Conservation practice standards are reviewed periodically and updated if needed. To obtain the current version of this standard, contact your Natural Resources Conservation Service State office or visit the Field Office Technical Guide.
Once tramlines are well established, operations which previously required the use of duals or extra-wide tires may no longer need them. Removing duals will significantly reduce the amount of trafficked area.

Extend the front axles of tractors to match the rear tires to reduce traffic lanes.

All traffic (high and low load) that crosses the field should utilize the designated traffic pattern. This includes custom applicators, pickup trucks, etc.

Consider no-till or direct-seed planting systems to further reduce compaction.

Utilize cover crops known to help reduce compaction, such as cereal rye, oil seed radish, or black oat.

Consolidated tramlines have lower rolling resistance and wheel slip than cultivated soil.

The compacted traffic lanes/tramlines are able to support higher axle loads, so tramlines also allow machinery access in higher soil moisture conditions.

Consolidated wheel tracks increase traction and reduce cultivation draft in the uncompact soil.

Consider subsoiling prior to establishing the controlled traffic lanes.

Repair all ruts prior to establishing the system.

When soil moisture conditions are prone to cause soil compaction, limit field access to field equipment and livestock.

Soil moisture content that would increase compaction of the tramline or during grazing of livestock to trample field should be avoided.

Axel loads of 10-12 tons should be restricted to the turn row/head row portion of the field.

Consider establishing grass for the field’s head row traffic, areas dedicated to harvest unloading, temporary storage, staging areas and point rows for turning traffic.

All equipment should cover the same working width or multiples of that width. Adjust the traffic pattern of each piece of equipment to minimize the number of lanes or tramlines across the field.

As older equipment is replaced, consider the working width of the equipment and how it fits into the controlled traffic farming system. The goal of controlled traffic farming is to limit the wheel/track traffic to as low a percent of the field as possible. This can be improved by having all equipment with the same working width or multiples of that width.

Utilize hitch offsets in no-till systems to avoid salt buildup and/or pH imbalances where fertilizer is banded in the same zone year after year. Hitch offsets can also help with positioning row placement in relation to previous crop rows and residues without altering wheel track lanes.

Extend tractor tires or tracks to the width of the combine and grain cart to reduce traffic lanes. Be sure to check equipment warranty when extending axle widths.

Utilize unloading auger extensions and harvesting platform widths that align grain cart traffic to the tram pattern.

Utilize parallel terrace systems.

Utilize rubber track type equipment for harvesting, grain cart and large tractors.
PLANS AND SPECIFICATIONS

Plans and specifications shall be prepared for each field site where the Controlled Traffic Farming system will be installed. Record practice specifications on the Controlled Traffic Farming Implementation Requirement document. Plans and specifications will include:

- Crops to be grown
- Row widths of all crops
- Width and spacing of tires/tracks of all equipment
- Percent of the field that receives controlled traffic

Note:

Record the specifications using the Texas Code 334 Practice Implementation Requirements document located in eFOTG Section IV – Conservation Practice – Controlled Traffic Farming (Code334) folder.

Locate the folder from the below link:

eFOTG-Document Locator

OPERATION AND MAINTENANCE

As older equipment is replaced, purchase equipment that will enhance the CTF system, reducing the number of tramlines in the system.

If ruts develop, use tillage or other specialized equipment to remove ruts and reestablish controlled traffic lanes.

REFERENCES:


