146 HARTFORD ROAD MANCHESTER, CONNECTICUT

OPINION O	F CONSTRUCTION COST	DATE PREPARED :	12-Nov-09	
Type:				
PROJECT:	Fyfeshire Pond Phase II BASIS: R.S. Means, Previous Project Cost Data			
LOCATION:	Bolton, MA			
DESCRIPTION	N: Alternative 1.1			
DRAWING NO	). C1.1	ESTIMATOR: DRB/KCB	CHECKED BY : PWM	

OPINION OF CONSTRUCTION COST - BUDGET: An opinion of cost based on design information available early in the design process. It can be used by an owner to establish his budget. It is normally expected that an estimate of this type would be accurate to within plus 30% or minus 15%. Since Fuss & O'Neill has no control over the cost of labor, materials, equipment or services furnished by others, or over the Contractor(s)' methods of determining prices, or over competitive bidding or market conditions, Fuss & O'Neill's opinion of probable Total Project Costs and Construction Costs are made on the basis of Fuss & O'Neill's experience and qualifiations and represent Fuss & O'Neill's best judgment as a nexperienced and qualified professional engineer, familiar with the construction industry; but Fuss & O'Neill cannot and does not guarantee that proposals, bids or actual Total Project or Construction Costs will not vary from opinions of probable cost prepared by Fuss & O'Neill. If prior to the bidding or negotiating Phase the Owner wishes greater assurance as to Total Project or Construction Costs. the Owner shall employ an independent cost estimator.

	shall employ an independent cost estimator.				
ITEM	ITEM	UNIT	NO.	PER	TOTAL
NO.		MEAS.	UNITS	UNIT	COST
SOIL AND ER	OSION CONTROL				
	Sedimentation and Erosion Control	L.S.	1	\$ 1,500.00	\$1,500.00
WATER OOM	TDO!				
WATER CONT	Control of Water	L.S.	1	\$ 32,000.00	\$32,000.00
	Dewatering	L.S.	1	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	\$26,000.00
				, , , , , , , , , , , , , , , , , , , ,	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
SITE PREPAR	RATION WORK				
	Access Road Improvements	L.S.	1		\$3,500.00
	Clearing and Grubbing	EA	20	\$ 475.00	\$9,500.00
DEMOLITION					
	Concrete (assumes off-site disposal)	C.Y.	21.5	\$ 750.00	\$16,125.00
	Disassemble Rubble Masonry Wall	C.F.	900	\$ 4.50	\$4,050.00
EARTHWORK		0.1/	470	ф 45.00	<b>₽</b> 0 550 00
	Sediment excavation (assumes on-site disposal)  Embankment excavation with on-site stockpiling for reuse	C.Y.	170 500		\$2,550.00 \$7,500.00
	Reconstruct embankment	C.Y.	500		\$10,000.00
		5.1.	500	20.00	\$ 70,000.00
DRAINAGE					
	Toe Drain, 6-inch perf. PVC	L.F.	60		\$2,400.00
	Sand drainage layer	C.Y.	25		\$825.00
	Filter Fabric or Reverse Filter	S.F.	500	\$ 6.75	\$3,375.00
MASONRY					
	Reconstruct dry placed stone masonry wall	C.F.	900	\$ 12.00	\$10,800.00
ARMOR UPST					
	Filter Fabric	S.F.	650		\$3,250.00
	Bedding Material, 12-inch layer Riprap, 12-inch layer	C.Y.	24 24	\$ 40.00 \$ 50.00	\$960.00 \$1,200.00
	Niprap, 12-inciriayei	0.1.	24	ψ 30.00	φ1,200.00
CAST-IN-PLA	CE SPILLWAY				
	Reinforced Concrete Spillway Structure	C.Y.	40	\$ 500.00	\$20,000.00
	Cut-off walls	C.Y.	10	\$ 650.00	\$6,500.00
	Stoplogs	S.F.	12		
	Inlet Pipe - 12-inch CLDIP Trash-rack	L.F.	40	\$ 60.50 \$ 600.00	\$2,420.00 \$600.00
	Hold-down blocks	EA	3	\$ 350.00	\$1,050.00
	Unseating head canal gate	EA	1		\$2,500.00
	Footbridge	L.S.	1	\$ 12,000.00	\$12,000.00
ACCESS ROA		1.0	4	¢ 20,000,00	¢20,000,00
	Access from Wattaquadock Hill Road  Permanent Access Easement from Abutter	LS LS	1		\$38,000.00 \$20,000.00
SITE STABILI	ZATION WORK			Ψ 20,000.00	Ψ20,000.00
	Seed embankment	S.F.	2500	\$ 0.20	\$500.00
	Wetland Restoration	S.F.	100	\$ 2.50	\$250.00
GENERAL CO		1.0	4	¢ 20,000,00	\$20,000,00
	Mobilization & Demobilization	L.S.	1	\$ 20,000.00	\$20,000.00
ENGINEERING	G/PERMITTING	1			
	Engineering	L.S.	1	\$ 60,000.00	\$60,000.00
	Permitting	1			
	Wetland Protection Act	EA	1		\$6,000.00
	401 Water Quality Certification  Endangered Species	EA EA	1		\$3,000.00 \$4,000.00
	Dam Safety Permit	EA	1	, , , , , , ,	\$2,000.00
	FEMA LOMR	EA	1		\$7,000.00
	Construction Admin	L.S.	1		\$30,000.00
	Dam Safety Inspections every 5 years for 50 years	Present Value	P/A, 4%, 50yr	\$5000/5yr	\$19,800.00
	Annual Maintenance for 50 years	Present Value	P/A, 4%, 50yr	\$1000/yr	\$21,500.00
	CUPTOTAL				0445-55
	SUBTOTAL CONTINCENCY (2007)	+			\$412,884.20
	CONTINGENCY (20%)				\$82,576.84
	TOTAL COST (ROUNDED TO NEAREST \$1,000)				\$495,000.00

