



TOWN OF SOUTH KINGSTOWN

MEMORANDUM

TO: James Rabbitt, Director of Planning

FROM: Richard Bourbonnais, PE, Town Engineer

SUBJECT: Village at Curtis Corner - Post Recording Bond - Engineers Estimate

DATE: March 8, 2021

Engineering is in receipt of the construction estimate for the future road at the Village at Curtis Corner (see attached). As provided, the estimate meets our requirements and provides sufficient estimated costs for surface pavement and incidentals to meet post-recording construction.

Atts: Land Development Performance Bond Calculation

cc: Jon R. Schock, Public Services Director;
Jason Parker, Principal Planner

Project Name: The Village at Curtis Corner
 Land Developer: 5A Builders, LLC
 Bond Estimate Prepared By: DIPrete Engineering
 Date: December 2020

Notes: 1. Items may be added to account for work specific to the project. 2. Consultant shall use prevailing wage when calculating the unit cost.

ITEM NO.	DESCRIPTION	UNIT	QUAN.	UNIT COST	PRE-RECORDING	POST RECORDING	TOTAL
					non-BOND ITEM COST	BOND ITEM COST	ITEM COST
2.0 Site Preparation							
	Clearing & Grubbing	ACRE	6.25	\$3,516.85	\$21,980.31		\$21,980.31
4.0 Soil Erosion Measures							
	Silt Fence STD 9.2.0	LF	2980	\$4.02	\$11,979.60		\$11,979.60
	Construction Entrance	SY	133	\$20.00	\$2,660.00		\$2,660.00
	Temp Sediment Trap	AC	0.262	\$41,600.00	\$10,899.20		\$10,899.20
	Temp Swale	LF	1037	\$10.00	\$10,370.00		\$10,370.00
5.0 Landscaping							
	Landscaping	TOTAL	1	\$35,000.00	\$0.00	\$35,000.00	\$35,000.00
	Residential Seeding	TOTAL	1	\$54,000.00	\$0.00	\$54,000.00	\$54,000.00
	Boulder Retaining Wall	SF	366	\$40.00	\$14,640.00		\$14,640.00
6.0 Storm Drainage							
	6" PVC Pipe (Perforated/Outlet Pipe on plans)	LF	145	\$20.00	\$2,900.00		\$2,900.00
	8" Ductile Iron Pipe	LF	17	\$75.00	\$1,275.00		\$1,275.00
	12" HDPE Pipe	LF	64	\$37.00	\$2,368.00		\$2,368.00
	12" Reinforced Concrete Pipe	LF	276	\$75.36	\$20,799.36		\$20,799.36
	15" Reinforced Concrete Pipe	LF	111	\$85.00	\$9,435.00		\$9,435.00
	18" Reinforced Concrete Pipe	LF	125	\$95.00	\$11,875.00		\$11,875.00
	24" Reinforced Concrete Pipe	LF	126	\$105.00	\$13,230.00		\$13,230.00
	Outlet Control Structure	EACH	1	\$3,500.00	\$3,500.00		\$3,500.00
	Concrete Weirs	CY	2	\$178.62	\$357.24		\$357.24
	Existing CB modification	VL	2	\$252.43	\$504.86		\$504.86
	OTDG-22	EACH	1	\$2,000.00	\$2,000.00		\$2,000.00
	6" HBI-6610	EACH	1	\$40.00	\$40.00		\$40.00
	LD Frame & Cover, RI STD 6.2.0 (OCS)	EACH	1	\$858.94	\$858.94		\$858.94
	HD Frame & Cover, RI STD 6.2.1	EACH	1	\$1,109.93	\$1,109.93		\$1,109.93
	Precast 5' Diameter Manhole	EACH	1	\$4,734.29	\$4,734.29		\$4,734.29
	Precast 4' Diameter Catch Basin	EACH	6	\$3,301.58	\$19,809.48		\$19,809.48
