

Appendix C

Preliminary Cost Estimate

Alternative 1

PROJECT:	Litchfield-West Gardiner, Babcock Bridge #2029	WIN:	23094.00						
Alternative 1:	Bridge Replacement: Steel Beams with CIP Deck on Integral Abutments with Piles Construction Type: Bridge Closure with Temporary Bridge Deck Area: 94' x 33.33' = 3133 SF	ESTIMATED BY:	KCN						
SUPERSTRUCTURE:									
	<u>3,133</u>	SF	×	<u>\$200.00</u>	=	<u>\$627,000</u>			
ABUTMENTS	<u>2</u>	EA	×	<u>\$142,000.00</u>	=	<u>\$284,000</u>			
PILES	<u>10</u>	EA	×	<u>\$20,500.00</u>	=	<u>\$205,000</u>			
COFFERDAMS	<u>2</u>	EA	×	<u>\$30,000.00</u>	=	<u>\$60,000</u>			
STRUCTURAL EXCAVATION & BORROW	<u>3,870</u>	CY	×	<u>\$50.00</u>	=	<u>\$194,000</u>			
PLAIN RIPRAP	<u>2,000</u>	CY	×	<u>\$65.00</u>	=	<u>\$130,000</u>			
EXISTING BRIDGE REMOVAL	<u>550</u>	CY	×	<u>\$470.00</u>	=	<u>\$259,000</u>			
DETOUR AND/OR TEMPORARY BRIDGE	<u>1</u>	LS	×	<u>\$311,000.00</u>	=	<u>\$311,000</u>			
REHABILITATION CONTINGENCIES				<u>N/A</u>	=	<u>\$0</u>			
MISCELLANEOUS (TCP'S, FIELD OFFICE, ETC.)				<u>10%</u>	=	<u>\$207,000</u>			
MOBILIZATION				<u>10%</u>	=	<u>\$207,000</u>			
STRUCTURE SUBTOTAL						\$2,490,000			
APPROACHES				<u>450</u>	LF	×	<u>\$600.00</u>	=	<u>\$270,000</u>
MISCELLANEOUS							<u>7%</u>	=	<u>\$19,000</u>
MOBILIZATION							<u>10%</u>	=	<u>\$27,000</u>
APPROACHES SUBTOTAL						\$320,000			
TOTAL CONSTRUCTION COST						\$2,810,000			
PRELIMINARY ENGINEERING							<u>10%</u>	=	<u>\$285,000</u>
RIGHT OF WAY								=	<u>\$15,000</u>
CONSTRUCTION ENGINEERING							<u>10%</u>	=	<u>\$290,000</u>
OTHER:								=	<u>\$0</u>
TOTAL PROJECT COST						\$3,400,000			

Preliminary Cost Estimate

Alternative 1a

PROJECT:	Deer Isle-Stonington, Mill Hill Bridge #3063	WIN:	22356.00
Alternative 1a:	Superstructure Replacement: NEXT Beams Closure with Off Site Detour Deck Area: 48' x 31.33' = 1,504 SF	ESTIMATED BY:	TAT
SUPERSTRUCTURE			
	<u>1,504</u>	SF ×	<u>\$ 174.00</u> = <u>\$262,000</u>
SUBSTRUCTURE			
	<u>168</u>	CY ×	<u>\$ 2,965.00</u> = <u>\$499,000</u>
STRUCTURAL EXCAVATION & BORROW			
	<u>240</u>	CY ×	<u>\$ 50.00</u> = <u>\$12,000</u>
RIPRAP			
	<u>1,210</u>	CY ×	<u>\$ 100.00</u> = <u>\$121,000</u>
EXISTING BRIDGE REMOVAL			
	<u>1</u>	LS ×	<u>\$ 156,000.00</u> = <u>\$156,000</u>
PORTABLE CHANGEABLE MESSAGE SIGNS			
	<u>2</u>	EA ×	<u>\$ 5,000.00</u> = <u>\$10,000</u>
DREDGE SPOILS			
	<u>470</u>	T ×	<u>\$ 115.00</u> = <u>\$55,000</u>
REHABILITATION CONTINGENCIES			<u>10%</u> = <u>\$112,000</u>
MISCELLANEOUS (TCP'S, FIELD OFFICE, ETC.)			<u>10%</u> = <u>\$112,000</u>
MOBILIZATION			<u>10%</u> = <u>\$134,000</u>
STRUCTURE SUBTOTAL			= \$1,480,000
APPROACHES			
	<u>552</u>	LF ×	<u>\$ 538.00</u> = <u>\$297,000</u>
3 ADDITIONAL CULVERTS - SOUTH APPROACH			
	<u>1</u>	LS ×	<u>\$ 24,000.00</u> = <u>\$24,000</u>
MISCELLANEOUS			<u>7%</u> = <u>\$23,000</u>
MOBILIZATION			<u>10%</u> = <u>\$35,000</u>
APPROACHES SUBTOTAL			= \$380,000
TOTAL CONSTRUCTION COST			= \$1,860,000
PRELIMINARY ENGINEERING			
			<u>\$265,000</u>
RIGHT OF WAY			
			<u>\$25,000</u>
CONSTRUCTION ENGINEERING			
			<u>\$170,000</u>
TOTAL PROJECT COST			= \$2,320,000

