer Manholes	1	ea	$ 15,000	$ 15,000
23	Bore & Jack Under SMART Rail, 24-inch aqueduct and drainage ditch	0	ls	$ 250,000	$ -
24	Tunneling Under Copeland Creek	1	ls	$ 250,000	$ 250,000
25	Tunneling and Receiving Pits	1	ls	$ 275,000	$ 275,000
26	Abandonement and Removal of Sewer Mains	0	lf	$ 100	$ -
27	Water Service- 3/4-inch	0	ea	$ 2,500	$ -
28	Water Service - 1-inch	0	ea	$ 2,750	$ -
29	Water Service - 1-inch with dual meter	0	ea	$ 3,000	$ -
	Water Service - 11/2-inch	0	0	$ 3,000	$ -
30	Water Service - 2-inch	0	ea	$ 3,750	$ -
31	Water Service- 2-inch commercial	0	ea	$ 3,750	$ -
32	Water Service 4-inch commercial	0	ea	$ 5,500	$ -
33	Landscape Restoration	0	ls	$ 6,000	$ -
34	Temporary Resurfacing	103	ton	$ 130	$ 13,390
35	Hot Mix Asphalt Digout Repair	62	ton	$ 200	$ 12,400
36	Road Restoration	884	ton	$ 130	$ 114,920
37	Conform Grind/Edge Grind AC Pavement	2138	lf	$ 4	$ 8,552
38	2-Inch HMA Overlay	822	ton	$ 115	$ 94,530
39	Adjust Existing Utility Structure to Grade	12	ea	$ 400	$ 4,800
40	Adjust Existing Manhole Structure to Grade	5	ea	$ 700	$ 3,500
41	Reset Survey Monuments	2	ea	$ 2,500	$ 5,000
42	Field Screening of Potentially Contaminated Soil and Groundwater	0	lf	$ 25	$ -
43	Trench Containment Cutoff	0	ea	$ 2,500	$ -
44	Contaminated Soil Disposal at Class II Landfill	0	ls	$ 33	$ -
45	Handling Treatment and Disposal of Contaminated Groundwater	0	ls	$ 0.05	$ -
46	Vehicle Detector Loop Replacement	10	ea	$ 650	$ 6,500
47	Traffic Striping: 6-inch	1000	lf	$ 1.00	$ 1,000
48	Traffic Striping: 8-inch	0	fl	$ 1.50	$ -
49	Pavement Markings	1020	sf	$ 5.25	$ 5,355
50	Retroreflective Pavement Markers	94	ea	$ 5.25	$ 494
51	Non-Reflective Pavement Markers	102	ea	$ 5.25	$ 536
Construction Subtotal					**$ 2,318,376**
Construction Contingency (20%)					$ 231,838
SUBTOTAL					**$ 2,550,214**
Design and Geotech					**$ 100,000**
CM, Observation and Project Administration (10%)					$ 255,021
TOTAL					**$ 2,805,235**

City of Rohnert Park
Interceptor Outfall Project Phase 1

				Present Value for Charge Calculation
Project Cost	$ 13,000,000			
Reconstruction Cost New (Project Cost x Escalation)	$ 14,483,417			
Depreciation (5 years in 75 year life = 6.67%)	$ (966,044)			
Reconstruction Cost New Less Depreciation				$ 13,517,373
Present Value of Interest on Debt (see below)				$ 9,615,250
Existing Users Share (69.7%)				$ 16,123,438
Total for Fee Calculation				**$ 7,009,185**

Present Value of Interest on Past Debt

Fiscal Year	Interest	LAIF Rate	PV Factor	Adjusted Interest
FY 05-06	$ 572,035	1.03873	1.172	$ 670,462
FY 06-07	$ 583,379	1.05121	1.128	$ 658,263
FY 07-08	$ 575,729	1.04325	1.073	$ 617,984
FY 08-09	$ 567,779	1.02224	1.029	$ 584,185
FY 09-10	$ 559,604	1.00651	1.007	$ 563,247
FY 10-11	$ 551,129		1.000	$ 551,129
FY 11-12	$ 542,074		0.962	$ 521,475
FY 12-13	$ 532,386		0.925	$ 492,457
FY 13-14	$ 522,205		0.889	$ 464,240
FY 14-15	$ 511,518		0.855	$ 437,347
FY 15-16	$ 500,143		0.822	$ 411,117
FY 16-17	$ 487,888		0.790	$ 385,431
FY 17-18	$ 475,138		0.760	$ 361,105
FY 18-19	$ 461,463		0.731	$ 337,329
FY 19-20	$ 447,175		0.703	$ 314,364
FY 20-21	$ 431,950		0.676	$ 291,998
FY 21-22	$ 416,100		0.650	$ 270,465
FY 22-23	$ 396,575		0.625	$ 247,859
FY 23-24	$ 376,075		0.601	$ 226,021
FY 24-25	$ 354,600		0.577	$ 204,604
FY 25-26	$ 332,150		0.555	$ 184,343
FY 26-27	$ 308,725		0.534	$ 164,859
FY 27-28	$ 284,075		0.513	$ 145,730
FY 28-29	$ 258,200		0.494	$ 127,551
FY 29-30	$ 231,100		0.475	$ 109,773
FY 30-31	$ 202,525		0.456	$ 92,351
FY 31-32	$ 172,725		0.439	$ 75,826
FY 32-33	$ 141,450		0.422	$ 59,692
FY 33-34	$ 108,475		0.406	$ 44,041
FY 34-35	$ 74,025		0.390	$ 28,877
FY 35-36	$ 37,875		0.375	$ 14,207
Total	**$ 12,016,267**			**$ 9,615,250**

City of Rohnert Park
Interceptor Outfall II
Engineer's Opinion of Probable Cost

ENR CCI (August 2004)	**8228.39**
ENR CCI (September 2011)	**10192.04**

Item	Description	Quantity	Unit	August 2004 Estimate	September 2011 Adjustment	Total
1	Mobilization & Demobilization	5%	LS	$ 151,220		$ 187,308
2	Force Main Rehabilitation	20,184	LF	2,018,400	1.24	$ 2,500,077.60
3	Pressure Manholes	12	EA	240,000	1.24	$ 297,274.39
4	70 HP Pumps	2	EA	110,000	1.24	$ 136,250.76
5	250 HP Pumps	2	EA	170,000	1.24	$ 210,569.36
6	Valves & Motors	1	LS	216,000	1.24	$ 267,546.95
7	Electrical, Controls, Instrumentation for pumps	1	LS	270,000	1.24	$ 334,433.69
8	Contractors Overhead & Profit	18%	ls	$ 544,392		$ 674,307
Construction Subtotal				**$ 3,720,012**		**$ 4,607,768**
Construction Contingency (10%)				**$ 372,001**		**$ 460,777**
Engineering & Management 35%)				**$ 1,302,004**		**$ 1,612,719**
	TOTAL			**$ 5,394,017**		**$ 6,681,263**

Source:Final Predesign Report Interceptor Project, August 2004 (Winzler & Kelly)

Rohnert Park Public Facilities Finance Plan					
Canon Manor Project Management Expenses					
	Canon Manor			Revenue	Expenses
	DESIGN REVIEW				63,621.97
	LEGAL EXPENSES				448,757.92
	STAFF TIME				74,055.32
	OTHER				14,430.44
	PROJECT REVENUES			239,002.46	
	TRANSFERS				
	Transfer from PFFP	116,644.24			
	Transfer from Sewer Conn Fee	310,667.39			
	Transfer from Sewer Capacity Fee	$ 8,016.57			
Total		435,328.20		239,002.46	600,865.65

Westside Water System Improvements (Redwood Drive Turn-out #163)

Improvement	2004 Unit Cost	ENR Escalation	2010 Unit Cost	45% Contingency & Management	Total Cost
8-inch pipe	$ 44,100	24%	$ 54,684	$ 24,608	$ 79,292
Tie-ins	$ 5,600	24%	$ 6,944	$ 3,125	$ 10,069
8-inch valves	$ 2,800	24%	$ 3,472	$ 1,562	$ 5,034
Traffic Control	$ 28,000	24%	$ 34,720	$ 15,624	$ 50,344
Misc Labor	$ 7,000	24%	$ 8,680	$ 3,906	$ 12,586
Total for Improvement with Contingency & Management					**$ 157,325**

ENR CCI September 2011	10192.79
ENR CCI 2004	8228.39
Inflation Factor	24%

City of Rohnert Park
Eastside Water Main Improvements - Project No. 2004-08
Engineer's Estimate of Probable Construction Costs
27-Apr-06

BASE BID

Item No.	Bid Item	Quantity	Units	Unit Cost	Total Cost
1	Mobilization	1	LS	40,000	$40,000
2	8" W, Trench A, Class 150	745	LF	98	$73,010
3	8" W, Trench A, Class 200	1459	LF	105	$153,195
4	8" W, Trench B, Class 200	85	LF	95	$8,075
5	8" W, Trench C, Class 150	155	LF	85	$13,175
6	12" W, Trench A, Class 150	1936	LF	120	$232,320
7	12" W, Trench B, Class 200	40	LF	125	$5,000
8	12" Gate Valve	2	EA	3,500	$7,000
9	8" Gate Valve	23	EA	1,300	$29,900
10	6" Gate Valve	6	EA	1,000	$6,000
11	2" Combination Air & Vacuum Release Valve Assembly	5	EA	3,000	$15,000
12	1" Combination Air & Vacuum Release Valve Assembly	8	EA	2,500	$20,000
13	Full Size Blow-Off Assembly	8	EA	2,500	$20,000
14	Temporary Blow-Off Assembly	1	EA	2,000	$2,000
15	Fire Hydrant Assembly	2	EA	5,000	$10,000
16	Cut-in Tee on 6" Main	2	EA	3,000	$6,000
17	Cut-in Tee or Ell on 8" Main	10	EA	3,500	$35,000
18	Cut-in Reducing Cross on 6" Main	2	EA	4,000	$8,000
19	Reconnect 1" Service Tap	1	EA	1,500	$1,500
20	Replace Traffic Detector Loop	3	EA	10,000	$30,000
21	Relocate Storm Drain Structures	2	LS	1,500	$3,000
22	Abandon Main	0	EA	1,000	$0
23	Turnout No. 15 Modifications	0	LS	2,000	$0
24	Pressure Reducing Valve Assembly & Vault	2	EA	15,000	$30,000
25	10" Meter Assembly, Vault and Backflow Assembly	1	LS	35,000	$35,000
26	RTU Controls @ Meter Station	1	LS	25,000	$25,000
27	City of Rohnert Park Business License	1	LS	250	$250
				Total Base Bid	$808,425

BID OPTION A

Item No.	Bid Item	Quantity	Units	Unit Cost	Total Cost
28A	12" Pipe, Trench A, Class 150 (PVC SDR 18 or DIP)	188	LF	120	$22,560
29A	16" Pipe, Trench A, Class 150 (PVC SDR 18 or DIP)	4575	LF	150	$686,250
30A	16" Pipe, Trench C, Class 150 (PVC SDR 18 or DIP)	55	LF	130	$7,150
31A	16" Butterfly Valve	3	EA	5,500	$16,500
				Total Option A	$732,460

ADDER to BID OPTION A

Item No.	Bid Item	Quantity	Units	Unit Cost	Total Cost
32A	3" Electrical Conduit (In Joint Trench w/16" Pipe)	4630	LF	28	$129,640
33A	Electrical Pull Box	10	EA	1,500	$15,000
				Total Adder A	$144,640

		Totals
	Engineer's Estimate	**$1,686,000**
	Credit for Caltrans Work	-$100,000
	Construction Budget Estimate	**$1,586,000**
Contingency	20%	$317,200
Management	25%	$396,500
	TOTAL	**$2,299,700**

Copeland Creek Basin

ITEM NO.	ITEM	QUANTITY	UNIT	UNIT COST*	TOTAL ITEM COST	20% CONTINGENCY 25% MANAGEMENT	TOTAL COST
1	Mobilization	10	%	$ 1,549,039	$ 154,904	$ 69,707	$ 224,611
2	Clearing & Grubbing	10	AC	$ 11,606.10	$ 116,061	$ 52,227	$ 168,288
3	Excavation	50100	CY	$ 10.40	$ 521,040	$ 234,468	$ 755,508
4	Levee Construction	9250	CY	$ 29.43	$ 272,228	$ 122,502	$ 394,730
5	Crack Stopper Material	1050	CY	$ 91.00	$ 95,550	$ 42,998	$ 138,548
6	Class 2 Aggregate Base	1560	CY	$ 66.00	$ 102,960	$ 46,332	$ 149,292
7	Fencing	2800	LF	$ 24.75	$ 69,300	$ 31,185	$ 100,485
8	Rock Slope Protection	3000	SY	$ 102.30	$ 306,900	$ 138,105	$ 445,005
9	Outlet Structure	1	LS	$ 50,000.00	$ 50,000	$ 22,500	$ 72,500
10	Seeding	10	AC	$ 1,500.00	$ 15,000	$ 6,750	$ 21,750
						Subtotal Surface Costs per LF:	**$ 2,470,716**
Right-of-way Acquisition Costs:							
14	Land Acquisition	10.00	AC	$ 1	$ 10.00	$ 4.50	$ 14.50
						TOTAL PROJECT COST (INCLUDING R-O-W ACQUISITION) INCLUDED IN THE FINANCE PLAN:	**$ 2,470,731**

Northeast Basin

ITEM NO.	ITEM	QUANTITY	UNIT	UNIT COST*	TOTAL ITEM COST	20% 25%	CONTINGENCY MANAGEMENT	TOTAL COST
1	Mobilization	10	%	$ 1,734,546	$ 173,455	$	78,055	$ 251,509
2	Clearing & Grubbing	6.5	AC	$ 11,606.10	$ 75,440	$	33,948	$ 109,387
3	Excavation	57350	CY	$ 10.40	$ 596,440	$	268,398	$ 864,838
4	Levee Construction	16550	CY	$ 29.43	$ 487,067	$	219,180	$ 706,246
5	Crack Stopper Material	1360	CY	$ 91.00	$ 123,760	$	55,692	$ 179,452
6	Class 2 Aggregate Base	1360	CY	$ 66.00	$ 89,760	$	40,392	$ 130,152
7	Fencing	2440	LF	$ 24.75	$ 60,390	$	27,176	$ 87,566
8	Rock Slope Protection	2365	SY	$ 102.30	$ 241,940	$	108,873	$ 350,812
9	Outlet Structure	1	LS	$ 50,000.00	$ 50,000	$	22,500	$ 72,500
10	Seeding	6.5	AC	$ 1,500.00	$ 9,750	$	4,388	$ 14,138
							Subtotal Surface Costs per LF:	**$ 2,766,600**
Right-of-way Acquisition Costs:								
14	Land Acquisition	6.50	AC	$ 120,000	$ 780,000.00	$	351,000.00	$ 1,131,000.00
							TOTAL PROJECT COST (INCLUDING R-O-W ACQUISITION) INCLUDED IN THE FINANCE PLAN:	**$ 3,897,600**

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Appendix C– Review of Capacity Needs for Two Future Road Projects

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w-trans

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March 19, 2010

Mr. Patrick Barnes
City of Rohnert Park
130 Avram Avenue
Rohnert Park, CA 94928

Review of Traffic Capacity Needs for Two Future Road Projects

Dear Mr. Barnes;

Whitlock & Weinberger Transportation, Inc. (W-Trans) has performed an evaluation to determine whether two roadway improvement projects identified in the City of Rohnert Park Public Facilities Finance Plan (PFFP) would be necessary in the future from a traffic capacity perspective. The projects include the extension of Seed Farm Drive between Rohnert Park Expressway and Enterprise Drive, and the widening of Commerce Boulevard between Enterprise Drive and Southwest Boulevard. The need for these projects was evaluated based on projected future traffic volumes developed through use of the Sonoma County Transportation Authority (SCTA) travel demand model.

Background

Public Facilities Finance Plan

In 2006 the City of Rohnert Park adopted an Updated Public PFFP which outlines a comprehensive strategy for managing the costs of capital facilities, maintenance and services that are impacted by new development. Since this update, the need for two projects has come into question: the extension of Seed Farm Drive between Rohnert Park Expressway and Enterprise Drive, including construction of a roadway with two travel lanes and two bike lanes together with installation of traffic signals at each end of the segment, and the widening of Commerce Boulevard between Enterprise Drive and Southwest Boulevard to include four travel lanes, two bike lanes and a median with traffic signal improvements at the two existing traffic signals mid-segment. Information about and locations of the two projects are shown on the enclosed PFFP Figures 2.1 and 2.3.

General Plan

The applied thresholds of significance for traffic impacts associated with not doing these projects were based on those included in the *Revised Draft EIR for the Rohnert Park General Plan*, as well as thresholds contained in the CEQA *Guidelines*, Appendix G. Specifically, elimination of these projects from the PFFP would create a significant traffic circulation impact on intersections if it would result in failure to maintain Level of Service (LOS) C operation for intersections and segments. Though the General Plan contains some exceptions to the LOS C standard, none of these are within the study area.

Study Area

The study area, as shown on the enclosed Figure 1, includes Commerce Boulevard between Enterprise Drive and Southwest Boulevard together with the following six intersections:

1. Rohnert Park Expressway/State Farm Drive
2. Enterprise Drive/Commerce Boulevard
3. Enterprise Drive/Hunter Drive
4. Enterprise Drive/State Farm Drive
5. Commerce Boulevard/Southwest Drive
6. Southwest Boulevard/Seed Farm Drive

Consideration was also given to potential impacts to roadways that would need to accommodate the traffic intended to use the proposed Seed Farm Drive extension.

Existing Conditions

Turning movement counts for the weekday morning and evening peak travel periods were obtained during December 2009 and February 2010, with the exception of the intersections at Rohnert Park Expressway/State Farm Drive and Commerce Boulevard/Southwest Boulevard, where data was collected in June 2007, as shown on Figure 1. In recent years during the economic downturn there has been a consistent trend of traffic volumes staying relatively unchanged or declining, therefore, it was deemed unnecessary to increase or "factor" the 2007 data to reflect 2009-2010 levels. Traffic volumes were obtained during the morning peak period between 7:00 a.m. and 9:00 a.m. and during the evening peak period between 4:00 p.m. and 6:00 p.m. on typical days while area schools were in session, including Cotati-Rohnert Park Unified School District schools and Sonoma State University.

The traffic volume data was used to establish the level of delay and associated LOS utilizing methodologies presented in the *Highway Capacity Manual 2000*, published by the Transportation Research Board in 2000. Based upon existing traffic conditions all of the study intersections currently operate acceptably. The intersection LOS calculations are summarized in Table 1. The study segment of Commerce Boulevard is also operating acceptably with an average travel speed of 22.4 miles per hour (mph), which is indicative of LOS C operation. Copies of all LOS calculations are enclosed.