	Double Grate Catch Basin RI STD 3.3.4	EACH	4	\$5,100.00	\$20,400.00		\$20,400.00
	Frame & Grate RI STD 6.3.2	EACH	16	\$943.81	\$15,100.96		\$15,100.96
	Infiltration Pond Outfall Headwall	CY	2.8	\$1,869.05	\$5,233.34		\$5,233.34
	12" Flared End Section	EACH	2	\$832.89	\$1,665.78		\$1,665.78
	24" Flared End Section	EACH	1	\$1,340.00	\$1,340.00		\$1,340.00
	Riprap R-3, R-4, R-5	SY	184	\$92.55	\$17,029.20		\$17,029.20
	Filter Fabric for Riprap	SY	76	\$8.03	\$610.28		\$610.28
	Silt Sacks	EACH	1	\$220.00	\$220.00		\$220.00
	Stormwater BMPs						
	Sand Filter	CF	0.28	\$22,005.26	\$6,161.47		\$6,161.47
	Infiltration basin	ACRE	0.68	\$11,800.00	\$8,024.00		\$8,024.00
	Flush & Clean Catch Basins / DMH's	EACH	13	\$126.00	\$1,638.00		\$1,638.00
7.0 Sewer							
	Doghouse Sewer Manhole	EACH	1	\$7,144.55	\$7,144.55		\$7,144.55
	Tap Sewer Main (Lots 23/24)	EACH	2	\$1,000.00	\$2,000.00		\$2,000.00
	4' Diameter Sewer Manhole	EACH	6	\$3,800.00	\$22,800.00		\$22,800.00
	SMH Frame and Cover (TSK STD)	EACH	7	\$1,109.93	\$7,769.51		\$7,769.51
	Sewer Clean out	EACH	24	\$225.00	\$5,400.00		\$5,400.00
	6" SDR 35 PVC Sewer Pipe	LF	1,782	\$75.00	\$133,650.00		\$133,650.00
	8" SDR 35 PVC Sewer Pipe	LF	631	\$75.00	\$47,325.00		\$47,325.00
	Crushed Gravel (Sewer Pipe bedding & initial backfill)	CY	47	\$30.76	\$1,445.72		\$1,445.72
	Sewer Tests (Pressure, Vacuum, Mandrel)	EACH	1	\$750.00	\$750.00		\$750.00
	Traceable Sewer Tape	EACH	1	\$100.00	\$100.00		\$100.00
8.0 Potable Water							
	8" DI Water Main	LF	610	\$120.00	\$73,200.00		\$73,200.00
	Fire Hydrant	EACH	2	\$5,419.17	\$10,838.34		\$10,838.34
	8" Gate Valve and Box	EACH	3	\$1,500.00	\$4,500.00		\$4,500.00
	Tees / Reducers	EACH	1	\$110.00	\$110.00		\$110.00
	Blowoffs / Air Release Assembly	EACH	3	\$1,430.00	\$4,290.00		\$4,290.00
	Thrust Blocks	EACH	3	\$390.00	\$1,170.00		\$1,170.00
	1" copper service line	LF	1,890	\$57.00	\$107,730.00		\$107,730.00
	1" curb stop	EACH	24	\$670.44	\$16,090.56		\$16,090.56
	Conduct Leakage Test	EACH	1	\$1,251.67	\$1,251.67		\$1,251.67
	Sterilization of Water Main	EACH	1	\$3,760.00	\$3,760.00		\$3,760.00
	Traceable Water Tape	EACH	1	\$100.00	\$100.00		\$100.00
9.0 Electric							
	Underground Electric	LF	659	\$12.00	\$7,908.00		\$7,908.00
10.0 Natural Gas							
	Natural Gas	LS	1	\$25,000.00	\$25,000.00		\$25,000.00
11.0 Telephone Line Installation							
	Telephone Line	LF	659	\$12.00	\$7,908.00		\$7,908.00
12.0 Cable TV							
	Cable TV	LF	659	\$12.00	\$7,908.00		\$7,908.00
15.0 Road Base / Sidewalk Preparation							
	Bank Run Gravel (Roadway)	CY	121	\$25.80	\$3,121.80		\$3,121.80
	Process Gravel (Roadway)	CY	535	\$25.80	\$13,803.00		\$13,803.00
