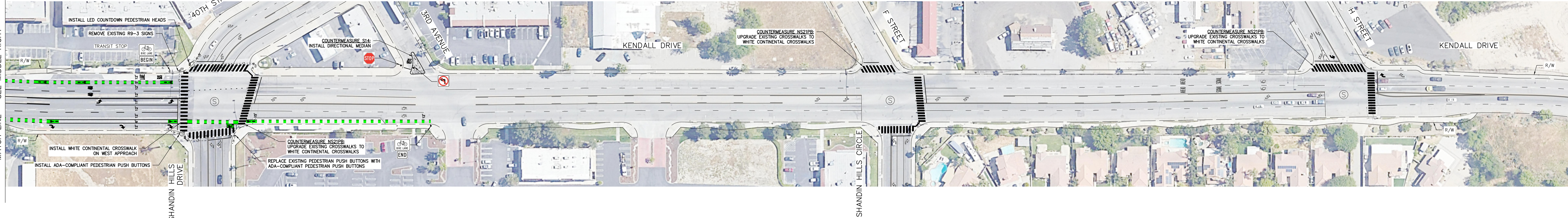
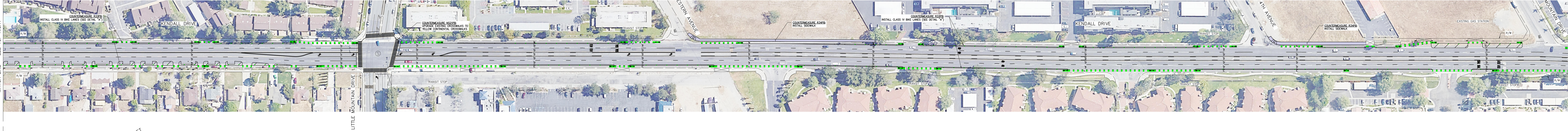


MATCH LINE — SEE MIDDLE RIGHT

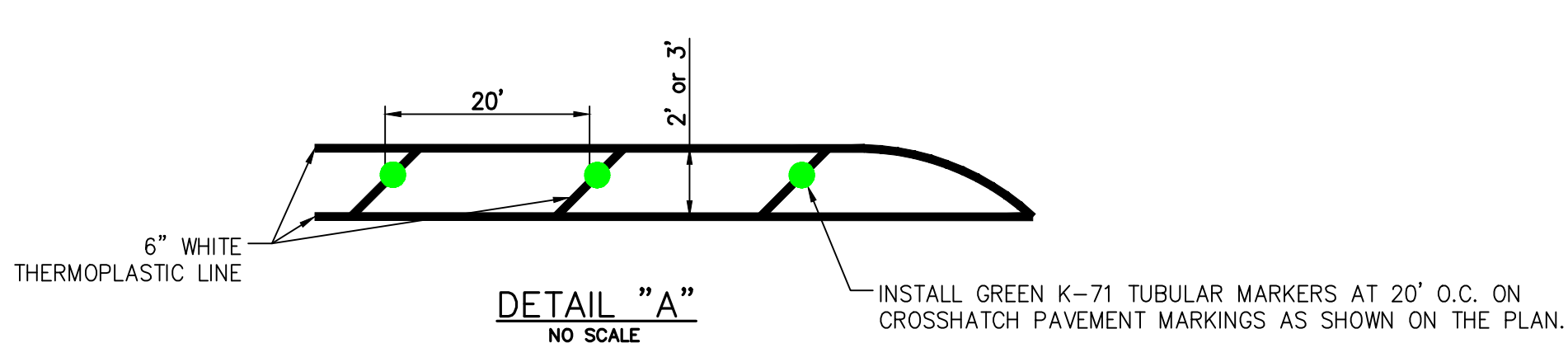
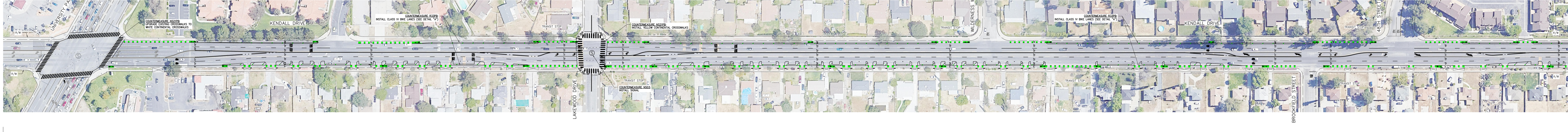


