

**Fee Study Update Summary  
for Copper River Ranch  
Fresno, California**



Prepared by:



6051 North Fresno Street, Suite 200  
Fresno, California 93710

Updated:  
**April 2019**

## **EXECUTIVE SUMMARY**

### **FEE COMARISON**

## COPPER RIVER RANCH FEE SUMMARY

Facilities	Existing	Future
<b>Roadway</b>		
Major	\$2,422,348.32	\$1,734,994.35
Collector	\$7,902,605.48	\$3,692,424.81
Local	\$1,937,907.63	\$4,445,167.07
Roundabouts	\$808,993.34	\$3,039,147.92
<b>Roadway Total</b>	<b>\$13,071,854.77</b>	<b>\$12,911,734.15</b>
<b>Sewer</b>	<b>\$ 2,044,548.77</b>	<b>\$ 1,190,580.63</b>
<b>Total Existing EDUs (per the City of Fresno)</b>	1329	
<b>Total Future EDUs</b>	2485	
	<b>3814</b>	<b>Total EDUs</b>
<b>Total Existing Acreage (per the City of Fresno)</b>	332.89	Gross Acreage
<b>Total Future Acreage Remaining</b>	358.75	Gross Acreage
	<b>691.64</b>	<b>Total Gross Acreage (Comm./Res.)</b>
<b>CRR FUTURE ROADWAY FACILITY FEE</b>	<b>\$35,990.90 /Gross Acreage</b>	
<b>CRR FUTURE SEWER FACILITY FEE</b>	<b>\$ 479.11 /EDU</b>	

**COPPER RIVER RANCH FEE SUMMARY**

<b>Facilities</b>	<b>2009 Update - Existing Fee</b>	<b>2019 Update Future</b>	
<b>Roadway</b>			
Major	\$5,537,590.80	\$1,734,994.35	
Collector	\$11,236,226.42	\$3,692,424.81	
Local	\$5,879,464.54	\$4,445,167.07	
Roundabouts	\$1,415,738.35	\$3,039,147.92	
<b>Roadway Total</b>	<b>\$24,069,020.11</b>	<b>\$12,911,734.15</b>	
<b>Sewer</b>	<b>\$ 3,378,919.78</b>	<b>\$ 1,190,580.63</b>	
<b>Total EDUs</b>	<b>3853</b>	<b>2485</b>	
<b>RESIDENTIAL AND COMMERCIAL TOTAL GROSS ACREAGE</b>	<b>694.7</b>	<b>358.75</b>	
			<b>Fee Increase</b>
<b>CRR PROPOSED ROADWAY FACILITY FEE/GROSS ACREAGE</b>	<b>\$34,648.00</b>	<b>\$35,990.90</b>	<b>\$1,342.90</b>
<b>CRR PROPOSED SEWER FACILITY FEE/EDU</b>	<b>\$877.00</b>	<b>\$479.11</b>	<b>(\$397.89)</b>

## COPPER RIVER RANCH FEE SUMMARY

Facilities	2009 Update	Proposed 2019 Update
Pavement - SG Prep(SY)	\$1.73	\$0.25
Pavement - Base (Ton)		\$40.00
Pavement - AC (Ton)		\$88.00
Median Curb - LF	\$8.69	\$9.50
Median Cap - SF	\$12.21	\$6.50
Curb and Gutter	\$9.05	\$10.00
Sidewalk	\$3.20	\$3.50
Street Lights	\$6,460.30	\$6,500.00
Ramp	\$723.22	\$1,150.00
Valley Gutter	\$6,289.53	\$4,750.00

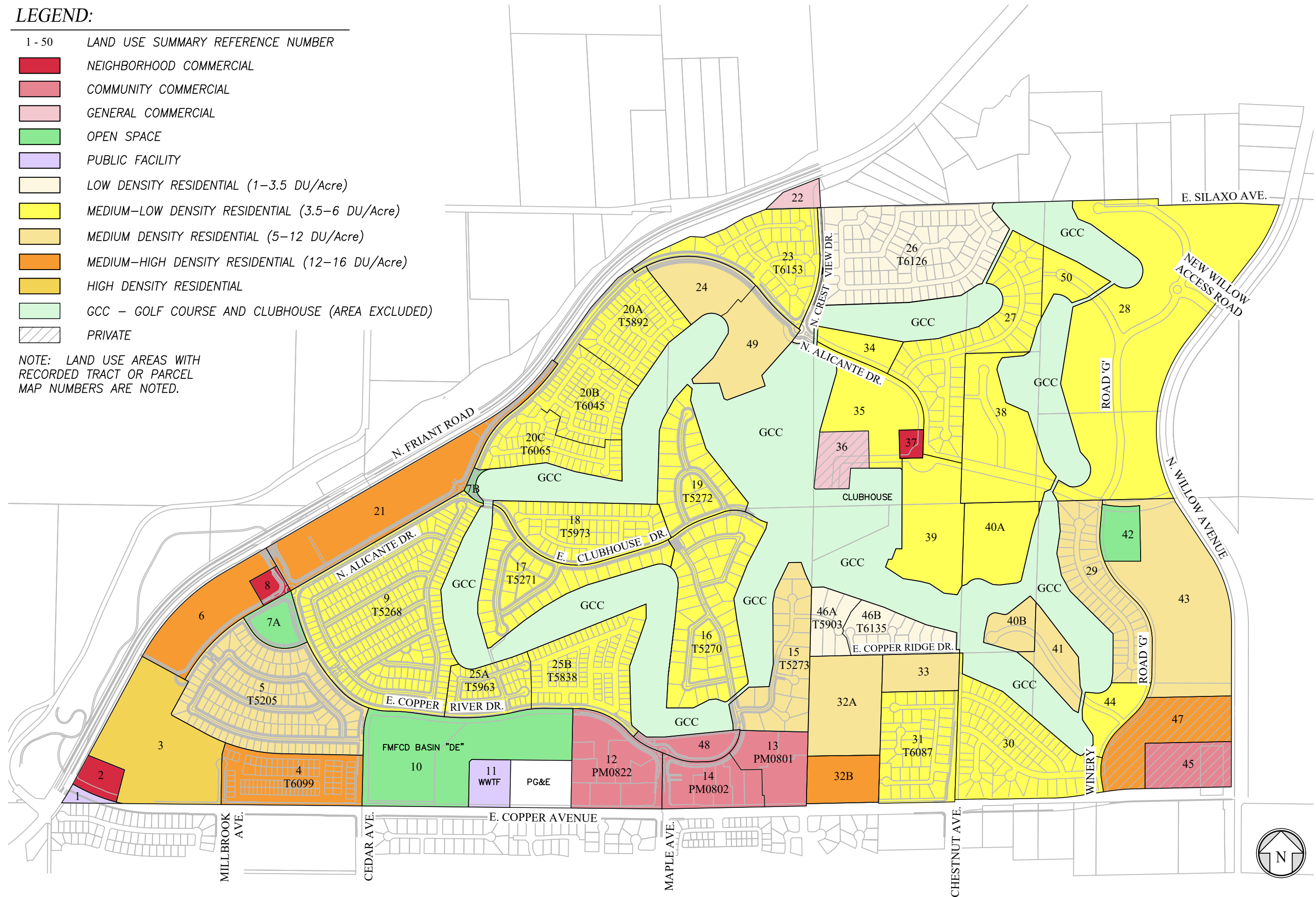
## **SECTION 1**

### **LAND USE AND ACREAGE SUMMARY**

**LEGEND:**

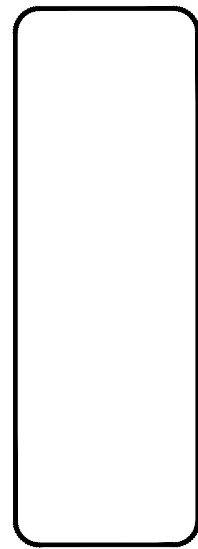

- 1 - 50 LAND USE SUMMARY REFERENCE NUMBER
- NEIGHBORHOOD COMMERCIAL
- COMMUNITY COMMERCIAL
- GENERAL COMMERCIAL
- OPEN SPACE
- PUBLIC FACILITY
- LOW DENSITY RESIDENTIAL (1-3.5 DU/Acre)
- MEDIUM-LOW DENSITY RESIDENTIAL (3.5-6 DU/Acre)
- MEDIUM DENSITY RESIDENTIAL (5-12 DU/Acre)
- MEDIUM-HIGH DENSITY RESIDENTIAL (12-16 DU/Acre)
- HIGH DENSITY RESIDENTIAL
- GCC - GOLF COURSE AND CLUBHOUSE (AREA EXCLUDED)
- PRIVATE

NOTE: LAND USE AREAS WITH RECORDED TRACT OR PARCEL MAP NUMBERS ARE NOTED.