146 HARTFORD ROAD MANCHESTER, CONNECTICUT

OPINION OF	CONSTRUCTION COST	DATE PREPARED :	12-Nov-09	
Type:	Budget			
PROJECT :	Fyfeshire Pond Phase II	BASIS: R.S. Means, Previous Project Cost Data		
LOCATION:	Bolton, MA			
DESCRIPTION	: Alternative 1.2			
DRAWING NO.	C1.2	ESTIMATOR: DRB/KCB	CHECKED BY : PWM	

OPINION OF CONSTRUCTION COST - BUDGET: An opinion of cost based on design information available early in the design process. It can be used by an owner to establish his budget. It is normally expected that an estimate of this type would be accurate to within plus 30% or minus 15%. Since Fuss & O'Neill has no control over the cost of labor, materials, equipment or services furnished by others, or over the Contractor(s)' methods of determining prices, or over competitive bidding or market conditions, Fuss & O'Neill's opinion of probable Total Project Costs and Construction Costs are made on the basis of Fuss & O'Neill's experience and qualifiations and represent Fuss & O'Neill's opinion updates an experienced and qualified professional engineer, familiar with the construction industry; but Fuss & O'Neill cannot and does not guarantee that proposals, bids or actual Total Project or Construction Costs will not vary from opinions of probable cost prepared by Fuss & O'Neill. If prior to the bidding or negotiating Phase the Owner wishes greater assurance as to Total Project or Construction Costs. the Owner shall emolohy an independent cost estimator.

