

Engineer's Final Cost Opinion
City of Norfolk, Department of Utilities

Project: Pump Station No. 10 Service Area - Phase IV
31st to 34th Streets Sewer and Water Upgrades
Date: September 16, 2008

Contingency Items				Engineer's Estimate			Tidewater Utilities			Chesapeake Bay			Innerview			JCB			Picon			WR Hall			Vico			Currents			TA Sheets			Suburban			Kevor					
ITEM NO.	ITEM DESCRIPTION	UNIT	TOTAL QTY.	ELIGIBLE/INELIGIBLE	ELIGIBLE QUANTITY	INELIGIBLE QUANTITY	UNIT PRICE	ELIGIBLE SUBTOTAL	INELIGIBLE SUBTOTAL	UNIT PRICE	ELIGIBLE SUBTOTAL	INELIGIBLE SUBTOTAL	UNIT PRICE	ELIGIBLE SUBTOTAL	INELIGIBLE SUBTOTAL	UNIT PRICE	ELIGIBLE SUBTOTAL	INELIGIBLE SUBTOTAL	UNIT PRICE	ELIGIBLE SUBTOTAL	INELIGIBLE SUBTOTAL	UNIT PRICE	ELIGIBLE SUBTOTAL	INELIGIBLE SUBTOTAL	UNIT PRICE	ELIGIBLE SUBTOTAL	INELIGIBLE SUBTOTAL	UNIT PRICE	ELIGIBLE SUBTOTAL	INELIGIBLE SUBTOTAL	UNIT PRICE	ELIGIBLE SUBTOTAL	INELIGIBLE SUBTOTAL	UNIT PRICE	ELIGIBLE SUBTOTAL	INELIGIBLE SUBTOTAL						
1	Select Material Backfill (Min. CBR=15)	CY	1,250	E	1,000	250	\$28.00	\$28,000.00	\$7,000.00	\$28.00	\$28,000.00	\$7,000.00	\$28.00	\$28,000.00	\$7,000.00	\$28.00	\$28,000.00	\$7,000.00	\$28.00	\$28,000.00	\$7,000.00	\$28.00	\$28,000.00	\$7,000.00	\$28.00	\$28,000.00	\$7,000.00	\$28.00	\$28,000.00	\$7,000.00	\$28.00	\$28,000.00	\$7,000.00	\$28.00	\$28,000.00	\$7,000.00	\$28.00	\$28,000.00	\$7,000.00			
2	Select Bedding, No. 57 Stone	TON	750	E	500	250	\$31.00	\$15,500.00	\$7,500.00	\$31.00	\$15,500.00	\$7,500.00	\$31.00	\$15,500.00	\$7,500.00	\$31.00	\$15,500.00	\$7,500.00	\$31.00	\$15,500.00	\$7,500.00	\$31.00	\$15,500.00	\$7,500.00	\$31.00	\$15,500.00	\$7,500.00	\$31.00	\$15,500.00	\$7,500.00	\$31.00	\$15,500.00	\$7,500.00	\$31.00	\$15,500.00	\$7,500.00	\$31.00	\$15,500.00	\$7,500.00			
3	Sheeting Left-In-Place	MBF	0	E	0	0	\$393.00	\$0.00	\$0.00	\$393.00	\$0.00	\$0.00	\$393.00	\$0.00	\$0.00	\$393.00	\$0.00	\$0.00	\$393.00	\$0.00	\$0.00	\$393.00	\$0.00	\$0.00	\$393.00	\$0.00	\$0.00	\$393.00	\$0.00	\$0.00	\$393.00	\$0.00	\$0.00	\$393.00	\$0.00	\$0.00	\$393.00	\$0.00	\$0.00	\$393.00	\$0.00	
4	Plumbing Permit Allowance	EA	20	E	10	10	\$46.80	\$468.00	\$468.00	\$46.80	\$468.00	\$468.00	\$46.80	\$468.00	\$468.00	\$46.80	\$468.00	\$468.00	\$46.80	\$468.00	\$468.00	\$46.80	\$468.00	\$468.00	\$46.80	\$468.00	\$468.00	\$46.80	\$468.00	\$468.00	\$46.80	\$468.00	\$468.00	\$46.80	\$468.00	\$468.00	\$46.80	\$468.00	\$468.00	\$46.80	\$468.00	\$468.00
