

Vermont Agency of Transportation

South Burlington RAIZ(1)

Estimate FINAL - Engineer's Estimate

Phase: FINAL	Designed By:
Estimate Date: 06 March, 2024	Reviewed By:
Specification: Standard Specifications for Construction	Approved By:
Region: NORTHWEST	Work Type: BRIDGE CONSTRUCTION
Town:	Highway Type: INTERSTATE, FREEWAY, EXPRESSWAY (URBAN)
Advertising Season: CONSTRUCTION SEASON	Urban/Rural: URBAN
Description: WORK TO BE PERFORMED INCLUDES CONSTRUCTION OF A NEW MULTI-USE PATH AND A PEDESTRIAN BRIDGE. PROJECT WILL INCLUDE PAUSE PLACES WITH BENCHES, MSE WALLS, RAILING, LIGHTING, AND STORMWATER INFRASTRUCTURE.	

Category

1011 - ROADWAY

Item Number	Description	Supplemental Description	Quantity	Unit	Unit Price	Amount
201.1000	CLEARING AND GRUBBING, INCLUDING INDIVIDUAL TREES AND STUMPS		1.00	LS	\$25,000.000	\$25,000.00
203.1500	COMMON EXCAVATION		3,700.00	CY	\$22.331	\$82,624.70
203.2800	EXCAVATION OF SURFACES AND PAVEMENTS		5.00	CY	\$37.000	\$185.00
203.3000	EARTH BORROW		500.00	CY	\$14.103	\$7,051.50
203.3100	SAND BORROW		390.00	CY	\$37.397	\$14,584.83
204.2000	TRENCH EXCAVATION OF EARTH		1,680.00	CY	\$31.631	\$53,140.08
204.2200	TRENCH EXCAVATION OF EARTH, EXPLORATORY (N.A.B.I.)		1.00	CY	\$75.000	\$75.00
204.2500	STRUCTURE EXCAVATION		4,900.00	CY	\$21.302	\$104,379.80
204.3000	GRANULAR BACKFILL FOR STRUCTURES		1,500.00	CY	\$52.985	\$79,477.50
227.0100	RETAINING WALL, MECHANICALLY STABILIZED EARTH		1.00	LS	\$1,000,000.000	\$1,000,000.00
227.0100	RETAINING WALL, MECHANICALLY STABILIZED EARTH	(FGA)	1.00	LS	\$3,500,000.000	\$3,500,000.00
301.3500	SUBBASE OF DENSE GRADED CRUSHED STONE		15,500.00	CY	\$39.407	\$610,808.50
401.1000	AGGREGATE SURFACE COURSE		50.00	CY	\$71.090	\$3,554.50
404.1100	TACK COAT, EMULSIFIED ASPHALT		16.00	CWT	\$77.960	\$1,247.36
406.0430	BITUMINOUS CONCRETE PAVEMENT, TYPE IVS, QA TIER III		780.00	TON	\$99.615	\$77,699.70
406.9100	PAY ADJUSTMENT, BCP, MIXTURE PROPERTIES (N.A.B.I.)		1.00	DL	\$1.000	\$1.00
406.9200	PAY ADJUSTMENT, BCP, MAT DENSITY (N.A.B.I.)		1.00	DL	\$1.000	\$1.00
541.2200	CONCRETE, CLASS B	(BRIDGE PLANTER CURB)	30.00	CY	\$1,770.000	\$53,100.00
601.2605	12 INCH CPEP(SL)		100.00	LF	\$65.000	\$6,500.00
601.2610	15 INCH CPEP(SL)		10.00	LF	\$70.000	\$700.00
601.2615	18 INCH CPEP(SL)		280.00	LF	\$80.000	\$22,400.00

Vermont Agency of Transportation

South Burlington RAIZ(1)

