

ATTACHMENT D

COST ANALYSIS

Town of Winthrop
 Department of Public Works
 100 Kennedy Drive
 Winthrop, Ma.

CALC BOOK NO. _____

PRELIMINARY ESTIMATE

Access Road A
 Argyle Street
 Winthrop, MA
 PSE Submission

Highway Items

ITEM NO.	QUANTITY	ITEM DESCRIPTION	Page
		Pavement Areas	2
		Earth Work	3 thru 11
101	0.25	Clearing and Grubbing	3 thru 11
120	963	Earth Excavation	3 thru 11
151	1925	Gravel Borrow	3 thru 11
170	2823	Fine Grading and Compacting	12
440	0	Calcium Chloride for Roadway Dust Control	13
443	0	Water for Roadway Dust Control	15
460	329	Hot Mix Asphalt Pavement	15
472	1	Hot Mix Asphalt Pavement For Misc. Work	15
482.5	32	Sawing Pavement and Sidewalk Joints	15
657	#REF!	Temporary Fence	15
697	2200	Sedimentation Fence	16
740	6	Engineers Field Office and Equipment (type A)	16
748	1	Mobilization	17
752	173	Top Soil Rehandled and Spread	17
765	1222	Seeding	17
767	1.00	Hay Mulch	17
767.8	900	Bales of Hay for Erosion Control	17
832.1	#REF!	Warning - Regulatory & Rte Marker Alum. Panel Type A	17
847.1	#REF!	Sign Supports (Not Guide) and Rt Mrker	18
		W/1 Brkwy Post Assmbly - Steel	18
851	#REF!	Safety Controls for Construction Operations	19
852	#REF!	Safety Signing for Construction Operations	19
861.04	#REF!	4 Inch ReflectORIZED Yellow Line (Painted)	19
999	0	Police Detail	20

Town of Winthrop
 Department of Public Works
 100 Kennedy Drive
 Winthrop, Ma.

PRELIMINARY ESTIMATE

Access Road A
 Argyle Street
 Winthrop, MA
 25% Submission

Highway Items

ITEM NO.	QUANT.	UNIT	ITEM DESCRIPTION	UNIT COST	TOTAL
101	0.25	A	Clearing and Grubbing	\$12,000.00	\$3,000.00
102.1	200	LF	Tree Trimming	\$10.00	\$2,000.00
120.1	963	CY	Unclassified Excavation	\$30.00	\$28,875
129	0	CY	Asphalt Pavement Excavation by Cold Plane	\$5.00	\$0.00
151	1925	CY	Gravel Borrow	\$30.00	\$57,750.00
156	0	TON	Crushed Stone For Drain,Revetment and/or W.W.Found.	\$25.00	\$0.00
170	2823	SY	Fine Grading and Compacting	\$2.50	\$7,058.33
191	25	LF	Drive Sample Boring	\$30.00	\$750.00
191.11	10	LF	Core Boring	\$65.00	\$650.00
193	1	LF	Mobilization and Dismantling of Boring Equipment	\$3,000.00	\$3,000.00
201	8	EA	Catch Basin	\$2,500.00	\$20,000.00
202	4	EA	Manhole	\$2,800.00	\$11,200.00
221	4	EA	Frame and Cover	\$500.00	\$2,000.00
222	8	EA	Frame and Grate	\$600.00	\$4,800.00
241.12	800	LF	12" Reinforced Concrete Pipe	\$60.00	\$48,000.00
402	572	CY	Dense Graded Crushed Stone For Sub-Base	\$50.00	\$28,600.00
440	0	LB	Calcium Chloride for Roadway Dust Control	\$0.45	\$0.00
443	0	MGL	Water for Roadway Dust Control	\$55.00	\$0.00
460	329	TON	Hot Mix Asphalt Pavement	\$85.00	\$27,925.33
472	1	TON	Hot Mix Asphalt Pavement For Misc. Work	\$160.00	\$160.00
482.5	32	LF	Sawing Pavement and Sidewalk Joints	\$2.00	\$64.00
570.2	2200	LF	Hot Mixed Asphalt Curb Type 2	\$7.50	\$16,500.00
602	16	LF	Guard Rail Post - Steel	\$112.00	\$1,792.00
620.1	600	LF	Steel W Beam Highway Guard Single Faced	\$25.00	\$15,000.00
685	0	CY	Stone Masonry Wall in Cement Mortar	\$650.00	\$0.00
697	2200	LF	Sedimentation Fence	\$4.00	\$8,800.00
740	6	MO	Engineers Field Office and Equipment (type A)	\$2,300.00	\$13,800.00
748	1	LS	Mobilization	BELOW	\$0.00
751	173	CY	Loam Borrow	\$40.00	\$6,925.93
765	1222	SY	Seeding	\$2.00	\$2,444.44
767.3	1.00	TON	Straw Mulch	\$607.50	\$607.50
767.8	900	EA	Bales of Hay for Erosion Control	\$12.00	\$10,800.00
829.1	22	SF	Roadside Guide Sign - (FR) - Aluminum Panel 25 SF and Under (Type A)	\$20.00	\$440.00
832.1	20	SF	Warning - Regulatory and Route Marker - Aluminum Panel (Type A)	\$10.00	\$200.00
841.1	0	EA	Supports for Guide Sign D6 with D8 - 5 Inch Steel	\$1,300.00	\$0.00

