

MREFPP Phase BU-1 Burlington - Opinion of Probable Cost

	Phase BU-1			
	Unit	Estimated Quantity	Bid Unit Price	Bid Price (Quantity x Bid Unit Price)
Mobilization/Demobilization	LS	1	1,500,000.00	1,500,000
Supplemental Construction Surveying	LS	1	40,000.00	40,000
Pre-Condition Roadway Assessment	LS	1	10,000.00	10,000
Post-Condition Roadway Assessment	LS	1	10,000.00	10,000
Quality Control	LS	1	30,000.00	30,000
Temporary Staging Areas (For all phases)	LS	1	50,000.00	50,000
Control of Water and Dewatering	LS	1	50,000.00	50,000
Traffic and Pedestrian Safety Control Measures	LS	1	25,000.00	25,000
Temporary Tree Protection Fencing	LF	1,500	3.00	4,500
Construction Fence (Orange)	LF	6,000	2.00	12,000
Borrow Site Management	LS	1	150,000.00	150,000
Rock Construction Entrance	EA	9	2,000.00	18,000
Temporary Erosion Control Blanket (All Types)	SY	20,000	4.00	80,000
Silt Fence (Type)	LF	40,000	3.00	120,000
Runoff Diversion Berm and Temporary Ditch	LF	10,000	2.00	20,000
Temporary Sedimentation Basin	CY	5,000	3.00	15,000
Inlet Protection (All Types)	EA	55	500.00	27,500
Temporary Rock Filter Dike	EA	25	1,500.00	37,500
Filter Sack	EA	21	2,000.00	42,000
Erosion Control Log (All Types)	LF	2,000	4.00	8,000
Concrete Washout	EA	4	2,500.00	10,000
Floatation Silt Curtain	LF	4,400	20.00	88,000
Temporary Seeding	AC	64	1,800.00	115,200
Temporary Mulching (All Types)	AC	32	400.00	12,800
Temporary Hydromulching	AC	32	2,500.00	80,000
Dust Control	DAY	60	500.00	30,000
Sawcut Pavement - All types	LF	3260	8.00	26,080
Remove Concrete, Rubble, Debris	CY	500	10.00	5,000
Remove Concrete Pavement	SY	1,600	12.00	19,200
Remove Concrete Pavement (8" Bridge Approach Slab)	SY	89	12.00	1,067
Remove Bituminous Pavement	SY	18,400	10.00	184,000
Remove Gravel	SY	4,500	4.00	18,000
Remove Fence (All Types)	LF	2660	8.00	21,280
Remove Existing Landscape	SF	500	20.00	10,000
Property Hazardous Substance Abatement	EA	5	10,000.00	50,000
Remove Structure (Residence/Dwelling)	EA	1	15,000.00	15,000
Remove Structure (Mobile Home)	EA	2	6,000.00	12,000
Remove Structure (Shed)	EA	4	500.00	2,000
Remove Structure (Garage, Well House, Restrooms)	EA	6	5,000.00	30,000
Remove and Relocate Structure (Batting Cage)	EA	1	8,000.00	8,000
Remove and Relocate Structure (Misc.)	EA	2	25,000.00	50,000
Adjust Culvert and End Section (Inlet Control Pipe to Pond near Park Road)	EA	1	10,000.00	10,000
Adjust Culvert and End Section (18" RCP Pond Outlet near Park Road)	EA	1	10,000.00	10,000
Remove and Reset Mailbox	EA	22	500.00	11,000
Remove Curb and Gutter (All Types)	LF	3,525	10.00	35,250
Remove Pipe (Water, All Sizes)	LF	3,400	20.00	68,000
Remove Pipe Service (Water Services, All Sizes)	EA	3	1,250.00	3,750
Remove and Plug Water Well	EA	1	1,500.00	1,500