L:\PROJECTS\2016\160235\ENGINEERING\ESTIMATES\2019-01-15\160235-LAND USE.DWG 1/30/2019 3:31 PM

REVISIONS	DATE	BY	DESCRIPTION

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(595) 446-9000

**COPPER RIVER RANCH**  
**LAND USE AND ACREAGE SUMMARY**  
**EXHIBIT 11**

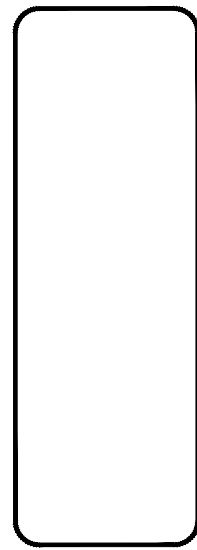
PROJECT NO.:	160235
DRAWN BY:	JV, JL
QA/QC BY:	CW, RW
SCALE:	NTS
SHEET NO.:	1 of 2

TABLE 1: COPPER RIVER RANCH AREA - ACREAGE AND EDU'S BY LAND USE

NO.	LAND USE	GROSS ACRE	DU'S/EDU'S	NOTES
1	PF	0.89		PUBLIC FACILITY
2	NC	2.60	12	5.8 EDU'S/AC; ESTIMATE
3	H	21.79	276	16 EDU'S/AC; ESTIMATE
4	MH	13.32	91	Recorded Tract Map 6099
5	M	30.39	134	Recorded Tract Map 5205
6	MH	11.89	119	12.5 EDU'S/AC; ESTIMATE
7A	O	3.90		PARK
7B	O	0.56		LANDSCAPE
8	NC	1.57	7	5.8 EDU'S/AC; ESTIMATE
9	ML	43.24	230	Recorded Tract Map 5268
10	O	26.44		FMFCD BASIN "DE"
11	PF	3.51		WWTF
12	CC	13.34	62	5.8 EDU'S/AC; ESTIMATE
13	CC	7.83	36	5.8 EDU'S/AC; ESTIMATE
14	CC	8.34	38	5.8 EDU'S/AC; ESTIMATE
15	M	13.60	20	Recorded Tract Map 5273
16	ML	24.06	54	Recorded Tract Map 5270
17	ML	16.14	39	Recorded Tract Map 5271
18	ML	14.55	56	Recorded Tract Map 5973
19	ML	12.68	25	Recorded Tract Map 5272
20A	ML	13.68	64	Recorded Tract Map 5892
20B	ML	12.09	84	Recorded Tract Map 6045
20C	ML	10.83	51	Recorded Tract Map 6065
21	MH	21.83	96	5.5 EDU'S/AC; ESTIMATE
22	GC	1.87	9	5.8 EDU'S/AC; ESTIMATE
23	ML	16.79	41	Recorded Tract Map 6153
24	M	7.92	35	5.5 EDU'S/AC; ESTIMATE
25A	ML	7.88	55	Recorded Tract Map 5963
25B	ML	15.81	95	Recorded Tract Map 5838
26	L	30.98	94	Recorded Tract Map 6126
27	ML	21.76	126	6,000 SF LOTS; ESTIMATE
28	ML	61.00	419	5,000 SF LOTS; ESTIMATE
29	M	14.62	102	5,000 SF LOTS; ESTIMATE
30	ML	22.54	157	5,000 SF LOTS; ESTIMATE
31	ML	15.21	44	Recorded Tract Map 6087
32A	M	13.15	76	6,000 SF LOTS; ESTIMATE
32B	MH	6.27	62	12.5 EDU'S/AC; ESTIMATE
33	M	5.30	30	6,000 SF LOTS; ESTIMATE
34	ML	3.70	22	6,000 SF LOTS; ESTIMATE
35	ML	12.42	86	5,000 SF LOTS; ESTIMATE
36	GC	4.64	22	5.8 EDU'S/AC; ESTIMATE
37	NC	1.20	6	5.8 EDU'S/AC; ESTIMATE
38	ML	17.21	120	5,000 SF LOTS; ESTIMATE
39	ML	14.31	83	6,000 SF LOTS; ESTIMATE
40A	ML	9.67	67	5,000 SF LOTS; ESTIMATE
40B	M	3.60	25	5,000 SF LOTS; ESTIMATE
41	M	5.28	37	5,000 SF LOTS; ESTIMATE
42	O	4.06		PARK
43	M	29.28	201	5,000 SF LOTS; ESTIMATE
44	ML	4.96	34	5,000 SF LOTS; ESTIMATE
45	CC	7.32	34	5.8 EDU'S/AC; ESTIMATE
46A	L	4.57	6	Recorded Tract Map 5903
46B	L	7.56	10	Recorded Tract Map 6135
47	MH	12.58	126	12.5 EDU'S/AC; ESTIMATE
48	CC	3.85	18	5.8 EDU'S/AC; ESTIMATE
49	M	10.47	49	5.8 EDU'S/AC; ESTIMATE
50	ML	4.15	29	5,000 SF LOTS; ESTIMATE
GCC	O	183.69		GOLF COURSE AND CLUB HOUSE
TOTAL		914.69	3814	

LA-PROJECTS (2016) 160235 ENGINEERING COST ESTIMATES 2019-01-15 160235-LAND USE.DWG 1/30/2019 3:31 PM

REVISIONS	DATE	BY	DESCRIPTION



**COPPER RIVER RANCH**  
 1396 WEST HERNDON, SUITE 101  
 FRESNO, CA 93711  
 (559) 445-9000

**COPPER RIVER RANCH  
 LAND USE AND ACREAGE SUMMARY  
 EXHIBIT 12**

PROJECT NO.: 160235  
 DRAWN BY:  
 JW, JL  
 QA/QC BY:  
 CW, RW  
 SCALE:  
 NTS  
 SHEET NO.: **2 of 2**



**TABLE 1: COPPER RIVER RANCH AREA - ACREAGE AND EDU'S BY LAND USE TOTAL**

NO.	LAND USE	GROSS ACRE	DU's/EDU's	NOTES
1	PF	0.89	0	PUBLIC FACILITY
2	NC	2.6	12	5.8 EDU'S/AC; ESTIMATE
3	H	21.79	276	16 EDU'S/AC; ESTIMATE
4	MH	13.32	91	Recorded Tract Map 6099
5	M	30.39	134	Recorded Tract Map 5205
6	MH	11.89	119	12.5 EDU'S/AC; ESTIMATE
7A	O	3.90		PARK
7B	O	0.56		LANDSCAPE
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9	ML	43.24	230	Recorded Tract Map 5268
10	O	26.44		FMFCD BASIN "DE"
11	PF	3.51	0	WWTF
12	CC	13.34	62	5.8 EDU'S/AC; ESTIMATE
13	CC	7.83	36	5.8 EDU'S/AC; ESTIMATE
14	CC	8.34	38	5.8 EDU'S/AC; ESTIMATE
15	M	13.6	20	Recorded Tract Map 5273
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34	ML	3.70	22	6,000 SF LOTS; ESTIMATE
35	ML	12.42	86	5,000 SF LOTS; ESTIMATE
36	GC	4.64	22	5.8 EDU'S/AC; ESTIMATE
37	NC	1.2	6	5.8 EDU'S/AC; ESTIMATE
38	ML	17.21	120	5,000 SF LOTS; ESTIMATE
39	ML	14.31	83	6,000 SF LOTS; ESTIMATE
40A	ML	9.67	67	5,000 SF LOTS; ESTIMATE
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49	M	10.47	49	5.8 EDU'S/AC; ESTIMATE
50	ML	4.15	29	5,000 SF LOTS; ESTIMATE
GCC	CC	183.69	0	GOLF COURSE AND CLUB HOUSE
TOTAL		914.69	3814	

TABLE 2: AREA EXCLUSIONS

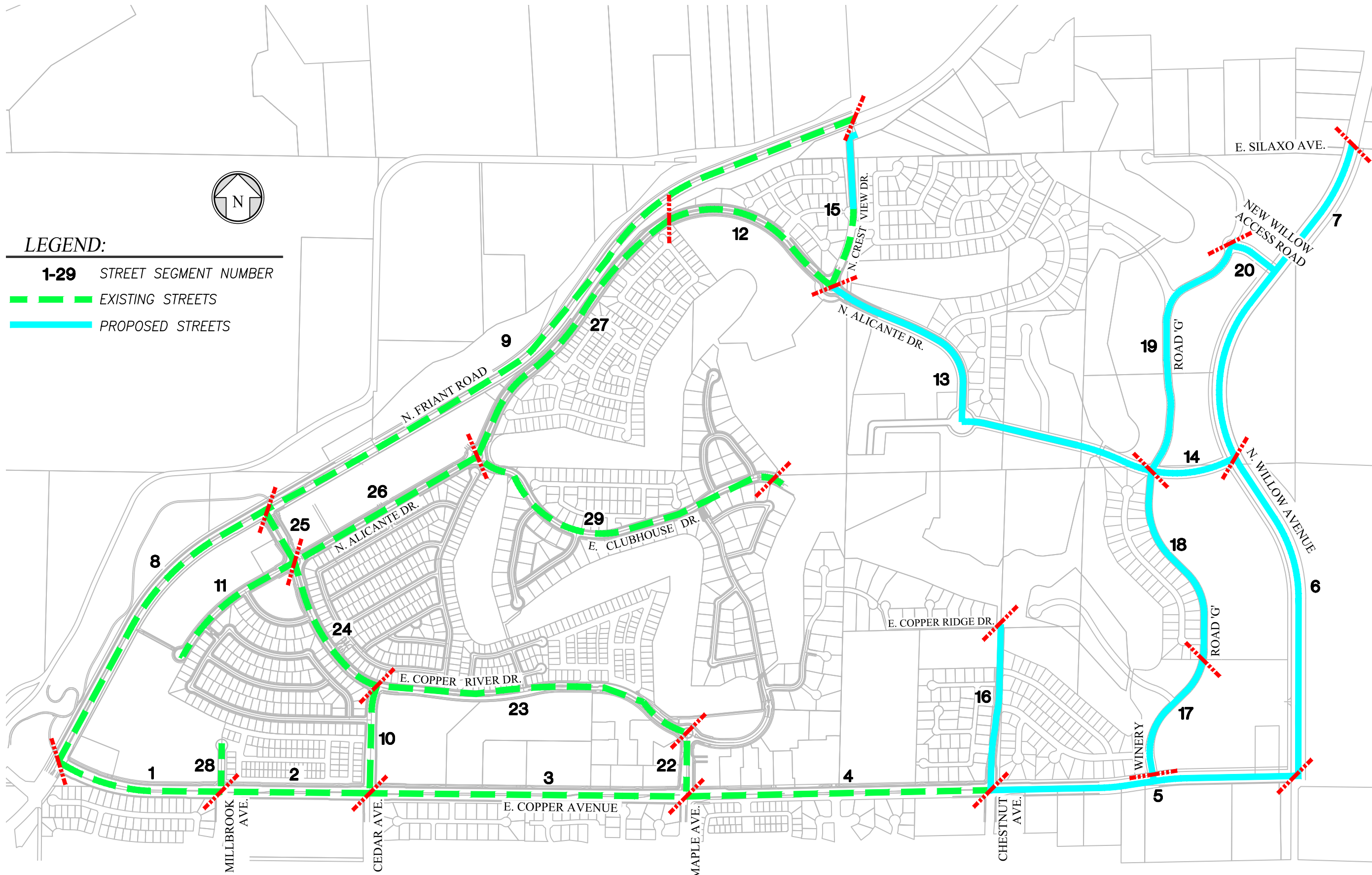
LAND USE		GROSS ACRE
PF	PUBLIC FACILITIES	4.40
O	OPEN SPACE	34.96
O	GOLF COURSE AND CLUB HOUSE	183.69

