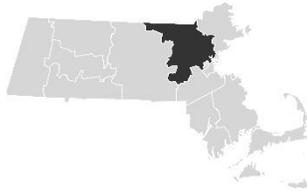


FLOOD INSURANCE STUDY

FEDERAL EMERGENCY MANAGEMENT AGENCY

VOLUME 5 OF 15



MIDDLESEX COUNTY, MASSACHUSETTS (ALL JURISDICTIONS)

COMMUNITY NAME	NUMBER	COMMUNITY NAME	NUMBER
ACTON, TOWN OF	250176	MARLBOROUGH, CITY OF	250203
ARLINGTON, TOWN OF	250177	MAYNARD, TOWN OF	250204
ASHBY, TOWN OF	250178	MEDFORD, CITY OF	250205
ASHLAND, TOWN OF	250179	MELROSE, CITY OF	250206
AYER, TOWN OF	250180	NATICK, TOWN OF	250207
BEDFORD, TOWN OF	255209	NEWTON, CITY OF	250208
BELMONT, TOWN OF	250182	NORTH READING, TOWN OF	250209
BILLERICA, TOWN OF	250183	PEPPERELL, TOWN OF	250210
BOXBOROUGH, TOWN OF	250184	READING, TOWN OF	250211
BURLINGTON, TOWN OF	250185	SHERBORN, TOWN OF	250212
CAMBRIDGE, CITY OF	250186	SHIRLEY, TOWN OF	250213
CARLISLE, TOWN OF	250187	SOMERVILLE, CITY OF	250214
CHELMSFORD, TOWN OF	250188	STONEHAM, TOWN OF	250215
CONCORD, TOWN OF	250189	STOW, TOWN OF	250216
DRACUT, TOWN OF	250190	SUDBURY, TOWN OF	250217
DUNSTABLE, TOWN OF	250191	TEWKSBURY, TOWN OF	250218
EVERETT, CITY OF	250192	TOWNSEND, TOWN OF	250219
FRAMINGHAM, TOWN OF	250193	TYNGSBOROUGH, TOWN OF	250220
GROTON, TOWN OF	250194	WAKEFIELD, TOWN OF	250221
HOLLISTON, TOWN OF	250195	WALTHAM, CITY OF	250222
HOPKINTON, TOWN OF	250196	WATERTOWN, TOWN OF	250223
HUDSON, TOWN OF	250197	WAYLAND, TOWN OF	250224
LEXINGTON, TOWN OF	250198	WESTFORD, TOWN OF	250225
LINCOLN, TOWN OF	250199	WESTON, TOWN OF	250226
LITTLETON, TOWN OF	250200	WILMINGTON, TOWN OF	250227
LOWELL, CITY OF	250201	WINCHESTER, TOWN OF	250228
MALDEN, CITY OF	250202	WOBURN, CITY OF	250229

REVISED:

REVISED
PRELIMINARY
06/08/2023



FEMA

FLOOD INSURANCE STUDY NUMBER
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Published Separately

Flood Insurance Rate Map (FIRM)

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	31	62	158	2.2	99.3	90.7 ²	90.7	0.0
B	237	161	1,002	0.3	99.3	99.1 ²	99.1	0.0
C	936	77	351	1.0	99.3	99.1 ²	99.6	0.5
D	1,292	181	1,496	0.2	99.3	99.1 ²	99.6	0.5
E	1,761	67	229	1.5	99.3	99.1 ²	99.6	0.5
F	2,023	82	724	0.5	102.4	102.4	102.9	0.5
G	2,362	77	645	0.5	102.4	102.4	102.9	0.5
H	2,862	97	594	0.6	102.4	102.4	102.9	0.5
I	4,243	194	1,416	0.2	102.5	102.5	102.9	0.4
J	4,691	138	822	0.4	102.5	102.5	102.9	0.4
K	5,053	30	149	2.0	102.5	102.5	102.9	0.4
L	5,307	60	224	1.3	105.7	105.7	106.2	0.5
M	5,651	85	443	0.7	105.8	105.8	106.2	0.4
N	6,071	24	100	2.9	105.8	105.8	106.2	0.4
O	6,367	20	67	4.3	106.2	106.2	106.6	0.4
P	6,503	16	60	4.8	106.9	106.9	107.1	0.2
Q	6,620	36	131	2.2	108.3	108.3	109.1	0.8
R	6,685	39	140	2.1	108.3	108.3	109.2	0.9
S	6,790	55	249	1.2	108.4	108.4	109.4	1.0
T	7,017	159	666	0.4	108.5	108.5	109.5	1.0
U	7,228	215	837	0.4	108.5	108.5	109.5	1.0

¹Feet above confluence with Merrimack River

²Elevation computed without consideration of backwater effects from Merrimack River

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY MIDDLESEX COUNTY, MA (ALL JURISDICTIONS)	FLOODWAY DATA
		FLOODING SOURCE: BLACK BROOK

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
V	7,477	170	586	0.5	108.5	108.5	109.5	1.0
W	7,598	238	731	0.4	108.5	108.5	109.5	1.0
X	7,645	238	710	0.4	108.5	108.5	109.5	1.0
Y	7,792	248	678	0.4	108.5	108.5	109.5	1.0
Z	7,895	150	292	1.0	108.5	108.5	109.5	1.0
AA	8,028	98	279	1.0	108.5	108.5	109.5	1.0
AB	8,141	85	208	1.4	108.6	108.6	109.6	1.0
AC	8,188	100	280	1.0	108.6	108.6	109.6	1.0
AD	8,198	100	286	1.0	108.6	108.6	109.6	1.0
AE	8,251	96	297	1.0	108.6	108.6	109.6	1.0
AF	8,596	125	322	0.9	108.8	108.8	109.7	0.9
AG	9,167	97	395	0.7	114.4	114.4	115.4	1.0
AH	9,532	275	2,070	0.1	114.4	114.4	115.4	1.0

¹Feet above confluence with Merrimack River

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY MIDDLESEX COUNTY, MA (ALL JURISDICTIONS)	FLOODWAY DATA
		FLOODING SOURCE: BLACK BROOK

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	0	149	630	2.4	146.4	146.4	146.5	0.1
B	1,670	159	1,072	1.8	148.3	148.3	149.3	1.0
C	2,076	150	898	2.1	149.0	149.0	149.8	0.8
D	4,478	345	1,491	1.2	150.8	150.8	151.8	1.0
E	6,548	131	730	1.7	152.1	152.1	153.1	1.0
F	6,928	154	761	1.4	152.4	152.4	153.4	1.0
G	9,827	498	3,262	0.3	152.9	152.9	153.9	1.0
H	11,506	201	1,086	0.7	153.4	153.4	154.4	1.0
I	13,909	112	626	1.3	154.9	154.9	155.9	1.0
J	14,146	200	739	1.1	156.7	156.7	157.1	0.4
K	14,980	200	1,088	0.7	156.9	156.9	157.5	0.6
L	16,659	171	953	0.8	157.1	157.1	158.1	1.0
M	19,410	80	196	3.3	166.7	166.7	166.7	0.0
N	19,906	48	137	4.7	172.1	172.1	172.7	0.6
O	22,440	91	*	*	*	*	*	*
P	22,651	35	221	2.7	186.8	186.8	186.8	0.0
Q	23,338	59	436	1.4	186.9	186.9	187.9	1.0
R	23,971	42	269	2.2	187.7	187.7	188.7	1.0
S	24,288	16	117	4.3	188.9	188.9	189.6	0.7
T	25,291	38	193	2.6	190.9	190.9	191.9	1.0
U	26,136	28	169	3.0	192.9	192.9	193.8	0.9

¹Feet above county boundary, approximately 1,945 feet below Central Street

*Encroachment not calculated

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY MIDDLESEX COUNTY, MA (ALL JURISDICTIONS)	FLOODWAY DATA
		FLOODING SOURCE: BOGASTOW BROOK – JAR BROOK

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
V	26,453	21	141	3.5	193.7	193.7	194.6	0.9
W	26,875	40	215	1.9	197.4	197.4	197.5	0.1
X	27,139	25	199	2.0	197.5	197.5	197.7	0.2
Y	27,350	40	137	2.9	200.2	200.2	200.2	0.0
Z	27,878	95	307	1.3	200.9	200.9	201.9	1.0
AA	28,565	10	55	7.3	206.8	206.8	207.6	0.8
AB	28,723	8	42	6.6	209.4	209.4	209.5	0.1
AC	29,093	15	63	4.4	212.7	212.7	213.7	1.0
AD	29,304	12	92	3.0	218.4	218.4	218.5	0.1
AE	29,515	12	53	5.3	220.3	220.3	220.6	0.3
AF	29,726	12	106	2.7	226.0	226.0	226.0	0.0
AG	29,885	15	122	2.3	226.1	226.1	226.4	0.3
AH	30,096	10	46	4.3	226.3	226.3	226.6	0.3
AI	30,360	10	33	6.1	230.3	230.3	230.5	0.2
AJ	30,518	15	69	2.9	235.0	235.0	235.0	0.0
AK	30,782	9	45	4.5	235.4	235.4	236.1	0.7
AL	30,835	12	50	4.0	238.0	238.0	238.0	0.0

¹Feet above county boundary, approximately 1,945 feet below Central Street

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY MIDDLESEX COUNTY, MA (ALL JURISDICTIONS)	FLOODWAY DATA
		FLOODING SOURCE: BOGASTOW BROOK – JAR BROOK

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	106	210	1,896	0.1	132.1	132.1	133.1	1.0
B	544	160	1,325	0.1	132.1	132.1	133.1	1.0
C	1,484	170	940	0.1	132.1	132.1	133.1	1.0
D	1,616	148	468	0.2	132.1	132.1	133.1	1.0
E	1,748	173	912	0.1	132.1	132.1	133.1	1.0
F	2,767	64	259	0.4	132.1	132.1	133.1	1.0
G	3,797	40	134	0.7	132.1	132.1	133.1	1.0
H	4,277	17	53	1.9	132.2	132.2	133.1	0.9
I	4,420	17	53	1.9	132.4	132.4	133.4	1.0

¹Feet above limit of detailed study, approximately 1,609 feet below Oak Street

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY MIDDLESEX COUNTY, MA (ALL JURISDICTIONS)	FLOODWAY DATA
		FLOODING SOURCE: BOGLE BROOK 1

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	0	23	85	7.4	154.9	154.9	154.9	0.0
B	317	72	216	2.9	156.0	156.0	157.0	1.0
C	634	36	89	7.1	158.3	158.3	158.5	0.2
D	1,214	33	90	7.0	163.9	163.9	164.2	0.3
E	1,373	59	185	3.4	164.7	164.7	165.6	0.9
F	1,478	42	227	2.8	167.6	167.6	168.5	0.9
G	1,690	45	185	3.4	167.8	167.8	168.7	0.9
H	1,901	35	181	3.5	169.2	169.2	169.2	0.0
I	2,112	15	87	7.2	169.3	169.3	169.5	0.2
J	2,587	79	272	2.3	169.8	169.8	170.8	1.0
K	2,904	14	76	8.3	170.4	170.4	171.4	1.0
L	3,010	14	94	6.7	173.7	173.7	173.7	0.0
M	3,221	48	264	2.4	173.7	173.7	174.6	0.9
N	3,326	58	245	2.6	173.9	173.9	174.8	0.9
O	4,224	148	895	0.7	174.0	174.0	175.0	1.0
P	5,438	30	88	6.3	174.4	174.4	174.7	0.3
Q	5,755	15	66	8.4	177.3	177.3	178.1	0.8
R	6,178	393	1,870	0.3	178.4	178.4	179.4	1.0
S	7,075	72	312	1.1	178.7	178.7	179.7	1.0
T	7,603	391	2,455	0.1	183.3	183.3	184.3	1.0
U	7,709	209	2,348	0.1	191.8	191.8	192.8	1.0

¹Feet above limit of detailed study, approximately 1,430 feet below Sherburn Circle

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY MIDDLESEX COUNTY, MA (ALL JURISDICTIONS)	FLOODWAY DATA
		FLOODING SOURCE: BOGLE BROOK 2

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
V	7,973	25	300	1.2	191.8	191.8	192.8	1.0
W	8,290	191	1,512	0.2	191.8	191.8	192.8	1.0
X	8,606	36	278	1.3	191.8	191.8	192.8	1.0
Y	8,765	24	221	1.6	195.8	195.8	196.8	1.0
Z	9,662	478	2,267	0.2	196.3	196.3	197.3	1.0
AA	10,243	54	209	1.3	196.4	196.4	197.4	1.0
AB	10,349	100	436	0.6	197.6	197.6	198.6	1.0
AC	10,982	571	2,800	0.1	197.6	197.6	198.6	1.0
AD	11,880	33	142	1.9	197.9	197.9	198.9	1.0
AE	12,566	164	411	0.7	198.2	198.2	199.2	1.0
AF	13,042	30	48	5.6	204.0	204.0	204.2	0.2

¹Feet above limit of detailed study, approximately 1,430 feet below Sherburn Circle

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY MIDDLESEX COUNTY, MA (ALL JURISDICTIONS)	FLOODWAY DATA
		FLOODING SOURCE: BOGLE BROOK 2

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	99	30	144	2.4	181.3	176.5 ²	177.5	1.0
B	618	25	86	4.1	181.3	177.7 ²	178.4	0.7

¹Feet above confluence with Assabet River

²Elevation computed without consideration of backwater effects from Assabet River

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY MIDDLESEX COUNTY, MA (ALL JURISDICTIONS)	FLOODWAY DATA
		FLOODING SOURCE: BOONS POND BRANCH