Remove Water Valve	EA	10	150.00	1,500
Remove Pipe Service (Sanitary Sewer Service, All Sizes)	EA	3	1,500.00	4,500
Remove Pipe (Sanitary Sewer, All Sizes)	LF	990	20.00	19,800
Remove Pipe (Sanitary Sewer Forcemain, All Sizes)	LF	3400	15.00	51,000
Abandon Pipe (Sanitary Force Main, All Sizes)	LF	2500	15.00	37,500
Remove Pipe (Storm, All Sizes)	LF	1,850	30.00	55,500
Remove End Section (Flared End Section)	EA	7	300.00	2,100
Remove Pipe (Storm Sewer Forcemain, All Sizes)	LF	230	15.00	3,450
Abandon Pipe (Storm Force Main, All Sizes)	LF	310	15.00	4,650
Remove Manhole (Storm, Concrete)	EA	3	2,000.00	6,000
Remove Manhole (Sanitary, Concrete)	EA	7	2,000.00	14,000
Remove Manhole (Water, Concrete)	EA	1	2,000.00	2,000
Remove Catch Basin (Concrete)	EA	5	1,000.00	5,000

Remove Storm Pump House and Gatewell	LS	3	15,000.00	45,000
Remove and Salvage Fire Hydrant	EA	7	1,200.00	8,400
Remove, Salvage and Deliver Road Signage	LS	1	1,400.00	1,400
Clearing and Grubbing (All Types)	AC	52	5,000.00	260,000
Salvaged Topsoil	BCY	25,000	2.00	50,000
Salvage and Stockpile Riprap	BCY	2,800	50.00	140,000
Topsoil	ECY	26,000	10.00	260,000
Soil Scarification (6")	SY	80,000	1.00	80,000
Exploration Trench (All Types)	BCY	2,200	15.00	33,000
Over-Excavation (At Found Utilities or Unacceptable Subsoils, Allowance)	BCY	30,000	4.00	120,000
Levee Fill (At Found Utilities or Unacceptable Subsoils, Allowance)	BCY	30,000	15.00	450,000
Excavation (Remove Existing Levee)	BCY	40,000	8.00	320,000
Seepage Cutoff (Bentonite Slurry, 0' to 35' Depth)	SFF	258,000	12.00	3,096,000
Seepage Cutoff (Bentonite Slurry, 35.1' to 55' Depth)	SFF	23300	14.00	326,200
Seepage Cutoff (Bentonite Slurry, 55.1' to 65' Depth)	SFF	0	16.00	0
Seepage Cutoff (Bentonite Slurry, 65.1' to 80' Depth)	SFF	0	17.00	0
Excavation (Overbank)	BCY	47,000	8.00	376,000
Excavation (Unclassified at Riprap Subcut)	BCY	34,000	4.00	136,000
Excavation (Interior Drainage Grading)	BCY	3,000	4.00	12,000
Salvaged Fill (Unclassified or Overbank to Embankment at Disposal Area #1)	ECY	16,000	4.00	64,000
Salvaged Fill (Unclassified or Overbank to Embankment at Disposal Area #2)	ECY	11,200	4.00	44,800
Salvaged Fill (Unclassified or Overbank to Embankment at Disposal Area #3)	ECY	9,400	4.00	37,600
Haul and Dispose Excavated Material Off-Site (Unclassified)	BCY	92,000	10	920,000
Ecological Mitigation Revegetation (Wetland Creation)	AC	4.5	30,000.00	135,000
Excavation (Wetland Mitigation)	BCY	5,000	4.00	20,000
Haul and Dispose Excavated Material Off-Site (Wetland Mitigation Excavation)	BCY	5,000	10	50,000
Levee Fill	BCY	254,100	16.00	4,065,600
Aggregate Bedding (Type B1)	TON	800	50.00	40,000
Aggregate Bedding (Type B2)	TON	3,000	50.00	150,000
Aggregate Bedding (Type B3)	TON	6,300	50.00	315,000