TOTAL EXCLUDED ACREAGE      223.05

## **SECTION 2**


### **PROPOSED AND EXISTING STREETS**

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**LEGEND:**


**1-29** STREET SEGMENT NUMBER

 EXISTING STREETS

 PROPOSED STREETS



REVISIONS	DATE	BY	DESCRIPTION



901 EAST MAIN STREET  
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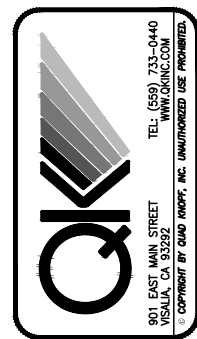
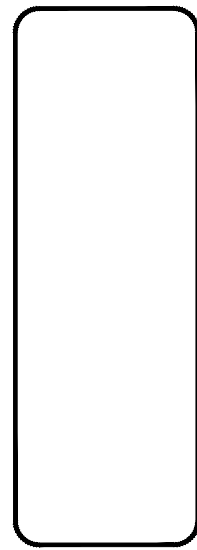
**COPPER RIVER RANCH**  
**PROPOSED VS. EXISTING STREETS EXHIBIT**  
**EXHIBIT 21**

PROJECT NO.:	160235
DRAWN BY:	JV, JL
QA/QC BY:	CW, RW
SCALE:	NTS
SHEET NO.:	1 of 2

LA PROJECTS (2016) 160235 ENGINEERING(COST ESTIMATES) 2019-01-15 160235-CRR EXHIBITS - STREETS-2018.DWG / 20/2019 4:18 PM

STREET SEGMENT SUMMARY		
STREET	SEGMENT #	SEGMENT LIMITS
E. Copper Avenue	1	N. Friant Road - N. Millbrook Avenue
	2	N. Millbrook Avenue - N. Cedar Avenue
	3	N. Cedar Avenue - N. Maple Avenue
	4	Maple Avenue - N. Chestnut Avenue
	5	N. Chestnut Avenue - N. Willow Avenue
N. Willow Avenue	6	E. Copper Avenue - N. Alicante Drive
	7	E. Alicante Drive - E. Silaxo Avenue
N. Friant Road	8	E. Copper Avenue - E. Copper River Drive
	9	E. Copper River Avenue - N. Crest View Drive
N. Cedar Avenue	10	E. Copper Avenue - E. Copper River Drive
N. Alicante Drive	11	Cul-de-Sac - E. Copper River Drive
	12	Amaryllis Avenue - N. Crest View Drive
	13	N. Crest View Drive - Road "G"
	14	Road "G" - N. Willow Avenue
N. Crest View Drive	15	N. Alicante Drive - Friant Road
N. Chestnut Avenue	16	E. Copper Avenue - E. Copper Ridge Drive
Winery	17	E. Copper Avenue - Road "G"
Road "G"	18	Winery - N. Alicante Drive
	19	N. Alicante Drive - New Willow Access Road
New Willow Access Road	20	Road "G" - Willow Avenue
	21	Not Used
N. Maple Avenue	22	E. Copper Avenue - E. Copper River Drive
E. Copper River Drive	23	N. Maple Avenue - N. Cedar Avenue
	24	N. Cedar Avenue - N. Alicante Drive
	25	N. Alicante Drive - Friant Road
N. Alicante Drive	26	E. Copper River Drive - E. Clubhouse Drive
	27	E. Clubhouse Drive - Amaryllis Avenue
Millbrook Avenue	28	E. Copper River Avenue - Cul-de-Sac
E. Clubhouse Avenue	29	N. Alicante Drive - CRR Club House

REVISIONS	DATE	BY	DESCRIPTION



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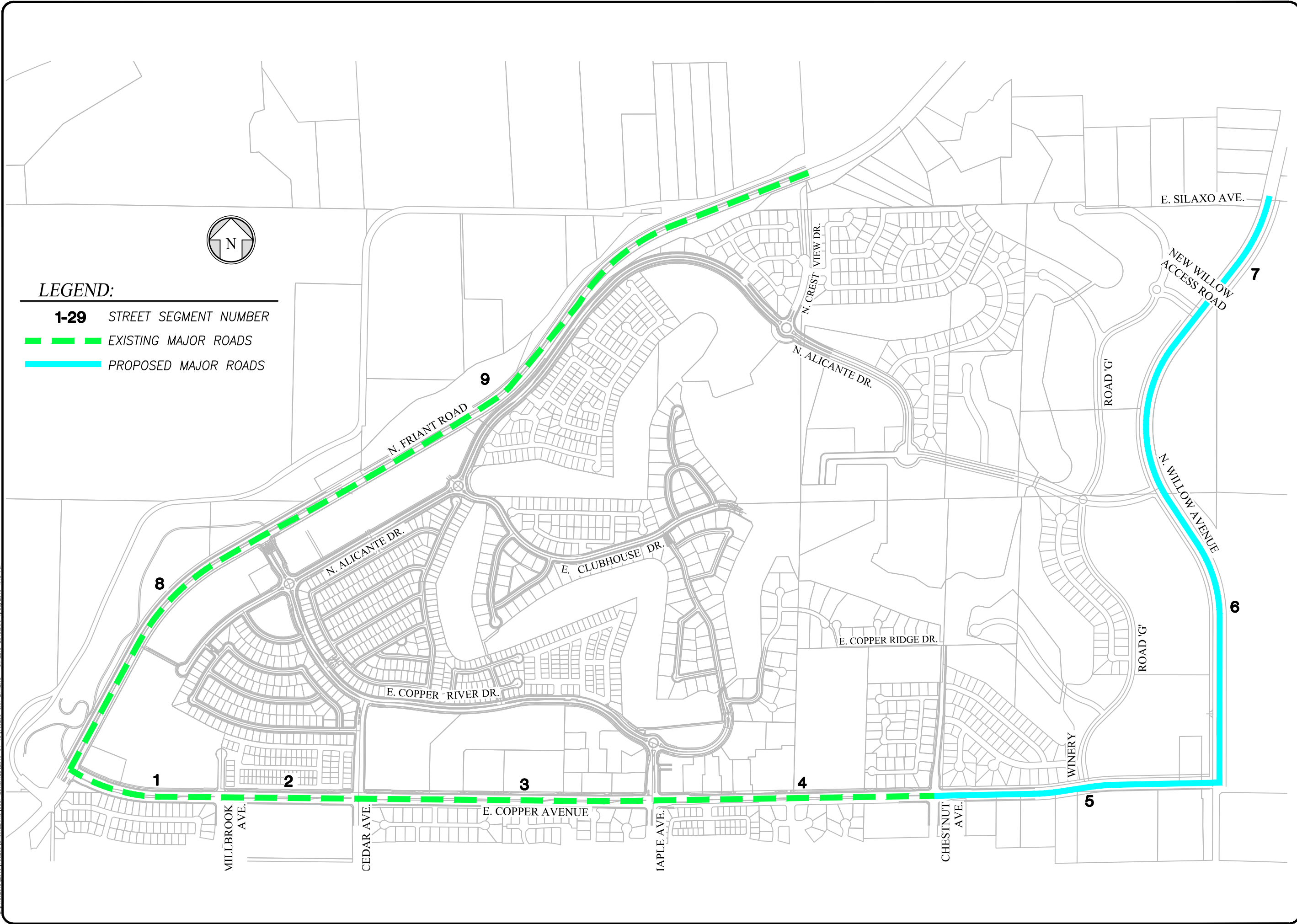
**COPPER RIVER RANCH**  
**STREET SEGMENT SUMMARY**  
**EXHIBIT 2.2**

PROJECT NO.: 160235  
 DRAWN BY:  
 JW, JL  
 QA/QC BY:  
 CW, RW  
 SCALE:  
 NTS  
 SHEET NO.: **2 of 2**

**SECTION 3**

**MAJOR ROADWAY FACILITY FEE**

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**LEGEND:**

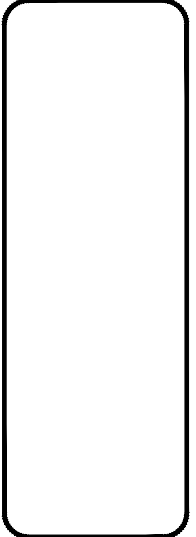
**1-29** STREET SEGMENT NUMBER

**---** EXISTING MAJOR ROADS

**---** PROPOSED MAJOR ROADS



REVISIONS	DATE	BY	DESCRIPTION



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(559) 446-9000

**COPPER RIVER RANCH**  
**MAJOR ROADS EXHIBIT**  
**EXHIBIT 3-1-MAJOR ROADWAY FACILITIES (MRF)**

PROJECT NO.:	160235
DRAWN BY:	JV, JL
QA/QC BY:	CW, RW
SCALE:	NTS
SHEET NO.:	1 of 1

**3.2 CRR - MAJOR ROADWAY FACILITY IMPACT FEE SUMMARY**

**COPPER RIVER RANCH PROJECT**

*Facility Detail and Calculation*

Street	Segment #	Case	Landscape (s.f.)	Street Light (ea.)	Ramp (ea.)	Valley Gutter (ea.)	High Voltage Tower (ea.)	Substructure (l.f.)	PG&E Conductor (l.f.)	Right of Way Acquisition (s.f.)
E. Copper Avenue	1	1	8,349 s. f.	10	1	-	-	-	-	64,916 s. f.
	2	1	8,223 s. f.	10	2	-	1	1,000 l. f.	1,000 l. f.	3,900 s. f.
	3	1	43,540 s. f.	21	2	-	1	500 l. f.	1,500 l. f.	7,785 s. f.
	4	1	17,280 s. f.	20	2	1	-	1,000 l. f.	1,000 l. f.	7,770 s. f.
	5	2	19,490 s. f.	17	4	-	-	-	-	101,599 s. f.
N. Willow Avenue	6	2	36,837 s. f.	18	3	-	-	-	-	76,508 s. f.
	7	2	38,658 s. f.	20	4	-	-	-	-	80,290 s. f.
N. Friant Road	8	1	49,218 s. f.	9	1	-	-	-	-	0 s. f.
	9	1	114,465 s. f.	7	2	-	-	-	-	0 s. f.

