

Vermont Agency of Transportation

NORTH HERO BF 028-1(30)

Estimate CONTRACT - Engineers Estimate - Updated

Phase: CONTRACT

Designed By: Alex Tsoukalas

Estimate Date: 22 February, 2022

Reviewed By: Tiffany Card

Specification: Standard Specifications for Construction

Approved By: Alex Tsoukalas

Region: NORTHWEST

Work Type: BRIDGE CONSTRUCTION

Town: NORTH HERO

Highway Type: MINOR ARTERIAL

Advertising Season: CONSTRUCTION SEASON

Urban/Rural: RURAL

Description: Replacement of existing deck, miscellaneous repairs to steel superstructure and concrete substructure and related approach roadway work.

Category

1011 - ROADWAY

Item Number	Description	Supplemental Description	Quantity	Unit	Unit Price	Amount
201.10	CLEARING AND GRUBBING, INCLUDING INDIVIDUAL TREES AND STUMPS		1.00	LS	\$12,415.000	\$12,415.00
203.15	COMMON EXCAVATION		725.00	CY	\$22.175	\$16,076.88
203.16	SOLID ROCK EXCAVATION		25.00	CY	\$153.008	\$3,825.20
203.28	EXCAVATION OF SURFACES AND PAVEMENTS		50.00	CY	\$37.014	\$1,850.70
203.30	EARTH BORROW		25.00	CY	\$11.218	\$280.45
204.22	TRENCH EXCAVATION OF EARTH, EXPLORATORY (N.A.B.I.)		1.00	CY	\$75.000	\$75.00
204.25	STRUCTURE EXCAVATION		205.00	CY	\$150.000	\$30,750.00
204.30	GRANULAR BACKFILL FOR STRUCTURES		70.00	CY	\$56.079	\$3,925.53
210.10	COARSE-MILLING, BITUMINOUS PAVEMENT		2,420.00	SY	\$9.631	\$23,307.02
301.35	SUBBASE OF DENSE GRADED CRUSHED STONE		425.00	CY	\$49.672	\$21,110.60
402.13	AGGREGATE SHOULDERS, RAP		70.00	TON	\$63.817	\$4,467.19
404.65	EMULSIFIED ASPHALT		33.00	CWT	\$50.714	\$1,673.56
406.50	PRICE ADJUSTMENT, ASPHALT CEMENT (N.A.B.I.)		1.00	LU	\$1.000	\$1.00
609.10	DUST CONTROL WITH WATER		32.00	MGAL	\$58.892	\$1,884.54
609.15	DUST AND ICE CONTROL WITH CALCIUM CHLORIDE		1.00	TON	\$821.818	\$821.82
613.11	STONE FILL, TYPE II		255.00	CY	\$62.852	\$16,027.26
616.28	CAST-IN-PLACE CONCRETE CURB, TYPE B		75.00	LF	\$46.553	\$3,491.48
619.10	BOUNDARY MARKERS		2.00	EACH	\$100.000	\$200.00
621.20	STEEL BEAM GUARDRAIL, GALVANIZED		350.00	LF	\$36.566	\$12,798.10
621.205	STEEL BEAM GUARDRAIL, GALVANIZED W/8 FEET POSTS		550.00	LF	\$22.997	\$12,648.35
621.218	TRAFFIC BARRIER DELINEATOR		114.00	EACH	\$10.124	\$1,154.14
621.56	ENERGY ABSORPTION ATTENUATOR, TEMPORARY		3.00	EACH	\$2,915.795	\$8,747.39