Table 1
Summary of Peak Hour Intersection Level of Service Calculations

Study Intersection	Existing Conditions				Future Conditions			
	AM Peak		PM Peak		AM Peak		PM Peak	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
1. Rohnert Park Expy/State Farm Dr	24.9	C	30.4	C	27.5	C	34.3	C
2. Commerce Dr/Enterprise Dr	5.5	A	10.2	B	5.4	A	10.8	B
3. Enterprise Dr/Hunter Dr	7.5	A	8.6	A	7.7	A	9.0	A
4. Enterprise Dr/State Farm Dr	9.2	A	13.4	B	16.5	C	19.5	C
5. Commerce Blvd/Southwest Blvd	10.4	B	18.6	C	12.9	B	37.0	E
Plus Roundabout					*8.0*	*A*	*20.9*	*C*
6. Southwest Blvd/Seed Farm Dr	12.8	B	18.8	B	16.8	B	19.2	B

Notes: Delay is measured in average seconds per vehicle; LOS = Level of Service

Future Conditions

Future traffic volumes were projected for the overall peak hour based upon existing traffic volumes and the level of growth projected in the Sonoma County Travel Model (SCTM/07), which is maintained by the SCTA, as supplied to W-Trans in May 2009. The model is a mathematical representation of existing main roadways and land uses as well as projects for future land use and roadway networks based upon the City's General Plan. The projected future intersection volumes are shown on Figure 2 and an image of the study area within the model is enclosed. Upon review it was determined that the model did not include the Commerce Boulevard widening nor the Seed Farm Drive extension, so the resulting volumes would reflect conditions if these projects were deleted from the PFFP, as is being considered.

Based upon projected future traffic volumes, all of the study intersections are expected to operate acceptably with the exception of Commerce Boulevard/Southwest Boulevard. The study segment along Commerce Boulevard is expected to operate acceptably at LOS C with an average travel speed of 21.9 mph. The intersection results are summarized in Table 1 and copies of the calculations are enclosed.

In the *Corridor Improvements Traffic Study* completed by W-Trans in November 2008, the intersection of Commerce Boulevard/Southwest Boulevard was studied in detail, with one finding that the intersection would operate unacceptably at LOS E under future conditions. The study included a recommendation that the intersection be converted to a roundabout, which would be expected to improve operations to an acceptable level. This recommendation remains unchanged; it is further recommended that installation of a roundabout at this intersection be added to the PFFP. A single-lane roundabout would be expected to operate acceptably at LOS A during the a.m. peak hour and LOS C during the p.m. peak hour. Calculations for conditions with a roundabout are enclosed.

PFFP Roadway Improvements Capacity Evaluation

Seed Farm Drive Extension

Regarding *vehicular capacity* the proposed extension of Seed Farm Drive was not included in the SCTM/07 model. Therefore, traffic volume projections within the model were developed with the underlying assumption that this segment would not exist, and such volumes were dispersed to other vicinity road segments, primarily the nearby parallel road, State Farm Drive. Similarly, future traffic was assumed to utilize other area intersections rather than the non-existent and unplanned intersections of Rohnert Park Expressway/Seed Farm Drive and Enterprise Drive/Seed Farm Drive. These "other area intersections" include Rohnert Park Expressway/State Farm Drive, Enterprise Drive/State Farm Drive, and Seed Farm Drive/Southwest Boulevard.

Since intersections are the locations along a corridor where the majority of turning and crossing movements occur, intersections are predominantly the limiting factor in roadway capacity. Further, the volume of traffic that can be accommodated is generally considerably higher for segments than at the intersections at either end; if the intersections along a segment operate acceptably the connecting segment would typically be expected to operate acceptably as well. Since all of the study intersections in proximity to the Seed Farm Drive extension are projected to operate acceptably under future conditions, as shown in Table 1, the existing vicinity segments of State Farm Drive and Seed Farm Drive would be expected to operate acceptably under future conditions; this is true without the Seed Farm Drive extension, given that the model assumptions did not include the extension.

Additionally, the existing and projected Average Daily Traffic (ADT) volumes on adjacent roadways, as shown on the enclosed Figure 3, are consistent with traffic levels that would be appropriate for each affected type of street.

Based upon these considerations it was determined that the Seed Farm Drive extension is not necessary to ensure future acceptable operations for vehicular travel.

Regarding *pedestrian and bicycle travel*, in order to determine if removal of the Seed Farm Drive extension would have any effect, the City's *Pedestrian and Bicycle Master Plan,* which is part of a Countywide plan, was reviewed. The plan indicates that a Class I Multi-use Path is proposed to connect Seed Farm Drive between Enterprise Drive and Rohnert Park Expressway. This path is part of the regional SMART trail that is proposed to run parallel to the railroad. Removal of the Seed Farm Drive extension is not expected to impact plans to build this path. The *Pedestrian and Bicycle Mast Plan* map for Rohnert Park is enclosed.

Commerce Boulevard Widening between Enterprise Drive and Southwest Boulevard

Regarding *vehicular capacity*, a segment capacity analysis was performed for the existing lane configuration of the study segment of Commerce Boulevard, including single through lanes in each direction. Additional lanes at specific locations were included, such as the southbound left-turn lanes at Enterprise Drive, Avram Avenue and Alison Avenue, and northbound right-turn lane at Alison Avenue. Finally, the stop/yield controls at the intersection of Commerce Boulevard/Southwest Boulevard were considered. It is projected that this segment of Commerce Boulevard will continue to operate acceptably at LOS C with this configuration and future traffic volumes. Because of these projected acceptable operations, the planned widening of this segment appears to be unnecessary from a traffic capacity perspective.

It should be noted that the HCM methodology utilized to analyze this segment is recommended for segments of at least one to two miles in length and this segment of Commerce Boulevard is less than one mile, or 0.6 miles in length. However, as with the Seed Farm Drive extension evaluation, if intersections operate acceptably it is expected that the adjacent corridor will also operate acceptably, so it is important that acceptable intersection operations are maintained to ensure acceptable segment operations. For this reason, it is important to reiterate the above recommendation to install a roundabout at the intersection of Commerce Boulevard/Southwest Boulevard. A single lane roundabout would be expected to provide acceptable intersection operation and maintain acceptable segment operations under future traffic conditions with the existing segment lane configuration.

Additionally, as with the Seed Farm Drive extension, the existing and projected ADTs on Commerce Boulevard are within a range that is considered appropriate for a two-lane facility with turn lanes at major intersections.

Regarding *pedestrian and bicycle travel*, currently there is a northbound Class II Bicycle Lane on Commerce Boulevard, and sidewalk exists on the majority of the east side of the segment. There is currently a Class I Multi-use Path on the west side of the street which serves pedestrians and southbound cyclists. The improvements identified in the PFFP include installation of a six-foot bicycle lane for southbound travel, together with a contiguous sidewalk on the west side of the street, which would duplicate the existing conditions for the northbound travel on the east side of the street. However, it is unclear if these proposed improvements would replace the existing Class I path or create duplicate southbound facilities. The street cross-section from the PFPP is enclosed.

It should be noted that the *Pedestrian and Bicycle Master Plan* shows existing Class I and Class II facilities for this segment.

While it appears to be unnecessary to widen Commerce Boulevard for vehicular capacity, it is recommended that pedestrian and bicycle facilities continue to be addressed in the PFFP.

Consistency with Recent Environmental Documents

As noted above, the SCTM/07 travel demand model does not include either the Seed Farm Drive extension or the widening of Commerce Boulevard. The predecessor to the SCTM/07 model was also reviewed, and it was determined that neither improvement was included in that model. These two travel demand models have formed the basis for the Environmental Impact Report (EIR) traffic analyses that are in-process or have been conducted over the past several years for projects in Rohnert Park, including those for University District, Northeast Area, Southeast Area, Canon Manor, Stadium Area, Sonoma Mountain Village, Walmart, and Wilfred-Dowdell. The traffic analyses conducted for these EIRs would therefore remain valid if the City chooses to remove the Seed Farm Drive extension and Commerce Boulevard widening projects from the PFFP.

Conclusions and Recommendations

- All study intersections and segment currently operate acceptably.
- Based on projected future volumes, all of the study intersections and segment are expected to operate acceptably in their current configurations with the exception of the intersection of Commerce Boulevard/Southwest Boulevard.
- A single-lane roundabout at the intersection of Commerce Boulevard/Southwest Boulevard would be expected to operate acceptably under future volumes. A roundabout at this intersection would also allow the Commerce Boulevard segment to the north to operate acceptably without widening. It is therefore recommended that installation of a single-lane roundabout at Commerce Boulevard/Southwest Boulevard be added to the PFFP.
- Subject to the installation of a single-lane roundabout at the intersection of Commerce Boulevard/Southwest Boulevard, the Commerce Boulevard widening project may be removed from the PFFP with less-than-significant impacts on vicinity roadways and intersections.
- Since all the study intersections in proximity of Seed Farm Drive extension are projected to operate acceptably under future conditions, and given that this extension was not included in regional traffic modeling assumptions, the Seed Farm Drive extension can be removed from the PFFP with less-than-significant impacts on vicinity roadways and intersections.
- Removal of the Seed Farm Drive extension from the PFFP is not expected to impact planned bicycle or pedestrian circulation improvements.
- It is recommended that bicycle and pedestrian facilities along the study segment of Commerce Boulevard continue to be addressed in future updates to the PFFP.
- The traffic projections utilized in ongoing and recent Rohnert Park EIRs utilized the SCTA travel demand model, which does not include either of the two roadway projects that were the focus of

this evaluation. Consequently, the traffic analyses for these EIRs would remain valid should the City remove the two projects from the PFFP.

Thank you for contacting W-Trans for these services. Please feel free to call have any questions.

Sincerely,

Tony Henderson, EIT
Assistant Transportation Engineer

Mary Jo Yung, P.E., PTOE
Associate

MJY/tdh/RPA907-20.L1

Enclosures: 2006 PFFP – Figures 2.1 and 2.3
Figure 1 – Study Area and Existing Traffic Volumes
Level of Service Calculations
Sonoma County Travel Model – Study Area
Figure 2 – Future Traffic Volumes
Figure 3 – Average Daily Traffic
SCTA Countywide Bicycle and Pedestrian Master Plan – Rohnert Park and Vicinity Map
2006 PFFP – Proposed Commerce Boulevard Cross-section

FIGURE 2.1
Rohnert Park Finance Plan
Roadway Improvements Key Map

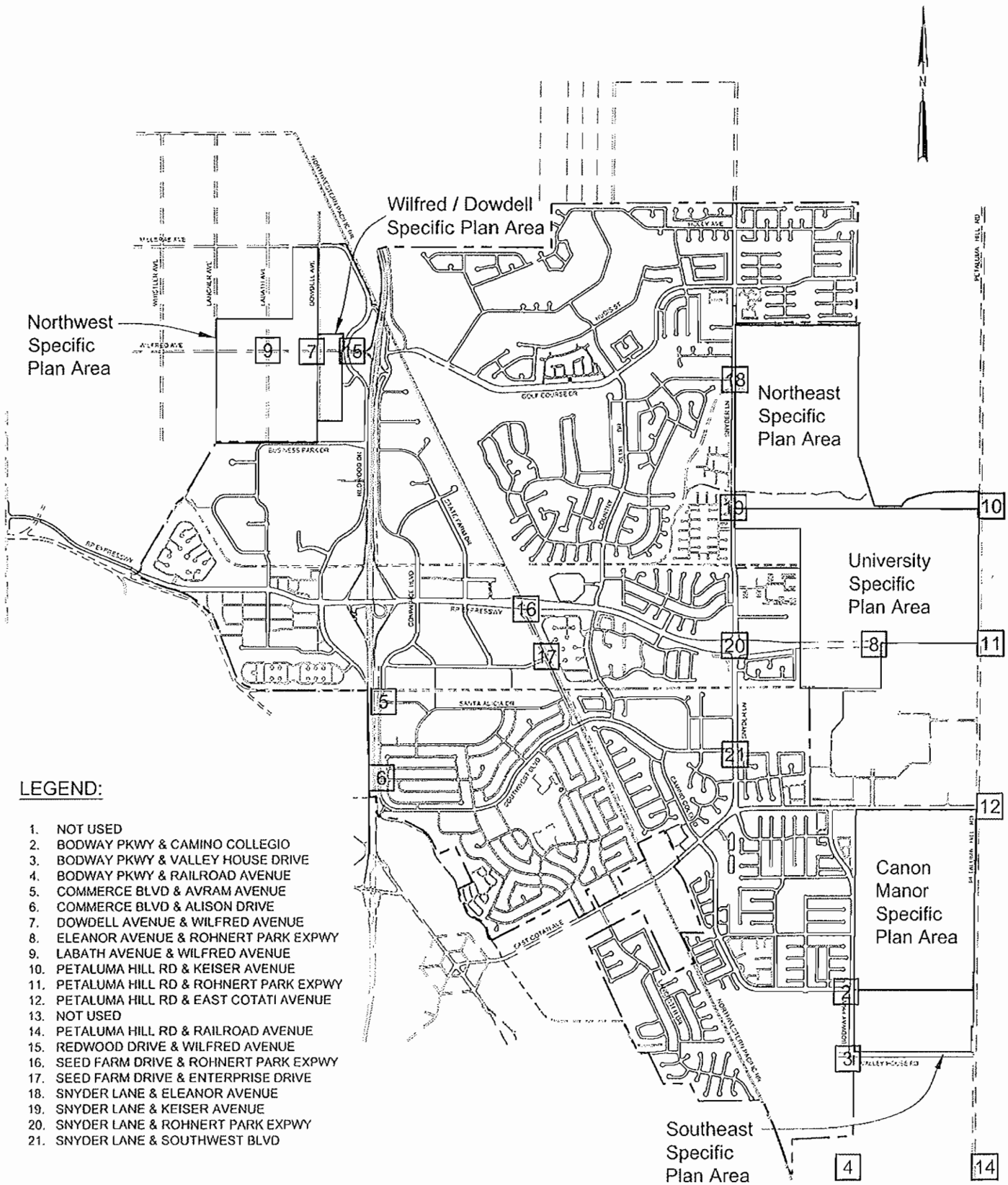
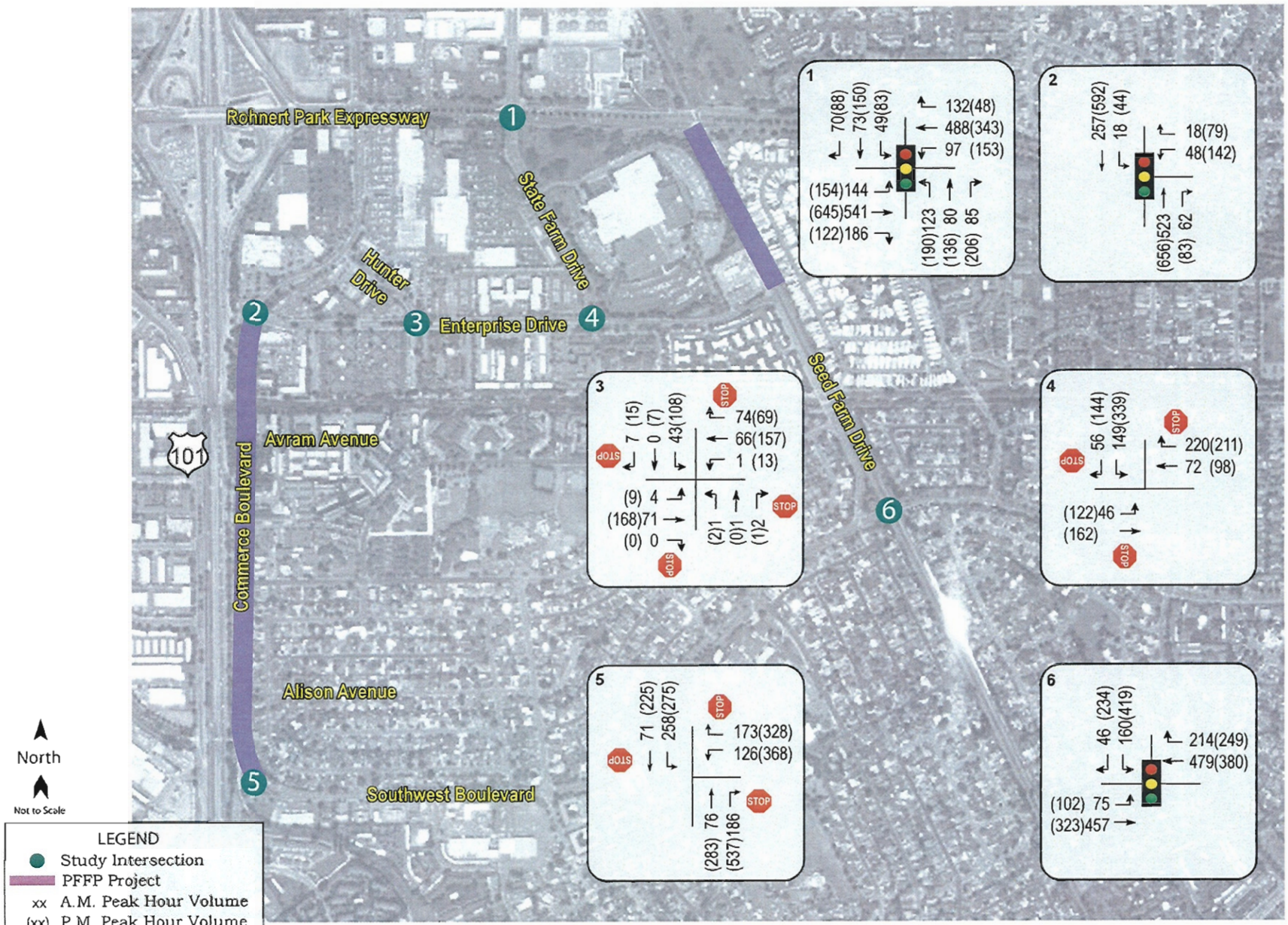


FIGURE 2.3
Rohnert Park Finance Plan
Traffic Signal Improvements Key Map



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Review of Traffic Capacity Needs for Two Future Road Projects

Figure 1

City of Rohnert Park

Study Area and Existing Traffic Volumes

AM Peak Hour - Existing Conditions
Traffic Capacity Needs for Two Future Roadway Projects
City of Rohnert Park

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #1 Rohnert Park Expwy/State Farm Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.337
Loss Time (sec):	8 (Y+R=4.0 sec)	Average Delay (sec/veh):	24.9
Optimal Cycle:	25	Level Of Service:	C

Street Name:	State Farm Dr						Rohnert Park Expwy					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	1	1 0	1	1	0 1	0	1 0	2 0	1	1 0	2 0 1
Volume Module:												
Base Vol:	123	80	85	49	73	70	144	541	186	97	488	132
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	123	80	85	49	73	70	144	541	186	97	488	132
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	123	80	85	49	73	70	144	541	186	97	488	132
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	123	80	85	49	73	70	144	541	186	97	488	132
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	123	80	85	49	73	70	144	541	186	97	488	132
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.85	0.89	0.89	0.89	0.95	0.95	0.85	0.95	0.95	0.85
Lanes:	1.82	1.18	1.00	1.00	1.02	0.98	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	3186	2072	1615	1684	1719	1648	1805	3610	1615	1805	3610	1615
Capacity Analysis Module:												
Vol/Sat:	0.04	0.04	0.05	0.03	0.04	0.04	0.08	0.15	0.12	0.05	0.14	0.08
Crit Moves:			****			****	****				****	
Green/Cycle:	0.16	0.16	0.16	0.13	0.13	0.13	0.24	0.47	0.47	0.17	0.40	0.40
Volume/Cap:	0.25	0.25	0.34	0.23	0.34	0.34	0.34	0.32	0.25	0.32	0.34	0.20
Delay/Veh:	37.2	37.2	38.4	39.5	40.2	40.2	32.1	16.7	16.1	37.2	20.9	19.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	37.2	37.2	38.4	39.5	40.2	40.2	32.1	16.7	16.1	37.2	20.9	19.7
LOS by Move:	D	D	D	D	D	D	C	B	B	D	C	B
HCM2k95thQ:	4	4	5	3	5	5	8	11	7	6	11	5

Note: Queue reported is the number of cars per lane.

