

Appendix D
Cost Estimates

Spring Brook (Salt Creek) Watershed Plan
Preliminary Cost Estimates for Alternative Analysis
7/13/2005

Item	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 8	Alt 9	Alt 10
Buyout Costs									
Upper Spring Brook	\$ 6,263,820	\$ 6,018,408	\$ 6,291,072	\$ 6,979,104	\$ 4,877,424	\$ 4,877,424	\$ 5,162,544	\$ 6,263,820	\$ 6,263,820
Lower Spring Brook	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Meacham Creek	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
MC Trib 1	\$ 1,627,236	\$ 1,627,236	\$ 1,627,236	\$ 1,627,236	\$ 1,627,236	\$ 1,627,236	\$ 1,627,236	\$ 931,464	\$ 521,424
Spring Brook Trib 1	\$ 561,528	\$ 561,528	\$ 561,528	\$ 561,528	\$ 561,528	\$ 561,528	\$ 561,528	\$ 561,528	\$ 561,528
Floodproofing Costs									
Upper Spring Brook	\$ 450,000	\$ 450,000	\$ 440,000	\$ 410,000	\$ 420,000	\$ 420,000	\$ 400,000	\$ 450,000	\$ 450,000
Lower Spring Brook	\$ 20,000	\$ 20,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 20,000	\$ 10,000	\$ 20,000	\$ 20,000
Meacham Creek	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
MC Trib 1	\$ 130,000	\$ 130,000	\$ 130,000	\$ 130,000	\$ 130,000	\$ 130,000	\$ 130,000	\$ 120,000	\$ 70,000
Spring Brook Trib 1	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000
Land Acquisition Costs									
Structural Costs	\$ -	\$ -	\$ -	\$ -	\$ 300,000	\$ 300,000	\$ 300,000	\$ -	\$ -
Total Capital Costs	\$ 9,082,584	\$ 9,407,494	\$ 9,883,995	\$ 14,681,148	\$ 8,269,182	\$ 8,503,019	\$ 12,897,260	\$ 8,749,905	\$ 12,584,442
Individual Owners Cost									
County Cost	\$ 630,000	\$ 630,000	\$ 610,000	\$ 580,000	\$ 590,000	\$ 600,000	\$ 570,000	\$ 620,000	\$ 570,000
	\$ 8,452,584	\$ 8,777,494	\$ 9,273,995	\$ 14,101,148	\$ 7,679,182	\$ 7,903,019	\$ 12,327,260	\$ 8,129,905	\$ 12,014,442
Buyouts									
Upper Spring Brook	33	32	33	35	27	27	27	33	33
Lower Spring Brook	0	0	0	0	0	0	0	0	0
Meacham Creek	0	0	0	0	0	0	0	0	0
MC Trib 1	7	7	7	7	7	7	7	3	3
Spring Brook Trib 1	2	2	2	2	2	2	2	2	2
Floodproofing									
Upper Spring Brook	25	25	24	21	22	22	20	25	25
Lower Spring Brook	2	2	1	1	1	2	1	2	2
Meacham Creek	0	0	0	0	0	0	0	0	0
MC Trib 1	13	13	13	13	13	13	13	12	7
Spring Brook Trib 1	3	3	3	3	3	3	3	3	3

**Spring Brook Watershed Plan
Alternative Analysis Improvement Matrix**

Improvements	Alternative							
	3	4	9	10	6	5	7	8
MG Reservoir Weir Notch	x	x			x	x	x	x
Foster Relief Pipe	x	x				x		
Foster Relief Swale					x		x	x
Foster Ave Culvert		x				x	x	x
Private Driveway Culvert		x				x	x	x
Roselle Road Sewer						x		x
Pine/Elm Sewer						x		x
Hawthorn Rd Culvert			x					
Plum Grove Culvert			x					
Plum Grove Weir Removal				x				
Plum Grove Storage				x				

**Springbrook Weir Notching
Planning Level Cost Estimate**

Division	Description	Quantity	Units	Unit Price (RAW)	CC Index (Chicago)	Unit Price	Totals
Div 0							
	Mobilization & Setup	1	LS	\$ 2,500.00	1	\$ 2,500.00	\$ 2,500
Div 1							
	Crane Rental	2	WK	\$ 1,900.00	1.114	\$ 2,116.60	\$ 4,233
Div 2							
	Demolition						\$ -
	Sawcutting	150	LF	\$ 150.00	0.898	\$ 134.70	\$ 20,205
	Wall dem & Equip	225	CF	\$ 38.00	0.898	\$ 34.12	\$ 7,678
	Disposal						\$ -
	Handling/Hauling	2	WK	\$ 545.00	0.898	\$ 489.41	\$ 979
	Tipping Fees	14	TON	\$ 70.00	0.898	\$ 62.86	\$ 880
Div 3							
	Concrete						\$ -
	Forming	450	SFCA	\$ 12.30	1.271	\$ 15.63	\$ 7,035
	Concrete	2.8	CY	\$ 100.00	1.144	\$ 114.40	\$ 320
	Concrete Surcharge	1	LS	\$ 250.00	1	\$ 250.00	\$ 250
	Steel Reinforcing	1	LS			\$ 500.00	\$ 500
Div 5							
	Drilling Anchors	150	EA	\$ 17.00	1.063	\$ 18.07	\$ 2,711
Construction subtotal							\$ 47,291
Contingency (25%)							11,823
Construction Grand Total							\$ 59,114
Design Development and Engineering (12%)							\$ 7,094
Construction Administration and Inspection (12%)							\$ 7,094
Grand Total							\$ 73,301

