

PROJECT 002 - Pre-Commercial Thin

End Results - Pre-commercial thin project units leaving the best and healthiest trees as well as the desired residual spacing as described in the following technical specifications.

1. LOCATION AND DESCRIPTION

- A. Location. The locations of project units are shown on Contract Area Map and subitem photo/unit information sheets furnished with this solicitation. All subitem sites are signed with a white "Payment Unit" sign highlighted with pink flagging.
- B. Access. Most thinning units may be reached by Forest roads that are accessible by standard pickup during the normal working season. The Government assumes no obligation to plow snow or do special maintenance to keep roads open. Due to deteriorating road conditions, some units may require walking from Forest Service Roads across country or along closed or deteriorated road. Contractor shall assume responsibility for determining best access by utilizing subitem photo/unit information sheets, Contract Area Map, a Forest map and personal site visits.
- C. Boundaries. Boundaries of units are indicated on subitem photo/unit information sheets. In some cases boundaries or portions of boundaries have been marked with pink plastic ribbon. Many boundaries are easily delineated by roads, adjacent stands of different ages, streams or other geographical features identifiable from air photos provided on subitem photo/unit information sheets. Contractor is required to be able to accurately interpret air photos provided in this contract to determine boundaries. Contractor shall mark with fluorescent orange flagging any boundary that Contractor feels is needed to assure accurate following of boundaries by their employees.
- D. Density. The density of trees on units vary to a large degree from unit to unit and within units. Only by on-the-ground examination can prospective Contractors determine the work entailed in thinning and slash disposal.

2. PROJECT SPECIFICATIONS

- A. Motorized Equipment. Use of motorized equipment other than hand held equipment such as power saws and brush cutters will not be permitted off designated roads in the project area without approval of the Contracting Officer.
- B. Selection of Leave Trees

The Contractor shall select leave trees in the following order of priority:

1. Tree Diameters. Leave all trees (both conifer and hardwood), which exceed the maximum DBH cut limit of 7 inches. These will count as leave trees unless there are more than the specified number of leave trees.
2. Tree Species. **Leave all Golden chinquapin**, pacific yew, western red-cedar, hardwoods and standing dead trees (These are not considered leave trees). Leave order of preference (unless otherwise designated on sub-item photo sheets):
  - (1) western larch
  - (2) Englemann spruce
  - (3) ponderosa pine
  - (4) western white pine
  - (5) noble fir
  - (6) Douglas-fir
  - (7) western hemlock
  - (8) lodgepole pine
  - (9) Grand/Silver Fir

- 3. Tree Health. Leave the healthiest tree. Leave trees shall generally be those tallest in height, largest crown and straightest stems that are free of damage due to insects, disease, physical, or mechanical causes.
  - 4. Tree Height. Leave the tallest tree. Minimum height is 2 feet.
  - 5. Minor Damage. If no healthy undamaged tree exists at the required spacing interval, leave a tree with minor damage.
  - 6. If no healthy tree with minor damage exists, leave the most healthy tree present, within spacing limits.
- C. Leave Tree Spacing. Spacing may be varied up to 25 percent (3 feet) to select the most desired tree. However, leave trees per acre, using spacing guides, shall not be materially increased or decreased.

| Project Unit | Acres      | Desired Average Spacing (feet) |
|--------------|------------|--------------------------------|
| 1            | 60         | 14 x 14                        |
| 2            | 35         | 14 x 14                        |
| 3            | 58         | 14 x 14                        |
| 4            | 97         | 14 x 14                        |
| 5            | 61         | 14 x 14                        |
| 6            | 43         | 14 x 14                        |
| <b>Total</b> | <b>354</b> |                                |

- D. Overtopping Brush Cutting Required. Cut only that brush which is within the specified average spacing distance from the bole (trunk) of the nearest leave tree, measured horizontally, whose height exceeds the top whorl of branches of the nearest leave tree.
- E. Streams and Wet Areas Streams and wet areas require a fifteen foot (15') riparian buffer. No thinning is allowed within riparian buffers. The Contractor shall establish the boundaries using horizontal measurement.
- a. Identified Riparian Areas. Location of known streams and wet areas are shown on the project maps. Units with known riparian areas are designated on the project map/unit information sheet.
  - b. Unidentified Riparian Areas. Location of known streams and wet areas are shown on subitem photo/unit information sheets. Discovery of additional streams or wet areas by the Contractor shall be promptly reported to the Forest Service.
    - 1. Contractor shall immediately notify the Forest Service if disturbance occurs to any site, and immediately buffer the stream or wet area fifteen feet (15').
    - 2. If other such streams or wet areas are discovered, the Forest Service may modify this contract to provide additional protection regardless of when such facts become known.
  - c. Riparian Buffer Boundaries Riparian buffer boundaries are not flagged. All riparian buffer distances shall be established using horizontal measurement.
    - 1. Stream Buffer The riparian buffer consists of the stream and the area on each side of the stream extending from the edge of the active stream channel to a horizontal distance of fifteen feet (15').
    - 2. Wet Area Buffers Riparian buffers consist of the body of wetland and the area to the edge of the standing water to a horizontal distance of fifteen feet (15').
- F. Cutting Methods

