

# Understanding the relationship between the "As-applied" surface and the Dynamic Blade Limit.

**The Dynamic Blade Limit (See the section of "Static Blade Limit" in the [Limits Tab](#) for disambiguation) relies totally on "As-applied" functionality to work properly. If this is not activated, or is not working properly, the blade limit will not work.**

**T3RRA software knows where the cutting edge currently is (courtesy of GPS). It also knows where the original surface is. When "As-applied" functionality is turned on the T3RRA software keeps track of changes to the current ("As-applied") surface. So anywhere you are in the field it will know what the actual surface height is. Using this information it is easy for the T3RRA software to limit the target elevation of the cutting edge to be a certain amount below (or above) the "As-applied" surface.**

**If the T3RRA software loses track of the current surface then the Blade Limit will no longer work. For instance, if you have not done any work on part of a field that is calling for 6 inches of cut, and you have a 2 inch blade limit set you would expect that it will take 3 passes to cut down to the final grade. However, if another**

operator has already removed the top 4 inches you may expect that it will only take one pass for you to complete the work. The problem in this scenario is that the T3RRA software has no way of knowing that the top 4 inches are no longer present. When you go to cut, the blade limit will keep the edge two inches off the current surface on the first pass, and on the second pass it will only skim the surface. It will only be on the 3rd pass that the blade will enter the ground.

It is critical to understand that the T3RRA software surveys as it goes, and keeps track of blade heights to understand where the surface is. Anything that alters the surface since the last time it was surveyed by the T3RRA software will cause the Blade Limit to have errors. Blade Limit guides the blade relative to where it *thinks* the dirt surface is, not where it *actually* is. As long as you alone are making changes to the field then the place it *thinks* the dirt surface is and where it *actually* is will be the same thing. If someone else is making changes then all bets are off!

**Do NOT expect Dynamic Blade Limit to work properly if anyone other than you is working in a field OR if the job has been worked on by anyone else since the original surface was surveyed.**