PM Peak Hour - Existing Conditions
Traffic Capacity Needs for Two Future Roadway Projects
City of Rohnert Park

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #1 Rohnert Park Expwy/State Farm Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.501
Loss Time (sec):	8 (Y+R=4.0 sec)	Average Delay (sec/veh):	30.4
Optimal Cycle:	32	Level Of Service:	C

Street Name:	State Farm Dr						Rohnert Park Expwy					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	1	1 0	1	1	0 1	0	1 0	2 0	1	1 0	2 0 1
Volume Module:												
Base Vol:	190	136	206	83	150	88	154	645	122	153	343	48
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	190	136	206	83	150	88	154	645	122	153	343	48
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	190	136	206	83	150	88	154	645	122	153	343	48
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	190	136	206	83	150	88	154	645	122	153	343	48
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	190	136	206	83	150	88	154	645	122	153	343	48
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.85	0.90	0.90	0.90	0.95	0.95	0.85	0.95	0.95	0.85
Lanes:	1.75	1.25	1.00	1.00	1.26	0.74	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	3068	2196	1615	1708	2154	1263	1805	3610	1615	1805	3610	1615
Capacity Analysis Module:												
Vol/Sat:	0.06	0.06	0.13	0.05	0.07	0.07	0.09	0.18	0.08	0.08	0.10	0.03
Crit Moves:			****			****		****		****		
Green/Cycle:	0.25	0.25	0.25	0.14	0.14	0.14	0.25	0.36	0.36	0.17	0.28	0.28
Volume/Cap:	0.24	0.24	0.50	0.35	0.50	0.50	0.34	0.50	0.21	0.50	0.34	0.11
Delay/Veh:	29.7	29.7	32.8	39.2	40.5	40.5	31.3	25.5	22.6	39.0	29.1	27.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	29.7	29.7	32.8	39.2	40.5	40.5	31.3	25.5	22.6	39.0	29.1	27.0
LOS by Move:	C	C	C	D	D	D	C	C	C	D	C	C
HCM2k95thQ:	6	6	11	5	8	8	8	16	5	9	9	2

Note: Queue reported is the number of cars per lane.

AM Peak Hour - Existing Conditions
Traffic Capacity Needs for Two Future Roadway Projects
City of Rohnert Park

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #2 Commerce Dr/Enterprise Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.200
Loss Time (sec):	6 (Y+R=4.0 sec)	Average Delay (sec/veh):	5.5
Optimal Cycle:	18	Level Of Service:	A

Street Name:	Commerce Dr						Enterprise Dr					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1	1 0	1	0 2	0 0	0 0	0	0 0	2	0 0	0 1
Volume Module:												
Base Vol:	0	523	62	18	257	0	0	0	0	48	0	18
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	523	62	18	257	0	0	0	0	48	0	18
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	523	62	18	257	0	0	0	0	48	0	18
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	523	62	18	257	0	0	0	0	48	0	18
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	523	62	18	257	0	0	0	0	48	0	18
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.93	0.93	0.95	0.95	1.00	1.00	1.00	1.00	0.92	1.00	0.85
Lanes:	0.00	1.79	0.21	1.00	2.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	0	3176	376	1805	3610	0	0	0	0	3502	0	1615
Capacity Analysis Module:												
Vol/Sat:	0.00	0.16	0.16	0.01	0.07	0.00	0.00	0.00	0.00	0.01	0.00	0.01
Crit Moves:		****		****						****		
Green/Cycle:	0.00	0.82	0.82	0.05	0.87	0.00	0.00	0.00	0.00	0.07	0.00	0.07
Volume/Cap:	0.00	0.20	0.20	0.20	0.08	0.00	0.00	0.00	0.00	0.20	0.00	0.16
Delay/Veh:	0.0	1.9	1.9	46.7	0.9	0.0	0.0	0.0	0.0	44.4	0.0	44.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	1.9	1.9	46.7	0.9	0.0	0.0	0.0	0.0	44.4	0.0	44.6
LOS by Move:	A	A	A	D	A	A	A	A	A	D	A	D
HCM2k95thQ:	0	4	4	2	1	0	0	0	0	2	0	1

Note: Queue reported is the number of cars per lane.

PM Peak Hour - Existing Conditions
Traffic Capacity Needs for Two Future Roadway Projects
City of Rohnert Park

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #2 Commerce Dr/Enterprise Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.300
Loss Time (sec):	6 (Y+R=4.0 sec)	Average Delay (sec/veh):	10.2
Optimal Cycle:	20	Level Of Service:	B

Street Name:	Commerce Dr						Enterprise Dr					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1	1 0	1	0 2	0 0	0 0	0	0 0	2	0 0	0 1
Volume Module:												
Base Vol:	0	656	83	44	592	0	0	0	0	142	0	79
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	656	83	44	592	0	0	0	0	142	0	79
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	656	83	44	592	0	0	0	0	142	0	79
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	656	83	44	592	0	0	0	0	142	0	79
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	656	83	44	592	0	0	0	0	142	0	79
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.93	0.93	0.95	0.95	1.00	1.00	1.00	1.00	0.92	1.00	0.85
Lanes:	0.00	1.78	0.22	1.00	2.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	0	3150	399	1805	3610	0	0	0	0	3502	0	1615
Capacity Analysis Module:												
Vol/Sat:	0.00	0.21	0.21	0.02	0.16	0.00	0.00	0.00	0.00	0.04	0.00	0.05
Crit Moves:		****		****								****
Green/Cycle:	0.00	0.70	0.70	0.08	0.78	0.00	0.00	0.00	0.00	0.16	0.00	0.16
Volume/Cap:	0.00	0.30	0.30	0.30	0.21	0.00	0.00	0.00	0.00	0.25	0.00	0.30
Delay/Veh:	0.0	5.9	5.9	44.4	3.0	0.0	0.0	0.0	0.0	36.7	0.0	37.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	5.9	5.9	44.4	3.0	0.0	0.0	0.0	0.0	36.7	0.0	37.4
LOS by Move:	A	A	A	D	A	A	A	A	A	D	A	D
HCM2k95thQ:	0	9	9	3	5	0	0	0	0	4	0	5

Note: Queue reported is the number of cars per lane.

AM Peak Hour - Existing Conditions
Traffic Capacity Needs for Two Future Roadway Projects
City of Rohnert Park

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #3 Enterprise Dr/Hunter Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.093
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	7.5
Optimal Cycle:	0	Level Of Service:	A

Street Name:	Hunter Dr						Enterprise Dr					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	1! 0	0	0	1! 0	0	1	0 1	0	1	0 1
Volume Module:												
Base Vol:	1	1	2	43	0	7	4	71	0	1	66	74
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	1	1	2	43	0	7	4	71	0	1	66	74
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	1	1	2	43	0	7	4	71	0	1	66	74
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1	1	2	43	0	7	4	71	0	1	66	74
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	1	1	2	43	0	7	4	71	0	1	66	74
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.25	0.25	0.50	0.86	0.00	0.14	0.11	1.89	0.00	0.01	0.99	1.00
Final Sat.:	206	206	411	668	0	109	79	1419	0	11	750	894
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.06	xxxx	0.06	0.05	0.05	xxxx	0.09	0.09	0.08
Crit Moves:		****		****			****			****		
Delay/Veh:	7.2	7.2	7.2	7.8	0.0	7.8	7.7	7.7	0.0	7.8	7.8	7.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	7.2	7.2	7.2	7.8	0.0	7.8	7.7	7.7	0.0	7.8	7.8	7.0
LOS by Move:	A	A	A	A	*	A	A	A	*	A	A	A
ApproachDel:		7.2			7.8			7.7			7.4	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		7.2			7.8			7.7			7.4	
LOS by Appr:		A			A			A			A	
AllWayAvgQ:	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

Note: Queue reported is the number of cars per lane.

PM Peak Hour - Existing Conditions
Traffic Capacity Needs for Two Future Roadway Projects
City of Rohnert Park

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #3 Enterprise Dr/Hunter Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.188
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	8.6
Optimal Cycle:	0	Level Of Service:	A

Street Name:	Hunter Dr						Enterprise Dr					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	1! 0	0	0	1! 0	0	1	0 1	0	1	0 1
Volume Module:												
Base Vol:	2	0	1	108	7	15	9	168	0	13	157	69
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	2	0	1	108	7	15	9	168	0	13	157	69
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	2	0	1	108	7	15	9	168	0	13	157	69
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	2	0	1	108	7	15	9	168	0	13	157	69
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	2	0	1	108	7	15	9	168	0	13	157	69
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.67	0.00	0.33	0.83	0.05	0.12	0.10	1.90	0.00	0.11	1.31	0.58
Final Sat.:	450	0	225	576	37	80	70	1317	0	76	946	443
Capacity Analysis Module:												
Vol/Sat:	0.00	xxxx	0.00	0.19	0.19	0.19	0.13	0.13	xxxx	0.17	0.17	0.16
Crit Moves:	****				****		****			****		
Delay/Veh:	8.0	0.0	8.0	9.0	9.0	9.0	8.5	8.5	0.0	8.8	8.6	8.1
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	8.0	0.0	8.0	9.0	9.0	9.0	8.5	8.5	0.0	8.8	8.6	8.1
LOS by Move:	A	*	A	A	A	A	A	A	*	A	A	A
ApproachDel:		8.0			9.0			8.5			8.4	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		8.0			9.0			8.5			8.4	
LOS by Appr:		A			A			A			A	
AllWayAvgQ:	0.0	0.0	0.0	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.2

Note: Queue reported is the number of cars per lane.

AM Peak Hour - Existing Conditions
Traffic Capacity Needs for Two Future Roadway Projects
City of Rohnert Park

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #4 Enterprise Dr/State Farm Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.284
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	9.2
Optimal Cycle:	0	Level Of Service:	A

Street Name:	State Farm Dr						Enterprise Dr					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0	0 0	1	0 0	0 1	1	0 1	0 0	0	0 1	0 1
Volume Module:												
Base Vol:	0	0	0	149	0	56	46	89	0	0	72	220
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	149	0	56	46	89	0	0	72	220
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	149	0	56	46	89	0	0	72	220
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	149	0	56	46	89	0	0	72	220
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	149	0	56	46	89	0	0	72	220
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Final Sat.:	0	0	0	580	0	716	599	654	0	0	672	776
Capacity Analysis Module:												
Vol/Sat:	xxxx	xxxx	xxxx	0.26	xxxx	0.08	0.08	0.14	xxxx	xxxx	0.11	0.28
Crit Moves:				****				****				****
Delay/Veh:	0.0	0.0	0.0	10.6	0.0	7.8	9.0	8.8	0.0	0.0	8.5	8.9
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	10.6	0.0	7.8	9.0	8.8	0.0	0.0	8.5	8.9
LOS by Move:	*	*	*	B	*	A	A	A	*	*	A	A
ApproachDel:	xxxxxx			9.8			8.9			8.8		
Delay Adj:	xxxxx			1.00			1.00			1.00		
ApprAdjDel:	xxxxxx			9.8			8.9			8.8		
LOS by Appr:	*			A			A			A		
AllWayAvgQ:	0.0	0.0	0.0	0.3	0.0	0.1	0.1	0.1	0.0	0.0	0.1	0.4

Note: Queue reported is the number of cars per lane.

PM Peak Hour - Existing Conditions
Traffic Capacity Needs for Two Future Roadway Projects
City of Rohnert Park

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #4 Enterprise Dr/State Farm Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.626
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	13.4
Optimal Cycle:	0	Level Of Service:	B

Street Name:	State Farm Dr						Enterprise Dr					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0	0 0	1	0 0	0 1	1	0 1	0 0	0	0 1	0 1
Volume Module:												
Base Vol:	0	0	0	339	0	144	122	162	0	0	98	211
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	339	0	144	122	162	0	0	98	211
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	339	0	144	122	162	0	0	98	211
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	339	0	144	122	162	0	0	98	211
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	339	0	144	122	162	0	0	98	211
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Final Sat.:	0	0	0	541	0	653	511	551	0	0	549	618
Capacity Analysis Module:												
Vol/Sat:	xxxx	xxxx	xxxx	0.63	xxxx	0.22	0.24	0.29	xxxx	xxxx	0.18	0.34
Crit Moves:				****				****				****
Delay/Veh:	0.0	0.0	0.0	19.0	0.0	9.5	11.5	11.5	0.0	0.0	10.3	11.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	19.0	0.0	9.5	11.5	11.5	0.0	0.0	10.3	11.0
LOS by Move:	*	*	*	C	*	A	B	B	*	*	B	B
ApproachDel:	xxxxxx			16.1			11.5			10.8		
Delay Adj:	xxxxx			1.00			1.00			1.00		
ApprAdjDel:	xxxxxx			16.1			11.5			10.8		
LOS by Appr:	*			C			B			B		
AllWayAvgQ:	0.0	0.0	0.0	1.5	0.0	0.3	0.3	0.4	0.0	0.0	0.2	0.5

Note: Queue reported is the number of cars per lane.

AM Peak Hour - Existing Conditions
Traffic Capacity Needs for Two Future Roadway Projects
City of Rohnert Park

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #5 Commerce Blvd/Southwest Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.396
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	10.4
Optimal Cycle:	0	Level Of Service:	B

Street Name:	Commerce Blvd						Southwest Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Ignore			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0 1	0 1	1	0 1	0 0	0	0 0	0 0	1	0 0	0 1
Volume Module:												
Base Vol:	0	76	186	258	71	0	0	0	0	126	0	173
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	76	186	258	71	0	0	0	0	126	0	173
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	0	76	0	258	71	0	0	0	0	126	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	76	0	258	71	0	0	0	0	126	0	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	0	76	0	258	71	0	0	0	0	126	0	0
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	674	773	651	714	0	0	0	0	575	0	708
Capacity Analysis Module:												
Vol/Sat:	xxxx	0.11	0.00	0.40	0.10	xxxx	xxxx	xxxx	xxxx	0.22	xxxx	0.00
Crit Moves:		****		****						****		
Delay/Veh:	0.0	8.5	0.0	11.6	8.2	0.0	0.0	0.0	0.0	10.3	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	8.5	0.0	11.6	8.2	0.0	0.0	0.0	0.0	10.3	0.0	0.0
LOS by Move:	*	A	*	B	A	*	*	*	*	B	*	*
ApproachDel:		8.5			10.9			xxxxxx			10.3	
Delay Adj:		1.00			1.00			xxxxx			1.00	
ApprAdjDel:		8.5			10.9			xxxxxx			10.3	
LOS by Appr:		A			B			*			B	
AllWayAvgQ:	0.0	0.1	0.0	0.6	0.1	0.0	0.0	0.0	0.0	0.3	0.0	0.0

Note: Queue reported is the number of cars per lane.

PM Peak Hour - Existing Conditions
Traffic Capacity Needs for Two Future Roadway Projects
City of Rohnert Park

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #5 Commerce Blvd/Southwest Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.731
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	18.6
Optimal Cycle:	0	Level Of Service:	C

Street Name:	Commerce Blvd						Southwest Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Ignore			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0 1	0 1	1	0 1	0 0	0	0 0	0 0	1	0 0	0 1
Volume Module:												
Base Vol:	0	283	537	275	225	0	0	0	0	368	0	328
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	283	537	275	225	0	0	0	0	368	0	328
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	0	283	0	275	225	0	0	0	0	368	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	283	0	275	225	0	0	0	0	368	0	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	0	283	0	275	225	0	0	0	0	368	0	0
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	533	585	518	557	0	0	0	0	503	0	594
Capacity Analysis Module:												
Vol/Sat:	xxxx	0.53	0.00	0.53	0.40	xxxx	xxxx	xxxx	xxxx	0.73	xxxx	0.00
Crit Moves:		****		****						****		
Delay/Veh:	0.0	16.1	0.0	16.6	13.0	0.0	0.0	0.0	0.0	25.5	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	16.1	0.0	16.6	13.0	0.0	0.0	0.0	0.0	25.5	0.0	0.0
LOS by Move:	*	C	*	C	B	*	*	*	*	D	*	*
ApproachDel:		16.1			15.0			xxxxxx			25.5	
Delay Adj:		1.00			1.00			xxxxx			1.00	
ApprAdjDel:		16.1			15.0			xxxxxx			25.5	
LOS by Appr:		C			B			*			D	
AllWayAvgQ:	0.0	1.0	0.0	1.0	0.6	0.0	0.0	0.0	0.0	2.2	0.0	0.0

Note: Queue reported is the number of cars per lane.

AM Peak Hour - Existing Conditions
Traffic Capacity Needs for Two Future Roadway Projects
City of Rohnert Park

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #6 Southwest Blvd/Seed Farm Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.234
Loss Time (sec):	6 (Y+R=4.0 sec)	Average Delay (sec/veh):	12.8
Optimal Cycle:	18	Level Of Service:	B

Street Name:	Seed Farm Dr						Southwest Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0	0 0	2	0 0	0 1	1	0 2	0 0	0	0 2	0 1
Volume Module:												
Base Vol:	0	0	0	160	0	46	75	457	0	0	479	214
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	160	0	46	75	457	0	0	479	214
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	160	0	46	75	457	0	0	479	214
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	160	0	46	75	457	0	0	479	214
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	160	0	46	75	457	0	0	479	214
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.92	1.00	0.85	0.95	0.95	1.00	1.00	0.95	0.85
Lanes:	0.00	0.00	0.00	2.00	0.00	1.00	1.00	2.00	0.00	0.00	2.00	1.00
Final Sat.:	0	0	0	3502	0	1615	1805	3610	0	0	3610	1615
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.05	0.00	0.03	0.04	0.13	0.00	0.00	0.13	0.13
Crit Moves:				****			****				****	
Green/Cycle:	0.00	0.00	0.00	0.20	0.00	0.37	0.18	0.74	0.00	0.00	0.57	0.57
Volume/Cap:	0.00	0.00	0.00	0.23	0.00	0.08	0.23	0.17	0.00	0.00	0.23	0.23
Delay/Veh:	0.0	0.0	0.0	34.1	0.0	20.3	35.7	3.8	0.0	0.0	10.9	10.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	34.1	0.0	20.3	35.7	3.8	0.0	0.0	10.9	10.9
LOS by Move:	A	A	A	C	A	C	D	A	A	A	B	B
HCM2k95thQ:	0	0	0	5	0	2	4	4	0	0	8	7

Note: Queue reported is the number of cars per lane.