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621.60	ANCHOR FOR STEEL BEAM RAIL	1.00	EACH	\$1,403.407	\$1,403.41	
621.80	REMOVAL AND DISPOSAL OF GUARDRAIL	975.00	LF	\$2.244	\$2,187.90	
621.90	TEMPORARY TRAFFIC BARRIER	1,100.00	LF	\$39.504	\$43,454.40	
621.95	REMOVE AND RESET TEMPORARY TRAFFIC BARRIER	1,100.00	LF	\$13.926	\$15,318.60	
630.10	UNIFORMED TRAFFIC OFFICERS	200.00	HR	\$78.350	\$15,670.00	
630.15	FLAGGERS	2,640.00	HR	\$44.279	\$116,896.56	
633.10	CPM SCHEDULE	19.00	EACH	\$321.585	\$6,110.12	
635.11	MOBILIZATION/DEMOBILIZATION	1.00	LS	\$1,700,000.000	\$1,700,000.00	
641.10	TRAFFIC CONTROL	1.00	LS	\$20,000.000	\$20,000.00	
641.15	PORTABLE CHANGEABLE MESSAGE SIGN	2.00	EACH	\$2,404.301	\$4,808.60	
646.404	DURABLE 4 INCH WHITE LINE, POLYUREA	3,375.00	LF	\$1.820	\$6,142.50	
646.414	DURABLE 4 INCH YELLOW LINE, POLYUREA	3,375.00	LF	\$1.819	\$6,139.13	
646.494	DURABLE LETTER OR SYMBOL, POLYUREA	4.00	EACH	\$153.162	\$612.65	
646.600	TEMPORARY 4 INCH WHITE LINE	11,500.00	LF	\$0.422	\$4,853.00	
646.610	TEMPORARY 4 INCH YELLOW LINE	6,750.00	LF	\$0.431	\$2,909.25	
646.680	TEMPORARY 24 INCH STOP BAR	30.00	LF	\$5.292	\$158.76	
646.76	LINE STRIPING TARGETS	675.00	EACH	\$1.285	\$867.38	
646.85	REMOVAL OF EXISTING PAVEMENT MARKINGS	1,400.00	SF	\$3.063	\$4,288.20	
675.20	TRAFFIC SIGN, TYPE A	51.00	SF	\$23.680	\$1,207.68	
675.341	SQUARE TUBE SIGN POST AND ANCHOR	150.00	LF	\$19.187	\$2,878.05	
675.50	REMOVING SIGNS	15.00	EACH	\$16.054	\$240.81	
676.10	DELINEATOR WITH STEEL POST	1.00	EACH	\$140.325	\$140.33	
678.40	TEMPORARY TRAFFIC SIGNAL SYSTEM	1.00	EACH	\$155,000.000	\$155,000.00	
900.615	SPECIAL PROVISION	(DISPOSAL FEES FOR CONTAMINATED SOIL)	6,500.00	DL	\$1.000	\$6,500.00
900.615	SPECIAL PROVISION	(INCENTIVE/DISINCENTIV E)(N.A.B.I.)	314,000.00	DL	\$1.000	\$314,000.00
900.620	SPECIAL PROVISION	(STEEL BEAM GUARDRAIL, GALVANIZED) (35' RADIUS)	1.00	EACH	\$2,250.000	\$2,250.00
900.620	SPECIAL PROVISION	(TRANSITION TO BRIDGE RAIL)	4.00	EACH	\$6,000.000	\$24,000.00
900.645	SPECIAL PROVISION	(MANAGEMENT OF CONTAMINATED SOIL)	1.00	LS	\$6,500.000	\$6,500.00
900.645	SPECIAL PROVISION	(TEMPORARY ACCESS ROAD AND BULKHEAD)	1.00	LS	\$347,500.000	\$347,500.00
900.650	SPECIAL PROVISION	(MAT DENSITY PAY ADJUSTMENT, SMALL QUANTITY)(N.A.B.I.)	1.00	LU	\$1.000	\$1.00
900.650	SPECIAL PROVISION	(MIXTURE PAY ADJUSTMENT, SMALL QUANTITY)(N.A.B.I.)	1.00	LU	\$1.000	\$1.00
900.675	SPECIAL PROVISION	(IMPERVIOUS SEPARATION BARRIER)	250.00	SY	\$5.000	\$1,250.00
900.680	SPECIAL PROVISION	(BITUMINOUS CONCRETE PAVEMENT, SMALL QUANTITY)	1,100.00	TON	\$200.000	\$220,000.00

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Category total: \$3,210,820.50

Category

1031 - TRAINING

Item Number	Description	Supplemental Description	Quantity	Unit	Unit Price	Amount
634.10	EMPLOYEE TRAINEESHIP		1,040.00	HR	\$6.989	\$7,268.56
Category total:						\$7,268.56

Category

1051 - EROSION CONTROL

Item Number	Description	Supplemental Description	Quantity	Unit	Unit Price	Amount
649.61	GEOTEXTILE FOR FILTER CURTAIN		655.00	SY	\$70.000	\$45,850.00
651.15	SEED		15.00	LB	\$24.170	\$362.55
651.17	SEED, WINTER RYE		15.00	LB	\$12.816	\$192.24
651.18	FERTILIZER		50.00	LB	\$6.419	\$320.95
651.20	AGRICULTURAL LIMESTONE		0.20	TON	\$622.858	\$124.57
651.35	TOPSOIL		50.00	CY	\$67.431	\$3,371.55
653.01	EPSC PLAN		1.00	LS	\$5,000.000	\$5,000.00
653.02	MONITORING EPSC PLAN		160.00	HR	\$39.366	\$6,298.56
653.03	MAINTENANCE OF EPSC PLAN (N.A.B.I.)		1.00	LU	\$7,500.000	\$7,500.00
653.10	HAY MULCH		0.20	TON	\$756.945	\$151.39
653.25	CHECK DAM, TYPE I		35.00	CY	\$113.370	\$3,967.95
653.35	STABILIZED CONSTRUCTION ENTRANCE		55.00	CY	\$60.863	\$3,347.47
653.45	FILTER BAG		2.00	EACH	\$546.000	\$1,092.00
653.476	SILT FENCE, TYPE II		2,375.00	LF	\$11.620	\$27,597.50
653.50	BARRIER FENCE		1,575.00	LF	\$2.466	\$3,883.95
Category total:						\$109,060.68