- a. Stump Height - Removal of Live Limbs. All trees other than leave trees shall be cut below the lowest live limb, except when prevented by natural obstacles. All live limbs below the cutting point shall be removed. Trees shall be completely severed from the stump. Stump height shall not exceed 8 inches above ground level or 4 inches above natural obstacles.
- b. Felling. Cut trees shall be felled away from unit boundaries, roads, telephone lines, established trails, stock driveways, fence lines, established land corners, road buffers, streams, and riparian buffers. Any trees falling in such areas shall be removed.
- c. Thinning slash shall be placed on or near the ground surface, so that it will not lean against or be suspended by an uncut tree.

4. CONTRACTOR OBLIGATIONS

- A. Furnish all supplies, materials, tools and equipment, plus labor, supervision and travel to do the required work.
- B. Immediately notify the Contracting Officer of any conditions encountered that are either beyond the scope of the contract or that prevent normal progress of work.
- C. Keep the Contracting Officer currently informed of the work schedule and physical location of his work force to permit ready location and timely inspection of accomplished work.
- D. The Contractor shall not cut or disturb trees or markers used to identify property lines, property corners, or subitem boundaries.

5. OPERATION SCHEDULE

| <i>Project Unit</i> | <i>Operation Conditions</i>                                                                       | <i>Purpose</i> |
|---------------------|---------------------------------------------------------------------------------------------------|----------------|
| 2, 3, 4, 5          | All power saw and brush cutter activities shall only take place from July 16 through February 28. | Spotted Owl    |

6. PROSECUTION AND COMPLETION OF WORK

The Contractor shall be required to commence work under this contract after a pre-work meeting agreed upon by the Contractor and Forest Service, prosecute the work diligently, and complete the entire work not later than December 31, 2021. The time stated for completion shall include final cleanup of the premises.

7. INSPECTION

The Forest Service may make periodic inspections to verify that the Contractor is meeting contract specifications. Inspections shall be performed in a manner that will not unduly delay work.

8. MEASUREMENT AND CREDIT

Accepted work will be credited at the contract unit rate for the items shown in AT.4.3.

DEFINITIONS

Contract Name: Grouse STEW  
Attachment C

- A. Average Spacing - The average of the distance between all leave trees necessary to provide the desired number of leave trees per acre.
- B. Buffer Areas - An area located inside of a subitem that no cutting is allowed. Boundaries are not marked.
- C. Calendar Days - Every day shown on the calendar, Sundays and holidays included.
- D. Change Order - An order issued to the Contractor by the Contracting Officer, pursuant to Section I, requiring work to be performed within the general scope of the contract.
- E. Contracting Officer - The person executing this contract on behalf of the Government, including any duly appointed successor and authorized representative of the Contracting Officer acting within the limits of his authority.
- F. Contracting Officer's Representative - The COR is the on-site contract administrator for the Contracting Officer. The duties and responsibilities of the COR are defined in the letter of designation issued by the Contracting Officer.
- G. Contract Time - The number of calendar days allowed in the contract for completion of the contract work.
- H. Cull Trees - Those conifers and hardwoods, not selected as leave trees, having serious disease, insect, weather, animal, or mechanical damage and evidenced by such things as dead or broken tops, bark damage extending 2/3 or more of the circumference, excessive crooks or lean.
- I. Damage - Includes any defect or deformity of a tree resulting from agents such as wind, snow, animals, insects, disease, and equipment, and evidenced by such things as dead or broken tops or trunks, crooks, and deep scars.
- J. DBH (Diameter Breast Height) - Diameter of the trunk measured at a point 4-1/2 feet above the ground level on the uphill side of tree.
- K. Excess Trees - Uncut trees that do not meet specifications and should have been cut. Trees not severed from the stump, hangup trees, stumps with live limbs, stumps higher than specified, trees not girdled or not girdled properly if required are also considered excess trees.
- L. Forest Supervisor - The person responsible for administration of a National Forest, including his authorized representative.
- M. General Provisions - Those provisions of an administrative nature applicable to the contract.
- N. Girdling - A cut through the bark and cambium tissue completely encircling the tree trunk for the purpose of killing the tree.
- O. Hangup Tree - Any cut tree suspended more than 3 feet off ground.
- P. Healthy Tree - The greenest, tallest, straightest stem which is free of disease, insect, weather, animal, or mechanical damage.
- Q. Labor Standards Provisions - Those statutory and regulatory requirements pertaining to the contractor's employees.
- R. Leave Trees - Any tree that is selected or required to be left standing as provided in the specifications.
- S. Lopping - Cutting limbs from trunks of trees.
- T. Minor Damage - Crooks in the trunk which are offset less than 3 inches from the long axis and within 13 feet of the ground, no forks, broken top, or bark damage extending more than 1/4 the circumference of the tree.
- U. Missing Leave Trees - Those trees cut that should have been left.