Town of Winthrop
 Department of Public Works
 100 Kennedy Drive
 Winthrop, Ma.

PRELIMINARY ESTIMATE

Access Road A
 Argyle Street
 Winthrop, MA
 25% Submission

Highway Items

ITEM NO.	QUANT.	UNIT	ITEM DESCRIPTION	UNIT COST	TOTAL
847.1	3	EA	Sign Supports (Not Guide) and Rt Mrker w/l Brkwy Post Assembly - Steel	\$100.00	\$300.00
851	1	UD	Safety Controls for Construction Operations	\$150.00	\$150.00
852	50	SF	Safety Signing for Construction Operations	\$16.00	\$800.00
859	1800	DD	Reflectorized Drum	\$0.40	\$720.00
864.04	144	SF	Pavement Arrow and Legends Reflective White (Thermoplastic)	\$4.00	\$576.00
865.1	12	SF	Cross walks and Stop Lines Reflective White (Thermoplastic)	\$20.00	\$240.00
866.04	2200	LF	4 inch Reflectorized White Line (Thermoplastic)	\$0.45	\$990.00
874	1	EA	Street Name Sign	\$100.00	\$100.00
902	0	CY	3500 PSI, 1.5 In, 520 Cement Concrete	\$700.00	\$0.00
904	0	CY	4000 PSI, 3/4 In, 610 Cement Concrete	\$875.00	\$0.00
910	0	LB	Steel Reinforcement For Structures	\$4.00	\$0.00
999	0	HR	Police Detail	\$37.00	\$0.00
			TOTAL HIGHWAY ITEMS		\$327,018.54
			3% - MOBILIZATION		\$9,810.56
			TOTAL COST HIGHWAY ITEMS		\$336,829.09
			10% Contingency		\$33,682.91
			TOTAL COST HIGHWAY ITEMS		\$370,512.00

Town of Winthrop
 Department of Public Works
 100 Kennedy Drive
 Winthrop, Ma.

CALC BOOK NO. _____

PRELIMINARY ESTIMATE

Access Road B
 Banks Street
 Winthrop, MA
 PSE Submission

Highway Items

ITEM NO.	QUANTITY	ITEM DESCRIPTION	Page
		Pavement Areas	2
		Earth Work	3 thru 11
101	0.25	Clearing and Grubbing	3 thru 11
120	744	Earth Excavation	3 thru 11
151	175	Gravel Borrow	12
170	315	Fine Grading and Compacting	13
381.01	4	Service Box (municipal Standard)	14
440	750	Calcium Chloride for Roadway Dust Control	15
443	1	Water for Roadway Dust Control	15
460	116	Hot Mix Asphalt Pavement	15
472	1	Hot Mix Asphalt Pavement For Misc. Work	15
482.5	32	Sawing Pavement and Sidewalk Joints	15
657	#REF!	Temporary Fence	16
697	1200	Sedimentation Fence	16
740	6	Engineers Field Office and Equipment (type A)	17
748	1	Mobilization	17
752	0	Top Soil Rehandled and Spread	17
765	0	Seeding	17
767	1.00	Hay Mulch	17
767.8	500	Bales of Hay for Erosion Control	17
832.1	#REF!	Warning - Regulatory & Rte Marker Alum. Panel Type A	18
847.1	#REF!	Sign Supports (Not Guide) and Rt Mrker W/1 Brkwy Post Assmby - Steel	18
851	#REF!	Safety Controls for Construction Operations	19
852	#REF!	Safety Signing for Construction Operations	19
861.04	#REF!	4 Inch Reflectorized Yellow Line (Painted)	19
999	0	Police Detail	20

Town of Winthrop
 Department of Public Works
 100 Kennedy Drive
 Winthrop, Ma.

