

TIMBER MARKING INFORMATION: This timber sale contains 12 Payment Units with timber designated for cutting. In Payment Units 1, 2, & 7, trees to be left (Leave Tree Marked, LTM) are designated with an orange painted band at about eye level and a spot on the stump. In Payment Units 3-6 and 8-12 trees designated for cutting are Cut Tree Marked (CTM) and are designated with paint marks at eye about eye level and on the stump. Sawtimber trees have two stump spots and small roundwood trees have one stump spot. Potential purchasers should pay special attention to the orange painted unit boundaries. **Unless designated by the Forest Service, trees will not be removed outside these designated boundaries.**

Cut Trees in this sale area are designated as indicated below:

<u>Type</u>	<u>Markings</u>	<u>Payment Unit(s)</u>
Cut Trees	Blue Paint	3, 5, 6, 10, & 11
Cut Trees	Yellow Paint	4, 8, & 9
Road ROW	Green Paint	12

Leave Trees in this sale area are designated as indicated below:

<u>Type</u>	<u>Markings</u>	<u>Payment Unit(s)</u>
Pine Leave Tree (LTM)	Orange Paint	1, 2, & 7

Cut Tree Marking (CTM): Payment Units 3-6 and 8-11 were cruised and volumes estimated utilizing the Sample Tree Measurement method. Sampling intervals for the various products/diameter classes are listed under the Volume and Sampling information table. Payment Unit 12 was 100% cruised and tallied.

Leave Tree Marked: In Payment Units 1, 2, and 7, included timber is designated using the Leave Tree Marking (LTM) method. Trees to be **left** are designated with an ORANGE band and stump spot. All other live pine trees meeting minimum merchantability specifications listed in AT2 are included timber and to be removed.

Payment Units 1, 2, and 7 were cruised with a 10 BAF prism using the PCMTRE method. One hundred thirty seven (137) variable radius plots were taken and volume determined on an estimated 147 acres.

VOLUME AND SAMPLING INFORMATION: Timber volumes are based on cubic foot tree measurement rule. Scribner board foot volumes are listed for informational purposes only so bidders can compare with cubic volume estimates. Sawtimber and pulpwood/topwood volume were determined from tree measurement volume equations for the Sam Houston National Forest. Pine sawtimber on this sale was not graded. The pine sawtimber volume is approximately 67% loblolly pine and 33% shortleaf pine.

VOLUME AND SAMPLING INFORMATION: The following methods were used to estimate timber volume and data.

<u>Payment Units</u>	<u>Species/Product</u>	<u>Sample Tree Measurement</u>		<u>100% Tree Measurement</u>
		<u>DBH Range Sampled</u>	<u>Sample Interval</u>	<u>DBH Range</u>
1, 2, & 7	Pine Pulpwood	5.0" – 10.9"	3 1/2 x 3 1/2 chain grid - 1 measure cut tree per plot, total tree count per plot	N/A
1, 2, & 7	Pine Sawtimber	11.0"+	3 1/2 x 3 1/2 chain grid - 2 measure cut trees per plot (where they exist), total tree count per plot	N/A
3-6, 8-12	Pine Pulpwood*	5.0" – 10.9"	1 in 125	11"+
3-6, 8-12	Pine Sawtimber*	11.0"+	See below	28"+
12*	Hardwood Pulpwood*	6.0" – 11.9"	1 in 1	6"+
12*	Hardwood Sawtimber*	12.0"+	1 in 1	12"+

*Note: In Payment Unit 12, all include timber was 100% tree measured.

<u>Pine Sawtimber Stratum for Units 3-6 & 8-12</u>	<u>Diameter Class (2")</u>	<u>Pine Sawtimber Sample Interval</u>	<u>Hardwood Sawtimber Sample Interval**</u>
12	12" & 14"	1 in 150	100%
16	16" & 18"	1 in 100	100%
20	20"	1 in 50	100%
22	22" & 24"	1 in 15	100%
26"+	26"+	1 in 1	100%

NORMAL OPERATING SEASON: The normal operating season is as follows:

Payment Units 1-12: May 1 thru November 30

Unless otherwise agreed, operations will not be permitted outside the normal operating season.

RELEASE OF PAYMENT UNITS FOR CUTTING: Purchaser must get a written release from the Forest Service before entering any payment unit. Before a payment unit can be accepted as completed, cutting and all other contract obligations must be completed. Unless otherwise agreed, no more than two (2) payment units may be operated at one time.

Unit 12 must be cut first and then Purchaser may cut remaining Payment Units in any order.

EQUIPMENT CLEANING: Prior to moving Off-Road equipment onto the Sale Area, Purchaser shall inform the Forest Service of the most recent area of equipment use due to the presence of invasive species (Cogon Grass) within Jasper County and western Louisiana. If equipment has been used within areas containing Cogon Grass or other invasive species of concern, cleaning of Off-Road equipment will be required prior to moving on the Sale Area.