Plum Grove Detention

Item	Unit	Unit Cost	Units	Cost
Property Purchase	each	varies	1	
Weir Removal	each	\$ 10,000.00	1.0	\$ 10,000.00
Clear & Grub	sq yd	\$ 0.50	50,000.0	\$ 25,000.00
Excavation	cu yd	\$ 12.00	195,000.00	\$ 2,340,000.00
Dewatering	l.s.	\$ 20,000.00	1.00	\$ 20,000.00
Erosion Control	l.s.	\$ 15,000.00	1.00	\$ 15,000.00
Silt Fence	ft	\$ 5.00	3,000	\$ 15,000.00
Topsoil	cu yd	\$ 20.00	12,500.00	\$ 250,000.00
Seeding	sq yd	\$ 2.00	62,500.00	\$ 125,000.00
Riprap	sq yd	\$ 60.00	1,100.00	\$ 66,000.00
Temporary Signage	l.s.	\$ 2,000.00	1	\$ 2,000.00
Utility Relocate (assume 5%)	l.s.	5%		\$ 143,400.00

Subtotal:	\$ 3,011,400.00
Construction Contingency (25%)	\$ 752,850.00
Subtotal:	\$ 3,764,250.00
Design Development and Engineering (12%)	\$ 451,710
Construction Administration and Inspection (12%)	\$ 451,710
Grand Total:	\$ 4,667,670.00

Foster Swale

Item	Unit	Unit Cost	Units	Cost
Buyout	each	varies	1	\$ 300,000.00
Demolition/Disposal	each	\$15,000	1	\$ 15,000.00
Pavement Removal	sq yd	\$ 5.00	200.0	\$ 1,000.00
Sidewalk Removal	sq yd	\$ 5.00	67.0	\$ 335.00
Excavation	cu yd	\$ 10.00	1,500.00	\$ 15,000.00
Clear & Grub	sq yd	\$ 0.50	3,200.00	\$ 1,600.00
Roadway	sq yd	\$ 34.00	200.00	\$ 6,800.00
Base Course (Roadway)	sq yd	\$ 12.50	200.00	\$ 2,500.00
Curb and Gutter	ft	\$ 12.00	150.00	\$ 1,800.00
Sidewalks	sq yd	\$ 54.00	67.0	\$ 3,618.00
Silt Fence	ft	\$ 5.00	800	\$ 4,000.00
Topsoil	cu yd	\$ 20.00	1,000.00	\$ 20,000.00
Seeding	sq yd	\$ 2.00	3,200.00	\$ 6,400.00
Riprap	sq yd	\$ 60.00	70.00	\$ 4,200.00
Temporary Signage	l.s.	\$ 2,000.00	1	\$ 2,000.00
Utility Relocate (assume 15%)	l.s.	15%	1	\$ 10,387.95

Subtotal:	\$ 394,640.95
Construction Contingency (25%)	\$ 98,660.24
Subtotal:	\$ 493,301.19
Design Development and Engineering (12%)	\$ 23,196
Construction Administration and Inspection (12%)	\$ 23,196
Grand Total:	\$ 539,693.47

