

# Coastal Connections Conceptual Planning Study

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## SANDAG COASTAL CONNECTIONS CONCEPTUAL PLANNING STUDY

### Summary of Cost Estimates (DRAFT)

11/30/2022

	<i>Construction Contract</i>	<i>Design, Env. &amp; Support</i>	<i>Total Project (2022 \$)</i>	<i>Est. Escalation to 2023-2027</i>	<i>Total Project (YOE \$)</i>
<b>Concept 1: North-South Trail (Full Trail, Seagrove Park to 4th St)</b>	\$5.1 million	\$3.7 million	<b>\$8.8 million</b>	\$0.8 million	<b>\$9.6 million</b>
<b>Concept 1: North-South Trail (Segments A-C)</b>					
<b>Segment A: Seagrove Park to 11th Street</b>	\$2.3 million	\$1.7 million	<b>\$4.0 million</b>	\$0.4 million	<b>\$4.4 million</b>
<b>Segment B: 11th Street to 8th Street</b>	\$2.0 million	\$1.5 million	<b>\$3.5 million</b>	\$0.3 million	<b>\$3.9 million</b>
<b>Segment C: 8th Street to 4th Street</b>	\$1.6 million	\$1.2 million	<b>\$2.8 million</b>	\$0.3 million	<b>\$3.1 million</b>
<b>Total of Concept 1: North-South Trail (Segments A-C)</b>	<b>\$5.9 million</b>	<b>\$4.5 million</b>	<b>\$10.4 million</b>	<b>\$1.0 million</b>	<b>\$11.4 million</b>
<b>Concept 2: At-Grade Crossing at 11th Street, Ramps &amp; Stairs to Beach</b>	\$5.4 million	\$3.9 million	<b>\$9.3 million</b>	\$0.9 million	<b>\$10.2 million</b>
<b>Concept 3: At-Grade Crossing at 11th Street, Stairs to Beach</b>	\$3.0 million	\$2.2 million	<b>\$5.2 million</b>	\$0.5 million	<b>\$5.7 million</b>
<b>Concept 4: At-Grade Crossing at 7th-8th Streets, Ramps to Beach</b>	\$4.9 million	\$3.5 million	<b>\$8.4 million</b>	\$0.8 million	<b>\$9.2 million</b>
<b>Concept 5: At-Grade Crossing at 7th-8th Streets, Stairs to Beach</b>	\$3.0 million	\$2.2 million	<b>\$5.2 million</b>	\$0.5 million	<b>\$5.7 million</b>
<b>Concept 6: Undercrossing at 7th-8th Streets, Ramps to Beach</b>	\$6.8 million	\$4.9 million	<b>\$11.7 million</b>	\$1.1 million	<b>\$12.8 million</b>
<b>Concept 7: Undercrossing at 7th-8th Streets, Stairs to Beach</b>	\$3.7 million	\$2.7 million	<b>\$6.4 million</b>	\$0.6 million	<b>\$7.0 million</b>

Notes: YOE is Year of Expenditure. All values rounded to the nearest \$100,000.

# Coastal Connections Concept 1 (North-South Trail: Full, Seagrove Park to 4th St)

## PROJECT COST ESTIMATE

Revised: November 30, 2022

Design Level: **Conceptual**

Estimated By: **WSP & Villa Civil**

Item	Quantity	Unit	Unit Price	Amount*	Subtotal	
<b>ENVIRONMENTAL</b>						
Agency Environmental Admin-SANDAG	3.00%	x	CCE	\$ 153,000		
Agency Program Mgmt-SANDAG	1.25%	x	CCE	\$ 63,800		
Agency Environmental Admin-NCTD	1.00%	x	CCE	\$ 51,000		
Design-Preliminary Engineering (30%)	3.50%	x	CCE	\$ 178,500		
Environmental Clearance	3.00%	x	CCE	\$ 153,000		
Independent Peer Reviews	1.00%	x	CCE	\$ 51,000		
PA&ED Contingency	1.00%	x	CCE	\$ 51,000		
Total	<b>13.8%</b>				<b>ENVIRONMENTAL TOTAL \$ 701,300</b>	
<b>DESIGN</b>						
Agency Design Admin-SANDAG	3.00%	x	CCE	\$ 153,000		
Agency Program Mgmt-SANDAG	1.25%	x	CCE	\$ 63,800		
Agency Design Admin-NCTD	1.00%	x	CCE	\$ 51,000		
Design-30% to 60%	6.00%	x	CCE	\$ 306,000		
Design-60% to Final PS&E, Bid Support	7.00%	x	CCE	\$ 357,000		
Independent Peer Reviews	1.50%	x	CCE	\$ 76,500		
PS&E Contingency	1.00%	x	CCE	\$ 51,000		
Total	<b>20.8%</b>				<b>DESIGN TOTAL \$1,058,300</b>	
<b>LEGAL / COMMUNICATIONS</b>						
Legal	1.00%	x	CCE	\$ 51,000		
Communication	2.00%	x	CCE	\$ 102,000		
Total	<b>3.00%</b>				<b>LEGAL / COMMUNICATIONS TOTAL \$153,000</b>	
<b>RIGHT OF WAY</b>						
Property Acquisition	1	LS	\$ -	\$ -		
Temporary Easements	1	LS	\$ 100,000	\$ 100,000		
Right of Way Contingency	35%	x	R/W Costs	\$ 35,000		
Total	<b>2.6%</b>				<b>RIGHT OF WAY TOTAL \$135,000</b>	
<b>CONSTRUCTION CONTRACT ESTIMATE</b>						
<i>See Sheet 3</i>						
Site Civil	1	LS	\$ 323,319	\$ 323,319		
Civil Improvements	1	LS	\$ 29,520	\$ 29,520		
Structures	1	LS	\$ 2,153,930	\$ 2,153,930		
Architectural & Lighting	1	LS	\$ 657,110	\$ 657,110		
Site Mitigation (SWPPP)	1	LS	\$ 322,006	\$ 322,006		
					Base Construction Estimate (BCE)	\$3,485,885
Contractor Mobilization	7.5%	X	BCE	\$ 300,000		
Contractor Demobilization	2.5%	X	BCE	\$ 100,000		
Time Related Overhead (Per Caltrans Contract)	0%	X	BCE	\$ -		
Construction Contingency	35%	X	BCE	\$ 1,200,000		
					<b>CONSTRUCTION CONTRACT ESTIMATE (CCE)</b>	<b>\$5,100,000</b>
<b>ANCILLARY CONSTRUCTION COSTS</b>						
		Years				
Agency Construction Admin. (SANDAG)	6.00%	x	CCE	\$ 306,000		
Agency Construction Prog. Mgmt. (SANDAG)	0.20%	x	CCE	\$ 10,200		
Agency Construction Admin. (NCTD/MTS)	0.10%	x	CCE	\$ 5,100		
Design Support During Construction	3.50%	x	CCE	\$ 178,500		
Construction Management	15.00%	x	CCE	\$ 765,000		
NCTD PTC & Signal Support & Testing	0.20%	x	CCE	\$ 10,200		
Flagging Services	6.00%	x	CCE	\$ 306,000		
ACC Contingency	1.00%	x	CCE	\$ 51,000		
Total	<b>32.0%</b>				<b>ANCILLARY CONSTRUCTION TOTAL \$1,632,000</b>	
<b>OFF-SITE ENVIRONMENTAL MITIGATION</b>						
Non-Tidal Wetlands	0	Acre	\$ 228,590	\$0		
					<b>ENVIRONMENTAL MITIGATION TOTAL</b>	<b>\$0</b>
<b>TOTAL PROJECT COST ESTIMATE (2022 Dollars)</b>					<b>\$8,779,600</b>	

**Coastal Connections Concept 1 (North-South Trail: Full, Seagrove Park to 4th St)**

**PROJECT COST ESTIMATE**

Revised: November 30, 2022

Design Level: **Conceptual**

Estimated By: **WSP & Villa Civil**

Item	Quantity	Unit	Unit Price	Amount*	Subtotal
<b>COST ESCALATION</b>					
Year of Expenditure	Annual % (Construction)	Annual % (Design Consultant)	Cumulative Escalation (Construction)	Expenditures**	TOTAL Escalation
FY23 PA&ED	4.4%	2.8%	4.4%	\$ 701,300	\$ 19,636
FY24 PS&E	2.9%	2.8%	7.3%	\$ 1,346,300	\$ 75,393
FY25 Construction	2.8%	2.8%	10.1%	\$ 3,029,400	\$ 305,969
FY26 Construction	2.8%	2.8%	12.9%	\$ 3,029,400	\$ 339,293
FY27 Closeout	2.8%	2.8%	15.8%	\$ 673,200	\$ 94,248
FY28	2.8%	2.8%	18.6%		\$ -
Estimated Escalation					\$ 834,539
<b>PROJECT COST IN YEAR OF EXPENDITURE DOLLARS</b>					<b>\$ 9,614,139</b>

<b>Coastal Connections Concept 1 (North-South Trail: Full, Seagrove Park to 4th St)</b>					
<b>Construction Cost Estimate</b>			<b>Design Level: Conceptual</b>		
<b>Per WSP Concept Estimate Dated: November 23, 2022</b>			<b>Estimated By: WSP &amp; Villa Civil</b>		
<b>Item</b>	<b>QTY</b>	<b>Unit</b>	<b>Unit Price</b>	<b>Cost</b>	<b>Subtotal</b>
<b>CONSTRUCTION</b>					
<b>Site Civil</b>					
Clearing and Grubbing	26,140	SF	\$ 0.25	\$ 6,535	
6' Decomposed Granite (DG) Path, stabilized for accessibility compliance	26,140	SF	\$ 10	\$ 261,400	
Excavate & Fill: 8th St Culvert Area	98	CY	\$ 64	\$ 6,272	
Excavate & Fill Other Areas	506	CY	\$ 64	\$ 32,384	
Import Earthwork	408	CY	\$ 41	\$ 16,728	
<b>Subtotal</b>					<b>\$ 323,319</b>
<b>Civil Improvements</b>					
6" AC Berm	60	LF	\$ 12	\$ 720	
Curb Ramp	9	EA	\$ 3,200	\$ 28,800	
<b>Subtotal</b>					<b>\$ 29,520</b>
<b>Structures</b>					
Culvert (Dual 36" RCP): North of 8th St	480	LF	\$ 380	\$ 182,400	
Wall: Seagrove Park South	550	SF	\$ 154	\$ 84,700	
Wall: South of 13th St	900	SF	\$ 154	\$ 138,600	
Wall: North of 12th St	615	SF	\$ 154	\$ 94,710	
Pedestrian Bridge: Lois Ln	396	SF	\$ 290	\$ 114,840	
Pedestrian Bridge: Sea Orbit Ln	570	SF	\$ 290	\$ 165,300	
Timber Walkway Over Ditch: Sea Orbit Ln-11th St	1,362	SF	\$ 200	\$ 272,400	
Timber Walkway Over Ditch: 11th St-10th St	2,952	SF	\$ 200	\$ 590,400	
Precast Ditch Crossing: 10th St	3.6	CY	\$ 2,200	\$ 7,920	
Precast Ditch Crossing: 9th St	2.7	CY	\$ 2,200	\$ 5,940	
Precast Ditch Crossing: 8th St	1.0	CY	\$ 2,200	\$ 2,200	
Timber Walkway Over Ditch: 7th St-8th St	2,400	SF	\$ 200	\$ 480,000	
Precast Ditch Crossing: 7th St	4.7	CY	\$ 2,200	\$ 10,340	
Precast Ditch Crossing: 6th St	1.9	CY	\$ 2,200	\$ 4,180	
<b>Subtotal</b>					<b>\$ 2,153,930</b>
<b>Architectural &amp; Lighting</b>					
IPE Post & Cable Fence w Guardrail (42" HT): 13th St	554	LF	\$ 130	\$ 72,020	
IPE Post & Cable Fence w Guardrail (42" HT): Lois Ln	132	LF	\$ 130	\$ 17,160	
IPE Post & Cable Fence w Guardrail (42" HT): 12th St	370	LF	\$ 130	\$ 48,100	
IPE Post & Cable Fence w Guardrail (42" HT): Sea Orbit Ln	188	LF	\$ 130	\$ 24,440	
IPE Post & Cable Fence w Guardrail (42" HT): 11th St	35	LF	\$ 130	\$ 4,550	
IPE Post & Cable Fence w Guardrail (42" HT): 10th St	63	LF	\$ 130	\$ 8,190	
IPE Post & Cable Fence w Guardrail (42" HT): 9th St	48	LF	\$ 130	\$ 6,240	
IPE Post & Cable Fence w Guardrail (42" HT): 8th St	207	LF	\$ 130	\$ 26,910	
IPE Post & Cable Fence w Guardrail (42" HT): 7th St	83	LF	\$ 130	\$ 10,790	
IPE Post & Cable Fence w Guardrail (42" HT): 6th St	32	LF	\$ 130	\$ 4,160	
IPE Post & Cable Fence w Guardrail (42" HT): Sea Cliff Wy	35	LF	\$ 130	\$ 4,550	
Bollards: 9th St Plaza	8	EA	\$ 500	\$ 4,000	
Benches: 9th St Plaza	6	EA	\$ 4,000	\$ 24,000	
Signage	1	LS	\$ 6,000	\$ 6,000	
Light Fixtures	1	LS	\$ 150,000	\$ 150,000	
Misc. Architectural Elements (decorative tile, decorative cairn, rock/pebble, etc.)	1	LS	\$ 246,000	\$ 246,000	
<b>Subtotal</b>					<b>\$ 657,110</b>
<b>Site Mitigation</b>					
Stormwater Pollution Prevention Plan (SWPPP) and Implementation	1	LS	\$ 322,006	\$ 322,006	
<b>Subtotal</b>					<b>\$ 322,006</b>