Estimate FINAL - Engineer's Estimate

601.2620	24 INCH CPEP(SL)	120.00	LF	\$100.000	\$12,000.00
601.2630	36 INCH CPEP(SL)	700.00	LF	\$120.000	\$84,000.00
601.7005	12 INCH CPEPES	1.00	EACH	\$800.000	\$800.00
604.1800	PRECAST REINFORCED CONCRETE DI WITH (4 FOOT DIA.) CAST IRON GRATE	1.00	EACH	\$5,500.000	\$5,500.00
604.1800	PRECAST REINFORCED CONCRETE DI WITH (5 FOOT DIA.) CAST IRON GRATE	6.00	EACH	\$6,500.000	\$39,000.00
604.1800	PRECAST REINFORCED CONCRETE DI WITH (8 FOOT DIA.) CAST IRON GRATE	1.00	EACH	\$8,000.000	\$8,000.00
604.1800	PRECAST REINFORCED CONCRETE DI WITH (DRAINAGE INLET) CAST IRON GRATE	7.00	EACH	\$1,000.000	\$7,000.00
604.2000	PRECAST REINFORCED CONCRETE CATCH BASIN WITH CAST IRON GRATE	3.00	EACH	\$6,316.025	\$18,948.08
604.2100	PRECAST REINFORCED CONCRETE (5 FOOT DIA.) MANHOLE WITH CAST IRON COVER	4.00	EACH	\$6,750.000	\$27,000.00
605.2006	UNDERDRAIN CARRIER PIPE, 6 INCH	1,670.00	LF	\$40.000	\$66,800.00
605.9500	UNDERDRAIN FLUSHING BASIN	3.00	EACH	\$500.000	\$1,500.00
609.1000	DUST CONTROL WITH WATER	240.00	MGAL	\$17.329	\$4,158.96
613.1001	STONE FILL, TYPE I	20.00	CY	\$105.274	\$2,105.48
616.2702	CAST-IN-PLACE CONCRETE CURB, TYPE B	60.00	LF	\$112.092	\$6,725.52
618.1005	PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH	80.00	SY	\$211.656	\$16,932.48
618.3000	DETECTABLE WARNING SURFACE	106.00	SF	\$50.829	\$5,387.87
619.1700	YIELDING MARKER POSTS	20.00	EACH	\$76.369	\$1,527.38
620.1006	CHAIN-LINK FENCE, 6 FOOT	1,120.00	LF	\$48.500	\$54,320.00
620.1506	GATE FOR CHAIN-LINK FENCE, 6 FOOT	12.00	LF	\$500.000	\$6,000.00
620.2006	BRACING ASSEMBLY FOR CHAIN-LINK FENCE, 6 FOOT	20.00	EACH	\$800.000	\$16,000.00
620.5500	REMOVAL OF EXISTING FENCE	2,100.00	LF	\$2.511	\$5,273.10
621.1260	HD STEEL BEAM GUARDRAIL	2,410.00	LF	\$28.000	\$67,480.00
621.1520	ANCHOR FOR STEEL BEAM GUARDRAIL	5.00	EACH	\$1,306.829	\$6,534.15
621.1530	ANCHOR FOR STEEL BEAM GUARDRAIL, MGS	2.00	EACH	\$1,417.807	\$2,835.61
621.3030	MTS, MGS, TANGENT, TL-3	1.00	EACH	\$3,203.115	\$3,203.12
621.3130	MTS, MGS, FLARED, TL-3	1.00	EACH	\$3,149.596	\$3,149.60
630.1000	UNIFORMED TRAFFIC OFFICERS	1,500.00	HR	\$100.000	\$150,000.00
630.1500	FLAGGERS	1,000.00	HR	\$43.209	\$43,209.00
631.1600	TESTING EQUIPMENT, CONCRETE	1.00	LS	\$1,500.000	\$1,500.00
631.1700	TESTING EQUIPMENT, BITUMINOUS	1.00	LS	\$750.000	\$750.00
633.1000	CPM SCHEDULE	24.00	EACH	\$738.484	\$17,723.62
635.1100	MOBILIZATION/DEMOBILIZATION	1.00	LS	\$1,178,028.938	\$1,178,028.94
641.1100	TRAFFIC CONTROL, ALL-INCLUSIVE	1.00	LS	\$500,000.000	\$500,000.00
641.1500	PORTABLE CHANGEABLE MESSAGE SIGN	4.00	EACH	\$4,632.347	\$18,529.39
646.2111	4 INCH YELLOW LINE, WATERBORNE PAINT	1,648.00	LF	\$1.223	\$2,015.50
646.2410	12 INCH WHITE LINE, WATERBORNE PAINT	131.00	LF	\$13.000	\$1,703.00

Vermont Agency of Transportation

South Burlington RAIZ(1)