Riprap (Type R20)	TON	1,300	65.00	84,500
Riprap (Type R80)	TON	9,400	65.00	611,000
Riprap (Type R270)	TON	21,700	65.00	1,410,500
Riprap (Type R470)	TON	4,500	75.00	337,500
Turf Reinforcement Mat (TRM)	SY	8,600	15.00	129,000
Articulated Concrete Block	SF	12,900	17.00	219,300
Roadway Excavation/Embankment	ECY	3,800	7.00	26,600
Roadway Fill Import	ECY	30,400	10.00	304,000
Haul Road Restoration	LS	1	30,000.00	30,000
Roadway Subgrade Preparation	SY	18,950	2.00	37,900
Geotextile Fabric (Roadway Type R-1)	SY	19,000	2.50	47,500
Aggregate Base Course (CL V)	TON	14,000	28.00	392,000
Bituminous Pavement (Superpave FAA 41 w/ PG 58-28 Asphalt Cement)	TON	4,500	90.00	405,000
Concrete Curb and Gutter (Type 1)	LF	2,200	26.00	57,200
Concrete Curb and Gutter (Type 2 Modified Mountable)	LF	2,700	26.00	70,200
Concrete Valley Gutter	LF	100	23.00	2,300
Concrete Driveway (6")	SY	1100	80.00	88,000
Concrete Sidewalk (4")	SY	360	65.00	23,400
Truncated Dome Panels	SF	77	45.00	3,465
Concrete Pedestrian Ramp	SF	80	45.00	3,600
Pavement Marking (4" Line)	LF	4100	1.00	4,100
Pavement Marking (24" Line)	LF	50	2.50	125
Pavement Marking (Message)	SF	4	25.00	100
Retaining Wall #1	SFF	1830	35.00	64,050
Retaining Wall #2	SFF	850	45.00	38,250
Chain Link Fence	LF	380	35.00	13,300
Casing Pipe (Water, HDPE 6")	LF	100	150.00	15,000
Casing Pipe (Water, 8")	LF	70	250.00	17,500
Casing Pipe (Water, 15")	LF	55	450.00	24,750
Casing Pipe (12") (Sewer)	LF	160	450.00	72,000
Casing Pipe (30" Storm Sewer)	LF	60	500.00	30,000
Casing Pipe (30" Storm Sewer, Steel)	LF	170	500.00	85,000
Casing Pipe (60" Storm Sewer)	LF		750.00	0
Casing Pipe (60" Storm Sewer, Steel)	LF	220	750.00	165,000
Gate Valve, Box and Riser (6")	EA	5	2,000.00	10,000
Gate Valve, Box and Riser (8")	EA	4	2,200.00	8,800
Fitting (DI Bend, 6", Water)	EA	16	425.00	6,800
Fitting (DI Bend, 8", Water)	EA	4	450.00	1,800
Fitting (DI Tee, 6")	EA	1	500.00	500
Fitting (DI Tee, 8")	EA	1	600.00	600
Fitting (8"x6" DI Tee)	EA	3	500.00	1,500
Fitting (2"x6" Saddle with Corp)	EA	1	500.00	500

Connect to Existing Water Service (Hose Bib)	EA	1	600.00	600
Connect to Existing Water Service	EA	6	600.00	3,600
Connect to Existing Water Main (6")	EA	7	1,000.00	7,000
Connect to Existing Water Main (8")	EA	3	1,200.00	3,600
Water Main (6", PVC)	LF	1380	45.00	62,100
Water Main (8", PVC)	LF	730	45.00	32,850
Water Service (1", Copper)	LF	300	10.00	3,000
Water Service (2", Copper)	LF	1410	20.00	28,200
Water Service (2" Curb Stop)	EA	3	800.00	2,400
Hose Bib	EA	1	500.00	500
Meter Vault (Water, 72" Dia., Complete)	EA	2	10,000.00	20,000
Hydrant (5")	EA	3	4,500.00	13,500
Connect to Existing Sanitary Sewer (Service)	EA	3	1,000.00	3,000
Connect to Existing Sanitary Sewer (8")	EA	2	1,200.00	2,400
Connect to Existing Sanitary Sewer (Manhole)	EA	2	1,500.00	3,000