			Location								
Culverts	Item	Unit	Unit Cost	Foster Ave (Alts 2, 5, 6)		Private Driveway (Alts 2, 5, 6)		Hawthorne Ln (Alt 3)		Plum Grove Rd (Alt 3)	
				Units	Costs	Units	Costs	Units	Costs	Units	Costs
	Culvert Concrete	cu yd	\$ 315.00	27.0	\$ 8,516.67	17.9	\$ 5,625.93	40.7	\$ 12,817.78	78.2	\$ 24,629.63
	Footing Concrete	cu yd	\$ 250.00	8.9	\$ 2,222.22	7.8	\$ 1,944.44	13.3	\$ 3,333.33	13.3	\$ 3,333.33
	Lift Rental (1 wk increments)	weeks	\$ 15,000.00	2.0	\$ 30,000.00	2.0	\$ 30,000.00	2.0	\$ 30,000.00	2.0	\$ 30,000.00
	Pavement Removal	sq yd	\$ 5.00	152.9	\$ 764.30	86.6	\$ 432.78	240.5	\$ 1,202.37	323.5	\$ 1,617.33
	Sidewalk Removal	sq yd	\$ 5.00	29.4	\$ 147.11	-	\$ -	-	\$ -	33.2	\$ 165.81
	Excavation	cu yd	\$ 10.00	386.8	\$ 3,867.69	344.9	\$ 3,448.85	921.6	\$ 9,215.67	1,542.9	\$ 15,429.11
	Structural Backfill	cu yd	\$ 12.50	95.0	\$ 1,187.91	75.8	\$ 947.99	144.4	\$ 1,804.63	241.9	\$ 3,023.15
	Concrete Walls	cu yd	\$ 315.00	5.1	\$ 1,617.78	4.9	\$ 1,555.56	9.1	\$ 2,877.78	8.4	\$ 2,644.44
	Temporary Sheeting	sq ft	\$ 16.50	-	\$ -	-	\$ -	-	\$ -	-	\$ -
	Roadway	sq yd	\$ 34.00	121.7	\$ 4,139.44	69.9	\$ 2,376.22	204.9	\$ 6,967.23	273.5	\$ 9,297.87
	Base Course (Roadway)	sq yd	\$ 12.50	121.7	\$ 1,521.85	69.9	\$ 873.61	204.9	\$ 2,561.48	273.5	\$ 3,418.33
	Curb and Gutter	ft	\$ 12.00	98.3	\$ 1,179.20	103.9	\$ 1,246.40	135.3	\$ 1,623.20	129.4	\$ 1,552.64
	Sidewalks	sq yd	\$ 54.00	26.1	\$ 1,408.80	-	\$ -	-	\$ -	30.4	\$ 1,640.80
	Railings / Wall	ft	\$ 75.00	39.1	\$ 2,935.00	41.9	\$ 3,145.00	57.6	\$ 4,322.50	54.7	\$ 4,102.00
	Erosion Control	l.s.	\$ 1,500.00	1	\$ 1,500.00	1	\$ 1,500.00	1	\$ 1,500.00	1	\$ 1,500.00
	Topsoil	cu yd	\$ 20.00	44.2	\$ 883.15	54.8	\$ 1,095.97	190.3	\$ 3,805.73	319.9	\$ 6,398.86
	Sod	sq yd	\$ 5.00	13.4	\$ 66.93	57.9	\$ 289.41	66.9	\$ 334.52	220.7	\$ 1,103.44
	Riprap	sq yd	\$ 60.00	48.5	\$ 2,907.94	37.1	\$ 2,226.39	109.0	\$ 6,542.86	109.0	\$ 6,542.86
	Temporary Signage	l.s.	\$ 2,000.00	1	\$ 2,000.00	1	\$ 2,000.00	1	\$ 2,000.00	1	\$ 2,000.00
	Utility Relocate (assume 15%)	l.s.	15%	1	\$ 10,029.90	1	\$ 8,806.28	1	\$ 13,636.36	1	\$ 17,759.94
	Subtotal:				\$ 76,895.86		\$ 67,514.83		\$ 104,545.44		\$ 136,159.56
	Construction Contingency (25%)				\$ 19,223.97		\$ 16,878.71		\$ 26,136.36		\$ 34,039.89
	Design Development and Engineering (12%)				\$ 11,534.38		\$ 10,127.22		\$ 15,681.82		\$ 20,423.93
	Construction Administration and Inspection (12%)				\$ 11,534.38		\$ 10,127.22		\$ 15,681.82		\$ 20,423.93
	Grand Total:				\$ 119,188.59		\$ 104,647.98		\$ 162,045.43		\$ 211,047.32

Location: Foster Ave Private Driveway Hawthorne Ln Plum Grove Rd

Alts 2, 5, 6, 7 Alts 2, 5, 6, 7 Alt 3 Alt 3

General Culvert Details

# Barrels		2	2	2	2					
Width	(ft)	8	7	12	12					
Height	(ft)	3.5	4	4.5	4					
Length of Culvert	(ft)	45	31	48	95					
Concrete Culv. Thickness	(ft)	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33
Concrete Volume	(cu yd)	27.0	17.9	40.7	78.2	0.0	0.0	0.0	0.0	0.0
Invert	(ft)	719.7	723.1	710.8	715.3					
Road Elevation	(ft)	724.8	729.8	719.4	722.9					
Depth	(ft)	5.93	7.53	9.43	8.45	0.83	0.83	0.83	0.83	0.83
Bottom Width of Excavation	(ft)	21.33	19.33	29.33	29.33	4.00	4.00	4.00	4.00	4.00
Top Width of Excavation	(ft)	39.13	41.93	57.63	54.69	6.50	6.50	6.50	6.50	6.50
Lift Rental (50 sec/week)	(wks)	2	2	2	2					

Surface Removal

Road width	(ft)	28	15	32	45					
U/S Sidewalk Width	(ft)	3	0	0	5					
D/S Sidewalk Width	(ft)	3	0	0	0					
Pavement Removal	(sq yd)	152.9	86.6	240.5	323.5	0.0	0.0	0.0	0.0	0.0
Sidewalk Removal	(sq yd)	29.4	0.0	0.0	33.2	0.0	0.0	0.0	0.0	0.0

