

Project Information

Project Name:	Fairfield Ward High School		
Client Info:	Fairfield Public Schools	Site Info:	Football Field
Report Date:	8/27/24	Test Date:	8/23/24
Report Status:	Complete	Job #:	24505045
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Checked by:	James Leszuk		

Notes:

1. This report has been prepared by New England Turf Management with all reasonable skills, care and diligence within the terms of the contract with the Client and within the limitations of the resources devoted to it.
2. This report is confidential to the Client and New England Turf Management accepts no responsibility whatsoever to third parties to whom this report, or any part thereof, is made known. Any such party relies upon the report at their own risk.
3. This report shall not be used for engineering or contractual purposes unless signed by the Author and the Checker and unless the report status is "Final".

Summary

New England Turf Management was commissioned to perform on-site Gmax impact testing per ASTM F1936. A complete test was performed in accordance with the ASTM F1936 Standard. The results have been summarized in the quick reference table below. Complete results and background can be found in the subsequent sections of this report.

Quick Reference Results Summary

	Average	(min)	Range	(max)	Max per ASTM
Gmax (g's)	152	138	to	174	200
Infill Depth (mm)	29.5	26	to	31	n/a

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General Information

Testing Device	ASTM F1936 Apparatus TRIAx 2010 Data Acquisition	Test Method	GMAX
Install Date	2015	Test Date	8/23/24
Field Orientation	Drop 9 = East	Primary Sport	football
Product Info	FTOMP	Infill System	rubber
Underlayment	shockpad	Air Temp (°F)	68
Turf Cover %	100	Soil Moisture %	
Humidity %	66	Weather Conditions	Sun
Misc. Field Notes		Technician	Roger Clough

Method

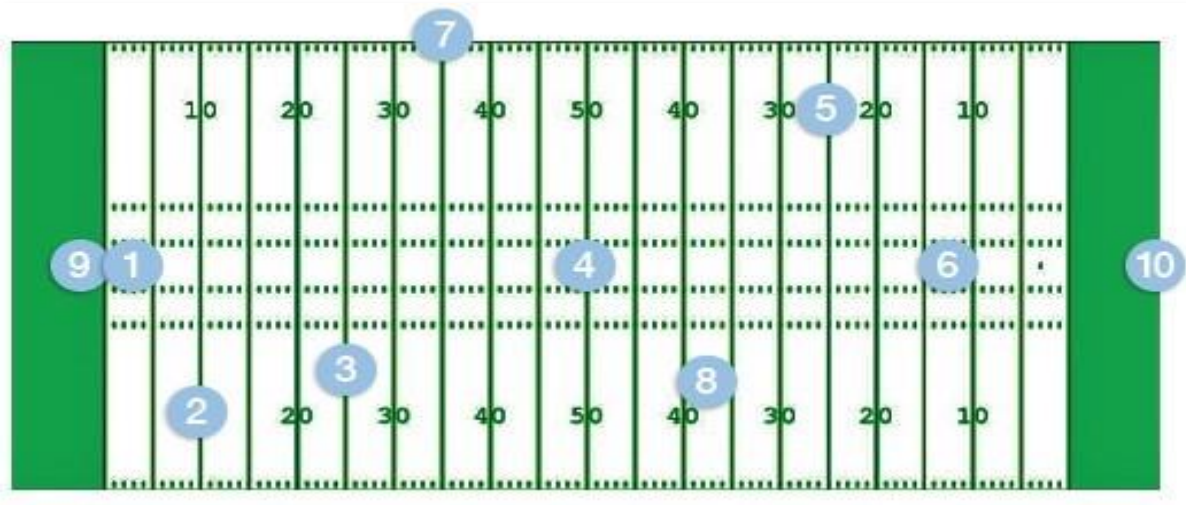
Method Background ASTM F355 Procedure A and ASTM F1936 are test methods used to measure the impact attenuation properties of synthetic turf playing systems. ASTM F355 Procedure A covers the overall test method and ASTM 1936 specifies the method for measurement in the field on an installed synthetic turf playing surface.

The test procedure involves dropping a 20 lb impacting missile three times at each location from a consistent height of 24 inches. The test is typically performed at 10 locations. The locations are based on the primary sport and the discretion of the tester. The first drop conditions / compacts the loose infill. This value is recorded but not included in the location average. The second and third drops are recorded and averaged for the location average. The location averages are used to determine the field average.

On-Site Testing GMAX Impact Evaluation

The impacting missile contains an accelerometer sensor that measures the magnitude of deceleration (measured in units of gravity or g's) for the duration of impact. The deceleration measured during impact creates a curve. The peak of that curve is referred to as the "Gmax". This is the primary value measured with this test. The maximum allowable Gmax as specified in the current ASTM F1936 test specification is 200 g's.

Location Map



Results Table

Loc#	Drop #	Gmax (g's)	Location Description	Gmax Avg (g's)	Infill Depth (mm)	Surface Temp (°F)
1	2	157			27	79
1	3	168		163	27	79
2	2	139			30	79
2	3	141		140	30	79
3	2	166			31	79
3	3	155		160	31	79
4	2	152			30	79
4	3	160		156	30	79
5	2	140			32	79
5	3	139		139	32	79
6	2	157			30	79
6	3	162		160	30	79
7	2	140			28	79

On-Site Testing GMAX Impact Evaluation

Loc#	Drop #	Gmax (g's)	Location Description	Gmax Avg (g's)	Infill Depth (mm)	Surface Temp (°F)
7	3	145		143	28	79
8	2	138			30	79
8	3	148		144	30	79
9	2	144			26	79
9	3	150		148	26	79
10	2	169			31	79
10	3	174		172	31	79

The above table outlines your Gmax score for the second and third drop at each location on the field and an average Gmax score for both drops. The location numbers correspond to the above field map. It also includes an infill depth reading. Per ASTM standards your Gmax score should be under 200.

Location Photos



Location #1



Location #2

On-Site Testing GMAX Impact Evaluation



Location #3



Location #4



Location #5

On-Site Testing GMAX Impact Evaluation



Location #10



Location #8