

## MEMORANDUM

**TO:** Mr. Mark Yadisernia  
Guardian Self Storage  
599 Washington Street  
Franklin, MA 02038

**FROM:** Mr. Jeffrey S. Dirk, P.E. \*, PTOE, FITE   
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*\*Professional Engineer in CT, MA, ME, NH, RI and VA*

**DATE:** January 9, 2025

**RE:** 10057

**SUBJECT:** Trip Generation Assessment  
Proposed Self-Storage Facility – 151 Grove Street  
Franklin, Massachusetts

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Vanasse & Associates, Inc. (VAI) has prepared a trip generation assessment in support of the proposed self-storage facility to be located at 151 Grove Street in Franklin, Massachusetts (hereafter referred to as the “Project”). This assessment provides detailed trip-generation calculations for the Project and includes a qualitative assessment of the potential impact of the Project on the transportation infrastructure.

Based on this assessment, we have concluded the following with respect to the Project:

1. Using trip-generation statistics published by the Institute of Transportation Engineer (ITE),<sup>1</sup> the Project is expected to generate approximately 92 vehicle trips on an average weekday (two-way, 24-hour volume), with six (6) vehicle trips expected during the weekday morning peak-hour and 10 vehicle trips expected during the weekday evening peak-hour. *We note that the predicted trip-generation is much higher than that which has been documented for the existing self-storage facility located at 599 Washington Street in Franklin, which is reported to generate approximately 26 vehicle trips on an average weekday;*
2. The predicted traffic volume increases are expected to be less than one (1) additional vehicle every 6 to 10 minutes during the peak hours and will not result in a material increase in motorist delays or vehicle queuing over existing conditions; and
3. Based on a review of the Massachusetts Department of Transportation (MassDOT) high crash location database, there are no (0) defined high crash locations along Grove Street or in the vicinity of the Project site.

The following details our assessment of the Project.

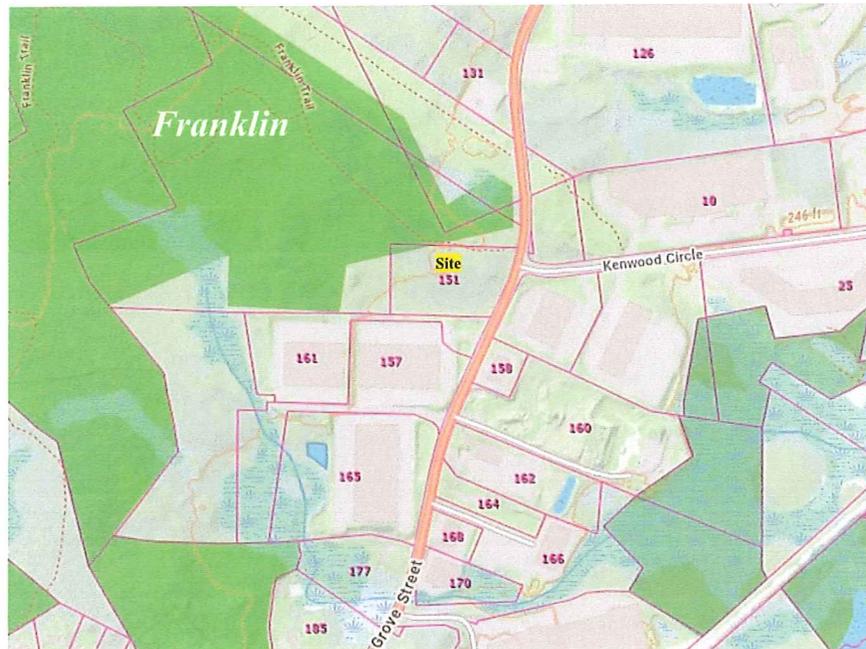
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<sup>1</sup>*Trip Generation*, 11<sup>th</sup> Edition; Institute of Transportation Engineers; Washington, DC; 2021.



## PROJECT DESCRIPTION

The Project will entail the construction of a two-story, 63,634± square foot (sf) self-storage facility to be located at 151 Grove Street in Franklin, Massachusetts. The facility will be demised to provide individual self-storage units for rent, but will not offer rental vehicles such as U-Haul or similar. The Project site encompasses approximately 3.68± acres of undeveloped land that is bounded by areas of open and wooded space to the north and west; a commercial property to the south; and Grove Steet to the east.



Source: MassMapper

Access to the Project site will be provided by way of a new driveway that will intersect the west side of Grove Street generally opposite Kenwood Circle. On-site parking will be provided for six (6) vehicles, which is below the parking requirements of c. 185, § 185-21, *Parking loading and driveway requirements*, of the Bylaws of the Town of Franklin, which requires a minimum of 1.0 parking spaces per 1,000 sf of gross floor area for a warehouse use and 1.0 parking spaces per 250 sf for an office use. The Project will include 62,584± sf of warehouse space and 1,050± sf of associated office space, which requires 68 parking spaces. The parking ratio that is provided (0.16 parking spaces per 1,000 sf) is within the range of rates documented by the ITE<sup>2</sup> for a similar use.