**CONSTRUCTED/REIMBURSED**

<b>Total Quantity</b>	<b>241,075 l. f.</b>	<b>77</b>	<b>10</b>	<b>1</b>	<b>2</b>	<b>2,500 l. f.</b>	<b>3,500 l. f.</b>	<b>84,371 s. f.</b>
<b>Unit Price</b>	<b>\$1.96</b>	<b>\$6,460.30</b>	<b>\$723.22</b>	<b>\$6,289.53</b>	<b>\$79,200.71</b>	<b>\$60.00</b>	<b>\$150.00</b>	<b>\$4.14</b>
<b>Total Cost per item</b>	<b>\$472,507.00</b>	<b>\$497,443.10</b>	<b>\$7,232.20</b>	<b>\$6,289.53</b>	<b>\$158,401.42</b>	<b>\$150,000.00</b>	<b>\$525,000.00</b>	<b>\$349,295.94</b>

**FUTURE**

<b>Total Quantity</b>	<b>94,985 l. f.</b>	<b>55</b>	<b>11</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>258,397 s. f.</b>
<b>Unit Price</b>	<b>\$3.50</b>	<b>\$6,500.00</b>	<b>\$1,150.00</b>	<b>\$4,750.00</b>	<b>\$83,160.75</b>	<b>\$63.00</b>	<b>\$157.50</b>	<b>\$3.61</b>
<b>Total Cost per item</b>	<b>\$332,448.06</b>	<b>\$357,500.00</b>	<b>\$12,650.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$933,329.96</b>

**CONSTRUCTED/REIMBURSED COSTS**

**SUB-TOTAL COST** **\$1,816,873.25**

Engineering Plan Check and Inspection @ 12.1% \$219,841.66

Administration @ 2.0% \$36,337.47

Right of Way Cost \$349,295.94

**TOTAL COST** **\$2,422,348.32**

**FUTURE**

**SUB-TOTAL COST** **\$702,598.06**

Engineering Plan Check and Inspection @ 12.1% \$85,014.37

Administration @ 2.0% \$14,051.96

\$933,329.96

**\$1,734,994.35**

Note:

1. CRR Fee does not include pavement as shown in the street cross section detail Exhibits 8.1 and 8.2. Pavement to be covered in whole or
2. Street Light quantities are based from 150' maximum spacing for Major Roads per Fresno Standard Drawing E-9.
3. Case Legend: "1" - Constructed/Reimbursed  
"2" - Future





**SECTION 4**

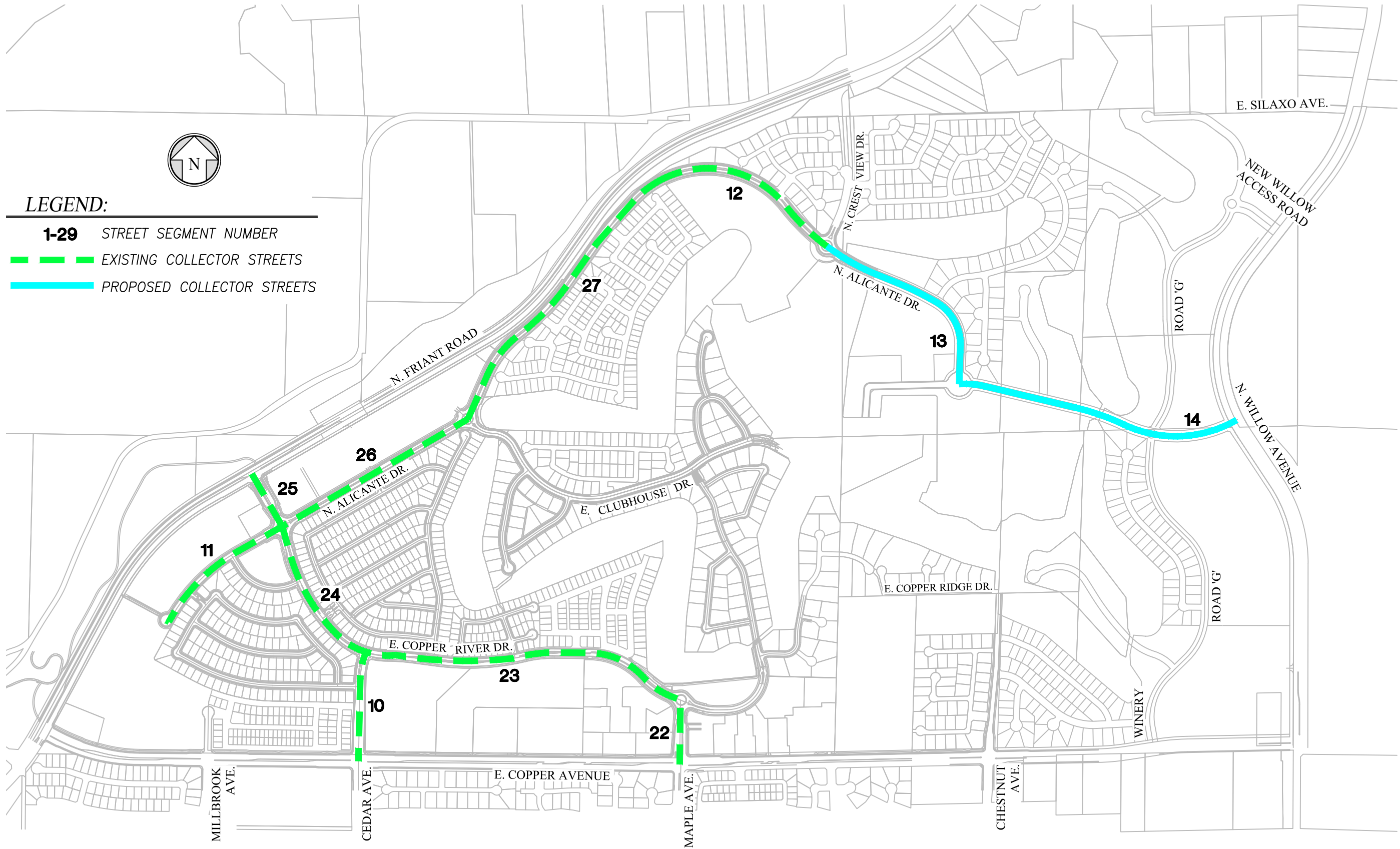
**COLLECTOR ROADWAY FACILITY FEE**

L:\PROJECTS\2016\160235\ENGINEERING\ESTIMATES\2019-01-15\160235-CRR-EXHIBITS - STREETS-2016.DWG 1/30/2019 4:17 PM

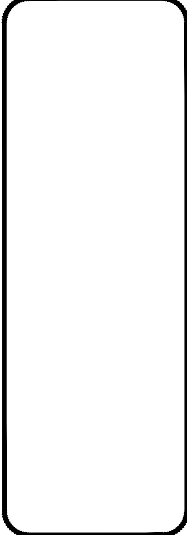



**LEGEND:**

- 1-29** STREET SEGMENT NUMBER
-  EXISTING COLLECTOR STREETS
-  PROPOSED COLLECTOR STREETS



REVISIONS	DATE	BY	DESCRIPTION

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(559) 440-9000

**COPPER RIVER RANCH**  
**COLLECTOR STREET EXHIBIT**  
**EXHIBIT 4-INTERIOR ROADWAY FACILITIES (IRF)**

PROJECT NO.:	160235
DRAWN BY:	JV, JL
QA/QC BY:	CW, RW
SCALE:	NTS
SHEET NO.:	1 of 1

**4.2 CRR-IRF FEE -COLLECTOR STREETS FACILITY IMPACT FEE SUMMARY**  
**COPPER RIVER RANCH PROJECT**

*Facility Detail and Calculation*

Street	Segment #	Case	Pavement (s.f.)	Median Curb (l.f.)	Median Cap (s.f.)	Median Landscape (s.f.)	Curb and Gutter (l.f.)	Landscape (s.f.)	Sidewalk (s.f.)	Street Light (ea.)	Ramp (ea.)	Valley Gutter (ea.)	Right of Way Acquisition (s.f.)								
N. Cedar Avenue	10	1	25,566.00 s. f.	No median in N. Cedar			1,449 l. f.	4,422 s. f.	7,246 s. f.	4	2	0	86023								
			-				-	-	-	-	-	-									
N. Alicante Drive	11	1	Part of FMSI Fee			See Note 2.			2,134 l. f.	6,852 s. f.	13,871 s. f.	6	8	0	107,305 s. f.						
									-	6,852 s. f.	-	-	-	-	-						
						2,993 l. f.	7,743 s. f.	16,565 s. f.	3,223 l. f.	46,261 s. f.	23,906 s. f.	11	7	-	141,494 s. f.						
						6,565 l. f.	11,347 s. f.	26,096 s. f.	6,976 l. f.	92,713 s. f.	51,698 s. f.	23	22	-	299,690 s. f.						
N. Maple Avenue	22	1	1,453 l. f.	1,035 s. f.	5,239 s. f.	1,453 l. f.	13,585 s. f.	9,159 s. f.	5	2	-	52,522 s. f.									
													917 s. f.	2,080 s. f.	639 l. f.	5,432 s. f.	6,391 s. f.	2	4	1	38,298 s. f.
E. Copper River Drive	23	1	5,554 s. f.	9,294 s. f.	CRR Fee. Not included in the old calc.	5,344 l. f.	55,310 s. f.	43,292 s. f.	20	10	2	311,771 s. f.									
													2,127 s. f.	3,599 s. f.	2,460 l. f.	28,728 s. f.	19,496 s. f.	8	8	2	113,864 s. f.
													726 s. f.	1,527 s. f.	1,098 l. f.	13,711 s. f.	10,851 s. f.	8	5	0	43,995 s. f.
N. Alicante Drive	26	1	3,229 s. f.	5,638 s. f.	3,148 l. f.	40,677 s. f.	26,962 s. f.	13	8	2	146,587 s. f.										
												4,833 s. f.	12,553 s. f.	4,609 l. f.	74,993 s. f.	38,754 s. f.	12	5	0	229,376 s. f.	