PRELIMINARY ESTIMATE

Access Road B
 Banks Street
 Winthrop, MA
 25% Submission

Highway Items

ITEM NO.	QUANT.	UNIT	ITEM DESCRIPTION	UNIT COST	TOTAL
101	0.25	A	Clearing and Grubbing	\$12,000.00	\$3,000.00
102.1	0	LF	Tree Trimming	\$10.00	\$0.00
120.1	744	CY	Unclassified Excavation	\$30.00	\$22,313
129	500	CY	Asphalt Pavement Excavation by Cold Plane	\$5.00	\$2,500.00
151	175	CY	Gravel Borrow	\$30.00	\$5,250.00
156	0	TON	Crushed Stone For Drain, Revetment and/or W.W. Found.	\$25.00	\$0.00
170	315	SY	Fine Grading and Compacting	\$2.50	\$787.50
191	25	LF	Drive Sample Boring	\$30.00	\$750.00
191.11	10	LF	Core Boring	\$65.00	\$650.00
193	1	LF	Mobilization and Dismantling of Boring Equipement	\$3,000.00	\$3,000.00
201	4	EA	Catch Basin	\$2,500.00	\$10,000.00
202	2	EA	Manhole	\$2,800.00	\$5,600.00
221	2	EA	Frame and Cover	\$500.00	\$1,000.00
222	4	EA	Frame and Grate	\$600.00	\$2,400.00
241.12	450	LF	12" Reinforced Concrete Pipe	\$60.00	\$27,000.00
402	117	CY	Dense Graded Crushed Stone For Sub-Base	\$50.00	\$5,850.00
440	750	LB	Calcium Chloride for Roadway Dust Control	\$0.45	\$337.50
443	1	MGL	Water for Roadway Dust Control	\$55.00	\$27.50
460	116	TON	Hot Mix Asphalt Pavement	\$85.00	\$9,877.00
472	1	TON	Hot Mix Asphalt Pavement For Misc. Work	\$160.00	\$160.00
482.5	32	LF	Sawing Pavement and Sidewalk Joints	\$2.00	\$64.00
570.2	450	LF	Hot Mixed Asphalt Curb Type 2	\$7.50	\$3,375.00
602	0	LF	Guard Rail Post - Steel	\$112.00	\$0.00
620.1	0	LF	Steel W Beam Highway Guard Single Faced	\$25.00	\$0.00
685	0	CY	Stone Masonry Wall in Cement Mortar	\$650.00	\$0.00
697	1200	LF	Sedimentation Fence	\$4.00	\$4,800.00
740	6	MO	Engineers Field Office and Equipment (type A)	\$2,300.00	\$13,800.00
748	1	LS	Mobilization	BELOW	\$0.00
751	0	CY	Loam Borrow	\$40.00	\$0.00
765	0	SY	Seeding	\$2.00	\$0.00
767.3	1.00	TON	Straw Mulch	\$607.50	\$607.50
767.8	500	EA	Bales of Hay for Erosion Control	\$12.00	\$6,000.00
829.1	22	SF	Roadside Guide Sign - (FR) - Aluminum Panel 25 SF and Under (Type A)	\$20.00	\$440.00
832.1	20	SF	Warning - Regulatory and Route Marker - Aluminum Panel (Type A)	\$10.00	\$200.00
841.1	0	EA	Supports for Guide Sign D6 with D8 - 5 Inch Steel	\$1,300.00	\$0.00

Town of Winthrop
 Department of Public Works
 100 Kennedy Drive
 Winthrop, Ma.