<sup>2</sup>*Parking Generation*, 6<sup>th</sup> Edition; Institute of Transportation Engineers; Washington, D.C.; October 2023. The observed peak parking demand ratios for a mini-warehouse documented by the ITE range from 0.03 parking spaces per 1,000 sf to 0.53 parking spaces per 1,000 sf, with the average observed peak parking demand found to be 0.10 parking spaces per 1,000 sf.



## PROJECT-GENERATED TRAFFIC

In order to develop the traffic characteristics of the Project, trip generation statistics published by the Institute of Transportation Engineers (ITE)<sup>3</sup> for a similar land use as that proposed was used. ITE Land Use Code (LUC) 151, *Mini-Warehouse*, was used to establish the traffic characteristics of the Project, the results of which are summarized in Table 1 with the detailed trip-generation calculations attached.

**Table 1**  
**TRIP GENERATION SUMMARY**

Time Period	Vehicle Trips <sup>a</sup>		
	Entering	Exiting	Total
<i>Average Weekday:</i>	46	46	92
<i>Weekday Morning Peak-Hour:</i>	3	3	6
<i>Weekday Evening Peak-Hour:</i>	4	6	10

<sup>a</sup>Based on ITE LUC 151, *Mini-Warehouse* (63,634 sf).

### **Project-Generated Traffic-Volume Summary**

As can be seen in Table 1, the Project is expected to generate approximately 92 vehicle trips on an average weekday (two-way, 24-hour volume, or 46 vehicles entering and 46 exiting), with six (6) vehicle trips (three (3) vehicles entering and three (3) exiting) expected during the weekday morning peak-hour and 10 vehicle trips (four (4) vehicles entering and six (6) exiting) expected during the weekday evening peak-hour.

We note that the predicted traffic volumes for the Project on an average weekday are higher than those that have been documented for the existing self-storage facility located at 599 Washington Street in Franklin, which is reported to generate approximately 26 vehicle trips on an average weekday.

***The predicted traffic volume increases are expected to be less than one (1) additional vehicle every 6 to 10 minutes during the peak hours and will not result in a material increase in motorist delays or vehicle queuing over existing conditions.***

### **SUMMARY**

VAI has prepared a trip generation assessment in support of the proposed self-storage facility to be located at 151 Grove Street in Franklin, Massachusetts. This assessment has provided trip-generation calculations for the Project and included a qualitative assessment of the potential impact of the Project on the transportation infrastructure. Based on this assessment, we have concluded the following with respect to the Project:

4. Using trip-generation statistics published by the ITE,<sup>4</sup> the Project is expected to generate approximately 92 vehicle trips on an average weekday (two-way, 24-hour volume), with six (6)

<sup>3</sup>*Trip Generation*, 11<sup>th</sup> Edition; Institute of Transportation Engineers; Washington, D.C.; 2021.

<sup>4</sup>Institute of Transportation Engineers, op. cit. 1.



vehicle trips expected during the weekday morning peak-hour and 10 vehicle trips expected during the weekday evening peak-hour. *We note that the predicted trip-generation is much higher than that which has been documented for the existing self-storage facility located at 599 Washington Street in Franklin, which is reported to generate approximately 26 vehicle trips on an average weekday;*

5. The predicted traffic volume increases are expected to be less than one (1) additional vehicle every 6 to 10 minutes during the peak hours and will not result in a material increase in motorist delays or vehicle queuing over existing conditions; and
6. Based on a review of the MassDOT high crash location database, there are no (0) defined high crash locations along Grove Street or in the vicinity of the Project site.

In consideration of the above findings, it is expected that the existing transportation infrastructure affords sufficient capacity to accommodate the relatively minor increase in traffic that the Project represents.

Attachments: Site Plan  
Trip-Generation Calculations



## ATTACHMENTS

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SITE PLAN

TRIP-GENERATION CALCULATIONS

SITE PLAN

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**INDUSTRIAL**

FRANKLIN PLANNING BOARD RESOLUTION 158  
 09-6-2023 BY AMENDMENT 23-898

MINIMUM LOT AREA	40,000 SF
MINIMUM LOT FRONTAGE	175'
MINIMUM LOT WIDTH	157.5'
MINIMUM YARDS	40'
MINIMUM STORIES	3
MINIMUM STORIES	3
% OF LOT UNLAND COVERED BY STRUCTURES	10
MINIMUM BUILDING HEIGHT OF THE STRUCTURE WHEN ADJUTING RESIDENTIAL DISTRICT OR USE	10
MINIMUM BUILDING HEIGHT OF THE STRUCTURE WHEN ADJUTING THE PLANNING BOARD	10

**LEGEND**

DRILLHOLE	CONCRETE CURB
BOUND	CONCRETE CURB
CAST VALVE	GRANITE CURB
GAS SHUTOFF	CONCRETE BOUND FOUND
WATER SHUTOFF	OK TREE
WATER VALVE	PINE TREE
FIRE HYDRANT	SPRINKLE TREE
CUT WIRE	FREE UNKNOWN
UTILITY POLE	WATERLINE
CATCH BASIN	WATERLINE
SEWER MANHOLE	CAULKLINE
SEWER MANHOLE	CAULKLINE
WALKBOX	SEWERLINE
LAMP POST	SEWERLINE
FREE	FORCED MAIN
SHRUB	FENCE
ELECTRIC METER	ELECTRIC METER
GAS METER	ELECTRIC METER