PM Peak Hour - Existing Conditions
Traffic Capacity Needs for Two Future Roadway Projects
City of Rohnert Park

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #6 Southwest Blvd/Seed Farm Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.351
Loss Time (sec):	6 (Y+R=4.0 sec)	Average Delay (sec/veh):	18.8
Optimal Cycle:	22	Level Of Service:	B

Street Name:	Seed Farm Dr						Southwest Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0	0 0	2	0 0	0 1	1	0 2	0 0	0	0 2	0 1
Volume Module:												
Base Vol:	0	0	0	419	0	234	102	323	0	0	380	249
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	419	0	234	102	323	0	0	380	249
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	419	0	234	102	323	0	0	380	249
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	419	0	234	102	323	0	0	380	249
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	419	0	234	102	323	0	0	380	249
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.92	1.00	0.85	0.95	0.95	1.00	1.00	0.95	0.85
Lanes:	0.00	0.00	0.00	2.00	0.00	1.00	1.00	2.00	0.00	0.00	2.00	1.00
Final Sat.:	0	0	0	3502	0	1615	1805	3610	0	0	3610	1615
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.12	0.00	0.14	0.06	0.09	0.00	0.00	0.11	0.15
Crit Moves:				****			****					****
Green/Cycle:	0.00	0.00	0.00	0.34	0.00	0.50	0.16	0.60	0.00	0.00	0.44	0.44
Volume/Cap:	0.00	0.00	0.00	0.35	0.00	0.29	0.35	0.15	0.00	0.00	0.24	0.35
Delay/Veh:	0.0	0.0	0.0	24.9	0.0	14.7	38.1	8.8	0.0	0.0	17.7	18.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	24.9	0.0	14.7	38.1	8.8	0.0	0.0	17.7	18.9
LOS by Move:	A	A	A	C	A	B	D	A	A	A	B	B
HCM2k95thQ:	0	0	0	10	0	8	6	5	0	0	8	10

Note: Queue reported is the number of cars per lane.

AM Peak Hour - Future Conditions
Traffic Capacity Needs for Two Future Roadway Projects
City of Rohnert Park

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #1 Rohnert Park Expwy/State Farm Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.679
Loss Time (sec):	8 (Y+R=4.0 sec)	Average Delay (sec/veh):	27.5
Optimal Cycle:	46	Level Of Service:	C

Street Name:	State Farm Dr						Rohnert Park Expwy					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	1	1 0	1	1	0 1 0	1	0	2 0 1	1	0	2 0 1
Volume Module:												
Base Vol:	125	129	148	152	166	127	267	1085	571	167	669	286
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	125	129	148	152	166	127	267	1085	571	167	669	286
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	125	129	148	152	166	127	267	1085	571	167	669	286
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	125	129	148	152	166	127	267	1085	571	167	669	286
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	125	129	148	152	166	127	267	1085	571	167	669	286
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.93	0.85	0.89	0.89	0.89	0.95	0.95	0.85	0.95	0.95	0.85
Lanes:	1.48	1.52	1.00	1.02	1.12	0.86	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	2601	2684	1615	1740	1900	1454	1805	3610	1615	1805	3610	1615
Capacity Analysis Module:												
Vol/Sat:	0.05	0.05	0.09	0.09	0.09	0.09	0.15	0.30	0.35	0.09	0.19	0.18
Crit Moves:			****		****				****	****		
Green/Cycle:	0.13	0.13	0.13	0.13	0.13	0.13	0.29	0.52	0.52	0.14	0.37	0.37
Volume/Cap:	0.36	0.36	0.68	0.68	0.68	0.68	0.51	0.58	0.68	0.68	0.51	0.49
Delay/Veh:	39.6	39.6	49.6	44.5	44.5	44.5	30.3	16.9	20.1	48.6	25.1	25.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	39.6	39.6	49.6	44.5	44.5	44.5	30.3	16.9	20.1	48.6	25.1	25.1
LOS by Move:	D	D	D	D	D	D	C	B	C	D	C	C
HCM2k95thQ:	6	6	11	11	11	11	14	22	24	12	16	13

Note: Queue reported is the number of cars per lane.

PM Peak Hour - Future Conditions
Traffic Capacity Needs for Two Future Roadway Projects
City of Rohnert Park

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #1 Rohnert Park Expwy/State Farm Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.682
Loss Time (sec):	8 (Y+R=4.0 sec)	Average Delay (sec/veh):	34.3
Optimal Cycle:	46	Level Of Service:	C

Street Name:	State Farm Dr						Rohnert Park Expwy					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	1	1 0	1	1	0 1 0	1	0	2 0 1	1	0	2 0 1
Volume Module:												
Base Vol:	202	246	259	259	156	232	268	783	122	153	650	154
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	202	246	259	259	156	232	268	783	122	153	650	154
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	202	246	259	259	156	232	268	783	122	153	650	154
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	202	246	259	259	156	232	268	783	122	153	650	154
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	202	246	259	259	156	232	268	783	122	153	650	154
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.93	0.85	0.88	0.88	0.88	0.95	0.95	0.85	0.95	0.95	0.85
Lanes:	1.35	1.65	1.00	1.25	0.75	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	2388	2908	1615	2089	1258	1673	1805	3610	1615	1805	3610	1615
Capacity Analysis Module:												
Vol/Sat:	0.08	0.08	0.16	0.12	0.12	0.14	0.15	0.22	0.08	0.08	0.18	0.10
Crit Moves:			****			****	****				****	
Green/Cycle:	0.24	0.24	0.24	0.20	0.20	0.20	0.22	0.35	0.35	0.14	0.26	0.26
Volume/Cap:	0.36	0.36	0.68	0.61	0.61	0.68	0.68	0.63	0.22	0.63	0.68	0.36
Delay/Veh:	32.1	32.1	39.9	37.3	37.3	38.9	40.8	28.3	23.3	45.9	35.1	30.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	32.1	32.1	39.9	37.3	37.3	38.9	40.8	28.3	23.3	45.9	35.1	30.5
LOS by Move:	C	C	D	D	D	D	D	C	C	D	D	C
HCM2k95thQ:	8	8	16	13	13	15	16	20	5	11	19	8

Note: Queue reported is the number of cars per lane.

AM Peak Hour - Future Conditions
Traffic Capacity Needs for Two Future Roadway Projects
City of Rohnert Park

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #2 Commerce Dr/Enterprise Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.226
Loss Time (sec):	6 (Y+R=4.0 sec)	Average Delay (sec/veh):	5.4
Optimal Cycle:	18	Level Of Service:	A

Street Name:	Commerce Dr						Enterprise Dr					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1	1 0	1	0 2	0 0	0	0 0	0 0	2	0 0	0 1
Volume Module:												
Base Vol:	0	585	70	24	346	0	0	0	0	51	0	19
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	585	70	24	346	0	0	0	0	51	0	19
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	585	70	24	346	0	0	0	0	51	0	19
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	585	70	24	346	0	0	0	0	51	0	19
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	585	70	24	346	0	0	0	0	51	0	19
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.93	0.93	0.95	0.95	1.00	1.00	1.00	1.00	0.92	1.00	0.85
Lanes:	0.00	1.79	0.21	1.00	2.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	0	3173	380	1805	3610	0	0	0	0	3502	0	1615
Capacity Analysis Module:												
Vol/Sat:	0.00	0.18	0.18	0.01	0.10	0.00	0.00	0.00	0.00	0.01	0.00	0.01
Crit Moves:		****		****						****		
Green/Cycle:	0.00	0.82	0.82	0.06	0.88	0.00	0.00	0.00	0.00	0.06	0.00	0.06
Volume/Cap:	0.00	0.23	0.23	0.23	0.11	0.00	0.00	0.00	0.00	0.23	0.00	0.18
Delay/Veh:	0.0	2.1	2.1	46.0	0.9	0.0	0.0	0.0	0.0	44.9	0.0	45.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	2.1	2.1	46.0	0.9	0.0	0.0	0.0	0.0	44.9	0.0	45.1
LOS by Move:	A	A	A	D	A	A	A	A	A	D	A	D
HCM2k95thQ:	0	5	5	2	2	0	0	0	0	2	0	1

Note: Queue reported is the number of cars per lane.

PM Peak Hour - Future Conditions
Traffic Capacity Needs for Two Future Roadway Projects
City of Rohnert Park

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #2 Commerce Dr/Enterprise Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.356
Loss Time (sec):	6 (Y+R=4.0 sec)	Average Delay (sec/veh):	10.8
Optimal Cycle:	22	Level Of Service:	B

Street Name:	Commerce Dr						Enterprise Dr					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1	1 0	1	0 2	0 0	0	0 0	0 0	2	0 0	0 1
Volume Module:												
Base Vol:	0	732	104	73	841	0	0	0	0	161	0	94
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	732	104	73	841	0	0	0	0	161	0	94
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	732	104	73	841	0	0	0	0	161	0	94
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	732	104	73	841	0	0	0	0	161	0	94
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	732	104	73	841	0	0	0	0	161	0	94
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.93	0.93	0.95	0.95	1.00	1.00	1.00	1.00	0.92	1.00	0.85
Lanes:	0.00	1.75	0.25	1.00	2.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	0	3101	441	1805	3610	0	0	0	0	3502	0	1615
Capacity Analysis Module:												
Vol/Sat:	0.00	0.24	0.24	0.04	0.23	0.00	0.00	0.00	0.00	0.05	0.00	0.06
Crit Moves:		****		****								****
Green/Cycle:	0.00	0.66	0.66	0.11	0.78	0.00	0.00	0.00	0.00	0.16	0.00	0.16
Volume/Cap:	0.00	0.36	0.36	0.36	0.30	0.00	0.00	0.00	0.00	0.28	0.00	0.36
Delay/Veh:	0.0	7.5	7.5	42.0	3.3	0.0	0.0	0.0	0.0	36.9	0.0	38.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	7.5	7.5	42.0	3.3	0.0	0.0	0.0	0.0	36.9	0.0	38.0
LOS by Move:	A	A	A	D	A	A	A	A	A	D	A	D
HCM2k95thQ:	0	11	11	5	8	0	0	0	0	5	0	6

Note: Queue reported is the number of cars per lane.

AM Peak Hour - Future Conditions
Traffic Capacity Needs for Two Future Roadway Projects
City of Rohnert Park

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #3 Enterprise Dr/Hunter Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.097
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	7.7
Optimal Cycle:	0	Level Of Service:	A

Street Name:	Hunter Dr						Enterprise Dr					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1!	0 0	0 0	1!	0 0	0 1	0 1	0	0 1	0 1	0
Volume Module:												
Base Vol:	1	2	2	53	0	10	17	75	0	2	66	77
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	1	2	2	53	0	10	17	75	0	2	66	77
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	1	2	2	53	0	10	17	75	0	2	66	77
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1	2	2	53	0	10	17	75	0	2	66	77
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	1	2	2	53	0	10	17	75	0	2	66	77
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.20	0.40	0.40	0.84	0.00	0.16	0.37	1.63	0.00	0.03	0.97	1.00
Final Sat.:	160	319	319	646	0	122	265	1199	0	21	729	880
Capacity Analysis Module:												
Vol/Sat:	0.01	0.01	0.01	0.08	xxxx	0.08	0.06	0.06	xxxx	0.10	0.09	0.09
Crit Moves:		****		****			****			****		
Delay/Veh:	7.3	7.3	7.3	7.9	0.0	7.9	8.0	7.8	0.0	7.9	7.9	7.1
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	7.3	7.3	7.3	7.9	0.0	7.9	8.0	7.8	0.0	7.9	7.9	7.1
LOS by Move:	A	A	A	A	*	A	A	A	*	A	A	A
ApproachDel:		7.3			7.9			7.9			7.5	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		7.3			7.9			7.9			7.5	
LOS by Appr:		A			A			A			A	
AllWayAvgQ:	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

Note: Queue reported is the number of cars per lane.

PM Peak Hour - Future Conditions
Traffic Capacity Needs for Two Future Roadway Projects
City of Rohnert Park

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #3 Enterprise Dr/Hunter Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.238
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	9.0
Optimal Cycle:	0	Level Of Service:	A

Street Name:	Hunter Dr						Enterprise Dr					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1!	0 0	0 0	1!	0 0	0 1	0 1	0	0 1	0 1	0
Volume Module:												
Base Vol:	3	0	1	122	11	27	18	206	0	13	180	80
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	3	0	1	122	11	27	18	206	0	13	180	80
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	3	0	1	122	11	27	18	206	0	13	180	80
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	3	0	1	122	11	27	18	206	0	13	180	80
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	3	0	1	122	11	27	18	206	0	13	180	80
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.75	0.00	0.25	0.76	0.07	0.17	0.16	1.84	0.00	0.09	1.32	0.59
Final Sat.:	472	0	157	513	46	113	107	1236	0	64	919	434
Capacity Analysis Module:												
Vol/Sat:	0.01	xxxx	0.01	0.24	0.24	0.24	0.17	0.17	xxxx	0.20	0.20	0.18
Crit Moves:	****			****			****			****		
Delay/Veh:	8.3	0.0	8.3	9.5	9.5	9.5	9.0	8.9	0.0	9.2	8.9	8.5
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	8.3	0.0	8.3	9.5	9.5	9.5	9.0	8.9	0.0	9.2	8.9	8.5
LOS by Move:	A	*	A	A	A	A	A	A	*	A	A	A
ApproachDel:		8.3			9.5			8.9			8.8	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		8.3			9.5			8.9			8.8	
LOS by Appr:		A			A			A			A	
AllWayAvgQ:	0.0	0.0	0.0	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2

Note: Queue reported is the number of cars per lane.

AM Peak Hour - Future Conditions
Traffic Capacity Needs for Two Future Roadway Projects
City of Rohnert Park

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #4 Enterprise Dr/State Farm Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.725
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	16.5
Optimal Cycle:	0	Level Of Service:	C

Street Name:	State Farm Dr						Enterprise Dr					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0	0 0	1	0	0 0 1	1	0 1	0 0	0	0 1	0 1
Volume Module:												
Base Vol:	0	0	0	398	0	58	46	107	0	0	73	341
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	398	0	58	46	107	0	0	73	341
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	398	0	58	46	107	0	0	73	341
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	398	0	58	46	107	0	0	73	341
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	398	0	58	46	107	0	0	73	341
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Final Sat.:	0	0	0	549	0	660	492	529	0	0	562	639
Capacity Analysis Module:												
Vol/Sat:	xxxx	xxxx	xxxx	0.72	xxxx	0.09	0.09	0.20	xxxx	xxxx	0.13	0.53
Crit Moves:				****				****				****
Delay/Veh:	0.0	0.0	0.0	23.4	0.0	8.4	10.3	10.7	0.0	0.0	9.7	13.8
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	23.4	0.0	8.4	10.3	10.7	0.0	0.0	9.7	13.8
LOS by Move:	*	*	*	C	*	A	B	B	*	*	A	B
ApproachDel:	xxxxxx			21.5			10.6			13.1		
Delay Adj:	xxxxx			1.00			1.00			1.00		
ApprAdjDel:	xxxxxx			21.5			10.6			13.1		
LOS by Appr:	*			C			B			B		
AllWayAvgQ:	0.0	0.0	0.0	2.2	0.0	0.1	0.1	0.2	0.0	0.0	0.1	1.0

Note: Queue reported is the number of cars per lane.

PM Peak Hour - Future Conditions
Traffic Capacity Needs for Two Future Roadway Projects
City of Rohnert Park

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #4 Enterprise Dr/State Farm Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.804
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	19.5
Optimal Cycle:	0	Level Of Service:	C

Street Name:	State Farm Dr						Enterprise Dr					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0	0 0	1	0	0 0 1	1	0 1	0 0	0	0 1	0 1
Volume Module:												
Base Vol:	0	0	0	403	0	144	144	191	0	0	135	364
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	403	0	144	144	191	0	0	135	364
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	403	0	144	144	191	0	0	135	364
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	403	0	144	144	191	0	0	135	364
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	403	0	144	144	191	0	0	135	364
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Final Sat.:	0	0	0	501	0	592	471	504	0	0	517	582
Capacity Analysis Module:												
Vol/Sat:	xxxx	xxxx	xxxx	0.80	xxxx	0.24	0.31	0.38	xxxx	xxxx	0.26	0.63
Crit Moves:				****				****				****
Delay/Veh:	0.0	0.0	0.0	31.9	0.0	10.4	13.2	13.6	0.0	0.0	11.7	17.8
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	31.9	0.0	10.4	13.2	13.6	0.0	0.0	11.7	17.8
LOS by Move:	*	*	*	D	*	B	B	B	*	*	B	C
ApproachDel:	xxxxxx			26.2			13.4			16.2		
Delay Adj:	xxxxx			1.00			1.00			1.00		
ApprAdjDel:	xxxxxx			26.2			13.4			16.2		
LOS by Appr:	*			D			B			C		
AllWayAvgQ:	0.0	0.0	0.0	3.1	0.0	0.3	0.4	0.6	0.0	0.0	0.3	1.5

Note: Queue reported is the number of cars per lane.

AM Peak Hour - Future Conditions
Traffic Capacity Needs for Two Future Roadway Projects
City of Rohnert Park

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #5 Commerce Blvd/Southwest Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.557
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	12.9
Optimal Cycle:	0	Level Of Service:	B

Street Name:	Commerce Blvd									Southwest Blvd								
Approach:	North Bound				South Bound				East Bound				West Bound					
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Stop Sign					Stop Sign				
Rights:	Ignore					Include					Include					Ignore				
Min. Green:	0		0		0	0		0		0	0		0		0	0		0		0
Lanes:	0	0	1	0	1	1	0	1	0	0	0	0	0	0	0	1	0	0	0	1
Volume Module:																				
Base Vol:	0	87	296			345	83	0			0	0	0			196	0	220		
Growth Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
Initial Bse:	0	87	296			345	83	0			0	0	0			196	0	220		
User Adj:	1.00	1.00	0.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	0.00		
PHF Adj:	1.00	1.00	0.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	0.00		
PHF Volume:	0	87	0			345	83	0			0	0	0			196	0	0		
Reduct Vol:	0	0	0			0	0	0			0	0	0			0	0	0		
Reduced Vol:	0	87	0			345	83	0			0	0	0			196	0	0		
PCE Adj:	1.00	1.00	0.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	0.00		
MLF Adj:	1.00	1.00	0.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	0.00		
FinalVolume:	0	87	0			345	83	0			0	0	0			196	0	0		
Saturation Flow Module:																				
Adjustment:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
Lanes:	0.00	1.00	1.00			1.00	1.00	0.00			0.00	0.00	0.00			1.00	0.00	1.00		
Final Sat.:	0	619	700			620	673	0			0	0	0			548	0	663		
Capacity Analysis Module:																				
Vol/Sat:	xxxx	0.14	0.00			0.56	0.12	xxxx			xxxx	xxxx	xxxx			0.36	xxxx	0.00		
Crit Moves:		****				****										****				
Delay/Veh:	0.0	9.2	0.0			15.2	8.6	0.0			0.0	0.0	0.0			12.3	0.0	0.0		
Delay Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
AdjDel/Veh:	0.0	9.2	0.0			15.2	8.6	0.0			0.0	0.0	0.0			12.3	0.0	0.0		
LOS by Move:	*	A	*			C	A	*			*	*	*			B	*	*		
ApproachDel:		9.2					13.9					xxxxxx					12.3			
Delay Adj:		1.00					1.00					xxxxx					1.00			
ApprAdjDel:		9.2					13.9					xxxxxx					12.3			
LOS by Appr:		A					B					*					B			
AllWayAvgQ:	0.0	0.2	0.0			1.2	0.1	0.0			0.0	0.0	0.0			0.5	0.0	0.0		

Note: Queue reported is the number of cars per lane.