Contract Name: Grouse STEW  
Attachment C

V. Riparian Area - Area with distinctive soils and vegetation between a stream or other body of water and the adjacent upland. It includes wetlands and those portions of floodplains and valley bottoms that support riparian vegetation.

W. Slash - Limbs and trunks of downed trees.

X. Spacing - The horizontal distance from the trunk of one leave tree to the trunk of the next nearest leave tree.

AA. Stream - Permanently flowing drainage feature having a definable natural channel and evidence of annual scour or deposition. Perennial streams have water present year-round.

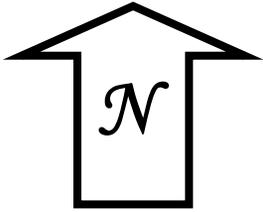
BB. Stream Channel - An area associated with streams which shows annual scouring and deposition of materials caused by the movement of the water. Usually void of growing brush, trees, and other woody plants. Water may or may not be present.

CC. Subitem - A pay item designated on the bid schedule and described by a specification.

DD. Tip Prune - For the removal of limbs, assuring that there will be enough green branches remaining on the main branch to allow for continued growth of boughs. Limbs may be cut, leaving one-third (1/3) of the live foliage on the limb. After removal of the branch, the stub shall not be less than fourteen (14) inches in length.

EE. Wet Areas - Areas that are inundated by surface water or ground water with a frequency sufficient to support, and under normal circumstances do or would support, a prevalence of vegetative or aquatic life that require saturated or seasonally saturated soil conditions for growth and reproduction. Wet areas generally include, but are not limited to, swamps, marshes, bogs, and similar areas. Some examples of vegetation that may be present, but are not limited to, devil's club, cattails, and sedges. Standing water is present year-round.

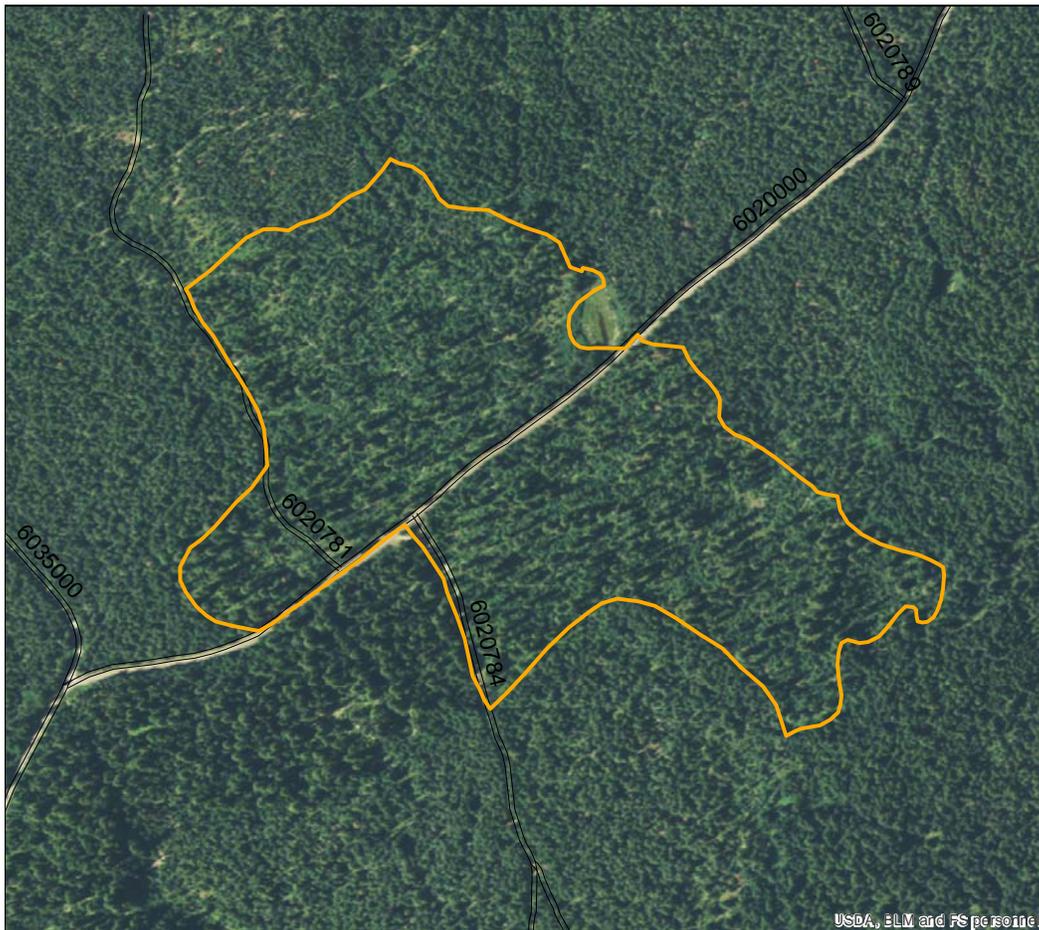
FF. Palatable Hardwoods - Cottonwood, Willow, Vinemaple, Dogwood and Elderberry.