**TESTING INFORMATION**

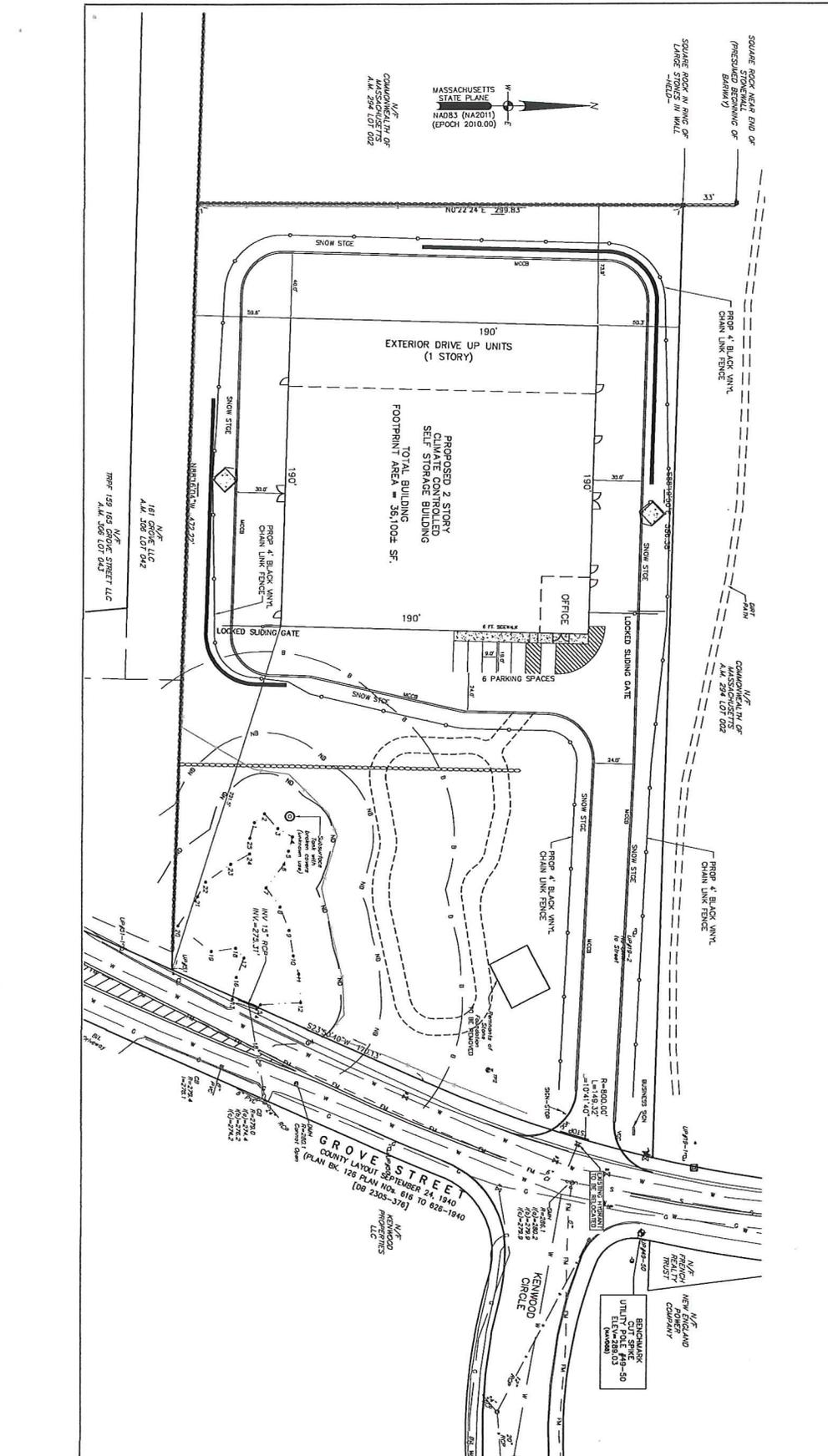
TESTING DATE: JULY 10, 2024. SOIL EVALUATOR: BRIAN HUSSETT

286.2	TP 1	286.9	TP 10	287.6	TP 19	288.3	TP 28	289.0	TP 37	289.7	TP 46	290.4	TP 55	291.1	TP 64	291.8	TP 73	292.5	TP 82	293.2	TP 91	293.9	TP 100	294.6	TP 109	295.3	TP 118	296.0	TP 127	296.7	TP 136	297.4	TP 145	298.1	TP 154	298.8	TP 163	299.5	TP 172	300.2	TP 181	300.9	TP 190	301.6	TP 199	302.3	TP 208	303.0	TP 217	303.7	TP 226	304.4	TP 235	305.1	TP 244	305.8	TP 253	306.5	TP 262	307.2	TP 271	307.9	TP 280	308.6	TP 289	309.3	TP 298	310.0	TP 307	310.7	TP 316	311.4	TP 325	312.1	TP 334	312.8	TP 343	313.5	TP 352	314.2	TP 361	314.9	TP 370	315.6	TP 379	316.3	TP 388	317.0	TP 397	317.7	TP 406	318.4	TP 415	319.1	TP 424	319.8	TP 433	320.5	TP 442	321.2	TP 451	321.9	TP 460	322.6	TP 469	323.3	TP 478	324.0	TP 487	324.7	TP 496	325.4	TP 505	326.1	TP 514	326.8	TP 523	327.5	TP 532	328.2	TP 541	328.9	TP 550	329.6	TP 559	330.3	TP 568	331.0	TP 577	331.7	TP 586	332.4	TP 595	333.1	TP 604	333.8	TP 613	334.5	TP 622	335.2	TP 631	335.9	TP 640	336.6	TP 649	337.3	TP 658	338.0	TP 667	338.7	TP 676	339.4	TP 685	340.1	TP 694	340.8	TP 703	341.5	TP 712	342.2	TP 721	342.9	TP 730	343.6	TP 739	344.3	TP 748	345.0	TP 757	345.7	TP 766	346.4	TP 775	347.1	TP 784	347.8	TP 793	348.5	TP 802	349.2	TP 811	349.9	TP 820	350.6	TP 829	351.3	TP 838	352.0	TP 847	352.7	TP 856	353.4	TP 865	354.1	TP 874	354.8	TP 883	355.5	TP 892	356.2	TP 901	356.9	TP 910	357.6	TP 919	358.3	TP 928	359.0	TP 937	359.7	TP 946	360.4	TP 955	361.1	TP 964	361.8	TP 973	362.5	TP 982	363.2	TP 991	363.9	TP 1000	364.6	TP 1009	365.3	TP 1018	366.0	TP 1027	366.7	TP 1036	367.4	TP 1045	368.1	TP 1054	368.8	TP 1063	369.5	TP 1072	370.2	TP 1081	370.9	TP 1090	371.6	TP 1099	372.3	TP 1108	373.0	TP 1117	373.7	TP 1126	374.4	TP 1135	375.1	TP 1144	375.8	TP 1153	376.5	TP 1162	377.2	TP 1171	377.9	TP 1180	378.6	TP 1189	379.3	TP 1198	380.0	TP 1207	380.7	TP 1216	381.4	TP 1225	382.1	TP 1234	382.8	TP 1243	383.5	TP 1252	384.2	TP 1261	384.9	TP 1270	385.6	TP 1279	386.3	TP 1288	387.0	TP 1297	387.7	TP 1306	388.4	TP 1315	389.1	TP 1324	389.8	TP 1333	390.5	TP 1342	391.2	TP 1351	391.9	TP 1360	392.6	TP 1369	393.3	TP 1378	394.0	TP 1387	394.7	TP 1396	395.4	TP 1405	396.1	TP 1414	396.8	TP 1423	397.5	TP 1432	398.2	TP 1441	398.9	TP 1450	399.6	TP 1459	400.3	TP 1468	401.0	TP 1477	401.7	TP 1486	402.4	TP 1495	403.1	TP 1504	403.8	TP 1513	404.5	TP 1522	405.2	TP 1531	405.9	TP 1540	