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ITEM	ITEM	UNIT	NO.	PER	TOTAL
NO.		MEAS.	UNITS	UNIT	COST
SOIL AND ER	OSION CONTROL	1.0	4	<b></b>	£4 500 00
	Sedimentation and Erosion Control	L.S.	1	\$ 1,500.00	\$1,500.00
WATER CON	TROI			1	
WATER CON	Control of Water	L.S.	1	\$ 32,000.00	\$32,000.00
	Dewatering	L.S.	1	\$ 18,000.00	\$18,000.00
			-	·	<b>4</b> 10,000100
SITE PREPAR	ATION WORK			ĺ	
	Access Road Improvements	L.S.	1	3,500.00	\$3,500.00
	Clearing and Grubbing	EA	20	\$ 475.00	\$9,500.00
DEMOLITION	T				
	Concrete (assumes off-site disposal)	C.Y.	21.5		\$16,125.00
	Disassemble Rubble Masonry Wall	C.F.	900	\$ 4.50	\$4,050.00
FARTINACRI					
EARTHWORK		CV	470	¢ 45.00	¢0 EE0 00
	Sediment excavation (assumes on-site disposal)	C.Y.	170 500		\$2,550.00
	Embankment excavation with on-site stockpiling for reuse	C.Y.	500		\$7,500.00 \$10,000.00
	Reconstruct embankment	U.1.	500	φ 20.00	φ10,000.00
DRAINAGE		+		<del>                                     </del>	
	Toe Drain, 6-inch perf. PVC	L.F.	60	\$ 40.00	\$2,400.00
	Sand drainage layer	C.Y.	25		\$825.00
	Filter Fabric or Reverse Filter	S.F.	500		\$3,375.00
MASONRY					
	Reconstruct dry placed stone masonry wall	C.F.	900	12.00	\$10,800.00
ARMOR UPST					
	Filter Fabric	S.F.	700		\$3,500.00
	Bedding Material, 12-inch layer	C.Y.	26	\$ 40.00	\$1,040.00
	Riprap, 12-inch layer	C.Y.	26	\$ 50.00	\$1,300.00
DDECACE OD	H I MAN				
PRECAST SP		1.0		<b></b>	<b>#04.000.00</b>
	Reinforced Concrete Spillway Structure Cut-off walls	L.S. C.Y.	10	\$ 21,600.00 \$ 650.00	\$21,600.00 \$6,500.00
	Cast-in-place weir	C.Y.	10	\$ 500.00	\$500.00
	Stoplogs	S.F.	12	\$ 19.10	\$229.20
	Footbridge	L.S.	1	\$ 12,000.00	\$12,000.00
	. colonago	2.0.	·	ψ .2,000.00	ψ.2,000.00
ACCESS ROA	D				
	Access from Wattaquadock Hill Rd.	LS	1	\$ 38,000.00	\$38,000.00
	Permanent Access Easement from Abutter	LS	1	20,000.00	\$20,000.00
SITE STABILI	ZATION WORK				
	Seed embankment	S.F.	2500		\$500.00
	Wetland Restoration	S.F.	100	\$ 2.50	\$250.00
GENERAL CO				05.000.00	005 000 00
	Mobilization & Demobilization	L.S.	1	25,000.00	\$25,000.00
ENCINEEDING	 G/PERMITTING	-		<del>                                     </del>	
LINGINEERING		1.0	1	\$ 60,000.00	\$60,000.00
	Engineering Permitting	L.S.		Ψ 00,000.00	φου,υυυ.υυ
	Wetland Protection Act	FA	1	\$ 6,000.00	\$6,000.00
	401 Water Quality Certification	EA	1	,	\$3,000.00
	Endangered Species	EA	1		\$4,000.00
	Dam Safety Permit	EA	1		\$2,000.00
	Construction Admin	L.S.	1		\$30,000.00
	Dam Safety Inspections every 5 years for 50 years		P/A, 4%, 50yr	\$5000/5yr	\$19,800.00
	Annual Maintenance for 50 years	Present Value		\$1000/yr	\$21,500.00
	SUBTOTAL				\$398,844.20
	IOONITINIOENOV (000)		1		A=0 =00 0.4
	CONTINGENCY (20%) TOTAL COST (ROUNDED TO NEAREST \$1,000)				\$79,768.84 \$479,000.00

146 HARTFORD ROAD MANCHESTER, CONNECTICUT

OPINION OF	CONSTRUCTION COST	DATE PREPARED :	12-Nov-09		
Туре:	, ,				
PROJECT :	DJECT: Fyfeshire Pond Phase II BASIS: R.S. Means, Previous Project Cost Data				
LOCATION:	Bolton, MA	·			
DESCRIPTION	: Alternative 2.1				
DRAWING NO.	. C2.1	ESTIMATOR: DRB/KCB	CHECKED BY : PWM		