Surface Restored

Road width	(ft)	28	15	32	45	0	0	0	0	0
U/S Sidewalk Width	(ft)	3	0	0	5	0	0	0	0	0
D/S Sidewalk Width	(ft)	3	0	0	0	0	0	0	0	0
Roadway Replacement	(sq yd)	121.7	69.9	204.9	273.5	0.0	0.0	0.0	0.0	0.0
Sidewalk Replacement	(sq yd)	26.1	0.0	0.0	30.4	0.0	0.0	0.0	0.0	0.0
Curb and Gutter	(ft)	98.3	103.9	135.3	129.4	0.0	0.0	0.0	0.0	0.0

Concrete Masonry (Walls)

Headwall length	(ft)	17.3	15.3	25.3	25.3	0.0	0.0	0.0	0.0	0.0
Headwall thickness	(ft)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Headwall height	(ft)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Headwall concrete volume	(cu yd)	1.28	1.14	1.88	1.88	0.00	0.00	0.00	0.00	0.00
Wingwall length	(ft)	8.0	7.0	12.0	12.0	0.0	0.0	0.0	0.0	0.0
Wingwall thickness	(ft)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Wingwall Height (avg)	(ft)	3.25	3.67	4.08	3.67	0.33	0.33	0.33	0.33	0.33
Wingwalls concrete volume	(cu yd)	3.85	3.80	7.26	6.52	0.00	0.00	0.00	0.00	0.00

Railing

Railing length	(ft)	39.1	41.9	57.6	54.7	6.5	6.5	6.5	6.5	6.5
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Excavation

Culvert (incl. base course)	(cu ft)	8072.3	7153.9	19689.3	33739.5	0.0	0.0	0.0	0.0	0.0
Culvert (incl. base course)	(cu yd)	299.0	265.0	729.2	1249.6	0.0	0.0	0.0	0.0	0.0
Footing foundation	(cu ft)	240.0	210.0	360.0	360.0	0.0	0.0	0.0	0.0	0.0
Footing foundation	(cu yd)	8.9	7.8	13.3	13.3	0.0	0.0	0.0	0.0	0.0
Wingwall	(cu ft)	390.0	396.0	686.0	616.0	8.0	8.0	8.0	8.0	8.0
Wingwall	(cu yd)	14.4	14.7	25.4	22.8	0.3	0.3	0.3	0.3	0.3
Temporary Sheeting	(sq ft)									

Structural Backfill

Base course (culvert)	(cu ft)	480.0	299.7	704.0	1393.3	0.0	0.0	0.0	0.0	0.0
Base course (culvert)	(cu yd)	17.8	11.1	26.1	51.6	0.0	0.0	0.0	0.0	0.0
Culvert Sides	(cu ft)	1921.9	1591.3	2914.0	4876.7	0.0	0.0	0.0	0.0	0.0
Culvert Sides	(cu yd)	71.2	58.9	107.9	180.6	0.0	0.0	0.0	0.0	0.0
Base course (wingwalls)	(cu ft)	60.0	54.0	84.0	84.0	12.0	12.0	12.0	12.0	12.0
Base course (wingwalls)	(cu yd)	2.2	2.0	3.1	3.1	0.4	0.4	0.4	0.4	0.4
Wingwall Sides	(cu ft)	104.0	102.7	196.0	176.0	0.0	0.0	0.0	0.0	0.0
Wingwall Sides	(cu yd)	3.9	3.8	7.3	6.5	0.0	0.0	0.0	0.0	0.0

Topsoil

Top of Culvert	(cu ft)	1192.2	1479.6	5137.7	8638.5	0.0	0.0	0.0	0.0	0.0
Top of Culvert	(cu yd)	44.2	54.8	190.3	319.9	0.0	0.0	0.0	0.0	0.0
Sod	(sq yd)	13.4	57.9	66.9	220.7	0.0	0.0	0.0	0.0	0.0
Riprap	(sq yd)	48.5	37.1	109.0	109.0	0.0	0.0	0.0	0.0	0.0

Alternative 2 - Buyouts and Floodproofing
FEQ Alternative A - Buyouts and Floodproofing
Spring Brook (Salt Creek)
Watershed Plan