406.6	TP 1549	407.3	TP 1558	408.0	TP 1567	408.7	TP 1576	409.4	TP 1585	410.1	TP 1594	410.8	TP 1603	411.5	TP 1612	412.2	TP 1621	412.9	TP 1630	413.6	TP 1639	414.3	TP 1648	415.0	TP 1657	415.7	TP 1666	416.4	TP 1675	417.1	TP 1684	417.8	TP 1693	418.5	TP 1702	419.2	TP 1711	419.9	TP 1720	420.6	TP 1729	421.3	TP 1738	422.0	TP 1747	422.7	TP 1756	423.4	TP 1765	424.1	TP 1774	424.8	TP 1783	425.5	TP 1792	426.2	TP 1801	426.9	TP 1810	427.6	TP 1819	428.3	TP 1828	429.0	TP 1837	429.7	TP 1846	430.4	TP 1855	431.1	TP 1864	431.8	TP 1873	432.5	TP 1882	433.2	TP 1891	433.9	TP 1900	434.6	TP 1909	435.3	TP 1918	436.0	TP 1927	436.7	TP 1936	437.4	TP 1945	438.1	TP 1954	438.8	TP 1963	439.5	TP 1972	440.2	TP 1981	440.9	TP 1990	441.6	TP 1999	442.3	TP 2008	443.0	TP 2017	443.7	TP 2026	444.4	TP 2035	445.1	TP 2044	445.8	TP 2053	446.5	TP 2062	447.2	TP 2071	447.9	TP 2080	448.6	TP 2089	449.3	TP 2098	450.0	TP 2107	450.7	TP 2116	451.4	TP 2125	452.1	TP 2134	452.8	TP 2143	453.5	TP 2152	454.2	TP 2161	454.9	TP 2170	455.6	TP 2179	456.3	TP 2188	457.0	TP 2197	457.7	TP 2206	458.4	TP 2215	459.1	TP 2224	459.8	TP 2233	460.5	TP 2242	461.2	TP 2251	461.9	TP 2260	462.6	TP 2269	463.3	TP 2278	464.0	TP 2287	464.7	TP 2296	465.4	TP 2305	466.1	TP 2314	466.8	TP 2323	467.5	TP 2332	468.2	TP 2341	468.9	TP 2350	469.6	TP 2359	470.3	TP 2368	471.0	TP 2377	471.7	TP 2386	472.4	TP 2395	473.1	TP 2404	473.8	TP 2413	474.5	TP 2422	475.2	TP 2431	475.9	TP 2440	476.6	TP 2449	477.3	TP 2458	478.0	TP 2467	478.7	TP 2476	479.4	TP 2485	480.1	TP 2494	480.8	TP 2503	481.5	TP 2512	482.2	TP 2521	482.9	TP 2530	483.6	TP 2539	484.3	TP 2548	485.0	TP 2557	485.7	TP 2566	486.4	TP 2575	487.1	TP 2584	487.8	TP 2593	488.5	TP 2602	489.2	TP 2611	489.9	TP 2620	490.6	TP 2629	491.3	TP 2638	492.0	TP 2647	492.7	TP 2656	493.4	TP 2665	494.1	TP 2674	494.8	TP 2683	495.5	TP 2692	496.2	TP 2701	496.9	TP 2710	497.6	TP 2719	498.3	TP 2728	499.0	TP 2737	499.7	TP 2746	500.4	TP 2755	501.1	TP 2764	501.8	TP 2773	502.5	TP 2782	503.2	TP 2791	503.9	TP 2800	504.6	TP 2809	505.3	TP 2818	506.0	TP 2827	506.7	TP 2836	507.4	TP 2845	508.1	TP 2854	508.8	TP 2863	509.5	TP 2872	510.2	TP 2881	510.9	TP 2890	511.6	TP 2899	512.3	TP 2908	513.0	TP 2917	513.7	TP 2926	514.4	TP 2935	515.1	TP 2944	515.8	TP 2953	516.5	TP 2962	517.2	TP 2971	517.9	TP 2980	518.6	TP 2989	519.3	TP 2998	520.0	TP 3007	520.7	TP 3016	521.4	TP 3025	522.1	TP 3034	522.8	TP 3043	523.5	TP 3052	524.2	TP 3061	524.9	TP 3070	525.6	TP 3079	526.3	TP 3088	527.0	