Off-Road equipment includes all logging and construction equipment, **EXCEPT** for log trucks, chip vans, service vehicles, water trucks, pickup trucks, cars and similar vehicles. **See contract provision BT6.35 for additional information.**

USE OF ROADS: Trucks used in hauling timber from this sale over roads under Forest Service jurisdiction are subject to State and County load, weight, length, height and width limitations. Any exceptions to these limitations are posted by individual road or road segment. Prospective bidders are urged to check out any questions on the haul route with the District Ranger before submitting bids.

ROAD MAINTENANCE: Road maintenance requirements are estimated for a proposed haul route. Any change from the proposed haul route may necessitate a change in the roads to be maintained or in the amount of required deposit for road maintenance. The estimated cost of the road maintenance deposit has been allowed for in the appraisal. See sample contract provision CT5.31, Road Maintenance Requirements. The Purchaser shall maintain the road surface, drainage ditches and ditches to assure adequate drainage.

TEMPORARY ROADS: The location and clearing widths of all temporary roads and landings shall be approved by the Forest Service before construction or use is started. The estimated quantity of timber in this sale does not include timber within the clearing limits of Temporary Roads. Any additional timber requiring removal will be designated by the Forest Service and paid for at contract rates prior to cutting.

The Purchaser will install and remove culverts on temporary roads where required for logging access. The Forest Service estimates one (1) 18" culvert will be required to be used at multiple locations. In addition, a culvert of adequate size to handle potential streams flow (max. 96" or equivalent) will be required to access Payment Unit 11. Culvert will be bedded with logs or other solid material to existing ground level and removed following unit completion.

Purchaser shall maintain all erosion control and water diversion structures such as waterbars and broad-based dips in a functional condition during operations. Purchaser shall reshape road surface and close all Temporary Roads prior to prolonged periods of non-use or when use is completed. Outside berms shall be removed by pulling the material back onto the road surface. Prior to final road closure, unless otherwise agreed, the road surface shall be ripped or scarified to reduce runoff and aid in revegetation.

EROSION CONTROL: Purchaser will install waterbars as logging in a payment unit and use of roads is completed. At that time, temporary and skid roads will be bladed to pull outside berms, reshape road surface to assure adequate surface drainage, construct waterbars where designated, and install barricades to block temporary roads to normal vehicular traffic where designated.

The Forest Service will not agree to perform the water barring and road blocking work for the purchaser.

The purchaser shall also install temporary waterbars if logging operations are stopped for prolonged periods prior to completing a payment unit. The Forest Service will not perform such temporary water barring work.

Where waterbars or similar measures alone won't provide satisfactory erosion control, purchaser shall vegetate areas where soil disturbance will result in soil losses from erosion. Areas specified by the Forest Service will be fertilized with 300 pounds of 13-13-13 commercial fertilizer (or equivalent) per acre and seeded in accordance with the sample contract provision CT6.601 specifications.

The Forest Service will not agree to perform to perform the seeding and fertilizing work.

SLASH DISPOSAL: Purchaser will be required to remove all logging slash and other debris resulting from logging operations off road surfaces, shoulders, draining ditches, and out of protected stream courses shown on the Sale Area Map.

Where Payment Units 1-4 are adjacent to the Lone Star Hiking Trail (LSHT), lopping and scattering of slash will be required to within 2 feet of the ground within 50 feet of the Unit Boundary closest to the LSHT.

See contract Special Provision CT6.7 for additional information.

DIRECTIONAL FELLING: In areas shown on Sale Area Map, Purchaser shall fell trees away from all reserve and residual trees, improvements, roads, and protected streamcourses unless otherwise agreed.

PROTECTION OF STREAMCOURSES: Culverts or temporary bridges will be required where temporary and skid roads cross protected streamcourses shown on Sale Area Map, unless otherwise agreed. The location of these crossings shall be approved in advance by the Forest Service. Purchaser shall furnish and install such culverts or temporary bridges and shall remove them upon completion of operations.

Unless otherwise agreed, all vehicles are prohibited outside the marked Payment unit boundaries along either side of protected streamcourses except as necessary to construct or remove stream crossing structures.

PROTECTION OF IMPROVEMENTS: The following improvements are located within or adjacent to the sale area:

- Lone Star Hiking Trail
- Underground utility lines and cleared ROWs within the Sale Area.
- Existing, constructed, and reconstructed culverts and other structures on or along NFSR 287
- Landline markers or trees and Survey monuments and associated witness trees.
- Wastewater facility adjacent to NFSR 287 A.
- Private fences and structures adjacent to, but not on, National Forest Lands.

Purchaser shall protect these improvements during operations and shall be responsible for prompt repair of any damage caused to them. Operations shall not begin until all necessary arrangements to protect these improvements and prevent damage have been made. Purchaser shall contact utility companies in advance of constructing crossings to ensure necessary arrangements to protect improvements.

THREATENED, ENDANGERED, OR SENSITIVE SPECIES HABITAT INFORMATION: This sale has no known Red Cockaded Woodpecker (RCW) clusters. If during logging operations, a new cavity tree is found or RCW activity is observed, logging operations in the adjacent area shall cease and the Forest Service shall be notified.

PRE-WORK CONFERENCE: A pre-work conference will be held with the designated representatives before Purchaser begins operations. The purpose of the conference is to ensure all designated representatives have a clear understanding of the contract requirements and obligations. The time and place for conference will be arranged by Forest Service.