**Coastal Connections Concept 1 (North-South Trail: Full, Seagrove Park to 4th St)**

Construction Cost Estimate

Design Level: Conceptual

Per WSP Concept Estimate Dated: November 23, 2022

Estimated By: WSP & Villa Civil

Item	QTY	Unit	Unit Price	Cost	Subtotal
<b>BASE CONSTRUCTION ESTIMATE (BCE)</b>					<b>\$ 3,485,885</b>

# Coastal Connections Concept 1 (North-South Trail: Segment A, Seagrove Park to 11th St)

## PROJECT COST ESTIMATE

Revised: November 30, 2022

Design Level: Conceptual

Estimated By: WSP & Villa Civil

Item	Quantity	Unit	Unit Price	Amount*	Subtotal	
<b>ENVIRONMENTAL</b>						
Agency Environmental Admin-SANDAG	3.00%	x	CCE	\$ 69,000		
Agency Program Mgmt-SANDAG	1.25%	x	CCE	\$ 28,800		
Agency Environmental Admin-NCTD	1.00%	x	CCE	\$ 23,000		
Design-Preliminary Engineering (30%)	3.50%	x	CCE	\$ 80,500		
Environmental Clearance	3.00%	x	CCE	\$ 69,000		
Independent Peer Reviews	1.00%	x	CCE	\$ 23,000		
PA&ED Contingency	1.00%	x	CCE	\$ 23,000		
Total	<b>13.8%</b>				<b>ENVIRONMENTAL TOTAL \$ 316,300</b>	
<b>DESIGN</b>						
Agency Design Admin-SANDAG	3.00%	x	CCE	\$ 69,000		
Agency Program Mgmt-SANDAG	1.25%	x	CCE	\$ 28,800		
Agency Design Admin-NCTD	1.00%	x	CCE	\$ 23,000		
Design-30% to 60%	6.00%	x	CCE	\$ 138,000		
Design-60% to Final PS&E, Bid Support	7.00%	x	CCE	\$ 161,000		
Independent Peer Reviews	1.50%	x	CCE	\$ 34,500		
PS&E Contingency	1.00%	x	CCE	\$ 23,000		
Total	<b>20.8%</b>				<b>DESIGN TOTAL \$477,300</b>	
<b>LEGAL / COMMUNICATIONS</b>						
Legal	1.00%	x	CCE	\$ 23,000		
Communication	2.00%	x	CCE	\$ 46,000		
Total	<b>3.00%</b>				<b>LEGAL / COMMUNICATIONS TOTAL \$69,000</b>	
<b>RIGHT OF WAY</b>						
Property Acquisition	1	LS	\$ -	\$ -		
Temporary Easements	1	LS	\$ 100,000	\$ 100,000		
Right of Way Contingency	35%	x	R/W Costs	\$ 35,000		
Total	<b>5.9%</b>				<b>RIGHT OF WAY TOTAL \$135,000</b>	
<b>CONSTRUCTION CONTRACT ESTIMATE</b>						
<i>See Sheet 3</i>						
Site Civil	1	LS	\$ 99,482	\$ 99,482		
Civil Improvements	1	LS	\$ 9,600	\$ 9,600		
Structures	1	LS	\$ 870,550	\$ 870,550		
Architectural & Lighting	1	LS	\$ 295,720	\$ 295,720		
Site Mitigation (SWPPP)	1	LS	\$ 322,006	\$ 322,006		
					Base Construction Estimate (BCE)	\$1,597,358
Contractor Mobilization	7.5%	X	BCE	\$ 100,000		
Contractor Demobilization	2.5%	X	BCE	\$ -		
Time Related Overhead (Per Caltrans Contract)	0%	X	BCE	\$ -		
Construction Contingency	35%	X	BCE	\$ 600,000		
					<b>CONSTRUCTION CONTRACT ESTIMATE (CCE)</b>	<b>\$2,300,000</b>
<b>ANCILLARY CONSTRUCTION COSTS</b>						
		Years				
Agency Construction Admin. (SANDAG)	6.00%	x	CCE	\$ 138,000		
Agency Construction Prog. Mgmt. (SANDAG)	0.20%	x	CCE	\$ 4,600		
Agency Construction Admin. (NCTD/MTS)	0.10%	x	CCE	\$ 2,300		
Design Support During Construction	3.50%	x	CCE	\$ 80,500		
Construction Management	15.00%	x	CCE	\$ 345,000		
NCTD PTC & Signal Support & Testing	0.20%	x	CCE	\$ 4,600		
Flagging Services	6.00%	x	CCE	\$ 138,000		
ACC Contingency	1.00%	x	CCE	\$ 23,000		
Total	<b>32.0%</b>				<b>ANCILLARY CONSTRUCTION TOTAL \$736,000</b>	
<b>OFF-SITE ENVIRONMENTAL MITIGATION</b>						
Non-Tidal Wetlands	0	Acre	\$ 228,590	\$0		
					<b>ENVIRONMENTAL MITIGATION TOTAL</b>	<b>\$0</b>
<b>TOTAL PROJECT COST ESTIMATE (2022 Dollars)</b>					<b>\$4,033,600</b>	

**Coastal Connections Concept 1 (North-South Trail: Segment A, Seagrove Park to 11th St)**

**PROJECT COST ESTIMATE**

Revised: November 30, 2022

Design Level: **Conceptual**

Estimated By: **WSP & Villa Civil**

Item	Quantity	Unit	Unit Price	Amount*	Subtotal
<b>COST ESCALATION</b>					
Year of Expenditure	Annual % (Construction)	Annual % (Design Consultant)	Cumulative Escalation (Construction)	Expenditures**	TOTAL Escalation
FY23 PA&ED	4.4%	2.8%	4.4%	\$ 316,300	\$ 8,856
FY24 PS&E	2.9%	2.8%	7.3%	\$ 681,300	\$ 38,153
FY25 Construction	2.8%	2.8%	10.1%	\$ 1,366,200	\$ 137,986
FY26 Construction	2.8%	2.8%	12.9%	\$ 1,366,200	\$ 153,014
FY27 Closeout	2.8%	2.8%	15.8%	\$ 303,600	\$ 42,504
FY28	2.8%	2.8%	18.6%		\$ -
Estimated Escalation					\$ 380,514
<b>PROJECT COST IN YEAR OF EXPENDITURE DOLLARS</b>					<b>\$ 4,414,114</b>



<b>Coastal Connections Concept 1 (North-South Trail: Segment A, Seagrove Park to 11th St)</b>					
<b>Construction Cost Estimate</b>			<b>Design Level: Conceptual</b>		
<b>Per WSP Concept Estimate Dated: November 23, 2022</b>			<b>Estimated By: WSP &amp; Villa Civil</b>		
<b>Item</b>	<b>QTY</b>	<b>Unit</b>	<b>Unit Price</b>	<b>Cost</b>	<b>Subtotal</b>
<b>CONSTRUCTION</b>					
<b>Site Civil</b>					
Clearing and Grubbing	7,652	SF	\$ 0.25	\$ 1,913	
6' Decomposed Granite (DG) Path, stabilized for accessibility compliance	7,652	SF	\$ 10	\$ 76,520	
Excavate & Fill Other Areas	277	CY	\$ 64	\$ 17,728	
Import Earthwork	81	CY	\$ 41	\$ 3,321	
<b>Subtotal</b>					<b>\$ 99,482</b>
<b>Civil Improvements</b>					
Curb Ramp	3	EA	\$ 3,200	\$ 9,600	
<b>Subtotal</b>					<b>\$ 9,600</b>
<b>Structures</b>					
Wall: Seagrove Park South	550	SF	\$ 154	\$ 84,700	
Wall: South of 13th St	900	SF	\$ 154	\$ 138,600	
Wall: North of 12th St	615	SF	\$ 154	\$ 94,710	
Pedestrian Bridge: Lois Ln	396	SF	\$ 290	\$ 114,840	
Pedestrian Bridge: Sea Orbit Ln	570	SF	\$ 290	\$ 165,300	
Timber Walkway Over Ditch: Sea Orbit Ln-11th St	1,362	SF	\$ 200	\$ 272,400	
<b>Subtotal</b>					<b>\$ 870,550</b>
<b>Architectural &amp; Lighting</b>					
IPE Post & Cable Fence w Guardrail (42" HT): 13th St	554	LF	\$ 130	\$ 72,020	
IPE Post & Cable Fence w Guardrail (42" HT): Lois Ln	132	LF	\$ 130	\$ 17,160	
IPE Post & Cable Fence w Guardrail (42" HT): 12th St	370	LF	\$ 130	\$ 48,100	
IPE Post & Cable Fence w Guardrail (42" HT): Sea Orbit Ln	188	LF	\$ 130	\$ 24,440	
Signage	1	LS	\$ 2,000	\$ 2,000	
Light Fixtures	1	LS	\$ 50,000	\$ 50,000	
Misc. Architectural Elements (decorative tile, decorative cairn, rock/pebble, etc.)	1	LS	\$ 82,000	\$ 82,000	
<b>Subtotal</b>					<b>\$ 295,720</b>
<b>Site Mitigation</b>					
Stormwater Pollution Prevention Plan (SWPPP) and Implementation	1	LS	\$ 322,006	\$ 322,006	
<b>Subtotal</b>					<b>\$ 322,006</b>
<b>BASE CONSTRUCTION ESTIMATE (BCE)</b>					<b>\$ 1,597,358</b>