Preliminary Cost Estimate

Alternative 1

PROJECT:	Greenbush, Boom Bridge #3587	WIN:	21727.00
Alternative 1:	Bridge Replacement: 125' single span steel bridge Maintain a single lane of traffic on temporary detour Deck Area: 125' x 39.34' = 4918 SF	ESTIMATED BY:	MHW
SUPERSTRUCTURE: Galvanized welded steel beams			
	<u>4,918</u>	SF	× = <u>\$170.00</u> = <u>\$836,000</u>
ABUTMENTS: Integral abuments with piles to bedrock			
	<u>4,918</u>	SF	× = <u>\$65.00</u> = <u>\$320,000</u>
PIER: N/A			
	<u>0</u>	SF	× = <u>\$0.00</u> = <u>\$0</u>
COFFERDAMS: (for removing existing piers)			
	<u>3</u>	EA	× = <u>\$15,000.00</u> = <u>\$45,000</u>
COFFERDAMS (for integral abutments and riprap)			
	<u>2</u>	EA	× = <u>\$15,000.00</u> = <u>\$30,000</u>
STRUCTURAL EXCAVATION & BORROW			
	<u>1,000</u>	CY	× = <u>\$40.00</u> = <u>\$40,000</u>
PLAIN RIPRAP			
	<u>900</u>	CY	× = <u>\$87.00</u> = <u>\$79,000</u>
EXISTING BRIDGE REMOVAL			
	<u>3,250</u>	SF	× = <u>\$52.00</u> = <u>\$169,000</u>
TEMPORARY WALLS & TRAFFIC SIGNALS			
	<u>1</u>	LS	× = <u>\$150,000.00</u> = <u>\$150,000</u>
REHABILITATION CONTINGENCIES			
			<u>N/A</u> = <u>\$0</u>
MISCELLANEOUS (TCP'S, FIELD OFFICE, ETC.)			
			<u>7%</u> = <u>\$117,000</u>
MOBILIZATION			
			<u>10%</u> = <u>\$167,000</u>
STRUCTURE SUBTOTAL			= \$1,960,000
APPROACHES: Full Reconstruction			
	<u>630</u>	LF	× = <u>\$850.00</u> = <u>\$536,000</u>
APPROACHES: Mill and Overlay			
	<u>109</u>	LF	× = <u>\$140.00</u> = <u>\$16,000</u>
MISCELLANEOUS			
			<u>7%</u> = <u>\$39,000</u>
MOBILIZATION			
			<u>10%</u> = <u>\$56,000</u>
APPROACHES SUBTOTAL			= \$650,000
TOTAL CONSTRUCTION COST			= \$2,610,000
PRELIMINARY ENGINEERING:			
			<u>16%</u> = <u>\$430,000</u>
RIGHT OF WAY			
			= <u>\$15,000</u>
CONSTRUCTION ENGINEERING			
			<u>13%</u> = <u>\$345,000</u>
OTHER:			
			= <u>\$0</u>
TOTAL PROJECT COST			= \$3,400,000

Preliminary Cost Estimate
Preferred Alternative (Hybrid)