Estimate FINAL - Engineer's Estimate

646.3010	LETTER OR SYMBOL, WATERBORNE PAINT		90.00	EACH	\$175.000	\$15,750.00
649.1100	GEOTEXTILE FOR ROADBED SEPARATOR		4,120.00	SY	\$2.200	\$9,064.00
654.0015	DRY SWALE WITH UNDERDRAIN		230.00	LF	\$100.000	\$23,000.00
675.2000	TRAFFIC SIGN, FLAT SHEET ALUMINUM		10.50	SF	\$43.728	\$459.14
675.3410	SQUARE TUBE SIGN POST AND ANCHOR		90.00	LF	\$22.471	\$2,022.39
675.5000	SIGN REMOVAL, FLAT SHEET ALUMINUM		5.00	EACH	\$38.503	\$192.52
675.6000	RESETTING SIGNS		2.00	EACH	\$121.304	\$242.61
690.0300	PRICE ADJUSTMENT, ASPHALT (N.A.B.I.)		1.00	DL	\$1.000	\$1.00
SS007	SS-PLACEHOLDER-EA	(LANDSCAPE BENCH)	6.00	EACH	\$1,000.000	\$6,000.00
SS007	SS-PLACEHOLDER-EA	(SOUTH BURLINGTON WAYFINDING SIGN)	14.00	EACH	\$150.000	\$2,100.00
SS012	SS-PLACEHOLDER-LF	(PEDESTRIAN BARRIER)	3,360.00	LF	\$250.000	\$840,000.00
SS013	SS-PLACEHOLDER-LS	(ART SCULPTURES)	1.00	LS	\$50,000.000	\$50,000.00
SS017	SS-PLACEHOLDER-SF	(BRICK PAVERS)	250.00	SF	\$27.000	\$6,750.00
SS017	SS-PLACEHOLDER-SF	(PERMEABLE PAVERS)	630.00	SF	\$30.000	\$18,900.00
Category total:						\$9,002,652.91

Category

1041 - LANDSCAPING

Item Number	Description	Supplemental Description	Quantity	Unit	Unit Price	Amount
656.2003	EVERGREEN TREES, LARGE	(PICEA GLAUCA)(6-8FT) (BANDB)	6.00	EACH	\$700.000	\$4,200.00
656.2003	EVERGREEN TREES, LARGE	(PICEA GLAUCA)(8-10FT) (BANDB)	5.00	EACH	\$700.000	\$3,500.00
656.3003	DECIDUOUS TREES, LARGE	(ACER SACCHARUM)(2.5-3IN) (BANDB)	5.00	EACH	\$700.000	\$3,500.00
656.3003	DECIDUOUS TREES, LARGE	(ACER X FREEMANII)(2.5-3IN) (BANDB)	8.00	EACH	\$700.000	\$5,600.00
656.3003	DECIDUOUS TREES, LARGE	(AMELANCHIER X GRANDIFLORA)(6-8FT) (MULTISTEM)	57.00	EACH	\$700.000	\$39,900.00
656.3003	DECIDUOUS TREES, LARGE	(BETULA NIGRA)(2.5-3IN) (BANDB)	13.00	EACH	\$700.000	\$9,100.00
656.3003	DECIDUOUS TREES, LARGE	(GLEDITSIA TRIACANTHOS INERMIS) (2.5-3IN)(BANDB)	3.00	EACH	\$700.000	\$2,100.00
656.3003	DECIDUOUS TREES, LARGE	(GLEDITSIA TRIACANTHOS)(2.5-3IN) (BANDB)	9.00	EACH	\$700.000	\$6,300.00
656.3003	DECIDUOUS TREES, LARGE	(ULMUX X)(2.5-3IN) (BANDB)	13.00	EACH	\$700.000	\$9,100.00
656.3500	DECIDUOUS SHRUBS	(ARONIA MELANOCARPA)(18-24IN) (SPD)	84.00	EACH	\$128.060	\$10,757.04
656.3500	DECIDUOUS SHRUBS	(CORNUS RACEMOSA)(24-30IN) (SPD)	21.00	EACH	\$141.980	\$2,981.58
656.3500	DECIDUOUS SHRUBS	(CORNUS SERICEA)(18-24IN) (SPD)	180.00	EACH	\$120.997	\$21,779.46
656.3500	DECIDUOUS SHRUBS	(CORNUS STOLONIFERA)(18-24IN) (SPD)	207.00	EACH	\$119.745	\$24,787.22
656.3500	DECIDUOUS SHRUBS	(ILEX VERTICILLATA)(18-24IN) (SPD)	51.00	EACH	\$132.905	\$6,778.16