# Coastal Connections Concept 1 (North-South Trail: Segment B, 11th St to 8th St)

## PROJECT COST ESTIMATE

Revised: November 30, 2022

Design Level: Conceptual

Estimated By: WSP & Villa Civil

Item	Quantity	Unit	Unit Price	Amount*	Subtotal	
<b>ENVIRONMENTAL</b>						
Agency Environmental Admin-SANDAG	3.00%	x	CCE	\$ 60,000		
Agency Program Mgmt-SANDAG	1.25%	x	CCE	\$ 25,000		
Agency Environmental Admin-NCTD	1.00%	x	CCE	\$ 20,000		
Design-Preliminary Engineering (30%)	3.50%	x	CCE	\$ 70,000		
Environmental Clearance	3.00%	x	CCE	\$ 60,000		
Independent Peer Reviews	1.00%	x	CCE	\$ 20,000		
PA&ED Contingency	1.00%	x	CCE	\$ 20,000		
Total	<b>13.8%</b>				<b>ENVIRONMENTAL TOTAL \$ 275,000</b>	
<b>DESIGN</b>						
Agency Design Admin-SANDAG	3.00%	x	CCE	\$ 60,000		
Agency Program Mgmt-SANDAG	1.25%	x	CCE	\$ 25,000		
Agency Design Admin-NCTD	1.00%	x	CCE	\$ 20,000		
Design-30% to 60%	6.00%	x	CCE	\$ 120,000		
Design-60% to Final PS&E, Bid Support	7.00%	x	CCE	\$ 140,000		
Independent Peer Reviews	1.50%	x	CCE	\$ 30,000		
PS&E Contingency	1.00%	x	CCE	\$ 20,000		
Total	<b>20.8%</b>				<b>DESIGN TOTAL \$ 415,000</b>	
<b>LEGAL / COMMUNICATIONS</b>						
Legal	1.00%	x	CCE	\$ 20,000		
Communication	2.00%	x	CCE	\$ 40,000		
Total	<b>3.00%</b>				<b>LEGAL / COMMUNICATIONS TOTAL \$ 60,000</b>	
<b>RIGHT OF WAY</b>						
Property Acquisition	1	LS	\$ -	\$ -		
Temporary Easements	1	LS	\$ 100,000	\$ 100,000		
Right of Way Contingency	35%	x	R/W Costs	\$ 35,000		
Total	<b>6.8%</b>				<b>RIGHT OF WAY TOTAL \$ 135,000</b>	
<b>CONSTRUCTION CONTRACT ESTIMATE</b>						
<i>See Sheet 3</i>						
Site Civil	1	LS	\$ 98,795	\$ 98,795		
Civil Improvements	1	LS	\$ 13,520	\$ 13,520		
Structures	1	LS	\$ 788,860	\$ 788,860		
Architectural & Lighting	1	LS	\$ 207,890	\$ 207,890		
Site Mitigation (SWPPP)	1	LS	\$ 322,006	\$ 322,006		
					Base Construction Estimate (BCE)	\$ 1,431,071
Contractor Mobilization	7.5%	X	BCE	\$ 100,000		
Contractor Demobilization	2.5%	X	BCE	\$ -		
Time Related Overhead (Per Caltrans Contract)	0%	X	BCE	\$ -		
Construction Contingency	35%	X	BCE	\$ 500,000		
					<b>CONSTRUCTION CONTRACT ESTIMATE (CCE)</b>	<b>\$ 2,000,000</b>
<b>ANCILLARY CONSTRUCTION COSTS</b>						
		Years				
Agency Construction Admin. (SANDAG)	6.00%	x	CCE	\$ 120,000		
Agency Construction Prog. Mgmt. (SANDAG)	0.20%	x	CCE	\$ 4,000		
Agency Construction Admin. (NCTD/MTS)	0.10%	x	CCE	\$ 2,000		
Design Support During Construction	3.50%	x	CCE	\$ 70,000		
Construction Management	15.00%	x	CCE	\$ 300,000		
NCTD PTC & Signal Support & Testing	0.20%	x	CCE	\$ 4,000		
Flagging Services	6.00%	x	CCE	\$ 120,000		
ACC Contingency	1.00%	x	CCE	\$ 20,000		
Total	<b>32.0%</b>				<b>ANCILLARY CONSTRUCTION TOTAL \$ 640,000</b>	
<b>OFF-SITE ENVIRONMENTAL MITIGATION</b>						
Non-Tidal Wetlands	0	Acre	\$ 228,590	\$ 0		
					<b>ENVIRONMENTAL MITIGATION TOTAL</b>	<b>\$ 0</b>
<b>TOTAL PROJECT COST ESTIMATE (2022 Dollars)</b>					<b>\$ 3,525,000</b>	

**Coastal Connections Concept 1 (North-South Trail: Segment B, 11th St to 8th St)**

**PROJECT COST ESTIMATE**

Revised: November 30, 2022

Design Level: **Conceptual**

Estimated By: **WSP & Villa Civil**

Item	Quantity	Unit	Unit Price	Amount*	Subtotal
<b>COST ESCALATION</b>					
Year of Expenditure	Annual % (Construction)	Annual % (Design Consultant)	Cumulative Escalation (Construction)	Expenditures**	TOTAL Escalation
FY23 PA&ED	4.4%	2.8%	4.4%	\$ 275,000	\$ 7,700
FY24 PS&E	2.9%	2.8%	7.3%	\$ 610,000	\$ 34,160
FY25 Construction	2.8%	2.8%	10.1%	\$ 1,188,000	\$ 119,988
FY26 Construction	2.8%	2.8%	12.9%	\$ 1,188,000	\$ 133,056
FY27 Closeout	2.8%	2.8%	15.8%	\$ 264,000	\$ 36,960
FY28	2.8%	2.8%	18.6%		\$ -
Estimated Escalation					\$ 331,864
<b>PROJECT COST IN YEAR OF EXPENDITURE DOLLARS</b>					<b>\$ 3,856,864</b>

<b>Coastal Connections Concept 1 (North-South Trail: Segment B, 11th St to 8th St)</b>					
<b>Construction Cost Estimate</b>			<b>Design Level: Conceptual</b>		
<b>Per WSP Concept Estimate Dated: November 23, 2022</b>			<b>Estimated By: WSP &amp; Villa Civil</b>		
<b>Item</b>	<b>QTY</b>	<b>Unit</b>	<b>Unit Price</b>	<b>Cost</b>	<b>Subtotal</b>
<b>CONSTRUCTION</b>					
<b>Site Civil</b>					
Clearing and Grubbing	7,600	SF	\$ 0.25	\$ 1,900	
6' Decomposed Granite (DG) Path, stabilized for accessibility compliance	7,600	SF	\$ 10	\$ 76,000	
Excavate & Fill: 8th St Culvert Area	98	CY	\$ 64	\$ 6,272	
Excavate & Fill Other Areas	101	CY	\$ 64	\$ 6,464	
Import Earthwork	199	CY	\$ 41	\$ 8,159	
<b>Subtotal</b>					<b>\$ 98,795</b>
<b>Civil Improvements</b>					
6" AC Berm	60	LF	\$ 12	\$ 720	
Curb Ramp	4	EA	\$ 3,200	\$ 12,800	
<b>Subtotal</b>					<b>\$ 13,520</b>
<b>Structures</b>					
Culvert (Dual 36" RCP): North of 8th St	480	LF	\$ 380	\$ 182,400	
Timber Walkway Over Ditch: 11th St-10th St	2,952	SF	\$ 200	\$ 590,400	
Precast Ditch Crossing: 10th St	3.6	CY	\$ 2,200	\$ 7,920	
Precast Ditch Crossing: 9th St	2.7	CY	\$ 2,200	\$ 5,940	
Precast Ditch Crossing: 8th St	1.0	CY	\$ 2,200	\$ 2,200	
<b>Subtotal</b>					<b>\$ 788,860</b>
<b>Architectural &amp; Lighting</b>					
IPE Post & Cable Fence w Guardrail (42" HT): 11th St	35	LF	\$ 130	\$ 4,550	
IPE Post & Cable Fence w Guardrail (42" HT): 10th St	63	LF	\$ 130	\$ 8,190	
IPE Post & Cable Fence w Guardrail (42" HT): 9th St	48	LF	\$ 130	\$ 6,240	
IPE Post & Cable Fence w Guardrail (42" HT): 8th St	207	LF	\$ 130	\$ 26,910	
Bollards: 9th St Plaza	8	EA	\$ 500	\$ 4,000	
Benches: 9th St Plaza	6	EA	\$ 4,000	\$ 24,000	
Signage	1	LS	\$ 2,000	\$ 2,000	
Light Fixtures	1	LS	\$ 50,000	\$ 50,000	
Misc. Architectural Elements (decorative tile, decorative cairn, rock/pebble, etc.)	1	LS	\$ 82,000	\$ 82,000	
<b>Subtotal</b>					<b>\$ 207,890</b>
<b>Site Mitigation</b>					
Stormwater Pollution Prevention Plan (SWPPP)	1	LS	\$ 322,006	\$ 322,006	
<b>Subtotal</b>					<b>\$ 322,006</b>
<b>BASE CONSTRUCTION ESTIMATE (BCE)</b>					<b>\$ 1,431,071</b>

# Coastal Connections Concept 1 (North-South Trail: Segment C, 8th St to 4th St)

## PROJECT COST ESTIMATE

Revised: November 30, 2022

Design Level: **Conceptual**

Estimated By: **WSP & Villa Civil**

Item	Quantity	Unit	Unit Price	Amount*	Subtotal
<b>ENVIRONMENTAL</b>					
Agency Environmental Admin-SANDAG	3.00%	x	CCE	\$ 48,000	
Agency Program Mgmt-SANDAG	1.25%	x	CCE	\$ 20,000	
Agency Environmental Admin-NCTD	1.00%	x	CCE	\$ 16,000	
Design-Preliminary Engineering (30%)	3.50%	x	CCE	\$ 56,000	
Environmental Clearance	3.00%	x	CCE	\$ 48,000	
Independent Peer Reviews	1.00%	x	CCE	\$ 16,000	
PA&ED Contingency	1.00%	x	CCE	\$ 16,000	
Total	<b>13.8%</b>				<b>ENVIRONMENTAL TOTAL \$ 220,000</b>
<b>DESIGN</b>					
Agency Design Admin-SANDAG	3.00%	x	CCE	\$ 48,000	
Agency Program Mgmt-SANDAG	1.25%	x	CCE	\$ 20,000	
Agency Design Admin-NCTD	1.00%	x	CCE	\$ 16,000	
Design-30% to 60%	6.00%	x	CCE	\$ 96,000	
Design-60% to Final PS&E, Bid Support	7.00%	x	CCE	\$ 112,000	
Independent Peer Reviews	1.50%	x	CCE	\$ 24,000	
PS&E Contingency	1.00%	x	CCE	\$ 16,000	
Total	<b>20.8%</b>				<b>DESIGN TOTAL \$332,000</b>
<b>LEGAL / COMMUNICATIONS</b>					
Legal	1.00%	x	CCE	\$ 16,000	
Communication	2.00%	x	CCE	\$ 32,000	
Total	<b>3.00%</b>				<b>LEGAL / COMMUNICATIONS TOTAL \$48,000</b>
<b>RIGHT OF WAY</b>					
Property Acquisition	1	LS	\$ -	\$ -	
Temporary Easements	1	LS	\$ 100,000	\$ 100,000	
Right of Way Contingency	35%	x	R/W Costs	\$ 35,000	
Total	<b>8.4%</b>				<b>RIGHT OF WAY TOTAL \$135,000</b>
<b>CONSTRUCTION CONTRACT ESTIMATE</b>					
<i>See Sheet 3</i>					
Site Civil	1	LS	\$ 99,284	\$ 99,284	
Civil Improvements	1	LS	\$ 12,800	\$ 12,800	
Structures	1	LS	\$ 494,520	\$ 494,520	
Architectural & Lighting	1	LS	\$ 153,500	\$ 153,500	
Site Mitigation (SWPPP)	1	LS	\$ 322,006	\$ 322,006	
					Base Construction Estimate (BCE)
					\$1,082,110
Contractor Mobilization	7.5%	X	BCE	\$ 100,000	
Contractor Demobilization	2.5%	X	BCE	\$ -	
Time Related Overhead (Per Caltrans Contract)	0%	X	BCE	\$ -	
Construction Contingency	35%	X	BCE	\$ 400,000	
					<b>CONSTRUCTION CONTRACT ESTIMATE (CCE) \$1,600,000</b>
<b>ANCILLARY CONSTRUCTION COSTS</b>					
		Years			
Agency Construction Admin. (SANDAG)	6.00%	x	CCE	\$ 96,000	
Agency Construction Prog. Mgmt. (SANDAG)	0.20%	x	CCE	\$ 3,200	
Agency Construction Admin. (NCTD/MTS)	0.10%	x	CCE	\$ 1,600	
Design Support During Construction	3.50%	x	CCE	\$ 56,000	
Construction Management	15.00%	x	CCE	\$ 240,000	
NCTD PTC & Signal Support & Testing	0.20%	x	CCE	\$ 3,200	
Flagging Services	6.00%	x	CCE	\$ 96,000	
ACC Contingency	1.00%	x	CCE	\$ 16,000	
Total	<b>32.0%</b>				<b>ANCILLARY CONSTRUCTION TOTAL \$512,000</b>
<b>OFF-SITE ENVIRONMENTAL MITIGATION</b>					
Non-Tidal Wetlands	0	Acre	\$ 228,590	\$0	
					<b>ENVIRONMENTAL MITIGATION TOTAL \$0</b>
<b>TOTAL PROJECT COST ESTIMATE (2022 Dollars)</b>					<b>\$2,847,000</b>