PRELIMINARY ESTIMATE

Access Road B
 Banks Street
 Winthrop, MA
 25% Submission

Highway Items

ITEM NO.	QUANT.	UNIT	ITEM DESCRIPTION	UNIT COST	TOTAL
847.1	3	EA	Sign Supports (Not Guide) and Rt Mrker w/1 Brkwy Post Assembly - Steel	\$100.00	\$300.00
851	1	UD	Safety Controls for Construction Operations	\$150.00	\$150.00
852	50	SF	Safety Signing for Construction Operations	\$16.00	\$800.00
859	1800	DD	Reflectorized Drum	\$0.40	\$720.00
864.04	144	SF	Pavement Arrow and Legends Reflective White (Thermoplastic)	\$4.00	\$576.00
865.1	12	SF	Cross walks and Stop Lines Reflective White (Thermoplastic)	\$20.00	\$240.00
866.04	2200	LF	4 inch Reflectorized White Line (Thermoplastic)	\$0.45	\$990.00
874	1	EA	Street Name Sign	\$100.00	\$100.00
902	0	CY	3500 PSI, 1.5 In, 520 Cement Concrete	\$700.00	\$0.00
904	0	CY	4000 PSI, 3/4 In, 610 Cement Concrete	\$875.00	\$0.00
910	0	LB	Steel Reinforcement For Structures	\$4.00	\$0.00
999	0	HR	Police Detail	\$37.00	\$0.00
			TOTAL HIGHWAY ITEMS		\$133,664.50
			3% - MOBILIZATION		\$4,009.94
			TOTAL COST HIGHWAY ITEMS		\$137,674.44
			10% Contingency		\$13,767.44
			TOTAL COST HIGHWAY ITEMS		\$151,441.88

Town of Winthrop
 Department of Public Works
 100 Kennedy Drive
 Winthrop, Ma.

CALC BOOK NO. _____

PRELIMINARY ESTIMATE

Access Road C
 Golden Ave
 Winthrop, MA
 PSE Submission

Highway Items

ITEM NO.	QUANTITY	ITEM DESCRIPTION	Page
		Pavement Areas	2
		Earth Work	3 thru 11
101	0.1	Clearing and Grubbing	3 thru 11
120	105	Earth Excavation	3 thru 11
125	#REF!	Top Soil Excavated and Stacked	3 thru 11
151	210	Gravel Borrow	12
170	308	Fine Grading and Compacting	13
381.01	2	Service Box (municipal Standard)	14
440	0	Calcium Chloride for Roadway Dust Control	15
443	0	Water for Roadway Dust Control	15
460	36	Hot Mix Asphalt Pavement	15
472	1	Hot Mix Asphalt Pavement For Misc. Work	15
482.5	32	Sawing Pavement and Sidewalk Joints	15
657	#REF!	Temporary Fence	16
697	240	Sedimentation Fence	16
740	6	Engineers Field Office and Equipment (type A)	17
748	1	Mobilization	17
752	19	Top Soil Rehandled and Spread	17
765	133	Seeding	17
767	1.00	Hay Mulch	17
767.8	100	Bales of Hay for Erosion Control	17
832.1	#REF!	Warning - Regulatory & Rte Marker Alum. Panel Type A	18
847.1	#REF!	Sign Supports (Not Guide) and Rt Mrker W/1 Brkwy Post Assmbly - Steel	18
851	#REF!	Safety Controls for Construction Operations	19
852	#REF!	Safety Signing for Construction Operations	19
861.04	#REF!	4 Inch Reflectorized Yellow Line (Painted)	19
999	624	Police Detail	20

Town of Winthrop
 Department of Public Works
 100 Kennedy Drive
 Winthrop, Ma.