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	102	7	43	4.2	188.3	188.3	188.3	0.0
B	150	80	237	0.8	188.7	188.7	188.7	0.0
C	645	80	141	1.3	189.8	189.8	190.6	0.8
D	695	86	222	0.8	189.8	189.8	190.6	0.8
E	1,245	40	105	1.7	190.8	190.8	191.4	0.6
F	1,514	26	134	1.3	192.3	192.3	192.3	0.0
G	1,721	171	266	0.7	193.7	193.7	193.7	0.0
H	1,770	58	309	0.6	193.7	193.7	193.7	0.0
I	2,165	80	297	0.6	193.7	193.7	193.7	0.0
J	3,315	11	35	5.2	198.7	198.7	198.7	0.0
K	3,365	12	39	1.6	199.2	199.2	199.2	0.0
L	3,825	10	69	2.6	200.8	200.8	201.2	0.4
M	4,345	80	360	0.5	202.6	202.6	202.8	0.2
N	4,395	80	406	0.4	202.6	202.6	202.8	0.2
O	5,938	80	305	0.6	203.3	203.3	203.5	0.2
P	5,990	80	650	0.3	203.3	203.3	203.5	0.2
Q	7,017	37	220	0.8	206.3	206.3	206.6	0.3
R	7,370	36	134	1.3	206.5	206.5	206.9	0.4
S	7,420	27	233	0.8	206.5	206.5	206.9	0.4

¹Feet above confluence with Stony Brook 2

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY MIDDLESEX COUNTY, MA (ALL JURISDICTIONS)	FLOODWAY DATA
		FLOODING SOURCE: BOUTWELL BROOK

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	430	42	42	4.8	275.5	275.5	276.0	0.5
B	1,700	218	1,000	0.2	290.4	290.4	290.4	0.0

¹Feet above confluence with Catacoonamug Brook

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY MIDDLESEX COUNTY, MA (ALL JURISDICTIONS)	FLOODWAY DATA
		FLOODING SOURCE: BOW BROOK

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	1,589	65	188	1.8	195.3	195.3	196.1	0.8
B	1,943	69	216	1.6	197.5	197.5	198.5	1.0
C	2,862	22	53	2.5	199.0	199.0	200.0	1.0
D	3,105	76	297	0.4	202.2	202.2	202.2	0.0
E	4,087	15	20	6.7	203.1	203.1	203.1	0.0
F	5,169	14	49	2.8	209.3	209.3	210.3	1.0
G	6,325	43	85	1.3	214.3	214.3	214.3	0.0
H	6,405	32	56	1.9	214.3	214.3	214.4	0.1
I	7,413	15	22	4.4	221.5	221.5	220.0	0.5
J	7,608	45	151	0.6	225.2	225.2	225.2	0.0
K	8,527	47	112	0.9	225.4	225.4	225.4	0.0
L	9,573	56	111	0.9	225.6	225.6	225.8	0.2

¹Feet above confluence with Assabet River

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY MIDDLESEX COUNTY, MA (ALL JURISDICTIONS)	FLOODWAY DATA
		FLOODING SOURCE: BRANCH OF ASSABET RIVER

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	401	12	63	2.0	195.0	195.0	196.0	1.0
B	1,062	86	437	0.3	195.1	195.1	196.1	1.0
C	1,183	40	186	0.7	198.8	198.8	199.8	1.0
D	1,299	176	952	0.1	198.9	198.9	199.8	0.9
E	2,017	225	1,809	0.1	198.9	198.9	199.8	0.9
F	2,756	15	49	2.6	198.9	198.9	199.8	0.9
G	2,872	91	180	0.7	202.9	202.9	202.9	0.0
H	2,973	38	195	0.6	202.9	202.9	202.9	0.0

¹Feet above confluence with Elizabeth Brook 1

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY MIDDLESEX COUNTY, MA (ALL JURISDICTIONS)	FLOODWAY DATA
		FLOODING SOURCE: BRANCH OF ELIZABETH BROOK 1

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	500	15	32	3.5	255.1	248.8 ²	249.7	0.9
B	980	15	57	2.0	258.6	258.6	258.6	0.0
C	1,425	24	32	3.5	259.2	259.2	259.7	0.5
D	2,420	10	17	6.5	268.4	268.4	269.1	0.7
E	3,812	15	32	3.5	276.4	276.4	277.0	0.6
F	4,055	129	368	0.3	279.8	279.8	280.2	0.4

¹Feet above confluence with Sudbury Reservoir

²Elevation computed without consideration of backwater effects from Sudbury Reservoir

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY MIDDLESEX COUNTY, MA (ALL JURISDICTIONS)	FLOODWAY DATA
		FLOODING SOURCE: BROAD MEADOW BROOK

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	158	20	53	0.7	77.6	75.1 ²	75.5	0.4
B	739	17	29	2.5	77.7	77.7	78.5	0.8
C	845	10	53	1.4	81.9	81.9	81.9	0.0
D	1,267	35	139	0.5	81.9	81.9	82.1	0.2

¹Feet above confluence with Shawsheen River

²Elevation computed without consideration of backwater effects from Shawsheen River

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY MIDDLESEX COUNTY, MA (ALL JURISDICTIONS)	FLOODWAY DATA
		FLOODING SOURCE: BROOK A

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	390	9	24	2.1	156.7	153.5 ²	153.7	0.2
B	1,140	220	791	0.1	156.7	156.2 ²	156.2	0.0

¹Feet above confluence with Beaverdam Brook

²Elevation computed without consideration of backwater effects from Beaverdam Brook

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY MIDDLESEX COUNTY, MA (ALL JURISDICTIONS)	FLOODWAY DATA
		FLOODING SOURCE: BROOK FROM WAUSHAKUM POND

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	885	100	197	1.1	173.2	167.1 ²	167.7	0.6
B	995	100	223	0.9	173.2	167.4 ²	168.0	0.6
C	1,434	100	137	1.5	173.2	167.6 ²	168.4	0.8
D	1,566	80	197	1.1	173.2	169.4 ²	169.5	0.1
E	2,770	100	190	1.0	173.2	169.4 ²	170.2	0.8
F	3,605	150	188	1.0	173.2	173.2	171.0	0.5
G	3,745	40	270	0.7	176.1	176.1	176.5	0.4
H	4,210	40	209	0.8	176.1	176.1	176.5	0.4
I	4,345	10	63	2.6	176.2	176.2	176.7	0.5
J	5,190	130	488	0.3	176.2	176.2	176.9	0.7
K	7,980	20	29	6.9	178.3	178.3	178.3	0.0
L	9,500	50	72	2.8	188.8	188.8	189.0	0.2
M	9,552	150	50	4.0	194.3	194.3	195.0	0.7
N	9,792	20	70	2.9	197.0	197.0	197.0	0.0
O	9,842	20	105	1.9	197.1	197.1	197.1	0.0
P	10,563	18	114	1.7	199.8	199.8	200.1	0.3
Q	10,613	20	140	1.4	199.9	199.9	200.2	0.3
R	11,933	20	289	0.6	199.9	199.9	200.3	0.4
S	13,433	20	30	5.4	200.0	200.0	200.3	0.3
T	14,593	4	21	3.3	209.3	209.3	209.3	0.0
U	14,643	20	127	0.5	209.5	209.5	209.5	0.0

¹Feet above confluence with Nashoba Brook

²Elevation computed without consideration of backwater effects from Nashoba Brook

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY MIDDLESEX COUNTY, MA (ALL JURISDICTIONS)	FLOODWAY DATA
		FLOODING SOURCE: BUTTER BROOK

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	2,140	275	466	3.0	226.2	224.5 ²	225.0	0.5
B	3,630	660	5,430	0.3	240.3	240.3	240.3	0.0
C	4,600	280	1,216	1.2	242.8	242.8	242.8	0.0
D	5,400	70	231	6.1	244.1	244.1	244.4	0.3
E	6,550	64	235	6.0	250.9	250.9	251.1	0.2
F	8,280	160	772	1.8	263.9	263.9	263.9	0.0

¹Feet above confluence with Nashua River

²Elevation computed without consideration of backwater effects from Nashua River

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY MIDDLESEX COUNTY, MA (ALL JURISDICTIONS)	FLOODWAY DATA
		FLOODING SOURCE: CATACOOMAMUG BROOK

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	1,160	318	2,735	1.6	3.6	3.6	3.6	0.0
B	1,594	242	2,465	1.8	3.6	3.6	3.6	0.0
C	2,021	177	2,215	2.0	3.7	3.7	3.7	0.0
D	2,387	216	2,598	1.7	3.8	3.8	3.8	0.0
E	3,377	239	2,180	2.0	3.9	3.9	3.9	0.0
F	4,113	280	2,568	1.7	4.0	4.0	4.0	0.0
G	4,969	287	2,719	1.6	4.0	4.0	4.0	0.0
H	5,674	252	2,253	2.0	4.1	4.1	4.1	0.0
I	6,144	330	2,868	1.6	4.2	4.2	4.2	0.0
J	6,410	329	2,827	1.6	4.2	4.2	4.2	0.0
K	6,617	343	2,830	1.6	4.2	4.2	4.2	0.0
L	7,662	824	3,689	1.2	4.3	4.3	4.3	0.0
M	9,058	500	3,004	1.5	4.5	4.5	4.5	0.0
N	10,246	341	1,630	2.7	4.7	4.7	4.7	0.0
O	12,054	151	1,244	3.6	5.4	5.4	5.5	0.1
P	12,367	159	1,222	3.7	5.6	5.6	5.6	0.0
Q	12,930	155	1,261	3.5	5.8	5.8	5.9	0.1
R	13,471	211	1,542	2.9	6.1	6.1	6.2	0.1
S	13,933	157	970	4.6	6.6	6.6	6.7	0.1
T	14,242	94	829	5.4	6.9	6.9	6.9	0.0
U	14,448	104	706	6.3	7.0	7.0	7.1	0.1

¹Feet above Cambridge/Watertown corporate limits

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY MIDDLESEX COUNTY, MA (ALL JURISDICTIONS)	FLOODWAY DATA
		FLOODING SOURCE: CHARLES RIVER

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
V	14,701	201	1,052	4.2	8.0	8.0	8.1	0.1
W	14,898	243	1,103	4.0	11.5	11.5	11.5	0.0
X	14,965	278	1,133	3.9	11.5	11.5	11.5	0.0
Y	15,239	187	1,233	3.6	12.0	12.0	12.0	0.0
Z	15,612	226	1,284	3.5	12.2	12.2	12.2	0.0
AA	16,360	202	1,069	4.2	12.7	12.7	12.8	0.1
AB	16,513	190	922	4.8	12.8	12.8	12.8	0.0
AC	17,333	130	750	5.9	14.0	14.0	14.2	0.2
AD	18,187	138	1,072	4.2	15.1	15.1	15.4	0.3
AE	19,162	134	973	4.6	15.7	15.7	16.1	0.4
AF	19,928	57	381	11.7	16.0	16.0	16.2	0.2
AG	21,002	138	1,116	4.0	19.8	19.8	20.3	0.5
AH	21,787	170	1,455	3.1	20.4	20.4	20.8	0.4
AI	22,275	185	1,338	3.3	20.6	20.6	21.0	0.4
AJ	22,538	162	1,276	3.5	20.8	20.8	21.1	0.3
AK	22,722	173	1,547	2.7	21.0	21.0	21.3	0.3
AL	23,201	111	1,087	3.8	21.1	21.1	21.4	0.3
AM	24,041	138	1,271	3.2	21.5	21.5	21.9	0.4
AN	24,319	145	1,257	3.3	21.9	21.9	22.2	0.3
AO	24,898	102	940	4.4	22.2	22.2	22.5	0.3
AP	25,401	95	769	5.3	22.3	22.3	22.9	0.6

¹Feet above Cambridge/Watertown corporate limits

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY MIDDLESEX COUNTY, MA (ALL JURISDICTIONS)	FLOODWAY DATA
		FLOODING SOURCE: CHARLES RIVER

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
AQ	25,599	115	857	4.8	22.7	22.7	23.3	0.6
AR	25,752	173	1,253	3.3	23.2	23.2	23.7	0.5
AS	25,938	225	1,082	3.8	23.5	23.5	23.9	0.4
AT	26,294	197	971	4.2	24.4	24.4	24.6	0.2
AU	26,612	221	1,696	2.4	24.8	24.8	25.0	0.2
AV	27,257	153	1,228	3.3	25.0	25.0	25.2	0.2
AW	27,755	157	1,404	2.9	25.2	25.2	25.5	0.3
AX	28,004	176	1,226	3.4	26.1	26.1	26.3	0.2
AY	28,340	153	1,157	3.6	26.3	26.3	26.5	0.2
AZ	28,799	159	1,385	3.0	26.6	26.6	26.8	0.2
BA	29,226	157	888	4.6	26.7	26.7	27.0	0.3
BB	29,665	75	550	7.5	27.5	27.5	27.6	0.1
BC	29,830	105	837	4.9	28.5	28.5	28.6	0.1
BD	30,004	99	759	5.4	28.6	28.6	28.8	0.2
BE	30,080	99	773	5.3	28.8	28.8	28.9	0.1
BF	30,527	332	3,362	1.2	37.5	37.5	37.7	0.2
BG	31,046	347	3,819	1.1	37.5	37.5	37.7	0.2
BH	32,028	388	2,843	1.4	37.5	37.5	37.8	0.3
BI	32,182	229	2,301	1.8	37.5	37.5	37.8	0.3
BJ	32,351	204	2,345	1.8	37.6	37.6	37.8	0.2
BK	33,197	443	4,422	0.9	37.8	37.8	38.0	0.2

¹Feet above Cambridge/Watertown corporate limits

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY MIDDLESEX COUNTY, MA (ALL JURISDICTIONS)	FLOODWAY DATA
		FLOODING SOURCE: CHARLES RIVER