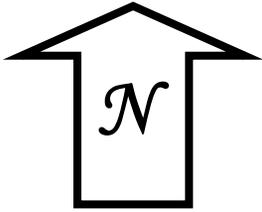
GIFFORD PINCHOT NATIONAL FOREST  
Mt. Adams Ranger District

**Grouse STEW Pre-Commercial Thinning Project**

| Unit     | Acre | Cut Tree Size    |                 | Spacing | Elevation | Slope | Species Preference   |
|----------|------|------------------|-----------------|---------|-----------|-------|----------------------|
|          |      | Min. Feet Height | Max. inches DBH |         |           |       |                      |
| 1        | 60   | 2                | 7               | 14 x 14 | 3814      | 3     | 1 western larch      |
| Remarks: |      |                  |                 |         |           |       | 2 Englemann Spruce   |
|          |      |                  |                 |         |           |       | 3 western white pine |
|          |      |                  |                 |         |           |       | 4 noble fir          |
|          |      |                  |                 |         |           |       | 5 Douglas fir        |
|          |      |                  |                 |         |           |       | 6 western hemlock    |
|          |      |                  |                 |         |           |       | 7 lodgepole pine     |
|          |      |                  |                 |         |           |       | 8 Grand/Silver Fir   |



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Miles



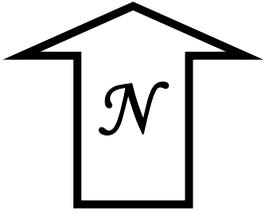
GIFFORD PINCHOT NATIONAL FOREST  
Mt. Adams Ranger District

**Grouse STEW Pre-Commercial Thinning Project**

| Unit     | Acre | Cut Tree Size    |                 | Spacing | Elevation | Slope | Species Preference   |
|----------|------|------------------|-----------------|---------|-----------|-------|----------------------|
|          |      | Min. Feet Height | Max. inches DBH |         |           |       |                      |
| 2        | 35   | 2                | 7               | 14 x 14 | 3743      | 5     | 1 western larch      |
| Remarks: |      |                  |                 |         |           |       | 2 Englemann Spruce   |
|          |      |                  |                 |         |           |       | 3 western white pine |
|          |      |                  |                 |         |           |       | 4 noble fir          |
|          |      |                  |                 |         |           |       | 5 Douglas fir        |
|          |      |                  |                 |         |           |       | 6 western hemlock    |
|          |      |                  |                 |         |           |       | 7 lodgepole pine     |
|          |      |                  |                 |         |           |       | 8 Grand/Silver Fir   |



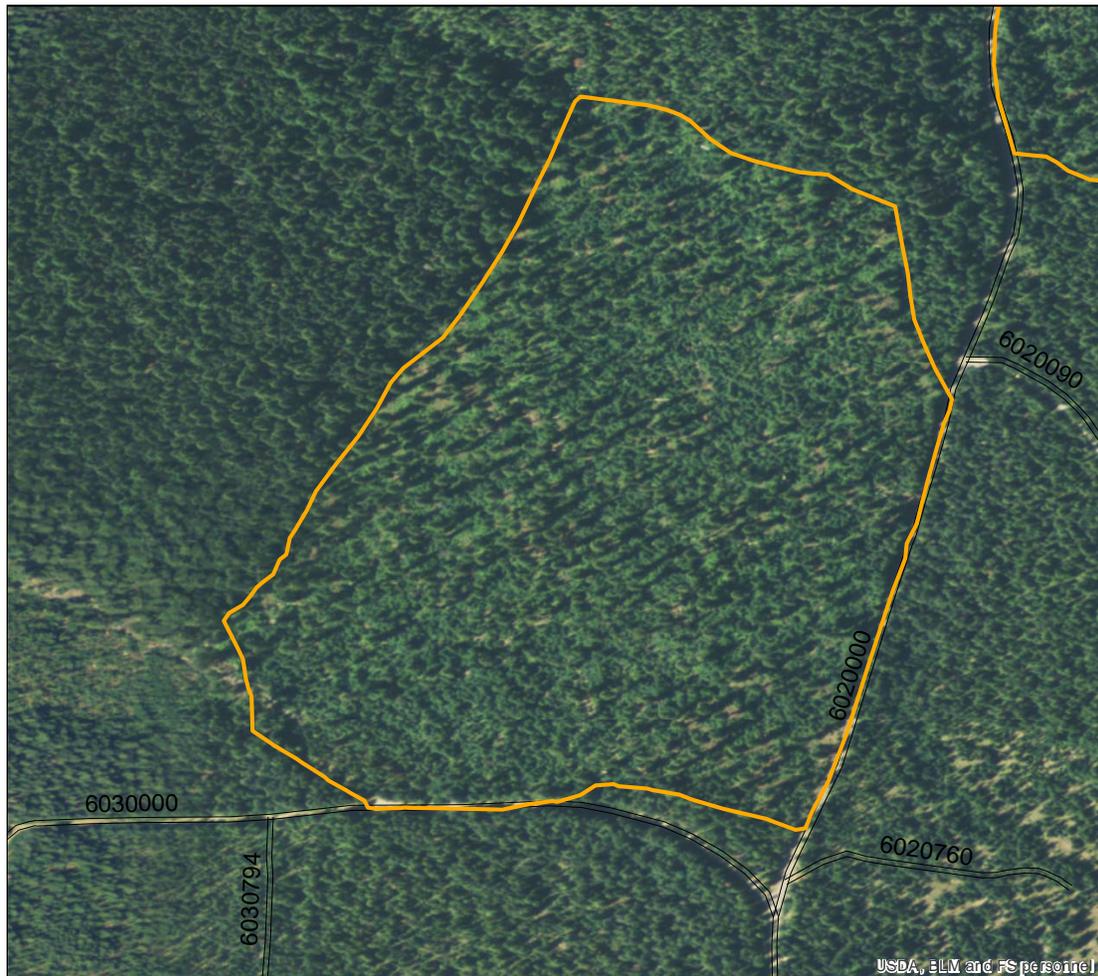
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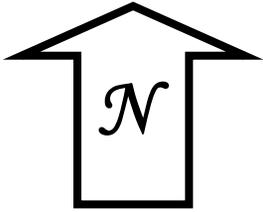
GIFFORD PINCHOT NATIONAL FOREST  
Mt. Adams Ranger District