TP 3097	527.7	TP 3106	528.4	TP 3115	529.1	TP 3124	529.8	TP 3133	530.5	TP 3142	531.2	TP 3151	531.9	TP 3160	532.6	TP 3169	533.3	TP 3178	534.0	TP 3187	534.7	TP 3196	535.4	TP 3205	536.1	TP 3214	536.8	TP 3223	537.5	TP 3232	538.2	TP 3241	538.9	TP 3250	539.6	TP 3259	540.3	TP 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3907	590.7	TP 3916	591.4	TP 3925	592.1	TP 3934	592.8	TP 3943	593.5	TP 3952	594.2	TP 3961	594.9	TP 3970	595.6	TP 3979	596.3	TP 3988	597.0	TP 3997	597.7	TP 4006	598.4	TP 4015	599.1	TP 4024	599.8	TP 4033	600.5	TP 4042	601.2	TP 4051	601.9	TP 4060	602.6	TP 4069	603.3	TP 4078	604.0	TP 4087	604.7	TP 4096	605.4	TP 4105	606.1	TP 4114	606.8	TP 4123	607.5	TP 4132	608.2	TP 4141	608.9	TP 4150	609.6	TP 4159	610.3	TP 4168	611.0	TP 4177	611.7	TP 4186	612.4	TP 4195	613.1	TP 4204	613.8	TP 4213	614.5	TP 4222	615.2	TP 4231	615.9	TP 4240	616.6	TP 4249	617.3	TP 4258	618.0	TP 4267	618.7	TP 4276	619.4	TP 4285	620.1	TP 4294	620.8	TP 4303	621.5	TP 4312	622.2	TP 4321	622.9	TP 4330	623.6	TP 4339	624.3	TP 4348	625.0	TP 4357	625.7	TP 4366	626.4	TP 4375	627.1	TP 4384	627.8	TP 4393	628.5	TP 4402	629.2	TP 4411	629.9	TP 4420	630.6	TP 4429	631.3	TP 4438	632.0	TP 4447	632.7	TP 4456	633.4	TP 4465	634.1	TP 4474	634.8	TP 4483	635.5	TP 4492	636.2	TP 4501	636.9	TP 4510	637.6	TP 4519	638.3	TP 4528	639.0	TP 4537	639.7	TP 4546	640.4	TP 4555	641.1	TP 4564	641.8	TP 4573	642.5	TP 4582	643.2	TP 4591	643.9	TP 4600	644.6	TP 4609	645.3	TP 4618	646.0	TP 4627	646.7	TP 4636	647.4	TP 4645	648.1	TP 4654	648.8	TP 4663	649.5	TP 4672	650.2	TP 4681	650.9	TP 4690	651.6	TP 4699	652.3	TP 4708	653.0	TP 4717	653.7	TP 4726	654.4	TP 4735	655.1	TP 4744	655.8	TP 4753	656.5	TP 4762	657.2	TP 4771	657.9	TP 4780	658.6	TP 4789	659.3	TP 4798	660.0	TP 4807	660.7	TP 4816	661.4	TP 4825	662.1	TP 4834	662.8	TP 4843	663.5	TP 4852	664.2	TP 4861	664.9	TP 4870	665.6	TP 4879	666.3	TP 4888	667.0	TP 4897	667.7	TP 4906	668.4	TP 4915	669.1	TP 4924	669.8
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INDUSTRIAL	
FRANKLIN ZONING BY-LAW SECTION 185	
08-6-2023 BY AMENDMENT 23-888	
REQUIRED	PROPOSED
MINIMUM LOT AREA	40,000 SF
MINIMUM LOT FRONTAGE	175 FT
MINIMUM LOT DEPTH	200 FT
MINIMUM YARDS	15/15
FRONT	40 FT
REAR	30 FT
MAINTENANCE BLDG. H.T.	34 FT
MAXIMUM BUILDING HEIGHT	2 FT
% OF LOT UNPAVED COVERED BY STRUCTURES/PAVING	80
PROPOSED BY THE COMMONWEALTH OF MASSACHUSETTS	22.5%
BE PERMITTED BY A SPECIAL PERMIT FROM THE PLANNING BOARD	45.9%