PINION OF CONSTRUCTION COST - BUDGET: An opinion of cost based on design information available early in the design process. It can be used by an owner to establish his budget. It is normally expected that an estimate of this type would be accurate to within plus 30% or minus 15%. Since Fuss & O'Neill has no control over the cost of labor, materials, equipment or services furnished by others, or over the Contractor(s)' methods of determining prices, or over competitive bidding or market conditions, Fuss & O'Neill's opinion of probable Total Project Costs and Construction Costs are made on the basis of Fuss & O'Neill's experience and qualified professional engineer, familiar with the construction industry, but Fuss & O'Neill cannot and does not guarantee that proposals, bids or actual Total Project or Construction Costs will not vary from opinions of probable cost prepared by Fuss & O'Neill. If prior to the bidding or negotiating Phase the Owner wishes greater assurance as to Total Project or Construction Costs. the Owner shall employ an independent cost estimator.

ITEM	ITEM	UNIT	NO.	PER	TOTAL
NO.	II LIVI	MEAS.	UNITS	UNIT	COST
	ROSION CONTROL	IVILAG.	GINITO	OIAII	0001
JUL AND LI	Sedimentation and Erosion Control	L.S.	1	\$ 1,500.00	\$1,500.0
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WATER CON	TROL				
	Control of Water	L.S.	1		\$32,000.0
	Dewatering	L.S.	1	\$ 26,000.00	\$26,000.0
SITE PREPA	RATION WORK				
	Access Road Improvements	L.S.	1	-,	\$3,500.0
	Clearing and Grubbing	EA	20	\$ 475.00	\$9,500.0
DEMOLITION	 				
DEWICETTION	Concrete (assumes off-site disposal)	C.Y.	21.5	\$ 750.00	\$16,125.0
	Disassemble Rubble Masonry Wall	C.F.	900	\$ 4.50	\$4,050.0
	Biodosciniste (Cassie Masority Wall	O.I .	300	Ψ 4.00	ψ4,000.0
EARTHWOR	Κ΄				
	Sediment excavation (assumes on-site disposal)	C.Y.	170	\$ 15.00	\$2,550.0
	Embankment excavation with on-site stockpiling for reuse	C.Y.	500	\$ 15.00	\$7,500.0
	Reconstruct embankment	C.Y.	650	\$ 20.00	\$13,000.0
DRAINAGE	T. D				
	Toe Drain, 6-inch perf. PVC	L.F.	60		\$2,400.0
	Sand drainage layer	C.Y.	18		\$594.0
	Filter Fabric or Reverse Filter	S.F.	240	\$ 6.75	\$1,620.0
ARMOR LIDS	TREAM FACE			+	
ANTION UPS	Filter Fabric	S.F.	770	\$ 5.00	\$3,850.0
	Bedding Material, 12-inch layer	C.Y.	28	\$ 40.00	\$1,120.0
	Riprap, 12-inch layer	C.Y.	28	\$ 50.00	\$1,400.0
	1 11				Ţ.,.30.0·
CAST-IN-PLA	ACE SPILLWAY			<u> </u>	
	Reinforced Concrete Spillway Structure	C.Y.	54	\$ 500.00	\$27,000.0
•	Cut-off walls	C.Y.	10	\$ 650.00	\$6,500.0
	Inlet Pipe - 12-inch CLDIP	L.F.	40		\$2,420.0
	Trash-rack	L.S.	1	\$ 600.00	\$600.0
	Hold-down blocks	EA	3		\$1,050.0
	Unseating head canal gate	EA	1	\$ 2,500.00	\$2,500.0
	Footbridge	L.S.	1	\$ 12,000.00	\$12,000.0
ACCESS RO	AD			<del>                                     </del>	
AUCEUU NU	Access from Wattaquadock Hill Road	LS	1	\$ 38,000.00	\$38,000.0
	Permanent access easement from abutter	LS	1	\$ 20,000.00	\$20,000.0
SITE STABIL	IZATION WORK		·	÷ 20,000.00	Ψ=0,000.0
	Seed embankment	S.F.	2500	\$ 0.20	\$500.0
	Wetland Restoration	S.F.	450		\$1,125.0
GENERAL C					
	Mobilization & Demobilization	L.S.	1	20,000.00	\$20,000.0
				ļ	
ENGINEERIN	G/PERMITTING			ф. 00.000.00	<b>#</b> 00 000 7
	Engineering	L.S.	1	\$ 60,000.00	\$60,000.0
	Permitting Wetland Protection Act	EA	1	\$ 6,000.00	\$6,000.0
	401 Water Quality Certification	EA	1		\$6,000.0
	Endangered Species	EA		\$ 4,000.00	\$4,000.0
	Dam Safety Permit	EA	1		\$2,000.0
	Construction Admin	L.S.	1	\$ 30,000.00	\$30,000.0
	Dam Safety Inspections every 5 years for 50 years	_	P/A, 4%, 50yr	\$5000/5yr	\$19.800.0
	Annual Maintenance for 50 years		P/A, 4%, 50yr	\$1000/yr	\$21,500.0
			, ., .,	1	. ,
	SUBTOTAL				\$404,704.0
	CONTINGENCY (20%)				\$80,940.8
	TOTAL COST (ROUNDED TO NEAREST \$1,000)				\$486,000.0
			RANGE	\$413,000.00	\$632,000.0

