

# Appendix E

## On-Bridge Improvement Cost Estimations

**Project Name:** Warren Avenue Bridge Pedestrian Improvements  
**Client Name:** City of Bremerton  
**SCJ Project No.:** 20-000248  
**Estimate Level:** Conceptual  
**Alternative Desc.:** 8 foot clear width, both sides of the bridge  
**Date:** 1/20/2023

Alternative 1



ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL
1	MOBILIZATION (8%)	LS	1	\$ 969,944.00	\$ 969,944.00
2	BRIDGE PREPARATION INCL CORMORANT REMEDIATION	LS	1	\$ 500,000.00	\$ 500,000.00
3	PROJECT TEMPORARY TRAFFIC CONTROL	DAY	300	\$ 1,500.00	\$ 450,000.00
4	REMOVING EXISTING CENTER CURB	LF	1,717	\$ 140.00	\$ 240,380.00
5	REMOVING EXISTING EDGE BARRIER	LF	3,434	\$ 140.00	\$ 480,760.00
6	REMOVING EXISTING SIDEWALK	LF	3,434	\$ 140.00	\$ 480,760.00
7	STRUCTURAL LOW ALLOW STEEL (STRUCTURAL STEEL AND DECKING)	LB	1,200,000	\$ 4.00	\$ 4,800,000.00
8	BRIDGE RAILING TYPE BP - SUPERSTR.	LF	6,868	\$ 150.00	\$ 1,030,200.00
9	TRAFFIC BARRIER - SUPERSTR.	LF	5,151	\$ 200.00	\$ 1,030,200.00
10	CLEANING AND PAINTING	SF	32,000	\$ 50.00	\$ 1,600,000.00
11	REIMBURSEMENT FOR THIRD PARTY DAMAGE	EST	1	\$ 50,000.00	\$ 50,000.00
12	ASBESTOS REMOVAL AND DISPOSAL	LF	10,800	\$ 15.00	\$ 162,000.00
13	ILLUMINATION SYSTEM	EA	12	\$ 25,000.00	\$ 300,000.00
14	ART & PLACEMAKING ELEMENTS	LS	1	\$ 250,000.00	\$ 250,000.00
15	TEMPORARY EROSION AND SEDIMENT CONTROL	MONTH	15	\$ 30,000.00	\$ 450,000.00
16	STAIRCASE MODIFICATION	EA	2	\$ 50,000.00	\$ 100,000.00
17	LANDWARD SIDEWALK TIE IN	LF	200	\$ 1,000.00	\$ 200,000.00

	Subtotal	\$	13,094,244.00
	Contingency (25%)	\$	3,273,561.00
	Inflationary Costs (3 year at 6%/yr)	\$	2,946,204.90
	<b>TOTAL CONSTRUCTION</b>	\$	<b>19,314,009.90</b>
	Preliminary Engineering	\$	1,500,000.00
	Construction Management (12%)	\$	2,317,681.19
	Right of Way		0
	<b>TOTAL PROJECT COST</b>	\$	<b>23,131,691.09</b>

**Project Name:** Warren Avenue Bridge Pedestrian Improvements  
**Client Name:** City of Bremerton  
**SCJ Project No.:** 20-000248  
**Estimate Level:** Conceptual  
**Alternative Desc.:** 10 foot clear width, both sides of the bridge  
**Date:** 1/20/2023