Category

1211 - BRIDGE NO. 1

Description

(STA. 625+92.28)

Item Number	Description	Supplemental Description	Quantity	Unit	Unit Price	Amount
506.55	STRUCTURAL STEEL, PLATE GIRDER		600.00	LB	\$19.283	\$11,569.80
507.12	REINFORCING STEEL, LEVEL II		30,000.00	LB	\$4.000	\$120,000.00
507.16	DRILLING AND GROUTING DOWELS		500.00	LF	\$50.000	\$25,000.00
507.19	MECHANICAL BAR CONNECTOR		80.00	EACH	\$100.000	\$8,000.00
516.10	BRIDGE EXPANSION JOINT, ASPHALTIC PLUG		144.00	LF	\$150.000	\$21,600.00
516.12	BRIDGE EXPANSION JOINT, FINGER PLATE		72.00	LF	\$3,250.000	\$234,000.00

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519.10	MEMBRANE WATERPROOFING, SPRAY APPLIED		3,100.00	SY	\$100.000	\$310,000.00
525.10	REMOVAL OF EXISTING BRIDGE RAILING		1,572.00	LF	\$38.987	\$61,287.56
529.20	PARTIAL REMOVAL OF STRUCTURE		1.00	EACH	\$852,000.000	\$852,000.00
531.18	BEARING DEVICE ASSEMBLY, ELASTOMERIC PAD W/ EXT. LOAD PLATES		14.00	EACH	\$2,500.000	\$35,000.00
580.13	REPAIR OF CONCRETE SUBSTRUCTURE SURFACE, CLASS I		50.00	SY	\$1,500.000	\$75,000.00
580.14	REPAIR OF CONCRETE SUBSTRUCTURE SURFACE, CLASS II		20.00	SY	\$2,500.000	\$50,000.00
900.608	SPECIAL PROVISION	(CONCRETE, HIGH PERFORMANCE CLASS B)	100.00	CY	\$2,200.000	\$220,000.00
900.608	SPECIAL PROVISION	(HIGH PERFORMANCE CONCRETE, RAPID SET)	60.00	CY	\$3,600.000	\$216,000.00
900.620	SPECIAL PROVISION	(BRIDGE SCUPPER COMPONENTS)	8.00	EACH	\$11,700.000	\$93,600.00
900.640	SPECIAL PROVISION	(BRIDGE RAILING, S3-TL4 STEEL TUBE WITH SAFETY CURB)	1,642.00	LF	\$450.000	\$738,900.00
900.640	SPECIAL PROVISION	(TEMPORARY LIMITED DEFLECTION BARRIER)	1,680.00	LF	\$130.000	\$218,400.00
900.645	SPECIAL PROVISION	(ACCELBRIDGE PRECAST DECK PANEL SYSTEM)	1.00	LS	\$4,290,000.000	\$4,290,000.00
900.645	SPECIAL PROVISION	(JACKING AND REMOVAL OF SUSPENDED SPAN BEARINGS)	1.00	LS	\$140,000.000	\$140,000.00
900.645	SPECIAL PROVISION	(REMOVAL, CONTAINMENT, AND DISPOSAL OF EXISTING PAINT)(TYPE II)	1.00	LS	\$44,000.000	\$44,000.00
900.645	SPECIAL PROVISION	(REMOVE AND REPLACE NAVIGATION LIGHTING SYSTEM)	1.00	LS	\$80,000.000	\$80,000.00
900.645	SPECIAL PROVISION	(STRUCTURAL STEEL REPAIRS, END FLOORBEAM CRACK)	1.00	LS	\$10,000.000	\$10,000.00
900.645	SPECIAL PROVISION	(STRUCTURAL STEEL REPAIRS, WELD REMOVAL)	1.00	LS	\$19,000.000	\$19,000.00
					Category total:	\$7,873,357.36

Category

1999 - FULL C.E. ITEMS

Item Number	Description	Supplemental Description	Quantity	Unit	Unit Price	Amount
631.10	FIELD OFFICE, ENGINEERS		1.00	LS	\$45,000.000	\$45,000.00
631.16	TESTING EQUIPMENT, CONCRETE		1.00	LS	\$1,000.000	\$1,000.00
631.17	TESTING EQUIPMENT, BITUMINOUS		1.00	LS	\$700.000	\$700.00
631.19	TESTING EQUIPMENT, GROUT		1.00	LS	\$990.000	\$990.00
631.26	FIELD OFFICE COMMUNICATIONS (N.A.B.I.)		6,000.00	DL	\$1.000	\$6,000.00
					Category total:	\$53,690.00

Grand Total: \$11,254,197.10