PRELIMINARY ESTIMATE

Access Road C
 Golden Ave
 Winthrop, MA
 25% Submission

Highway Items

ITEM NO.	QUANT.	UNIT	ITEM DESCRIPTION	UNIT COST	TOTAL
101	0.1	A	Clearing and Grubbing	\$12,000.00	\$1,200.00
102.1	0	LF	Tree Trimming	\$10.00	\$0.00
120.1	105	CY	Unclassified Excavation	\$30.00	\$3,150
129	0	CY	Asphalt Pavement Excavation by Cold Plane	\$5.00	\$0.00
151	210	CY	Gravel Borrow	\$30.00	\$6,300.00
156	0	TON	Crushed Stone For Drain,Revetment and/or W.W.Found.	\$25.00	\$0.00
170	308	SY	Fine Grading and Compacting	\$2.50	\$770.00
191	25	LF	Drive Sample Boring	\$30.00	\$750.00
191.11	10	LF	Core Boring	\$65.00	\$650.00
193	1	LF	Mobilization and Dismantling of Boring Equipment	\$3,000.00	\$3,000.00
201	2	EA	Catch Basin	\$2,500.00	\$5,000.00
202	1	EA	Manhole	\$2,800.00	\$2,800.00
221	1	EA	Frame and Cover	\$500.00	\$500.00
222	2	EA	Frame and Grate	\$600.00	\$1,200.00
241.12	50	LF	12" Reinforced Concrete Pipe	\$60.00	\$3,000.00
402	62	CY	Dense Graded Crushed Stone For Sub-Base	\$50.00	\$3,120.00
440	0	LB	Calcium Chloride for Roadway Dust Control	\$0.45	\$0.00
443	0	MGL	Water for Roadway Dust Control	\$55.00	\$0.00
460	36	TON	Hot Mix Asphalt Pavement	\$85.00	\$3,046.40
472	1	TON	Hot Mix Asphalt Pavement For Misc. Work	\$160.00	\$160.00
482.5	32	LF	Sawing Pavement and Sidewalk Joints	\$2.00	\$64.00
570.2	240	LF	Hot Mixed Asphalt Curb Type 2	\$7.50	\$1,800.00
602	37	LF	Guard Rail Post - Steel	\$112.00	\$4,144.00
620.1	120	LF	Steel W Beam Highway Guard Single Faced	\$25.00	\$3,000.00
685	0	CY	Stone Masonry Wall in Cement Mortar	\$650.00	\$0.00
697	240	LF	Sedimentation Fence	\$4.00	\$960.00
740	6	MO	Engineers Field Office and Equipment (type A)	\$2,300.00	\$13,800.00
748	1	LS	Mobilization	BELOW	\$0.00
751	19	CY	Loam Borrow	\$40.00	\$755.56
765	133	SY	Seeding	\$2.00	\$266.67
767.3	1.00	TON	Straw Mulch	\$607.50	\$607.50
767.8	100	EA	Bales of Hay for Erosion Control	\$12.00	\$1,200.00
829.1	22	SF	Roadside Guide Sign - (FR) - Aluminum Panel 25 SF and Under (Type A)	\$20.00	\$440.00
832.1	20	SF	Warning - Regulatory and Route Marker - Aluminum Panel (Type A)	\$10.00	\$200.00
841.1	0	EA	Supports for Guide Sign D6 with D8 - 5 Inch Steel	\$1,300.00	\$0.00

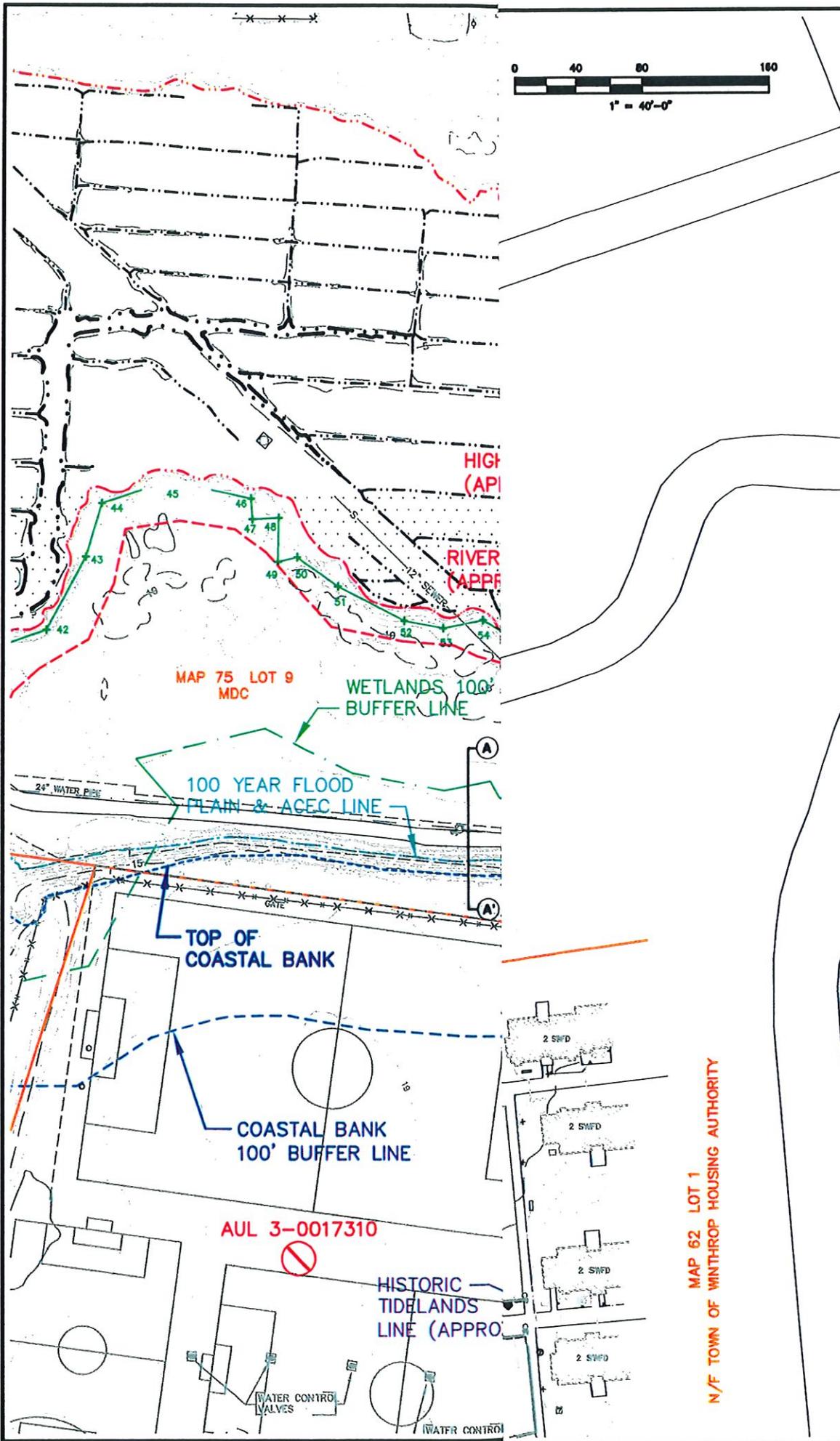
Town of Winthrop
 Department of Public Works
 100 Kennedy Drive
 Winthrop, Ma.