5	Plumbing Repair Allowance	AC	0	E	0	0	\$1,000.00	\$0.00	\$0.00	\$1,000.00	\$0.00	\$0.00	\$1,000.00	\$0.00	\$0.00	\$1,000.00	\$0.00	\$0.00	\$1,000.00	\$0.00	\$0.00	\$1,000.00	\$0.00	\$0.00	\$1,000.00	\$0.00	\$0.00	\$1,000.00	\$0.00	\$0.00	\$1,000.00	\$0.00	\$0.00	\$1,000.00	\$0.00	\$0.00	\$1,000.00	\$0.00	\$0.00	\$1,000.00	\$0.00	
Total Contingency Items								\$43,968.00	\$15,218.00		\$43,968.00	\$15,218.00		\$43,968.00	\$15,218.00		\$43,968.00	\$15,218.00		\$43,968.00	\$15,218.00		\$43,968.00	\$15,218.00		\$43,968.00	\$15,218.00		\$43,968.00	\$15,218.00		\$43,968.00	\$15,218.00		\$43,968.00	\$15,218.00		\$43,968.00	\$15,218.00			
General Requirements																																										
6	Type I Modified Pavement	LF	4,370	E	1,463	2,907	\$40.00	\$58,520.00	\$116,280.00	\$27.00	\$39,501.00	\$78,489.00	\$43.00	\$62,909.00	\$125,001.00	\$30.00	\$43,890.00	\$87,210.00	\$27.00	\$39,501.00	\$78,489.00	\$43.00	\$62,909.00	\$125,001.00	\$37.00	\$55,155.10	\$109,593.90	\$80.40	\$117,625.20	\$233,722.80	\$49.00	\$71,887.00	\$142,443.00	\$50.00	\$73,150.00	\$145,350.00	\$67.00	\$98,021.00	\$194,769.00	\$65.00	\$95,095.00	\$188,955.00
7	Type II Pavement	LF	1,997	E	1,059	938	\$75.00	\$79,425.00	\$70,350.00	\$48.00	\$50,632.00	\$45,024.00	\$78.00	\$82,602.00	\$73,164.00	\$65.00	\$90,015.00	\$70,350.00	\$11.00	\$11,649.00	\$10,318.00	\$68.00	\$72,012.00	\$63,794.00	\$51.00	\$54,009.00	\$47,838.00	\$183.00	\$193,797.00	\$171,654.00	\$51.00	\$54,009.00	\$47,838.00	\$65.00	\$90,015.00	\$70,350.00	\$71.00	\$75,169.00	\$66,598.00	\$128.00	\$135,552.00	\$120,064.00
8	Temporary Asphalt Pavement Patch	SY	1,000	E	500	500	\$40.00	\$20,000.00	\$20,000.00	\$17.00	\$8,500.00	\$8,500.00	\$20.00	\$10,000.00	\$10,000.00	\$75.00	\$37,500.00	\$37,500.00	\$14.00	\$7,000.00	\$7,000.00	\$30.00	\$15,000.00	\$15,000.00	\$27.00	\$13,500.00	\$13,500.00	\$35.00	\$17,500.00	\$17,500.00	\$15.00	\$7,500.00	\$7,500.00	\$15.00	\$7,500.00	\$7,500.00	\$22.00	\$11,000.00	\$11,000.00			
9	Test Pits	EA	10	E	5	5	\$1,200.00	\$6,000.00	\$6,000.00	\$500.00	\$2,500.00	\$2,500.00	\$1,480.00	\$7,300.00	\$7,300.00	\$1,000.00	\$5,000.00	\$5,000.00	\$900.00	\$4,500.00	\$4,500.00	\$1,000.00	\$5,000.00	\$5,000.00	\$2,000.00	\$10,000.00	\$10,000.00	\$784.00	\$3,920.00	\$3,920.00	\$1,800.00	\$9,000.00	\$9,000.00	\$1,000.00	\$5,000.00	\$5,000.00	\$1,200.00	\$6,000.00	\$6,000.00	\$1,200.00	\$6,000.00	\$6,000.00