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
BL	34,405	258	2,725	1.5	37.8	37.8	38.0	0.2
BM	35,729	258	3,172	1.3	37.9	37.9	38.1	0.2
BN	37,487	647	7,755	0.5	38.0	38.0	38.2	0.2
BO	39,562	149	1,377	3.0	38.0	38.0	38.1	0.1
BP	43,447	206	1,966	1.9	38.9	38.9	39.0	0.1
BQ	44,632	211	1,954	1.9	39.0	39.0	39.2	0.2
BR	45,622	412	3,262	1.2	39.1	39.1	39.3	0.2
BS	46,464	131	1,373	2.7	39.4	39.4	39.5	0.1
BT	46,926	176	1,624	2.3	39.5	39.5	39.7	0.2
BU	47,329	216	2,106	1.8	39.7	39.7	39.8	0.1
BV	47,722	237	1,882	2.0	39.8	39.8	39.9	0.1
BW	48,077	173	1,522	2.5	39.9	39.9	40.0	0.1
BX	48,551	123	1,229	3.1	40.3	40.3	40.5	0.2
BY	48,786	103	1,180	3.2	40.6	40.6	40.8	0.2
BZ	49,247	250	2,558	1.5	40.7	40.7	41.0	0.3
CA	49,464	262	2,499	1.5	40.8	40.8	41.0	0.2
CB	49,943	199	1,902	2.0	40.8	40.8	41.1	0.3
CC	50,357	321	2,927	1.3	41.0	41.0	41.2	0.2
CD	50,947	420	3,161	1.2	41.1	41.1	41.3	0.2
CE	52,286	386	2,932	1.3	41.2	41.2	41.4	0.2
CF	53,412	313	2,265	1.7	41.2	41.2	41.5	0.3

¹Feet above Cambridge/Watertown corporate limits

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY MIDDLESEX COUNTY, MA (ALL JURISDICTIONS)	FLOODWAY DATA
		FLOODING SOURCE: CHARLES RIVER

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
CG	54,113	236	2,002	1.9	41.3	41.3	41.6	0.3
CH	54,391	312	2,611	1.4	41.4	41.4	42.1	0.7
CI	55,084	220	1,822	2.1	41.4	41.4	42.2	0.8
CJ	55,789	181	1,518	2.5	41.5	41.5	42.3	0.8
CK	56,239	261	1,760	2.1	41.5	41.5	42.5	1.0
CL	56,544	218	1,731	2.2	41.6	41.6	42.6	1.0
CM	57,636	198	1,379	2.7	42.0	42.0	43.0	1.0
CN	58,650	111	1,029	3.7	42.6	42.6	43.4	0.8
CO	59,054	156	1,370	2.8	43.1	43.1	43.8	0.7
CP	59,662	121	900	4.2	43.4	43.4	44.0	0.6

¹Feet above Cambridge/Watertown corporate limits

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY MIDDLESEX COUNTY, MA (ALL JURISDICTIONS)	FLOODWAY DATA
		FLOODING SOURCE: CHARLES RIVER

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	5,742	30	183	4.4	35.3	35.3	36.3	1.0
B	5,892	30	166	4.8	35.5	35.5	36.5	1.0
C	6,202	30	187	4.3	37.7	37.7	37.7	0.0
D	6,578	30	202	4.0	38.6	38.6	38.6	0.0
E	7,158	30	164	4.9	38.6	38.6	39.0	0.4

¹Feet above confluence with Charles River

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY MIDDLESEX COUNTY, MA (ALL JURISDICTIONS)	FLOODWAY DATA
		FLOODING SOURCE: CHEESE CAKE BROOK

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	106	35	94	7.4	108.8	105.1 ²	106.1	1.0
B	317	27	101	6.9	108.8	106.4 ²	106.9	0.5
C	950	153	582	1.2	108.8	107.6 ²	108.6	1.0
D	1,848	54	136	5.1	111.9	111.9	112.7	0.8
E	2,059	37	211	3.3	117.0	117.0	117.0	0.0
F	2,746	20	72	9.7	127.4	127.4	127.5	0.1
G	3,326	207	1,017	0.7	128.9	128.9	129.9	1.0
H	4,118	34	124	5.6	131.3	131.3	132.0	0.7
I	4,910	56	338	2.1	133.6	133.6	134.5	0.9
J	5,069	20	316	2.2	137.1	137.1	137.1	0.0
K	5,650	17	164	4.3	137.1	137.1	137.5	0.4
L	7,022	75	693	1.0	137.2	137.2	138.2	1.0
M	7,814	190	1,610	0.4	137.2	137.2	138.2	1.0
N	8,712	140	927	0.8	137.3	137.3	138.3	1.0
O	9,715	70	328	2.1	138.0	138.0	138.9	0.9
P	10,930	80	891	0.6	140.9	140.9	140.9	0.0
Q	11,088	80	891	0.6	149.4	149.4	149.4	0.0
R	11,827	80	605	0.9	149.4	149.4	149.5	0.1
S	12,830	86	447	1.2	149.5	149.5	149.8	0.3
T	14,573	78	394	1.4	150.1	150.1	151.1	1.0
U	15,154	35	146	3.8	151.1	151.1	151.9	0.8

¹Feet above confluence with Stony Brook 1

²Elevation computed without consideration of backwater effects from Stony Brook 1

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY MIDDLESEX COUNTY, MA (ALL JURISDICTIONS)	FLOODWAY DATA
		FLOODING SOURCE: CHERRY BROOK

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
V	15,840	219	1,140	0.5	151.8	151.8	152.8	1.0
W	16,157	338	3,391	0.2	157.9	157.9	158.9	1.0
X	16,738	140	1,329	0.4	157.9	157.9	158.9	1.0
Y	17,002	120	1,033	0.5	157.9	157.9	158.9	1.0

¹Feet above confluence with Stony Brook 1

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY MIDDLESEX COUNTY, MA (ALL JURISDICTIONS)	FLOODWAY DATA
		FLOODING SOURCE: CHERRY BROOK

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	1,954	63	113	5.2	39.7	36.6 ²	36.6	0.0
B	3,142	30	155	3.8	39.7	38.8 ²	39.1	0.3
C	3,221	21	139	4.2	39.7	39.7	40.1	0.4
D	3,543	26	176	3.3	40.1	40.1	40.1	0.0
E	3,648	22	152	3.8	40.1	40.1	40.1	0.0
F	3,992	21	106	5.5	40.5	40.5	40.9	0.4
G	4,261	19	100	5.8	41.3	41.3	41.3	0.0
H	4,409	27	280	2.1	44.0	44.0	44.0	0.0
I	4,673	57	495	1.2	44.1	44.1	44.1	0.0
J	5,116	43	391	1.5	44.1	44.1	44.1	0.0
K	5,465	22	136	3.0	44.1	44.1	44.2	0.1
L	5,766	22	49	8.2	45.7	45.7	45.8	0.1
M	5,887	19	73	5.5	49.8	49.8	50.0	0.2
N	6,162	28	98	4.2	50.5	50.5	50.6	0.1
O	6,262	159	97	8.7	60.9	60.9	60.9	0.0
P	6,711	50	95	4.2	69.2	69.2	69.2	0.0
Q-AA*	*	*	*	*	*	*	*	*
AB	11,083	125	111	3.6	138.3	138.3	138.3	0.0
AC	11,679	8	42	4.7	151.1	151.1	151.1	0.0
AD	11,822	16	71	2.8	151.1	151.1	151.7	0.6
AE	11,917	47	72	2.8	151.3	151.3	152.0	0.7

¹Feet above confluence with Beaver Brook 1

²Elevation computed without consideration of backwater effects from Beaver Brook 1

*No data available

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY MIDDLESEX COUNTY, MA (ALL JURISDICTIONS)	FLOODWAY DATA
		FLOODING SOURCE: CHESTER BROOK

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
AF	12,075	49	44	4.5	153.7	153.7	153.7	0.0
AG	12,149	59	52	3.9	158.2	158.2	158.2	0.0
AH	13,628	9	62	3.2	190.2	190.2	190.3	0.1
AI	13,971	28	151	1.3	190.3	190.3	190.6	0.3
AJ	14,177	22	80	2.5	190.3	190.3	190.6	0.3
AK	14,351	17	30	6.6	193.8	193.8	193.8	0.0
AL	14,499	21	181	1.1	202.7	202.7	202.7	0.0
AM	14,942	19	171	1.2	202.8	202.8	202.8	0.0
AN	15,037	36	257	0.8	202.8	202.8	202.8	0.0
AO	15,228	14	98	2.0	202.8	202.8	202.8	0.0
AP	15,428	28	200	1.0	202.8	202.8	202.9	0.1
AQ	15,518	32	168	1.2	202.8	202.8	202.9	0.1
AR	15,602	26	121	1.6	202.8	202.8	202.9	0.1
AS	15,745	12	79	2.5	202.9	202.9	203.0	0.1
AT	15,845	23	130	1.5	202.9	202.9	203.1	0.2

¹Feet above confluence with Beaver Brook 1

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY MIDDLESEX COUNTY, MA (ALL JURISDICTIONS)	FLOODWAY DATA
		FLOODING SOURCE: CHESTER BROOK

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
AX ²	20,836	42	103	3.5	223.1	223.1	223.3	0.2
AY	20,960	25	184	2.0	227.1	227.1	227.3	0.2
AZ	21,009	30	193	1.9	227.1	227.1	227.3	0.2
BA	21,116	192	929	0.4	227.2	227.2	227.4	0.2
BB	22,039	26	84	4.4	227.2	227.2	227.4	0.2
BC	22,140	41	129	2.8	228.0	228.0	228.7	0.7
BD	22,491	28	85	4.3	229.0	229.0	229.3	0.3
BE	23,046	59	176	2.1	230.2	230.2	230.3	0.1
BF	23,307	31	90	4.1	230.7	230.7	230.8	0.1
BG	23,513	26	99	3.7	231.4	231.4	231.4	0.0
BH	23,616	114	555	0.7	233.0	233.0	233.0	0.0
BI	24,448	25	154	1.9	233.0	233.0	233.0	0.0
BJ	24,604	38	158	1.8	233.4	233.4	233.5	0.1
BK	25,251	83	282	1.0	233.6	233.6	233.7	0.1
BL	25,530	56	229	1.3	233.6	233.6	233.8	0.2
BM	25,680	150	346	0.8	234.5	234.5	234.5	0.0
BN	26,165	21	52	5.6	234.6	234.6	234.7	0.1
BO	26,282	56	220	1.3	238.5	238.5	239.3	0.8
BP	26,671	50	131	2.2	238.6	238.6	239.4	0.8
BQ	27,038	80	633	0.5	244.2	244.2	244.7	0.5
BR	28,531	80	353	0.8	244.2	244.2	244.7	0.5

¹Feet above confluence with Charles River

²Cross sections A-AW (Norfolk County, Massachusetts) in floodway data tables for other counties

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY MIDDLESEX COUNTY, MA (ALL JURISDICTIONS)	FLOODWAY DATA
		FLOODING SOURCE: CHICKEN BROOK

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
BS	30,243	109	85	3.4	246.2	246.2	246.2	0.0
BT	30,408	39	295	1.0	251.1	251.1	251.3	0.2
BU	30,942	47	280	1.0	251.1	251.1	251.4	0.3
BV	31,657	49	188	1.1	251.1	251.1	251.4	0.3
BW	32,039	47	219	0.9	251.2	251.2	251.5	0.3
BX	32,235	80	385	0.5	251.2	251.2	251.5	0.3
BY	32,783	75	333	0.6	251.2	251.2	251.5	0.3
BZ	32,931	80	311	0.7	251.2	251.2	251.6	0.4
CA	33,173	136	512	0.4	251.2	251.2	251.6	0.4
CB	33,323	70	266	0.8	251.2	251.2	251.6	0.4
CC	33,479	76	301	0.7	251.2	251.2	251.6	0.4
CD	33,578	59	179	1.2	251.2	251.2	251.7	0.5
CE	33,700	90	434	0.5	253.3	253.3	253.5	0.2
CF	34,066	54	245	0.8	253.3	253.3	253.5	0.2
CG	34,482	32	146	1.4	253.3	253.3	253.5	0.2
CH	34,681	54	232	0.9	253.3	253.3	253.5	0.2
CI	35,895	125	65	3.2	254.3	254.3	254.3	0.0
CJ	36,056	40	70	2.9	256.1	256.1	256.2	0.1
CK	36,553	71	74	2.8	257.9	257.9	258.4	0.5
CL	36,642	48	156	1.3	260.4	260.4	261.2	0.8
CM	36,651	53	164	1.3	260.4	260.4	261.2	0.8

¹Feet above confluence with Charles River

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY MIDDLESEX COUNTY, MA (ALL JURISDICTIONS)	FLOODWAY DATA
		FLOODING SOURCE: CHICKEN BROOK

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
CN	36,764	127	737	0.3	260.5	260.5	261.2	0.7
CO	36,868	21	30	6.9	260.8	260.8	260.8	0.0
CP	37,049	79	113	1.8	263.1	263.1	263.1	0.0
CQ	37,306	66	80	2.6	265.3	265.3	265.3	0.0
CR	37,578	34	70	3.0	267.1	267.1	267.1	0.0
CS	38,044	177	230	0.9	268.3	268.3	268.6	0.3
CT	38,563	91	63	3.3	270.9	270.9	270.9	0.0
CU	39,164	84	120	1.7	275.6	275.6	276.0	0.4
CV	39,497	72	89	2.3	277.0	277.0	277.4	0.4
CW	39,993	142	174	1.2	278.9	278.9	279.0	0.1
CX	40,175	159	167	1.2	279.4	279.4	279.4	0.0
CY	40,467	145	198	1.0	279.9	279.9	280.0	0.1
CZ	40,565	54	59	3.5	280.0	280.0	280.1	0.1
DA	40,729	1,260	6,569	0.0	289.3	289.3	289.3	0.0

¹Feet above confluence with Charles River

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY MIDDLESEX COUNTY, MA (ALL JURISDICTIONS)	FLOODWAY DATA
		FLOODING SOURCE: CHICKEN BROOK

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	1,900	30	218	3.7	125.7	125.7	126.3	0.6
B	3,190	20	116	6.9	126.2	126.2	126.9	0.7

¹Feet above confluence with Sudbury River

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY MIDDLESEX COUNTY, MA (ALL JURISDICTIONS)	FLOODWAY DATA
		FLOODING SOURCE: COCHICHUATE BROOK