**PARKING INFORMATION:**  
 MINIMUM 1 SPACE PER 100 SF  
 OFFICE 1 SPACE PER 200 SF  
 PROPOSED 2 STORY CLIMATE CONTROLLED SELF STORAGE BUILDING  
 MINIMUM 4.5 (1) PARKING SPACES REQUIRED  
 MINIMUM 4.5 (1) OFFICE SPACE REQUIRED  
 SECOND FLOOR PARKING  
 MINIMUM 2.5 (1) OFFICE SPACE REQUIRED  
 MINIMUM 2.5 (1) OFFICE SPACE REQUIRED  
 TOTAL REQUIRED = 46 PARKING SPACES  
 PROPOSED 4 PARKING SPACES (TOTAL 50)  
 PROPOSED 4 PARKING SPACES (TOTAL 50)  
 PROPOSED 4 PARKING SPACES (TOTAL 50)

LEGEND	
1	BOUNDARY
2	CONCRETE CURB
3	CONCRETE CURB
4	CONCRETE CURB
5	CONCRETE CURB
6	CONCRETE CURB
7	CONCRETE CURB
8	CONCRETE CURB
9	CONCRETE CURB
10	CONCRETE CURB
11	CONCRETE CURB
12	CONCRETE CURB
13	CONCRETE CURB
14	CONCRETE CURB
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97	CONCRETE CURB
98	CONCRETE CURB
99	CONCRETE CURB
100	CONCRETE CURB



**LEGAL NOTES**

UTILITIES ARE PLOTTED AS A CORRELATION OF RECORD PLANS, RECORDS, RECORDS AND OTHER INFORMATION. THE ENGINEER HAS CONDUCTED A VISUAL INSPECTION OF THE SITE AND HAS OBSERVED THE UTILITIES AS SHOWN ON THE PLANS. THE ENGINEER HAS CONDUCTED A VISUAL INSPECTION OF THE SITE AND HAS OBSERVED THE UTILITIES AS SHOWN ON THE PLANS. THE ENGINEER HAS CONDUCTED A VISUAL INSPECTION OF THE SITE AND HAS OBSERVED THE UTILITIES AS SHOWN ON THE PLANS.

**APPROVED DATE:**

FRANKLIN PLANNING BOARD

**OWNER:**

SM PARTNERS LLC  
 560 FRANKLIN, MA, 02038  
 DEED BOOK 42015 PAGE 483  
 A.M. 284 LOT 1

**SITE PLAN AND SPECIAL PERMIT FOR GUARDIAN SELF STORAGE II 151 GROVE STREET FRANKLIN MASSACHUSETTS**

**SITE PLAN**

**JANUARY 8, 2025**

**REVISION DESCRIPTION**

**GRAPHIC SCALE: 1"=30'**

**Guerriere & Holton, Inc.**  
 ENGINEERING & LAND SURVEYING  
 55 WEST CENTRAL ST., PH. (508) 528-3221  
 FRANKLIN, MA 02038 FX (508) 528-7821  
 www.guerriereholton.com