Location / Item	Unit	Unit Cost	Quantity	Item Cost
Upper Spring Brook				
Buyouts	# homes	varies	33	\$ 6,263,820
Floodproofing	# properties	\$ 10,000.00	25	\$ 250,000
WWTP Floodproofing	l.s	\$ 200,000.00	1	\$ 200,000
Lower Spring Brook				
Buyouts	# homes	varies	0	
Floodproofing	# properties	\$ 10,000.00	2	\$ 20,000
Meacham Creek				
Buyouts	# homes	varies	0	\$ -
Floodproofing	# properties	\$ 10,000.00	0	\$ -
Meacham Creek Tributary				
Buyouts	# homes	varies	7	\$ 1,627,236
Floodproofing	# properties	\$ 10,000.00	13	\$ 130,000
Spring Brook Tributary #1				
Buyouts	# homes	varies	2	\$ 561,528
Floodproofing	# properties	\$ 10,000.00	3	\$ 30,000
Buyout / Floodproofing Subtotal				\$ 9,082,584
Construction Contingency			25%	\$ -
Engineering / Construction Mgmt / Admin / Permitting			30%	\$ -
Total				\$ 9,082,584

Notes / Assumptions

The Roselle WWTP is eligible for buyout. It will be considered as a floodproofing measure, not a buyout
Floodproofing cost is based on DuPage County values as of 7/7/2005
Construction Contingency and Eng/Cons Mgmt/Admin/Permit is only based on structural improvements
Several businesses are eligible for buyout, but are not part of the voluntary buyout program. Therefore,
the businesses are considered to be floodproofed rather than bought out

**Alternative 3 - Meacham Grove Weir, Foster Relief Pipe, Buyouts,
Floodproofing**

FEQ Alternative 1 - Meacham Grove Weir, Foster Relief Pipe, Buyouts, Floodproofing
Spring Brook (Salt Creek)
Watershed Plan

Location / Item	Unit	Unit Cost	Quantity	Item Cost
Upper Spring Brook				
Buyouts	# homes	varies	32	\$ 6,018,408
Floodproofing	# properties	\$ 10,000.00	25	\$ 250,000
WWTP Floodproofing	l.s	\$ 200,000.00	1	\$ 200,000
Lower Spring Brook				
Buyouts	# homes	varies		\$ -
Floodproofing	# properties	\$ 10,000.00	2	\$ 20,000
Meacham Creek				
Buyouts	# homes	varies	0	\$ -
Floodproofing	# properties	\$ 10,000.00	0	\$ -
Meacham Creek Tributary				
Buyouts	# homes	varies	7	\$ 1,627,236
Floodproofing	# properties	\$ 10,000.00	13	\$ 130,000
Spring Brook Tributary #1				
Buyouts	# homes	varies	2	\$ 561,528
Floodproofing	# properties	\$ 10,000.00	3	\$ 30,000
Buyout / Floodproofing Subtotal				\$ 8,837,172
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Meacham Grove Weir Notching	(see backup calcs)			\$ 47,291
Foster Avenue Relief Pipe / Connection Pipes	(see backup calcs)			\$ 320,659
Structural Improvements Subtotal				\$ 367,950
Construction Contingency				25% \$ 91,987
Subtotal				\$ 459,937
Design Development and Engineering				12% \$ 55,192
Construction Mgmt / Admin / Permitting				12% \$ 55,192

Total	\$ 9,407,494
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Notes / Assumptions

The Roselle WWTP is eligible for buyout. It will be considered as a floodproofing measure, not a buyout
 Floodproofing cost is based on DuPage County values as of 7/7/2005
 Construction Contingency and Eng/Cons Mgmt/Admin/Permit is only based on structural improvements
 Several businesses are eligible for buyout, but are not part of the voluntary buyout program. Therefore,
 the businesses are considered to be floodproofed rather than bought out

**Alternative 4 - Meacham Grove Weir, Foster Relief Pipe,
Foster/Private Culverts, Buyouts, Floodproofing**

**FEQ Alternative 2
Spring Brook (Salt Creek)
Watershed Plan**

Location / Item	Unit	Unit Cost	Quantity	Item Cost
Upper Spring Brook				
Buyouts	# homes	varies	33	\$ 6,291,072
Floodproofing	# properties	\$ 10,000.00	24	\$ 240,000
WWTP Floodproofing	l.s	\$ 200,000.00	1	\$ 200,000
Lower Spring Brook				
Buyouts	# homes	varies	0	\$ -
Floodproofing	# properties	\$ 10,000.00	1	\$ 10,000
Meacham Creek				
Buyouts	# homes	varies	0	\$ -
Floodproofing	# properties	\$ 10,000.00	0	\$ -
Meacham Creek Tributary				
Buyouts	# homes	varies	7	\$ 1,627,236
Floodproofing	# properties	\$ 10,000.00	13	\$ 130,000
Spring Brook Tributary #1				
Buyouts	# homes	varies	2	\$ 561,528
Floodproofing	# properties	\$ 10,000.00	3	\$ 30,000
Buyout / Floodproofing Subtotal				\$ 9,089,836
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Meacham Grove Weir Notching	(see backup calcs)			\$ 47,291
Foster Avenue Relief Pipe / Connection Pipes	(see backup calcs)			\$ 320,659
Foster Avenue Culverts	(see backup calcs)			\$ 76,896
Private Driveway Culverts	(see backup calcs)			\$ 67,515
Structural Improvements Subtotal				\$ 512,361
Construction Contingency				25% \$ 128,090
Subtotal				\$ 640,451
Design Development and Engineering				12% \$ 76,854
Construction Mgmt / Admin / Permitting				12% \$ 76,854
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Total				\$ 9,883,995