MATCH LINE — SEE TOP RIGHT



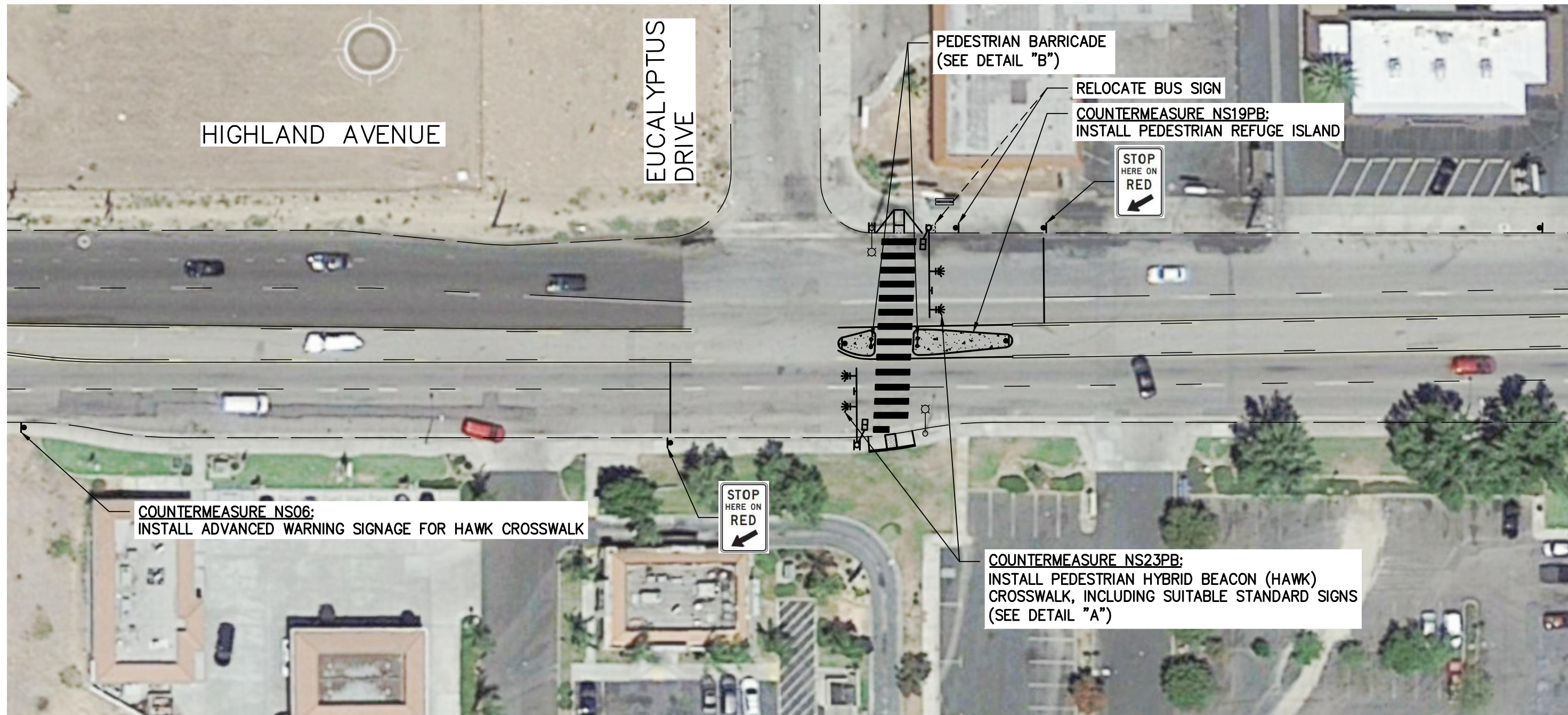
MATCH LINE — SEE BOTTOM LEFT

MATCH LINE — SEE MIDDLE LEFT

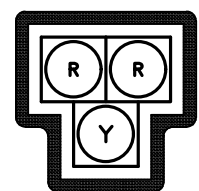




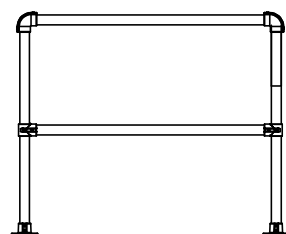
CITY OF SAN BERNARDINO					
KENDALL DRIVE BETWEEN UNIVERSITY PARKWAY AND H STREET					
PRELIMINARY ENGINEER'S COST ESTIMATE					
COUNTER MEASURE	ITEM DESCRIPTION	ESTIMATED QUANTITY	UNIT OF MEASURE	UNIT PRICE	ITEM TOTAL
R34PB	<b>CIVIL</b>				
	Demo/unclassified excavation	130	CY	\$350	\$45,500
	Native fill	115	CY	\$60	\$6,900
	Install curb and gutter	800	LF	\$65	\$52,000
	Install 4" PCC sidewalk	4,794	SF	\$15	\$71,910
	Install curb ramp	2	EA	\$6,500	\$13,000
<b>COUNTERMEASURE SUBTOTAL</b>					<b>\$189,310</b>
NS21PB	<b>SIGNING AND STRIPING</b>				
	Remove striping	3,715	LF	\$1	\$3,715
	Install limit line striping	1,051	LF	\$3	\$3,153
	Install white continental crosswalk	5,547	SF	\$4	\$22,188
	Install yellow continental crosswalk	2,616	SF	\$4	\$10,464
	<b>COUNTERMEASURE SUBTOTAL</b>				<b>\$39,520</b>
NS03	<b>TRAFFIC SIGNAL</b>				
	Install new traffic signal	1	LS	\$500,000	\$500,000
<b>COUNTERMEASURE SUBTOTAL</b>					<b>\$500,000</b>
R33PB	<b>SIGNING AND STRIPING</b>				
	Remove striping	57,941	LF	\$1.00	\$57,941
	Remove pavement marking	32	EA	\$300	\$9,600
	Install striping (solid)	23,341	LF	\$1.40	\$32,677
	Install striping (dashed)	15,870	LF	\$1.80	\$28,566
	Install striping (double yellow)	11,815	LF	\$2.20	\$25,993
	Install green conflict zone striping	5,291	LF	\$15	\$79,365
