

Vermont Agency of Transportation

WORCESTER BF 0241(59)

Estimate FINAL - Engineer's Estimate - B84

Phase: FINAL	Designed By:
Estimate Date: 09 June, 2022	Reviewed By: Jon Olin
Specification: Standard Specifications for Construction	Approved By:
Region: NORTHWEST	Work Type: BRIDGE CONSTRUCTION
Town: WORCESTER	Highway Type: MAJOR COLLECTOR
Advertising Season:	Urban/Rural: RURAL
Description: EXISTING BRIDGE REPLACEMENT WITH A STEEL GIRDER BRIDGE WITH FOOTINGS FOUNDED ON BEDROCK AND ASSOCIATED ROADWAY IMPROVEMENTS.	

Category

1011 - ROADWAY

Item Number	Description	Supplemental Description	Quantity	Unit	Unit Price	Amount
201.10	CLEARING AND GRUBBING, INCLUDING INDIVIDUAL TREES AND STUMPS	(BRIDGE 84)	1.00	LS	\$8,400.000	\$8,400.00
203.15	COMMON EXCAVATION		1,400.00	CY	\$12.611	\$17,655.40
203.30	EARTH BORROW		450.00	CY	\$4.718	\$2,123.10
204.20	TRENCH EXCAVATION OF EARTH		60.00	CY	\$21.877	\$1,312.62
204.22	TRENCH EXCAVATION OF EARTH, EXPLORATORY (N.A.B.I.)		1.00	CY	\$75.000	\$75.00
210.10	COARSE-MILLING, BITUMINOUS PAVEMENT		600.00	SY	\$6.479	\$3,887.40
301.35	SUBBASE OF DENSE GRADED CRUSHED STONE		1,600.00	CY	\$36.951	\$59,121.60
401.10	AGGREGATE SURFACE COURSE		100.00	CY	\$49.105	\$4,910.50
404.65	EMULSIFIED ASPHALT		20.00	CWT	\$46.662	\$933.24
406.38	HAND-PLACED BITUMINOUS CONCRETE MATERIAL, DRIVES		90.00	SY	\$26.533	\$2,387.97
406.50	PRICE ADJUSTMENT, ASPHALT CEMENT (N.A.B.I.)		1.00	LU	\$1.000	\$1.00
601.0910	15" CPEP		40.00	LF	\$35.000	\$1,400.00
601.0915	18" CPEP		15.00	LF	\$54.029	\$810.44
601.7010	15" CPEPES		2.00	EACH	\$325.000	\$650.00
601.7015	18" CPEPES		1.00	EACH	\$375.000	\$375.00
604.20	PRECAST REINFORCED CONCRETE CATCH BASIN WITH CAST IRON GRATE		1.00	EACH	\$5,794.937	\$5,794.94
608.25	ALL PURPOSE EXCAVATOR RENTAL, TYPE I		10.00	HR	\$121.140	\$1,211.40
613.10	STONE FILL, TYPE I		105.00	CY	\$60.580	\$6,360.90
616.28	CAST-IN-PLACE CONCRETE CURB, TYPE B		180.00	LF	\$39.446	\$7,100.28
617.10	REMOVE AND RESET MAILBOX, SINGLE SUPPORT		2.00	EACH	\$189.074	\$378.15
619.17	YIELDING MARKER POSTS		3.00	EACH	\$48.954	\$146.86

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621.20	STEEL BEAM GUARDRAIL, GALVANIZED	(MIDWEST GUARDRAIL SYSTEM)	525.00	LF	\$20.472	\$10,747.80
621.51	MANUFACTURED TERMINAL SECTION, TANGENT		2.00	EACH	\$2,585.800	\$5,171.60
621.60	ANCHOR FOR STEEL BEAM RAIL		1.00	EACH	\$951.862	\$951.86
621.72	GUARDRAIL APPROACH SECTION, GALVANIZED 2 RAIL BOX BEAM		4.00	EACH	\$6,000.000	\$24,000.00
621.80	REMOVAL AND DISPOSAL OF GUARDRAIL		650.00	LF	\$1.178	\$765.70
630.10	UNIFORMED TRAFFIC OFFICERS		115.00	HR	\$65.066	\$7,482.59
630.15	FLAGGERS		560.00	HR	\$34.643	\$19,400.08
635.11	MOBILIZATION/DEMOBILIZATION	(BRIDGE 84)	1.00	LS	\$170,000.000	\$170,000.00
641.11	TRAFFIC CONTROL, ALL-INCLUSIVE	(BRIDGE 84)	1.00	LS	\$13,000.000	\$13,000.00
641.15	PORTABLE CHANGEABLE MESSAGE SIGN		2.00	EACH	\$3,827.175	\$7,654.35
646.201	4 INCH WHITE LINE, WATERBORNE PAINT		1,550.00	LF	\$0.636	\$985.80
646.2111	4 INCH YELLOW LINE, WATERBORNE PAINT		1,550.00	LF	\$0.678	\$1,050.90
675.50	REMOVING SIGNS		6.00	EACH	\$15.620	\$93.72
675.60	RESETTING SIGNS		2.00	EACH	\$28.650	\$57.30
676.10	DELINEATOR WITH STEEL POST		3.00	EACH	\$78.552	\$235.66
676.12	REMOVAL OF EXISTING DELINEATOR AND POST		3.00	EACH	\$2.412	\$7.24
678.40	TEMPORARY TRAFFIC SIGNAL SYSTEM		1.00	EACH	\$35,000.000	\$35,000.00
900.680	SPECIAL PROVISION	(BITUMINOUS CONCRETE PAVEMENT, SMALL QUANTITY)	660.00	TON	\$106.418	\$70,235.88
					Category total:	\$491,876.27