**CONSTRUCTED/REIMBURSED**

<b>Total Quantity</b>	<b>25,566 s. f.</b>	<b>17,386 l. f.</b>	<b>34,691 s. f.</b>	<b>47,900 s. f.</b>	<b>32,533 l. f.</b>	<b>241,399.5</b>	<b>166,863 s. f.</b>	<b>73</b>	<b>50</b>	<b>7</b>	<b>1,077,219 s. f.</b>
<b>Unit Price</b>	<b>\$4.98</b>	<b>\$8.69</b>	<b>\$12.21</b>	<b>\$3.50</b>	<b>\$9.05</b>	<b>\$3.18</b>	<b>\$3.20</b>	<b>\$6,460.30</b>	<b>\$723.22</b>	<b>\$6,289.53</b>	<b>\$4.14</b>
<b>Total Cost per Item</b>	<b>\$127,318.68</b>	<b>\$151,084.34</b>	<b>\$423,577.11</b>	<b>\$167,650.04</b>	<b>\$294,425.55</b>	<b>\$767,650.41</b>	<b>\$533,961.60</b>	<b>\$471,601.90</b>	<b>\$36,161.00</b>	<b>\$44,026.71</b>	<b>\$4,459,686.66</b>

**FUTURE**

<b>Total Quantity</b>	Part of FMSI Fee	<b>11,012 l. f.</b>	<b>20,125 s. f.</b>	<b>-</b>	<b>-</b>	<b>152,558.80 s. f.</b>	<b>84,763.03 s. f.</b>	<b>39</b>	<b>31</b>	<b>0</b>	<b>493,706 s. f.</b>
<b>Unit Price</b>		<b>\$9.50</b>	<b>\$6.50</b>	<b>-</b>	<b>-</b>	<b>\$3.50</b>	<b>\$3.50</b>	<b>\$6,500.00</b>	<b>\$1,150.00</b>	<b>\$4,750.00</b>	<b>\$4.35</b>
<b>Total Cost per Item</b>		<b>\$104,609.44</b>	<b>\$130,814.62</b>	<b>-</b>	<b>-</b>	<b>\$533,955.81</b>	<b>\$296,670.61</b>	<b>\$253,500.00</b>	<b>\$35,650.00</b>	<b>\$0.00</b>	<b>\$2,146,141.07</b>

**CONSTRUCTED/REIMBURSED COSTS**

**SUB-TOTAL COST \$3,017,457.34**

Engineering Plan Check and Inspection @ 12.1% \$365,112.34

Administration @ 2.0% \$60,349.15

Right of Way Cost \$4,459,686.66

**TOTAL COST \$7,902,605.48**

**FUTURE COSTS**

**SUB-TOTAL COST \$1,355,200.48**

Engineering Plan Check and 12.1% Inspection @ \$163,979.26

Administration @ 2.0% \$27,104.01

Right of Way Cost \$2,146,141.07

**TOTAL COST \$3,692,424.81**

Note:

1. Street Light quantities are based from 150' maximum spacing for Collector Streets per Fresno Standard Drawing E-9.

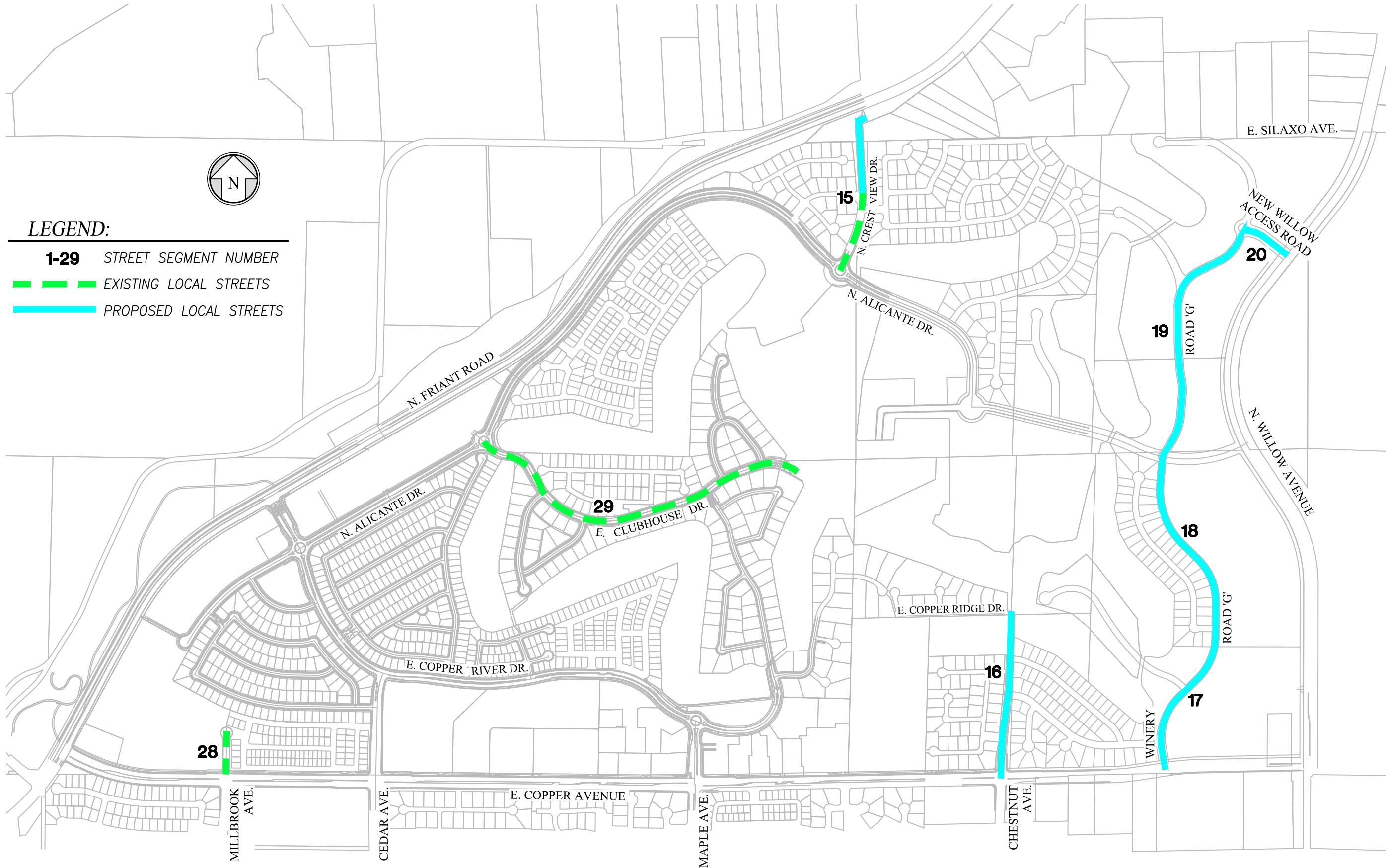
2. Pavement is existing. Detail shows a median.

3. Case Legend: "1" - Constructed/Reimbursed



"2" - Future

**SECTION 5**  
**LOCAL FACILITY FEE**

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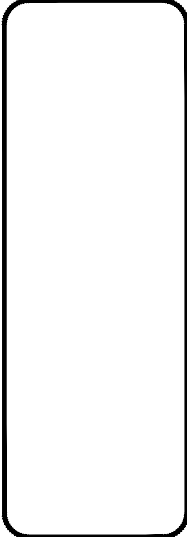



**LEGEND:**

- 1-29** STREET SEGMENT NUMBER
-  EXISTING LOCAL STREETS
-  PROPOSED LOCAL STREETS



REVISIONS	DATE	BY	DESCRIPTION

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(530) 440-9000

**COPPER RIVER RANCH**  
**LOCAL STREETS EXHIBIT**  
**EXHIBIT 6-INTERIOR ROADWAY FACILITIES (IRF)**

PROJECT NO.:	160235
DRAWN BY:	JV, JL
QA/QC BY:	CW, RW
SCALE:	NTS
SHEET NO.:	1 of 1

**5.2 CRR - IRF FEE - LOCAL INTERIOR COLLECTOR FACILITIES**  
**COPPER RIVER RANCH PROJECT**

Facility Detail and Calculation

Street	Segment #	Case	Pavement						Curb and Gutter (l.f.)	Landscape (s.f.)	Sidewalk (s.f.)	Street Light (ea.)	Ramp (ea.)	Valley Gutter (ea.)	Right of Way Acquisition (s.f.)
			AC (ton)		AB (ton)		SG Prep (s.y.)	Roadway Ex. (c.y.)							
N. Crest View Drive	15	2	947 ton	\$80,506.84	1,515 ton	\$39,400.99	7,016 s. y.	2,436 c. y.	2,687 l. f.	-	9,850 s. f.	6	11	3	73,920 s. f.
N. Chestnut Avenue	16	2	981 ton	\$83,365.86	1,569 ton	\$40,800.23	7,265 s. y.	2,523 c. y.	2,782 l. f.	-	11,981 s. f.	7	4	2	72,490 s. f.
Winery	17	2	986 ton	\$83,831.24	1,315 ton	\$34,190.00	6,088 s. y.	2,198 c. y.	2,332 l. f.	-	9,952 s. f.	6	4	1	69,097 s. f.
Road "G"	18	2	1,217 ton	\$103,463.51	1,948 ton	\$50,636.26	9,016 s. y.	3,131 c. y.	3,453 l. f.	-	15,089 s. f.	9	10	1	102,335 s. f.
	19	2	1,046 ton	\$88,929.72	1,674 ton	\$43,523.25	7,750 s. y.	2,691 c. y.	4,359 l. f.	21,797 s. f.	21,797 s. f.	11	12	1	153,510 s. f.
New Willow Access Rd	20	2	254 ton	\$21,589.40	339 ton	\$8,805.09	1,568 s. y.	566 c. y.	882 l. f.	4,410 s. f.	4,410 s. f.	2	6	1	27,378 s. f.
Millbrook Avenue	28	2	305 ton	\$25,887.60	406 ton	\$10,558.08	1,880 s. y.	679 c. y.	720 l. f.	3,960 s. f.	1,800 s. f.	2	2	1	12,240 s. f.
E. Clubhouse Drive	29	1	161,690.00 s. f.						7,350 c. y.	31,874 s. f.	44,100 s. f.	13	16	4	246,225 s. f.