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	9,215	58	196	0.4	121.2	119.9 ²	120.9	1.0
B	9,775	28	73	0.9	121.2	120.0 ²	121.0	1.0
C	10,785	33	61	1.3	121.4	121.4	122.2	0.8
D	11,380	23	56	1.4	122.7	122.7	123.6	0.9
E	12,500	45	68	1.2	125.7	125.7	126.6	0.9
F	13,010	12	17	4.8	129.8	129.8	130.6	0.8

¹Feet above confluence with Sudbury River

²Elevation computed without consideration of backwater effects from Sudbury River

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY MIDDLESEX COUNTY, MA (ALL JURISDICTIONS)	FLOODWAY DATA
		FLOODING SOURCE: COLD BROOK

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	98	37	164	2.2	177.5	173.5 ²	173.9	0.4
B	1,164	127	487	1.2	177.5	173.7 ²	174.2	0.5
C	1,784	39	168	2.2	177.5	174.4 ²	174.8	0.4
D	11,650	30	71	6.0	224.2	224.2	225.0	0.8
E	12,450	35	116	3.7	235.9	235.9	236.6	0.7
F	13,850	260	1,395	0.3	237.8	237.8	238.6	0.8
G	14,860	380	1,722	0.2	237.8	237.8	238.6	0.8
H	15,365	225	1,282	0.3	237.8	237.8	238.6	0.8
I	16,525	40	187	2.3	238.9	238.9	239.6	0.7
J	17,880	215	1,089	0.4	243.0	243.0	243.0	0.0
K	18,835	55	351	1.2	251.8	251.8	251.8	0.0
L	20,115	45	277	1.5	251.8	251.8	251.8	0.0
M	21,040	440	3,801	0.1	260.8	260.8	260.8	0.0
N	21,350	55	152	2.8	261.0	261.0	261.1	0.1
O	22,840	20	60	7.2	268.0	268.0	268.8	0.8
P	23,630	35	129	3.3	270.4	270.4	271.3	0.9
Q	23,880	100	539	0.8	271.3	271.3	271.8	0.5
R	24,740	65	282	1.5	271.4	271.4	271.9	0.5

¹Feet above confluence with Sudbury River

²Elevation computed without consideration of backwater effects from Sudbury River

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY MIDDLESEX COUNTY, MA (ALL JURISDICTIONS)	FLOODWAY DATA
		FLOODING SOURCE: COLD SPRING BROOK

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	150	10	40	12.3	128.8	128.8	128.8	0.0
B	200	30	210	2.6	132.0	132.0	132.9	0.9
C	1,850	20	60	9.7	137.9	137.9	137.9	0.0
D	1,920	20	130	4.0	141.8	141.8	142.1	0.3
E	1,980	110	490	1.1	142.0	142.0	142.4	0.4
F	2,060	170	1,440	0.4	146.2	146.2	146.8	0.6
G	3,050	110	450	1.2	146.2	146.2	146.8	0.6
H	3,160	190	1,430	0.4	149.8	149.8	150.7	0.9
I	4,910	100	480	0.8	149.8	149.8	150.7	0.9

¹Feet above confluence with Fort Pond Brook

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY MIDDLESEX COUNTY, MA (ALL JURISDICTIONS)	FLOODWAY DATA
		FLOODING SOURCE: COLES BROOK

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	1,426	100	258	0.5	85.1	80.5 ²	80.9	0.4
B	2,534	100	128	1.0	85.1	80.8 ²	81.7	0.9
C	2,640	85	477	0.3	85.9	85.9	85.9	0.0
D	4,382	8	12	7.1	86.4	86.4	86.4	0.0

¹Feet above confluence with Sutton Brook

²Elevation computed without consideration of backwater effects from Shawsheen River

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY MIDDLESEX COUNTY, MA (ALL JURISDICTIONS)	FLOODWAY DATA
		FLOODING SOURCE: COLLINS BROOK

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	145	30	80	7.3	143.8	143.8	144.2	0.4
B	203	220	1,000	0.6	146.8	146.8	147.3	0.5
C	1,460	73	293	1.9	160.8	160.8	160.8	0.0
D	3,210	46	76	7.4	176.9	176.9	176.9	0.0
E	4,680	10	40	9.6	190.9	190.9	190.9	0.0
F	4,730	10	30	2.5	192.4	192.4	192.4	0.0
G	4,775	90	460	0.8	194.9	194.9	194.9	0.0
H	5,775	90	480	0.8	195.0	195.0	195.1	0.1
I	6,964	230	1,380	0.3	195.0	195.0	195.3	0.3

¹Feet above confluence with Nashoba Brook

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY MIDDLESEX COUNTY, MA (ALL JURISDICTIONS)	FLOODWAY DATA
		FLOODING SOURCE: CONANT BROOK

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	606	113	811	7.5	65.9	50.7 ²	50.8	0.1
B	1,441	115	917	6.6	65.9	55.2 ²	55.2	0.0
C	2,012	119	785	7.8	65.9	56.8 ²	56.8	0.0
D	2,547	129	808	7.5	65.9	61.9 ²	62.5	0.6
E	3,076	217	1,784	3.4	65.9	65.7 ²	65.8	0.1
F	4,123	114	814	7.5	66.6	66.6	66.7	0.1
G	4,763	142	832	7.5	75.6	75.6	75.6	0.0
H	5,306	183	1,543	4.0	78.0	78.0	78.1	0.1
I	5,929	155	928	6.6	78.5	78.5	78.6	0.1
J	6,277	75	426	13.9	80.3	80.3	80.3	0.0
K	6,927	68	427	14.8	92.4	92.4	92.5	0.1
L	7,522	107	945	6.3	97.6	97.6	97.6	0.0
M	8,187	240	1,502	3.9	101.3	101.3	101.5	0.2
N	8,589	147	1,041	5.8	103.0	103.0	103.1	0.1
O	9,416	232	2,970	2.0	104.0	104.0	104.1	0.1
P	10,958	335	4,378	1.3	104.2	104.2	104.2	0.0
Q	11,994	294	3,956	1.5	104.9	104.9	105.0	0.1
R	13,464	352	3,928	1.5	105.2	105.2	105.3	0.1
S	15,836	591	5,577	1.3	105.3	105.3	105.4	0.1
T	17,508	414	3,973	1.8	105.4	105.4	105.5	0.1
U	19,182	314	4,557	1.3	105.5	105.5	105.7	0.2

¹Feet above confluence with Merrimack River

²Elevation computed without consideration of backwater effects from Merrimack River

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY MIDDLESEX COUNTY, MA (ALL JURISDICTIONS)	FLOODWAY DATA
		FLOODING SOURCE: CONCORD RIVER

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
V	21,794	445	4,099	1.7	105.6	105.6	105.9	0.3
W	24,039	260	2,688	2.3	105.7	105.7	106.2	0.5
X	25,081	110	1,036	5.6	108.1	108.1	108.3	0.2
Y	25,129	180	1,793	3.2	113.9	113.9	113.9	0.0
Z	26,520	229	1,975	2.9	114.1	114.1	114.2	0.1
AA	28,107	191	1,569	3.7	115.8	115.8	115.9	0.1
AB	29,534	233	2,513	2.3	116.6	116.6	116.7	0.1
AC	31,902	322	3,480	1.7	117.1	117.1	117.3	0.2
AD	33,130	194	2,736	2.0	117.5	117.5	117.8	0.3
AE	34,943	374	4,156	1.4	117.7	117.7	117.9	0.2
AF	37,622	396	4,984	1.1	117.8	117.8	118.1	0.3
AG	39,621	238	3,285	1.7	118.0	118.0	118.3	0.3
AH	41,859	268	3,809	1.5	118.2	118.2	118.6	0.4
AI	43,510	213	2,650	2.1	118.3	118.3	118.8	0.5
AJ	46,753	482	5,421	1.1	118.6	118.6	119.0	0.4
AK	49,630	272	4,390	1.3	118.8	118.8	119.2	0.4
AL	51,565	980	10,850	0.5	118.8	118.8	119.3	0.5
AM	52,382	1,047	12,915	0.4	118.8	118.8	119.3	0.5
AN	54,675	797	10,179	0.6	118.8	118.8	119.3	0.5
AO	56,182	790	10,031	0.6	118.9	118.9	119.3	0.4
AP	57,314	1,018	10,228	0.5	118.9	118.9	119.4	0.5

¹Feet above confluence with Merrimack River

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY MIDDLESEX COUNTY, MA (ALL JURISDICTIONS)	FLOODWAY DATA
		FLOODING SOURCE: CONCORD RIVER

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
AQ	59,022	855	9,894	0.6	118.9	118.9	119.4	0.5
AR	60,443	320	5,681	1.0	119.0	119.0	119.5	0.5
AS	65,823	1,183	12,285	0.5	119.0	119.0	119.5	0.5
AT	67,500	905	11,104	0.5	119.0	119.0	119.6	0.6
AU	69,822	574	6,620	0.8	119.1	119.1	119.6	0.5
AV	71,553	540	7,310	0.8	119.1	119.1	119.6	0.5
AW	74,744	2,546	23,886	0.2	119.1	119.1	119.7	0.6
AX	77,896	2,004	18,936	0.3	119.1	119.1	119.7	0.6
AY	81,430	347	3,738	1.5	119.2	119.2	119.7	0.5
AZ	82,381	169	2,286	2.4	119.4	119.4	120.3	0.9
BA	83,593	844	7,319	0.8	119.7	119.7	120.3	0.6
BB	85,496	173	2,247	2.4	119.9	119.9	120.6	0.7

¹Feet above confluence with Merrimack River

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY MIDDLESEX COUNTY, MA (ALL JURISDICTIONS)	FLOODWAY DATA
		FLOODING SOURCE: CONCORD RIVER

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	3,274	50	445	0.8	91.0	91.0	91.0	0.0
B	5,546	20	128	4.9	91.2	91.2	91.6	0.4
C	5,596	20	114	4.0	91.2	91.2	91.7	0.5
D	7,186	58	171	5.0	96.7	96.7	97.7	1.0
E	7,921	166	1,001	0.5	100.8	100.8	101.3	0.5
F	8,916	65	362	1.3	100.8	100.8	101.3	0.5
G	9,216	20	51	12.8	101.8	101.8	101.8	0.0
H	9,546	225	1,613	0.3	105.5	105.5	105.6	0.1
I	10,517	40	77	5.2	105.5	105.5	105.6	0.1
J	10,957	163	1,285	0.3	106.1	106.1	106.8	0.7
K	11,646	14	70	3.5	106.1	106.1	106.8	0.7
L	11,742	25	70	3.5	106.1	106.1	106.8	0.7
M	12,651	20	81	3.0	107.4	107.4	107.9	0.5
N	14,411	23	94	2.2	108.5	108.5	109.1	0.6
O	15,136	20	100	2.1	108.7	108.7	109.3	0.6
P	15,881	20	99	2.1	108.9	108.9	109.6	0.7

¹Feet above confluence with Shawsheen River

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY MIDDLESEX COUNTY, MA (ALL JURISDICTIONS)	FLOODWAY DATA
		FLOODING SOURCE: CONTENT BROOK – MIDDLESEX CANAL

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	0	50	295	1.8	144.5	144.5	144.5	0.0
B	1,318	100	686	0.6	144.6	144.6	144.6	0.0
C	2,867	160	942	0.5	144.6	144.6	144.7	0.1
D	4,026	125	461	1.4	144.7	144.7	144.7	0.0
E	4,632	115	606	1.1	146.6	146.6	146.6	0.0
F	5,159	30	178	2.6	146.6	146.6	146.7	0.1
G	5,597	70	296	1.3	147.3	147.3	147.5	0.2
H	5,854	130	425	0.7	147.4	147.4	147.5	0.1
I	6,827	75	238	1.4	150.3	150.3	150.3	0.0
J	7,971	123	449	0.8	150.4	150.4	150.4	0.0
K	9,350	60	173	2.5	150.5	150.5	150.7	0.2
L	10,644	52	326	1.2	153.5	153.5	154.1	0.6
M	10,807	52	298	1.0	153.5	153.5	154.1	0.6

¹Feet above limit of detailed study, approximately 38 feet above Pond Street

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY MIDDLESEX COUNTY, MA (ALL JURISDICTIONS)	FLOODWAY DATA
		FLOODING SOURCE: COURSE BROOK

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	420	30	89	6.4	181.2	181.2	181.2	0.0
B	1,630	100	589	1.0	186.9	186.9	186.9	0.0
C	3,225	50	208	2.8	187.7	187.7	188.2	0.5
D	4,830	150	676	0.8	191.5	191.5	191.7	0.2
E	7,315	65	246	2.3	194.4	194.4	195.2	0.8
F	8,650	495	2,318	0.2	196.4	196.4	196.8	0.4
G	10,785	255	1,147	0.5	196.5	196.5	196.9	0.4
H	12,985	620	12,891	0.0	197.6	197.6	198.1	0.5
I	14,725	145	492	0.2	197.6	197.6	198.1	0.5

¹Feet above limit of detailed study, approximately 4,140 feet below Bridge Street

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY MIDDLESEX COUNTY, MA (ALL JURISDICTIONS)	FLOODWAY DATA
		FLOODING SOURCE: COW POND BROOK

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	460	25 ²	58	7.0	46.9	46.9	46.9	0.0
B	2,390	81 ²	167	2.4	56.1	56.1	56.5	0.4
C	3,980	18	26	5.2	67.1	67.1	67.1	0.0
D	4,440	36	157	0.9	77.8	77.8	77.8	0.0
E	5,110	14	27	5.4	78.9	78.9	78.9	0.0
F	6,110	22	32	3.5	87.4	87.4	87.4	0.0
G	6,980	17	27	3.4	91.6	91.6	91.6	0.0
H	7,350	24	46	2.0	94.6	94.6	94.6	0.0
I	7,540	46	64	1.4	96.7	96.7	96.7	0.0
J	7,730	51	128	0.7	96.8	96.8	96.8	0.0