146 HARTFORD ROAD MANCHESTER, CONNECTICUT

OPINION O	F CONSTRUCTION COST	DATE PREPARED :	12-Nov-09	
Type:	Budget			
PROJECT:	yfeshire Pond Phase II BASIS: R.S. Means, Previous Project Cost Data			
LOCATION:	Bolton, MA	]		
DESCRIPTION	N: Alternative 2.2			
DRAWING NO	). C2.2	ESTIMATOR: DRB/KCB	CHECKED BY : PWM	

OPINION OF CONSTRUCTION COST - BUDGET: An opinion of cost based on design information available early in the design process. It can be used by an owner to establish his budget. It is normally expected that an estimate of this type would be accurate to within plus 30% or minus 15%. Since Fuss & O'Neill has no control over the cost of labor, materials, equipment or services furnished by others, or over the Contractor(s)' methods of determining prices, or over competitive bidding or market conditions, Fuss & O'Neill's opinion of probable Total Project Costs and Construction Costs are made on the basis of Fuss & O'Neill's experience and qualified professional engineer, familiar with the construction industry, but Fuss & O'Neill cannot and does not guarantee that proposals, bids or actual Total Project or Construction Costs will not vary from opinions of probable cost prepared by Fuss & O'Neill. If prior to the bidding or negotiating Phase the Owner wishes greater assurance as to Total Project or Construction

