

Exhibit 4 - Cost Estimating Worksheet

2024

**BRIDGE COST ESTIMATE WORKSHEET
- CPM, REHAB, REPLACE -**

REV. 02/6/2024

OWNER:	FISCAL YEAR:	Out to Out	Curb to Curb	DATE:	
REGION:		LENGTH	WIDTH	ENGINEER:	
TSC:	PR: MP:		WIDTH	STRUCTURE ID:	
	LOCATION: over			BRIDGE ID:	
PRIMARY WORK ACTIVITY		DECK AREA:	SFT	STR. TYPE:	
OTHER WORK:		CLEAR ROADWAY:	SFT		

WORK ACTIVITY	QUANTITY	UNIT	UNIT COST	TOTAL
NEW BRIDGE <small>(increase deck area based on design standards and hydraulic requirements)</small>				
Single or Multiple Spans, Grade Separation <small>(add demo, approach, MOT)</small>		SFT	\$435.00 /SFT	
Single Span, Over Water <small>(add demo, approach, MOT)</small>		SFT	\$525.00 /SFT	
Multiple Spans, Over Water <small>(add demo, approach, MOT)</small>		SFT	\$470.00 /SFT	
Precast Culvert <small>(add demo, approach, MOT)</small>		SFT	\$565.00 /SFT	
NEW SUPERSTRUCTURE				
New Superstructure, Grade Separation <small>(incl. remove exist deck/super; add MOT & approach)</small>		SFT	\$310.00 /SFT	
New Superstructure, Over Water <small>(incl. remove exist deck/super; add MOT & approach)</small>		SFT	\$315.00 /SFT	
WIDENING				
Structure Widening, _____ ft <small>(incl. deck/super/sub widening, add approach transition)</small>		SFT	\$630.00 /SFT	
NEW DECK				
New Bridge Deck & Barrier <small>(incl. remove exist deck/railing, add approach, MOT)</small>		SFT	\$150.00 /SFT	
DEMOLITION				
Entire Structure, Grade Separation		SFT	\$75.00 /SFT	
Entire Structure, Over Water		SFT	\$95.00 /SFT	
DECK REPAIR / TREATMENTS				
Bridge Railing Replacement <small>(incl. removal and replacement)</small>		FT	\$750.00 /FT	
Concrete Brush Block / Curb Patch <small>(incl. hand chipping and formwork)</small>		FT	\$29.00 /FT	
Concrete Barrier Patch <small>(incl. hand chipping and formwork)</small>		SFT	\$85.00 /SFT	
Concrete Deck Patch <small>(incl. hand chipping)</small>		SFT	\$68.00 /SFT	
Deep Overlay <small>(incl. joint repl & hydro)</small>		SFT	\$46.00 /SFT	
Epoxy Overlay <small>(incl. warranty)</small>		SYD	\$48.00 /SYD	
Expansion Joint Gland Replacement <small>(remove and replace elastomeric gland)</small>		FT	\$125.00 /FT	
Expansion Joint Replacement <small>(incl. removal)</small>		FT	\$860.00 /FT	
Full Depth Patch		SFT	\$140.00 /SFT	
Healer / Sealer <small>(penetrates cracks in bridge deck)</small>		SYD	\$30.00 /SYD	
HMA Overlay with WP membrane		SYD	\$60.00 /SYD	
Overlay Removal <small>(Epoxy: \$22/syd Latex: \$26/syd HMA: \$7/syd)</small>		SYD	\$22.00 /SYD	
Reseal Bridge Joints		FT	\$28.00 /FT	
Shallow Overlay <small>(incl. joint repl & hydro)</small>		SFT	\$46.00 /SFT	
SUPERSTRUCTURE REPAIR				
Bearing Realignment / Replacement <small>(incl. temporary supports)</small>		EA	\$6,450.00 EA	
Heat Straightening <small>(incl. clean and coat)</small>		EA	\$57,000.00 EA	
Pack Rust Repair <small>(greater than 3/8" separation)</small>		FT	\$1,150.00 /FT	