Notes / Assumptions

The Roselle WWTP is eligible for buyout. It will be considered as a floodproofing measure, not a buyout
Floodproofing cost is based on DuPage County values as of 7/7/2005
Construction Contingency and Eng/Cons Mgmt/Admin/Permit is only based on structural improvements
Several businesses are eligible for buyout, but are not part of the voluntary buyout program. Therefore,
the businesses are considered to be floodproofed rather than bought out

**Alternative 5 - Meacham Grove Weir, Foster Relief Pipe,
Foster/Private Culverts, Pine/Elm Sewer, Roselle Sewer, Buyouts,
and Floodproofing**

*FEQ Alternative 5 - Meacham Grove Weir, Foster Relief Pipe, Foster/Private Culverts,
Pine/Elm Sewer, Roselle Sewer, Buyouts, Floodproofing
Spring Brook (Salt Creek)
Watershed Plan*

Location / Item	Unit	Unit Cost	Quantity	Item Cost
Upper Spring Brook				
Buyouts	# homes	varies	35	\$ 6,979,104
Floodproofing	# properties	\$ 10,000.00	21	\$ 210,000
WWTP Floodproofing	l.s	\$ 200,000.00	1	\$ 200,000
Lower Spring Brook				
Buyouts	# homes	varies	0	\$ -
Floodproofing	# properties	\$ 10,000.00	1	\$ 10,000
Meacham Creek				
Buyouts	# homes	varies	0	\$ -
Floodproofing	# properties	\$ 10,000.00	0	\$ -
Meacham Creek Tributary				
Buyouts	# homes	varies	7	\$ 1,627,236
Floodproofing	# properties	\$ 10,000.00	13	\$ 130,000
Spring Brook Tributary #1				
Buyouts	# homes	varies	2	\$ 561,528
Floodproofing	# properties	\$ 10,000.00	3	\$ 30,000
Buyout / Floodproofing Subtotal				\$ 9,747,868
<hr/>				
Meacham Grove Weir Notching	(see backup calcs)			\$ 47,291
Foster Avenue Relief Pipe / Connection Pipes	(see backup calcs)			\$ 320,659
Foster Avenue Culverts	(see backup calcs)			\$ 76,896
Private Driveway Culverts	(see backup calcs)			\$ 67,515
Pine / Elm Sewer	(see backup calcs)			\$ 1,446,230
Roselle Sewer	(see backup calcs)			\$ 1,224,171
Structural Improvements Subtotal				\$ 3,182,761
Construction Contingency				25% \$ 795,690
Subtotal				\$ 3,978,452
Design Development and Engineering				12% \$ 477,414
Construction Mgmt / Admin / Permitting				12% \$ 477,414

Total	\$ 14,681,148
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Notes / Assumptions

The Roselle WWTP is eligible for buyout. It will be considered as a floodproofing measure, not a buyout
 Floodproofing cost is based on DuPage County values as of 7/7/2005
 Construction Contingency and Eng/Cons Mgmt/Admin/Permit is only based on structural improvements
 Several businesses are eligible for buyout, but are not part of the voluntary buyout program. Therefore,
 the businesses are considered to be floodproofed rather than bought out

Alternative 6 - Meacham Grove Weir, Foster Ave Swale, Buyouts and Floodproofing

**FEQ Alternative 4 - Meacham Grove Weir, Foster Ave Swale, Buyouts and Floodproofing
Spring Brook (Salt Creek)
Watershed Plan**

Location / Item	Unit	Unit Cost	Quantity	Item Cost
Upper Spring Brook				
Buyouts	# homes	varies	27	\$ 4,877,424
Floodproofing	# properties	\$ 10,000.00	22	\$ 220,000
WWTP Floodproofing	l.s	\$ 200,000.00	1	\$ 200,000
Lower Spring Brook				
Buyouts	# homes	varies	0	\$ -
Floodproofing	# properties	\$ 10,000.00	1	\$ 10,000
Meacham Creek				
Buyouts	# homes	varies	0	\$ -
Floodproofing	# properties	\$ 10,000.00	0	\$ -
Meacham Creek Tributary				
Buyouts	# homes	varies	7	\$ 1,627,236
Floodproofing	# properties	\$ 10,000.00	13	\$ 130,000
Spring Brook Tributary #1				
Buyouts	# homes	varies	2	\$ 561,528
Floodproofing	# properties	\$ 10,000.00	3	\$ 30,000
Buyout / Floodproofing Subtotal				\$ 7,656,188
<hr/>				
Meacham Grove Weir Notching	(see backup calcs)			\$ 47,291
Foster Avenue Swale	(see backup calcs)			\$ 94,641
Structural Improvements Subtotal				\$ 141,932
Construction Contingency				25% \$ 110,483
Subtotal				\$ 252,415
<hr/>				
Design Development and Engineering				12% \$ 30,290
Construction Mgmt / Admin / Permitting				12% \$ 30,290
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Land Acquisition for Swale				\$ 300,000
Total				\$ 8,269,182