PM Peak Hour - Future Conditions
Traffic Capacity Needs for Two Future Roadway Projects
City of Rohnert Park

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #5 Commerce Blvd/Southwest Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.945
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	37.0
Optimal Cycle:	0	Level Of Service:	E

Street Name:	Commerce Blvd									Southwest Blvd								
Approach:	North Bound				South Bound				East Bound				West Bound					
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Stop Sign					Stop Sign				
Rights:	Ignore					Include					Include					Ignore				
Min. Green:	0		0		0	0		0		0	0		0		0	0		0		0
Lanes:	0	0	1	0	1	1	0	1	0	0	0	0	0	0	0	1	0	0	0	1
Volume Module:																				
Base Vol:	0	285	537			425	341	0			0	0	0			447	0	413		
Growth Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
Initial Bse:	0	285	537			425	341	0			0	0	0			447	0	413		
User Adj:	1.00	1.00	0.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	0.00		
PHF Adj:	1.00	1.00	0.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	0.00		
PHF Volume:	0	285	0			425	341	0			0	0	0			447	0	0		
Reduct Vol:	0	0	0			0	0	0			0	0	0			0	0	0		
Reduced Vol:	0	285	0			425	341	0			0	0	0			447	0	0		
PCE Adj:	1.00	1.00	0.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	0.00		
MLF Adj:	1.00	1.00	0.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	0.00		
FinalVolume:	0	285	0			425	341	0			0	0	0			447	0	0		
Saturation Flow Module:																				
Adjustment:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
Lanes:	0.00	1.00	1.00			1.00	1.00	0.00			0.00	0.00	0.00			1.00	0.00	1.00		
Final Sat.:	0	478	525			488	520	0			0	0	0			473	0	551		
Capacity Analysis Module:																				
Vol/Sat:	xxxx	0.60	0.00			0.87	0.66	xxxx			xxxx	xxxx	xxxx			0.94	xxxx	0.00		
Crit Moves:		****				****										****				
Delay/Veh:	0.0	20.0	0.0			41.6	21.4	0.0			0.0	0.0	0.0			55.2	0.0	0.0		
Delay Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
AdjDel/Veh:	0.0	20.0	0.0			41.6	21.4	0.0			0.0	0.0	0.0			55.2	0.0	0.0		
LOS by Move:	*	C	*			E	C	*			*	*	*			F	*	*		
ApproachDel:		20.0					32.6					xxxxxx					55.2			
Delay Adj:		1.00					1.00					xxxxx					1.00			
ApprAdjDel:		20.0					32.6					xxxxxx					55.2			
LOS by Appr:		C					D					*					F			
AllWayAvgQ:	0.0	1.3	0.0			4.3	1.7	0.0			0.0	0.0	0.0			5.9	0.0	0.0		

Note: Queue reported is the number of cars per lane.

MOVEMENT SUMMARY

Site: Future AM (Single Lane)

Commerce Boulevard/Southwest Boulevard
Future AM Peak Hour
Roundabout

Movement Performance - Vehicles

Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance ft	Prop. Queued	Effective Stop Rate per veh	Average Speed mph
South	Northbound Commerce										
8T	T	87	2.0	0.397	4.5	LOS A	3.1	80.0	0.61	0.52	23.2
8R	R	296	2.0	0.398	7.6	LOS A	3.1	80.0	0.61	0.68	25.1
Approach		383	2.0	0.398	6.9	LOS A	3.1	80.0	0.61	0.64	24.7
East	Westbound Southwest										
1L	L	196	2.0	0.319	10.6	LOS B	2.6	65.7	0.30	0.67	23.9
6R	R	220	2.0	0.319	5.3	LOS A	2.6	65.7	0.30	0.44	26.5
Approach		416	2.0	0.319	7.8	LOS B	2.6	65.7	0.30	0.55	25.1
North	Southbound Commerce										
7L	L	345	2.0	0.375	10.6	LOS B	2.9	73.9	0.45	0.69	22.3
4T	T	83	2.0	0.376	4.1	LOS A	2.9	73.9	0.45	0.42	24.1
Approach		428	2.0	0.375	9.3	LOS B	2.9	73.9	0.45	0.64	22.6
All Vehicles		1227	2.0	0.398	8.0	LOS A	3.1	80.0	0.45	0.61	24.0

Level of Service (Aver. Int. Delay): LOS A. Based on average delay for all vehicle movements. LOS Method: Delay (HCM).
Level of Service (Worst Movement): LOS B. LOS Method for individual vehicle movements: Delay (HCM).
Approach LOS values are based on the worst delay for any vehicle movement.
Roundabout LOS Method: Same as Signalised Intersections.
Roundabout Capacity Model: SIDRA Standard.

MOVEMENT SUMMARY

Site: Future PM (Single Lane)

Commerce Boulevard/Southwest Boulevard
Future PM Peak Hour
Roundabout

Movement Performance - Vehicles

Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance ft	Prop. Queued	Effective Stop Rate per veh	Average Speed mph
South	Northbound Commerce										
8T	T	285	2.0	0.947	22.9	LOS C	25.8	654.4	1.00	1.47	14.8
8R	R	537	2.0	0.947	26.0	LOS C	25.8	654.4	1.00	1.40	16.1
Approach		822	2.0	0.948	24.9	LOS C	25.8	654.4	1.00	1.42	15.7
East	Westbound Southwest										
1L	L	447	2.0	0.836	17.4	LOS B	16.4	416.2	1.00	0.95	20.5
6R	R	413	2.0	0.834	12.0	LOS B	16.4	416.2	1.00	0.95	21.8
Approach		860	2.0	0.835	14.8	LOS B	16.4	416.2	1.00	0.95	21.1
North	Southbound Commerce										
7L	L	425	2.0	0.912	26.3	LOS C	21.3	541.4	1.00	1.36	16.2
4T	T	341	2.0	0.912	19.8	LOS B	21.3	541.4	1.00	1.36	16.5
Approach		766	2.0	0.911	23.4	LOS C	21.3	541.4	1.00	1.36	16.3
All Vehicles		2448	2.0	0.947	20.9	LOS C	25.8	654.4	1.00	1.24	17.5

Level of Service (Aver. Int. Delay): LOS C. Based on average delay for all vehicle movements. LOS Method: Delay (HCM).
Level of Service (Worst Movement): LOS C. LOS Method for individual vehicle movements: Delay (HCM).
Approach LOS values are based on the worst delay for any vehicle movement.
Roundabout LOS Method: Same as Signalised Intersections.
Roundabout Capacity Model: SIDRA Standard.

AM Peak Hour - Future Conditions
Traffic Capacity Needs for Two Future Roadway Projects
City of Rohnert Park

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #6 Southwest Blvd/Seed Farm Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.373
Loss Time (sec):	6 (Y+R=4.0 sec)	Average Delay (sec/veh):	16.8
Optimal Cycle:	22	Level Of Service:	B

Street Name:	Seed Farm Dr									Southwest Blvd								
Approach:	North Bound			South Bound			East Bound			West Bound								
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected			Protected			Protected			Protected								
Rights:		Include			Ovl			Include				Include						
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0						
Lanes:	0	0	0	0	0	2	0	0	0	1	1	0	2	0	0	0	0	2	0	1
Volume Module:																				
Base Vol:	0	0	0	396	0	99	91	550	0	0	585	302								
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
Initial Bse:	0	0	0	396	0	99	91	550	0	0	585	302								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Volume:	0	0	0	396	0	99	91	550	0	0	585	302								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
Reduced Vol:	0	0	0	396	0	99	91	550	0	0	585	302								
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
FinalVolume:	0	0	0	396	0	99	91	550	0	0	585	302								
Saturation Flow Module:																				
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900								
Adjustment:	1.00	1.00	1.00	0.92	1.00	0.85	0.95	0.95	1.00	1.00	0.95	0.85								
Lanes:	0.00	0.00	0.00	2.00	0.00	1.00	1.00	2.00	0.00	0.00	2.00	1.00								
Final Sat.:	0	0	0	3502	0	1615	1805	3610	0	0	3610	1615								
Capacity Analysis Module:																				
Vol/Sat:	0.00	0.00	0.00	0.11	0.00	0.06	0.05	0.15	0.00	0.00	0.16	0.19								
Crit Moves:				****			****					****								
Green/Cycle:	0.00	0.00	0.00	0.30	0.00	0.44	0.14	0.64	0.00	0.00	0.50	0.50								
Volume/Cap:	0.00	0.00	0.00	0.37	0.00	0.14	0.37	0.24	0.00	0.00	0.32	0.37								
Delay/Veh:	0.0	0.0	0.0	27.6	0.0	16.9	40.3	7.8	0.0	0.0	14.9	15.6								
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
AdjDel/Veh:	0.0	0.0	0.0	27.6	0.0	16.9	40.3	7.8	0.0	0.0	14.9	15.6								
LOS by Move:	A	A	A	C	A	B	D	A	A	A	B	B								
HCM2k95thQ:	0	0	0	10	0	4	6	7	0	0	11	11								

Note: Queue reported is the number of cars per lane.

PM Peak Hour - Future Conditions
Traffic Capacity Needs for Two Future Roadway Projects
City of Rohnert Park

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #6 Southwest Blvd/Seed Farm Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.506
Loss Time (sec):	6 (Y+R=4.0 sec)	Average Delay (sec/veh):	19.2
Optimal Cycle:	27	Level Of Service:	B

Street Name:	Seed Farm Dr									Southwest Blvd								
Approach:	North Bound			South Bound			East Bound			West Bound								
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected			Protected			Protected			Protected								
Rights:		Include			Ovl			Include				Include						
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0						
Lanes:	0	0	0	0	0	2	0	0	0	1	1	0	2	0	0	0	0	2	0	1
Volume Module:																				
Base Vol:	0	0	0	518	0	234	123	375	0	0	490	419								
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
Initial Bse:	0	0	0	518	0	234	123	375	0	0	490	419								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Volume:	0	0	0	518	0	234	123	375	0	0	490	419								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
Reduced Vol:	0	0	0	518	0	234	123	375	0	0	490	419								
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
FinalVolume:	0	0	0	518	0	234	123	375	0	0	490	419								
Saturation Flow Module:																				
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900								
Adjustment:	1.00	1.00	1.00	0.92	1.00	0.85	0.95	0.95	1.00	1.00	0.95	0.85								
Lanes:	0.00	0.00	0.00	2.00	0.00	1.00	1.00	2.00	0.00	0.00	2.00	1.00								
Final Sat.:	0	0	0	3502	0	1615	1805	3610	0	0	3610	1615								
Capacity Analysis Module:																				
Vol/Sat:	0.00	0.00	0.00	0.15	0.00	0.14	0.07	0.10	0.00	0.00	0.14	0.26								
Crit Moves:				****			****					****								
Green/Cycle:	0.00	0.00	0.00	0.29	0.00	0.43	0.13	0.65	0.00	0.00	0.51	0.51								
Volume/Cap:	0.00	0.00	0.00	0.51	0.00	0.34	0.51	0.16	0.00	0.00	0.26	0.51								
Delay/Veh:	0.0	0.0	0.0	29.8	0.0	19.5	41.9	7.0	0.0	0.0	13.8	16.5								
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
AdjDel/Veh:	0.0	0.0	0.0	29.8	0.0	19.5	41.9	7.0	0.0	0.0	13.8	16.5								
LOS by Move:	A	A	A	C	A	B	D	A	A	A	B	B								
HCM2k95thQ:	0	0	0	14	0	10	8	5	0	0	9	16								

Note: Queue reported is the number of cars per lane.

Phone:
E-Mail:

Fax:

PLANNING ANALYSIS

Analyst:	TDH
Agency/Co.:	W-Trans
Date Performed:	2/25/2010
Analysis Time Period:	Existing PM Peak Hour
Urban Street:	Commerce Blvd
Direction of Travel:	
Jurisdiction:	City of Rohnert Park
Analysis Year:	2010
Project ID:	RPA907-20

Traffic Characteristics

Annual average daily traffic, AADT	13750	vpd
Planning analysis hour factor, K	0.096	
Directional distribution factor, D	0.546	
Peak-hour factor, PHF	0.960	
Adjusted saturation flow rate	1800	pcphgpl
Percent turns from exclusive lanes	50	%

Roadway Characteristics

Number of through lanes one direction, N	1	
Free flow speed, FFS	35	mph
Urban class	3	
Section length	0.60	miles
Median	No	
Left-turn bays	No	

Signal Characteristics

Signalized intersections	3	
Arrival type, AT	3	
Signal type (k = 0.5 for planning)	Actuated	
Cycle length, C	80.0	sec
Effective green ratio, g/C	0.680	

Results

Annual average daily traffic, AADT	13750	vpd
Two-way hourly volume	1320	vph
Hourly directional volume	720	vph
Through-volume 15-min. flow rate	375	v
Running time	76.8	sec
v/c ratio	0.38	
Through capacity	978	vph
Progression factor, PF	1.000	
Uniform delay	5.5	sec
Filtering/metering factor, I	0.930	
Incremental delay	1.1	sec
Control delay	6.6	sec/v
Total travel speed, Sa	22.4	mph
Total urban street LOS	C	

HCS+: Urban Streets Release 5.4

Phone:
E-Mail:

Fax:

PLANNING ANALYSIS

Analyst:	TDH
Agency/Co.:	W-Trans
Date Performed:	2/25/2010
Analysis Time Period:	Future PM Peak Hour
Urban Street:	Commerce Blvd
Direction of Travel:	
Jurisdiction:	City of Rohnert Park
Analysis Year:	2035
Project ID:	RPA907-20

Traffic Characteristics

Annual average daily traffic, AADT	16350	vpd
Planning analysis hour factor, K	0.096	
Directional distribution factor, D	0.546	
Peak-hour factor, PHF	0.960	
Adjusted saturation flow rate	1800	pcphgpl
Percent turns from exclusive lanes	50	%

Roadway Characteristics

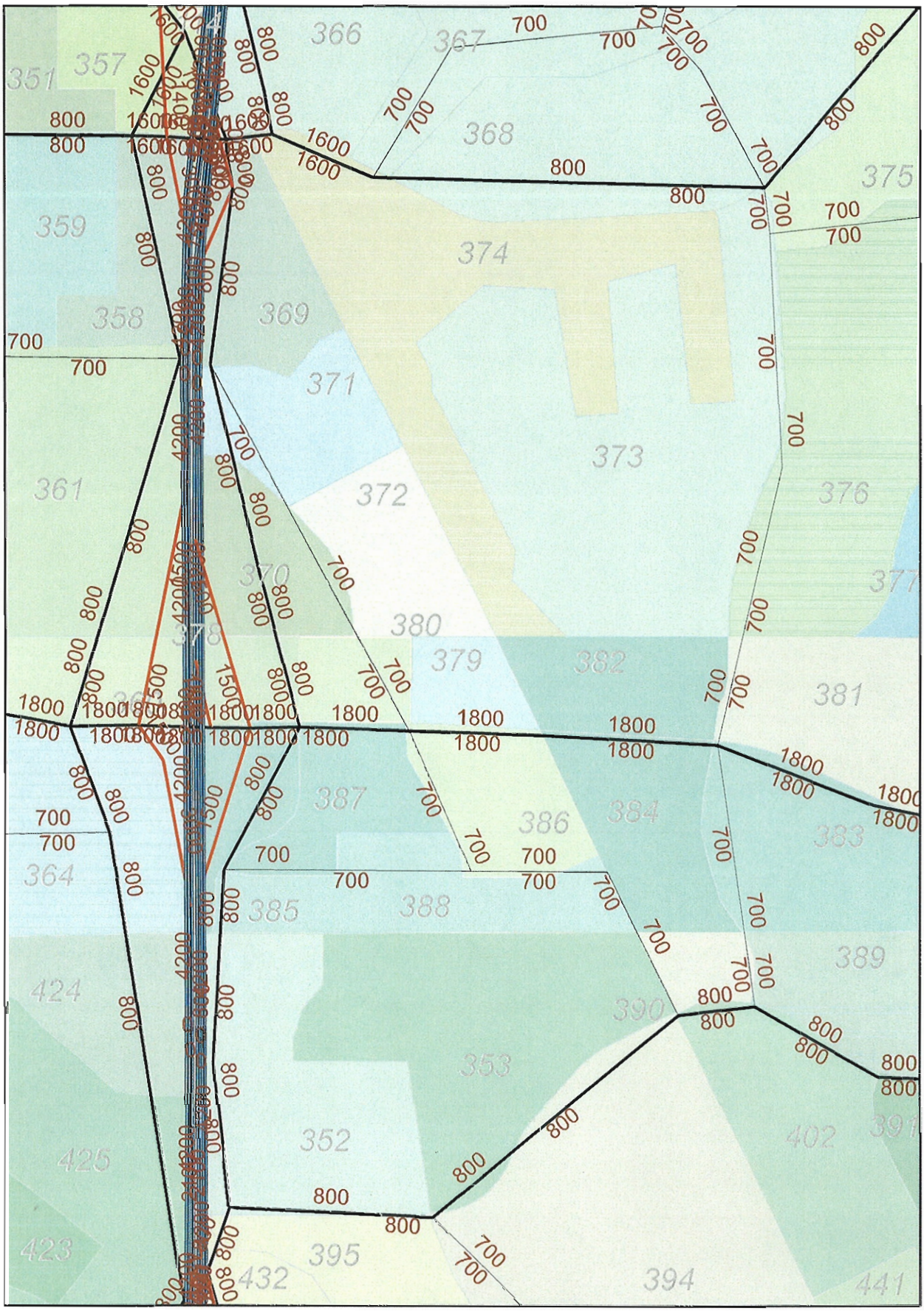
Number of through lanes one direction, N	1	
Free flow speed, FFS	35	mph
Urban class	3	
Section length	0.60	miles
Median	No	
Left-turn bays	No	