Paint - Complete <small>(incl. clean & coat)</small>		SFT	\$30.00 /SFT	
Paint - Partial / Spot / Zone <small>(incl. clean & coat - \$20k minimum)</small>		SFT	\$60.00 /SFT	
PCI Beam End Blockout <small>(incl. temporary supports)</small>		EA	\$7,200.00 EA	
Pin & Hanger Replacement <small>(incl. temporary supports)</small>		EA	\$17,000.00 EA	
Structural Steel Repair <small>(based on 6ft repair length)</small>		EA	\$4,000.00 EA	
Structural Steel Repair - Stiffener <small>(includes each side of beam)</small>		EA	\$1,500.00 EA	
SUBSTRUCTURE REPAIR				
Substructure Patching <small>(measured x 2) replace if repair area > 30%</small>		CFT	\$360.00 /CFT	
Substructure Replacement <small>(incl. temporary supports, excavation)</small>		CFT	\$375.00 /CFT	
Substructure Horizontal Surface Sealer		SYD	\$75.00 /SYD	
Temporary Supports <small>(add Structural Steel Repair - Stiffener for ea steel beam)</small>		EA	\$4,000.00 EA	
MISCELLANEOUS				
Articulating Concrete Block System (ACB)		SYD	\$320.00 /SYD	
Concrete Surface Coating		SYD	\$47.00 /SYD	
Culvert Cleanout		FT	\$125.00 /FT	
Epoxy Crack Injection <small>(structural crack repair)</small>		FT	\$70.00 /FT	
Metal Mesh Panels <small>(48" width, max 6'-6" length)</small>		SFT	\$28.00 /SFT	
Pressure Relief Joint <small>(use when approach concrete roadway exceeds 1,000ft)</small>		FT	\$110.00 /FT	
Riprap <small>(assume 10ft distance around perimeter of substructure)</small>		SYD	\$275.00 /SYD	
Silane Treatment <small>(penetrating sealer for concrete surfaces)</small>		SFT	\$7.00 /SFT	
Slope Protection Repairs		SYD	\$150.00 /SYD	
Other				
STRUCTURE CONSTRUCTION BUDGET				\$0
ROAD WORK				
Approach Pavement, 12" RC <small>(incl. removal; add curb, gutter, guardrail) 40' ea. end</small>		SYD	\$230.00 /SYD	
Approach Curb & Gutter <small>(incl. removal) 40' ea. quadrant</small>		FT	\$57.00 /FT	
Guardrail Anchorage to Bridge <small>(each quadrant)</small>		EA	\$2,540.00 /EA	
Guardrail <small>(incl. removal) < 200ft beyond reference line</small>		FT	\$41.00 /FT	
Guardrail Terminal <small>(each quadrant)</small>		EA	\$3,900.00 /EA	
Roadway Approach Work <small>(beyond approach pavement)</small>		LSUM	LSUM	
Utilities		LSUM	LSUM	
TRAFFIC CONTROL <small>Unit Cost to be determined by Region or TSC Traffic & Safety</small>				
Part Width Construction		LSUM	LSUM	
Crossovers		EA	/EA	
Temporary Traffic Signals		set	/set	
RR Flagging		LSUM	LSUM	
Detour		LSUM	LSUM	
RELATED ROAD/TRAFFIC CONSTRUCTION BUDGET				\$0
CONTINGENCY <small>(10% - 20%) (use higher contingency for small projects)</small>	10	%	\$0.00	\$0
MOBILIZATION <small>(estimate at 10%)</small>	10	%	\$0.00	\$0
INFLATION <small>(assume 4% per year, beginning in 2024)</small>	0	%	\$0.00	\$0

(Does not include PE or CE)
(Refer to programming guidelines in Bridge Cost Estimating Worksheet-Key for CE, PE & PE-S)

TOTAL CONSTRUCTION BUDGET	\$0
% CE	CON BUDGET \$0
% PE	PE BUDGET \$0
% PE	PE-S BUDGET \$0