Vermont Agency of Transportation

South Burlington RAIZ(1)

Estimate FINAL - Engineer's Estimate

656.3500	DECIDUOUS SHRUBS	(PHYSOCARPUS OPULIFOLIUS)(18-24IN) (SPD)	210.00	EACH	\$119.616	\$25,119.36
656.3500	DECIDUOUS SHRUBS	(SALIX DISCOLOR)(24- 30IN)(SPD)	34.00	EACH	\$136.978	\$4,657.25
656.4000	GROUND COVERS AND VINES	(CALAMAGROSTIS X ACUTIFLORA)(2 GAL.)	163.00	EACH	\$65.000	\$10,595.00
656.6500	LANDSCAPE WATERING		50.00	MGAL	\$70.005	\$3,500.25
656.8000	LANDSCAPE BACKFILL, TRUCK MEASUREMENT		1,600.00	CY	\$58.155	\$93,048.00
Category total:						\$287,303.31

Category
1051 - EROSION CONTROL

Item Number	Description	Supplemental Description	Quantity	Unit	Unit Price	Amount
651.1500	TURF ESTABLISHMENT, GENERAL SEED	(RURAL MIX)	2,060.00	SY	\$2.000	\$4,120.00
651.1500	TURF ESTABLISHMENT, GENERAL SEED	(URBAN MIX)	610.00	SY	\$2.000	\$1,220.00
651.1600	TURF ESTABLISHMENT, SPECIALTY SEED	(POLLINATOR COMPACT MIX)	940.00	SY	\$2.500	\$2,350.00
651.1600	TURF ESTABLISHMENT, SPECIALTY SEED	(POLLINATOR DRY MIX)	10,560.00	SY	\$2.500	\$26,400.00
651.3500	TOPSOIL		1,900.00	CY	\$48.943	\$92,991.70
653.0100	EPSC PLAN		1.00	LS	\$5,000.000	\$5,000.00
653.0200	MONITORING EPSC PLAN		200.00	HR	\$45.085	\$9,017.00
653.0300	MAINTENANCE OF EPSC PLAN (N.A.B.I.)		1.00	DL	\$1.000	\$1.00
653.2001	ROLLED EROSION CONTROL PRODUCT, TYPE I		2,200.00	SY	\$3.300	\$7,260.00
653.2501	CHECK DAM, TYPE I		10.00	CY	\$94.020	\$940.20
653.3500	STABILIZED CONSTRUCTION ENTRANCE		150.00	CY	\$65.214	\$9,782.10
653.4001	INLET PROTECTION DEVICE, TYPE I		8.00	EACH	\$196.001	\$1,568.01
653.4002	INLET PROTECTION DEVICE, TYPE II		4.00	EACH	\$250.000	\$1,000.00
653.4003	INLET PROTECTION DEVICE, TYPE III		10.00	CY	\$110.000	\$1,100.00
653.4701	SILT FENCE, TYPE I		720.00	LF	\$4.852	\$3,493.44
653.4702	SILT FENCE, TYPE II		150.00	LF	\$7.606	\$1,140.90
653.5000	BARRIER FENCE		850.00	LF	\$3.082	\$2,619.70
653.5500	PROJECT DEMARCATION FENCE		2,480.00	LF	\$2.131	\$5,284.88
Category total:						\$175,288.93

Category
1081 - UTILITIES - BID ITEMS

Item Number	Description	Supplemental Description	Quantity	Unit	Unit Price	Amount
625.3024	SLEEVES FOR UTILITIES, STEEL, 24 INCH		32.00	LF	\$200.000	\$6,400.00
625.6000	WIRED CONDUIT	(1 INCH)(PVC)(SCH. 40)	670.00	LF	\$30.152	\$20,201.84

Vermont Agency of Transportation

South Burlington RAIZ(1)