ITEM	ITCM	UNIT	NO	DED	TOTAL
NO.	ITEM	MEAS.	NO. UNITS	PER UNIT	TOTAL COST
	ROSION CONTROL	IVIEAS.	UNITS	UNII	0031
SOIL AND ER	Sedimentation and Erosion Control	L.S.	1	\$ 1,500.00	\$1,500.0
	Sedimentation and Erosion Control	L.S.	'	φ 1,300.00	φ1,500.0
WATER CON	TROI				
MATER COR	Control of Water	L.S.	1	\$ 32,000.00	\$32,000.00
	Dewatering	L.S.	1	\$ 21,000,00	\$21,000.00
	<u> </u>			, , , , , , , , ,	, , , , , , , , , , , , , , , , , , , ,
SITE PREPAI	RATION WORK				
	Permanent Access Easement	Acre	0.5		
	Access Road Improvements	L.S.	1	3,500.00	\$3,500.0
	Clearing and Grubbing	EA	20	\$ 475.00	\$9,500.0
DEMOLITION					
	Concrete (assumes off-site disposal)	C.Y.	21.5		\$16,125.0
	Disassemble Rubble Masonry Wall	C.F.	900	\$ 4.50	\$4,050.0
EARTHWORK					
EARTHWORI		C.Y.	170	\$ 15.00	\$2,550.0
	Sediment excavation (assumes on-site disposal)  Embankment excavation with on-site stockpiling for reuse	C.Y.	500		\$2,550.0
	Reconstruct embankment	C.Y.	650		\$13,000.0
	reconstruct embantiment	0.1.	030	Ψ 20.00	ψ15,000.0
DRAINAGE				+	
	Toe Drain, 6-inch perf. PVC	L.F.	60	\$ 40.00	\$2,400.0
	Sand drainage layer	C.Y.	18		\$594.0
	Filter Fabric or Reverse Filter	S.F.	240	\$ 6.75	\$1,620.0
ARMOR UPS	TREAM FACE				
	Filter Fabric	S.F.	770	\$ 5.00	\$3,850.00
	Bedding Material, 12-inch layer	C.Y.	28	\$ 40.00	\$1,120.00
	Riprap, 12-inch layer	C.Y.	28	\$ 50.00	\$1,400.00
PRECAST SF					
	Reinforced Concrete Spillway Structure	L.S.	1	33,600.00	\$33,600.0
	Cut-off walls	C.Y.	10	650.00	\$6,500.0
	Cast-in-place weir	C.Y.	1 12	500.00 \$ 19.10	\$500.0
	Stoplogs Footbridge	S.F. L.S.	12	\$ 19.10 \$ 12,000.00	\$229.20 \$12,000.00
	Footbridge	L.S.	'	\$ 12,000.00	\$12,000.00
ACCESS RO	AD.				
ACCEDO NO	Access from Wattaquadock Hill Rd.	LS	1	\$ 38.000.00	\$38,000.0
	Permanent access easement from abutter	LS	1	20.000.00	\$20,000.0
SITE STABIL	IZATION WORK				4_0,000.0
	Seed embankment	S.F.	2500	\$ 0.20	\$500.0
	Wetland Restoration	S.F.	450	\$ 2.50	\$1,125.0
GENERAL CO					
	Mobilization & Demobilization	L.S.	1	25,000.00	\$25,000.0
ENGINEERIN	G/PERMITTING				
	Engineering	L.S.	1	\$ 60,000.00	\$60,000.0
	Permitting				
	Wetland Protection Act	EA	1	,	\$6,000.0
	401 Water Quality Certification	EA	1		\$3,000.0
	Endangered Species	EA EA	1		\$4,000.0
	Dam Safety Permit Construction Admin	L.S.	1	\$ 2,000.00	\$2,000.0 \$30,000.0
	Dam Safety Inspections every 5 years for 50 years		P/A, 4%, 50yr	\$5000/5yr	\$30,000.0
	Annual Maintenance for 50 years	Present Value		\$1000/yr	\$21,500.0
	particular maintenance for 50 years	i resent value	, , <del>, ,</del> ,0, Juyl	ψ1000/yl	Ψ21,000.0
	SUBTOTAL				\$405,463.2
	CONTINGENCY (20%)			<del>                                     </del>	\$81,092.6
	TOTAL COST (ROUNDED TO NEAREST \$1,000)			+	\$487,000.0
			RANGE		+ , 5 5 5 . 0

146 HARTFORD ROAD MANCHESTER, CONNECTICUT

OPINION OF	CONSTRUCTION COST	DATE PREPARED :	12-Nov-09	
Туре:	Budget			
PROJECT :	JECT: Fyfeshire Pond Phase II BASIS: R.S. Means, Previous Project Cost Data			
LOCATION:	Bolton, MA			
DESCRIPTION	: Alternative 3.0			
DRAWING NO.	. C3.0	ESTIMATOR: DRB/KCB	CHECKED BY : PWM	

OPINION OF CONSTRUCTION COST - BUDGET: An opinion of cost based on design information available early in the design process. It can be used by an owner to establish his budget. It is normally expected that an estimate of this type would be accurate to within plus 30% or minus 15%. Since Fuss & O'Neill has no control over the cost of labor, materials, equipment or services furnished by others, or over the Contractor(s)' methods of determining prices, or over competitive bidding or market conditions, Fuss & O'Neill's opinion of probable Total Project Costs and Construction Costs are made on the basis of Fuss & O'Neill's experience and qualifiations and represent Fuss & O'Neill's best judgment as an experienced and qualified professional engineer, familiar with the construction industry, but Fuss & O'Neill cannot and does not guarantee that proposals, bids or actual Total Project or Construction Costs will not vary from opinions of probable cost prepared by Fuss & O'Neill. If prior to the bidding or negotiating Phase the Owner wishes greater assurance as to Total Project or Construction Costs, the Owner shall employ an independent cost estimator.