Total General Requirements								\$163,945.00	\$212,630.00		\$101,333.00	\$134,513.00		\$162,811.00	\$215,465.00		\$156,405.00	\$180,060.00		\$93,150.00	\$130,807.00		\$146,756.00	\$200,620.00		\$134,164.10	\$182,431.90		\$132,942.20	\$142,896.80		\$132,196.00	\$216,781.00		\$175,665.00	\$237,580.00		\$188,710.00	\$276,867.00		\$247,647.00	\$326,019.00
Sanitary Sewer System																																										
10	Pavement Milling	SY	12,000	E	12,000		\$5.00	\$60,000.00	\$0.00	\$1.00	\$12,000.00	\$0.00	\$2.00	\$24,000.00	\$0.00	\$2.50	\$30,000.00	\$0.00	\$4.00	\$48,000.00	\$0.00	\$1.70	\$20,400.00	\$0.00	\$2.00	\$24,000.00	\$0.00	\$3.70	\$44,400.00	\$0.00	\$3.00	\$36,000.00	\$0.00	\$3.00	\$36,000.00	\$0.00	\$1.76	\$21,120.00	\$0.00	\$2.40	\$28,800.00	
11	Alphalt Surface Course, S-5	TON	1,350	E	1,350		\$100.00	\$135,000.00	\$0.00	\$74.00	\$99,900.00	\$0.00	\$75.00	\$101,250.00	\$0.00	\$95.00	\$128,250.00	\$0.00	\$88.00	\$118,800.00	\$0.00	\$86.00	\$116,100.00	\$0.00	\$90.00	\$117,000.00	\$0.00	\$85.00	\$110,750.00	\$0.00	\$88.00	\$118,800.00	\$0.00	\$100.00	\$135,000.00	\$0.00	\$84.82	\$114,507.00	\$0.00	\$87.00	\$117,450.00	
12	8" PVC Man (SCR 26)	LF	2,175	E	2,175		\$90.00	\$195,750.00	\$0.00	\$87.00	\$189,225.00	\$0.00	\$74.00	\$160,950.00	\$0.00	\$70.00	\$153,750.00	\$0.00	\$75.00	\$163,125.00	\$0.00	\$70.00	\$157,500.00	\$0.00	\$75.00	\$168,750.00	\$0.00	\$80.00	\$174,000.00	\$0.00	\$78.00	\$161,100.00	\$0.00	\$80.00	\$180,000.00	\$0.00	\$76.00	\$165,900.00	\$0.00	\$76.00	\$168,600.00	
13	8" PVC C-903 Man	LF	76	E	76		\$1,000.00	\$76,000.00	\$0.00	\$200.00	\$15,200.00	\$0.00	\$88.00	\$6,688.00	\$0.00	\$100.00	\$7,600.00	\$0.00	\$110.00	\$8,360.00	\$0.00	\$100.00	\$7,600.00	\$0.00	\$110.00	\$8,360.00	\$0.00	\$120.00	\$9,120.00	\$0.00	\$110.00	\$8,360.00	\$0.00	\$110.00	\$8,360.00	\$0.00	\$110.00	\$8,360.00	\$0.00	\$110.00	\$8,360.00	
14	18" PVC C-905 Man	LF	271	E	271		\$150.00	\$40,650.00	\$0.00	\$375.00	\$101,625.00	\$0.00	\$283.00	\$76,713.00	\$0.00	\$300.00	\$81,300.00	\$0.00	\$300.00	\$81,300.00	\$0.00	\$195.00	\$52,845.00	\$0.00	\$300.00	\$81,300.00	\$0.00	\$171.50	\$46,475.50	\$0.00	\$495.00	\$134,145.00	\$0.00	\$225.00	\$60,975.00	\$0.00	\$235.00	\$63,685.00	\$0.00	\$550.00	\$149,050.00	
15	4" PVC Service Lateral (Public)	LF	1,705	E	1,705		\$100.00	\$170,500.00	\$0.00	\$44.00	\$74,820.00	\$0.00	\$80.00	\$136,400.00	\$0.00	\$75.00	\$127,875.00	\$0.00	\$75.00	\$127,875.00	\$0.00	\$74.00	\$126,170.00	\$0.00	\$50.00	\$85,250.00	\$0.00	\$41.80	\$71,269.00	\$0.00	\$75.00	\$127,875.00	\$0.00	\$75.00	\$127,875.00	\$0.00	\$75.00	\$127,875.00	\$0.00	\$77.00	\$131,285.00	