Estimate FINAL - Engineer's Estimate

625.6000	WIRED CONDUIT	(1.5 INCH)(PVC)(SCH. 40)	2,560.00	LF	\$21.252	\$54,405.12
625.6002	WIRED CONDUIT, 2 INCH	(PVC)(SCH.40)	3,090.00	LF	\$20.234	\$62,523.06
625.7000	POWER DROP STANCHION		2.00	EACH	\$7,500.000	\$15,000.00
625.7021	PULL BOX, SINGLE		4.00	EACH	\$1,500.000	\$6,000.00
629.2800	ADJUST ELEVATION OF VALVE BOX		1.00	EACH	\$211.845	\$211.85
629.3600	RELOCATE HYDRANT		1.00	EACH	\$5,500.000	\$5,500.00
678.2015	PEDESTAL POST ASSEMBLY	(RELOCATE PEDESTRIAN SIGNAL)	1.00	EACH	\$5,000.000	\$5,000.00
679.2500	REMOVE AND RESET LIGHT POLE		1.00	EACH	\$5,000.000	\$5,000.00
679.4600	STREET LIGHT ASSEMBLY		68.00	EACH	\$7,500.000	\$510,000.00
679.5000	LUMINAIRE	(TYPE B LIGHT FIXTURES, RIBS)	11.00	EACH	\$500.000	\$5,500.00
679.5000	LUMINAIRE	(TYPE C LIGHT FIXTURES, BRIDGE HAND RAILING)	28.00	EACH	\$300.000	\$8,400.00
679.5400	STREET LIGHTING CONTROL DEVICE		1.00	EACH	\$1,050.000	\$1,050.00
699.7500	L-115-5.3 ELECTRICAL MH/JUNCTION STRUCTURE ELEVATION ADJ.		6.00	EACH	\$250.000	\$1,500.00
					Category total:	\$706,691.87

Category

1211 - BRIDGE NO. 1

Item Number	Description	Supplemental Description	Quantity	Unit	Unit Price	Amount
501.3700	PERFORMANCE-BASED CONCRETE, CLASS PCD		220.00	CY	\$1,000.000	\$220,000.00
501.3800	PERFORMANCE-BASED CONCRETE, CLASS PCS		460.00	CY	\$1,300.000	\$598,000.00
504.1000	FURNISHING EQUIPMENT FOR DRIVING PILING		1.00	LS	\$200,000.000	\$200,000.00
505.1800	STEEL PILING, HP 14 x 89		1,850.00	LF	\$100.000	\$185,000.00
505.4500	DYNAMIC PILE LOADING TEST	(METALIZED)	3.00	EACH	\$4,000.000	\$12,000.00
506.5600	STRUCTURAL STEEL, CURVED PLATE GIRDER		400,230.00	LB	\$5.500	\$2,201,265.00
506.6000	STRUCTURAL STEEL	(GALVANIZED)	48,000.00	LB	\$15.000	\$720,000.00
507.1100	REINFORCING STEEL, LEVEL I		17,000.00	LB	\$2.526	\$42,942.00
507.1200	REINFORCING STEEL, LEVEL II		108,560.00	LB	\$2.669	\$289,746.64
508.1500	SHEAR CONNECTORS		1.00	LS	\$24,000.000	\$24,000.00
514.1000	WATER REPELLENT, SILANE		15.00	GAL	\$160.000	\$2,400.00
531.1500	BEARING DEVICE ASSEMBLY, HIGH LOAD MULTI-ROTATIONAL		6.00	EACH	\$10,000.000	\$60,000.00
540.1000	PRECAST CONCRETE STRUCTURE		1.00	LS	\$34,500.000	\$34,500.00
620.9000	HAND RAILING		3,130.00	LF	\$50.000	\$156,500.00
SS007	SS-PLACEHOLDER-EA	(BRIDGE DRAIN, FRP)	2.00	EACH	\$5,000.000	\$10,000.00
SS012	SS-PLACEHOLDER-LF	(BRIDGE EXPANSION JOINT, STRIP SEAL)	40.00	LF	\$1,500.000	\$60,000.00
SS017	SS-PLACEHOLDER-SF	(ARCHITECTURAL BRIDGE PANELS)	5,790.00	SF	\$130.000	\$752,700.00

Vermont Agency of Transportation

South Burlington RAIZ(1)

Estimate FINAL - Engineer's Estimate

SS018	SS-PLACEHOLDER-SY	(POLYESTER POLYMER CONCRETE OVERLAY)	580.00 SY	\$280.000	\$162,400.00
				Category total:	\$5,731,453.64
				Grand Total:	\$15,903,390.66