**CONSTRUCTED/REIMBURSED**

<b>Total Quantity</b>	<b>164,959.53 s. f.</b>	<b>8,070 c. y.</b>	<b>35,834 s. f.</b>	<b>45,900 s. f.</b>	<b>15</b>	<b>18</b>	<b>5</b>	<b>258,465 s. f.</b>
<b>Unit Price</b>	<b>\$1.73</b>	<b>\$9.05</b>	<b>\$3.18</b>	<b>\$3.20</b>	<b>\$6,460.30</b>	<b>\$723.22</b>	<b>\$6,289.53</b>	<b>\$4.14</b>
<b>Total Cost per Item</b>	<b>\$285,379.98</b>	<b>\$73,033.50</b>	<b>\$113,952.12</b>	<b>\$146,880.00</b>	<b>\$96,904.50</b>	<b>\$13,017.96</b>	<b>\$31,447.65</b>	<b>\$1,070,045.10</b>

**FUTURE**

<b>Total Quantity</b>	<b>5,432 ton</b>	<b>8,360 ton</b>	<b>38,703 s. y.</b>	<b>13,545 c. y.</b>	<b>16,495 c. y.</b>	<b>26,206 s. f.</b>	<b>73,078 s. f.</b>	<b>41</b>	<b>47</b>	<b>9</b>	<b>498,730 s. f.</b>
<b>Unit Price</b>	<b>\$88.00</b>	<b>\$40.00</b>	<b>\$0.25</b>	<b>\$22.00</b>	<b>\$10.00</b>	<b>\$3.50</b>	<b>\$3.50</b>	<b>\$6,500.00</b>	<b>\$1,150.00</b>	<b>\$4,750.00</b>	<b>\$4.35</b>
<b>Total Cost per Item</b>	<b>\$477,981.39</b>	<b>\$334,393.57</b>	<b>\$9,675.74</b>	<b>\$297,986.89</b>	<b>\$164,951.40</b>	<b>\$91,721.35</b>	<b>\$255,772.09</b>	<b>\$266,500.00</b>	<b>\$54,050.00</b>	<b>\$42,750.00</b>	<b>\$2,167,979.31</b>

**CONSTRUCTED/REIMBURSED COSTS**

**SUB-TOTAL COST \$760,615.71**

Engineering Plan Check and Inspection @ 12.1% \$92,034.50

Administration @ 2.0% \$15,212.31  
 Right of Way Cost \$1,070,045.10

**TOTAL COST \$1,937,907.63**

**FUTURE COSTS**

**SUB-TOTAL COST \$1,995,782.44**

Engineering Plan Check and Inspection @ 12.1% \$241,489.67

Administration @ 2.0% \$39,915.65  
 Right of Way Cost \$2,167,979.31

**TOTAL COST \$4,445,167.07**

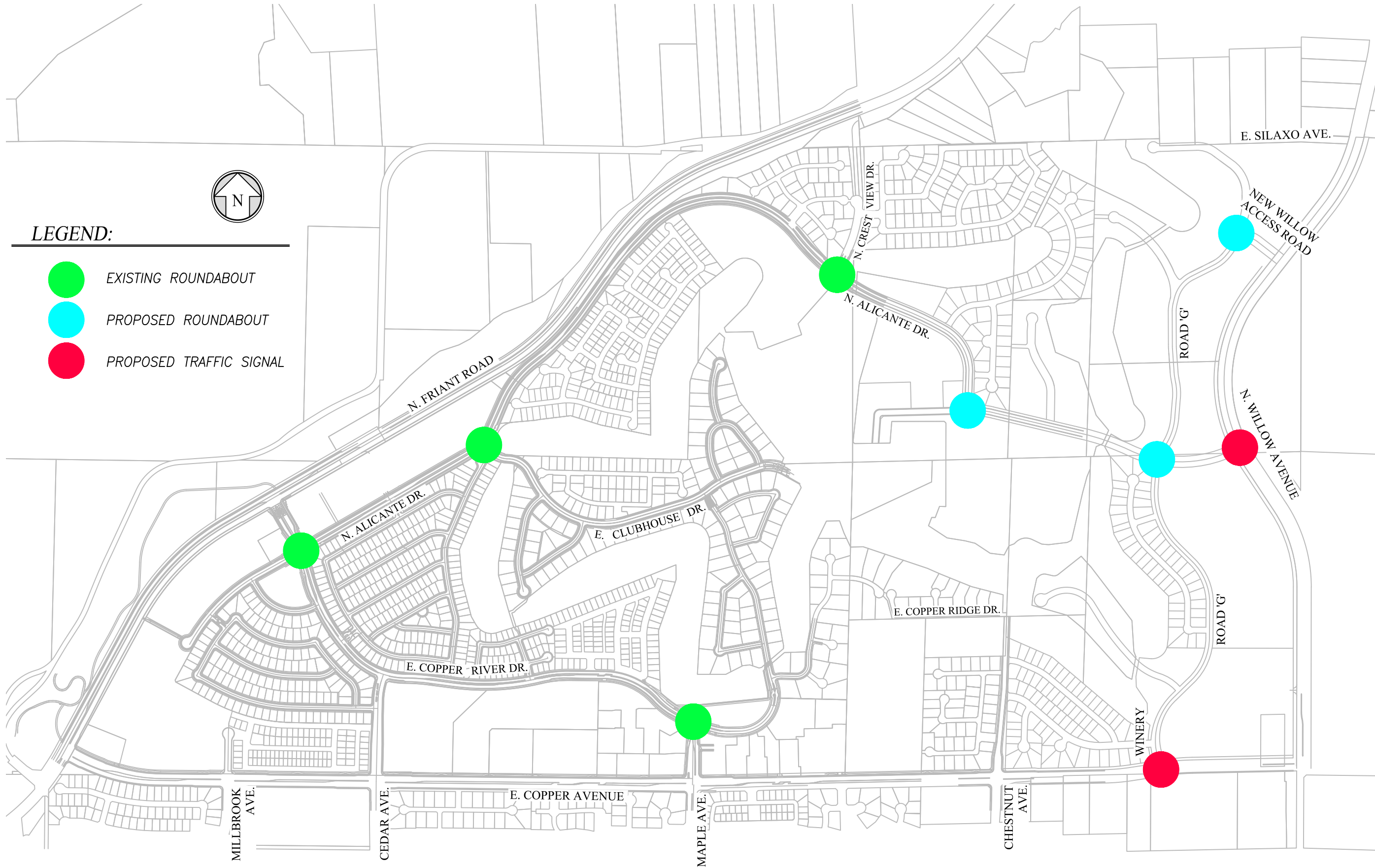
Note:

1. Street Light quantities was obtained using 200 ft. spacing in between. Maximum spacing is 275 ft. per Fresno Standard Drawing E-9.
2. Case Legend: "1" - Constructed/Reimbursed  
 "2" - Future

**SECTION 6**

**INTERSECTION FACILITIES FEE**

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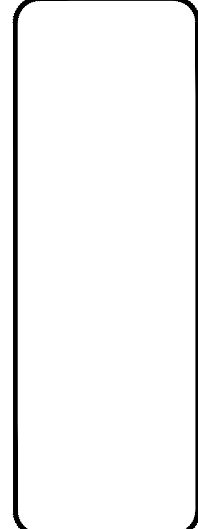



**LEGEND:**

- EXISTING ROUNDABOUT
- PROPOSED ROUNDABOUT
- PROPOSED TRAFFIC SIGNAL



REVISIONS	DATE	BY	DESCRIPTION

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**COPPER RIVER RANCH**  
**INTERSECTIONS EXHIBIT**  
**EXHIBIT 6-INTERIOR ROADWAY FACILITIES (RF)**

PROJECT NO.:	160235
DRAWN BY:	JV, JL
QA/QC BY:	CW, RW
SCALE:	NTS
SHEET NO.:	1 of 1



**6.2 CRR - IRF FEE - EXISTING ROUNDABOUT FACILITIES**  
**COPPER RIVER RANCH PROJECT**

*Facility Detail and Calculation*

**Existing Roundabout Locations**

1. Intersection of N. Alicante Drive and E. Copper River Drive
2. Intersection of N. Alicante Drive and E. Clubhouse Avenue
3. Intersection of E. Copper River Drive and N. Maple Road
4. Intersection of N. Alicante Drive and N. Crest View Drive

Items	Unit Price	Quantity	Cost
Pavement <sup>1</sup>	-	-	-
Concrete Apron	\$9.05 SF	962 s. f.	\$8,707.15
Median Curb	\$8.69 LF	264 l. f.	\$2,294.29
Median Landscaping	\$3.18 per s.f.	8,116 s. f.	\$25,808.88
Curb & Gutter	\$9.05 per l.f.	333 l. f.	\$3,012.51
Sidewalk	\$3.20 SF	3,202 s. f.	\$10,235.90
Curb Ramp	\$723.22 ea.	2 ea.	\$1,446.44
Landscaping	\$3.18 SF	2,705 s. f.	\$8,600.59
Streetlights	\$6,460.30 ea.	4 ea.	\$25,841.20
Construction Costs Sub-Total for <i>EACH</i> roundabout			\$85,946.95

Number of Existing Roundabouts	4
Cost of Improvements	<b>\$343,787.81</b>
Engineering, Plan Check & Inspection @	12.1% \$41,598.33
Administration @	2.0% \$6,875.76
Right of Way Acquisition	25165 sf / roundabout \$416,731.45
	\$4.14 per s.f.
<b>TOTAL ROUNDABOUT COST ESTIMATE</b>	<b>\$808,993.34</b>

Note:

1. Pavement is included in the City of Fresno Major Street Impact Fees with the exception of the roundabout located at Road G and the new Willow Access Road, which is included in the Local Interior Collector Street Fees.
2. May 2008 Update: Two New Roundabout Intersections added (East Copper Ave/Road G & Road G/New Willow Access Road)
3. All roundabouts are located in a city Classified Collector Street except for roundabout located at Road "G" and New Willow Access Road.