Alternative 2



ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL
1	MOBILIZATION (8%)	LS	1	\$ 1,061,944.00	\$ 1,061,944.00
2	BRIDGE PREPARATION INCL CORMORANT REMEDIATION	LS	1	\$ 500,000.00	\$ 500,000.00
3	PROJECT TEMPORARY TRAFFIC CONTROL	DAY	300	\$ 1,500.00	\$ 450,000.00
4	REMOVING EXISTING CENTER CURB	LF	1,717	\$ 140.00	\$ 240,380.00
5	REMOVING EXISTING EDGE BARRIER	LF	3,434	\$ 140.00	\$ 480,760.00
6	REMOVING EXISTING SIDEWALK	LF	3,434	\$ 140.00	\$ 480,760.00
7	STRUCTURAL LOW ALLOW STEEL (STRUCTURAL STEEL AND DECKING)	LB	1,400,000	\$ 4.00	\$ 5,600,000.00
8	BRIDGE RAILING TYPE BP - SUPERSTR.	LF	6,868	\$ 150.00	\$ 1,030,200.00
9	TRAFFIC BARRIER - SUPERSTR.	LF	5,151	\$ 200.00	\$ 1,030,200.00
10	CLEANING AND PAINTING	SF	39,000	\$ 50.00	\$ 1,950,000.00
11	REIMBURSEMENT FOR THIRD PARTY DAMAGE	EST	1	\$ 50,000.00	\$ 50,000.00
12	ASBESTOS REMOVAL AND DISPOSAL	LF	10,800	\$ 15.00	\$ 162,000.00
13	ILLUMINATION SYSTEM	EA	12	\$ 25,000.00	\$ 300,000.00
14	ART & PLACEMAKING ELEMENTS	LS	1	\$ 250,000.00	\$ 250,000.00
15	TEMPORARY EROSION AND SEDIMENT CONTROL	MONTH	15	\$ 30,000.00	\$ 450,000.00
16	STAIRCASE MODIFICATION	EA	2	\$ 50,000.00	\$ 100,000.00
17	LANDWARD SIDEWALK TIE IN	LF	200	\$ 1,000.00	\$ 200,000.00

Subtotal	\$	14,336,244.00
Contingency (25%)	\$	3,584,061.00
Inflationary Costs (3 year at 6%/yr)	\$	3,225,654.90
<b>TOTAL CONSTRUCTION</b>	<b>\$</b>	<b>21,145,959.90</b>
Preliminary Engineering	\$	1,500,000.00
Construction Management (12%)	\$	2,537,515.19
Right of Way		0
<b>TOTAL PROJECT COST</b>	<b>\$</b>	<b>25,183,475.09</b>

**Project Name:** Warren Avenue Bridge Pedestrian Improvements  
**Client Name:** City of Bremerton  
**SCJ Project No.:** 20-000248  
**Estimate Level:** Conceptual  
**Alternative Desc.:** 12 foot clear width, both sides of the bridge  
**Date:** 1/20/2023

Alternative 3



ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL
1	MOBILIZATION (8%)	LS	1	\$ 1,236,344.00	\$ 1,236,344.00
2	BRIDGE PREPARATION INCL CORMORANT REMEDIATION	LS	1	\$ 500,000.00	\$ 500,000.00
3	PROJECT TEMPORARY TRAFFIC CONTROL	DAY	300	\$ 1,500.00	\$ 450,000.00
4	REMOVING EXISTING CENTER CURB	LF	1,717	\$ 140.00	\$ 240,380.00
5	REMOVING EXISTING EDGE BARRIER	LF	3,434	\$ 140.00	\$ 480,760.00
6	REMOVING EXISTING SIDEWALK	LF	3,434	\$ 140.00	\$ 480,760.00
7	STRUCTURAL LOW ALLOW STEEL (STRUCTURAL STEEL AND DECKING)	LB	1,620,000	\$ 4.00	\$ 6,480,000.00
8	BRIDGE RAILING TYPE BP - SUPERSTR.	LF	6,868	\$ 150.00	\$ 1,030,200.00
9	TRAFFIC BARRIER - SUPERSTR.	LF	5,151	\$ 200.00	\$ 1,030,200.00
10	CLEANING AND PAINTING	SF	45,000	\$ 50.00	\$ 2,250,000.00
11	REIMBURSEMENT FOR THIRD PARTY DAMAGE	EST	1	\$ 50,000.00	\$ 50,000.00
12	ASBESTOS REMOVAL AND DISPOSAL	LF	10,800	\$ 15.00	\$ 162,000.00
13	ILLUMINATION SYSTEM	EA	12	\$ 25,000.00	\$ 300,000.00
14	ART & PLACEMAKING ELEMENTS	LS	1	\$ 250,000.00	\$ 250,000.00
15	TEMPORARY EROSION AND SEDIMENT CONTROL	MONTH	15	\$ 30,000.00	\$ 450,000.00
16	STAIRCASE MODIFICATION	EA	2	\$ 50,000.00	\$ 100,000.00
17	LANDWARD SIDEWALK TIE IN	LF	200	\$ 1,000.00	\$ 200,000.00
18	UBIT A-62T	LS	1	\$ 1,000,000.00	\$ 1,000,000.00

