



600 Unicorn Park Drive σ Woburn, MA 01801

Phone: 781-932-3201 σ Fax: 781-932-3413

MEMORANDUM

TO: David Hale
FROM: Kenneth P. Cram, P.E.
CC:
DATE: September 28, 2020
RE: Proposed Cedar Crossing and Cedar Edge Residential Development
Railroad Crossing Assessment
Summer Street, Walpole, MA

This memorandum has been prepared to assess the perceived safety issues associated with the location of the proposed site driveway in relation to the existing railroad crossing on Summer Street in Walpole, MA. Based on an average of 1.5 to 1 vehicles per minute during the respective weekday morning and weekday evening peak hours, the relatively short time for railroad crossing operations (approximately one minute) and the short time for vehicle queues to clear, the vehicular increase will not significantly affect existing operations.

PROJECT DESCRIPTION

The project will consist of the development of 300 residential units, of which 192 will be apartments units, 48 will be townhouse units and 60 will be single-family homes. Parking for a total of 677 (includes garage and surface parking) vehicles will be provided at the site. Access to the site will be provided by way of a driveway to Summer Street.

OBSERVED RAILROAD CROSSING DELAYS

Located immediately east of the site is the MBTA Commuter Rail line which provides service to Boston from Gillette Stadium. There is also a gated railroad crossing on Summer Street. To understand railroad crossing operations, from November 6th through November 12th, 2019, the actual delays and queues created by the railroad crossing were video recorded during the weekday morning and weekday evening peak periods. These results are summarized in Table 1 (originally summarized as Table 5 in the Traffic Impact and Access Study (TIAS) prepared for the project).

As shown in Table 1, during the weekday morning peak period (7:00 to 9:00 AM), the average queue length in the westbound direction was two (2) vehicles and the time it took for this vehicle queue to clear was ten (10) seconds. Similarly, the average queue length in the eastbound direction was five (5) vehicles and the time it took for this vehicle queue to clear was fifteen (15) seconds.

During the weekday evening peak period (4:00 to 6:30 PM), the average queue length in the westbound direction was eight (8) vehicles and the time it took for this vehicle queue to clear was twenty-six (26) seconds. Similarly, the

average queue length in the eastbound direction was three (3) vehicles and the time it took for this vehicle queue to clear was eleven (11) seconds.

TABLE 1
SUMMER STREET OBSERVED RAILROAD CROSSING DELAYS AND VEHICLE QUEUES^a

Time Period	Average Time for Westbound Vehicle Queue to Clear (sec)	Average Time for Eastbound Vehicle Queue to Clear (sec)	Average Westbound Vehicle Queue (veh)	Average Eastbound Vehicle Queue (veh)
Weekday Morning Peak Period ^b	10	15	2	5
Weekday Evening Peak Period ^c	26	11	8	3

^aBased on count data compiled November 6, 2019 to November 12, 2019.

^bMorning Peak period from 7:00 – 9:00 AM.

^cEvening Peak period from 4:00 – 6:30 PM.

The Foxboro line travels from Patriot Place to South Station. Currently there are 10 trains to Foxboro and 10 trains to Boston per day Monday through Friday. Service hours are from 5:48 AM to 10:55 PM. No weekend service is currently provided. During the weekday morning peak period (7:00 to 9:00 AM), there are two trains from Foxboro to Boston (leaves Foxboro at 7:23 AM and 8:19 AM) and one train from Boston (arrives in Foxboro at 8:06 AM). During the weekday evening peak period (4:00 to 6:30 PM), there are two trains from Foxboro to Boston (leaves Foxboro at 4:32 PM and 5:29 PM) and two trains from Boston (arrives in Foxboro at 5:16 PM and 6:07 PM). Additional trains also run for New England Patriots games (from Boston and Providence), as well as special events at Gillette Stadium. The train schedule is attached.

As part of our assessment, the videoed data was again reviewed and the time from the start of railroad flashing operations to the end of operations were recorded. This summary is attached at the end of this memorandum. Summarized in Table 2 are the peak period operations summary.

TABLE 2
RAILROAD OPERATIONS SUMMARY^a

Time Period	Weekday Morning Peak Period ^b	Weekday Evening Peak Period ^b	NB Trains	SB Trains
Average Time for Flashing Operations (sec)	58	62	58	62

^aBased on count data compiled November 6, 2019 to November 12, 2019.