**Coastal Connections Concept 1 (North-South Trail: Segment C, 8th St to 4th St)**

**PROJECT COST ESTIMATE**

Revised: November 30, 2022

Design Level: **Conceptual**

Estimated By: **WSP & Villa Civil**

Item	Quantity	Unit	Unit Price	Amount*	Subtotal
<b>COST ESCALATION</b>					
Year of Expenditure	Annual % (Construction)	Annual % (Design Consultant)	Cumulative Escalation (Construction)	Expenditures**	TOTAL Escalation
FY23 PA&ED	4.4%	2.8%	4.4%	\$ 220,000	\$ 6,160
FY24 PS&E	2.9%	2.8%	7.3%	\$ 515,000	\$ 28,840
FY25 Construction	2.8%	2.8%	10.1%	\$ 950,400	\$ 95,990
FY26 Construction	2.8%	2.8%	12.9%	\$ 950,400	\$ 106,445
FY27 Closeout	2.8%	2.8%	15.8%	\$ 211,200	\$ 29,568
FY28	2.8%	2.8%	18.6%		\$ -
Estimated Escalation					\$ 267,003
<b>PROJECT COST IN YEAR OF EXPENDITURE DOLLARS</b>					<b>\$ 3,114,003</b>

## Coastal Connections Concept 1 (North-South Trail: Segment C, 8th St to 4th St)

Construction Cost Estimate

Design Level: Conceptual

Per WSP Concept Estimate Dated: November 23, 2022

Estimated By: WSP & Villa Civil

Item	QTY	Unit	Unit Price	Cost	Subtotal
<b>CONSTRUCTION</b>					
<b>Site Civil</b>					
Clearing and Grubbing	8,375	SF	\$ 0.25	\$ 2,093.75	
6' Decomposed Granite (DG) Path, stabilized for accessibility compliance	8,375	SF	\$ 10	\$ 83,750	
Excavate & Fill Other Areas	128	CY	\$ 64	\$ 8,192	
Import Earthwork	128	CY	\$ 41	\$ 5,248	
<b>Subtotal</b>				<b>\$</b>	<b>99,284</b>
<b>Civil Improvements</b>					
Curb Ramp	4	EA	\$ 3,200	\$ 12,800	
<b>Subtotal</b>				<b>\$</b>	<b>12,800</b>
<b>Structures</b>					
Timber Walkway Over Ditch: 7th St-8th St	2,400	SF	\$ 200	\$ 480,000	
Precast Ditch Crossing: 7th St	4.7	CY	\$ 2,200	\$ 10,340	
Precast Ditch Crossing: 6th St	1.9	CY	\$ 2,200	\$ 4,180	
<b>Subtotal</b>				<b>\$</b>	<b>494,520</b>
<b>Architectural &amp; Lighting</b>					
IPE Post & Cable Fence w Guardrail (42" HT): 7th St	83	LF	\$ 130	\$ 10,790	
IPE Post & Cable Fence w Guardrail (42" HT): 6th St	32	LF	\$ 130	\$ 4,160	
IPE Post & Cable Fence w Guardrail (42" HT): Sea Cliff Wy	35	LF	\$ 130	\$ 4,550	
Signage	\$ 1	LS	\$ 2,000	\$ 2,000	
Light Fixtures	\$ 1	LS	\$ 50,000	\$ 50,000	
Misc. Architectural Elements (decorative tile, decorative cairn, rock/pebble, etc.)	\$ 1	LS	\$ 82,000	\$ 82,000	
<b>Subtotal</b>				<b>\$</b>	<b>153,500</b>
<b>Site Mitigation</b>					
Stormwater Pollution Prevention Plan (SWPPP) and Implementation	1	LS	\$ 322,006	\$ 322,006	
<b>Subtotal</b>				<b>\$</b>	<b>322,006</b>
<b>BASE CONSTRUCTION ESTIMATE (BCE)</b>					<b>\$ 1,082,110</b>

# Coastal Connections Concept 2 (At-Grade Crossing 11th St, Ramps/Stairs to Beach)

## PROJECT COST ESTIMATE

Revised: November 28, 2022

Design Level: **Conceptual**

Estimated By: **WSP & Villa Civil**

Item	Quantity	Unit	Unit Price	Amount*	Subtotal
<b>ENVIRONMENTAL</b>					
Agency Environmental Admin-SANDAG	3.00%	x	CCE	\$ 162,000	
Agency Program Mgmt-SANDAG	1.25%	x	CCE	\$ 67,500	
Agency Environmental Admin-NCTD	1.00%	x	CCE	\$ 54,000	
Design-Preliminary Engineering (30%)	3.50%	x	CCE	\$ 189,000	
Environmental Clearance	3.00%	x	CCE	\$ 162,000	
Independent Peer Reviews	1.00%	x	CCE	\$ 54,000	
PA&ED Contingency	1.00%	x	CCE	\$ 54,000	
Total	<b>13.8%</b>				<b>ENVIRONMENTAL TOTAL \$ 742,500</b>
<b>DESIGN</b>					
Agency Design Admin-SANDAG	3.00%	x	CCE	\$ 162,000	
Agency Program Mgmt-SANDAG	1.25%	x	CCE	\$ 67,500	
Agency Design Admin-NCTD	1.00%	x	CCE	\$ 54,000	
Design-30% to 60%	6.00%	x	CCE	\$ 324,000	
Design-60% to Final PS&E, Bid Support	7.00%	x	CCE	\$ 378,000	
Independent Peer Reviews	1.50%	x	CCE	\$ 81,000	
PS&E Contingency	1.00%	x	CCE	\$ 54,000	
Total	<b>20.8%</b>				<b>DESIGN TOTAL \$1,120,500</b>
<b>LEGAL / COMMUNICATIONS</b>					
Legal	1.00%	x	CCE	\$ 54,000	
Communication	2.00%	x	CCE	\$ 108,000	
Total	<b>3.00%</b>				<b>LEGAL / COMMUNICATIONS TOTAL \$162,000</b>
<b>RIGHT OF WAY</b>					
Property Acquisition	1	LS	\$ -	\$ -	
Temporary Easements	1	LS	\$ 100,000	\$ 100,000	
Right of Way Contingency	35%	x	R/W Costs	\$ 35,000	
Total	<b>2.5%</b>				<b>RIGHT OF WAY TOTAL \$135,000</b>
<b>CONSTRUCTION CONTRACT ESTIMATE</b>					
<i>See Sheet 3</i>					
Site Civil	1	LS	\$ 125,157	\$ 125,157	
Civil Improvements	1	LS	\$ -	\$ -	
Structures	1	LS	\$ 1,242,728	\$ 1,242,728	
Architectural & Lighting	1	LS	\$ 1,992,088	\$ 1,992,088	
Site Mitigation (SWPPP)	1	LS	\$ 320,000	\$ 320,000	
					Base Construction Estimate (BCE)
					<b>\$3,679,973</b>
Contractor Mobilization	7.5%	X	BCE	\$ 300,000	
Contractor Demobilization	2.5%	X	BCE	\$ 100,000	
Time Related Overhead (Per Caltrans Contract)	0%	X	BCE	\$ -	
Construction Contingency	35%	X	BCE	\$ 1,300,000	
					<b>CONSTRUCTION CONTRACT ESTIMATE (CCE) \$5,400,000</b>
<b>ANCILLARY CONSTRUCTION COSTS</b>					
		Years			
Agency Construction Admin. (SANDAG)	6.00%	x	CCE	\$ 324,000	
Agency Construction Prog. Mgmt. (SANDAG)	0.20%	x	CCE	\$ 10,800	
Agency Construction Admin. (NCTD/MTS)	0.10%	x	CCE	\$ 5,400	
Design Support During Construction	3.50%	x	CCE	\$ 189,000	
Construction Management	15.00%	x	CCE	\$ 810,000	
NCTD PTC & Signal Support & Testing	0.20%	x	CCE	\$ 10,800	
Flagging Services	6.00%	x	CCE	\$ 324,000	
ACC Contingency	1.00%	x	CCE	\$ 54,000	
Total	<b>32.0%</b>				<b>ANCILLARY CONSTRUCTION TOTAL \$1,728,000</b>
<b>OFF-SITE ENVIRONMENTAL MITIGATION</b>					
Non-Tidal Wetlands	0	Acre	\$ 228,590	\$0	
					<b>ENVIRONMENTAL MITIGATION TOTAL \$0</b>
<b>TOTAL PROJECT COST ESTIMATE (2022 Dollars)</b>					<b>\$9,288,000</b>



**Coastal Connections Concept 2 (At-Grade Crossing 11th St, Ramps/Stairs to Beach)**

**PROJECT COST ESTIMATE**

Revised: November 28, 2022

Design Level: **Conceptual**

Estimated By: **WSP & Villa Civil**

Item	Quantity	Unit	Unit Price	Amount*	Subtotal
<b>COST ESCALATION</b>					
Year of Expenditure	Annual % (Construction)	Annual % (Design Consultant)	Cumulative Escalation (Construction)	Expenditures**	TOTAL Escalation
FY23 PA&ED	4.4%	2.8%	4.4%	\$ 742,500	\$ 20,790
FY24 PS&E	2.9%	2.8%	7.3%	\$ 1,417,500	\$ 79,380
FY25 Construction	2.8%	2.8%	10.1%	\$ 3,207,600	\$ 323,968
FY26 Construction	2.8%	2.8%	12.9%	\$ 3,207,600	\$ 359,251
FY27 Closeout	2.8%	2.8%	15.8%	\$ 712,800	\$ 99,792
FY28	2.8%	2.8%	18.6%		\$ -
				Estimated Escalation	\$ 883,181
<b>PROJECT COST IN YEAR OF EXPENDITURE DOLLARS</b>					<b>\$ 10,171,181</b>