**6.3 CRR - IRF FEE - FUTURE INTERSECTION FACILITIES**  
**COPPER RIVER RANCH PROJECT**

*Facility Detail and Calculation*

**Future Roundabout Locations**

1. N. Alicante Drive
2. Intersection of Road "G" and N. Alicante Drive
3. Intersection of Road "G" and New Willow Access Road

Items	Unit Price	Quantity	Cost
Pavement <sup>1</sup>	-	-	-
Concrete Apron	\$9.05 SF	962 s. f.	\$8,707.15
Median Curb	\$9.50 LF	264 l. f.	\$2,506.99
Median Landscaping	\$3.50 per s.f.	8,116 s. f.	\$28,406.00
Curb & Gutter	\$10.00 per l.f.	333 l. f.	\$3,328.75
Sidewalk	\$3.50 SF	3,202 s. f.	\$11,206.02
Curb Ramp	\$1,150.00 ea.	2 ea.	\$2,300.00
Landscaping	\$3.50 SF	2,705 s. f.	\$9,466.05
Traffic Signal	\$350,000.00 ea.	2 s. f.	\$700,000.00
Streetlights	\$6,500.00 ea.	4 ea.	\$26,000.00
Construction Costs Sub-Total for <b>EACH</b> roundabout			\$791,920.95

**Number of Future Roundabouts**

3

Cost of Improvements		<b>\$2,375,762.85</b>
Engineering, Plan Check & Inspection @	12.1%	\$287,467.31
Administration @	2.0%	\$47,515.26
Right of Way Acquisition	25165 sf / roundabout \$4.35 per s.f.	\$328,402.50

**TOTAL ROUNDABOUT COST ESTIMATE** **\$3,039,147.92**

**Note:**

1. Pavement is included in the City of Fresno Major Street Impact Fees with the exception of the roundabout located at Road G and the new Willow Access Road, which is included in the Local Interior Collector Street Fees.
2. May 2008 Update: Two New Roundabout Intersections added (East Copper Ave/Road G and Road G/New Willow Access Road)
3. All roundabouts are located in a city Classified Collector Street except for roundabout located at Road "G" and New Willow Access Road.

**SECTION 7**

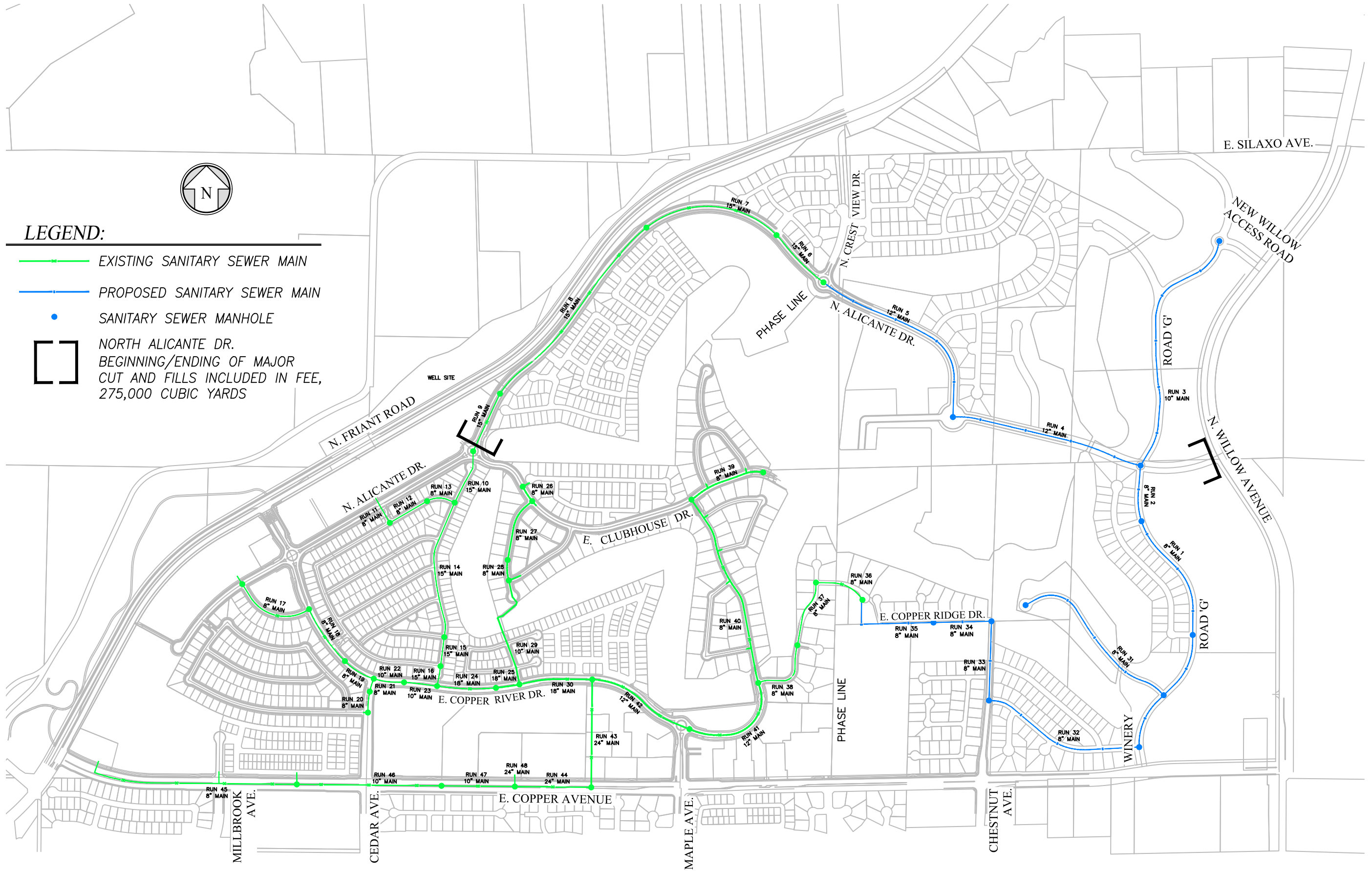
**SEWER BACKBONE SYSTEM FEE**

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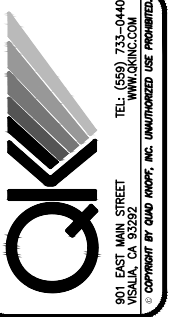


**LEGEND:**

- EXISTING SANITARY SEWER MAIN
- PROPOSED SANITARY SEWER MAIN
- SANITARY SEWER MANHOLE
- NORTH ALICANTE DR. BEGINNING/ENDING OF MAJOR CUT AND FILLS INCLUDED IN FEE, 275,000 CUBIC YARDS



REVISIONS	DATE	BY	DESCRIPTION



**COPPER RIVER RANCH**  
 1396 WEST HERNDON, SUITE 101  
 PRESNO, CA 95771  
 (559) 440-9000

**COPPER RIVER RANCH**  
**SEWER BACKBONE EXHIBIT**  
**EXHIBIT 7.1**

PROJECT NO.:	160235
DRAWN BY:	JV, JL
QA/QC BY:	CW, RW
SCALE:	NTS
SHEET NO.:	1 of 1

## 7.2 Sewer Backbone Fee Calculation - Existing

Copper River Ranch Project

### Facility Detail and Calculations

Street <sup>(5)</sup>	Segment	Pipe Run	Length (ft)	Number of Manholes	Diameter (in)	Downstream Depth (ft)	Pipe Cost (L/F)	Construction Cost (L/F)	Total Cost
N. Alicante Dr.	N. Alicante Dr. - E. Clubhouse Ave	6	565	3	15	12.0	\$ 16.22	\$ 36.93	\$30,029.75
		7	1,205	5	15	12.0	\$ 16.22	\$ 43.67	\$72,167.45
		8	2,000	5	15	20.5	\$ 16.22	\$ 50.52	\$133,480.00
		9	444	3	15	21.3	\$ 16.22	\$ 50.52	\$29,632.56
N. Via Montessori Dr.	E. Clubhouse Ave - N. Via Napoli Dr.	10	444	4	15	17.4	\$ 16.22	\$ 50.52	\$29,632.56
N. Via Napoli Dr.	N. Alicante Dr. - N. Via Montessori Dr.	11	265	3	8	14.6	\$ 5.09	\$ 26.40	\$8,344.85
		12	324	1	8	15.3	\$ 5.09	\$ 26.40	\$10,202.76
		13	321	3	8	17.4	\$ 5.09	\$ 30.24	\$11,340.93
N. Via Montessori Dr.	N. Via Napoli Dr - E. Copper River Dr	14	1,000	9	15	16.5	\$ 16.22	\$ 50.52	\$66,740.00
		15	167	1	15	14.4	\$ 16.22	\$ 43.67	\$10,001.63
		16	1,692	1	15	15.3	\$ 16.22	\$ 43.67	\$101,333.88
E. Via Roma Dr.	N. Alicante Dr. - E. Copper River Dr	17	735	6	8	11.6	\$ 5.09	\$ 19.81	\$18,301.50
E. Copper River Dr	E. Via Roma Ave - N. Cedar Ave	18	559	3	8	12.4	\$ 5.09	\$ 26.40	\$17,602.91
		19	274	2	8	13.7	\$ 5.09	\$ 26.40	\$8,628.26
N. Cedar Ave	E. Via Marbella Dr - E. Copper River Dr	20	88	1	8	13.3	\$ 5.09	\$ 26.40	\$2,771.12
		21	167	1	8	13.7	\$ 5.09	\$ 26.40	\$5,258.83
E. Copper River Dr	N. Cedar Ave - N. Via Montessori Dr	22	250	1	10	14.2	\$ 7.98	\$ 31.13	\$9,777.50
		23	300	1	10	14.9	\$ 7.98	\$ 31.13	\$11,733.00
E. Copper River Dr	N. Via Montessori Dr - N. Via Venice Ln	24	583	2	18	13.3	\$ 27.13	\$ 62.59	\$52,306.76
		25	111	1	18	12.9	\$ 27.13	\$ 62.59	\$9,958.92
N. Balmoral Way, N. Via Venice Ln	E. Clubhouse Ave - E. Copper River Dr	26	147	2	8	8.9	\$ 5.09	\$ 19.81	\$3,660.30
		27	618	3	8	10.0	\$ 5.09	\$ 19.81	\$15,388.20
		28	63	1	8	10.5	\$ 5.09	\$ 19.81	\$1,568.70
		29	1,000	8	10	12.3	\$ 7.98	\$ 31.13	\$39,110.00
E. Copper Rver Dr.	N. Via Venice Ln - PG&E	30	583	2	18	16.7	\$ 27.13	\$ 67.67	\$55,268.40
Kizarian	N. Chestnut Ave - E. Copper Rdige Dr	36	443	5	8	8.5	\$ 5.09	\$ 19.81	\$11,030.70
Tract 5273	E. Copper Rdige Dr - N. Knotting Hill Dr	37	563	6	8	9.7	\$ 5.09	\$ 19.81	\$14,018.70
		38	572	8	8	16.5	\$ 5.09	\$ 19.81	\$14,242.80
E. Clubhouse Ave	CRR Clubhouse - N. Knotting Hill Dr	39	678	3	8	8.9	\$ 5.09	\$ 19.81	\$16,882.20
N. Knotting Hill Dr	E. Clubhouse Ave - Tract 5273	40	1,706	9	8	16.5	\$ 5.09	\$ 30.24	\$60,272.98
E. Copper River Dr	N. Knotting Hill Dr - PG&E	41	150	9	12	9.8	\$ 11.46	\$ 29.81	\$6,190.50
		42	958	9	12	16.2	\$ 11.46	\$ 40.69	\$49,959.70
PG&E	E. Copper River Ave - E. Copper Dr	43	1,200	4	24	24.2	\$ 45.50	\$ 105.00	\$180,600.00
E. Copper Ave	PG&E- WWTF	44	525	1	24	17.8	\$ 45.50	\$ 105.00	\$79,012.50
E. Copper Ave	N. Friant Rd - WWTF	45	1,762	4	8	11.1	\$ 5.09	\$ 19.81	\$43,873.80
		46	1,208	1	10	13.7	\$ 7.98	\$ 31.13	\$47,244.88
		47	616	1	10	16.7	\$ 7.98	\$ 31.13	\$24,091.76
WWTF	E. Copper Ave	48	80	1	24	17.1	\$ 45.50	\$ 105.00	\$12,040.00
		<b>Total:</b>	<b>22,596</b>	<b>125</b>			<b>Total:</b>		<b>\$ 1,211,504.09</b>