^bMorning Peak period from 7:00 – 9:00 AM.

^cEvening Peak period from 4:00 – 6:30 PM.

As can be seen in Table 2, during the peak periods, the average time from the start of railroad operations to the end is on average, one (1) minute.

Also, during the morning peak hour, it is anticipated that there will be 87 vehicles turning left out of the site and during the evening peak hour, it is anticipated that there will be 57 vehicles turning left out of the site. This is on average 1.5 to 1 vehicles per minute during the respective weekday morning and weekday evening peak hours. This increase will not significantly affect existing operations.

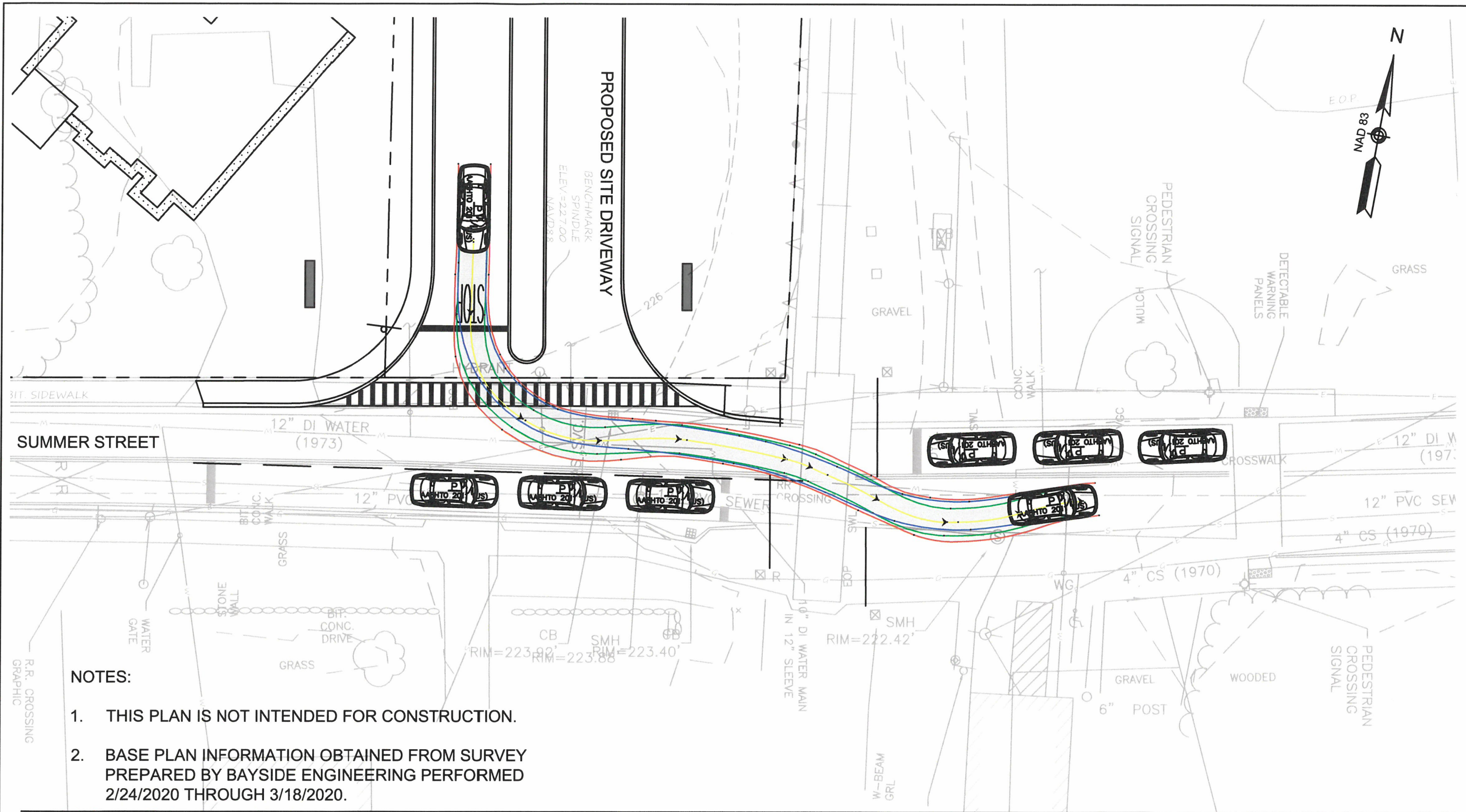
RAILROAD OPERATIONS

As indicated in Tables 1 and 2, overall railroad operations are not lengthy. However, it has been suggested that drivers exiting the site may conceivably break the law by turning left and driving on the wrong side of the road into head-on traffic in an attempt to by-pass any vehicle queue on Summer Street. It should be noted that cars leaving the site would be no more likely to break the law than the cars waiting in the queue on Summer Street. Bayside reviewed the geometry and performed a number of AutoTURN¹ runs.