## Coastal Connections Concept 2 (At-Grade Crossing 11th St, Ramps/Stairs to Beach)

**Construction Cost Estimate**

**Design Level: Conceptual**

**Per WSP Concept Estimate Dated: November 23, 2022**

**Estimated By: WSP & Villa Civil**

Item	QTY	Unit	Unit Price	Cost	Subtotal
<b>CONSTRUCTION</b>					
<b>Site Civil</b>					
Clearing & Grubbing	9,588	SF	\$ 0.25	\$ 2,397	
8' Decomposed Granite (DG) Path, stabilized for accessibility compliance	9,588	SF	\$ 10	\$ 95,880	
Excavate & Fill	420	CY	\$ 64	\$ 26,880	
<b>Subtotal</b>					<b>\$ 125,157</b>
<b>Civil Improvements</b>					
				\$ -	
				\$ -	
<b>Subtotal</b>					<b>\$ -</b>
<b>Structures</b>					
Retaining Walls	6,932	SF	\$ 154	\$ 1,067,528	
Natural Stairs Between 11th Street & Railroad	22	LF	\$ 800	\$ 17,600	
Natural Stairs to Beach	197	LF	\$ 800	\$ 157,600	
<b>Subtotal</b>					<b>\$ 1,242,728</b>
<b>Architectural &amp; Lighting</b>					
IPE Post & Cable Fence w Guardrail (42" HT): View Overlook	29	LF	\$ 130	\$ 3,770	
IPE Post & Cable Fence w Guardrail (42" HT): Northern Ramps	760	LF	\$ 130	\$ 98,800	
IPE Post & Cable Fence w Guardrail (42" HT): Natural Stairs	196	LF	\$ 130	\$ 25,480	
IPE Post & Cable Fence w Guardrail (42" HT): Seawall Ramp	83	LF	\$ 130	\$ 10,790	
Galvanized Handrail	2,808	LF	\$ 250	\$ 702,000	
Channelized Fence at Railroad Crossing (48" HT)	328	LF	\$ 36	\$ 11,808	
Emergency Swing Gate	2	EA	\$ 6,000	\$ 12,000	
30" High Visibility Panels	24	EA	\$ 60	\$ 1,440	
3' Wide Detectable Warning Strip	300	SF	\$ 60	\$ 18,000	
CPUC Signal/Gate System	1	LS	\$ 470,000	\$ 470,000	
Signal House	1	LS	\$ 500,000	\$ 500,000	
Signage	1	LS	\$ 6,000	\$ 6,000	
Light Fixtures	1	LS	\$ 50,000	\$ 50,000	
Misc. Architectural Elements (decorative tile, decorative cairn, rock/pebble, etc.)	1	LS	\$ 82,000	\$ 82,000	
<b>Subtotal</b>					<b>\$ 1,992,088</b>
<b>Site Mitigation</b>					
Stormwater Pollution Prevention Plan (SWPPP) & Implementation	1	LS	\$ 320,000	\$ 320,000	
<b>Subtotal</b>					<b>\$ 320,000</b>
<b>BASE CONSTRUCTION ESTIMATE (BCE)</b>					<b>\$ 3,679,973</b>

# Coastal Connections Concept 3 (At-Grade Crossing 11th St, Stairs to Beach)

## PROJECT COST ESTIMATE

Revised: November 30, 2022

Design Level: **Conceptual**

Estimated By: **WSP & Villa Civil**

Item	Quantity	Unit	Unit Price	Amount*	Subtotal
<b>ENVIRONMENTAL</b>					
Agency Environmental Admin-SANDAG	3.00%	x	CCE	\$ 90,000	
Agency Program Mgmt-SANDAG	1.25%	x	CCE	\$ 37,500	
Agency Environmental Admin-NCTD	1.00%	x	CCE	\$ 30,000	
Design-Preliminary Engineering (30%)	3.50%	x	CCE	\$ 105,000	
Environmental Clearance	3.00%	x	CCE	\$ 90,000	
Independent Peer Reviews	1.00%	x	CCE	\$ 30,000	
PA&ED Contingency	1.00%	x	CCE	\$ 30,000	
Total	<b>13.8%</b>			<b>ENVIRONMENTAL TOTAL</b>	<b>\$ 412,500</b>
<b>DESIGN</b>					
Agency Design Admin-SANDAG	3.00%	x	CCE	\$ 90,000	
Agency Program Mgmt-SANDAG	1.25%	x	CCE	\$ 37,500	
Agency Design Admin-NCTD	1.00%	x	CCE	\$ 30,000	
Design-30% to 60%	6.00%	x	CCE	\$ 180,000	
Design-60% to Final PS&E, Bid Support	7.00%	x	CCE	\$ 210,000	
Independent Peer Reviews	1.50%	x	CCE	\$ 45,000	
PS&E Contingency	1.00%	x	CCE	\$ 30,000	
Total	<b>20.8%</b>			<b>DESIGN TOTAL</b>	<b>\$622,500</b>
<b>LEGAL / COMMUNICATIONS</b>					
Legal	1.00%	x	CCE	\$ 30,000	
Communication	2.00%	x	CCE	\$ 60,000	
Total	<b>3.00%</b>			<b>LEGAL / COMMUNICATIONS TOTAL</b>	<b>\$90,000</b>
<b>RIGHT OF WAY</b>					
Property Acquisition	1	LS	\$ -	\$ -	
Temporary Easements	1	LS	\$ 100,000	\$ 100,000	
Right of Way Contingency	35%	x	R/W Costs	\$ 35,000	
Total	<b>4.5%</b>			<b>RIGHT OF WAY TOTAL</b>	<b>\$135,000</b>
<b>CONSTRUCTION CONTRACT ESTIMATE</b>					
<i>See Sheet 3</i>					
Site Civil	1	LS	\$ 56,675	\$ 56,675	
Civil Improvements	1	LS	\$ -	\$ -	
Structures	1	LS	\$ 175,200	\$ 175,200	
Architectural & Lighting	1	LS	\$ 1,463,538	\$ 1,463,538	
Site Mitigation (SWPPP)	1	LS	\$ 320,000	\$ 320,000	
Base Construction Estimate (BCE)					\$2,015,413
Contractor Mobilization	7.5%	X	BCE	\$ 200,000	
Contractor Demobilization	2.5%	X	BCE	\$ 100,000	
Time Related Overhead (Per Caltrans Contract)	0%	X	BCE	\$ -	
Construction Contingency	35%	X	BCE	\$ 700,000	
<b>CONSTRUCTION CONTRACT ESTIMATE (CCE)</b>					<b>\$3,000,000</b>
<b>ANCILLARY CONSTRUCTION COSTS</b>					
		Years			
Agency Construction Admin. (SANDAG)	6.00%	x	CCE	\$ 180,000	
Agency Construction Prog. Mgmt. (SANDAG)	0.20%	x	CCE	\$ 6,000	
Agency Construction Admin. (NCTD/MTS)	0.10%	x	CCE	\$ 3,000	
Design Support During Construction	3.50%	x	CCE	\$ 105,000	
Construction Management	15.00%	x	CCE	\$ 450,000	
NCTD PTC & Signal Support & Testing	0.20%	x	CCE	\$ 6,000	
Flagging Services	6.00%	x	CCE	\$ 180,000	
ACC Contingency	1.00%	x	CCE	\$ 30,000	
Total	<b>32.0%</b>			<b>ANCILLARY CONSTRUCTION TOTAL</b>	<b>\$960,000</b>
<b>OFF-SITE ENVIRONMENTAL MITIGATION</b>					
Non-Tidal Wetlands	0	Acre	\$ 228,590	\$0	
<b>ENVIRONMENTAL MITIGATION TOTAL</b>					<b>\$0</b>
<b>TOTAL PROJECT COST ESTIMATE (2022 Dollars)</b>					<b>\$5,220,000</b>

**Coastal Connections Concept 3 (At-Grade Crossing 11th St, Stairs to Beach)**

**PROJECT COST ESTIMATE**

Revised: November 30, 2022

Design Level: **Conceptual**

Estimated By: **WSP & Villa Civil**

Item	Quantity	Unit	Unit Price	Amount*	Subtotal
<b>COST ESCALATION</b>					
Year of Expenditure	Annual % (Construction)	Annual % (Design Consultant)	Cumulative Escalation (Construction)	Expenditures**	TOTAL Escalation
FY23 PA&ED	4.4%	2.8%	4.4%	\$ 412,500	\$ 11,550
FY24 PS&E	2.9%	2.8%	7.3%	\$ 847,500	\$ 47,460
FY25 Construction	2.8%	2.8%	10.1%	\$ 1,782,000	\$ 179,982
FY26 Construction	2.8%	2.8%	12.9%	\$ 1,782,000	\$ 199,584
FY27 Closeout	2.8%	2.8%	15.8%	\$ 396,000	\$ 55,440
FY28	2.8%	2.8%	18.6%		\$ -
Estimated Escalation					\$ 494,016
<b>PROJECT COST IN YEAR OF EXPENDITURE DOLLARS</b>					<b>\$ 5,714,016</b>

## Coastal Connections Concept 3 (At-Grade Crossing 11th St, Stairs to Beach)

**Construction Cost Estimate**

**Design Level: Conceptual**

**Per WSP Concept Estimate Dated: November 23, 2022**

**Estimated By: WSP & Villa Civil**

Item	QTY	Unit	Unit Price	Cost	Subtotal
<b>CONSTRUCTION</b>					
<b>Site Civil</b>					
Clearing & Grubbing	4,499	SF	\$ 0.25	\$ 1,125	
8' Decomposed Granite (DG) Path, stabilized for accessibility compliance	4,499	SF	\$ 10	\$ 44,990	
Excavate & Fill	165	CY	\$ 64	\$ 10,560	
<b>Subtotal</b>					<b>\$ 56,675</b>
<b>Civil Improvements</b>					
				\$ -	
				\$ -	
<b>Subtotal</b>					<b>\$ -</b>
<b>Structures</b>					
Natural Stairs Between 11th Street & Railroad	22	LF	\$ 800	\$ 17,600	
Natural Stairs to Beach	197	LF	\$ 800	\$ 157,600	
<b>Subtotal</b>					<b>\$ 175,200</b>
<b>Architectural &amp; Lighting</b>					
IPE Post & Cable Fence w Guardrail (42" HT): View Overlook	29	LF	\$ 130	\$ 3,770	
IPE Post & Cable Fence w Guardrail (42" HT): Natural Stairs	196	LF	\$ 130	\$ 25,480	
IPE Post & Cable Fence w Guardrail (42" HT): Seawall Ramp	83	LF	\$ 130	\$ 10,790	
Galvanized Handrail	1,089	LF	\$ 250	\$ 272,250	
Channelized Fence at Railroad Crossing (48" HT)	328	LF	\$ 36	\$ 11,808	
Emergency Swing Gate	2	EA	\$ 6,000	\$ 12,000	
30" High Visibility Panels	24	EA	\$ 60	\$ 1,440	
3' Wide Detectable Warning Strip	300	SF	\$ 60	\$ 18,000	
CPUC Signal/Gate System	1	LS	\$ 470,000	\$ 470,000	
Signal House	1	LS	\$ 500,000	\$ 500,000	
Signage	1	LS	\$ 6,000	\$ 6,000	
Light Fixtures	1	LS	\$ 50,000	\$ 50,000	
Misc. Architectural Elements (decorative tile, decorative cairn, rock/pebble, etc.)	1	LS	\$ 82,000	\$ 82,000	
<b>Subtotal</b>					<b>\$ 1,463,538</b>
<b>Site Mitigation</b>					
Stormwater Pollution Prevention Plan (SWPPP) & Implementation	1	LS	\$ 320,000	\$ 320,000	
<b>Subtotal</b>					<b>\$ 320,000</b>
<b>BASE CONSTRUCTION ESTIMATE (BCE)</b>					<b>\$ 2,015,413</b>