**SHEET 4 OF 10 JOB NO. F4683**



**TRIP-GENERATION CALCULATIONS**

---

Query Filter

Graph Look Up

How to Use ITETripGen

TGM Desk Reference

TGM Appendices

Support Documents

Add Users

Comments

**DATA SOURCE:** Trip Generation Manual, 11th Ed

**SEARCH BY LAND USE CODE:** 151

**LAND USE GROUP:** (100-199) Industrial

**LAND USE:** 151 - Mini-Warehouse

**LAND USE SUBCATEGORY:** All Sites

**SETTING/LOCATION:** General Urban/Suburban

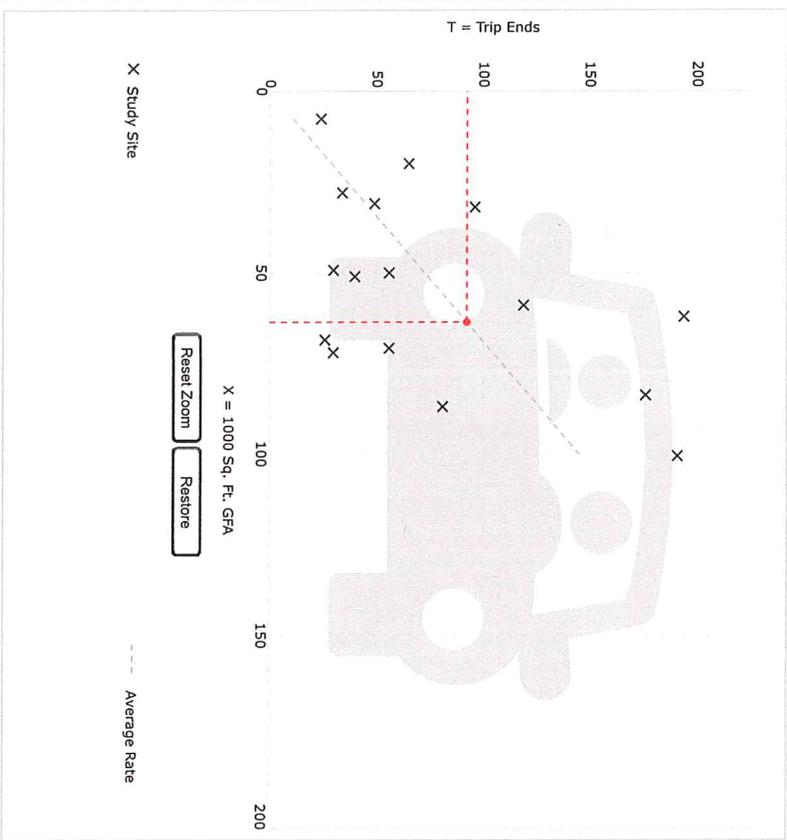
**INDEPENDENT VARIABLE (IV):** 1000 Sq. Ft. GFA

**TIME PERIOD:** Weekday

**TRIP TYPE:** Vehicle

**ENTER IV VALUE TO CALCULATE TRIPS:** 63.63

**Data Plot and Equation**



Use the mouse wheel to Zoom Out or Zoom In.  
 Hover the mouse pointer on data points to view X and T values.