¹Feet above confluence with Shakers Glen Brook

²The measured top width on the FIRM may differ due to the effects of ineffective flow, the exclusion of small pocket areas due to map scale limitations, or is estimated due to HEC-RAS modeling limitations

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY MIDDLESEX COUNTY, MA (ALL JURISDICTIONS)	FLOODWAY DATA
		FLOODING SOURCE: CUMMINGS BROOK

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	290	36	147	3.1	204.2	203.5 ²	204.1	0.6
B	401	21	98	4.6	204.2	203.8 ²	204.1	0.3
C	512	43	189	2.4	204.2	204.1 ²	204.7	0.6
D	649	19	114	4.0	205.1	205.1	205.5	0.4
E	776	36	152	2.9	205.4	205.4	205.5	0.4
F	808	18	103	4.4	205.4	205.4	205.7	0.3
G	950	15	99	4.5	205.8	205.8	205.9	0.1
H	972	15	101	4.5	205.8	205.8	206.0	0.2
I	1,056	24	53	8.4	216.5	216.5	216.5	0.0
J	1,394	349	5,256	0.1	218.0	218.0	218.0	0.0
K	1,505	332	2,793	0.2	218.0	218.0	218.0	0.0
L	1,621	300	3,723	0.1	218.0	218.0	218.0	0.0
M	2,793	150	1,114	0.4	218.0	218.0	218.0	0.0
N	2,962	150	1,229	0.4	219.4	219.4	219.4	0.0
O	3,089	295	2,276	0.2	219.4	219.4	219.4	0.0
P	4,192	19	48	9.1	219.4	219.4	219.4	0.0
Q	4,330	20	99	4.1	221.3	221.3	222.2	0.9
R	4,451	233	930	0.5	221.9	221.9	222.6	0.7
S	5,254	26	78	5.6	224.9	224.9	224.9	0.0
T	5,391	40	195	2.1	226.2	226.2	226.2	0.0
U	5,512	20	84	4.8	226.2	226.2	226.2	0.0

¹Feet above confluence with Assabet River

²Elevation computed without consideration of backwater effects from Assabet River

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY MIDDLESEX COUNTY, MA (ALL JURISDICTIONS)	FLOODWAY DATA
		FLOODING SOURCE: DANFORTH BROOK

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
V	6,410	93	343	1.2	227.8	227.8	228.2	0.4
W	7,001	36	64	6.3	233.6	233.6	233.6	0.0
X	7,112	12	40	10.0	236.0	236.0	236.1	0.1
Y	7,244	15	45	8.9	240.5	240.5	240.5	0.0
Z	7,434	20	62	6.5	244.6	244.6	245.3	0.7
AA	7,582	60	295	1.2	248.5	248.5	248.6	0.1
AB	7,714	28	131	2.8	248.5	248.5	248.6	0.1
AC	8,485	12	36	10.0	260.6	260.6	260.6	0.0

¹Feet above confluence with Assabet River

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY MIDDLESEX COUNTY, MA (ALL JURISDICTIONS)	FLOODWAY DATA
		FLOODING SOURCE: DANFORTH BROOK

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	655	30	155	0.6	102.2	101.4 ²	101.5	0.1
B	1,119	10	48	1.9	103.3	102.5 ²	102.6	0.1
C	2,603	15	47	1.9	104.1	104.0 ²	104.1	0.1
D	3,833	5	19	4.8	111.6	111.6	111.6	0.0
E	4,467	20	109	0.8	114.8	114.8	115.4	0.6
F	4,731	20	76	1.2	114.9	114.9	115.5	0.6
G	5,201	20	70	1.3	114.9	114.9	115.7	0.8

¹Feet above confluence with Marshall Brook

²Elevation computed without consideration of backwater effects from Marshall Brook

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY MIDDLESEX COUNTY, MA (ALL JURISDICTIONS)	FLOODWAY DATA
		FLOODING SOURCE: DARBY BROOK

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	422	281	1,498	0.2	121.0	121.0	121.0	0.0
B	623	11	60	3.8	121.0	121.0	121.0	0.0
C	1,146	8	23	9.8	127.6	127.6	127.6	0.0
D	1,246	8	42	5.5	131.7	131.7	131.7	0.0
E	1,341	82	286	0.8	132.0	132.0	132.2	0.2
F	2,445	48	140	1.6	132.5	132.5	133.1	0.6
G	2,545	91	459	0.5	134.8	134.8	135.4	0.6
H	2,645	20	55	4.1	134.8	134.8	135.4	0.6
I	2,925	120	600	0.4	135.0	135.0	135.7	0.7
J	3,025	86	400	0.6	137.1	137.1	137.8	0.7
K	3,120	83	259	0.9	137.1	137.1	137.8	0.7
L	3,965	147	502	0.5	137.3	137.3	138.1	0.8
M	4,066	10	50	4.6	137.3	137.3	138.1	0.8
N	4,203	10	74	3.1	138.1	138.1	139.1	1.0
O	4,324	50	204	1.1	138.4	138.4	139.3	0.9
P	4,483	39	162	1.4	138.4	138.4	139.3	0.9
Q	4,594	79	372	0.6	139.5	139.5	140.4	0.9
R	4,704	15	103	2.2	139.5	139.5	140.4	0.9
S	5,803	243	674	0.3	139.7	139.7	140.6	0.9
T	6,864	184	545	0.4	139.8	139.8	140.7	0.9
U	7,904	143	405	0.6	139.9	139.9	140.9	1.0

¹Feet above confluence with Charles River

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY MIDDLESEX COUNTY, MA (ALL JURISDICTIONS)	FLOODWAY DATA
		FLOODING SOURCE: DAVIS BROOK

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	79	50	113	3.0	149.0	145.0 ²	145.2	0.2
B	517	128	371	0.9	149.0	145.8 ²	146.8	1.0
C	818	10	72	4.7	149.6	149.6	150.0	0.4
D	1,515	163	655	0.5	149.7	149.7	150.7	1.0
E	2,318	80	217	1.6	151.3	151.3	152.3	1.0

¹Feet above confluence with Bogastow Brook

²Elevation computed without consideration of backwater effects from Bogastow Brook

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY MIDDLESEX COUNTY, MA (ALL JURISDICTIONS)	FLOODWAY DATA
		FLOODING SOURCE: DIRTY MEADOW BROOK

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	333	200	248	1.5	152.9	148.7 ²	148.7	0.0
B	2,133	150	379	0.9	152.9	151.3 ²	152.1	0.8
C	3,633	85	32	1.3	153.4	153.4	154.0	0.6
D	3,796	85	45	2.3	154.2	154.2	154.5	0.3
E	5,005	20	*	*	158.7	*	*	*
F	5,064	30	103	2.3	159.1	159.1	159.1	0.0
G	5,164	23	53	4.5	159.2	159.2	159.3	0.1
H	5,306	60	241	1.0	162.7	162.7	162.7	0.0
I	6,003	60	229	1.0	162.8	162.8	163.2	0.4
J	6,721	60	279	0.9	162.9	162.9	163.7	0.8
K	6,853	60	261	0.9	163.0	163.0	163.8	0.8
L	7,007	60	288	0.8	163.4	163.4	163.9	0.5

¹Feet above confluence with Bogastow Brook

²Elevation computed without consideration of backwater effects from Bogastow Brook

*No data available

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY MIDDLESEX COUNTY, MA (ALL JURISDICTIONS)	FLOODWAY DATA
		FLOODING SOURCE: DOPPING BROOK

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	1,300	30	79	2.3	138.5	137.8 ²	138.7	0.9
B	1,960	13	25	7.5	141.8	141.8	142.1	0.3
C	3,220	265	1,479	0.1	148.2	148.2	148.2	0.0
D	3,910	165	976	0.2	148.2	148.2	148.2	0.0
E	6,285	100	320	0.6	152.4	152.4	153.0	0.6
F	7,793	330	1,204	0.2	154.4	154.4	154.5	0.1
G-L*	*	*	*	*	*	*	*	*

¹Feet above confluence with Hop Brook

²Elevation computed without consideration of backwater effects from Hop Brook

*No data available

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY MIDDLESEX COUNTY, MA (ALL JURISDICTIONS)	FLOODWAY DATA FLOODING SOURCE: DUDLEY BROOK – TRIBUTARY A TO DUDLEY BROOK
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LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	1,720	50	189	1.3	158.0	158.0	159.0	1.0
B	5,340	25	47	2.6	167.6	167.6	168.6	1.0
C	5,900	45	43	2.2	183.5	183.5	184.5	1.0

¹Feet above confluence with Sudbury River

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY MIDDLESEX COUNTY, MA (ALL JURISDICTIONS)	FLOODWAY DATA
		FLOODING SOURCE: EAST OUTLET

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	7,291	172	954	1.1	188.0	188.0	189.0	1.0
B	8,601	41	164	5.9	188.7	188.7	189.1	0.4
C	8,775	41	187	5.1	191.4	191.4	191.4	0.0
D	8,876	67	336	2.9	191.8	191.8	191.8	0.0
E	8,976	237	1,673	0.6	195.8	195.8	195.8	0.0
F	9,076	226	1,706	0.6	195.8	195.8	195.8	0.0
G	10,175	57	187	4.9	195.8	195.8	195.8	0.0
H	10,275	18	109	8.4	196.2	196.2	196.3	0.1
I	10,322	64	273	3.4	197.8	197.8	197.8	0.0
J	10,776	82	389	2.3	198.1	198.1	198.4	0.3
K	12,667	84	432	2.0	199.0	199.0	199.6	0.6
L	12,825	77	368	2.2	200.2	200.2	200.5	0.3
M	13,374	109	701	1.1	200.3	200.3	200.6	0.3
N	13,475	126	870	0.9	206.8	206.8	206.8	0.0
O	13,575	343	1,612	0.5	206.8	206.8	206.8	0.0
P	15,513	107	266	2.6	207.5	207.5	207.5	0.0
Q	15,613	268	1,532	0.4	207.6	207.6	207.6	0.0
R	18,443	33	75	8.6	207.8	207.8	207.8	0.0
S	20,666	59	238	2.5	213.6	213.6	214.6	1.0
T	20,867	35	119	4.9	214.0	214.0	214.8	0.8
U	20,967	17	73	8.0	214.6	214.6	214.9	0.3

¹Feet above confluence with Assabet River

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY MIDDLESEX COUNTY, MA (ALL JURISDICTIONS)	FLOODWAY DATA
		FLOODING SOURCE: ELIZABETH BROOK 1

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
V	21,764	44	249	2.3	215.8	215.8	216.4	0.6
W	25,106	73	185	2.6	217.2	217.2	217.8	0.6
X	25,307	47	221	2.2	218.6	218.6	218.6	0.0
Y	27,482	83	200	1.9	219.1	219.1	219.3	0.2
Z	27,683	40	158	2.3	219.5	219.5	219.6	0.1

¹Feet above confluence with Assabet River

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY MIDDLESEX COUNTY, MA (ALL JURISDICTIONS)	FLOODWAY DATA
		FLOODING SOURCE: ELIZABETH BROOK 1

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	265	14	25	7.7	247.0	247.0	247.0	0.0
B	1,225	231	413	0.5	248.8	248.8	249.4	0.6
C	2,430	88	372	0.5	248.9	248.9	249.5	0.6
D	2,657	49	174	1.1	252.9	252.9	252.9	0.0
E	3,937	35	158	1.2	253.1	253.1	253.3	0.2
F	4,807	56	131	1.2	253.3	253.3	253.6	0.3
G	5,732	43	48	3.2	256.3	256.3	256.7	0.4
H	5,919	56	386	0.4	264.8	264.8	264.9	0.1
I	6,010	102	741	0.2	264.8	264.8	264.9	0.1
J	6,575	26	56	2.2	264.8	264.8	264.9	0.1
K	6,615	31	33	3.6	266.3	266.3	266.3	0.0
L	7,044	11	28	4.3	267.6	267.6	268.0	0.4
M	7,244	49	220	0.5	271.2	271.2	271.5	0.3
N	8,774	7	17	6.9	271.3	271.3	271.6	0.3

¹Feet above county boundary (approximately 480 feet above Eldridge Road)

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY MIDDLESEX COUNTY, MA (ALL JURISDICTIONS)	FLOODWAY DATA
		FLOODING SOURCE: ELIZABETH BROOK 2

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	370	98	569	0.8	112.4	112.2 ²	112.7	0.5
B	787	19	135	2.6	112.5	112.2 ²	112.8	0.6
C	1,030	23	160	2.2	113.0	112.5 ²	113.2	0.7
D	1,600	80	339	1.3	114.6	112.6 ²	113.4	0.8
E	2,450	42	239	1.5	114.6	112.7 ²	113.6	0.9
F	2,624	42	209	2.0	114.6	112.7 ²	113.6	0.9
G	3,015	26	156	2.3	114.6	114.4 ²	114.6	0.2
H	3,596	42	233	1.5	114.6	114.4 ²	114.8	0.4
I	3,823	16	98	3.6	115.0	115.0	115.2	0.2
J	4,483	38	245	1.5	115.0	115.0	115.7	0.7
K	4,916	20	117	3.0	115.3	115.3	115.9	0.6
L	6,283	29	187	1.9	115.4	115.4	116.3	0.9
M	7,725	40	192	1.9	115.8	115.8	116.7	0.9
N	9,277	98	419	1.2	116.3	116.3	117.3	1.0
O	10,375	56	232	2.1	116.7	116.7	117.7	1.0
P	10,618	138	483	1.2	119.2	119.2	119.2	0.0
Q	11,817	26	137	4.6	119.6	119.6	119.6	0.0
R	12,873	26	83	4.3	120.9	120.9	121.3	0.4
S	13,490	78	214	3.4	122.2	122.2	123.0	0.8

¹Feet above confluence with Shawsheen River

²Elevation computed without consideration of backwater effects from Shawsheen River