Category
1031 - TRAINING

Item Number	Description	Supplemental Description	Quantity	Unit	Unit Price	Amount
634.10	EMPLOYEE TRAINEESHIP		208.00	HR	\$17.411	\$3,621.49
					Category total:	\$3,621.49

Category
1051 - EROSION CONTROL

Item Number	Description	Supplemental Description	Quantity	Unit	Unit Price	Amount
651.15	SEED		60.00	LB	\$9.927	\$595.62
651.18	FERTILIZER		400.00	LB	\$3.737	\$1,494.80
651.20	AGRICULTURAL LIMESTONE		2.00	TON	\$690.999	\$1,382.00
651.35	TOPSOIL		90.00	CY	\$39.514	\$3,556.26
651.40	GRUBBING MATERIAL	(12 INCH)	100.00	SY	\$3.500	\$350.00
653.01	EPSC PLAN	(BRIDGE 84)	1.00	LS	\$3,600.000	\$3,600.00

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653.02	MONITORING EPSC PLAN	102.00	HR	\$27.720	\$2,827.44
653.03	MAINTENANCE OF EPSC PLAN (N.A.B.I.)	1.00	LU	\$4,000.000	\$4,000.00
653.10	HAY MULCH	3.00	TON	\$681.875	\$2,045.63
653.20	ROLLED EROSION CONTROL PRODUCT, TYPE I	2,900.00	SY	\$1.865	\$5,408.50
653.25	CHECK DAM, TYPE I	20.00	CY	\$54.461	\$1,089.22
653.35	STABILIZED CONSTRUCTION ENTRANCE	35.00	CY	\$45.761	\$1,601.64
653.45	FILTER BAG	1.00	EACH	\$321.201	\$321.20
653.475	SILT FENCE, TYPE I	270.00	LF	\$3.812	\$1,029.24
653.476	SILT FENCE, TYPE II	600.00	LF	\$5.110	\$3,066.00
653.50	BARRIER FENCE	825.00	LF	\$2.044	\$1,686.30
653.55	PROJECT DEMARCATION FENCE	575.00	LF	\$1.109	\$637.68
653.60	EROSION LOG	120.00	LF	\$4.767	\$572.04
Category total:					\$35,263.55