Further, from this assessment, Bayside determined that a vehicle would have to be travelling at a speed of five (5) miles per hour (mph) in order to make the zig-zag maneuver to cross the tracks (if the crossing arm bars are in the down position). This maneuver is shown on the attached Figure 1. A vehicle travelling any faster would not be able to maneuver across the railroad tracks, in between the crossing arm bars or queued vehicles without a collision.

The project applicant has committed to installing a sign on the driveway approach to Summer Street reminding motorists of the adjacent railroad crossing. Also, in the respective sale/rental of housing units documents, information will be included identifying the railroad crossing.

¹ AutoTURN is a computer software used to analyze road and site design projects including intersections, roundabouts, bus terminals, loading bays, parking lots or any on/off-street assignments involving vehicle access checks, clearances, and swept path maneuvers



NOTES:

1. THIS PLAN IS NOT INTENDED FOR CONSTRUCTION.
2. BASE PLAN INFORMATION OBTAINED FROM SURVEY PREPARED BY BAYSIDE ENGINEERING PERFORMED 2/24/2020 THROUGH 3/18/2020.



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*Proposed Residential
 Cedar Crossing and Cedar Edge
 Walpole, MA*

Figure 1
 5 MPH AUTOTURN RUN
 SCALE: 1" = 20'

PM: 4-6:30pm

	Lights Begin Flashing	Bars Begin to Go Up	Direction	Type of Train	Amount of Time			
Wednesday, November 6, 2019	7:31:48 AM	7:32:45 AM	NB	MBTA	00:57	57		Average
	8:13:36 AM	8:14:39 AM	SB	MBTA	01:03	63	AM Trains	00:58
	8:22:27 AM	8:23:17 AM	NB	MBTA	00:50	50	PM Trains	01:02
	8:50:09 AM	8:51:11 AM	SB	CSX	01:02	62		
							NB Trains	00:58
	4:33:34 PM	4:34:29 PM	NB	MBTA	00:55	55	SB Trains	01:02
	4:40:42 PM	4:42:18 PM	NB	CSX	01:36	96		
	5:13:27 PM	5:14:28 PM	SB	MBTA	01:01	61	All Trains	01:00
	5:27:13 PM	5:28:08 PM	NB	MBTA	00:55	55		
	6:05:41 PM	6:06:44 PM	SB	MBTA	01:03	63		
Thursday, November 7, 2019	7:30:52 AM	7:31:49 AM	NB	MBTA	00:57	57		
	8:36:04 AM	8:37:06 AM	SB	MBTA	01:02	62		
	8:44:43 AM	8:45:35 AM	NB	MBTA	00:52	52		
	4:33:44 PM	4:34:41 PM	NB	MBTA	00:57	57		
	5:20:05 PM	5:21:10 PM	SB	MBTA	01:05	65		
	5:33:38 PM	5:34:32 PM	NB	MBTA	00:54	54		
	6:13:43 PM	6:14:43 PM	SB	MBTA	01:00	60		
Friday, November 8, 2019	7:31:39 AM	7:32:36 AM	NB	MBTA	00:57	57		
	8:08:13 AM	8:09:14 AM	SB	MBTA	01:01	61		
	8:20:47 AM	8:21:38 AM	NB	MBTA	00:51	51		
	8:51:07 AM	8:52:25 AM	SB	CSX	01:18	78		
	4:33:33 PM	4:34:27 PM	NB	MBTA	00:54	54		
	5:12:33 PM	5:13:36 PM	SB	MBTA	01:03	63		
	5:27:08 PM	5:28:02 PM	NB	MBTA	00:54	54		
	6:13:46 PM	6:14:47 PM	SB	MBTA	01:01	61		
Saturday, November 9, 2019	No AM Trains							
	No PM Trains							