# Coastal Connections Concept 4 (At-Grade Crossing 7th-8th St, Ramps to Beach)

## PROJECT COST ESTIMATE

Revised: November 30, 2022

Design Level: **Conceptual**

Estimated By: **WSP & Villa Civil**

Item	Quantity	Unit	Unit Price	Amount*	Subtotal
<b>ENVIRONMENTAL</b>					
Agency Environmental Admin-SANDAG	3.00%	x	CCE	\$ 147,000	
Agency Program Mgmt-SANDAG	1.25%	x	CCE	\$ 61,300	
Agency Environmental Admin-NCTD	1.00%	x	CCE	\$ 49,000	
Design-Preliminary Engineering (30%)	3.50%	x	CCE	\$ 171,500	
Environmental Clearance	3.00%	x	CCE	\$ 147,000	
Independent Peer Reviews	1.00%	x	CCE	\$ 49,000	
PA&ED Contingency	1.00%	x	CCE	\$ 49,000	
Total	<b>13.8%</b>				<b>ENVIRONMENTAL TOTAL \$ 673,800</b>
<b>DESIGN</b>					
Agency Design Admin-SANDAG	3.00%	x	CCE	\$ 147,000	
Agency Program Mgmt-SANDAG	1.25%	x	CCE	\$ 61,300	
Agency Design Admin-NCTD	1.00%	x	CCE	\$ 49,000	
Design-30% to 60%	6.00%	x	CCE	\$ 294,000	
Design-60% to Final PS&E, Bid Support	7.00%	x	CCE	\$ 343,000	
Independent Peer Reviews	1.50%	x	CCE	\$ 73,500	
PS&E Contingency	1.00%	x	CCE	\$ 49,000	
Total	<b>20.8%</b>				<b>DESIGN TOTAL \$1,016,800</b>
<b>LEGAL / COMMUNICATIONS</b>					
Legal	1.00%	x	CCE	\$ 49,000	
Communication	2.00%	x	CCE	\$ 98,000	
Total	<b>3.00%</b>				<b>LEGAL / COMMUNICATIONS TOTAL \$147,000</b>
<b>RIGHT OF WAY</b>					
Property Acquisition	1	LS	\$ -	\$ -	
Temporary Easements	1	LS	\$ 100,000	\$ 100,000	
Right of Way Contingency	35%	x	R/W Costs	\$ 35,000	
Total	<b>2.8%</b>				<b>RIGHT OF WAY TOTAL \$135,000</b>
<b>CONSTRUCTION CONTRACT ESTIMATE</b>					
<i>See Sheet 3</i>					
Site Civil	1	LS	\$ 202,400	\$ 202,400	
Civil Improvements	1	LS	\$ -	\$ -	
Structures	1	LS	\$ 854,800	\$ 854,800	
Architectural & Lighting	1	LS	\$ 1,967,242	\$ 1,967,242	
Site Mitigation (SWPPP)	1	LS	\$ 320,000	\$ 320,000	
					Base Construction Estimate (BCE)
					<b>\$3,344,442</b>
Contractor Mobilization	7.5%	X	BCE	\$ 300,000	
Contractor Demobilization	2.5%	X	BCE	\$ 100,000	
Time Related Overhead (Per Caltrans Contract)	0%	X	BCE	\$ -	
Construction Contingency	35%	X	BCE	\$ 1,200,000	
					<b>CONSTRUCTION CONTRACT ESTIMATE (CCE) \$4,900,000</b>
<b>ANCILLARY CONSTRUCTION COSTS</b>					
		Years			
Agency Construction Admin. (SANDAG)	6.00%	x	CCE	\$ 294,000	
Agency Construction Prog. Mgmt. (SANDAG)	0.20%	x	CCE	\$ 9,800	
Agency Construction Admin. (NCTD/MTS)	0.10%	x	CCE	\$ 4,900	
Design Support During Construction	3.50%	x	CCE	\$ 171,500	
Construction Management	15.00%	x	CCE	\$ 735,000	
NCTD PTC & Signal Support & Testing	0.20%	x	CCE	\$ 9,800	
Flagging Services	6.00%	x	CCE	\$ 294,000	
ACC Contingency	1.00%	x	CCE	\$ 49,000	
Total	<b>32.0%</b>				<b>ANCILLARY CONSTRUCTION TOTAL \$1,568,000</b>
<b>OFF-SITE ENVIRONMENTAL MITIGATION</b>					
Non-Tidal Wetlands	0	Acre	\$ 228,590	\$0	
					<b>ENVIRONMENTAL MITIGATION TOTAL \$0</b>
<b>TOTAL PROJECT COST ESTIMATE (2022 Dollars)</b>					<b>\$8,440,600</b>

**Coastal Connections Concept 4 (At-Grade Crossing 7th-8th St, Ramps to Beach)**

**PROJECT COST ESTIMATE**

Revised: November 30, 2022

Design Level: **Conceptual**

Estimated By: **WSP & Villa Civil**

Item	Quantity	Unit	Unit Price	Amount*	Subtotal
<b>COST ESCALATION</b>					
Year of Expenditure	Annual % (Construction)	Annual % (Design Consultant)	Cumulative Escalation (Construction)	Expenditures**	TOTAL Escalation
FY23 PA&ED	4.4%	2.8%	4.4%	\$ 673,800	\$ 18,866
FY24 PS&E	2.9%	2.8%	7.3%	\$ 1,298,800	\$ 72,733
FY25 Construction	2.8%	2.8%	10.1%	\$ 2,910,600	\$ 293,971
FY26 Construction	2.8%	2.8%	12.9%	\$ 2,910,600	\$ 325,987
FY27 Closeout	2.8%	2.8%	15.8%	\$ 646,800	\$ 90,552
FY28	2.8%	2.8%	18.6%		\$ -
Estimated Escalation					\$ 802,109
<b>PROJECT COST IN YEAR OF EXPENDITURE DOLLARS</b>					<b>\$ 9,242,709</b>

<b>Coastal Connections Concept 4 (At-Grade Crossing 7th-8th St, Ramps to Beach)</b>					
<b>Construction Cost Estimate</b>			<b>Design Level: Conceptual</b>		
<b>Per WSP Concept Estimate Dated: November 23, 2022</b>			<b>Estimated By: WSP &amp; Villa Civil</b>		
<b>Item</b>	<b>QTY</b>	<b>Unit</b>	<b>Unit Price</b>	<b>Cost</b>	<b>Subtotal</b>
<b>CONSTRUCTION</b>					
<b>Site Civil</b>					
Clearing & Grubbing	11,638	SF	\$ 0.25	\$ 2,910	
8' Decomposed Granite (DG) Path, stabilized for accessibility compliance	11,638	SF	\$ 10	\$ 116,380	
Excavate & Fill	1,240	CY	\$ 64	\$ 79,360	
Pipe Culvert East of Railroad	15	LF	\$ 250	\$ 3,750	
<b>Subtotal</b>					<b>\$ 202,400</b>
<b>Civil Improvements</b>					
				\$ -	
				\$ -	
<b>Subtotal</b>					<b>\$ -</b>
<b>Structures</b>					
Retaining Walls	5,400	SF	\$ 154	\$ 831,600	
Natural Stairs Between 7th St & Railroad	29	LF	\$ 800	\$ 23,200	
<b>Subtotal</b>					<b>\$ 854,800</b>
<b>Architectural &amp; Lighting</b>					
IPE Post & Cable Fence w Guardrail (42" HT): Ramps	642	LF	\$ 130	\$ 83,460	
Galvanized Handrail	2,661	LF	\$ 250	\$ 665,250	
Channelized Fence at Railroad Crossing (48" HT)	1,887	LF	\$ 36	\$ 67,932	
Emergency Swing Gate	1	EA	\$ 6,000	\$ 6,000	
30" High Visibility Panels	10	EA	\$ 60	\$ 600	
3' Wide Detectable Warning Strip	600	SF	\$ 60	\$ 36,000	
CPUC Signal/Gate System	1	LS	\$ 470,000	\$ 470,000	
Signal House	1	LS	\$ 500,000	\$ 500,000	
Signage	1	LS	\$ 6,000	\$ 6,000	
Light Fixtures	1	LS	\$ 50,000	\$ 50,000	
Misc. Architectural Elements (decorative tile, decorative cairn, rock/pebble, etc.)	1	LS	\$ 82,000	\$ 82,000	
<b>Subtotal</b>					<b>\$ 1,967,242</b>
<b>Site Mitigation</b>					
Stormwater Pollution Prevention Plan (SWPPP) & Implementation	1	LS	\$ 320,000	\$ 320,000	
<b>Subtotal</b>					<b>\$ 320,000</b>
<b>BASE CONSTRUCTION ESTIMATE (BCE)</b>					<b>\$ 3,344,442</b>



# Coastal Connections Concept 5 (At-Grade Crossing 7th-8th St, Stairs to Beach)

## PROJECT COST ESTIMATE

Revised: November 30, 2022

Design Level: **Conceptual**

Estimated By: **WSP & Villa Civil**

Item	Quantity	Unit	Unit Price	Amount*	Subtotal
<b>ENVIRONMENTAL</b>					
Agency Environmental Admin-SANDAG	3.00%	x	CCE	\$ 90,000	
Agency Program Mgmt-SANDAG	1.25%	x	CCE	\$ 37,500	
Agency Environmental Admin-NCTD	1.00%	x	CCE	\$ 30,000	
Design-Preliminary Engineering (30%)	3.50%	x	CCE	\$ 105,000	
Environmental Clearance	3.00%	x	CCE	\$ 90,000	
Independent Peer Reviews	1.00%	x	CCE	\$ 30,000	
PA&ED Contingency	1.00%	x	CCE	\$ 30,000	
Total	<b>13.75%</b>				<b>ENVIRONMENTAL TOTAL \$ 412,500</b>
<b>DESIGN</b>					
Agency Design Admin-SANDAG	3.00%	x	CCE	\$ 90,000	
Agency Program Mgmt-SANDAG	1.25%	x	CCE	\$ 37,500	
Agency Design Admin-NCTD	1.00%	x	CCE	\$ 30,000	
Design-30% to 60%	6.00%	x	CCE	\$ 180,000	
Design-60% to Final PS&E, Bid Support	7.00%	x	CCE	\$ 210,000	
Independent Peer Reviews	1.50%	x	CCE	\$ 45,000	
PS&E Contingency	1.00%	x	CCE	\$ 30,000	
Total	<b>20.75%</b>				<b>DESIGN TOTAL \$ 622,500</b>
<b>LEGAL / COMMUNICATIONS</b>					
Legal	1.00%	x	CCE	\$ 30,000	
Communication	2.00%	x	CCE	\$ 60,000	
Total	<b>3.00%</b>				<b>LEGAL / COMMUNICATIONS TOTAL \$ 90,000</b>
<b>RIGHT OF WAY</b>					
Property Acquisition	1	LS	\$ -	\$ -	
Temporary Easements	1	LS	\$ 100,000	\$ 100,000	
Right of Way Contingency	35%	x	R/W Costs	\$ 35,000	
Total	<b>4.5%</b>				<b>RIGHT OF WAY TOTAL \$ 135,000</b>
<b>CONSTRUCTION CONTRACT ESTIMATE</b>					
<i>See Sheet 3</i>					
Site Civil	1	LS	\$ 72,557.36	\$ 72,557.36	
Civil Improvements	1	LS	\$ -	\$ -	
Structures	1	LS	\$ 316,784	\$ 316,784	
Architectural & Lighting	1	LS	\$ 1,325,421	\$ 1,325,421	
Site Mitigation (SWPPP)	1	LS	\$ 320,000	\$ 320,000	
Base Construction Estimate (BCE)					<b>\$ 2,034,762.36</b>
Contractor Mobilization	7.5%	X	BCE	\$ 200,000	
Contractor Demobilization	2.5%	X	BCE	\$ 100,000	
Time Related Overhead (Per Caltrans Contract)	0%	X	BCE	\$ -	
Construction Contingency	35%	X	BCE	\$ 700,000	
<b>CONSTRUCTION CONTRACT ESTIMATE (CCE)</b>					<b>\$ 3,000,000</b>
<b>ANCILLARY CONSTRUCTION COSTS</b>					
		Years			
Agency Construction Admin. (SANDAG)	6.00%	x	CCE	\$ 180,000	
Agency Construction Prog. Mgmt. (SANDAG)	0.20%	x	CCE	\$ 6,000	
Agency Construction Admin. (NCTD/MTS)	0.10%	x	CCE	\$ 3,000	
Design Support During Construction	3.50%	x	CCE	\$ 105,000	
Construction Management	15.00%	x	CCE	\$ 450,000	
NCTD PTC & Signal Support & Testing	0.20%	x	CCE	\$ 6,000	
Flagging Services	6.00%	x	CCE	\$ 180,000	
ACC Contingency	1.00%	x	CCE	\$ 30,000	
Total	<b>32.0%</b>				<b>ANCILLARY CONSTRUCTION TOTAL \$960,000</b>
<b>OFF-SITE ENVIRONMENTAL MITIGATION</b>					
Non-Tidal Wetlands	0	Acre	\$ 228,590	\$0	
<b>ENVIRONMENTAL MITIGATION TOTAL</b>					<b>\$0</b>
<b>TOTAL PROJECT COST ESTIMATE (2022 Dollars)</b>					<b>\$5,220,000</b>