Connect to Existing Sanitary Sewer (Force Main)	EA	8	1,200.00	9,600
Sanitary Sewer Service (4" PVC, Complete)	EA	3	1,200.00	3,600
Sanitary Sewer (6" PVC Sewer Main)	LF	380	35.00	13,300
Sanitary Sewer (8" PVC Sewer Main)	LF	620	40.00	24,800
Sanitary Sewer (6" PVC Force Main)	LF	1130	25.00	28,250
Sanitary Sewer (12" PVC Force Main)	LF	1150	40.00	46,000
Fitting (Sanitary Sewer Fitting, 6" DI Bend)	EA	6	250.00	1,500
Fitting (Sanitary Sewer Fitting, 12" DI Bend)	EA	5	1,200.00	6,000
Fitting (Sanitary Sewer Fitting, 12"x6" DI Tee)	EA	2	1,000.00	2,000
Gate Valve, Box, and Riser (6", Sanitary)	EA	4	2,000.00	8,000
Gate Valve, Box, and Riser (12", Sanitary)	EA	2	5,000.00	10,000
Meter Vault (Sanitary, 72" Dia., Complete)	EA	2	10,000.00	20,000
Air Release Valve, Complete	EA	1	2,000.00	2,000
Sanitary Sewer Cleanout (6", PVC)	EA	1	2,000.00	2,000
Sanitary Manhole (48" DIA, 8-12', RCP)	EA	3	4,000.00	12,000
Sanitary Manhole (48" DIA, 12'-20', RCP)	EA	4	5,000.00	20,000
Connect to Existing Storm Manhole (Storm)	EA	1	1,000.00	1,000
Storm Catch Basin Structure (3'x2')	EA	9	3,000.00	27,000
Storm Catch Basin Structure (24" Area Inlet)	EA	5	3,000.00	15,000
Storm Catch Basin Structure (6' x 2')	EA	4	4,000.00	16,000
Storm Catch Basin Structure (48" DIA Manhole)	EA	4	4,500.00	18,000
Storm Catch Basin Structure (48" DIA Manhole Area Inlet)	EA	4	4,500.00	18,000
Storm Catch Basin Structure (60" DIA Manhole)	EA	2	5,000.00	10,000
Storm Catch Basin Structure (60" DIA Manhole Area Inlet)	EA	2	5,000.00	10,000
Storm Catch Basin Structure (72" DIA Manhole)	EA	1	6,500.00	6,500
Storm Catch Basin Structure (84" DIA Manhole)	EA	1	7,500.00	7,500
Storm Manhole (48" DIA, RCP)	EA	6	4,500.00	27,000
Storm Manhole (60" DIA, RCP)	EA	10	5,000.00	50,000
Storm Manhole (72" DIA, RCP)	EA	1	6,000.00	6,000
Storm Manhole (84" DIA, RCP)	EA	1		
Storm Manhole (96" DIA, RCP)	EA	2	7,500.00	15,000
Storm Manhole (84" x 84" Box)	EA	2	9,000.00	18,000
Storm Sewer End Section (15" FES, RCP)	EA	4	920.00	3,680
Storm Sewer End Section (18" FES, RCP)	EA	13	950.00	12,350
Storm Sewer End Section (24" FES, RCP)	EA	0	1,000.00	0
Storm Sewer End Section (30" FES, RCP)	EA	2	1,200.00	2,400
Storm Sewer End Section (42" FES, RCP)	EA	6	1,500.00	9,000
Storm Sewer End Section (48" FES, RCP)	EA	2	2,000.00	4,000
Storm Sewer (18" DI Force Main)	LF	1710	80.00	136,800
Storm Sewer Bend (18" DI Bend)	EA	7	2,000.00	14,000
Storm Sewer Bend (30" RCP Bend)	EA	0	200.00	0
Gate Valve, Box and Riser (Storm Sewer, 18" Gate Valve)	EA	2	8,000.00	16,000
Storm Sewer (18" PVC, Slotted)	LF	890	50.00	44,500
Storm Sewer (15", RCP)	LF	820	75.00	61,500
Storm Sewer (18", RCP)	LF	3220	80.00	257,600
Storm Sewer (24", RCP)	LF	770	100.00	77,000
Storm Sewer (30", RCP)	LF	2450	120.00	294,000