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY MIDDLESEX COUNTY, MA (ALL JURISDICTIONS)	FLOODWAY DATA
		FLOODING SOURCE: ELM BROOK

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	200	20	72	1.2	120.6	121.2 ³	121.2	0.0
B	455	13	77	1.1	124.2	124.2	124.2	0.0
C	625	5	19	4.5	124.2	124.2	124.2	0.0
D	880	7	34	2.5	128.5	128.5	128.7	0.2
E	1,150	8	32	2.6	128.5	128.5	129.3	0.8
F	1,975	30	107	0.8	137.3	137.3	137.3	0.0
G	2,300	20	68	1.2	142.7	142.7	142.7	0.0
H	2,645	4	10	8.5	163.3	163.3	163.3	0.0

¹Feet above confluence with Farrar Pond

²Elevation computed without consideration of backwater effects from Farrar Pond

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY MIDDLESEX COUNTY, MA (ALL JURISDICTIONS)	FLOODWAY DATA
		FLOODING SOURCE: FARRAR POND BROOK

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	2,318	200	370	1.5	181.5	177.7 ²	178.7	1.0
B	3,416	270	495	1.0	181.5	179.7 ²	180.0	0.3
C	3,548	119	744	0.7	184.5	184.5	184.5	0.0
D	3,670	116	650	0.9	184.5	184.5	184.6	0.1
E	4,076	51	156	2.9	184.6	184.6	184.7	0.1
F	4,219	30	78	5.8	184.9	184.9	185.3	0.4
G	4,340	85	305	1.5	185.9	185.9	186.1	0.2
H	5,539	34	60	7.5	193.1	193.1	193.1	0.0
I	5,660	80	127	3.5	194.5	194.5	194.6	0.1
J	5,771	15	45	9.9	194.9	194.9	195.0	0.1
K	6,912	85	251	1.7	199.0	199.0	200.0	1.0
L	7,133	28	124	3.5	199.3	199.3	200.1	0.8
M	7,413	55	113	3.9	199.8	199.8	200.4	0.6
N	8,453	25	55	7.8	206.4	206.4	206.4	0.0
O	9,652	59	233	1.8	209.7	209.7	210.6	0.9
P	10,222	20	73	5.9	211.0	211.0	211.5	0.5
Q	10,328	30	127	3.4	213.7	213.7	213.7	0.0
R	10,444	40	134	3.2	213.9	213.9	214.0	0.1
S	11,341	18	47	9.2	225.4	225.4	225.4	0.0
T	12,603	95	310	1.4	229.2	229.2	230.1	0.9
U	13,343	45	71	5.8	231.5	231.5	231.5	0.0

¹Feet above confluence with Assabet River

²Elevation computed without consideration of backwater effects from Assabet River

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY MIDDLESEX COUNTY, MA (ALL JURISDICTIONS)	FLOODWAY DATA
		FLOODING SOURCE: FORT MEADOW BROOK

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
V	13,459	196	863	0.5	233.9	233.9	234.0	0.1
W	13,570	15	44	9.8	234.4	234.4	234.4	0.0
X	14,113	15	41	7.0	250.7	250.7	250.9	0.2
Y	14,224	15	62	4.6	254.0	254.0	254.0	0.0
Z	14,340	10	31	9.4	255.6	255.6	256.3	0.7
AA	14,557	13	32	9.0	261.6	261.6	262.1	0.5
AB	14,562	22	60	4.8	261.8	261.8	262.6	0.8

¹Feet above confluence with Assabet River

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY MIDDLESEX COUNTY, MA (ALL JURISDICTIONS)	FLOODWAY DATA
		FLOODING SOURCE: FORT MEADOW BROOK

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	235	40	209	4.7	123.8	122.4 ²	123.4	1.0
B	435	26	121	8.1	123.8	122.6 ²	123.4	0.9
C	875	130	600	1.6	124.6	124.6	125.5	0.9
D	2,475	160	810	1.2	125.5	125.5	126.4	0.9
E	4,075	170	940	1.0	126.0	126.0	126.9	0.9
F	6,175	160	950	1.0	126.2	126.2	127.2	1.0
G	7,575	60	330	3.0	126.4	126.4	127.4	1.0
H	7,625	60	380	2.6	127.5	127.5	128.3	0.8
I	9,125	30	150	6.8	129.2	129.2	129.7	0.5
J	10,675	50	360	2.7	131.0	131.0	132.0	1.0
K	12,125	90	470	2.1	131.7	131.7	132.6	0.9
L	13,025	40	210	4.8	132.6	132.6	133.2	0.6
M	13,150	75	460	2.1	135.7	135.7	136.5	0.8
N	14,250	55	300	3.2	136.1	136.1	136.8	0.7
O	14,320	50	370	2.7	139.7	139.7	140.3	0.6
P	14,870	35	100	9.6	141.3	141.3	141.3	0.0
Q	15,000	120	491	2.0	149.8	149.8	149.8	0.0
R	15,070	90	322	3.0	149.9	149.9	149.9	0.0
S	15,300	20	168	5.7	149.9	149.9	150.9	1.0
T	15,650	50	350	2.8	150.8	150.8	151.4	0.6
U	16,500	30	96	10.0	153.1	153.1	153.1	0.0

¹Feet above confluence with Nashoba Brook

²Elevation computed without consideration of backwater effects from Nashoba Brook

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY MIDDLESEX COUNTY, MA (ALL JURISDICTIONS)	FLOODWAY DATA
		FLOODING SOURCE: FORT POND BROOK

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
V	16,550	30	153	6.3	155.5	155.5	155.9	0.4
W	17,050	40	105	9.2	158.1	158.1	158.1	0.0
X	17,750	60	166	5.8	164.3	164.3	164.3	0.0
Y	18,720	110	770	1.3	175.3	175.3	175.3	0.0
Z	19,320	90	100	9.7	175.5	175.5	175.5	0.0
AA	19,530	50	310	3.1	179.8	179.8	179.8	0.0
AB	19,780	60	320	3.0	180.0	180.0	180.0	0.0
AC	20,890	100	560	1.7	193.8	193.8	193.8	0.0
AD	22,115	20	130	7.6	194.4	194.4	195.0	0.6
AE	22,160	80	370	2.6	197.5	197.5	198.5	1.0
AF	22,575	210	970	1.0	197.7	197.7	198.7	1.0
AG	22,990	170	1,080	0.9	197.8	197.8	198.8	1.0
AH	23,120	280	1,450	0.7	198.1	198.1	199.0	0.9
AI	25,850	620	4,160	0.2	198.3	198.3	199.1	0.8
AJ	28,300	340	2,130	0.3	198.3	198.3	199.1	0.8
AK	28,950	550	2,930	0.2	198.3	198.3	199.2	0.9
AL	30,875	30	270	2.3	198.4	198.4	199.2	0.8
AM	30,970	30	270	2.3	199.9	199.9	200.7	0.8
AN	31,674	30	280	2.2	200.1	200.1	200.8	0.7
AO	31,820	40	300	2.1	201.2	201.2	201.7	0.5
AP	32,135	350	670	0.9	201.3	201.3	201.8	0.5

¹Feet above confluence with Nashoba Brook

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY MIDDLESEX COUNTY, MA (ALL JURISDICTIONS)	FLOODWAY DATA
		FLOODING SOURCE: FORT POND BROOK

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
AQ	32,850	510	2,150	0.3	201.4	201.4	201.9	0.5
AR	34,300	760	4,130	0.1	201.4	201.4	201.9	0.5
AS	35,565	380	1,670	0.4	201.4	201.4	201.9	0.5
AT	35,700	220	910	0.7	202.5	202.5	203.0	0.5
AU	37,420	120	500	1.1	202.8	202.8	203.2	0.4
AV	37,575	80	420	1.3	202.8	202.8	203.3	0.5
AW	37,710	160	860	0.7	204.7	204.7	205.5	0.8
AX	40,010	20	110	5.0	205.0	205.0	205.8	0.8
AY	40,110	20	130	4.3	206.1	206.1	206.8	0.7
AZ	40,270	175	1,056	0.7	206.1	206.1	207.1	1.0
BA	40,380	160	515	1.5	206.2	206.2	207.2	1.0
BB	40,855	200	1,134	0.7	206.4	206.4	207.4	1.0
BC	41,585	310	1,751	0.2	206.4	206.4	207.4	1.0
BD	41,695	220	1,152	0.2	206.4	206.4	207.4	1.0
BE	42,025	214	1,021	0.3	206.4	206.4	207.4	1.0
BF	42,165	192	1,614	0.2	206.5	206.5	207.5	1.0
BG	42,675	190	1,593	0.2	206.5	206.5	207.5	1.0
BH	42,985	150	799	0.4	206.5	206.5	207.5	1.0
BI	43,085	150	689	0.4	206.6	206.6	207.6	1.0
BJ	43,825	150	732	0.4	206.6	206.6	207.6	1.0
BK	44,535	150	729	0.4	206.6	206.6	207.6	1.0

¹Feet above confluence with Nashoba Brook

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY MIDDLESEX COUNTY, MA (ALL JURISDICTIONS)	FLOODWAY DATA
		FLOODING SOURCE: FORT POND BROOK

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
BL	44,790	175	887	0.2	207.1	207.1	208.1	1.0
BM	45,540	163	647	0.3	207.1	207.1	208.1	1.0
BN	45,645	141	789	0.2	207.3	207.3	208.3	1.0
BO	46,543	115	610	0.3	207.3	207.3	208.3	1.0

¹Feet above confluence with Nashoba Brook

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY MIDDLESEX COUNTY, MA (ALL JURISDICTIONS)	FLOODWAY DATA
		FLOODING SOURCE: FORT POND BROOK

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	5,281	314	64	0.0	196.4	196.4	197.4	1.0
B	6,177	387	479	0.0	196.4	196.4	197.4	1.0
C	6,503	7	14	0.8	196.5	196.5	197.5	1.0
D	6,684	396	59	0.2	198.5	198.5	199.5	1.0
E	6,932	667	114	0.1	198.5	198.5	199.5	1.0
F	8,255	447	585	0.5	198.5	198.5	199.5	1.0
G	8,891	25	149	1.5	204.4	204.4	204.6	0.2
H	10,286	140	513	0.5	204.4	204.4	204.7	0.3
I	10,730	43	113	2.2	204.7	204.7	204.9	0.2
J	11,432	35	92	2.5	205.1	205.1	206.1	1.0

¹Feet above confluence of Pratts Brook with Fort Pond Brook

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY MIDDLESEX COUNTY, MA (ALL JURISDICTIONS)	FLOODWAY DATA
		FLOODING SOURCE: FORT POND BROOK BRANCH 1

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	0	155	462	0.6	207.1	207.1	208.1	1.0
B	1,003	114	446	0.6	207.2	207.2	208.2	1.0
C	1,162	49	301	0.9	209.8	209.8	209.9	0.1
D	1,848	386	1,613	0.2	209.8	209.8	210.0	0.2
E	3,010	9	28	9.0	210.6	210.6	211.2	0.6
F	3,168	74	289	0.7	214.6	214.6	214.6	0.0
G	3,485	356	1,159	0.2	214.6	214.6	214.6	0.0
H	3,643	360	1,553	0.1	215.0	215.0	215.3	0.3
I	4,382	278	1,228	0.1	215.0	215.0	215.3	0.3

¹Feet above confluence with Fort Pond Brook

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY MIDDLESEX COUNTY, MA (ALL JURISDICTIONS)	FLOODWAY DATA
		FLOODING SOURCE: FORT POND BROOK BRANCH 2

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	0	26	50	3.0	202.8	198.7 ²	198.7	0.0
B	1,263	20	47	3.2	202.8	202.1 ²	202.3	0.2
C	1,410	105	387	0.4	204.2	204.2	204.3	0.1
D	1,500	135	506	0.3	204.2	204.2	204.3	0.1
E	1,630	50	262	0.6	204.3	204.3	205.1	0.7
F	2,870	69	243	0.6	204.4	204.4	205.1	0.7
G	2,990	25	122	1.2	205.2	205.2	206.2	1.0
H	4,055	115	443	0.3	205.3	205.3	206.2	0.9
I	4,840	35	112	1.1	205.3	205.3	206.2	0.9
J	4,970	70	342	0.4	207.5	207.5	208.1	0.6
K	5,255	72	277	0.4	207.5	207.5	208.1	0.6
L	5,600	50	141	0.9	207.5	207.5	208.1	0.6
M	5,730	30	102	1.2	210.0	210.0	210.0	0.0
N	6,380	22	21	5.6	210.4	210.4	210.5	0.1
O	6,880	14	47	2.1	213.6	213.6	214.6	1.0
P	7,075	40	195	0.5	216.0	216.0	216.0	0.0

¹Feet above confluence with Fort Pond Brook

²Elevation computed without consideration of backwater effects from Fort Pond Brook

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY MIDDLESEX COUNTY, MA (ALL JURISDICTIONS)	FLOODWAY DATA
		FLOODING SOURCE: GRASSY POND BROOK

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	560	23	67	2.6	338.0	338.0	338.0	0.0
B	1,175	7	19	9.3	347.2	347.2	347.2	0.0

¹Feet above limit of detailed study, approximately 490 feet below Emery Road

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY MIDDLESEX COUNTY, MA (ALL JURISDICTIONS)	FLOODWAY DATA
		FLOODING SOURCE: GRAVES POND BROOK

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	1,146	20	42	2.4	211.2	211.2	211.3	0.1
B	3,057	22	57	0.6	216.1	216.1	216.3	0.2
C	4,081	14	15	1.4	216.1	216.1	216.4	0.3

¹Feet above confluence with Beaver Brook 4

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY MIDDLESEX COUNTY, MA (ALL JURISDICTIONS)	FLOODWAY DATA
		FLOODING SOURCE: GREAT ROAD TRIBUTARY