PRELIMINARY ESTIMATE

Access Road C
 Golden Ave
 Winthrop, MA
 25% Submission

Highway Items

ITEM NO.	QUANT.	UNIT	ITEM DESCRIPTION	UNIT COST	TOTAL
847.1	3	EA	Sign Supports (Not Guide) and Rt Mrker w/1 Brkwy Post Assmly - Steel	\$100.00	\$300.00
851	1	UD	Safety Controls for Construction Operations	\$150.00	\$150.00
852	50	SF	Safety Signing for Construction Operations	\$16.00	\$800.00
859	1800	DD	Reflectorized Drum	\$0.40	\$720.00
864.04	144	SF	Pavement Arrow and Legends Reflective White (Thermoplastic)	\$4.00	\$576.00
865.1	12	SF	Cross walks and Stop Lines Reflective White (Thermoplastic)	\$20.00	\$240.00
866.04	240	LF	4 inch Reflectorized White Line (Thermoplastic)	\$0.45	\$108.00
874	1	EA	Street Name Sign	\$100.00	\$100.00
902	0	CY	3500 PSI, 1.5 In, 520 Cement Concrete	\$700.00	\$0.00
904	0	CY	4000 PSI, 3/4 In, 610 Cement Concrete	\$875.00	\$0.00
910	0	LB	Steel Reinforcement For Structures	\$4.00	\$0.00
999	0	HR	Police Detail	\$37.00	\$0.00
			TOTAL HIGHWAY ITEMS		\$64,878.12
			3% - MOBILIZATION		\$1,946.34
			TOTAL COST HIGHWAY ITEMS		\$66,824.47
			10% Contingency		\$6,682.45
			TOTAL COST HIGHWAY ITEMS		\$73,506.91