Signal Characteristics

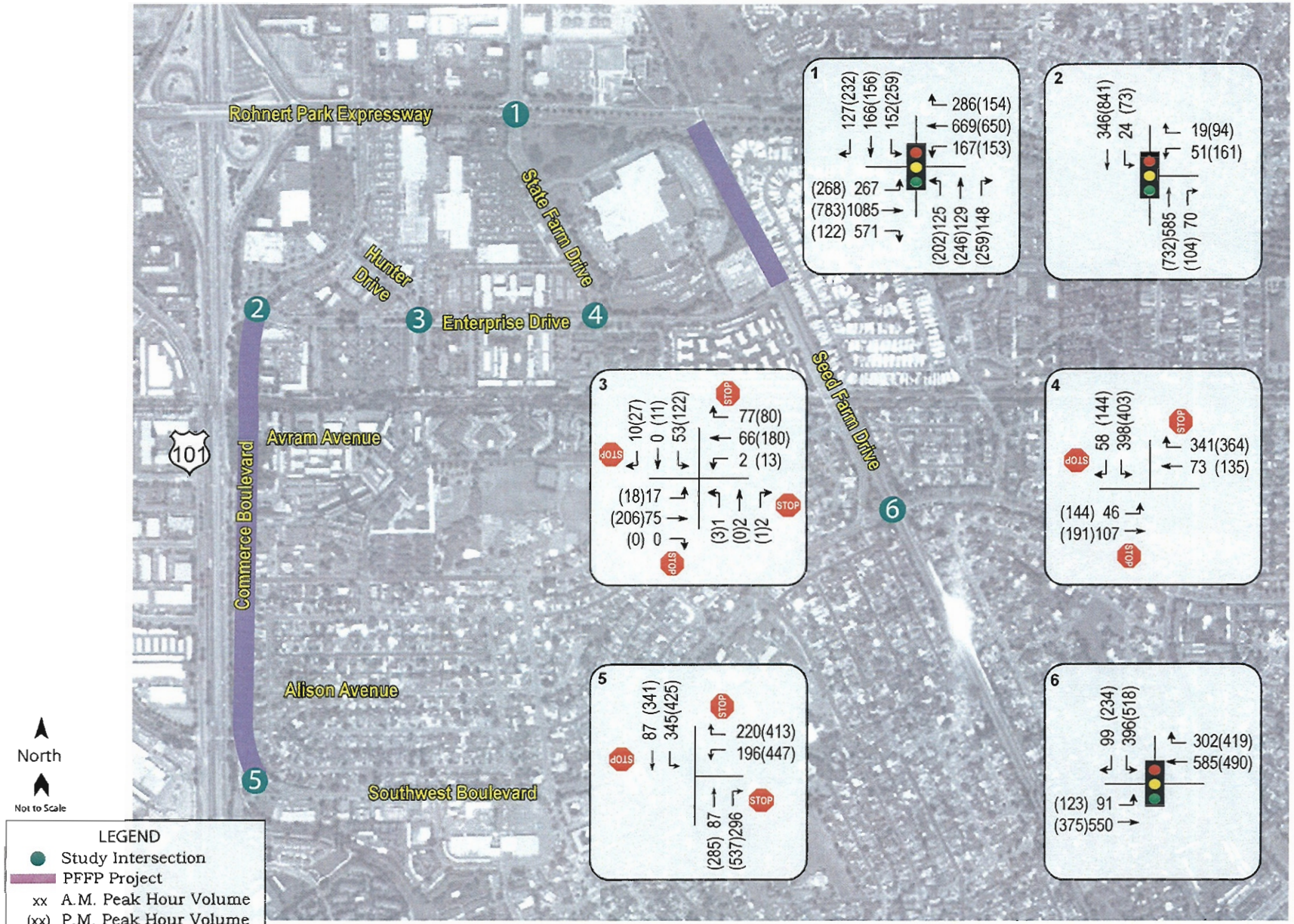
Signalized intersections	3	
Arrival type, AT	3	
Signal type (k = 0.5 for planning)	Actuated	
Cycle length, C	80.0	sec
Effective green ratio, g/C	0.680	

Results

Annual average daily traffic, AADT	16350	vpd
Two-way hourly volume	1569	vph
Hourly directional volume	856	vph
Through-volume 15-min. flow rate	445	v
Running time	76.8	sec
v/c ratio	0.46	
Through capacity	978	vph
Progression factor, PF	1.000	
Uniform delay	5.9	sec
Filtering/metering factor, I	0.890	
Incremental delay	1.4	sec
Control delay	7.3	sec/v
Total travel speed, Sa	21.9	mph
Total urban street LOS	C	



SCTA Model Year 2035 Rohnert Park Area
Assumed Roadway Capacitites



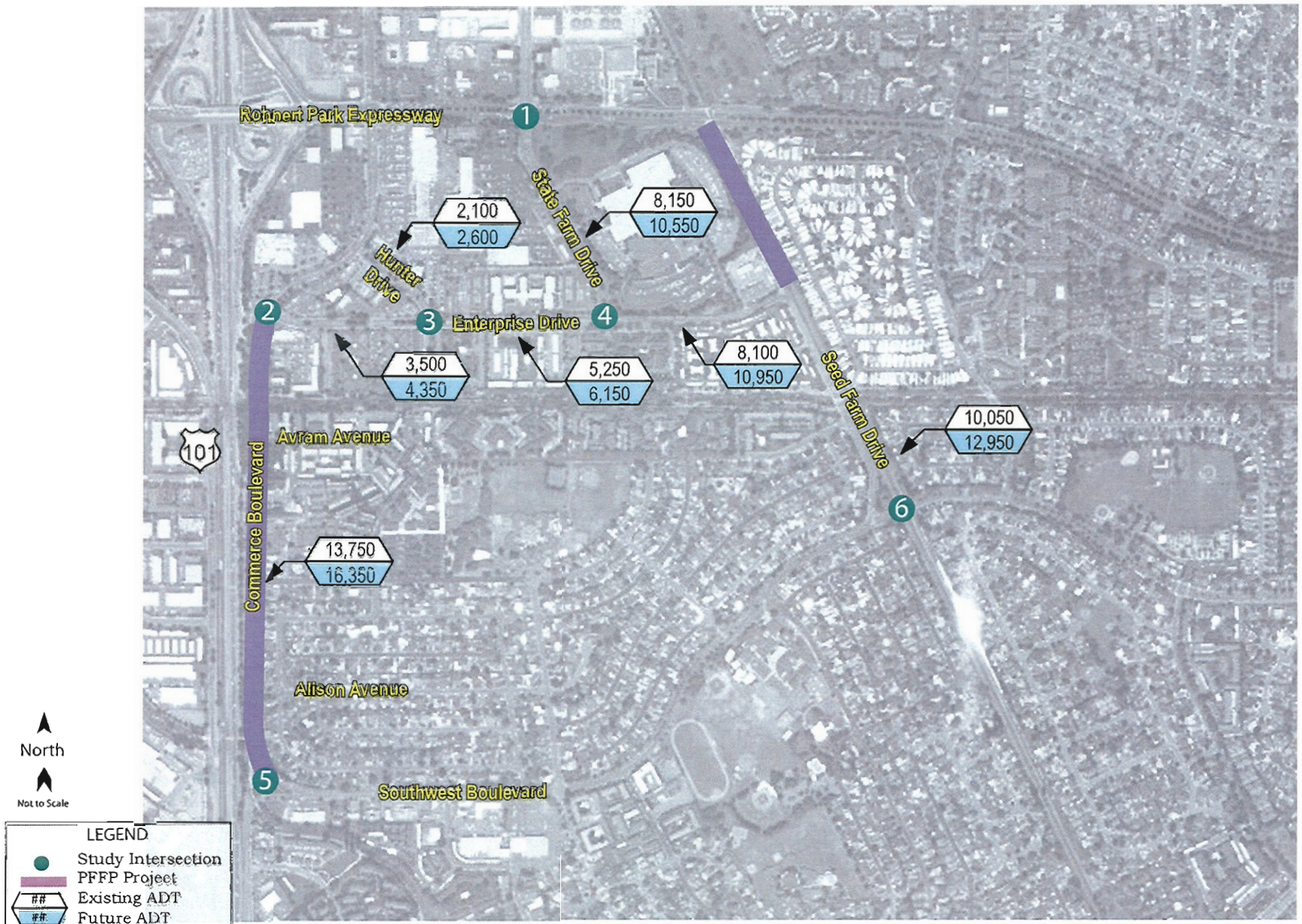
RPA907-20.ai 3/10

Review of Traffic Capacity Needs for Two Future Road Projects

City of Rohnert Park

Figure 2

Future Traffic Volumes



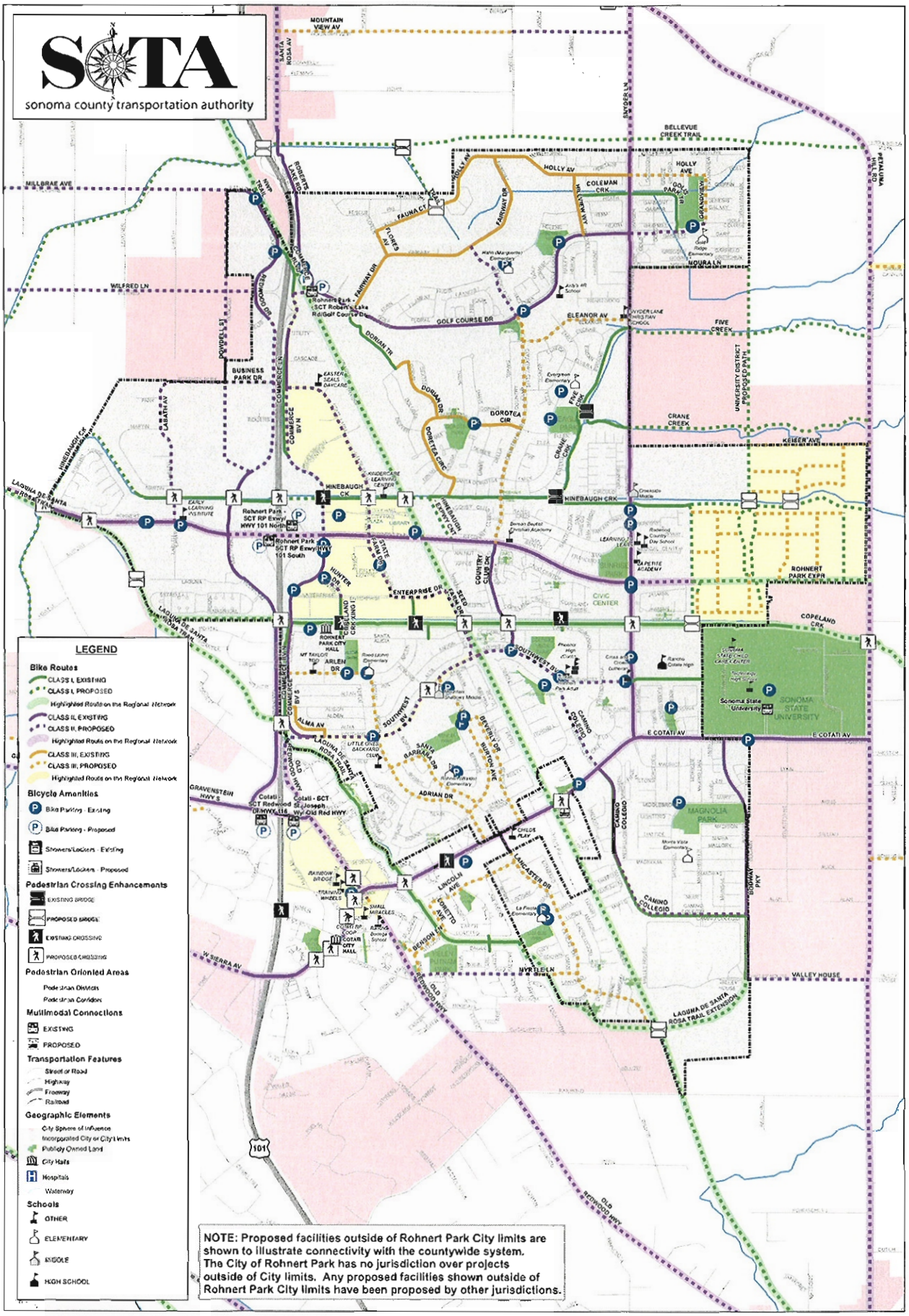
RPA907-20.ai 3/10

Review of Traffic Capacity Needs for Two Future Road Projects

City of Rohnert Park

Figure 3

Average Daily Traffic



CITY OF ROHNERT PARK AND VICINITY

PROPOSED AND EXISTING BICYCLE AND PEDESTRIAN FACILITIES
SONOMA COUNTY, CALIFORNIA

Kilometers
0 0.125 0.25 0.5 0.75 1

Miles
0 0.125 0.25 0.5 0.75 1

Location Index

Author: Sonoma County Transportation Authority
Date: April 20, 2006
Revised: October 7, 2008
Projection & Coordinate System: CA State Plane, Zone II, NAD 83, US Survey Feet, Lambert Conformal Conic Projection.
Project Source: s:\SCTA\SCTA Modeling Program\PROJECTS\bikemapsw\transupdates\rp_update.mxd
Sources: SCTA Countywide Bicycle and Pedestrian Advisory Committee, Sonoma County GIS, City of Rohnert Park

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Appendix D – Canon Manor Agreement

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October 11, 2001

AGREEMENT BETWEEN SONOMA COUNTY AND THE CITY OF ROHNERT PARK TO PROVIDE PUBLIC WASTEWATER SERVICE TO THE CANON MANOR WEST AREA

Recitals

1. This is an agreement (subsequently referred to as the "Agreement") between Sonoma County and the City of Rohnert Park describing the circumstances under which the Rohnert Park will provide public wastewater collection, treatment, and disposal services to the Canon Manor West area. The Canon Manor West area is located in the unincorporated area of Sonoma County near the intersection of Petaluma Hill Road and the East Cotati Avenue. The Canon Manor West area is depicted on the map attached as Exhibit A to this Agreement.

2. The City of Rohnert Park is a California City adjacent to the Canon Manor West area. The Canon Manor West area is within Rohnert Park's sphere of influence, as approved by the Local Agency Formation Commission. Sonoma County is a California County within which the Canon Manor West area is currently located.

3. Because existing residential septic systems in the Canon Manor West area have caused nitrate contamination of groundwater and water wells and other problems, the Canon Manor West area properties would benefit from (a) public wastewater collection, treatment, and disposal service and (b) a reliable public potable water supply. Rohnert Park is capable of and willing to accept, treat, and dispose of wastewater from the properties in the Canon Manor West area in accordance with the terms of this Agreement. The Penngrove Water Company, a privately owned public utility regulated by the California Public Utilities Commission, is capable of and willing to supply potable water to all properties in the Canon Manor West area.

4. In order to calculate the proposed parcel assessments for water and wastewater service, the type of needed improvements to be paid from assessment district bond proceeds must first be determined, and their cost estimated, and the appropriate charge established for each parcel specially benefited. The Canon Manor West property owners will subsequently decide in 2001 whether or not to approve an assessment district that will pay for public wastewater collection and treatment service and potable water service and related costs.

5. In this Agreement Sonoma County and Rohnert Park desire to set forth the public wastewater services which Rohnert Park agrees to supply to existing lots in the Canon Manor West area. Sonoma County will then be able to allocate the estimated cost of those improvements to each parcel in proportion to the special benefit conferred on that parcel. Pursuant to state law, the owners of the parcels for which an assessment is proposed will receive a ballot indicating their support or opposition to the proposed assessment. Subsequently the assessment district may or may not be formed, depending upon the outcome of the legally required protest ballot procedure and other state law requirements. In addition, the owners of the parcels for which an assessment is proposed will vote whether or not to approve an annual wastewater and private road maintenance fee that will be used to reimburse:

(a) Rohnert Park for operating and maintaining, in good working order, the wastewater collection system in Canon Manor West, and

(b) Sonoma County for the costs of annually maintaining the roads used for access to the wastewater collection system and to properties within Canon Manor West.

6. Rohnert Park and Sonoma County wish to enter into this Agreement pursuant to the authority of, and to satisfy the requirements of, Streets and Highways Code §§10109 through 10111, and specifically Streets and Highways Code §10110.

Agreement

7. OBLIGATIONS SET FORTH IN THIS AGREEMENT CONTINGENT ON THREE EVENTS.

The contractual obligations of the parties to this Agreement are contingent upon the occurrence of all of the following four events:

A. The formation of assessment district in 2001, and property owner approval in 2001 of the proposed annual wastewater system maintenance fee (to reimburse Rohnert Park) and annual access road maintenance fee or sewer road maintenance fee (to reimburse Sonoma County); provided, however, that if the road maintenance fee or sewer road maintenance fee is not approved, Sonoma County and Rohnert Park shall meet and confer in order to reach an agreement to maintain the roads in the condition necessary to allow Rohnert Park to fulfill its obligations under paragraph 8.4 of this Agreement.

B. Approval of a mutually satisfactory agreement between Sonoma County and the Penngrove Water Company for public potable water supply to the Canon Manor West area.

C. The County's receipt of a legally acceptable bid, in an amount equal to or less than the available assessment district construction budget and funding, for the non-water system portion of the assessment district improvements.

D. The execution of an agreement in 2001 between the City of Santa Rosa and the City of Rohnert Park transferring a portion of Santa Rosa's allocation of sewer treatment capacity ("Interim Agreement") on terms and conditions that are consistent with the obligations of the City of Rohnert Park pursuant to this Agreement

If an assessment district is not formed for the Canon Manor West area in 2001 or if the property owners do not approve the proposed annual maintenance fee, neither Sonoma County nor Rohnert Park shall have any further obligations under this Agreement, and this Agreement shall automatically terminate and have no further force or effect. If a mutually satisfactory agreement between Sonoma County and the Penngrove Water Company for public potable water services is not signed in 2001, neither Sonoma County nor Rohnert Park shall have any further obligations under this Agreement, and this Agreement shall automatically terminate and have no further force or effect. If Sonoma County does not receive a legally acceptable bid, in an amount equal to or less than the available assessment district construction budget and funding, for the non-water system portion of the assessment district improvements, neither Sonoma County nor Rohnert Park shall have any further obligations under this Agreement, and this Agreement shall automatically terminate and have no further force or effect.

If an assessment district is formed for the Canon Manor West area in 2001and if the property owners approve the proposed annual maintenance fee and if a mutually satisfactory agreement between Sonoma County and the Penngrove Water Company is signed in 2001 and if Sonoma County receives a legally acceptable bid within budget for the non-water system portion of the assessment district improvements, Sonoma County, and if the Interim Agreement provides sufficient sewerage capacity to the City of Rohnert Park to allow the City of Rohnert Park to comply with the terms of this Agreement, then Rohnert Park shall fulfill the obligations set forth in the following paragraphs of this Agreement and Sonoma County shall fulfill the obligations set forth in the following paragraphs of this Agreement. Pending a decision on the formation of an assessment district for the Canon Manor West area, both Sonoma County and Rohnert Park shall reasonably cooperate with each other on matters related to the proposed assessment district for the Canon Manor West area.

8. OBLIGATIONS OF ROHNERT PARK IF ASSESSMENT DISTRICT IS FORMED AND THE PROPERTY OWNERS APPROVE THE PROPOSED ANNUAL MAINTENANCE FEE AND SONOMA COUNTY AND THE PENNGROVE WATER COMPANY APPROVE A MUTUALLY SATISFACTORY AGREEMENT AND SONOMA COUNTY RECEIVES CONSTRUCTION BIDS WITHIN BUDGET.

If an assessment district is formed in 2001 and if the property owners approve the proposed maintenance fee and if a mutually satisfactory agreement between the Penngrove Water Company and Sonoma County for a potable water supply is signed not later than December 31, 2001 and if Sonoma

October 11, 2001
County receives bids for the non-water system portion of the assessment district improvements that are within budget, Rohnert Park shall do the following:

1. Promptly review, and approve, disapprove, or modify, in accordance with existing City standards for wastewater collection systems, detailed plans and specifications prepared by County for the construction of the wastewater collection system within the Canon Manor West area and an emergency potable water connection to Rohnert Park's potable water system. The terms and conditions pursuant to which Rohnert Park shall provide an emergency potable water connection shall be determined by mutual agreement of Sonoma County and Rohnert Park.