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	230	38	95	1.0	231.7	231.7	232.6	0.9
B	1,002	28	99	1.0	236.0	236.0	236.8	0.8
C	1,500	160	392	0.3	236.2	236.2	237.0	0.8
D	2,575	45	110	0.7	238.7	238.7	239.4	0.7
E	3,490	33	63	1.3	247.0	247.0	247.8	0.8
F	3,896	55	348	0.2	253.7	253.7	254.1	0.4

¹Feet above confluence with Varnum Brook

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY MIDDLESEX COUNTY, MA (ALL JURISDICTIONS)	FLOODWAY DATA
		FLOODING SOURCE: GREENS BROOK

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	135	135	455	0.6	206.5	205.6 ²	206.6	1.0
B	240	135	503	0.6	206.6	206.5 ²	206.9	0.4
C	565	80	237	1.2	206.6	206.5 ²	206.9	0.4
D	940	80	241	1.2	206.7	206.6 ²	207.2	0.6
E	1,927	45	137	1.1	206.7	206.7	207.7	1.0
F	2,930	8	17	8.2	207.9	207.9	208.9	1.0
G	3,828	41	74	1.8	213.0	213.0	213.9	0.9
H	3,986	133	379	0.3	216.8	216.8	216.8	0.0
I	5,085	16	29	4.1	216.9	216.9	217.1	0.2
J	6,262	12	25	4.7	223.0	223.0	224.0	1.0
K	6,420	13	20	5.0	224.2	224.2	224.7	0.5
L	6,526	13	42	2.4	226.0	226.0	226.4	0.4
M	7,054	10	22	4.5	227.3	227.3	227.7	0.4
N	7,170	342	577	0.2	229.0	229.0	229.6	0.6
O	7,540	36	54	1.9	229.0	229.0	229.6	0.6
P	7,698	143	385	0.3	232.7	232.7	232.7	0.0
Q	7,857	12	15	6.6	232.7	232.7	233.1	0.4
R	8,068	135	704	0.1	237.2	237.2	237.7	0.5
S	8,184	36	108	0.9	237.2	237.2	237.9	0.7
T	8,290	30	161	0.6	237.3	237.3	237.8	0.5
U	9,240	5	9	7.9	238.0	238.0	238.0	0.0

¹Feet above confluence with Inch Brook

²Elevation computed without consideration of coincident peak flooding with Inch Brook

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY MIDDLESEX COUNTY, MA (ALL JURISDICTIONS)	FLOODWAY DATA
		FLOODING SOURCE: GUGGINS BROOK

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
V	10,460	147	21	3.5	242.6	242.6	242.6	0.0
W	11,579	24	46	1.6	245.9	245.9	246.7	0.8
X	11,674	32	23	3.2	250.1	250.1	250.1	0.0
Y	12,466	6	10	7.4	273.8	273.8	273.9	0.1
Z	13,416	6	11	6.7	302.3	302.3	302.3	0.0
AA	13,628	42	49	1.5	303.9	303.9	304.4	0.5
AB	13,839	270	1,031	0.1	308.8	308.8	308.8	0.0
AC	14,472	44	74	1.0	308.8	308.8	308.8	0.0

¹Feet above confluence with Inch Brook

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY MIDDLESEX COUNTY, MA (ALL JURISDICTIONS)	FLOODWAY DATA
		FLOODING SOURCE: GUGGINS BROOK

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A-F* G	* 6,930	* 30	* 170	* 0.6	* 105.1	* 105.1	* 105.7	* 0.6

¹Feet above confluence with River Meadow Brook

*No data available

TABLE 23

FEDERAL EMERGENCY MANAGEMENT AGENCY

MIDDLESEX COUNTY, MA

(ALL JURISDICTIONS)

FLOODWAY DATA

FLOODING SOURCE: HALES BROOK

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	10	7 ²	32	2.6	54.0	51.9 ³	51.9	0.0
B	190	243 ²	1,825	0.1	54.2	54.2	54.8	0.6
C	2,180	588	1,287	0.5	55.1	55.1	55.4	0.3
D	4,090	21 ²	55	4.4	55.7	55.7	55.8	0.1
E	4,940	31	90	1.9	60.5	60.4	60.5	0.1
F	5,320	48 ²	180	1.0	61.6	61.6	61.6	0.0
G	8,590	15	23	5.5	71.2	71.2	71.2	0.0
H	8,890	25 ²	50	2.6	74.0	74.0	74.1	0.1
I	9,090	24	50	2.2	78.0	78.0	78.0	0.0
J	10,500	20	21	2.5	89.0	89.0	89.0	0.0
K	10,710	18	13	3.9	91.7	91.7	91.7	0.0
L	10,980	42	110	0.5	95.2	95.2	95.2	0.0

¹Feet above confluence with Aberjona River

²The measured top width on the FIRM may differ due to the effects of ineffective flow, the exclusion of small pocket areas due to map scale limitations, or is estimated due to HEC-RAS modeling limitations

³Elevation computed without consideration of backwater effects from Aberjona River

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY MIDDLESEX COUNTY, MA (ALL JURISDICTIONS)	FLOODWAY DATA
		FLOODING SOURCE: HALLS BROOK

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	660	80	166	1.9	122.0	120.3 ³	121.2	0.9
B	1,250	17	28	6.3	122.9	122.9	122.9	0.0
C	1,605	87	469	0.4	129.3	129.3	129.3	0.0
D	2,745	31	143	1.2	129.3	129.3	129.3	0.0
E	3,135	10	17	7.5	135.2	135.2	135.2	0.0
F	3,869	104	255	0.5	145.2	145.2	145.7	0.5
G	4,359	84	137	1.0	145.5	145.5	145.9	0.4
H	4,999	242	1,810	0.1	156.1	156.1	156.1	0.0

¹Feet above confluence with Pine Brook

²Elevation computed without consideration of backwater effects from Sudbury River

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY MIDDLESEX COUNTY, MA (ALL JURISDICTIONS)	FLOODWAY DATA
		FLOODING SOURCE: HAYWARD BROOK

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	4,340	355	2,748	0.1	87.4	86.0 ²	86.8	0.8
B	7,403	16	27	6.2	87.4	86.2 ²	86.8	0.6

¹Feet above confluence with Shawsheen River

²Elevation computed without consideration of backwater effects from Shawsheen River

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY MIDDLESEX COUNTY, MA (ALL JURISDICTIONS)	FLOODWAY DATA
		FLOODING SOURCE: HEATH BROOK

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	317	21	130	4.0	96.8	94.7 ²	94.7	0.0
B	792	23	126	4.2	96.8	95.0 ²	95.2	0.2
C	1,109	33	116	4.5	96.8	95.6 ²	96.4	0.8
D	1,267	15	114	4.6	100.2	100.2	100.2	0.0
E	1,373	60	94	5.6	100.3	100.3	100.3	0.0
F	2,218	37	174	2.9	100.6	100.6	101.2	0.6
G	3,168	15	53	9.4	108.0	108.0	108.2	0.2
H	4,118	34	106	4.7	113.0	113.0	113.4	0.4
I	4,858	31	63	7.9	119.5	119.5	119.5	0.0
J	5,438	14	62	8.1	125.8	125.8	126.1	0.3
K	5,544	235	183	2.9	134.4	134.4	134.4	0.0
L	6,547	30	136	1.4	135.5	135.5	135.5	0.0
M	7,292	20	42	6.2	138.5	138.5	138.5	0.0
N	8,622	15	59	4.4	143.4	143.4	144.4	1.0
O	9,456	15	39	6.7	149.0	149.0	149.2	0.2

¹Feet above confluence with Stony Brook 1

²Elevation computed without consideration of backwater effects from Stony Brook 1

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY MIDDLESEX COUNTY, MA (ALL JURISDICTIONS)	FLOODWAY DATA
		FLOODING SOURCE: HOBBS BROOK 1

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	160	67	410	0.4	172.6	172.6	173.6	1.0
B	760	79	232	0.7	173.4	173.4	174.4	1.0
C	1,660	21	25	6.3	176.4	176.4	176.4	0.0

¹Feet above limit of detailed study, approximately 660 feet below Mill Street

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY MIDDLESEX COUNTY, MA (ALL JURISDICTIONS)	FLOODWAY DATA
		FLOODING SOURCE: HOBBS BROOK 2

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	355	16	43	9.4	212.4	210.1 ²	210.1	0.0
B	475	16	58	6.9	212.4	211.6 ²	212.2	0.6
C	608	235	998	0.4	214.5	214.5	214.5	0.0
D	1,595	31	54	7.5	220.5	220.5	220.5	0.0
E	2,662	30	53	7.6	234.7	234.7	235.3	0.6
F	3,515	22	48	8.4	238.6	238.6	238.8	0.2

¹Feet above confluence with Assabet River

²Elevation computed without consideration of backwater effects from Assabet River

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY MIDDLESEX COUNTY, MA (ALL JURISDICTIONS)	FLOODWAY DATA
		FLOODING SOURCE: HOG BROOK

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	1,910	30	165	5.6	123.5	123.5	124.5	1.0
B	4,560	163	724	1.3	133.6	133.6	134.3	0.7
C	6,000	165	703	1.3	137.8	137.8	137.8	0.0
D	8,500	125	720	1.3	138.2	138.2	138.4	0.2
E	9,830	90	311	2.4	138.4	138.4	138.7	0.3
F	11,220	226	914	0.8	138.7	138.7	139.1	0.4
G	12,700	155	574	1.3	141.2	141.2	141.2	0.0
H	14,800	325	1,443	0.5	145.7	145.7	146.3	0.6
I	16,155	54	225	3.3	146.0	146.0	146.7	0.7
J	17,170	45	204	3.7	146.5	146.5	147.3	0.8
K	19,050	55	239	2.7	147.9	147.9	148.9	1.0
L	21,270	60	239	2.6	148.8	148.8	149.8	1.0
M	22,520	124	357	1.8	150.3	150.3	151.3	1.0
N	23,000	320	2,574	0.2	158.1	158.1	158.1	0.0
O	24,560	200	1,146	0.6	158.1	158.1	158.1	0.0
P	25,820	188	1,163	0.5	158.2	158.2	158.2	0.0
Q	28,100	10	72	8.8	158.3	158.3	159.1	0.8
R	29,900	225	727	0.9	161.0	161.0	161.6	0.6
S	31,150	120	417	1.5	161.3	161.3	161.9	0.6
T	33,060	296	741	0.9	162.2	162.2	162.9	0.7
U	33,900	40	94	3.3	162.7	162.7	163.4	0.7

¹Feet above confluence with Landham-Allowance Brook

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY MIDDLESEX COUNTY, MA (ALL JURISDICTIONS)	FLOODWAY DATA
		FLOODING SOURCE: HOP BROOK

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
V	36,600	970	13,781	0.0	186.5	186.5	186.5	0.0
W	38,700	180	900	0.3	186.5	186.5	186.5	0.0
X	40,155	20	65	4.7	191.2	191.2	191.5	0.3
Y	41,330	15	41	6.3	197.8	197.8	198.7	0.9
Z	42,370	280	3,767	0.1	211.9	211.9	211.9	0.0
AA	43,905	100	900	0.3	211.9	211.9	211.9	0.0
AB	44,755	25	99	3.1	212.2	212.2	212.3	0.1
AC	45,130	49	242	1.3	224.8	224.8	224.8	0.0

¹Feet above confluence with Landham-Allowance Brook

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY MIDDLESEX COUNTY, MA (ALL JURISDICTIONS)	FLOODWAY DATA
		FLOODING SOURCE: HOP BROOK

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	100	74 ²	531	1.2	22.7	22.6 ³	23.3	0.7
B	440	76 ²	351	1.8	22.9	22.8 ³	23.5	0.7
C	1,130	361	1,586	0.5	23.6	23.6	23.8	0.2
D	1,560	208	424	1.5	23.7	23.7	23.8	0.1
E	2,850	56	138	4.5	25.0	25.0	25.2	0.2
F	3,590	19	68	9.2	28.6	28.6	28.7	0.1
G	3,880	76	202	3.1	31.6	31.6	31.7	0.1
H	4,700	47	107	5.8	34.6	34.6	34.7	0.1
I	6,270	39	86	7.0	38.1	38.1	38.1	0.0
J	6,390	30	149	4.0	42.0	42.0	42.1	0.1
K	7,240	937	21,555	0.0	42.7	42.7	42.8	0.1
L	9,960	196 ²	8,563	0.3	42.7	42.7	42.7	0.0
M	11,300	123 ²	658	1.5	43.6	43.6	43.6	0.0
N	12,990	58 ²	1,970	3.4	46.6	46.6	46.8	0.2

¹Feet above confluence with Aberjona River

²The measured top width on the FIRM may differ due to the effects of ineffective flow, the exclusion of small pocket areas due to map scale limitations, or is estimated due to HEC-RAS modeling limitations

³Elevation computed without consideration of backwater effects from Aberjona River

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY MIDDLESEX COUNTY, MA (ALL JURISDICTIONS)	FLOODWAY DATA
		FLOODING SOURCE: HORN POND BROOK – FOWLE BROOK

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	0	40	71	4.7	206.4	201.5 ²	201.8	0.3
B	50	40	70	4.8	206.4	202.5 ²	202.5	0.0
C	320	40	146	2.3	206.4	203.4 ²	204.3	0.9
D	510	150	393	0.9	206.4	203.5 ²	204.5	1.0
E	615	150	391	0.9	206.4	203.7 ²	204.6	0.9
F	870	37	117	2.9	206.4	204.1 ²	204.7	0.6
G	1,185	39	105	3.2	206.5	204.9 ²	205.4	0.5
H	1,270	40	152	2.2	206.5	205.5 ²	205.9	0.4

¹Feet above confluence with Fort Pond Brook

²Elevation computed without consideration of coincident peak flooding with Fort Pond Brook

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY MIDDLESEX COUNTY, MA (ALL JURISDICTIONS)	FLOODWAY DATA
		FLOODING SOURCE: INCH BROOK