**DATA STATISTICS**

**Land Use:** Mini-Warehouse (151) [Click for Description and Data Plots](#)

**Independent Variable:** 1000 Sq. Ft. GFA

**Time Period:** Weekday

**Setting/Location:** General Urban/Suburban

**Trip Type:** Vehicle

**Number of Studies:** 16

**Avg. 1000 Sq. Ft. GFA:** 55

**Average Rate:** 1.45

**Range of Rates:** 0.38 - 3.25

**Standard Deviation:** 0.92

**Fitted Curve Equation:** Not Given

**R<sup>2</sup>:** \*\*\*\*

**Directional Distribution:** 50% entering, 50% exiting

**Calculated Trip Ends:** Average Rate: 92 (Total), 46 (Entry), 46 (Exit)



Add-ons to do more  
 Try OTSS Pro

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TGM Desk Reference

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Comments

Query  Filter

**DATA SOURCE:**

**SEARCH BY LAND USE CODE:**

**LAND USE GROUP:**

**LAND USE:**

**LAND USE SUBCATEGORY:**

**SETTING/LOCATION:**

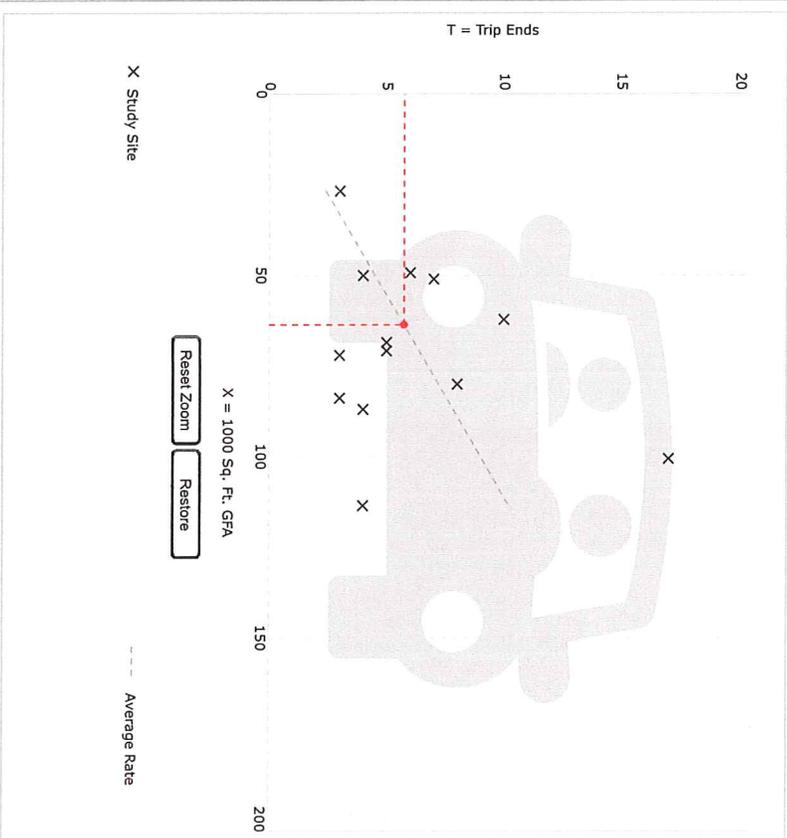
**INDEPENDENT VARIABLE (IV):**

**TIME PERIOD:**

**TRIP TYPE:**

**ENTER IV VALUE TO CALCULATE TRIPS:**

### Data Plot and Equation



### DATA STATISTICS

**Land Use:** Mini-Warehouse (151) [Click for Description and Data Plots](#)

**Independent Variable:** 1000 Sq. Ft. GFA

**Time Period:** Weekday  
 Peak Hour of Adjacent Street Traffic  
 One Hour Between 7 and 9 a.m.

**Setting/Location:** General Urban/Suburban

**Trip Type:** Vehicle

**Number of Studies:** 13

**Avg. 1000 Sq. Ft. GFA:** 70

**Average Rate:** 0.09

**Range of Rates:** 0.04 - 0.17

**Standard Deviation:** 0.05

**Fitted Curve Equation:** Not Given

**R<sup>2</sup>:** ....

**Directional Distribution:** 59% entering, 41% exiting

**Calculated Trip Ends:** Average Rate: 6 (Total), 3 (Entry), 3 (Exit)

Add-ons to do more

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Comments

Query Filter

**DATA SOURCE:** Trip Generation Manual, 11th Ed

**SEARCH BY LAND USE CODE:**

**LAND USE GROUP:** (100-199) Industrial

**LAND USE:** 151 - Mini-Warehouse

**LAND USE SUBCATEGORY:** All Sites

**SETTING/LOCATION:** General Urban/Suburban

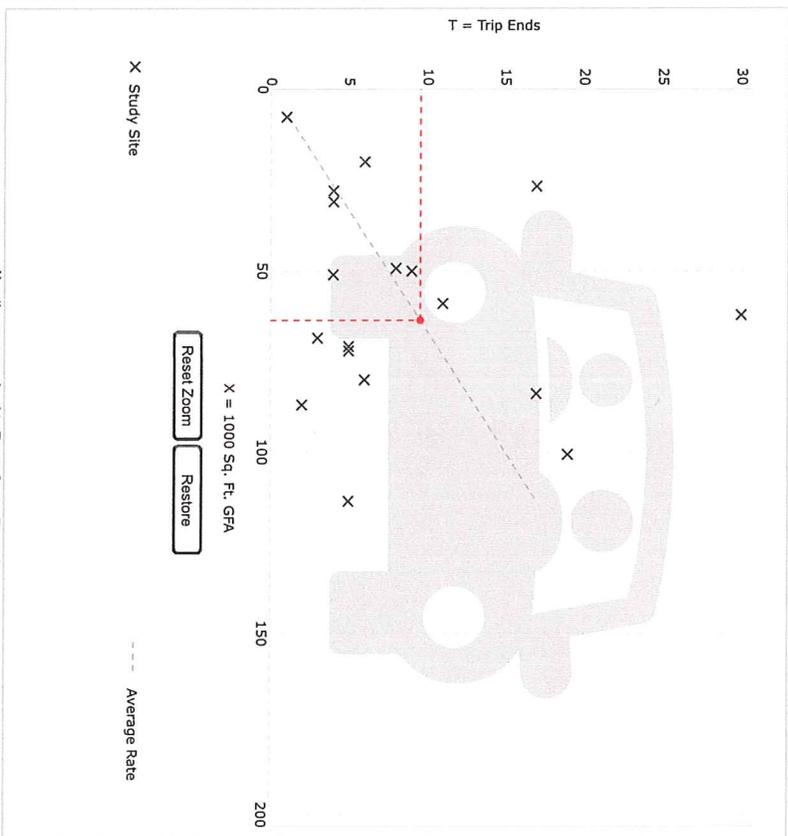
**INDEPENDENT VARIABLE (IV):** 1000 Sq. Ft. GFA

**TIME PERIOD:** Weekday, Peak Hour of Adjacent Street Traffic

**TRIP TYPE:** Vehicle

**ENTER IV VALUE TO CALCULATE TRIPS:**

### Data Plot and Equation



### DATA STATISTICS

**Land Use:** Mini-Warehouse (151) [Click for Description and Data Plots](#)

**Independent Variable:** 1000 Sq. Ft. GFA

**Time Period:** Weekday  
Peak Hour of Adjacent Street Traffic  
One Hour Between 4 and 6 p.m.

**Setting/location:** General Urban/Suburban

**Trip Type:** Vehicle

**Number of Studies:** 18

**Avg. 1000 Sq. Ft. GFA:** 59

**Average Rate:** 0.15

**Range of Rates:** 0.02 - 0.64

**Standard Deviation:** 0.14

**Fitted Curve Equation:** Not Given

**R<sup>2</sup>:** \*\*\*\*

**Directional Distribution:** 47% entering, 53% exiting

**Calculated Trip Ends:** Average Rate: 10 (Total), 4 (Entry), 6 (Exit)

Add-ons to do more

Try OTISS Pro