PDI File# 197249

Summer Street MBTA Crossing

EB and WB Queues

City, State: Walpole, MA

Client: Bayside Engineering/ K. Cram

Client #: 2192658

Count Dates: Wed 11/6 thru Tues 11/12/2019

AM: 7-9am

PM: 4-6:30pm

	Lights Begin Flashing	Bars Begin to Go Up	Direction	Type of Train	Amount of Time	
Sunday, November 10, 2019	No AM Trains					
	No PM Trains					
Monday, November 11, 2019	7:31:32 AM	7:32:31 AM	NB	MBTA	00:59	59
	8:09:20 AM	8:10:21 AM	SB	MBTA	01:01	61
	8:23:34 AM	8:24:25 AM	NB	MBTA	00:51	51
	8:46:43 AM	8:47:37 AM	SB	CSX	00:54	54
	4:33:47 PM	8:34:40 PM	NB	MBTA	00:53	53
	5:16:36 PM	5:17:39 PM	SB	MBTA	01:03	63
	5:29:03 PM	5:30:03 PM	NB	MBTA	01:00	60
	6:04:28 PM	6:05:27 PM	SB	MBTA	00:59	59
Tuesday, November 12, 2019	7:31:00 AM	7:31:57 AM	NB	MBTA	00:57	57
	8:08:38 AM	8:09:41 AM	SB	MBTA	01:03	63
	8:20:37 AM	8:21:28 AM	NB	MBTA	00:51	51
	4:33:42 PM	4:34:39 PM	NB	MBTA	00:57	57
	4:40:24 PM	4:41:52 PM	NB	CSX	01:28	88
	5:23:24 PM	5:24:27 PM	SB	MBTA	01:03	63
	5:35:56 PM	5:36:51 PM	NB	MBTA	00:55	55
	6:07:05 PM	6:08:13 PM	SB	MBTA	01:08	68

Monday to Friday

Inbound to Boston			AM										PM															
ZONE	STATION	TRAIN #	700	740	702	7704	7742	7708	7744	710	746	712	714	748	716	718	720	750	7722	7752	754	724	7756	726	728	758	730	732
6	Forge Park/495		5:18	-	6:03	6:50	-	7:47	-	9:24	-	10:55	12:20	-	1:37	2:54	3:55	-	4:58	-	-	7:45	-	8:07	9:10	-	10:30	11:50
6	Franklin/Dean Coll.		5:25	-	6:10	6:57	-	7:54	-	9:31	-	11:02	12:27	-	1:44	3:01	4:02	-	5:05	-	-	7:52	-	8:14	9:17	-	10:37	11:57
5	Norfolk		5:32	-	6:17	7:04	-	8:01	-	9:38	-	11:09	12:34	-	1:51	3:08	4:09	-	5:12	-	-	7:59	-	8:21	9:24	-	10:44	12:04
4	Foxboro		-	5:47	-	-	7:23	-	8:19	-	10:29	-	-	1:29	-	-	-	4:32	-	5:29	6:34	-	8:07	-	-	9:49	-	-
4	Walpole		5:39	-	6:24	7:11	-	8:08	-	9:45	-	11:16	12:41	-	1:58	3:23	4:24	-	5:26	-	-	8:06	-	8:36	9:31	-	10:51	12:11
4	Plimptonville		-	-	-	f 7:13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	Windsor Gardens		5:42	6:00	6:28	7:16	7:36	8:12	-	9:49	10:42	11:20	12:45	1:42	-	3:28	-	4:45	-	-	f 6:47	-	-	-	-	-	-	-
3	Norwood Central		5:46	6:05	6:33	7:21	7:41	8:18	8:35	9:55	10:46	11:24	12:49	1:46	2:05	3:32	4:31	4:49	5:33	5:44	6:51	8:13	8:23	8:43	9:38	10:06	10:58	f 12:18
3	Norwood Depot		5:49	6:08	6:36	7:24	7:44	8:21	8:38	9:53	10:48	11:26	12:51	1:48	2:07	3:34	-	4:51	-	5:46	6:53	8:15	-	8:45	9:40	10:08	11:00	f 12:20
3	Islington		5:52	6:12	6:40	7:28	7:48	8:25	8:42	9:58	10:51	11:29	12:54	1:51	2:10	3:37	-	4:54	-	5:49	6:56	8:18	-	8:48	9:43	10:11	11:02	f 12:22
2	Dedham Corp. Ctr.		5:55	6:15	6:43	7:31	7:51	8:28	8:45	10:01	10:53	11:31	12:56	1:53	2:12	3:39	4:36	4:56	5:38	5:51	6:58	8:20	8:28	8:50	9:45	10:13	11:05	f 12:25
2	Endicott		5:58	6:18	6:46	7:35	7:55	8:31	8:48	10:04	10:56	11:34	12:59	1:56	2:15	3:42	-	4:59	-	5:54	7:01	8:23	-	8:53	9:48	10:16	11:08	f 12:28
2	Readville		6:02	VIA	6:51	7:40	VIA	8:35	VIA	10:08	VIA	11:38	1:03	VIA	2:19	-	VIA	VIA	VIA	5:58	VIA	8:26	-	VIA	9:52	VIA	11:12	f 12:32
1	Hyde Park		-	FAIR-	-	-	FAIR-	-	FAIR-	-	FAIR-	-	-	FAIR-	-	-	-	FAIR-	FAIR-	-	FAIR-	-	-	FAIR-	-	FAIR-	-	-
1A	Ruggles		L 6:13	MOUNT	L 7:01	L 7:50	MOUNT	L 8:48	MOUNT	L 10:18	MOUNT	-	-	MOUNT	-	-	-	MOUNT	MOUNT	-	MOUNT	L 8:37	-	MOUNT		L 10:02	MOUNT	
1A	Back Bay		L 6:17	LINE	L 7:05	L 7:54	LINE	L 8:52	LINE	L 10:22	LINE	L 11:49	L 1:14	LINE	L 2:30	L 4:00	L 4:59	LINE	LINE	L 6:15	LINE	L 8:41	L 8:48	LINE	L 10:06	LINE	L 11:24	L 12:43
1A	South Station		6:23	6:52	7:11	8:00	8:30	8:58	9:23	10:27	11:30	11:54	1:19	2:30	2:35	4:05	5:04	5:33	6:14	6:20	7:36	8:46	8:53	9:27	10:11	10:50	11:29	12:44