Notes / Assumptions

The Roselle WWTP is eligible for buyout. It will be considered as a floodproofing measure, not a buyout
Floodproofing cost is based on DuPage County values as of 7/7/2005
Construction Contingency and Eng/Cons Mgmt/Admin/Permit is only based on structural improvements
The Foster Ave Swale would require the additional buyout of a property that is on the buyout list, but
is removed once a swale is constructed
Several businesses are eligible for buyout, but are not part of the voluntary buyout program. Therefore,
the businesses are considered to be floodproofed rather than bought out

**Alternative 7 - Meacham Grove Weir, Foster Swale,
Foster/Private Culverts, Buyouts, Floodproofing**
**FEQ Alternative 6 - Meacham Grove Weir, Foster Swale, Foster/Private Culverts,
Buyouts, Floodproofing**
Spring Brook (Salt Creek)
Watershed Plan

Location / Item	Unit	Unit Cost	Quantity	Item Cost
Upper Spring Brook				
Buyouts	# homes	varies	27	\$ 4,877,424
Floodproofing	# properties	\$ 10,000.00	22	\$ 220,000
WWTP Floodproofing	l.s	\$ 200,000.00	1	\$ 200,000
Lower Spring Brook				
Buyouts	# homes	varies	0	\$ -
Floodproofing	# properties	\$ 10,000.00	2	\$ 20,000
Meacham Creek				
Buyouts	# homes	varies	0	\$ -
Floodproofing	# properties	\$ 10,000.00	0	\$ -
Meacham Creek Tributary				
Buyouts	# homes	varies	7	\$ 1,627,236
Floodproofing	# properties	\$ 10,000.00	13	\$ 130,000
Spring Brook Tributary #1				
Buyouts	# homes	varies	2	\$ 561,528
Floodproofing	# properties	\$ 10,000.00	3	\$ 30,000
Buyout / Floodproofing Subtotal				\$ 7,666,188
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Meacham Grove Weir Notching	(see backup calcs)		1	\$ 47,291
Foster Avenue Swale	(see backup calcs)		1	\$ 94,641
Foster Avenue Culverts	(see backup calcs)		1	\$ 76,896
Private Driveway Culverts	(see backup calcs)		1	\$ 67,515
Structural Improvements Subtotal				\$ 286,343
Construction Contingency				25% \$ 146,586
Subtotal				\$ 432,928
Design Development and Engineering				12% \$ 51,951
Construction Mgmt / Admin / Permitting				12% \$ 51,951
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Land Acquisition for Swale				\$ 300,000
Total				\$ 8,503,019

Notes / Assumptions

The Roselle WWTP is eligible for buyout. It will be considered as a floodproofing measure, not a buyout
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The Foster Ave Swale would require the additional buyout of a property that is on the buyout list, but
is removed once a swale is constructed
Several businesses are eligible for buyout, but are not part of the voluntary buyout program. Therefore,
the businesses are considered to be floodproofed rather than bought out

**Alternative 8 - Meacham Grove Weir, Foster Swale,
Foster/Private Culverts, Pine/Elm Sewer, Roselle Sewer, Buyouts,
Floodproofing**

*FEQ Alternative 7 - Meacham Grove Weir, Foster Swale, Foster/Private Culverts,
Pine/Elm Sewer, Roselle Sewer, Buyouts, Floodproofing*
Spring Brook (Salt Creek)
Watershed Plan

Location / Item	Unit	Unit Cost	Quantity	Item Cost
Upper Spring Brook				
Buyouts	# homes	varies	27	\$ 5,162,544
Floodproofing	# properties	\$ 10,000.00	20	\$ 200,000
WWTP Floodproofing	l.s	\$ 200,000.00	1	\$ 200,000
Lower Spring Brook				
Buyouts	# homes	varies	0	\$ -
Floodproofing	# properties	\$ 10,000.00	1	\$ 10,000
Meacham Creek				
Buyouts	# homes	varies	0	\$ -
Floodproofing	# properties	\$ 10,000.00	0	\$ -
Meacham Creek Tributary				
Buyouts	# homes	varies	7	\$ 1,627,236
Floodproofing	# properties	\$ 10,000.00	13	\$ 130,000
Spring Brook Tributary #1				
Buyouts	# homes	varies	2	\$ 561,528
Floodproofing	# properties	\$ 10,000.00	3	\$ 30,000
Buyout / Floodproofing Subtotal				\$ 7,921,308
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Meacham Grove Weir Notching	(see backup calcs)		1	\$ 47,291
Foster Avenue Swale	(see backup calcs)		1	\$ 94,641
Foster Avenue Culverts	(see backup calcs)		1	\$ 76,896
Private Driveway Culverts	(see backup calcs)		1	\$ 67,515
Pine / Elm Sewer	(see backup calcs)		1	\$ 1,446,230
Roselle Sewer	(see backup calcs)		1	\$ 1,224,171
Structural Improvements Subtotal				\$ 2,956,743
Construction Contingency				25% \$ 814,186
Subtotal				\$ 3,770,929
Design Development and Engineering				12% \$ 452,511
Construction Mgmt / Admin / Permitting				12% \$ 452,511
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Land Acquisition for Swale				\$ 300,000
Total				\$ 12,897,260