	Subtotal	\$	16,690,644.00
	Contingency (25%)	\$	4,172,661.00
	Inflationary Costs (3 year at 6%/yr)	\$	3,755,394.90
	<b>TOTAL CONSTRUCTION</b>	\$	<b>24,618,699.90</b>
	Preliminary Engineering	\$	1,500,000.00
	Construction Management (12%)	\$	2,954,243.99
	Right of Way		0
	<b>TOTAL PROJECT COST</b>	\$	<b>29,072,943.89</b>

**Project Name:** Warren Avenue Bridge Pedestrian Improvements  
**Client Name:** City of Bremerton  
**SCJ Project No.:** 20-000248  
**Estimate Level:** Conceptual  
**Alternative Desc.:** 12 foot clear width, east side of the bridge and modify west side to achieve 5 foot wide sidewalk  
**Date:** 1/20/2023

Alternative 7



ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL
1	MOBILIZATION (8%)	LS	1	\$ 975,273.60	\$ 975,273.60
2	BRIDGE PREPARATION INCL CORMORANT REMEDIATION	LS	1	\$ 500,000.00	\$ 500,000.00
3	PROJECT TEMPORARY TRAFFIC CONTROL	DAY	225	\$ 1,500.00	\$ 337,500.00
4	REMOVING EXISTING CENTER CURB	LF	1,717	\$ 140.00	\$ 240,380.00
5	REMOVING EXISTING EDGE BARRIER (EAST)	LF	1,717	\$ 140.00	\$ 240,380.00
6	REMOVING EXISTING EDGE BARRIER (WEST)	LF	1,717	\$ 140.00	\$ 240,380.00
7	REMOVING EXISTING SIDEWALK (EAST)	LF	1,717	\$ 140.00	\$ 240,380.00
8	STRUCTURAL LOW ALLOW STEEL (STRUCTURAL STEEL AND DECKING) (EAST)	LB	810,000	\$ 4.00	\$ 3,240,000.00
9	BRIDGE RAILING TYPE BP - SUPERSTR. (EAST)	LF	3,434	\$ 150.00	\$ 515,100.00
10	BRIDGE RAILING TYPE BP - SUPERSTR. (WEST)	LF	3,434	\$ 150.00	\$ 515,100.00
11	TRAFFIC BARRIER - SUPERSTR. (EAST)	LF	1,717	\$ 200.00	\$ 343,400.00
12	TRAFFIC BARRIER - SUPERSTR. (CENTER)	LF	1,717	\$ 200.00	\$ 343,400.00
13	TRAFFIC BARRIER - SUPERSTR. (WEST)	LF	1,717	\$ 200.00	\$ 343,400.00
14	SIDEWALK REPAIR AND OVERLAY (WEST)	SF	8,585	\$ 200.00	\$ 1,717,000.00
15	CLEANING AND PAINTING (EAST)	SF	22,500	\$ 50.00	\$ 1,125,000.00
16	REIMBURSEMENT FOR THIRD PARTY DAMAGE	EST	1	\$ 50,000.00	\$ 50,000.00
17	ASBESTOS REMOVAL AND DISPOSAL	LF	10,800	\$ 15.00	\$ 162,000.00
18	ILLUMINATION SYSTEM	EA	12	\$ 25,000.00	\$ 300,000.00
19	ART & PLACEMAKING ELEMENTS	LS	1	\$ 250,000.00	\$ 250,000.00
20	TEMPORARY EROSION AND SEDIMENT CONTROL	MONTH	11	\$ 30,000.00	\$ 337,500.00
21	STAIRCASE MODIFICATION	EA	1	\$ 50,000.00	\$ 50,000.00
22	LANDWARD SIDEWALK TIE IN	LF	100	\$ 1,000.00	\$ 100,000.00
23	UBIT A-62T	LS	1	\$ 1,000,000.00	\$ 1,000,000.00