ITEM	ITEM	UNIT	NO.	PER	TOTAL
NO.		MEAS.	UNITS	UNIT	COST
SOIL AND EF	ROSION CONTROL				
	Sedimentation and Erosion Control	L.S.	1	\$ 1,500.00	\$1,500.0
WATER CON	NTROL				
	Control of Water	L.S.	1	\$ 32,000.00	\$32,000.0
	Dewatering	L.S.	1	\$ 7,500.00	\$7,500.0
SITE PREPA	RATION WORK				
	Access Improvements	L.S.	1	3,500.00	\$3,500.
	Clearing and Grubbing	EA	20	\$ 475.00	\$9,500.
DEMOLITION	N				
	Concrete (assumes off-site disposal)	C.Y.	21.5		\$16,125.0
	Disassemble Rubble Masonry Wall	C.F.	900	\$ 4.50	\$4,050.
EARTHWOR					
	Sediment excavation (assumes on-site disposal)	C.Y.	500		\$7,500.
	Embankment excavation and haul offsite	C.Y.	350		\$8,750.
	Armor Bedding	C.Y.	130		\$5,850.
	Channel Armor	C.Y.	130	45.00	\$5,850.
	Archored logs	EA	11	250.00	\$2,750.
	Boulder clusers	EA	30	450.00	\$13,500.0
PLANTINGS					
	Live Stakes, assorted native species	SF	1600	0.70	\$1,120.
	Plant with Wetland Seed Mix	SF	5000	0.05	\$232.
GENERAL C	ONDITIONS			-	
SENERAL C	Mobilization & Demobilization	L.S.	1	22 500 00	<b>#22 F00</b>
	Mobilization & Demobilization	L.S.		22,500.00	\$22,500.
ENGINEEDIN	I NG/PERMITTING				
LINGINELKIIN	Engineering	L.S.	1	45,000.00	\$45,000.
	Permitting	L.O.		43,000.00	Ψ45,000.
	Wetland Protection Act	EA	1	6,000.00	\$6,000.
	401 Water Quality Certification	EA	1	3,000.00	\$3,000.
	404 Compliance (Assume Cat. II PGP only)	EA	1	4,000.00	\$4,000
	MEPA (Assume EENF only)	EA	1	7,000.00	\$7,000
	Endangered Species	EA	1	4,000.00	\$4,000
	Dam Safety Permit	EA	1	2,000.00	\$2,000
	FEMA LOMR	EA	1	\$ 7,000.00	\$7,000.
	Construction Admin	L.S.	1	30,000.00	\$30,000.
	Long Term Monitoring	Year	2	5,000.00	\$10,000.
	Maintenance	Year	2	5,000.00	\$10,000.
			_	2,222.00	Ţ:2,300.
	SUBTOTAL			† †	\$270,227.
	CONTINGENCY (20%)				\$54,045.
	TOTAL COST (ROUNDED TO NEAREST \$1,000)			† †	\$324,000.
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	•	RANGE	\$275,000.00	\$421,000.