2. Approve, disapprove, or modify the contract for construction of the wastewater collection system. Upon completion of the construction of the wastewater collection system within the Canon Manor West area according to the approved plans and specifications, maintain that system using the same maintenance standards applied to wastewater collection systems in Rohnert Park.

3. Accept annually from Sonoma County a sum equal to an amount determined annually by the City of Rohnert Park as Rohnert Park's annual charges to maintain the wastewater collection system improvements and treat and dispose of the wastewater from Canon Manor West. Said annual charge shall be limited to an amount equal to the adopted charge to maintain the wastewater collection system improvements imposed on Rohnert Park residents plus an amount equal to five percent (5%) of that charge.

4. After completion of the construction of the wastewater system improvements within the Canon Manor West area, completion of the Geysers Project of the Santa Rosa Subregional Sewerage System, payment of the Rohnert Park sewer connection fee, and acceptance of the improvements by the County, operate and maintain the wastewater collection system and accept and treat and dispose of wastewater from 220 lots in Canon Manor West. A map of these 220 lots is attached to this Agreement as Exhibit A and incorporated here by this reference. The obligation of Rohnert Park that is set forth in this paragraph shall be suspended in the event that the Interim Agreement does not allow Rohnert Park to perform this obligation. In the event that the Interim Agreement reduces the allocation of sewerage treatment capacity available to Rohnert Park, the obligation of Rohnert Park set forth in this paragraph shall be reduced proportionately. For the period beginning on the date the Geysers Project is complete and continuing for twelve months, the Rohnert Park sewer connection fee shall be $5,910. After this twelve month period, the sewer connection fee payable by property owners within Canon Manor West shall be the sewer connection fee in effect on the date application for connection is submitted to the City of Rohnert Park.

5. At the time of, or before, City operation of the Canon Manor West wastewater system begins, apply service rules, regulations, and standards; establish user, service, and connection fees; accept grants of easements for the wastewater system and other land rights as appropriate; and establish standards for the construction of any new sanitation facilities that may connect to the Canon Manor West wastewater system. Rates and charges shall be established, and may be revised in the future.

6. Cooperate reasonably with all entities utilizing the public utility right of way in the Canon Manor West area.

9. OBLIGATIONS OF SONOMA COUNTY IF ASSESSMENT DISTRICT IS FORMED AND THE PROPERTY OWNERS APPROVE THE PROPOSED MAINTENANCE FEE OR SEWER ROAD MAINTENANCE FEE AND SONOMA COUNTY AND THE PENNGROVE WATER COMPANY APPROVE A MUTUALLY SATISFACTORY AGREEMENT.

If an assessment district is formed in 2001 and if the property owners approve the proposed annual maintenance fee (or a sewer road maintenance fee) and if a mutually satisfactory agreement between the Penngrove Water Company and Sonoma County for a potable water supply is signed not later than December 31, 2001, Sonoma County shall do the following, but only to the extent funds become available to the County through the proceeds of property owner cash payments on account of assessments levied or the proceeds of the sale of securities issued pursuant to the Improvement Bond Act of 1915 or the property owner approved annual maintenance fee:

1. Complete and approve detailed plans for the design of the wastewater collection system and access road and coordinate the design of water supply improvements to be installed in the Canon Manor West area. A general description of the wastewater collection system is set forth in Exhibit B to this Agreement. The Rohnert Park City Engineer shall be consulted regularly and shall have the authority to approve, disapprove, or modify the final design, so that the final design of the wastewater collection system and emergency potable water supply connection meets city standards.

2. Complete environmental review pursuant to the California Environmental Quality Act of the improvements to be installed in the Canon Manor West area.

3. Acquire the easements needed to construct the water, wastewater, access road, emergency wastewater supply improvements, and roads sufficient to improve the roads to the Street Standards, to be installed in the Canon Manor West area, and convey to the Penngrove Water Company appropriate easements upon substantial completion of the construction of the water, so that the Penngrove Water Company will own the water system and associated easements.

4. Call for bids to construct the wastewater and access road and emergency water supply improvements to be installed in the Canon Manor West area in accordance with the approved final design, evaluate the bids received, and award the construction contract to the lowest responsive and responsible bidder if such bid is within budget and Sonoma County elects to award the contract. Sonoma County shall require the contractor to name the City of Rohnert Park as a beneficiary on the required performance bond, and to name the City of Rohnert Park as an additional insured (with an endorsement approved by the City Attorney) on the required insurance. Sonoma County shall also have the discretion to either reject all bids and abandon the project or rebid the project, as its Board of Supervisors finds appropriate.

5. Administer the construction contract, if awarded, and inspect the work performed for compliance with the construction contract documents and accept the work when completed in accordance with the contract documents. The Rohnert Park City Engineer shall be consulted at regular intervals during the construction work, so that the City is satisfied that such work meets the city standards that were incorporated into the construction contract documents.

6. Annually maintain the access roads used to access the wastewater and water system and also used for access by property owners in Canon Manor West from revenues received from the proposed road maintenance fee or the proposed sewer road maintenance fee; provided, however, that if Sonoma County fails to maintain said roads due to the property owners' failure to approve either the road maiantenance fee or the proposed sewer road maintenance fee, Rohnert Park shall be under no further obligation to provide connections to the Santa Rosa Subregional Sewer System in Canon Manor West.

7. Cooperate reasonably with all entities utilizing the public utility right of way in the Canon Manor West area.

8. Pay the City of Rohnert Park a bi-monthly maintenance and operations fee to maintain the wastewater collection system and pay the City of Rohnert Park the annual sewerage treatment fee imposed by the Santa Rosa Subregional Sewer System in amounts determined by the City of Rohnert Park and Board of Public Utilities of the City of Santa Rosa, respectively. Annually, not later than February 1, Rohnert Park will advise the County of any fee increases for the following fiscal year. In the event the County is unable by law to charge the property owners within Canon Manor West the increased fees, the County shall pay the increased fee to Rohnert Park. The County and Rohnert Park agree to cooperate reasonably and consider taking appropriate action to terminate wastewater service to those customers who may choose not to pay the full costs of that service.

9. Indemnify, defend and hold harmless the City of Rohnert Park from damages to property and injury to persons arising from the construction of the wastewater collection system in Canon Manor West.

10. Impose a sewer road maintenance fee on property owners within Canon Manor West, in an amount sufficient to allow the County to maintain the roads necessary for the provision of sewer service by the City of Rohnert Park, if the road maintenance fee that is pending on the date this Agreement is executed is disapproved by the property owners.

10. NEW CONSTRUCTION IN CANON MANOR WEST MUST BE APPROVED BY ROHNERT PARK AND MEET CITY STANDARDS.

Because Canon Manor West is in the sphere of influence of Rohnert Park, and because Rohnert Park is providing urban services (wastewater collection, treatment, and disposal), and because Canon Manor West will eventually be annexed into the City of Rohnert Park, the parties agree that all new construction in Canon Manor West should be, to the extent feasible, consistent with the development standards of Rohnert Park. To that end, the parties agree that:

1. Sonoma County shall develop a specific plan for Canon Manor West as part of the update of its General Plan. Sonoma County shall consider adopting and imposing development standards for the Canon Manor West Area that are consistent with the City of Rohnert Park's development standards for Rural Residential. A copy of the Rural Residential standards are attached to this Agreement as Exhibit C. Sonoma County shall refer all applications for development within Canon Manor West to Rohnert Park for review, comment, and consultation prior to taking action on such applications. Sonoma County shall issue a building permit for a single family residence within Canon Manor only after receipt of a written certification from the Rohnert Park City Engineer that the then applicable sewer connection fee has been paid to the City.

2. Sonoma County shall require, as a condition of development within the Canon Manor West Area, the dedication of right-of-way to allow construction of roads to the standards imposed by the City of Rohnert Park. A copy of those standards are attached to this Agreement as Exhibit D ("Street Standards").

3. Sonoma County shall adopt and impose on all lots within the Canon Manor West Area, as a condition of development, a development impact fee in compliance with the requirements of Government Code §§ 66000 et seq., that defrays the cost of improving streets in Canon Manor West to the Street Standards ("Street Improvement Fee"). Sonoma County shall establish the fee in an amount sufficient to provide funding to improve the streets within Canon Manor West to the Street Standards. Sonoma County

shall impose the Street Improvement Fee on all development approvals, including the issuance of a building permit, within Canon Manor West. Imposition and collection of the Street Improvement Fee shall be in accordance with the requirements of Government Code §§ 66000 et seq. The revenues collected from such a fee shall be retained by the County in a separate fund and, at the option of the City of Rohnert Park, either be used as funds become available to improve the streets in Canon Manor West to the Street Standards within five (5) years of the date the first home is connected to the City of Rohnert Park's wastewater collection system, or transferred, with interest, to the City of Rohnert Park for use by Rohnert Park to improve the streets within Canon Manor West to the Street Standards. Sonoma County and Rohnert Park shall establish priorities for use of the funds by mutual agreement.

4. Sonoma County agrees that it may only approve or allow the construction of a second unit on any lot within Canon Manor West if and only if the streets that serve that lot have been improved to the Street Standards.

11.0 INSURANCE.

With respect to performance of work under this Agreement, County shall require the contractor to whom the construction contract is awarded to add Rohnert Park as an additional insured on the commercial general liability policy required by County from the contractor.

11.1 STATUS OF ROHNERT PARK AND SONOMA COUNTY.

The parties intend and agree that each of them, in performing the obligations specified in this Agreement, shall act as independent contractors and shall control the work and the manner in which it is performed. Neither party is an employee or agent of the other party.

11.2. ASSIGNMENT AND DELEGATION.

Neither party hereto shall assign, delegate, sublet, or transfer any interest in or duty under this Agreement without the prior written consent of the other, and no such transfer shall be of any force or effect whatsoever unless and until the other party shall have so consented.

11.3. METHOD AND PLACE OF GIVING NOTICE, SUBMITTING BILLS AND MAKING PAYMENTS.

All notices, bills, and payments shall be made in writing and may be given by personal delivery or by mail. Notices, bills, and payments sent by mail shall be addressed as follows:

TO COUNTY:

Sonoma County Director of Transportation & Public Works
575 Administration Drive Room 117A
Santa Rosa, Ca. 95403

TO ROHNERT PARK:
City Manager
City of Rohnert Park
6750 Commerce Boulevard
Rohnert Park, Ca. 94928

and when so addressed, shall be deemed given upon deposit in the United States mail, postage prepaid. In all other instances, notices, bills, and payments shall be deemed given at the time of actual delivery. Changes may be made in the names and addresses of the person to whom notices, bills, and payments are to be given by giving notice pursuant to this paragraph.

11.4 NO WAIVER OF BREACH.
The waiver by County of any breach of any term or promise contained in this Agreement shall not be deemed to be a waiver of such term or provision or any subsequent breach of the same or any other term or promise contained in this Agreement.

11.5 CONSTRUCTION AND COUNSEL.
Rohnert Park and County acknowledge that they have each contributed to the making of this Agreement and that, in the event of a dispute over the interpretation of this Agreement, the language of the Agreement will not be construed against one party in favor of the other. Rohnert Park and County acknowledge that they have each had an adequate opportunity to consult with counsel in the negotiation and preparation of this Agreement.

11.6 NO THIRD PARTY BENEFICIARIES.
Nothing contained in this Agreement shall be construed to create and the parties do not intend to create any rights in third parties.

11.7 APPLICABLE LAW AND FORUM.
This Agreement shall be construed and interpreted according to the substantive law of California excluding the law of conflicts. Any action to enforce the terms of this Agreement or for the breach thereof shall be brought and tried in the County of Sonoma.

11.8 CAPTIONS.
The captions in this Agreement are solely for convenience of reference. They are not a part of this Agreement and shall have no effect on its construction or interpretation.

11.9 MERGER.
This writing is intended both as the final expression of the Agreement between the parties hereto with respect to the included terms and as a complete and exclusive statement of the terms of the Agreement, pursuant to Code of Civil Procedure Section 1856. No modification of this Agreement shall be effective unless and until such modification is evidenced by a writing signed by both parties.

11.10 TIME OF ESSENCE.
Time is and shall be of the essence of this Agreement and every provision hereof. The parties hereto have executed this Agreement on the dates set forth below.

DATED: 11-27-01 ROHNERT PARK

By: _____
Joseph H. Netter, City Manager
Per Resolution No. 2001-228 adopted by the Rohnert Park City Council at its meeting of October 23, 2001.

DATED: 12/19/01 COUNTY OF SONOMA

By: _____
Chairman
Board of Supervisors

ATTEST:

Eeve T. Lewis

EEVE T. LEWIS, County Clerk and ex-officio Clerk of the Board of Supervisors

APPROVED AS TO FORM:

DATED: 12/18/2001 By: _____
Sonoma County Counsel

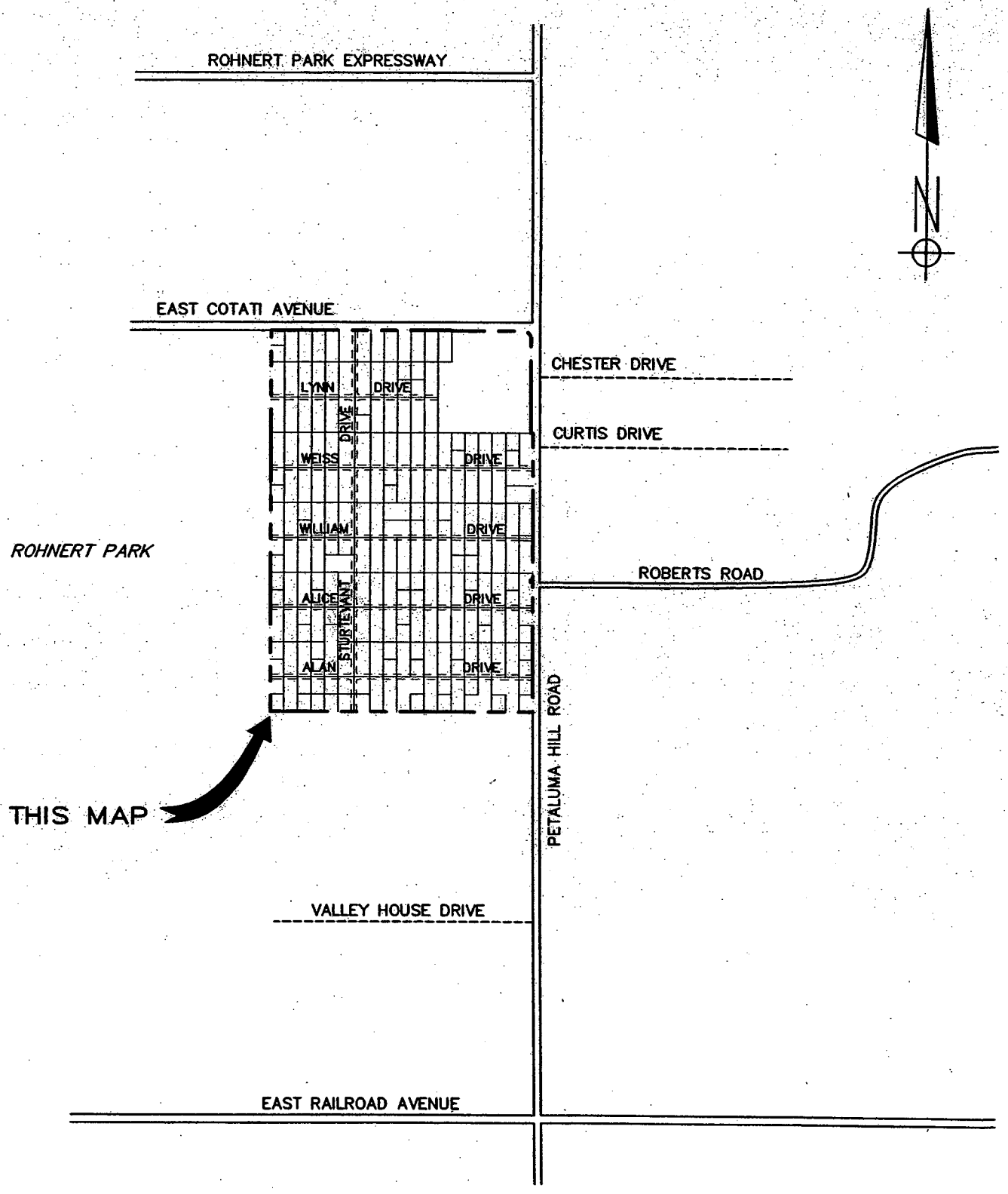
APPROVED AS TO FORM:

DATED: 11/27/01 By: _____
Rohnert Park City Attorney

October 11, 2001

EXHIBIT A

(map of Canon Manor West area)



LOCATION MAP
NOT TO SCALE

BOUNDARIES OF CANON MANOR WEST ASSESSMENT DISTRICT

EXHIBIT A

October 11, 2001

EXHIBIT B

(description of wastewater system improvements)

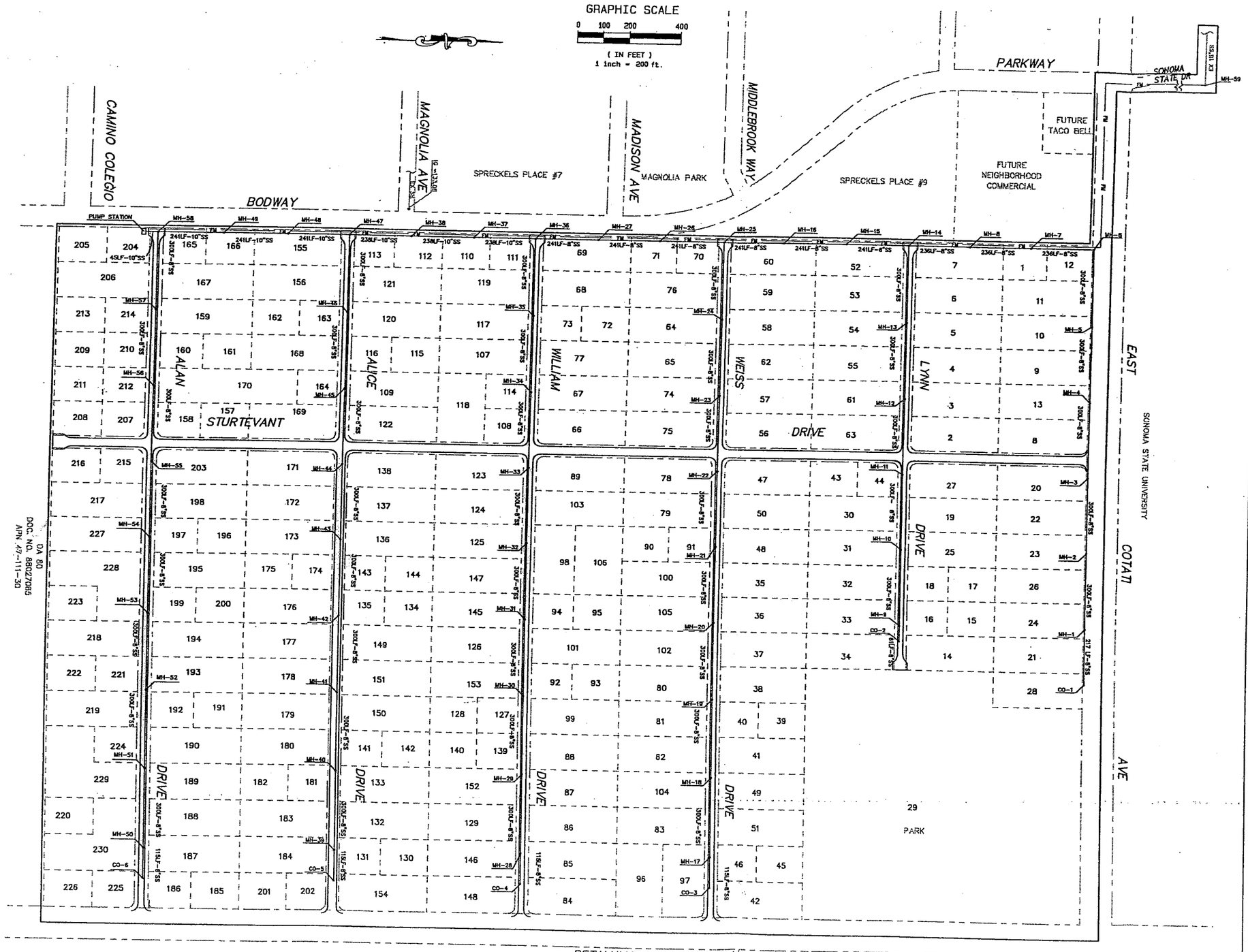


EXHIBIT B

CONCEPTUAL SANITARY SEWER SYSTEM IMPROVEMENT PLAN

CANON MANOR WEST ASSESSMENT DISTRICT

COUNTY OF SONOMA

JULY 2001

LEGEND

- BOUNDARY
- PROPOSED RIGHT-OF-WAY
- EXISTING LOT LINE
- PROPOSED SEWER MAIN, MH, CLEANOUT, FLOW DIRECTION
- FORCE MAIN, DIRECTION
- PROPOSED EDGE OF PVMT
- MH-14 MANHOLE ID#
- CO-3 CLEANOUT ID#
- 36 ASSESSMENT DIAGRAM NUMBER