Powerpole Relocation	\$	18,600.00
Sewer Manholes @ \$3,000.00 each	\$	375,000.00
<b>Total Sewer Pipe Construction Cost</b>	<b>\$</b>	<b>1,605,104.09</b>

Engineering, Plan Check and Inspection Fees @	12.1%	\$	194,217.59
Administration Fee @	2.0%	\$	32,102.08
<b>Subtotal</b>		<b>\$</b>	<b>\$1,831,423.77</b>

Special Earthwork (220,000 cyds cut / 55,000 fill), \$ 213,125.00

**Total Existing Sewer Backbone Construction Cost with Roadway Excavation** **\$ 2,044,548.77**

Note:

- Assumes manhole spacing at approximately 600 feet. Manhole cost is \$3,000 each
- Run 3 was expanded from East Alicante (formerly Copper River) to the Traffic Roundabout at the Willow Avenue Access Street
- Power Pole relocation costs were for power poles being relocated along the south side of Basin DE that were in conflict with the sewer.
- Special Earthwork: Per the developer stakeholders at CRR, Special Earthwork consisting of 220,000 cubic yards of cut and 55,000 cubic yards of fill has been included in this fee to allow for the grading of the roadway elevation prior to sewer installation for a portion of East Alicante Dr. (formerly Copper River Road) between East Clubhouse Avenue and Road G. Approximately 8,265 lineal feet.
- Street Names were changed: East Riverbank became East Copper River and Copper River Avenue became Alicante Drive per revisions to the project street names.
- Phase 1 Backbone includes runs 9-30 and runs 39-48.

### 7.3 Sewer Backbone Fee Calculation - Future

Copper River Ranch Project

#### Facility Detail and Calculations

Street <sup>(5)</sup>	Segment	Pipe Run	Length (ft)	Number of Manholes	Diameter (in)	Downstream Depth (ft)	Pipe Cost (L/F)		Construction Cost (L/F)	Total Cost
							\$	\$		
Road "G"	Road "K" - N. Willow Ave Access Street	1	2,194	6	8	6.0	\$ 5.34	\$ 15.68	\$46,125.12	
		2	474	2	8	10.2	\$ 5.34	\$ 20.20	\$12,120.61	
		3	2,180	3	10	10.4	\$ 8.38	\$ 24.14	\$70,880.36	
N. Alicante Dr.	Road "G" - N. Crest View Drive	4	2,310	5	12	15.4	\$ 12.03	\$ 38.37	\$116,437.61	
		5	1,767	8	12	10.0	\$ 12.03	\$ 28.32	\$71,303.75	
Road "K"	N. Winery Ave - N. Chestnut Ave	31	1,546	4	8	17.8	\$ 5.34	\$ 31.89	\$57,548.15	
		32	1,398	7	8	10.8	\$ 5.34	\$ 20.20	\$35,717.60	
		33	670	2	8	11.5	\$ 5.34	\$ 20.20	\$17,114.82	
Kizarian	N. Chestnut Ave - E. Copper Ridge Drive	34	490	1	8	28.7	\$ 5.34	\$ 31.89	\$18,244.91	
		35	815	2	8	11.1	\$ 5.34	\$ 20.20	\$20,807.02	
<b>Total:</b>			13,844	40				<b>Total:</b>	\$ 466,299.94	

Powerpole Relocation	\$	41,400.00
Sewer Manholes @ \$3,000.00 each	\$	120,000.00
<b>Total Sewer Pipe Construction Cost</b>	\$	<b>627,699.94</b>

Engineering, Plan Check and Inspection Fees @	12.1%	\$	75,951.69
Administration Fee @	2.0%	\$	12,554.00
<b>Subtotal</b>			<b>\$716,205.63</b>

Special Earthwork (220,000 cyds cut / 55,000 fill) \$ 474,375.00

**Total Sewer Backbone Construction Cost with Roadway Excavation \$ 1,190,580.63**

Note:

- Assumes manhole spacing at approximately 600 feet. Manhole cost is \$3,000 each
- Run 3 was expanded from East Alicante (formerly Copper River) to the Traffic Roundabout at the Willow Avenue Access Street
- Power Pole relocation costs were for power poles being relocated along the south side of Basin DE that were in conflict with the sewer.
- Special Earthwork: Per the developer stakeholders at CRR, Special Earthwork consisting of 220,000 cubic yards of cut and 55,000 cubic yards of fill has been included in this fee to allow for the grading of the roadway elevation prior to sewer installation for a portion of East Alicante Dr. (formerly Copper River Road) between East Clubhouse Avenue and Road G. Approximately 8,265 lineal feet.
- Street Names were changed: East Riverbank became East Copper River and Copper River Avenue became Alicante Drive per revisions to the project street names.
- Phase 1 Backbone includes runs 9-30 and runs 39-48.

\$ 716,205.63

**7.4 Sewer Pipe Construction Unit costs - Existing**

**Purchase Price of Pipe (w/Tax), PVC**

8" Sewer	\$5.09	/ LF	\$5.09
10" Sewer	\$7.98	/ LF	\$7.98
12" Sewer	\$11.46	/ LF	\$11.46
15" Sewer	\$16.22	/ LF	\$16.22
18" Sewer	\$27.13	/ LF	\$27.13
24" Sewer	\$45.50	/ LF	\$45.50

**Construction Cost of Sewer Pipe, PVC <sup>(1, 2)</sup>**

Depth	Pipe Size					
	8"	10"	12"	15"	18"	24"
< 8 FT	\$ 14.93	\$ 17.69	\$ 22.97	\$ 29.47	\$ 41.95	\$ 63.50
8-12 FT	\$ 19.81	\$ 24.60	\$ 29.81	\$ 36.93	\$ 50.52	\$ 74.91
12-16 FT	\$ 26.40	\$ 31.13	\$ 36.54	\$ 43.67	\$ 62.59	\$ 95.00
> 16 FT	\$ 30.24	\$ 35.19	\$ 40.69	\$ 50.52	\$ 67.67	\$ 105.00

Cost shown are on a per linear foot basis

1. Reference unit costs using actual CRR Contractor costs or the City of Clovis Construction Cost Summary dated 9/1/2005
2. 24" Diameter Pipe Costs obtained from Industry Cost References

## 7.5 Sewer Pipe Construction Unit costs - Future

### Purchase Price of Pipe (w/Tax), PVC

8" Sewer	\$5.34	/ LF	\$5.34
10" Sewer	\$8.38	/ LF	\$8.38
12" Sewer	\$12.03	/ LF	\$12.03
15" Sewer	\$17.03	/ LF	\$17.03
18" Sewer	\$28.49	/ LF	\$28.49
24" Sewer	\$47.78	/ LF	\$47.78

### Construction Cost of Sewer Pipe, PVC <sup>(1, 2)</sup>

Depth	Pipe Size					
	8"	10"	12"	15"	18"	24"
< 8 FT	\$ 15.68	\$ 18.57	\$ 24.12	\$ 30.94	\$ 44.05	\$ 66.68
8-12 FT	\$ 20.20	\$ 24.14	\$ 28.32	\$ 34.74	\$ 44.66	\$ 70.01
12-16 FT	\$ 27.57	\$ 31.42	\$ 38.37	\$ 45.85	\$ 65.72	\$ 99.75
> 16 FT	\$ 31.89	\$ 36.02	\$ 42.72	\$ 53.05	\$ 71.05	\$ 110.25

Cost shown are on a per linear foot basis

1. Reference unit costs using actual CRR Contractor costs or the City of Clovis Construction Cost Summary dated September 2009 and added 5%.
2. 24" Diameter Pipe Costs obtained from Industry Cost References