MAP 62 LOT 1
N/F TOWN OF WINTHROP HOUSING AUTHORITY

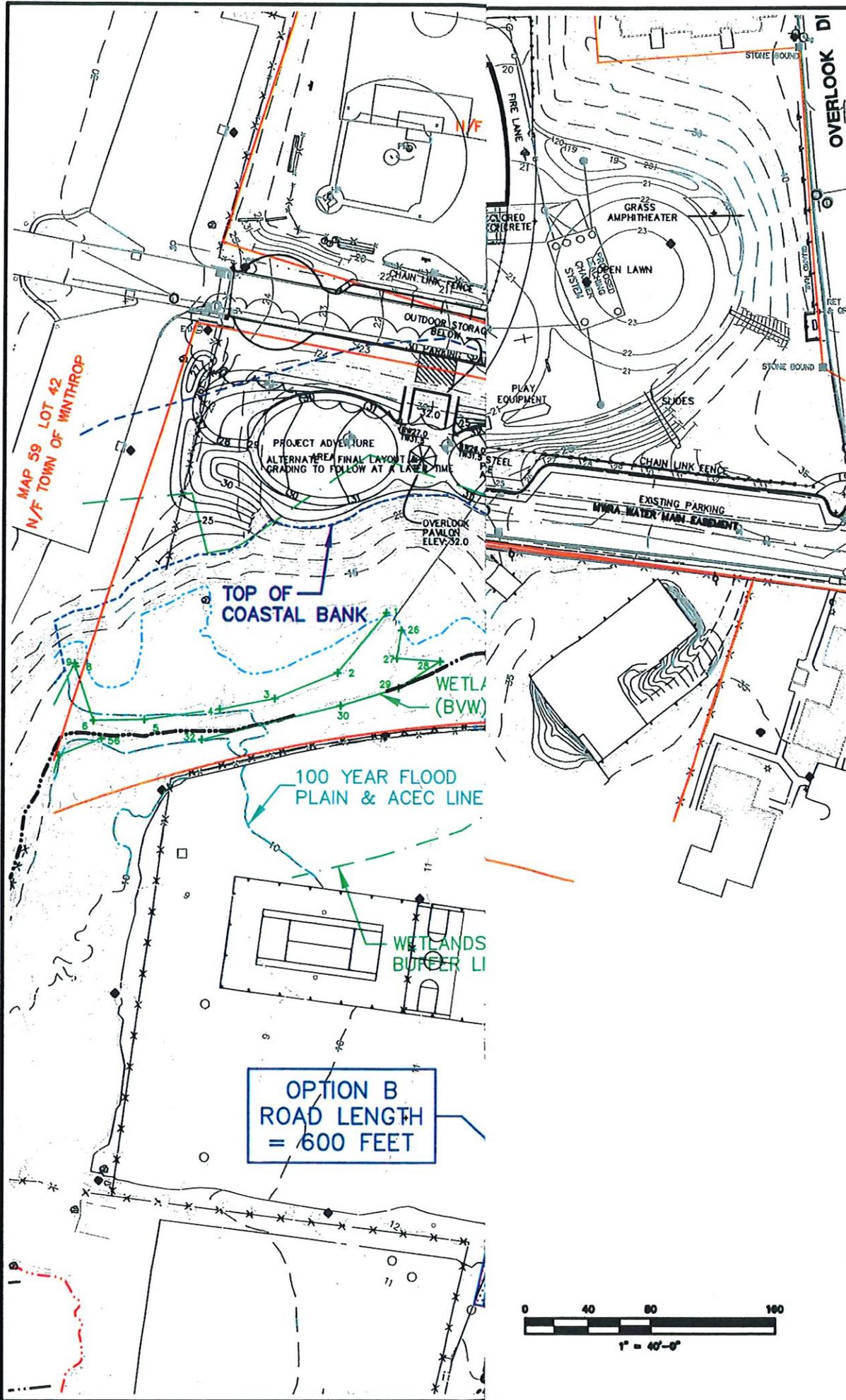
REV.	DATE	DESCRIPTION

PREPARED FOR:
TOWN OF WINTHROP
1 METCALF SQUARE
WINTHROP, MASSACHUSETTS

PREPARED BY:
GEOD CONSULTING
INCORPORATED AND CONSULTING CORPORATION
24 Roy Avenue, Burlington, MA 01803
Phone (781) 273-3434 Fax (781) 273-3430