Notes / Assumptions

The Roselle WWTP is eligible for buyout. It will be considered as a floodproofing measure, not a buyout
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Construction Contingency and Eng/Cons Mgmt/Admin/Permit is only based on structural improvements
The Foster Ave Swale would require the additional buyout of a property that is on the buyout list, but
is removed once a swale is constructed
Several businesses are eligible for buyout, but are not part of the voluntary buyout program. Therefore,
the businesses are considered to be floodproofed rather than bought out

**Alternative 9 - Hawthorn, Plum Grove Culvert replacement, Buyouts,
Floodproofing**

**FEQ Alternative 3 - Hawthorn, Plum Grove Culvert replacement, Buyouts, Floodproofing
Spring Brook (Salt Creek)
Watershed Plan**

Location / Item	Unit	Unit Cost	Quantity	Item Cost
Upper Spring Brook				
Buyouts	# homes	varies	33	\$ 6,263,820
Floodproofing	# properties	\$ 10,000.00	25	\$ 250,000
WWTP Floodproofing	l.s	\$ 200,000.00	1	\$ 200,000
Lower Spring Brook				
Buyouts	# homes	varies	0	\$ -
Floodproofing	# properties	\$ 10,000.00	2	\$ 20,000
Meacham Creek				
Buyouts	# homes	varies	0	\$ -
Floodproofing	# properties	\$ 10,000.00	0	\$ -
Meacham Creek Tributary				
Buyouts	# homes	varies	3	\$ 931,464
Floodproofing	# properties	\$ 10,000.00	12	\$ 120,000
Spring Brook Tributary #1				
Buyouts	# homes	varies	2	\$ 561,528
Floodproofing	# properties	\$ 10,000.00	3	\$ 30,000
Buyout / Floodproofing Subtotal				\$ 8,376,812
<hr/>				
Plum Grove Rd Culverts	(see backup calcs)			\$ 136,160
Hawthorne Ln Culverts	(see backup calcs)			\$ 104,545
Structural Improvements Subtotal				\$ 240,705
Construction Contingency				25% \$ 60,176
Subtotal				\$ 300,881
Design Development and Engineering				12% \$ 36,106
Construction Mgmt / Admin / Permitting				12% \$ 36,106

Total	\$ 8,749,905
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Notes / Assumptions

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 Floodproofing cost is based on DuPage County values as of 7/7/2005
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 Several businesses are eligible for buyout, but are not part of the voluntary buyout program. Therefore,
 the businesses are considered to be floodproofed rather than bought out

Alternative 10 - Plum Grove Storage Basin, Buyouts, Floodproofing
FEQ Alternative 3a - Plum Grove Storage Basin, Buyouts, Floodproofing
Spring Brook (Salt Creek)
Watershed Plan

Location / Item	Unit	Unit Cost	Quantity	Item Cost
Upper Spring Brook				
Buyouts	# homes	varies	33	\$ 6,263,820
Floodproofing	# properties	\$ 10,000.00	25	\$ 250,000
WWTP Floodproofing	l.s	\$ 200,000.00	1	\$ 200,000
Lower Spring Brook				
Buyouts	# homes	varies	0	\$ -
Floodproofing	# properties	\$ 10,000.00	2	\$ 20,000
Meacham Creek				
Buyouts	# homes	varies	0	\$ -
Floodproofing	# properties	\$ 10,000.00	0	\$ -
Meacham Creek Tributary				
Buyouts	# homes	varies	3	\$ 521,424
Floodproofing	# properties	\$ 10,000.00	7	\$ 70,000
Spring Brook Tributary #1				
Buyouts	# homes	varies	2	\$ 561,528
Floodproofing	# properties	\$ 10,000.00	3	\$ 30,000
Buyout / Floodproofing Subtotal				\$ 7,916,772
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Plum Grove Rd Detention Basin	(see backup calcs)			\$ 3,011,400
Structural Improvements Subtotal				\$ 3,011,400
Construction Contingency				25% \$ 752,850
Subtotal				\$ 3,764,250
Design Development and Engineering				12% \$ 451,710
Construction Mgmt / Admin / Permitting				12% \$ 451,710
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Total				\$ 12,584,442

Notes / Assumptions

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Several businesses are eligible for buyout, but are not part of the voluntary buyout program. Therefore,
the businesses are considered to be floodproofed rather than bought out