Storm Sewer Auger and Jack (30", Auger and Jack, RCP)	LF	0	500.00	0
Storm Sewer (42", RCP)	LF	260	200.00	52,000
Storm Sewer (48", RCP)	LF	860	250.00	215,000
Storm Sewer Box Culvert (48" x 96" Concrete Box Culvert)	LF	70	600.00	42,000
Storm Sewer End Section (48"x96" Box End Section, Cast-in-Place)	EA	2	4,000.00	8,000
Controlled Low-Strength Material (CLSM)	CY	100	200.00	20,000
Barrier (Gate, Vehicle)	EA	13	1,600.00	20,800
Kittleston Pump Station, Complete	LS	1	650,000.00	650,000
Gatewell (Kittleston)	EA	1	50,000.00	50,000

Gatewell (BRC)	EA	1	50,000.00	50,000	
Pipe Insulation (Polystyrene Insulation)	SF	80	10.00	800	
Signs (Street, Traffic, Trails)	SF	50	500.00	25,000	
Barrier (Vehicle)	EA	7	3,000.00	21,000	
Barrier (Chain)	EA	2	3,500.00	7,000	
Franchise Utility Relocation (Electrical Utility Relocations)	LS	1	50,000.00	50,000	
Franchise Utility Relocation (Gas Utility Relocations)	LS	1	5,000.00	5,000	
Franchise Utility Relocation (Fiber Optic Utility Relocations)	LS	1	20,000.00	20,000	
Steel Sheet Pile (Cofferdam Sta. 15+00F and 276+00F)	SF	10,200	35.00	357,000	
Aggregate Base Course (CL V , Under Bit. Pedestrian and Bicycle Path)	TON	2,100	28.00	58,800	
Bituminous Pavement (Pedestrian and Bicycle Path, Bit Surfacing)	SY	9,645	50.00	482,250	
Aggregate Base Course (CL V, Under Bit. Pedestrian and Bicycle Path at BRC)	TON	65	28.00	1,820	
Bituminous Pavement (Pedestrian and Bicycle Path, Bit Surfacing at Burlington Recreation Comple	SY	657	50.00	32,850	
Trail Bench (All Types)	EA	7	4,000.00	28,000	
Levee Turf Seeding	AC	19	3,500.00	66,500	
High Performance Turf Seeding	AC	26	3,500.00	91,000	
Prairie Seeding	AC	6	3,500.00	21,000	
Wet Meadow Seeding	AC	13	3,500.00	45,500	
Sod	SY	1,650	5.00	8,250	
Hydromulching	AC	16	2,500.00	40,000	
Tree (1.5" B&B Deciduous)	EA	48	530.00	25,440	
Tree (4-6' Coniferous)	EA	6	530.00	3,180	
Landscape Rock	CY	10	150.00	1,500	
SiteLighting and Electrical Work	LS	1	100,000.00	100,000	
Remove Pipe Service (Type, Size)	EA	number			
Double Shredded Hardwood Mulch	CY	number			
Adjust Gate Valve	EA	3			
Adjust Manhole	EA	3			
Water Service Curb Stop	EA	NUMBER			
Concrete Pavement (8" Bridge Approach Slab)	SY	89	90.00		
Remove and Reinstall Irrigation System	LF	500			
Remove Trash, Debris, Misc. Items	LS	1			
Site Electrical Work Allowance (Pump Station Controls Integration by Preferred Controls)	LS	1	20,000.00	20,000	
Site Electrical Work Allowance (Pump Station Electrical Service)	LS	1	50,000.00	50,000	
			Anticipated Accuracy Range	Point Estimate	Anticipated Accuracy Range High
			Low		+10%
			-10%		
SUBTOTAL			21,622,128	24,024,587	26,427,045
CONTINGENCY (5%)				1,201,229	
SUBTOTAL - OPINION OF CONSTRUCTION COST			22,703,234	25,225,816	27,748,398