Monday to Friday

Outbound from Boston			AM								PM																	
ZONE	STATION	TRAIN #	701	741	743	7703	745	705	707	747	709	711	713	749	7715	7751	7717	7753	7721	7723	7755	725	757	727	759	729	731	
Bikes Allowed																												
1A	South Station		4:15	6:03	7:05	7:55	8:50	9:40	11:00	11:45	12:20	1:35	2:40	2:45	3:30	4:10	4:35	5:00	5:30	6:15	6:30	7:50	8:15	9:10	10:00	10:30	11:55	
1A	Back Bay		-	VIA	VIA	VIA	8:55	9:45	11:05	VIA	12:25	1:40	2:45	VIA	3:35	VIA	4:40	VIA	5:35	6:20	VIA	7:55	VIA	9:15	VIA	10:35	11:55	
1A	Ruggles		-	FAIR-	FAIR-	FAIR-	8:59	-	11:08	FAIR-	12:28	1:44	2:49	FAIR-	3:39	FAIR-	4:44	FAIR-	5:39	6:24	FAIR-	7:59	FAIR-	9:18	FAIR-	10:38	11:58	
1	Hyde Park		-	MOUNT	MOUNT	MOUNT	-	-	-	MOUNT	-	-	-	MOUNT	-	MOUNT	4:53	MOUNT	5:49	6:33	MOUNT	-	MOUNT	-	MOUNT	-	10:46	-
2	Readville		-	LINE	LINE	LINE	9:09	9:56	-	LINE	12:38	1:53	2:59	LINE	3:49	LINE	4:57	LINE	5:53	6:37	LINE	8:08	LINE	9:28	LINE	10:50	12:08	
2	Endicott	-	-	-	7:38	8:28	9:12	9:59	11:19	-	12:41	1:57	-	3:20	3:53	4:44	5:00	5:34	5:57	6:41	7:03	8:11	8:48	9:31	-	10:53	12:11	
2	Dedham Corp. Ctr.		-	6:37	7:41	8:31	9:15	10:02	11:22	12:20	12:44	1:59	3:04	3:23	3:56	4:47	5:03	5:37	6:00	6:44	7:06	8:14	8:51	9:34	10:35	10:56	12:14	
3	Islington	-	-	7:44	f 8:34	9:18	10:05	11:25	-	12:47	2:02	-	3:26	3:59	4:50	5:06	5:40	6:03	6:47	7:09	8:17	8:54	9:37	-	10:59	12:17		
3	Norwood Depot		-	7:47	8:37	9:21	10:08	11:28	-	12:50	2:05	-	3:30	4:03	4:53	5:09	5:43	6:06	6:50	7:13	8:20	8:57	9:40	-	11:02	12:20		
3	Norwood Central		L 4:37	6:42	7:50	8:40	9:24	10:11	11:31	12:25	12:53	2:08	3:10	3:33	4:06	4:56	5:12	5:46	6:09	6:53	7:17	8:23	9:00	9:43	10:40	11:05	12:23	
4	Windsor Gardens	-	-	-	8:44	-	10:15	11:35	-	12:57	2:12	-	3:37	4:10	5:00	5:16	5:50	6:13	6:57	7:21	8:27	9:04	9:47	-	11:08	12:26		
4	Plimptonville	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	L 5:53	-	-	-	-	-	-	-	-	-	-	
4	Walpole	L 4:43	-	-	-	8:48	-	10:19	11:39	-	1:01	2:16	3:18	-	4:15	-	5:21	-	6:18	7:02	-	8:32	-	9:52	-	11:12	12:31	
4	Foxboro		-	6:59	8:06	-	9:40	-	-	12:43	-	-	-	3:52	-	5:16	-	6:07	-	-	7:37	-	9:19	-	10:56	-	-	
5	Norfolk		-	-	-	8:54	-	10:25	11:45	-	1:07	2:22	3:25	-	4:24	-	5:28	-	6:25	7:09	-	8:39	-	9:59	-	11:19	12:38	
6	Franklin/Dean Coll.	-	4:55	-	-	9:01	-	10:32	11:52	-	1:14	2:29	3:32	-	4:31	-	5:35	-	6:32	7:16	-	8:46	-	10:06	-	11:26	12:45	
6	Forge Park/495		5:03	-	-	9:09	-	10:40	12:00	-	1:22	2:37	3:40	-	4:41	-	5:44	-	6:41	7:25	-	8:54	-	10:14	-	11:34	12:53	