	Install pavement marking	134	EA	\$500	\$67,000
	Remove sign and post (R1-1 at 3rd Ave)	1	EA	\$150	\$150
	Install sign panel and post	20	EA	\$550	\$11,000
	Install sign panel - R2-1(40)	4	EA	\$500	\$2,000
	Remove sign panel - R2-1(50)	4	EA	\$50	\$200
	Install K71-Type bollard delineator	332	EA	\$225	\$74,700
	Install red curb	415	LF	\$2	\$830
<b>COUNTERMEASURE SUBTOTAL</b>					<b>\$390,022</b>
NS14	<b>CIVIL</b>				
	Demo/unclassified excavation	10	CY	\$350	\$3,500
	Native fill	10	CY	\$60	\$600
	Install curb only	102	LF	\$50	\$5,100
	Install 4" PCC sidewalk	407	SF	\$15	\$6,105
	<b>SIGNING AND STRIPING</b>				
	Remove striping	30	LF	\$1	\$30
	Remove pavement marking	1	EA	\$300	\$300
	Install limit line	12	LF	\$3.50	\$42
	Install pavement marking	1	EA	\$500	\$500
<b>COUNTERMEASURE SUBTOTAL</b>					<b>\$16,177</b>
<b>TOTAL FOR BASE BID ITEMS</b>					<b>\$1,135,029</b>
<b>MOBILIZATION &amp; DEMOBILIZATION</b>					<b>\$113,503</b>
<b>TRAFFIC CONTROL, PUBLIC CONVENIENCE AND SAFETY</b>					<b>\$50,000</b>
<b>CONSTRUCTION SURVEY AND MONUMENTATION</b>					<b>\$20,000</b>
<b>FINAL DESIGN</b>					<b>\$120,000</b>
<b>CONSTRUCTION MANAGEMENT AND INSPECTION</b>					<b>\$80,840</b>
<b>PROJECT MANAGEMENT</b>					<b>\$113,503</b>
<b>STORM WATER BEST MANAGEMENT PRACTICES (BMPs)</b>					<b>\$120,000</b>
<b>30% CONTINGENCY</b>					<b>\$525,863</b>
<b>INFLATION ADJUSTMENT (3% PER YEAR @ 6 YEARS)</b>					<b>\$442,194</b>
<b>GRAND TOTAL</b>					<b>\$2,720,932</b>