**Coastal Connections Concept 5 (At-Grade Crossing 7th-8th St, Stairs to Beach)**

**PROJECT COST ESTIMATE**

Revised: November 30, 2022

Design Level: **Conceptual**

Estimated By: **WSP & Villa Civil**

Item	Quantity	Unit	Unit Price	Amount*	Subtotal
<b>COST ESCALATION</b>					
Year of Expenditure	Annual % (Construction)	Annual % (Design Consultant)	Cumulative Escalation (Construction)	Expenditures**	TOTAL Escalation
FY23 PA&ED	4.4%	2.8%	4.4%	\$ 412,500	\$ 11,550
FY24 PS&E	2.9%	2.8%	7.3%	\$ 847,500	\$ 47,460
FY25 Construction	2.8%	2.8%	10.1%	\$ 1,782,000	\$ 179,982
FY26 Construction	2.8%	2.8%	12.9%	\$ 1,782,000	\$ 199,584
FY27 Closeout	2.8%	2.8%	15.8%	\$ 396,000	\$ 55,440
FY28	2.8%	2.8%	18.6%		\$ -
Estimated Escalation					\$ 494,016
<b>PROJECT COST IN YEAR OF EXPENDITURE DOLLARS</b>					<b>\$ 5,714,016</b>

<b>Coastal Connections Concept 5 (At-Grade Crossing 7th-8th St, Stairs to Beach)</b>					
<b>Construction Cost Estimate</b>			<b>Design Level: Conceptual</b>		
<b>Per WSP Concept Estimate Dated: November 23, 2022</b>			<b>Estimated By: WSP &amp; Villa Civil</b>		
<b>Item</b>	<b>QTY</b>	<b>Unit</b>	<b>Unit Price</b>	<b>Cost</b>	<b>Subtotal</b>
<b>CONSTRUCTION</b>					
<b>Site Civil</b>					
Clearing & Grubbing	4,917	SF	\$ 0.25	\$ 1,229	
8' Decomposed Granite (DG) Path, stabilized for accessibility compliance	4,917	SF	\$ 10	\$ 49,170	
Excavate & Fill	288	CY	\$ 64	\$ 18,408	
Pipe Culvert East of Railroad	15	LF	\$ 250	\$ 3,750	
<b>Subtotal</b>					<b>\$ 72,557</b>
<b>Civil Improvements</b>					
				\$ -	
				\$ -	
<b>Subtotal</b>					<b>\$ -</b>
<b>Structures</b>					
Retaining Walls	1,096	SF	\$ 154	\$ 168,784	
Natural Stairs Between 7th St & Railroad	20	LF	\$ 800	\$ 16,000	
Natural Stairs to Beach	165	LF	\$ 800	\$ 132,000	
<b>Subtotal</b>					<b>\$ 316,784</b>
<b>Architectural &amp; Lighting</b>					
IPE Post & Cable Fence w Guardrail (42" HT): View Overlook	21	LF	\$ 130	\$ 2,665	
IPE Post & Cable Fence w Guardrail (42" HT): Natural Stairs	43	LF	\$ 130	\$ 5,590	
Galvanized Handrail	1,281	LF	\$ 90	\$ 115,290	
Channelized Fence at Railroad Crossing (48" HT)	1,421	LF	\$ 36	\$ 51,156	
Emergency Swing Gate	1	EA	\$ 6,000	\$ 6,000	
30" High Visibility Panels	12	EA	\$ 60	\$ 720	
3' Wide Detectable Warning Strip	600	SF	\$ 60	\$ 36,000	
CPUC Signal/Gate System	1	LS	\$ 470,000	\$ 470,000	
Signal House	1	LS	\$ 500,000	\$ 500,000	
Signage	1	LS	\$ 6,000	\$ 6,000	
Light Fixtures	1	LS	\$ 50,000	\$ 50,000	
Misc. Architectural Elements (decorative tile, decorative cairn, rock/pebble, etc.)	1	LS	\$ 82,000	\$ 82,000	
<b>Subtotal</b>					<b>\$ 1,325,421</b>
<b>Site Mitigation</b>					
Stormwater Pollution Prevention Plan (SWPPP) & Implementation	1	LS	\$ 320,000	\$ 320,000	
<b>Subtotal</b>					<b>\$ 320,000</b>
<b>BASE CONSTRUCTION ESTIMATE (BCE)</b>					<b>\$ 2,034,762</b>

# Coastal Connections Concept 6 (Undercrossing 7th-8th St, Ramps to Beach)

## PROJECT COST ESTIMATE

Revised: November 30, 2022

Design Level: **Conceptual**

Estimated By: **WSP & Villa Civil**

Item	Quantity	Unit	Unit Price	Amount*	Subtotal
<b>ENVIRONMENTAL</b>					
Agency Environmental Admin-SANDAG	3.00%	x	CCE	\$ 204,000	
Agency Program Mgmt-SANDAG	1.25%	x	CCE	\$ 85,000	
Agency Environmental Admin-NCTD	1.00%	x	CCE	\$ 68,000	
Design-Preliminary Engineering (30%)	3.50%	x	CCE	\$ 238,000	
Environmental Clearance	3.00%	x	CCE	\$ 204,000	
Independent Peer Reviews	1.00%	x	CCE	\$ 68,000	
PA&ED Contingency	1.00%	x	CCE	\$ 68,000	
Total	<b>13.8%</b>				<b>ENVIRONMENTAL TOTAL \$ 935,000</b>
<b>DESIGN</b>					
Agency Design Admin-SANDAG	3.00%	x	CCE	\$ 204,000	
Agency Program Mgmt-SANDAG	1.25%	x	CCE	\$ 85,000	
Agency Design Admin-NCTD	1.00%	x	CCE	\$ 68,000	
Design-30% to 60%	6.00%	x	CCE	\$ 408,000	
Design-60% to Final PS&E, Bid Support	7.00%	x	CCE	\$ 476,000	
Independent Peer Reviews	1.50%	x	CCE	\$ 102,000	
PS&E Contingency	1.00%	x	CCE	\$ 68,000	
Total	<b>20.8%</b>				<b>DESIGN TOTAL \$1,411,000</b>
<b>LEGAL / COMMUNICATIONS</b>					
Legal	1.00%	x	CCE	\$ 68,000	
Communication	2.00%	x	CCE	\$ 136,000	
Total	<b>3.00%</b>				<b>LEGAL / COMMUNICATIONS TOTAL \$204,000</b>
<b>RIGHT OF WAY</b>					
Property Acquisition	1	LS	\$ -	\$ -	
Temporary Easements	1	LS	\$ 100,000	\$ 100,000	
Right of Way Contingency	35%	x	R/W Costs	\$ 35,000	
Total	<b>2.0%</b>				<b>RIGHT OF WAY TOTAL \$135,000</b>
<b>CONSTRUCTION CONTRACT ESTIMATE</b>					
<i>See Sheet 3</i>					
Site Civil	1	LS	\$ 366,151	\$ 366,151	
Civil Improvements	1	LS	\$ -	\$ -	
Structures	1	LS	\$ 3,527,380	\$ 3,527,380	
Architectural & Lighting	1	LS	\$ 480,715	\$ 480,715	
Site Mitigation (SWPPP)	1	LS	\$ 320,000	\$ 320,000	
					Base Construction Estimate (BCE)
					<b>\$4,694,246</b>
Contractor Mobilization	7.5%	X	BCE	\$ 400,000	
Contractor Demobilization	2.5%	X	BCE	\$ 100,000	
Time Related Overhead (Per Caltrans Contract)	0%	X	BCE	\$ -	
Construction Contingency	35%	X	BCE	\$ 1,600,000	
					<b>CONSTRUCTION CONTRACT ESTIMATE (CCE) \$6,800,000</b>
<b>ANCILLARY CONSTRUCTION COSTS</b>					
		Years			
Agency Construction Admin. (SANDAG)	6.00%	x	CCE	\$ 408,000	
Agency Construction Prog. Mgmt. (SANDAG)	0.20%	x	CCE	\$ 13,600	
Agency Construction Admin. (NCTD/MTS)	0.10%	x	CCE	\$ 6,800	
Design Support During Construction	3.50%	x	CCE	\$ 238,000	
Construction Management	15.00%	x	CCE	\$ 1,020,000	
NCTD PTC & Signal Support & Testing	0.20%	x	CCE	\$ 13,600	
Flagging Services	6.00%	x	CCE	\$ 408,000	
ACC Contingency	1.00%	x	CCE	\$ 68,000	
Total	<b>32.0%</b>				<b>ANCILLARY CONSTRUCTION TOTAL \$2,176,000</b>
<b>OFF-SITE ENVIRONMENTAL MITIGATION</b>					
Non-Tidal Wetlands	0	Acre	\$ 228,590	\$0	
					<b>ENVIRONMENTAL MITIGATION TOTAL \$0</b>
<b>TOTAL PROJECT COST ESTIMATE (2022 Dollars)</b>					<b>\$11,661,000</b>

**Coastal Connections Concept 6 (Undercrossing 7th-8th St, Ramps to Beach)**

**PROJECT COST ESTIMATE**

Revised: November 30, 2022

Design Level: **Conceptual**

Estimated By: **WSP & Villa Civil**

Item	Quantity	Unit	Unit Price	Amount*	Subtotal
<b>COST ESCALATION</b>					
Year of Expenditure	Annual % (Construction)	Annual % (Design Consultant)	Cumulative Escalation (Construction)	Expenditures**	TOTAL Escalation
FY23 PA&ED	4.4%	2.8%	4.4%	\$ 935,000	\$ 26,180
FY24 PS&E	2.9%	2.8%	7.3%	\$ 1,750,000	\$ 98,000
FY25 Construction	2.8%	2.8%	10.1%	\$ 4,039,200	\$ 407,959
FY26 Construction	2.8%	2.8%	12.9%	\$ 4,039,200	\$ 452,390
FY27 Closeout	2.8%	2.8%	15.8%	\$ 897,600	\$ 125,664
FY28	2.8%	2.8%	18.6%		\$ -
Estimated Escalation					\$ 1,110,194
<b>PROJECT COST IN YEAR OF EXPENDITURE DOLLARS</b>					<b>\$ 12,771,194</b>