Category
1211 - BRIDGE NO. 1

Item Number	Description	Supplemental Description	Quantity	Unit	Unit Price	Amount
203.16	SOLID ROCK EXCAVATION		130.00	CY	\$81.932	\$10,651.16
203.27	UNCLASSIFIED CHANNEL EXCAVATION		100.00	CY	\$12.867	\$1,286.70
204.25	STRUCTURE EXCAVATION		810.00	CY	\$17.681	\$14,321.61
204.30	GRANULAR BACKFILL FOR STRUCTURES		330.00	CY	\$34.639	\$11,430.87
501.37	HIGH PERFORMANCE CONCRETE, CLASS PCD		160.00	CY	\$810.000	\$129,600.00
501.38	HIGH PERFORMANCE CONCRETE, CLASS PCS		290.00	CY	\$1,100.000	\$319,000.00
506.55	STRUCTURAL STEEL, PLATE GIRDER		104,500.00	LB	\$3.000	\$313,500.00
507.11	REINFORCING STEEL, LEVEL I	(EPOXY COATED)	9,000.00	LB	\$1.593	\$14,337.00
507.11	REINFORCING STEEL, LEVEL I	(UNCOATED)	48,000.00	LB	\$1.500	\$72,000.00
507.12	REINFORCING STEEL, LEVEL II	(CONTINUOUSLY GALVANIZED)	36,000.00	LB	\$1.612	\$58,032.00
508.15	SHEAR CONNECTORS	(XXXX - 7/8" X 7")	1.00	LS	\$7,000.000	\$7,000.00
514.10	WATER REPELLENT, SILANE		60.00	GAL	\$64.351	\$3,861.06
516.10	BRIDGE EXPANSION JOINT, ASPHALTIC PLUG		60.00	LF	\$133.441	\$8,006.46
525.33	BRIDGE RAILING, GALVANIZED 2 RAIL BOX BEAM		200.00	LF	\$140.000	\$28,000.00
528.10	ONE-WAY TEMPORARY BRIDGE	(BRIDGE 84, 2080 SF - EST.)	1.00	LS	\$400,000.000	\$400,000.00
529.15	REMOVAL OF STRUCTURE	(BRIDGE 84, 1970 SF - EST.)	1.00	EACH	\$250,000.000	\$250,000.00
531.17	BEARING DEVICE ASSEMBLY, STEEL REINFORCED ELASTOMERIC PAD		10.00	EACH	\$1,400.000	\$14,000.00
541.30	CONCRETE, CLASS C		100.00	CY	\$515.864	\$51,586.40
613.12	STONE FILL, TYPE III		100.00	CY	\$51.511	\$5,151.10

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649.31	GEOTEXTILE UNDER STONE FILL		100.00	SY	\$1.842	\$184.20
900.640	SPECIAL PROVISION	(WILDLIFE SHELF)	100.00	LF	\$15.000	\$1,500.00
					Category total:	\$1,713,448.56

Category
1999 - FULL C.E. ITEMS

Item Number	Description	Supplemental Description	Quantity	Unit	Unit Price	Amount
631.10	FIELD OFFICE, ENGINEERS		1.00	LS	\$14,400.000	\$14,400.00
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
631.26	FIELD OFFICE COMMUNICATIONS (N.A.B.I.)		1,200.00	DL	\$1.000	\$1,200.00
					Category total:	\$17,300.00

Category
3041 - LANDSCAPING

Item Number	Description	Supplemental Description	Quantity	Unit	Unit Price	Amount
656.20	EVERGREEN TREES	(PICEA GLAUCA)(5'-6' HT.) (B&B)	6.00	EACH	\$340.000	\$2,040.00
656.20	EVERGREEN TREES	(PINUS STROBUS)(3'-4' HT.)(B&B)	13.00	EACH	\$340.000	\$4,420.00
656.30	DECIDUOUS TREES	(ACER RUBRUM)(2" - 2.5" CAL.)(B&B)	8.00	EACH	\$770.000	\$6,160.00
656.30	DECIDUOUS TREES	(FAGUS GRANDIFOLIA)(2"- 2.5" CAL.)(B&B)	5.00	EACH	\$770.000	\$3,850.00
656.35	DECIDUOUS SHRUBS	(CORNUS RACEMOSA)(3 GALLON)(CONT.)	20.00	EACH	\$80.000	\$1,600.00
656.35	DECIDUOUS SHRUBS	(ILEX VERTICILLATA ' RED SPRITE')(3 GALLON) (CONT.)	4.00	EACH	\$80.000	\$320.00
656.35	DECIDUOUS SHRUBS	(ILEX VERTICILLATA 'JIM DANDY')(3 GALLON) (CONT.)	1.00	EACH	\$80.000	\$80.00
656.35	DECIDUOUS SHRUBS	(VIBURNUM OPULUS VAR. AMERICANUM)(3 GALLON) (CONT.)	3.00	EACH	\$80.000	\$240.00
656.41	PERENNIALS	(ASCLEPIAS SYRIACA)(1 GALLON)(CONT.)	50.00	EACH	\$35.000	\$1,750.00
656.41	PERENNIALS	(RUDBECKIA HIRTA)(1 GALLON)(CONT.)	50.00	EACH	\$35.000	\$1,750.00
656.65	LANDSCAPE WATERING		40.00	MGAL	\$60.000	\$2,400.00
656.80	LANDSCAPE BACKFILL, TRUCK MEASUREMENT		228.00	CY	\$80.000	\$18,240.00
900.620	SPECIAL PROVISION	(TUBELING)(TBD)(PLUG)	40.00	EACH	\$13.000	\$520.00
900.670	SPECIAL PROVISION	(WET AREA SEED MIX)	2,080.00	SF	\$0.100	\$208.00
900.670	SPECIAL PROVISION	(WILDFLOWER SEED)	15,554.00	SF	\$0.070	\$1,088.78
					Category total:	\$44,666.78

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Grand Total: \$2,306,176.65