THESE PLANS ARE
HALF SCALE

PREPARED BY

COUNTY OF SONOMA
DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS
EDWARD J. WALKER, DIRECTOR

575 ADMINISTRATION DR., ROOM 117A
SANTA ROSA, CA 95403
(707) 565-2231

EXHIBIT C

Comparison of County Rural Residential District (RR) and Proposed City Rural Residential District (RR) and Rural Estate District (RE)

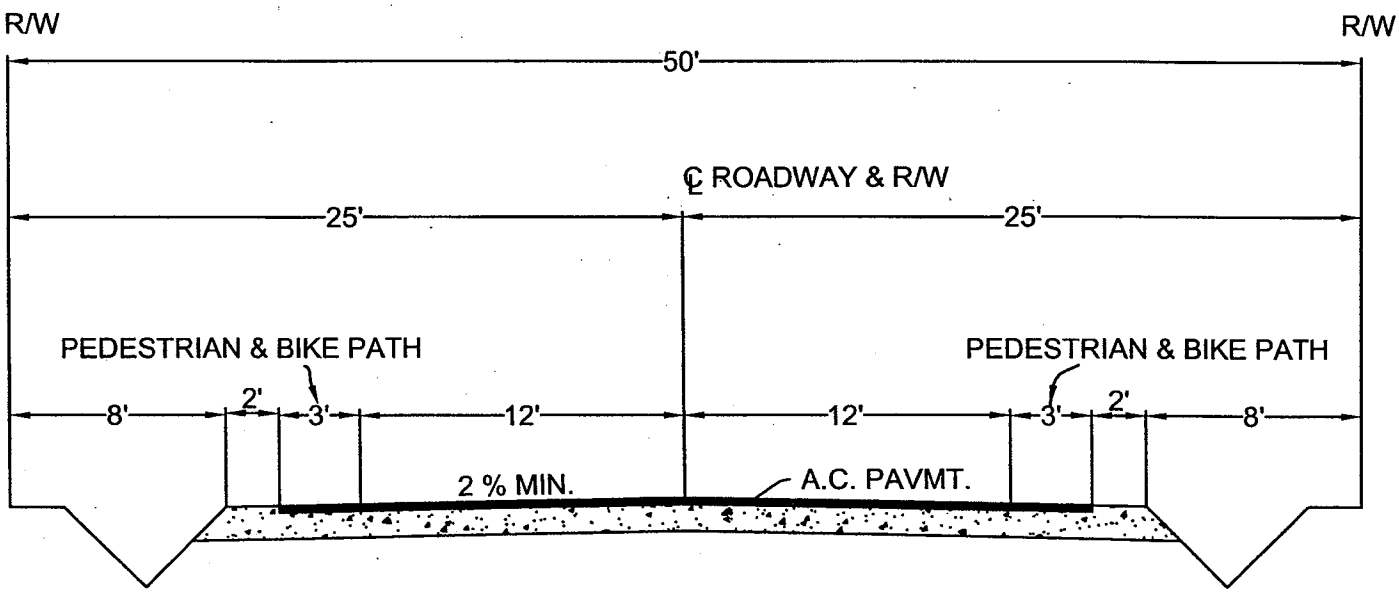
Development Standards

Standard	County RR District	City RR District (Proposed)	City RE District (Proposed)
Residential Density	1 unit/acre	1 unit/acre	2 units/acre
Minimum Lot Size	1 acre	40,000 sq. ft.	18,000 sq. ft.
Minimum Lot Width	80 feet	100 feet	100 feet
Maximum Lot Coverage	35 percent	35 percent *	35 percent *
Maximum Building Height	35 feet	35 feet	35 feet
Setbacks			
• Front Yard	20 feet	50 feet	25 feet
• Side Yard	5 feet	10 feet	10 feet
• Rear Yard	20 feet	50 feet	25 feet
Residential Parking	1 covered space per unit	2 covered spaces per unit	2 covered spaces per unit

* Not in current draft ordinance, but proposed to be added.

Land Uses

Land Use	County RR District	City RR District (Proposed)	City RE District (Proposed)
Agriculture	Permitted	Use Permit	Use Permit
Animal Breeding	Permitted with limitations, larger operations require use permit	Use Permit	Use Permit
Art Studios	Use Permit	Administrative Approval (as Home Occupation)	Administrative Approval (as Home Occupation)
Bed and Breakfast	Use Permit	Use Permit	Use Permit
Cemeteries	Use Permit	Not Permitted	Not Permitted
Clubs and Lodges	Use Permit	Not Permitted	Not Permitted
Community Care Facility	Permitted with limitations, larger operations require use permit	Permitted with limitations, larger operations require use permit	Permitted with limitations, larger operations require use permit
Condominiums	Use Permit	Not Permitted	Not Permitted
Day Care Center	Use Permit	Use Permit	Use Permit
Family Day Care	Permitted	Permitted	Permitted
Golf Course	Use Permit	Not Permitted	Not Permitted
Guest House	Permitted	Administrative Approval	Administrative Approval
Home Occupations	Permitted	Administrative Approval	Administrative Approval
Schools	Use Permit	Use Permit	Use Permit
Second Unit	Not Permitted with "Z" District	Administrative Approval	Administrative Approval
Single Family Home	Permitted	Permitted	Permitted
Travel Trailer	Administrative Approval	Not Permitted	Not Permitted



RURAL RESIDENTIAL STREET

CITY OF ROHNERT PARK

EXHIBIT "D"

RURAL RESIDENTIAL STREET

Scale: NONE	Date: OCTOBER 2001

Appendix E – Adopted Goals and Policies for Mello Roos Financing Districts

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RESOLUTION NO. 2006-276

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ROHNERT PARK APPROVING A STATEMENT OF LOCAL GOALS AND POLICIES CONCERNING THE USE OF THE MELLO-ROOS COMMUNITY FACILITIES ACT OF 1982

WHEREAS, pursuant to Section 53312.7 of the California Government Code a local agency may initiate proceedings to establish a Community Facilities District (CFD) only if it has first considered and adopted Local Goals and Policies Concerning the use of the Mello-Roos Community Facilities Act of 1982; and

WHEREAS, a CFD is one of three (3) approved principal financing mechanisms utilized in the City of Rohnert Park's Public Facilities Finance Plan; and

WHEREAS, the City of Rohnert Park (City) has agreed to use its best effort to adopt Local Goals and Policies within ninety (90) days following the Effective Date of the City's Development Agreement with the University District LLC and Vast Oak Properties L.P.; and

WHEREAS, the Local Goals and Policies are designed to ensure that CFDs created are made for the public good and comply with all relevant laws, acts and agreements; and

WHEREAS, the Goals and Policies may be amended or supplemented by City Council resolution at any time, and approval does not obligate the City Council in any way to create CFDs if they meet the parameters set forth; and

BE IT RESOLVED by the City Council of the City of Rohnert Park that it does hereby authorize and approve The City of Rohnert Park Statement of Local Goals and Policies Concerning the use of the Mello-Roos Community Facilities Act of 1982, as outlined in Exhibit "A" attached.

DULY AND REGULARLY ADOPTED this 28th day of November, 2006.

CITY OF ROHNERT PARK

Mayor Tim Smith

ATTEST:

City Clerk Deputy

BREEZE: AYE FLORES: AYE MACKENZIE: AYE
VIDAK-MARTINEZ: ABSENT SMITH: AYE
AYES: (4) NOES: (0) ABSENT: (1) ABSTAIN: (0)

EXHIBIT "A"

CITY OF ROHNERT PARK
STATEMENT OF LOCAL GOALS AND POLICIES CONCERNING THE USE OF THE MELLO-ROOS COMMUNITY FACILITIES ACT OF 1982

Pursuant to Section 53312.7 of the California Government Code, the City Council of Rohnert Park (hereafter the "City Council") hereby states its goals and policies concerning the use of the Mello-Roos Community Facilities Act of 1982, Section 53311, et seq. of the California Government Code (hereafter the "Act"), in providing adequate public infrastructure improvements for the City of Rohnert Park (the "City") and in refunding existing debt on land within the City. In addition, the Act may be used to provide for the maintenance, repair, reconstruction and replacement of any of the foregoing infrastructure improvements. The following goals and policies shall apply to each community facilities district (a "CFD") hereafter formed by the City.

Any policy or goal stated herein may be supplemented or amended or deviated from, and new goals and policies may be added hereto, from time to time upon a determination by the City Council that such supplement, amendment, deviation or addition is necessary or desirable. Any policy or goal stated herein shall be deemed amended or supplemented in the event, and as of the date, if ever, that such amendment or supplement is required to ensure compliance with:

a. Development Agreements entered into or amended by the City in accordance with Government Code Section 65864 et. seq.;
b. The Act;
c. Any other laws of the State of California; or
d. Laws of the United States of America.

1. Priority for Financing Various Kinds of Public Facilities Through the Use of the Act.

It is the policy of the City to give priority to the financing, through the use of the Act, as follows:

a) Refinancing of pre-existing assessment liens and refunding of any bonds secured by said liens as these may affect land within the CFD;
b) Financing of the design, construction and/or acquisition of public infrastructure identified in the City's Public Facilities Finance Plan (PFFP) as it may be amended from time to time, as such infrastructure mitigates impacts caused by development occurring within the CFD, and to the extent that such infrastructure may lawfully be financed under the Act; and
c) Financing of the design, construction and/or acquisition of other public infrastructure improvements directly benefiting the City, which improvements may include, but are not limited to, in-track improvements, park improvements, storm drainage improvements, public roadways and sidewalks.

It is also the policy of the City to assist in the financing of the design, construction and/or acquisition of other public facilities, through the use of Joint Public Facilities Financing Agreements, when to do so will, in the sole discretion of the City Council acting as the legislative body of the affected CFD, result in a savings to residents or property owners, for example, by reducing costs of bond issuance

and/or administrative expenses. Such joint financing assistance shall be considered when it does not interfere with the financing of public infrastructure improvements directly benefiting the City.

2. Credit Quality Required of Bond Issues, Including Criteria in Evaluating the Credit Quality.

It is the policy of the City that prior to the issuance of any CFD bonds, the following conditions shall be met:

a) Maximum special tax revenues from the CFD are reasonably expected to provide at least one hundred ten percent (110%) debt service coverage for each year of the term of such bonds;

b) The bond issuance document establishes, and includes a covenant to cause special taxes to be levied in an amount sufficient to maintain, for the term of such bonds an adequately funded reserve fund securing such bonds in accordance with the regulations of the Internal Revenue Service (IRS).

In addition, in cases when development interests (Proponents) petition for CFD formation, the City may require that Proponents provide a letter of credit or other credit enhancement instrument in form and amount reasonably satisfactory to the City which is sufficient to ensure payment of the principal and interest payments on the CFD bonds for up to two (2) years following issuance thereof (computed without regard for the availability of capitalized interest or amounts on deposit in a debt service reserve fund).

Further, it is the policy of the City to comply with all provisions of the Act including, but not limited to, Section 53345.8, as such Section may be amended from time to time.

3. Steps to Ensure that Prospective Property Purchasers Are Fully Informed About Their Taxpaying Obligations.

It is the goal of the City that the CFD Proponents provide actual and conspicuous notice to all potential homeowners, taxpayers residing within, or taxpayers owning property within, the boundaries of a CFD.

In order to comply with this goal, it is the policy of the City that:

a) All notices provided by the CFD Proponents shall be in compliance with applicable legal requirements, including, without limitation, applicable provisions of Government Code Section 53341.5;

b) The form of such notice shall be acceptable to the City and shall at a minimum provide a comprehensive listing of all the fees, taxes and assessments to be charged to any and all owners of property within the CFD;

c) The proposed form of such notice shall be submitted to the City, for review, at the same time that petitions requesting formation of the CFD are submitted; and

d) The Proponents shall make revisions to the proposed form of notice as requested by the City;

It is the policy of the City to refrain from the issuance of any CFD bonds until the aforementioned notice is approved.

It is further the policy of the City that:

a) In conformance with the Act, the Proponents shall provide potential property owners with a written and itemized notice of such projected costs and the manner in which they will be charged, which notice the potential property owner will sign;

b) The Proponents shall provide a copy of each signed notice to the City's Community Development Director;

c) The Proponents shall retain a copy of such notice in Proponents' files for at least fifteen (15) years following the date of such notice.

It is further the policy of the City to provide Section 53340.2 notice of special tax to any individual requesting such notice or any owner of property subject to a special tax levied by the City within five (5) working days of receiving a request for such notice.

4. Criteria for Evaluating the Equity of Tax Allocation Formulas, and Concerning Desirable and Maximum Amounts of Special Tax.

It is the goal of the City that each taxpayer residing within, or owning property within, the boundaries of any CFD hereafter established by the City pay special taxes which generally reflect such taxpayer's fair and reasonable share of his or her projected benefit from, and/or burden upon, the facilities to be constructed and/or maintained or of any refunding of existing debt within the CFD by such CFD.

It is the goal of the City that maximum special taxes on residential owner-occupied property, when taken together with (a) ad valorem taxes, (b) all other special taxes levied pursuant to the Act and (c) all assessments applicable to such property, do not exceed in any year 1.75% of the greater of the parcel's assessed value or a reasonable estimate of the sale price for the parcel and the residential or commercial unit to be constructed thereon.

In order to comply with this goal and when the Proponent requests that a "reasonable estimate" be used to calculate the maximum allowable special tax it is the policy of the City that:

a) At least 120 days prior to the anticipated election date, as defined in the Act, the Proponent, at its cost, shall submit its method of estimating value for approval by the City;

b) At least 100 days prior to the anticipated election date, the City shall provide the Proponent with requested changes to said method; and

c) At least 30 days prior to the anticipated election date, the Proponent, at its cost, shall provide the City with the estimated values to be used in making the final determination of the maximum special tax.

It is the policy of the City to refrain from the issuance of any CFD bonds until the aforementioned appraisal process is satisfactorily completed.

It is further the policy of the City that the rate method of apportionment for special tax levied pursuant to the Act be drafted to allow a property owner to permanently satisfy the special tax (and remove the lien thereof) as to any taxable parcel by prepayment pursuant to Section 53344 of the Act.

It is further the policy of the City not to permit the escalation of maximum taxes.

5. Definitions, Standards, and Assumptions for Appraisals Required by Section 53345.8.

It is the goal of the City to conform, as nearly as practicable, to the California Debt and Investment Advisory Commission's Appraisal Standards for Land-Secured Financings, as such standards may be amended from time to time, provided, however, that the City Council may additionally amend such standards from time to time as it deems necessary and reasonable, in its own discretion, to provide needed infrastructure improvements within the City, while still accomplishing the goals set forth herein.

6. Standard for Advance of Expenses; Reimbursement.

It is the policy of the City that the Proponents of the CFD shall advance to the City actual out of pocket costs of formation of the CFD, sale of CFD bonds, and other costs and expenses associated with the CFD ("Advanced Costs"). Such Advanced Costs may include, without limitation, legal, financial, appraisal and engineering costs and expenses associated with:

a) Formation of the CFD;

b) Determination of the rate and method of apportionment and levy of the special tax;

c) Review and approval of the plans and specifications for construction of the improvements;

d) Determination of the value of the property;

e) Sale of CFD bonds; and

f) Any other costs or expenses reasonably incurred in connection with the CFD.

It is further the policy of the City that all such Advanced Costs, together with those reasonable out-of-pocket legal, engineering, and financial services costs incurred by Proponent directly related to establishment and implementation of the CFD, which may lawfully be financed under the Mello-Roos Act and other applicable law, shall be reimbursed from proceeds of the sale of CFD bonds in accordance with the provisions of the Reimbursement Agreement described below. However, in the event that the City is unable to make legally required findings in connection with the formation of the CFD and the issuance of CFD bonds for any reason, the City shall not be liable for any costs incurred by Proponents.

It is the policy of the City that when the proceeds of CFD bonds will be used for either reimbursement of costs incurred by Proponents or acquisition of facilities constructed by Proponents that City and Proponents will enter into a either a Reimbursement or Funding and Acquisition Agreement. The form of said agreements shall be reasonably acceptable to the City's bond counsel setting forth, among other things, the procedures for and mechanisms by which Proponents will be reimbursed, out of available proceeds of the CFD bonds, for improvements constructed and/or paid for by Proponents.

7. Issuance of Bonds

It is the goal of the City that the amounts, timing and terms of the issuance and sale of the CFD bonds shall be coordinated, as closely as possible, with the phasing of the development of the property to provide financing for the improvements in a timely fashion to meet the needs of the respective phases of development of the project. If necessary, the CFD bonds may be issued in series to help correspond to such phases. The amounts, timing and terms of the issuance and sale of the

CFD bonds shall be determined by the City, in consultation with the Developer, and the City's bond counsel, financial advisors an/or underwriters.

It is the policy of the City that the Proponents shall commit in writing at least 30 days before the election date to the following:

a) To assist the City in the issuance of the CFD bonds by providing financial and development information reasonably required for due-diligence and disclosures relating to the issuance of the CFD bonds;

b) To provide for any required continuing disclosures under applicable securities laws.