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
DZ ²	131,727	380	1,848	0.8	59.4	59.4	60.2	0.8
EA	134,105	115	540	2.8	60.1	60.1	60.8	0.7
EB	135,035	115	546	2.7	62.1	62.1	62.6	0.5
EC	135,304	108	767	2.0	62.2	62.2	63.0	0.8
ED	135,640	99	784	1.9	62.8	62.8	63.5	0.7
EE	136,371	171	1,449	1.0	63.0	63.0	63.8	0.8
EF	137,159	316	2,404	0.6	63.1	63.1	63.9	0.8
EG	137,964	474	3,379	0.4	63.1	63.1	63.9	0.8
EH	138,689	409	2,778	0.5	63.1	63.1	64.0	0.9
EI	139,523	186	1,337	1.1	63.2	63.2	64.0	0.8
EJ	139,550	195	903	1.7	63.2	63.2	64.0	0.8
EK	139,577	218	1,850	0.8	63.2	63.2	64.1	0.9
EL	140,239	500	3,455	0.4	63.3	63.3	64.2	0.9
EM	140,900	634	4,075	0.4	63.3	63.3	64.2	0.9
EN	142,041	462	2,816	0.5	63.3	63.3	64.2	0.9
EO	142,589	612	3,738	0.4	63.4	63.4	64.3	0.9
EP	143,214	767	4,227	0.4	63.4	63.4	64.3	0.9
EQ	144,581	521	2,852	0.5	63.5	63.5	64.4	0.9
ER	145,116	248	1,491	1.0	63.5	63.5	64.4	0.9
ES	145,504	275	1,474	1.0	63.6	63.6	64.5	0.9
ET	145,914	280	1,484	1.0	63.8	63.8	64.6	0.8

¹Feet above limit of detailed study, approximately 300 feet above County Street

²Cross sections A-DY (Essex County, Massachusetts) in floodway data tables for other counties

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY MIDDLESEX COUNTY, MA (ALL JURISDICTIONS)	FLOODWAY DATA
		FLOODING SOURCE: IPSWICH RIVER

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
EU	146,388	357	1,658	0.9	63.8	63.8	64.7	0.9
EV	147,065	214	1,235	1.2	63.9	63.9	64.9	1.0
EW	147,460	288	1,564	1.0	64.0	64.0	64.9	0.9
EX	147,679	327	1,767	0.8	64.3	64.3	65.3	1.0
EY	147,957	286	1,697	0.9	64.4	64.4	65.3	0.9
EZ	148,821	287	1,842	0.8	64.4	64.4	65.4	1.0
FA	149,083	118	528	2.8	64.4	64.4	65.4	1.0
FB	149,390	121	1,162	1.3	68.4	68.4	68.4	0.0
FC	150,886	319	2,247	0.6	68.5	68.5	68.5	0.0
FD	151,666	277	1,448	1.0	68.5	68.5	68.5	0.0
FE	151,936	197	1,434	1.0	68.7	68.7	68.7	0.0
FF	152,876	271	1,836	0.8	68.7	68.7	68.8	0.1
FG	153,391	295	2,117	0.7	68.7	68.7	68.8	0.1
FH	153,632	415	2,612	0.6	68.7	68.7	68.8	0.1
FI	153,775	414	2,540	0.6	68.7	68.7	68.8	0.1
FJ	154,144	421	4,818	0.3	68.8	68.8	68.8	0.0
FK	154,695	510	2,600	0.6	68.8	68.8	68.8	0.0
FL	154,922	470	2,732	0.5	69.4	69.4	70.0	0.6
FM	155,186	362	1,890	0.8	69.4	69.4	70.0	0.6
FN	155,243	308	1,736	0.8	69.4	69.4	70.0	0.6
FO	155,271	272	1,658	0.9	69.4	69.4	70.0	0.6

¹Feet above limit of detailed study, approximately 300 feet above County Street

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY MIDDLESEX COUNTY, MA (ALL JURISDICTIONS)	FLOODWAY DATA
		FLOODING SOURCE: IPSWICH RIVER

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
FP	155,331	240	1,545	0.9	69.4	69.4	70.0	0.6
FQ	156,687	446	2,484	0.6	69.5	69.5	70.1	0.6
FR	156,846	538	2,791	0.5	69.5	69.5	70.1	0.6
FS	157,161	734	3,065	0.5	69.5	69.5	70.1	0.6
FT	157,392	382	1,998	0.7	69.8	69.8	70.6	0.8
FU	157,694	342	1,692	0.9	69.8	69.8	70.7	0.9
FV	158,181	414	1,999	0.7	69.9	69.9	70.7	0.8
FW	158,687	266	1,403	0.9	69.9	69.9	70.8	0.9
FX	159,723	315	1,504	0.9	69.9	69.9	70.9	1.0
FY	160,384	379	1,733	0.7	70.0	70.0	71.0	1.0
FZ	160,993	537	2,100	0.6	70.1	70.1	71.0	0.9
GA	161,208	745	2,756	0.5	70.1	70.1	71.0	0.9
GB	161,397	730	2,685	0.5	70.1	70.1	71.0	0.9
GC	161,854	605	2,096	0.6	70.1	70.1	71.1	1.0
GD	162,395	95	404	3.1	70.1	70.1	71.1	1.0
GE	162,763	78	461	2.8	72.2	72.2	72.8	0.6
GF	163,329	131	865	1.5	72.2	72.2	73.0	0.8
GG	163,882	113	1,022	1.2	72.2	72.2	73.1	0.9
GH	164,121	112	995	1.3	76.5	76.5	77.0	0.5
GI	164,541	100	857	1.5	76.5	76.5	77.1	0.6
GJ	165,108	183	1,492	0.9	76.5	76.5	77.2	0.7

¹Feet above limit of detailed study, approximately 300 feet above County Street

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY MIDDLESEX COUNTY, MA (ALL JURISDICTIONS)	FLOODWAY DATA
		FLOODING SOURCE: IPSWICH RIVER

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
GK	166,237	94	776	1.6	76.5	76.5	77.2	0.7
GL	167,649	170	1,244	1.0	76.5	76.5	77.4	0.9
GM	169,063	218	1,635	0.8	76.5	76.5	77.5	1.0
GN	170,242	485	3,106	0.4	76.6	76.6	77.6	1.0
GO	171,556	495	2,133	0.6	76.6	76.6	77.6	1.0
GP	172,231	367	2,458	0.5	76.7	76.7	77.6	0.9
GQ	173,172	508	3,896	0.3	76.7	76.7	77.7	1.0
GR	174,071	625	3,737	0.3	76.7	76.7	77.7	1.0
GS	174,558	535	2,816	0.5	76.7	76.7	77.7	1.0
GT	174,659	344	1,633	0.8	76.7	76.7	77.7	1.0
GU	175,068	299	1,205	0.9	77.6	77.6	78.5	0.9
GV	175,291	353	2,171	0.5	77.6	77.6	78.5	0.9
GW	175,737	355	2,132	0.5	77.6	77.6	78.5	0.9
GX	176,222	305	1,757	0.6	77.6	77.6	78.5	0.9
GY	176,978	344	1,911	0.6	77.6	77.6	78.5	0.9
GZ	177,518	329	1,806	0.6	77.6	77.6	78.6	1.0
HA	177,753	435	2,554	0.4	78.7	78.7	79.2	0.5
HB	177,855	535	3,013	0.4	78.7	78.7	79.2	0.5
HC	178,050	510	2,728	0.3	78.7	78.7	79.2	0.5
HD	178,553	435	2,402	0.3	79.5	79.5	80.5	1.0
HE	179,705	570	2,907	0.2	79.6	79.6	80.5	0.9

¹Feet above limit of detailed study, approximately 300 feet above County Street

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY MIDDLESEX COUNTY, MA (ALL JURISDICTIONS)	FLOODWAY DATA
		FLOODING SOURCE: IPSWICH RIVER

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
HF	179,950	560	2,815	0.3	79.6	79.6	80.5	0.9
HG	180,061	515	2,536	0.3	79.6	79.6	80.5	0.9
HH	180,194	331	1,618	0.4	79.6	79.6	80.6	1.0
HI	183,178	910	3,775	0.2	79.7	79.7	80.7	1.0
HJ	183,392	925	3,733	0.2	79.7	79.7	80.7	1.0
HK	183,533	932	3,537	0.2	79.7	79.7	80.7	1.0
HL	185,909	26	36	6.7	80.3	80.3	80.3	0.0
HM	186,019	58	211	1.2	84.2	84.2	85.0	0.8
HN	186,485	91	408	0.6	84.2	84.2	85.0	0.8
HO	186,804	95	334	0.7	84.2	84.2	85.1	0.9
HP	187,177	100	258	0.9	84.3	84.3	85.2	0.9
HQ	187,323	47	227	1.1	86.9	86.9	87.3	0.4
HR	187,515	42	168	1.5	86.9	86.9	87.3	0.4
HS	187,748	32	133	1.8	86.9	86.9	87.4	0.5
HT	187,952	34	174	1.4	88.7	88.7	89.3	0.6
HU	188,334	172	691	0.4	88.8	88.8	89.4	0.6
HV	188,624	235	859	0.3	88.8	88.8	89.4	0.6
HW	188,895	138	422	0.6	88.8	88.8	89.5	0.7
HX	189,079	87	486	0.5	91.3	91.3	91.5	0.2
HY	189,428	125	525	0.5	91.3	91.3	91.6	0.3
HZ	190,193	53	242	1.0	92.8	92.8	93.7	0.9

¹Feet above limit of detailed study, approximately 300 feet above County Street

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY MIDDLESEX COUNTY, MA (ALL JURISDICTIONS)	FLOODWAY DATA
		FLOODING SOURCE: IPSWICH RIVER

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
IA	190,538	29	88	2.8	93.0	93.0	93.9	0.9
IB	190,854	150	990	0.2	96.0	96.0	96.9	0.9
IC	191,280	217	1,477	0.2	96.0	96.0	96.9	0.9
ID	192,606	105	501	0.6	96.1	96.1	97.0	0.9
IE	194,251	63	272	1.1	96.3	96.3	97.2	0.9
IF	194,504	205	696	0.4	96.4	96.4	97.3	0.9
IG	194,706	194	625	0.5	96.4	96.4	97.3	0.9
IH	194,931	62	141	2.2	96.6	96.6	97.4	0.8
II	195,096	154	507	0.6	101.1	101.1	102.1	1.0
IJ	197,256	75	59	5.1	104.9	104.9	105.0	0.1
IK	198,895	140	288	1.1	108.9	108.9	109.0	0.1

¹Feet above limit of detailed study, approximately 300 feet above County Street

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY MIDDLESEX COUNTY, MA (ALL JURISDICTIONS)	FLOODWAY DATA
		FLOODING SOURCE: IPSWICH RIVER

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	1,080	75	297	1.1	213.0	206.1 ²	206.1	0.0
B	2,220	115	220	1.5	213.0	207.5 ²	208.2	0.7
C	3,550	32	63	5.3	214.1	214.1	214.9	0.8
D	4,000	35	63	5.3	217.1	217.1	217.9	0.8
E	4,340	17	79	4.3	218.2	218.2	219.1	0.9
F	4,725	10	70	4.8	223.5	223.5	224.0	0.5
G	5,900	15	40	6.0	230.1	230.1	230.6	0.5
H	6,475	97	136	1.8	232.7	232.7	233.3	0.6
I	7,000	20	44	5.5	234.9	234.9	235.6	0.7
J	7,463	20	39	6.1	239.2	239.2	239.4	0.2
K	7,950	12	32	7.6	246.0	246.0	246.2	0.2
L	9,360	30	49	4.1	264.0	264.0	264.7	0.7
M	9,945	13	36	5.7	270.2	270.2	270.9	0.7
N	11,615	22	34	6.0	283.6	283.6	284.1	0.5
O	13,050	43	151	1.4	292.0	292.0	292.0	0.0
P	13,960	65	374	0.4	294.9	294.9	295.0	0.1
Q	15,015	81	268	0.5	295.1	295.1	295.2	0.1
R	16,030	20	35	4.1	296.9	296.9	297.0	0.1
S	16,740	125	582	0.2	300.7	300.7	300.7	0.0
T	17,530	250	967	0.1	300.7	300.7	300.7	0.0
U	19,480	300	913	0.1	301.5	301.5	301.5	0.0

¹Feet above confluence with Nashua River

²Elevation computed without consideration of backwater effects from Nashua River

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY MIDDLESEX COUNTY, MA (ALL JURISDICTIONS)	FLOODWAY DATA
		FLOODING SOURCE: JAMES BROOK

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	975	50	190	2.4	96.6	93.3 ²	94.3	1.0
B	1,800	40	186	2.4	96.6	95.3 ²	95.8	0.5
C	2,500	40	137	3.3	97.5	97.5	98.2	0.7
D	3,250	40	159	2.8	101.1	101.1	101.5	0.4
E	3,760	60	190	2.2	103.9	103.9	104.2	0.3
F	4,340	100	373	1.1	104.2	104.2	104.8	0.6
G	4,680	150	628	0.7	104.3	104.3	104.9	0.6
H	5,520	16	88	3.9	106.8	106.8	106.8	0.0
I	6,150	40	215	1.6	108.0	108.0	108.4	0.4

¹Feet above confluence with Shawsheen River

²Elevation computed without consideration of backwater effects from Shawsheen River

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY MIDDLESEX COUNTY, MA (ALL JURISDICTIONS)	FLOODWAY DATA
		FLOODING SOURCE: JONES BROOK

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	211	106	372	1.2	119.9	115.0 ²	116.0	1.0
B	1,890	1,385	3,531	0.1	119.9	115.1 ²	116.1	1.0
C	2,809	338	281	1.6	119.9	115.2 ²	116.2	1.0

¹Feet above confluence with North Lexington Brook

²Elevation computed without consideration of backwater effects from North Lexington Brook

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY MIDDLESEX COUNTY, MA (ALL JURISDICTIONS)	FLOODWAY DATA
		FLOODING SOURCE: KILN BROOK