Subtotal	\$	13,166,193.60
Contingency (25%)	\$	3,291,548.40
Inflationary Costs (3 year at 6%/yr)	\$	2,962,393.56
<b>TOTAL CONSTRUCTION</b>	<b>\$</b>	<b>19,420,135.56</b>
Preliminary Engineering	\$	1,500,000.00
Construction Management (12%)	\$	2,330,416.27
Right of Way		0
<b>TOTAL PROJECT COST</b>	<b>\$</b>	<b>23,250,551.83</b>



**Project Name:** Warren Avenue Bridge Pedestrian Improvements  
**Client Name:** City of Bremerton  
**SCJ Project No.:** 20-000248  
**Estimate Level:** Conceptual  
**Alternative Desc.:** 14 foot clear width, east side of the bridge and modify west side to achieve 5 foot wide sidewalk  
**Date:** 4/10/2023

Alternative 8



ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL
1	MOBILIZATION (8%)	LS	1	\$ 1,080,873.60	\$ 1,080,873.60
2	BRIDGE PREPARATION INCL CORMORANT REMEDIATION	LS	1	\$ 500,000.00	\$ 500,000.00
3	PROJECT TEMPORARY TRAFFIC CONTROL	DAY	225	\$ 1,500.00	\$ 337,500.00
4	REMOVING EXISTING CENTER CURB	LF	1,717	\$ 140.00	\$ 240,380.00
5	REMOVING EXISTING EDGE BARRIER (EAST)	LF	1,717	\$ 140.00	\$ 240,380.00
6	REMOVING EXISTING EDGE BARRIER (WEST)	LF	1,717	\$ 140.00	\$ 240,380.00
7	REMOVING EXISTING SIDEWALK (EAST)	LF	1,717	\$ 140.00	\$ 240,380.00
8	STRUCTURAL LOW ALLOW STEEL (STRUCTURAL STEEL AND DECKING) (EAST)	LB	1,110,000	\$ 4.00	\$ 4,440,000.00
9	BRIDGE RAILING TYPE BP - SUPERSTR. (EAST)	LF	3,434	\$ 150.00	\$ 515,100.00
10	BRIDGE RAILING TYPE BP - SUPERSTR. (WEST)	LF	3,434	\$ 150.00	\$ 515,100.00
11	TRAFFIC BARRIER - SUPERSTR. (EAST)	LF	1,717	\$ 200.00	\$ 343,400.00
12	TRAFFIC BARRIER - SUPERSTR. (CENTER)	LF	1,717	\$ 200.00	\$ 343,400.00
13	TRAFFIC BARRIER - SUPERSTR. (WEST)	LF	1,717	\$ 200.00	\$ 343,400.00
14	SIDEWALK REPAIR AND OVERLAY (WEST)	SF	8,585	\$ 200.00	\$ 1,717,000.00
15	CLEANING AND PAINTING (EAST)	SF	24,900	\$ 50.00	\$ 1,245,000.00
16	REIMBURSEMENT FOR THIRD PARTY DAMAGE	EST	1	\$ 50,000.00	\$ 50,000.00
17	ASBESTOS REMOVAL AND DISPOSAL	LF	10,800	\$ 15.00	\$ 162,000.00
18	ILLUMINATION SYSTEM	EA	12	\$ 25,000.00	\$ 300,000.00
19	ART & PLACEMAKING ELEMENTS	LS	1	\$ 250,000.00	\$ 250,000.00
20	TEMPORARY EROSION AND SEDIMENT CONTROL	MONTH	11	\$ 30,000.00	\$ 337,500.00
21	STAIRCASE MODIFICATION	EA	1	\$ 50,000.00	\$ 50,000.00
22	LANDWARD SIDEWALK TIE IN	LF	100	\$ 1,000.00	\$ 100,000.00
23	UBIT A-62T	LS	1	\$ 1,000,000.00	\$ 1,000,000.00

Subtotal	\$ 14,591,793.60
Contingency (25%)	\$ 3,647,948.40
Inflationary Costs (3 year at 6%/yr)	\$ 3,283,153.56
<b>TOTAL CONSTRUCTION</b>	<b>\$ 21,522,895.56</b>
Preliminary Engineering	\$ 1,500,000.00
Construction Management (12%)	\$ 2,582,747.47
Right of Way	0
<b>TOTAL PROJECT COST</b>	<b>\$ 25,605,643.03</b>