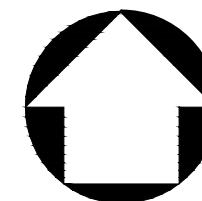
**NOTE:**  
ALL PEDESTRIAN HEADS SHALL BE COUNTDOWN AND PEDESTRIAN PUSH BUTTONS SHALL BE ADA-COMPLIANT.



**DETAIL "A"**  
ALL 12" LENSES  
(TYPICAL BEACON)



**DETAIL "B"**  
PEDESTRIAN RAILING



40' 20' 0 20' 40'  
1"=40' GRAPHIC SCALE



2141 W. Orangewood Ave., Suite A  
Orange, California 92668  
Tel: (714) 573-0317 Fax: (714) 573-9534

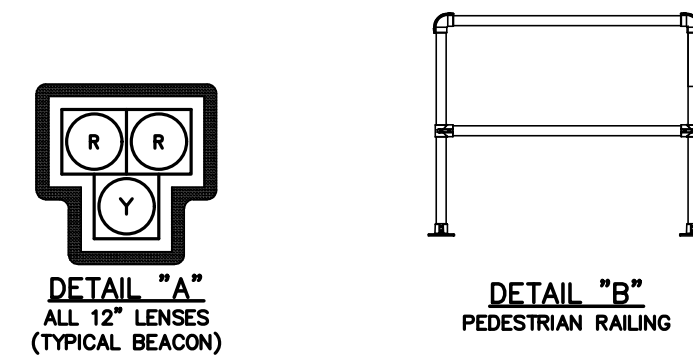
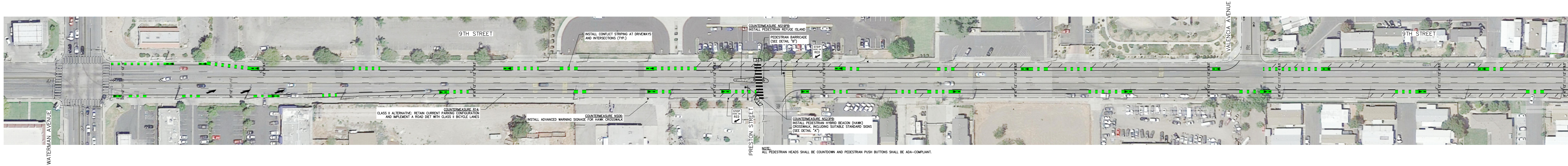
CITY OF SAN BERNARDINO, CALIFORNIA