FORT BANKS SCHOOL
101 KENNEDY DRIVE
WINTHROP, MASSACHUSETTS
OPTION A

DESIGNED BY: JTL	SCALE: 1" = 40'
DRAWN BY: JTL	DATE: 09/02/08
CHECKED BY: C.E.	CONTRACT NO. 08493M



REV.	DATE	DESCRIPTION

PREPARED FOR:
TOWN OF WINTHROP
 1 METCALF SQUARE
 WINTHROP, MASSACHUSETTS

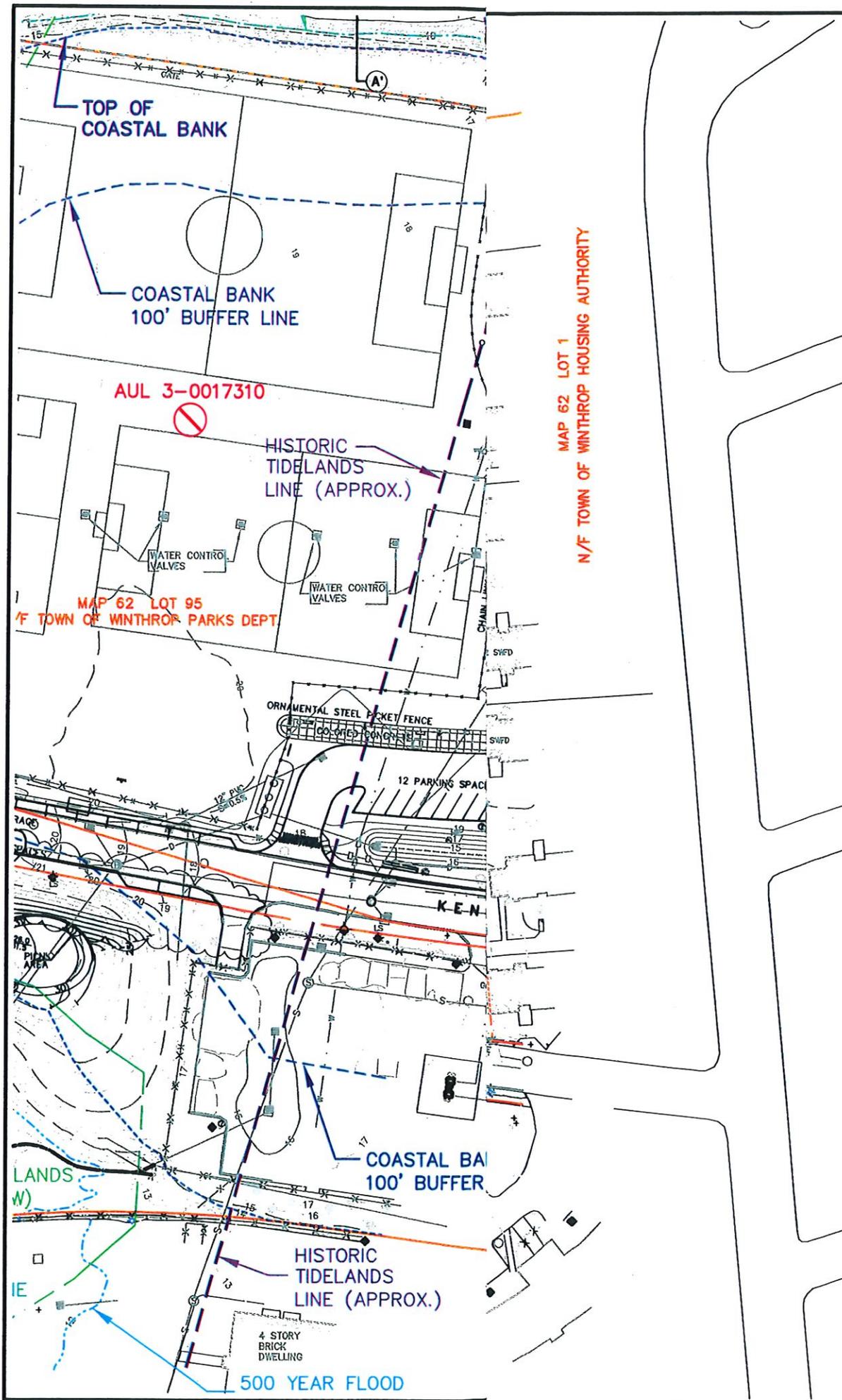
PREPARED BY:
GEOD CONSULTING
INCORPORATED AND ENGINEERING TRANSPORTATION
 24 Roy Avenue, Burlington, MA 01803
 Phone (781) 273-3434 Fax (781) 273-3430

FORT BANKS SCHOOL
 101 KENNEDY DRIVE
 WINTHROP, MASSACHUSETTS

OPTION B

DESIGNED BY: JTL	SCALE: 1"=40'
DRAWN BY: JTL	DATE: 09/02/08
CHECKED BY: C.E.	CONTRACT NO. 08493M

C-B
 SHEET 2 OF 3



REV.	DATE	DESCRIPTION

PREPARED FOR:
TOWN OF WINTHROP
 1 METCALF SQUARE
 WINTHROP, MASSACHUSETTS

PREPARED BY:
GEOD CONSULTING
PROVIDING SITE CONSULTANT TRANSPORTATION
 24 Roy Avenue, Burlington, MA 01803
 Phone (781) 273-3434 Fax (781) 273-3430

FORT BANKS SCHOOL
 101 KENNEDY DRIVE
 WINTHROP, MASSACHUSETTS

OPTION C

DESIGNED BY: JTL	SCALE: 1"=40'
DRAWN BY: JTL	DATE: 09/02/08
CHECKED BY: C.E.	CONTRACT NO. 08493M