**Grouse STEW Pre-Commercial Thinning Project**

| Unit     | Acre | Cut Tree Size    |                 | Spacing | Elevation | Slope | Species Preference   |
|----------|------|------------------|-----------------|---------|-----------|-------|----------------------|
|          |      | Min. Feet Height | Max. inches DBH |         |           |       |                      |
| 3        | 58   | 2                | 7               | 14 x 14 | 3792      | 8     | 1 western larch      |
| Remarks: |      |                  |                 |         |           |       | 2 Englemann Spruce   |
|          |      |                  |                 |         |           |       | 3 western white pine |
|          |      |                  |                 |         |           |       | 4 noble fir          |
|          |      |                  |                 |         |           |       | 5 Douglas fir        |
|          |      |                  |                 |         |           |       | 6 western hemlock    |
|          |      |                  |                 |         |           |       | 7 lodgepole pine     |
|          |      |                  |                 |         |           |       | 8 Grand/Silver Fir   |



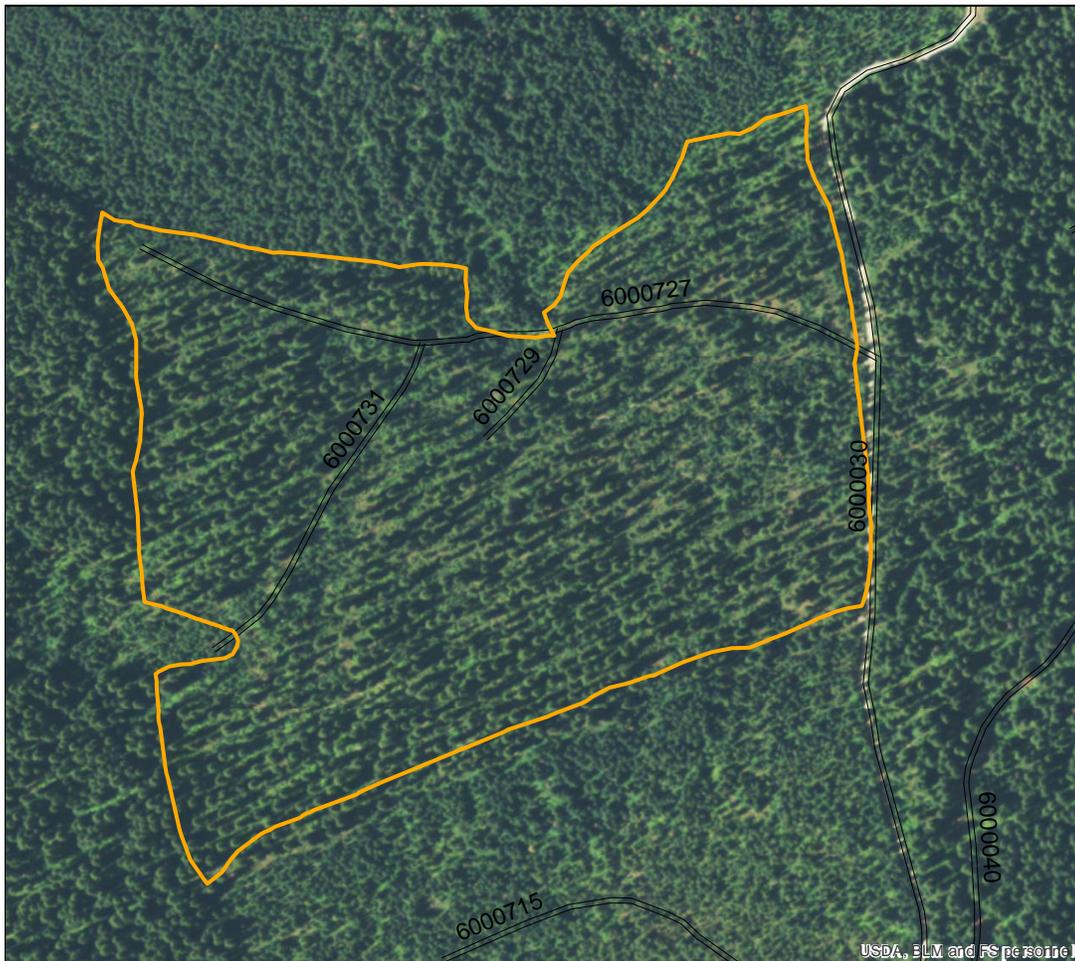
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GIFFORD PINCHOT NATIONAL FOREST  
Mt. Adams Ranger District