CONCEPT PLAN-COUNTER MEASURES  
HIGHLAND AVENUE AND EUCALYPTUS DRIVE

**CITY OF SAN BERNARDINO**  
**HIGHLAND AVENUE AND EUCALYPTUS DRIVE**  
**PRELIMINARY ENGINEER'S COST ESTIMATE**

COUNTER MEASURE	ITEM DESCRIPTION	ESTIMATED QUANTITY	UNIT OF MEASURE	UNIT PRICE	ITEM TOTAL
NS23PB	<b>TRAFFIC SIGNAL (HAWK)</b>				
	Install Type 332 cabinet with 2070 controller complete	1	EA	\$25,000	\$25,000
	Install Type III-BF service pedestal complete	1	EA	\$10,000	\$10,000
	Install Type 19 standard and foundation complete	1	EA	\$12,000	\$12,000
	Install Type 24 standard and foundation complete	1	EA	\$17,000	\$17,000
	Install 30' mast arm complete	1	EA	\$3,600	\$3,600
	Install 35' mast arm complete	1	EA	\$4,200	\$4,200
	Install 3-12" LED vehicle head with mounting	4	EA	\$1,200	\$4,800
	Install Type B pedestrian push button	2	EA	\$750	\$1,500
	Install LED countdown pedestrian head with mounting	2	EA	\$1,600	\$3,200
	Install sign on mast arm	2	EA	\$800	\$1,600
	Install sign on pole	4	EA	\$250	\$1,000
	<b>SIGNING AND STRIPING</b>				
	Relocate bus sign	1	EA	\$250	\$250
	<b>COUNTERMEASURE SUBTOTAL</b>				\$84,150
OTHER	<b>SIGNING AND STRIPING</b>				
	Remove striping	310	LF	\$1	\$310
	Install striping	172	LF	\$3.00	\$516
	Install white continental crosswalk	980	SF	\$4.00	\$3,920
	<b>CIVIL</b>				
	Install curb ramp	2	EA	\$6,500	\$13,000
	<b>OTHER SUBTOTAL</b>				\$17,746
NS19PB	<b>CIVIL</b>				
	Demo/unclassified excavation	10	CY	\$350	\$3,500
	Native fill	52	CY	\$60	\$3,120
	Install curb only	130	LF	\$50	\$6,500
	Install sidewalk	175	SF	\$15	\$2,625
	<b>COUNTERMEASURE SUBTOTAL</b>				\$15,745
OTHER	<b>CIVIL</b>				
	Install tubular hand railing	12	LF	\$225	\$2,700
	<b>OTHER SUBTOTAL</b>				\$2,700
NS06	<b>SIGNING AND STRIPING</b>				
	Install sign panel and post	4	EA	\$550	\$2,200
	<b>COUNTERMEASURE SUBTOTAL</b>				\$2,200
TOTAL FOR BASE BID ITEMS					\$122,541
MOBILIZATION & DEMOBILIZATION					\$12,254
TRAFFIC CONTROL, PUBLIC CONVENIENCE AND SAFETY					\$6,000
CONSTRUCTION SURVEY AND MONUMENTATION					\$5,000
FINAL DESIGN					\$40,000
CONSTRUCTION MANAGEMENT AND INSPECTION					\$28,200
PROJECT MANAGEMENT					\$12,254
STORM WATER BEST MANAGEMENT PRACTICES (BMPs)					\$1,000
30% CONTINGENCY					\$68,175
18% INFLATION (3% PER YEAR @ 6 YEARS)					\$57,328
GRAND TOTAL					\$352,752







