

36.7 APPENDIX 'A' - DYKELAND LAND FORMING STANDARDS



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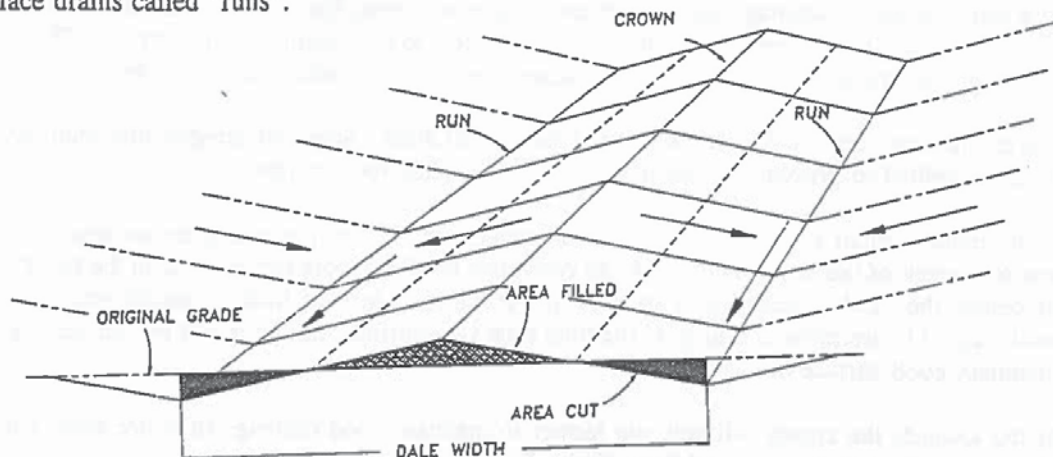
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DYKELAND LAND FORMING

Dykeland soils in New Brunswick and Nova Scotia have naturally low permeabilities. This means the downward movement of water through these soils is very slow. The naturally flat topography causes water to pond on the soil surface. The agricultural potential of these soils can be greatly improved by providing surface drainage with proper land forming. The surface drainage improvements will result in a longer growing season, improved crop yields and quality as well as improved field trafficability. Land forming can be used to develop previously unproductive dykeland and to consolidate small fields, hereby improving crop production efficiency when operating modern farm equipment.

PRINCIPLES OF LAND FORMING

Land forming is the process of mechanically moving soil to change field topography to provide for improved surface drainage. Land forming involves the excavation of a series of parallel surface drains called "runs".



As illustrated in the above diagram the soil which is excavated from the runs is pushed into hills called "crowns". The surface water will drain off the crown to the two adjoining runs. The grade between the crown and the run should be 1 to 2%. The runoff is then drained from the run to a vent ditch and from there to the main ditch system. The grade on the run should not be less than 0.25%. The distance between a pair of runs is called the "dale width". Dale widths vary from 36 to 55 metres (120-180 ft).