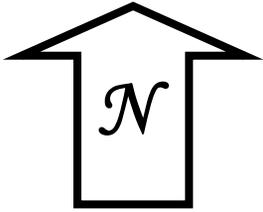
**Grouse STEW Pre-Commercial Thinning Project**

| Unit     | Acre | Cut Tree Size    |                 | Spacing | Elevation | Slope | Species Preference   |
|----------|------|------------------|-----------------|---------|-----------|-------|----------------------|
|          |      | Min. Feet Height | Max. inches DBH |         |           |       |                      |
| 5        | 61   | 2                | 7               | 14 x 14 | 3285      | 6     | 1 western larch      |
| Remarks: |      |                  |                 |         |           |       | 2 Englemann Spruce   |
|          |      |                  |                 |         |           |       | 3 western white pine |
|          |      |                  |                 |         |           |       | 4 noble fir          |
|          |      |                  |                 |         |           |       | 5 Douglas fir        |
|          |      |                  |                 |         |           |       | 6 western hemlock    |
|          |      |                  |                 |         |           |       | 7 lodgepole pine     |
|          |      |                  |                 |         |           |       | 8 Grand/Silver Fir   |



0.1  
Miles

USDA, BLM and FS personnel



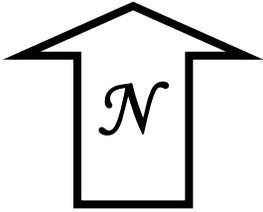
GIFFORD PINCHOT NATIONAL FOREST  
Mt. Adams Ranger District

**Grouse STEW Pre-Commercial Thinning Project**

| Unit     | Acre | Cut Tree Size    |                 | Spacing | Elevation | Slope | Species Preference   |
|----------|------|------------------|-----------------|---------|-----------|-------|----------------------|
|          |      | Min. Feet Height | Max. inches DBH |         |           |       |                      |
| 4        | 97   | 2                | 7               | 14 x 14 | 3481      | 2     | 1 western larch      |
| Remarks: |      |                  |                 |         |           |       | 2 Englemann Spruce   |
|          |      |                  |                 |         |           |       | 3 western white pine |
|          |      |                  |                 |         |           |       | 4 noble fir          |
|          |      |                  |                 |         |           |       | 5 Douglas fir        |
|          |      |                  |                 |         |           |       | 6 western hemlock    |
|          |      |                  |                 |         |           |       | 7 lodgepole pine     |
|          |      |                  |                 |         |           |       | 8 Grand/Silver Fir   |



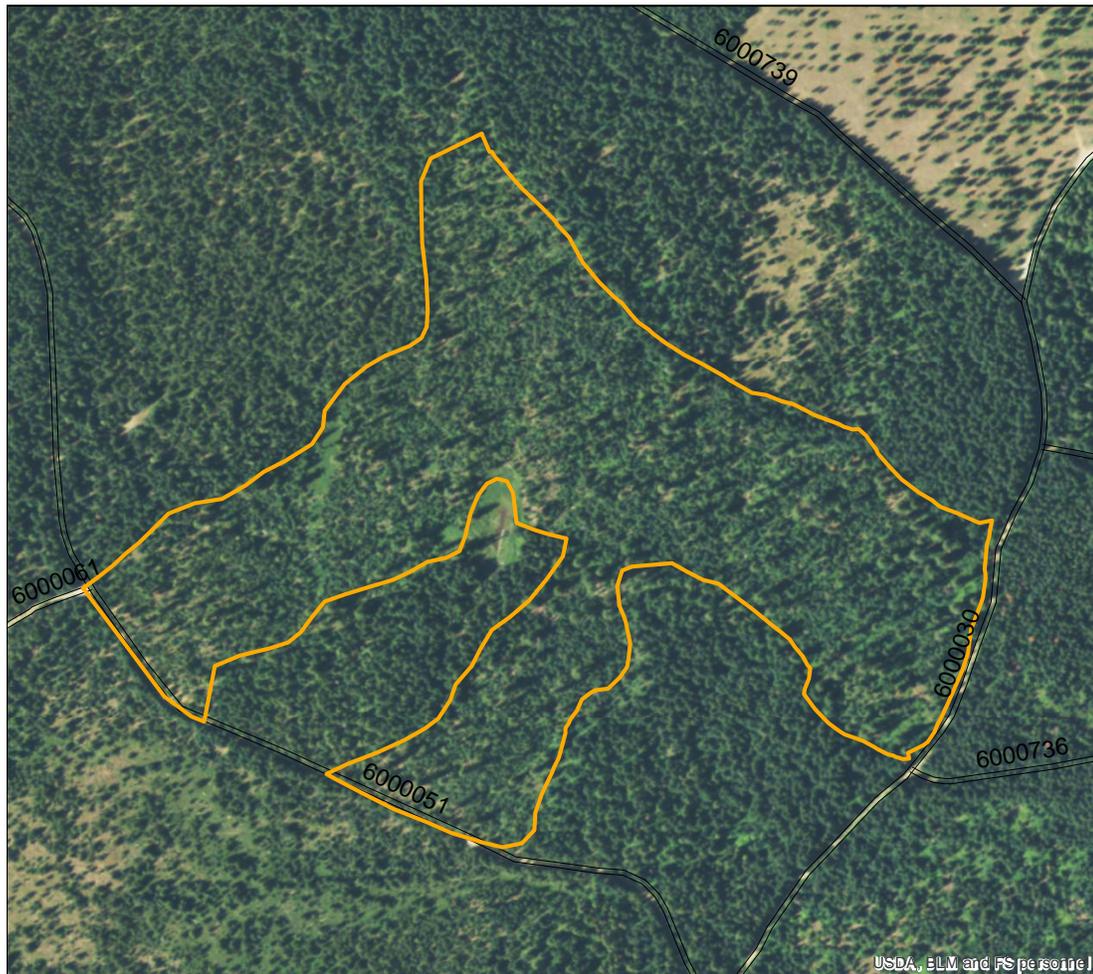
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GIFFORD PINCHOT NATIONAL FOREST  
Mt. Adams Ranger District

