Firebreak

North Carolina Practice Job Sheet 394

Prepared for: _____

Prepared by: _____

Farm: _____ Tract: _____ Date: _____

Firebreaks are useful for forest management, access and recreation.

DEFINITION

A permanent or temporary strip of bare or vegetated land planned to retard fire.

PURPOSE

☐ Reduce the spread of wildfire.

☐ Contain prescribed burns.

CRITERIA

Firebreaks may be temporary or permanent and shall be fire-resistant vegetation, non-flammable materials, bare ground, or a combination of these.

Firebreaks will be of sufficient width and length to contain the expected fire.

Firebreaks shall be located to minimize risk to the resources being protected.

Erosion control measures, such as waterbars, turn-out ditches, seeding/vegetation, etc. shall be installed to prevent sediment from leaving the site.

Constructed firebreaks may tie into existing natural or manmade physical barriers and should not direct drainage/sediment into receiving waters.

Comply with applicable federal, state, and local laws and regulations during the installation, operation and maintenance of this practice, including North Carolina (NC) Forest Practices Guidelines.

Types of Firebreaks

Four types of firebreaks are adaptable to the various needs and conditions existing in North Carolina. They are:

1. Plowed, disked, or bladed firebreaks.
2. Burned firebreaks
3. Vegetative firebreaks.

Plowed, disked, or bladed fire breaks may be used in any forest type and on nearly all terrain conditions, provided location specifications are followed. Use of burned and vegetated firebreaks is suited to pine woodlands in the Coastal Plain and on gentle slopes in the Piedmont.

Plowed, Disked or Bladed Firebreaks

These should be located:

- Parallel to public roads and railroads (high risk areas), adjacent or parallel to forest property boundaries, and within the forest where necessary.
- In the Piedmont and Mountains, they should be located on adapted main ridges and side ridges. They should follow the approximate contour of the land wherever feasible to minimize erosion.

Construction techniques include the following:

- Expose mineral soil with fireline plows, heavy bush and bog disks, or farm plows and disks or blades depending upon the terrain and character of vegetation to be removed.
- Firebreak width is a site-specific determination. Width for equipment pass ranges from 5 to 8 feet. These widths are usually sufficient to contain most creeping or slowly moving ground fires. Wider widths of 10 to 12 feet should be used where firebreak is a permanent structure for wildfire control.

Burned Firebreaks

These should be located:

- Parallel to public roads, railroads, or high-risk areas; parallel to forest property boundaries; and within forests, where needed.

Construction techniques include the following:

- Two parallel strips, each 5 feet wide, and a minimum of 20 feet apart, should be plowed or disked.
- Logs, limbs, and other flammable materials which are likely to burn for several hours should be removed from the area between the strips.
- A burning permit must be obtained from the local Forest Ranger or Fire Warden, representing the North Carolina Division of Forest Resources.
- The area between the strips should be burned on a calm, clear day.

Vegetated Firebreaks

Locations must protect the forest as well as provide convenient access to the enterprise.

Installation techniques include the following:

- Strips at least 30 feet wide adjoining forest land and 50 feet wide within forests should be cleared by removing trees and scrubby growth.
- Breaks must be 50 feet wide within the forest to allow sufficient sunlight for grass and legume plants to grow successfully and form a sod.
- Prepare a suitable seedbed with non-invasive grass or legume capable of retarding fire.

OPERATION AND MAINTENANCE

- Mow, disk, or graze vegetative firebreaks to avoid a build-up of excess litter and to control weeds. Treatment should be timed to reduce impacts to wildlife nesting when possible.
- Inspect firebreaks for woody materials such as dead limbs, blown down trees and remove them from the firebreak. Remove overhanging vines and brush that could carry fire across the firebreak.
- Inspect firebreaks at least annually and rework/refresh bare ground firebreaks as necessary to keep them clear of flammable vegetation and maintain the desired level of fire protection.
- Repair erosion control measures as necessary to ensure proper function.
- Control access by vehicles or people to prevent damage.
- Stabilize bare ground firebreaks, which are no longer needed.

Additional Operation and Maintenance requirements specific to this Plan:

_____

_____

_____

_____

FIREBREAK - SPECIFICATIONS SHEET

Landowner_____ Field Number_____

Type of Firebreak	
☐ Plowed, disked or bladed ☐ Burned	☐ Vegetative

Layout, Dimensions, Construction Information		
Construction must comply with all federal, state, and local laws.		

Total Length (ft): Average Width (ft.): Total area (ac) or 1000Ft.^{2}

Additional location and layout requirements: Location shown on plan map ☐ Yes ☐ No

Equipment to be used:

Plant Materials Information (For vegetated firebreaks)

Species (Use cool season species only)	Seed Lbs./ac. or Lbs./1000Ft.^{2}	Lime Lbs./ac. or Lbs./1000Ft.^{2}	Fertilizer Lbs./ac. or Lbs. /1000Ft.^{2}	Mulch Lbs./ac. or Lbs./1000Ft.^{2}	Planting Dates
Erosion Control					
1.					
2.					
3.					
Wildlife					
1.					
2.					
3.					

Site Preparation

Planting Method (s)

Broadcast_____ Drilled_____

Maintenance Requirements – Check as Appropriate

☐ Inspect annually, rework erosion control measures.	☐ Clean and repair surface drains.
☐ Control access by vehicles.	☐ Rework bare ground breaks before fire season.
☐ Stabilize unneeded bare ground firebreaks.	☐ Apply lime, fertilizer, and seed.
☐ Remove all woody materials.	☐ Mow, disk or graze to remove litter, weeds.
	☐ Burn or disk dead grass.

LANDOWNER'S/OPERATOR'S ACKNOWLEDGEMENT:

The landowner/operator acknowledges that:

a. He/she has received a copy of the drawings and specifications, and that he/she has an understanding of the contents, and the requirements.

b. He/she has obtained all the necessary permits. (**IT WILL BE THE RESPONSIBILITY OF THE OWNER TO OBTAIN ALL NECESSARY PERMITS AND/OR RIGHTS, AND TO COMPLY WITH ALL ORDINANCES AND LAWS PERTAINING TO THIS INSTALLATION.**)

c. No changes will be made in the installation of the job without prior concurrence of the NRCS.

d. Maintenance of the installed work is necessary for proper performance during the project life.

PRACTICE COMPLETION

I have made an on-site inspection of the site (or I am accepting owner/contractor documentation), and have determined that the job as installed does conform to the drawings and practice specifications.

Completion Certification by:

Planner _____ Date _____

I HAVE REVIEWED THIS PLAN AND AGREE TO INSTALL AS DESIGNED.

Cooperator _____ Date _____

Additional Specifications and Notes:

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