PROJECT:	Southport-Townsend Gut Bridge #2789	WIN:	21751.00
Alternative 2:	Bridge Strengthening and Repair: One-Lane Closure, Maintaining Traffic During Construction Deck Area: 366' x 26' = 9,516 SF	ESTIMATED BY:	MFS

SUPERSTRUCTURE:	<u>9,516</u>	SF	×	\$ <u>100.00</u>	=	\$ <u>869,500</u>
ABUTMENTS	<u>2</u>	EA	×	\$ <u>2,000.00</u>	=	\$ <u>4,000</u>
PIERS	<u>3</u>	EA	×	\$ <u>13,840.00</u>	=	\$ <u>41,500</u>
COFFERDAMS	<u>0</u>	EA	×	<u>N/A</u>	=	\$ <u>0</u>
STRUCTURAL EXCAVATION & BORROW	<u>1</u>	CY	×	\$ <u>500.00</u>	=	\$ <u>500</u>
PLAIN RIPRAP	<u>0</u>	CY	×	<u>N/A</u>	=	\$ <u>0</u>
MECHANICAL REPAIRS AND UPGRADES	<u>1</u>	LS	×	\$ <u>507,800.00</u>	=	\$ <u>507,800</u>
ELECTRICAL REPAIRS AND UPGRADES	<u>1</u>	LS	×	\$ <u>558,800.00</u>	=	\$ <u>558,800</u>
TRAFFIC SAFETY IMPROVEMENTS	<u>1</u>	LS	×	\$ <u>369,500.00</u>	=	\$ <u>369,500</u>
SUPERSTRUCTURE REHABILITATION	<u>50</u>	SF	×	\$ <u>2,230.00</u>	=	\$ <u>111,500</u>
FENDER SYSTEM	<u>1</u>	LS		\$ <u>4,625,480.00</u>		\$ <u>4,625,480</u>
MISCELLANEOUS (TCP'S, FIELD OFFICE, ETC.)				<u>10%</u>	=	\$ <u>709,000</u>
MOBILIZATION				<u>10%</u>	=	\$ <u>709,000</u>

STRUCTURE SUBTOTAL = \$8,510,000

APPROACHES	<u>50.00</u>	LF	×	\$ <u>440.00</u>	=	\$ <u>21,555.00</u>
MISCELLANEOUS				<u>7%</u>	=	\$ <u>2,000</u>
MOBILIZATION				<u>10%</u>	=	\$ <u>3,000</u>

APPROACHES SUBTOTAL = \$30,000

TOTAL CONSTRUCTION COST = \$8,540,000

PRELIMINARY ENGINEERING				<u>12%</u>	=	\$ <u>1,030,000</u>
RIGHT OF WAY					=	\$ <u>0</u>
CONSTRUCTION ENGINEERING				<u>12%</u>	=	\$ <u>1,030,000</u>
OTHER (DAMAGE RELATED ITEMS):					=	\$ <u>0</u>

TOTAL PROJECT COST = \$10,600,000

Preliminary Cost Estimate

Alternative 1

PROJECT:	Milo, Old Toll Bridge #2867	WIN:	20502.00						
Alternative 1:	Bridge Replacement: New bridge built downstream Maintain a single lane of traffic on the existing bridge Deck Area: 275' x 37.34' = 10,269 SF	ESTIMATED BY:	MHW						
SUPERSTRUCTURE: Galvanized & Haunched welded steel beams									
	<u>10,269</u>	SF	×	<u>\$175.00</u>	=	<u>\$1,797,000</u>			
ABUTMENTS: Integral abuments	<u>10,269</u>	SF	×	<u>\$38.00</u>	=	<u>\$391,000</u>			
PIER: Mass type pier	<u>10,269</u>	SF	×	<u>\$50.00</u>	=	<u>\$514,000</u>			
COFFERDAMS (for removing existing piers)	<u>3</u>	EA	×	<u>\$25,000.00</u>	=	<u>\$75,000</u>			
COFFERDAM for new pier	<u>1</u>	EA	×	<u>\$175,000.00</u>	=	<u>\$175,000</u>			
STRUCTURAL EXCAVATION & BORROW	<u>1,500</u>	CY	×	<u>\$40.00</u>	=	<u>\$60,000</u>			
PLAIN RIPRAP	<u>900</u>	CY	×	<u>\$80.00</u>	=	<u>\$72,000</u>			
EXISTING BRIDGE REMOVAL	<u>7,416</u>	SF	×	<u>\$52.00</u>	=	<u>\$386,000</u>			
TEMPORARY WALLS & TRAFFIC SIGNAL	<u>1</u>	LS	×	<u>\$125,000.00</u>	=	<u>\$125,000</u>			
REHABILITATION CONTINGENCIES				<u>N/A</u>	=	<u>\$0</u>			
MISCELLANEOUS (TCP'S, FIELD OFFICE, ETC.)				<u>6%</u>	=	<u>\$216,000</u>			
MOBILIZATION				<u>10%</u>	=	<u>\$360,000</u>			
STRUCTURE SUBTOTAL					=	\$4,175,000			
APPROACHES				<u>1125</u>	LF	×	<u>\$850.00</u>	=	<u>\$957,000</u>
MISCELLANEOUS							<u>6%</u>	=	<u>\$58,000</u>
MOBILIZATION							<u>10%</u>	=	<u>\$96,000</u>
APPROACHES SUBTOTAL					=	\$1,115,000			
TOTAL CONSTRUCTION COST					=	\$5,290,000			
PRELIMINARY ENGINEERING: includes archaeology work							<u>18%</u>	=	<u>\$975,000</u>
RIGHT OF WAY								=	<u>\$25,000</u>
CONSTRUCTION ENGINEERING							<u>13%</u>	=	<u>\$710,000</u>
OTHER:								=	<u>\$0</u>
TOTAL PROJECT COST					=	\$7,000,000			

Preliminary Cost Estimate

Alternative 1

PROJECT:	Bridgewater, Whitney Bridge #2942	WIN:	24783.00
Alternative 1:	Bridge Replacement: Single span-Next Beams Staged Construction Deck Area: 60' x 52.42' = 2,665 SF	ESTIMATED BY:	MHW
SUPERSTRUCTURE: Next Beams			
	<u>2,665</u>	SF	×
			<u>\$235.00</u> =
			<u>\$627,000</u>
ABUTMENTS: Integral abutments with possible rock sockets			
	<u>2,665</u>	SF	×
			<u>\$130.00</u> =
			<u>\$347,000</u>
PIERS: N/A			
	<u>0</u>	EA	×
			=
			<u>\$0</u>
COFFERDAMS			
	<u>2</u>	EA	×
			<u>\$40,000.00</u> =
			<u>\$80,000</u>
STRUCTURAL EXCAVATION & BORROW			
	<u>1,500</u>	CY	×
			<u>\$53.00</u> =
			<u>\$80,000</u>
PLAIN RIPRAP			
	<u>750</u>	CY	×
			<u>\$80.00</u> =
			<u>\$60,000</u>
EXISTING BRIDGE REMOVAL			
	<u>1,734</u>	SF	×
			<u>\$47.00</u> =
			<u>\$82,000</u>
TRAFFIC SIGNALS (3) and TEMPORARY WALLS			
	<u>1</u>	LS	×
			<u>\$150,000.00</u> =
			<u>\$150,000</u>
REHABILITATION CONTINGENCIES			
			<u>N/A</u> =
			<u>\$0</u>
MISCELLANEOUS (TCP'S, FIELD OFFICE, ETC.)			
			<u>10%</u> =
			<u>\$143,000</u>
MOBILIZATION			
			<u>10%</u> =
			<u>\$143,000</u>
STRUCTURE SUBTOTAL			=
			\$1,720,000
APPROACHES			
	<u>400</u>	LF	×
			<u>\$850.00</u> =
			<u>\$340,000</u>
MISCELLANEOUS			
			<u>10%</u> =
			<u>\$34,000</u>
MOBILIZATION			
			<u>10%</u> =
			<u>\$34,000</u>
APPROACHES SUBTOTAL			=
			\$410,000
TOTAL CONSTRUCTION COST			=
			\$2,130,000
PRELIMINARY ENGINEERING			
			<u>15%</u> =
			<u>\$325,000</u>
RIGHT OF WAY			
			=
			<u>\$20,000</u>
CONSTRUCTION ENGINEERING			
			<u>15%</u> =
			<u>\$325,000</u>
OTHER:			
			=
			<u>\$0</u>
TOTAL PROJECT COST			=
			\$2,800,000