**Grouse STEW Pre-Commercial Thinning Project**

| Unit     | Acre | Cut Tree Size    |                 | Spacing | Elevation | Slope | Species Preference   |
|----------|------|------------------|-----------------|---------|-----------|-------|----------------------|
|          |      | Min. Feet Height | Max. inches DBH |         |           |       |                      |
| 6        | 43   | 2                | 7               | 14 x 14 | 3522      | 4     | 1 western larch      |
| Remarks: |      |                  |                 |         |           |       | 2 Englemann Spruce   |
|          |      |                  |                 |         |           |       | 3 western white pine |
|          |      |                  |                 |         |           |       | 4 noble fir          |
|          |      |                  |                 |         |           |       | 5 Douglas fir        |
|          |      |                  |                 |         |           |       | 6 western hemlock    |
|          |      |                  |                 |         |           |       | 7 lodgepole pine     |
|          |      |                  |                 |         |           |       | 8 Grand/Silver Fir   |



0.1  
Miles

Contract Name: Grouse STEW  
Attachment D

PROJECT 002 - Snag Creation

End Results - Scattered clumps of snags across the thinned stands that have been created by topping or girdling green trees. These will help provide foraging and possibly nesting structures for woodpecker species that are Forest Plan Management Indicator Species.

1. DESCRIPTION OF WORK

Project is to create an average of 2 snags per acre in Grouse STEW Payment Units listed below:

| Payment Unit       | Acres | Number of Snags to Create |
|--------------------|-------|---------------------------|
| 8                  | 25    | 50                        |
| 9                  | 52    | 104                       |
| 10                 | 32    | 64                        |
| 11                 | 4     | 8                         |
| 12                 | 42    | 84                        |
| <b>TOTAL SNAGS</b> |       | <b>310</b>                |

2. PROJECT LOCATION

Refer to the Contract Area Map for locations.

3. PROJECT SPECIFICATIONS

A. Selecting Trees for Treatment

- a. Trees to be girdled or topped are selected by the contractor in all units in the following order of species priority:

1. Douglas-fir
2. western hemlock
3. Grand fir

Selected trees shall have diameters between 15 and 19 inches, diameter at breast height (DBH). DBH is measured at four and one half feet above the ground, on the uphill side of the tree.

- b. Only live trees can be selected for girdling, and no live trees with dead or broken tops will be selected. A tree with multiple tops is counted as one tree.
- c. Snags should not be created in areas with obvious root rot infections, which typically consist of several standing snags and fallen snags in a small area.

B. Spacing Trees for Treatment

- a. Girdle or top trees in clumps of 3 or 4 trees, and distribute clumps proportionally across the unit. The topped trees within each clump should be within about 40 feet of each other.
- b. Snags shall not be created within 100 feet of open Forest Roads and established trails.
- c. The contractor will provide the Forest Service the GPS coordinates, or a map showing the locations of the clumps of the girdled or topped snags created in all units.

C. Girdling and topping

- a. Individual (single) snags will be created in clumps of 3 or 4, and will be girdled or topped at a 50 to 80 foot height or 6 inch top diameter whichever occurs first. Multi-leadered trees do not count as two trees. All live branches below the girdled bole can

be removed. Height measurement is taken from the ground level on the uphill side of the tree.