Keep in Mind:

This schedule will be effective from June 22, 2020 and will replace the schedule of October 21, 2019.

Presidents' Day and 4th of July operate on a **Saturday service schedule.**

New Year's Day, Memorial Day, Labor Day, Thanksgiving Day, and Christmas Day operate on a **Sunday service schedule**.

For all other holiday schedules, please check MBTA.com/holidays or call 617-222-3200.

For the latest information regarding weekend disruptions, visit MBTA.com/weekend.

VIA FAIRMOUNT LINE: Operates via the Fairmount Line between Readville and South Station. See the Fairmount Line schedule for all stops.

For additional service to Readville Station, refer to the Fairmount Line schedule for particular trains.

For additional service to Ruggles Station, refer to the Providence and Needham Line schedules for particular trains.

For additional service to Hyde Park Station, refer to the Providence Line schedule for particular trains.

<p>Foxboro Weekday Pilot service began Oct 21, 2019.</p> <p>As part of the pilot, a Reverse Commute fare is being tested between Zone 1A stations and Foxboro on specific trains.</p> <p>More details at mbta.com/foxboro.</p>		<p>PM trains from Foxboro Station</p>	<p>Train 750 (4:32 PM Fairmount) Train 752 (5:25 PM Franklin) Train 754 (6:34 PM Fairmount) Train 756 (7:39 PM Franklin)</p>
<p>Foxboro Pilot – Reverse Commute Fare Details</p>			
<p>Zone 1A stations</p>	<p>South Station, Back Bay, Ruggles, Newmarket, Uphams Corner, Four Corners/Geneva, Taibot Ave, Morton Street, Blue Hill Ave and Fairmount</p>	<p>Fares</p>	<p>One-Way \$4.25 Reduced Fare One-Way \$2 Monthly Pass (incl. local bus transfers) \$139 Monthly Pass on mTicket (no transfers) \$129</p>
<p>AM trains from South Station</p>	<p>Train 741 (6:03 AM Fairmount) Train 743 (7:05 AM Fairmount) Train 745 (8:50 AM Franklin)</p>	<p>Tickets</p>	<p>Tickets available on the mTicket app, onboard, and at the South Station Commuter Rail Ticket Office.</p>