**CITY OF SAN BERNARDINO**

**9TH STREET BETWEEN WATERMAN AVENUE AND DEL ROSA AVENUE**

**PRELIMINARY ENGINEER'S COST ESTIMATE**

COUNTER MEASURE	ITEM DESCRIPTION	ESTIMATED QUANTITY	UNIT OF MEASURE	UNIT PRICE	ITEM TOTAL
NS23PB	<b>TRAFFIC SIGNAL (HAWK)</b>				
	Install Type 332 cabinet with 2070 controller complete	1	EA	\$25,000	\$25,000
	Install Type III-BF service pedestal complete	1	EA	\$10,000	\$10,000
	Install Type 1-A standard and foundation complete	1	EA	\$3,650	\$3,650
	Install Type 19 standard and foundation complete	2	EA	\$12,000	\$24,000
	Install 25' mast arm complete	2	EA	\$3,300	\$6,600
	Install 3-12" LED vehicle head with mounting	2	EA	\$1,200	\$2,400
	Install Type B pedestrian push button	2	EA	\$750	\$1,500
	Install LED countdown pedestrian head with mounting	2	EA	\$1,600	\$3,200
	Install sign on mast arm	2	EA	\$800	\$1,600
	Install sign on pole	4	EA	\$250	\$1,000
	<b>COUNTERMEASURE SUBTOTAL</b>				\$78,950
OTHER	<b>SIGNING AND STRIPING</b>				
	Remove striping	480	LF	\$1	\$480
	Install striping	25	LF	\$3	\$75
	Install yellow continental crosswalk	290	SF	\$4	\$1,160
	<b>CIVIL</b>				
	Install curb ramp	2	EA	\$6,500	\$13,000
	<b>OTHER SUBTOTAL</b>				\$14,715
NS19PB	<b>CIVIL</b>				
	Demo/unclassified excavation	9	CY	\$350	\$3,150
	Native fill	6	CY	\$60	\$360
	Install curb only	120	LF	\$50	\$6,000
	Install sidewalk	322	SF	\$15	\$4,830
	<b>COUNTERMEASURE SUBTOTAL</b>				\$14,340
OTHER	<b>CIVIL</b>				
	Install tubular hand railing	12	LF	\$225	\$2,700
	<b>OTHER SUBTOTAL</b>				\$2,700
NS06	<b>SIGNING AND STRIPING</b>				
	Install sign panel and post	2	EA	\$550	\$1,100
	<b>COUNTERMEASURE SUBTOTAL</b>				\$1,100
R14	<b>SIGNING AND STRIPING</b>				
	Remove pavement marking	21	EA	\$300	\$6,300
	Remove striping	17,975	LF	\$1	\$17,975
	Install pavement marking	70	EA	\$500	\$35,000
	Install striping	37,240	LF	\$3	\$111,720
	Install green conflict zone striping	2,770	LF	\$15	\$41,550
	Install sign panel and post	11	EA	\$550	\$6,050
	<b>COUNTERMEASURE SUBTOTAL</b>				\$212,545
<b>TOTAL FOR BASE BID ITEMS</b>					<b>\$310,010</b>
<b>MOBILIZATION &amp; DEMOBILIZATION</b>					<b>\$31,001</b>
<b>TRAFFIC CONTROL, PUBLIC CONVENIENCE AND SAFETY</b>					<b>\$12,000</b>
<b>CONSTRUCTION SURVEY AND MONUMENTATION</b>					<b>\$5,000</b>
<b>FINAL DESIGN</b>					<b>\$55,000</b>
<b>CONSTRUCTION MANAGEMENT AND INSPECTION</b>					<b>\$28,200</b>
<b>PROJECT MANAGEMENT</b>					<b>\$31,001</b>
<b>STORM WATER BEST MANAGEMENT PRACTICES (BMPs)</b>					<b>\$120,000</b>
<b>30% CONTINGENCY</b>					<b>\$177,664</b>
<b>18% INFLATION (3% PER YEAR @ 6 YEARS)</b>					<b>\$149,396</b>
<b>GRAND TOTAL</b>					<b>\$919,272</b>