## Coastal Connections Concept 6 (Undercrossing 7th-8th St, Ramps to Beach)

Construction Cost Estimate

Design Level: Conceptual

Per WSP Concept Estimate Dated: November 23, 2022

Estimated By: WSP & Villa Civil

Item	QTY	Unit	Unit Price	Cost	Subtotal
<b>CONSTRUCTION</b>					
<b>Site Civil</b>					
Clearing & Grubbing	22,410	SF	\$ 0.25	\$ 5,603	
8' Decomposed Granite (DG) Path, stabilized for accessibility compliance	22,410	SF	\$ 10	\$ 224,100	
Excavate & Fill	2,132	CY	\$ 64	\$ 136,448	
<b>Subtotal</b>					<b>\$ 366,151</b>
<b>Civil Improvements</b>					
				\$ -	
				\$ -	
<b>Subtotal</b>					<b>\$ -</b>
<b>Structures</b>					
Retaining Walls	20,970	SF	\$ 154	\$ 3,229,380	
Furnish Bent Cap	2	EA	\$ 30,000	\$ 60,000	
Erect Bent Cap	2	EA	\$ 10,000	\$ 20,000	
Furnish Abutment	2	EA	\$ 30,000	\$ 60,000	
Erect Abutment	2	EA	\$ 20,000	\$ 40,000	
Furnish Precast Slab Girder	2	EA	\$ 25,000	\$ 50,000	
Erect Precast Slab Girder	2	EA	\$ 10,000	\$ 20,000	
Furnish Precast Wingwall	2	EA	\$ 10,000	\$ 20,000	
Erect Precast Wingwall	2	EA	\$ 4,000	\$ 8,000	
Remove and Re-Install Track	20	TF	\$ 1,000	\$ 20,000	
<b>Subtotal</b>					<b>\$ 3,527,380</b>
<b>Architectural &amp; Lighting</b>					
IPE Post & Cable Fence w Guardrail (42" HT): View Overlook	90	LF	\$ 130	\$ 11,700	
IPE Post & Cable Fence w Guardrail (42" HT): Ramps	834	LF	\$ 130	\$ 108,355	
Galvanized Handrail	2,474	LF	\$ 90	\$ 222,660	
Signage	1	LS	\$ 6,000	\$ 6,000	
Light Fixtures	1	LS	\$ 50,000	\$ 50,000	
Misc. Architectural Elements (decorative tile, decorative cairn, rock/pebble, etc.)	1	LS	\$ 82,000	\$ 82,000	
<b>Subtotal</b>					<b>\$ 480,715</b>
<b>Site Mitigation</b>					
Stormwater Pollution Prevention Plan (SWPPP) & Implementation	1	LS	\$ 320,000	\$ 320,000	
<b>Subtotal</b>					<b>\$ 320,000</b>
<b>BASE CONSTRUCTION ESTIMATE (BCE)</b>					<b>\$ 4,694,246</b>

# Coastal Connections Concept 7 (Undercrossing 7th-8th St, Stairs to Beach)

## PROJECT COST ESTIMATE

Revised: November 30, 2022

Design Level: Conceptual

Estimated By: WSP & Villa Civil

Item	Quantity	Unit	Unit Price	Amount*	Subtotal	
<b>ENVIRONMENTAL</b>						
Agency Environmental Admin-SANDAG	3.00%	x	CCE	\$ 111,000		
Agency Program Mgmt-SANDAG	1.25%	x	CCE	\$ 46,300		
Agency Environmental Admin-NCTD	1.00%	x	CCE	\$ 37,000		
Design-Preliminary Engineering (30%)	3.50%	x	CCE	\$ 129,500		
Environmental Clearance	3.00%	x	CCE	\$ 111,000		
Independent Peer Reviews	1.00%	x	CCE	\$ 37,000		
PA&ED Contingency	1.00%	x	CCE	\$ 37,000		
Total	<b>13.8%</b>				<b>ENVIRONMENTAL TOTAL \$ 508,800</b>	
<b>DESIGN</b>						
Agency Design Admin-SANDAG	3.00%	x	CCE	\$ 111,000		
Agency Program Mgmt-SANDAG	1.25%	x	CCE	\$ 46,300		
Agency Design Admin-NCTD	1.00%	x	CCE	\$ 37,000		
Design-30% to 60%	6.00%	x	CCE	\$ 222,000		
Design-60% to Final PS&E, Bid Support	7.00%	x	CCE	\$ 259,000		
Independent Peer Reviews	1.50%	x	CCE	\$ 55,500		
PS&E Contingency	1.00%	x	CCE	\$ 37,000		
Total	<b>20.8%</b>				<b>DESIGN TOTAL \$767,800</b>	
<b>LEGAL / COMMUNICATIONS</b>						
Legal	1.00%	x	CCE	\$ 37,000		
Communication	2.00%	x	CCE	\$ 74,000		
Total	<b>3.00%</b>				<b>LEGAL / COMMUNICATIONS TOTAL \$111,000</b>	
<b>RIGHT OF WAY</b>						
Property Acquisition	1	LS	\$ -	\$ -		
Temporary Easements	1	LS	\$ 100,000	\$ 100,000		
Right of Way Contingency	35%	x	R/W Costs	\$ 35,000		
Total	<b>3.6%</b>				<b>RIGHT OF WAY TOTAL \$135,000</b>	
<b>CONSTRUCTION CONTRACT ESTIMATE</b>						
<i>See Sheet 3</i>						
Site Civil	1	LS	\$ 131,033	\$ 131,033		
Civil Improvements	1	LS	\$ -	\$ -		
Structures	1	LS	\$ 1,651,210	\$ 1,651,210		
Architectural & Lighting	1	LS	\$ 373,240	\$ 373,240		
Site Mitigation (SWPPP)	1	LS	\$ 320,000	\$ 320,000		
					Base Construction Estimate (BCE)	\$2,475,483
Contractor Mobilization	7.5%	X	BCE	\$ 200,000		
Contractor Demobilization	2.5%	X	BCE	\$ 100,000		
Time Related Overhead (Per Caltrans Contract)	0%	X	BCE	\$ -		
Construction Contingency	35%	X	BCE	\$ 900,000		
					<b>CONSTRUCTION CONTRACT ESTIMATE (CCE)</b>	<b>\$3,700,000</b>
<b>ANCILLARY CONSTRUCTION COSTS</b>						
		Years				
Agency Construction Admin. (SANDAG)	6.00%	x	CCE	\$ 222,000		
Agency Construction Prog. Mgmt. (SANDAG)	0.20%	x	CCE	\$ 7,400		
Agency Construction Admin. (NCTD/MTS)	0.10%	x	CCE	\$ 3,700		
Design Support During Construction	3.50%	x	CCE	\$ 129,500		
Construction Management	15.00%	x	CCE	\$ 555,000		
NCTD PTC & Signal Support & Testing	0.20%	x	CCE	\$ 7,400		
Flagging Services	6.00%	x	CCE	\$ 222,000		
ACC Contingency	1.00%	x	CCE	\$ 37,000		
Total	<b>32.0%</b>				<b>ANCILLARY CONSTRUCTION TOTAL \$1,184,000</b>	
<b>OFF-SITE ENVIRONMENTAL MITIGATION</b>						
Non-Tidal Wetlands	0	Acre	\$ 228,590	\$0		
					<b>ENVIRONMENTAL MITIGATION TOTAL</b>	<b>\$0</b>
<b>TOTAL PROJECT COST ESTIMATE (2022 Dollars)</b>					<b>\$6,406,600</b>	

**Coastal Connections Concept 7 (Undercrossing 7th-8th St, Stairs to Beach)**

**PROJECT COST ESTIMATE**

Revised: November 30, 2022

Design Level: Conceptual

Estimated By: WSP & Villa Civil

Item	Quantity	Unit	Unit Price	Amount*	Subtotal
<b>COST ESCALATION</b>					
Year of Expenditure	Annual % (Construction)	Annual % (Design Consultant)	Cumulative Escalation (Construction)	Expenditures**	TOTAL Escalation
FY23 PA&ED	4.4%	2.8%	4.4%	\$ 508,800	\$ 14,246
FY24 PS&E	2.9%	2.8%	7.3%	\$ 1,013,800	\$ 56,773
FY25 Construction	2.8%	2.8%	10.1%	\$ 2,197,800	\$ 221,978
FY26 Construction	2.8%	2.8%	12.9%	\$ 2,197,800	\$ 246,154
FY27 Closeout	2.8%	2.8%	15.8%	\$ 488,400	\$ 68,376
FY28	2.8%	2.8%	18.6%		\$ -
Estimated Escalation					\$ 607,527
<b>PROJECT COST IN YEAR OF EXPENDITURE DOLLARS</b>					<b>\$ 7,014,127</b>



## Coastal Connections Concept 7 (Undercrossing 7th-8th St, Stairs to Beach)

Construction Cost Estimate

Design Level: Conceptual

Per WSP Concept Estimate Dated: November 23, 2022

Estimated By: WSP & Villa Civil

Item	QTY	Unit	Unit Price	Cost	Subtotal
<b>CONSTRUCTION</b>					
<b>Site Civil</b>					
Clearing & Grubbing	6,059	SF	\$ 0.25	\$ 1,515	
8' Decomposed Granite (DG) Path, stabilized for accessibility compliance	6,059	SF	\$ 10	\$ 60,590	
Excavate & Fill	1,077	CY	\$ 64	\$ 68,928	
<b>Subtotal</b>					<b>\$ 131,033</b>
<b>Civil Improvements</b>					
				\$ -	
				\$ -	
<b>Subtotal</b>					<b>\$ -</b>
<b>Structures</b>					
Retaining Walls	8,065	SF	\$ 154	\$ 1,242,010	
Furnish Bent Cap	2	EA	\$ 30,000	\$ 60,000	
Erect Bent Cap	2	EA	\$ 10,000	\$ 20,000	
Furnish Abutment	2	EA	\$ 30,000	\$ 60,000	
Erect Abutment	2	EA	\$ 20,000	\$ 40,000	
Furnish Precast Slab Girder	2	EA	\$ 25,000	\$ 50,000	
Erect Precast Slab Girder	2	EA	\$ 10,000	\$ 20,000	
Furnish Precast Wingwall	2	EA	\$ 10,000	\$ 20,000	
Erect Precast Wingwall	2	EA	\$ 4,000	\$ 8,000	
Remove and Re-Install Track	20	TF	\$ 1,000	\$ 20,000	
Natural Stairs to Beach	139	LF	\$ 800	\$ 111,200	
<b>Subtotal</b>					<b>\$ 1,651,210</b>
<b>Architectural &amp; Lighting</b>					
IPE Post & Cable Fence w Guardrail (42" HT): View Overlook	886	LF	\$ 130	\$ 115,180	
Galvanized Handrail	1,334	LF	\$ 90	\$ 120,060	
Signage	1	LS	\$ 6,000	\$ 6,000	
Light Fixtures	1	LS	\$ 50,000	\$ 50,000	
Misc. Architectural Elements (decorative tile, decorative cairn, rock/pebble, etc.)	1	LS	\$ 82,000	\$ 82,000	
<b>Subtotal</b>					<b>\$ 373,240</b>
<b>Site Mitigation</b>					
Stormwater Pollution Prevention Plan (SWPPP) & Implementation	1	LS	\$ 320,000	\$ 320,000	
<b>Subtotal</b>					<b>\$ 320,000</b>
<b>BASE CONSTRUCTION ESTIMATE (BCE)</b>					<b>\$ 2,475,483</b>