Saturday & Sunday

Inbound to Boston		AM			PM						
SATURDAY TRAIN #		1702	1704	1706	1708	1710	1712	1714	1716	1718	
ZONE	STATION	SUNDAY TRAIN #	SAT ONLY	SAT ONLY	2706	2708	2710	2712	2714	2716	2718
Bikes Allowed											
6	Forge Park/495		6:40	8:40	10:40	12:40	2:40	4:40	6:40	8:40	10:40
6	Franklin/Dean Coll.		6:47	8:47	10:47	12:47	2:47	4:47	6:47	8:47	10:47
5	Norfolk		6:54	8:54	10:54	12:54	2:54	4:54	6:54	8:54	10:54
4	Walpole		7:01	9:01	11:01	1:01	3:01	5:01	7:01	9:01	11:01
4	Winsor Gardens		7:06	9:06	11:06	1:06	3:06	5:06	7:06	9:06	7:11:01
3	Norwood Central		7:10	9:10	11:10	1:10	3:10	5:10	7:10	9:10	7:11:09
3	Norwood Depot		7:12	9:12	11:12	1:12	3:12	5:12	7:12	9:12	7:11:11
3	Islington		7:16	9:16	11:16	1:16	3:16	5:16	7:16	9:16	7:11:14
2	Dedham Corp. Ctr.		7:19	9:19	11:19	1:19	3:19	5:19	7:19	9:19	7:11:17
2	Endicott		7:21	9:21	11:21	1:21	3:21	5:21	7:21	9:21	7:11:19
2	Readville		7:24	9:24	11:24	1:24	3:24	5:24	7:24	9:24	7:11:21
1A	Ruggles		7:13:34	9:13:34	11:13:34	1:13:34	3:13:34	5:13:34	7:13:34	9:13:34	11:13:34
1A	Back Bay		7:13:38	9:13:38	11:13:38	1:13:38	3:13:38	5:13:38	7:13:38	9:13:38	11:13:38
1A	South Station		7:43	9:43	11:43	1:43	3:43	5:43	7:43	9:43	11:43

Trains 1702 and 1704 are Saturday only trains and will not operate on Sunday

Saturday & Sunday

Outbound from Boston			AM			PM						
SATURDAY TRAIN #			1703	1705	1707	1709	1711	1713	1715	1717	1719	
ZONE	STATION	SUNDAY TRAIN #	SAT ONLY	SAT ONLY	2707	2709	2711	2713	2715	2717	2719	
Bikes Allowed												
1A	South Station		♻️	7:20	9:20	11:20	1:20	3:20	5:20	7:20	9:20	11:30
1A	Back Bay		♻️	7:25	9:25	11:25	1:25	3:25	5:25	7:25	9:25	11:35
1A	Ruggles		♻️	7:28	9:28	11:28	1:28	3:28	5:28	7:28	9:28	11:38
2	Readville		♻️	7:38	9:38	11:38	1:38	3:38	5:38	7:38	9:38	11:48
2	Endicott			7:41	9:41	11:41	1:41	3:41	5:41	7:41	9:41	11:51
2	Deedham Corp. Ctr.		♻️	7:45	9:45	11:45	1:45	3:45	5:45	7:45	9:45	11:55
3	Islington			7:47	9:47	11:47	1:47	3:47	5:47	7:47	9:47	11:57
3	Norwood Depot		♻️	7:50	9:50	11:50	1:50	3:50	5:50	7:50	9:50	12:00
3	Norwood Central		♻️	7:53	9:53	11:53	1:53	3:53	5:53	7:53	9:53	12:03
4	Windsor Gardens			7:57	9:57	11:57	1:57	3:57	5:57	7:57	9:57	12:07
4	Walpole			8:03	10:03	12:03	2:03	4:03	6:03	8:03	10:03	12:13
5	Norfolk		♻️	8:10	10:10	12:10	2:10	4:10	6:10	8:10	10:10	12:20
6	Franklin/Dean Coll.			8:17	10:17	12:17	2:17	4:17	6:17	8:17	10:17	12:27
6	Forge Park/495		♻️	8:24	10:24	12:24	2:24	4:24	6:24	8:24	10:24	12:34

Trains 1703 and 1705 are Saturday only trains and will not operate on Sunday.



Times in purple with “f” indicate a flag stop: Passengers must tell the conductor that they wish to leave. Passengers waiting to board must be visible on the platform for the train to stop.



Times in blue indicate an early departure
(L stop): The train may leave ahead of schedule at these stops.



Bikes: Bicycles are allowed on trains with the bicycle symbol shown below the train number.



High level platform and bridge plate available.
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