	Process Gravel (Sidewalk)	CY	56	\$25.80	\$1,444.80		\$1,444.80
17.0 Road Paving / Sidewalk							
	Bituminous Berm Standard 7.5.1	LF	1331	\$1.00	\$0.00	\$1,331.00	\$1,331.00
	2 1/2" Binder Course (Class 12.5 or 19)	TON	338	\$203.67	\$68,840.46		\$68,840.46
	1 1/2" Type I-I Bituminous Surface Course (Class 9.5)	TON	215	\$164.75	\$0.00	\$35,421.25	\$35,421.25
	Asphalt Emulsion Tack Coat	SY	2139	\$0.39	\$0.00	\$834.21	\$834.21
	Street Sweeping, Pre-Tack Coat, Pavement Marking	HSY	43	\$15.00	\$0.00	\$645.00	\$645.00
	Cement Concrete Sidewalk RI STD 43.1.0	CY	26	\$393.27	\$10,225.02		\$10,225.02
	Cement Concrete Driveway RI STD 43.5.0	CY	29	\$450.00	\$13,050.00		\$13,050.00
	Cement Concrete Curb Precast Straight RI STD 7.1.0	LF	41	\$35.66	\$1,462.06		\$1,462.06
	Cement Concrete Curb Precast Curved RI STD 7.1.0	LF	24	\$46.90	\$1,125.60		\$1,125.60
	Cement Concrete Wheelchair Ramp Curb RI STD 43.3.1	EA	2	\$572.74	\$1,145.48		\$1,145.48
	6' Precast Concrete Transition Curb RI STD 7.1.2	EA	2	\$348.68	\$697.36		\$697.36
	Full Depth Sawcut of Curtis Corner Rd	LF	252	\$2.88	\$725.76		\$725.76
	<u>Temp patch of Curtis Corner Road</u>						
	* Class 9.5 HMA	TON	4	\$164.75	\$659.00		\$659.00
	* Class 12.5 HMA	TON	6	\$151.14	\$906.84		\$906.84
	* Gravel Borrow Subbase Course	CY	9	\$38.00	\$342.00		\$342.00
18.0 Road Striping							
	12" Epoxy Resin Pavement Marking - White (Stop Bar)	LF	11	\$10.00	\$0.00	\$110.00	\$110.00
19.0 As-Builts & Monumentation							
	As-built record drawing preparation	EACH	1	\$7,500.00	\$5,000.00	\$2,500.00	\$7,500.00
	Install ROW Bounds (Granite)	EACH	14	\$600.00	\$0.00	\$8,400.00	\$8,400.00
	Install Iron Rods	EACH	22	\$100.00	\$0.00	\$2,200.00	\$2,200.00
	Construction Stakeout	EACH	1	\$3,500.00	\$3,500.00		\$3,500.00
20.0 Traffic Control							
	Furnish & Install Stop Sign & Post	EACH	1	\$350.00	\$0.00	\$350.00	\$350.00
	Furnish & Install Street Identifier Sign & Post	EACH	1	\$350.00	\$0.00	\$350.00	\$350.00
	Furnish & Install Speed Limit Sign & Post	EACH	1	\$350.00	\$0.00	\$350.00	\$350.00
	Furnish & Install Watch for Children Sign & Post	EACH	1	\$350.00	\$0.00	\$350.00	\$350.00
TOTAL PROJECT COST					\$870,947.77	\$141,841.46	\$1,012,789.23
						Total	\$1,012,789.23

*CONSTRUCTION COSTS BASED ON RHODE ISLAND DEPARTMENT OF TRANSPORTATION (RIDOT) WEIGHTED AVERAGE PRICES, DATA OBTAINED FROM SOUTH KINGSTOWN ENGINEERING DEPARTMENT, AND DIPRETE ENGINEERING ASSOCIATES LOCAL KNOWLEDGE

TOTAL CONSTRUCTION COST	\$ 1,012,789
ENGINEERING-Stakeout, As-Builts (5% of Const. Cost)	\$ 50,639
TOTAL PROJECT COST	\$ 1,063,429
15% CONTINGENCY	\$ 159,514
TOTAL	\$ 1,222,943
INITIAL ESTIMATED MAINTENANCE BOND (5% of total improvements)	\$ 53,200
INSPECTION FEE (2% OF BOND)	\$ 24,460