146 HARTFORD ROAD MANCHESTER, CONNECTICUT

OPINION O	F CONSTRUCTION COST	DATE PREPARED	: 12-Nov-09		
Type:	Type: Budget				
PROJECT:	Fyfeshire Pond Phase II	BASIS: R.S. Means, Previou	s Project Cost Data		
LOCATION:	Bolton, MA				
DESCRIPTION	: Alternative 4.0				
DRAWING NO	. C4.0	ESTIMATOR: DRB/KCB	CHECKED BY : PWM		

OPINION OF CONSTRUCTION COST - BUDGET: An opinion of cost based on design information available early in the design process. It can be used by an owner to establish his budget. It is normally expected that an estimate of this type would be accurate to within plus 30% or minus 15%. Since Fuss & O'Neill has no control over the cost of labor, materials, equipment or services furnished by others, or over the Contractor(s)' methods of determining prices, or over competitive bidding or market conditions, Fuss & O'Neill's opinion of probable Total Project Costs and Construction Costs are made on the basis of Fuss & O'Neill's experience and qualifiations and represent Fuss & O'Neill's best judgment as an experienced and qualified professional engineer, familiar with the construction industry, but Fuss & O'Neill cannot and does not guarantee that proposals, bids or actual Total Project or Construction Costs will not vary from opinions of probable cost prepared by Fuss & O'Neill. If prior to the bidding or negotiating Phase the Owner wishes greater assurance as to Total Project or Construction Costs, the Owner shall employ an independent cost estimator.

ITEM	ITEM	UNIT	NO.	PER	TOTAL
NO.		MEAS.	UNITS	UNIT	COST
SOIL AND ER	OSION CONTROL				
	Sedimentation and Erosion Control	L.S.	1	\$ 1,500.00	\$1,500.0
WATER CON	TROL				
	Control of Water	L.S.	1	\$ 32,000.00	\$32,000.0
	Dewatering	L.S.		\$ 7,500.00	
SITE PREPAR	RATION WORK				
	Access Road Improvements	L.S.	1	3,500.00	\$3,500.0
	Clearing and Grubbing	EA	20	\$ 475.00	\$9,500.0
DEMOLITION					
	Concrete (assumes off-site disposal)	C.Y.	21.5		\$16,125.0
	Disassemble Rubble Masonry Wall	C.F.	900	\$ 4.50	\$4,050.0
ADTIBACS					
EARTHWORK		0.1/	4500	<b>.</b> 45.00	<b>\$00.500</b>
	Sediment excavation (assumes on-site disposal)	C.Y.	1500		\$22,500.0
	Embankment excavation and haul off-site	C.Y.	500		\$12,500.0
	Stream Substrate	C.Y.	755		\$26,425.0
	Boulder Clusters	EA	85 28	450.00 250.00	\$38,250.0
	Anchored logs	EA	28	250.00	\$7,000.0
PLANTINGS				+	
LANTINGS	Native, FAC trees from rootball	EA	360	55.00	\$19,800.0
	Plant with Wetland Seed Mix	AC	9	1,500.00	\$13,500.0
	Live Stakes, assorted native species	SF	17000	0.70	\$11,900.0
	Eive Glakes, asserted halive species	- U.	17000	0.70	ψ11,000.0
SENERAL CO	ONDITIONS				
	Mobilization & Demobilization	L.S.	1	22,500.00	\$22,500.0
	Mobilization & Bomobilization	2.0.	·	22,000.00	ΨΕΣ,000.
NGINEERIN	G/PERMITTING				
	Engineering	L.S.	1	45,000.00	\$45,000.0
	Permitting			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	· · · · · · · · · · · · · · · · · · ·
	Wetland Protection Act	EA	1	6,000.00	\$6,000.
	401 Water Quality Certification	EA	1	3,000.00	\$3,000.0
	404 Compliance (Assume Cat. II PGP only)	EA	1	4,000.00	\$4,000.
	MEPA (Assume EENF only)	EA	1	7,000.00	\$7,000.
	Endangered Species	EA	1	4,000.00	\$4,000.
	Dam Safety Permit	EA	1	2,000.00	\$2,000.
	FEMA LOMR	EA	1	\$ 7,000.00	\$7,000.
·	Construction Admin	L.S.	1	30,000.00	\$30,000.
	Long Term Monitoring	Year	2	5,000.00	\$10,000.0
	Maintenance	Year	2	5,000.00	\$10,000.
	SUBTOTAL				\$369,050.
	CONTINGENCY (20%)				\$73,810.
	TOTAL COST (ROUNDED TO NEAREST \$1,000)				\$443,000.