16	8" PVC Service Lateral (Public)	LF	290	E	290		\$110.00	\$31,900.00	\$0.00	\$60.00	\$17,400.00	\$0.00	\$81.00	\$23,610.00	\$0.00	\$75.00	\$21,750.00	\$0.00	\$85.00	\$24,375.00	\$0.00	\$80.00	\$24,000.00	\$0.00	\$60.00	\$18,000.00	\$0.00	\$47.80	\$13,862.00	\$0.00	\$195.00	\$58,550.00	\$0.00	\$80.00	\$24,000.00	\$0.00	\$84.00	\$24,360.00	\$0.00	\$93.50	\$27,115.00	
17	8" PVC Service Lateral (Public)	LF	290	E	290		\$120.00	\$34,800.00	\$0.00	\$100.00	\$29,000.00	\$0.00	\$84.00	\$24,360.00	\$0.00	\$200.00	\$40,000.00	\$0.00	\$85.00	\$24,375.00	\$0.00	\$100.00	\$20,000.00	\$0.00	\$100.00	\$20,000.00	\$0.00	\$56.70	\$17,144.00	\$0.00	\$200.00	\$40,000.00	\$0.00	\$85.00	\$24,375.00	\$0.00	\$85.00	\$24,375.00	\$0.00	\$100.00	\$20,000.00	
18	Pre-Cast Manhole (0-5.99 in depth, 4' diameter)	EA	6	E	6		\$4,500.00	\$27,000.00	\$0.00	\$7,000.00	\$42,000.00	\$0.00	\$3,000.00	\$18,000.00	\$0.00	\$4,000.00	\$24,000.00	\$0.00	\$6,000.00	\$36,000.00	\$0.00	\$3,800.00	\$22,800.00	\$0.00	\$6,500.00	\$39,000.00	\$0.00	\$1,997.00	\$8,987.00	\$0.00	\$5,000.00	\$22,500.00	\$0.00	\$5,000.00	\$22,500.00	\$0.00	\$4,900.00	\$22,400.00	\$0.00	\$5,500.00	\$24,900.00	
19	Pre-Cast Manhole (6-11.99 in depth, 4' diameter)	EA	9	E	9		\$9,000.00	\$81,000.00	\$0.00	\$10,000.00	\$90,000.00	\$0.00	\$4,100.00	\$36,900.00	\$0.00	\$6,500.00	\$58,500.00	\$0.00	\$9,000.00	\$81,000.00	\$0.00	\$4,600.00	\$41,400.00	\$0.00	\$12,000.00	\$108,000.00	\$0.00	\$2,684.00	\$24,156.00	\$0.00	\$7,500.00	\$67,500.00	\$0.00	\$8,000.00	\$72,000.00	\$0.00	\$10,575.00	\$95,175.00	\$0.00	\$8,400.00	\$75,600.00	
20	Pre-Cast Manhole (12 and deeper, 5' diameter)	EA	2	E	2		\$14,000.00	\$28,000.00	\$0.00	\$16,500.00	\$33,000.00	\$0.00	\$14,131.00	\$28,262.00	\$0.00	\$19,000.00	\$38,000.00	\$0.00	\$45,000.00	\$90,000.00	\$0.00	\$46,000.00	\$92,000.00	\$0.00	\$18,000.00	\$36,000.00	\$0.00	\$8,211.00	\$16,422.00	\$0.00	\$10,000.00	\$20,000.00	\$0.00	\$12,000.00	\$24,000.00	\$0.00	\$12,000.00	\$24,000.00	\$0.00	\$12,000.00	\$24,000.00	
21	Manhole Frame Seal	EA	17	E	17		\$800.00	\$13,600.00	\$0.00	\$400.00	\$6,800.00	\$0.00	\$500.00	\$8,500.00	\$0.00	\$400.00	\$6,800.00	\$0.00	\$400.00	\$6,800.00	\$0.00	\$400.00	\$6,800.00	\$0.00	\$400.00	\$6,800.00	\$0.00	\$56.70	\$1,144.00	\$0.00	\$400.00	\$8,0										