- b. Girdling, if selected as the preferred method, shall be accomplished by cutting and removing a circular band around the entire bole of the tree. The band shall be at least six inches (6") wide at all points and the cut shall remove the bark and cambium layer, and the underlying sapwood to a depth of at least one half inch (1/2") to one inch (1"). Girdles may be created using hand tools or power tools.

4. OPERATION SCHEDULE

| <i>Payment Unit</i> | <i>Operation Conditions</i>                                                | <i>Purpose</i>          |
|---------------------|----------------------------------------------------------------------------|-------------------------|
| 8, 9, 11,<br>12     | All chainsaw operations shall take place from July 16 through February 28. | Spotted Owl 07/16-02/28 |

5. CONTRACTOR'S OBLIGATIONS

The Contractor shall furnish materials, labor, supervision, transportation, and all supplies not provided by the Government, which are required to complete the project.

6. PROSECUTION AND COMPLETION OF WORK

The Contractor shall be required to commence work under this contract after a pre-work meeting agreed upon by the Contractor and Forest Service, prosecute the work diligently, and complete the entire work not later than December 31, 2021. The time stated for completion shall include final cleanup of the premises.

7. INSPECTION

The Forest Service may make periodic inspections to verify that the Contractor is meeting contract specifications. Inspections shall be performed in a manner that will not unduly delay work.

8. MEASUREMENT AND CREDIT

Accepted work will be credited at the contract unit rate for the items shown in AT.4.3.

Contract Name: Grouse STEW  
Attachment E

PROJECT 003 - Road Decommissioning

End Results - Close and stabilize four (4) roads to prevent soil erosion and control pollution in stream channels.

1. DESCRIPTION OF WORK

Refer Decommissioning Worklist Attachment E1 Sheet 3.

2. PROJECT LOCATION

Refer to the Contract Area Map for locations.

3. PROJECT SPECIFICATIONS

All work shall conform to the design specifications in Attachment E1 and the Washington State/ Forest Service MOU Attachment G.

4. OPERATION SCHEDULE

- A. In-water work will be restricted to between: July 16 through September 15
- B. All other work must be done in the dry season July 16 through September 30

5. CONTRACTOR'S OBLIGATIONS

The Contractor shall furnish all labor, materials, equipment, tools, transportation and supplies, and perform all work required according to the drawings and specifications of the contract.

6. PROSECUTION AND COMPLETION OF WORK

The Contractor shall be required to commence work under this contract after a pre-work meeting agreed upon by the Contractor and Forest Service, prosecute the work diligently, and complete the entire work not later than September 30, 2021. The time stated for completion shall include final cleanup of the premises.

7. INSPECTION

The Forest Service will make periodic inspections to verify that the Contractor is meeting contract specifications. Inspections shall be performed in a manner that will not unduly delay work.

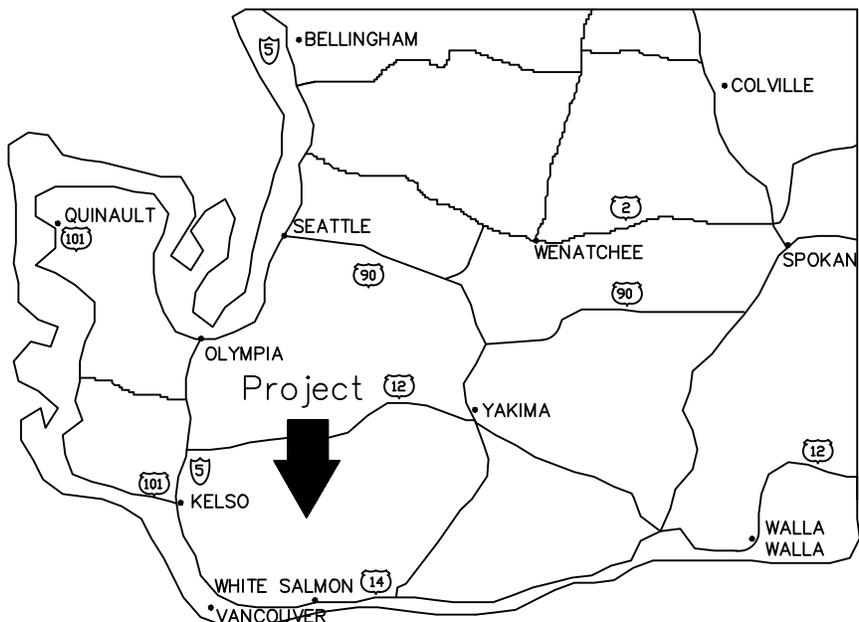
8. MEASUREMENT AND CREDIT

Accepted work will be credited at the contract unit rate for the items shown in AT.4.3.

UNITED STATES DEPARTMENT OF AGRICULTURE  
FOREST SERVICE – REGION SIX  
GIFFORD PINCHOT NATIONAL FOREST  
MT ADAMS RANGER DISTRICT  
SKAMANIA COUNTY, WA



Grouse Stewardship – Road Decommissioning  
6000061, 6000739, 6020770, 6020785



KEY MAP OF WASHINGTON  
SHOWING PROJECT LOCATION

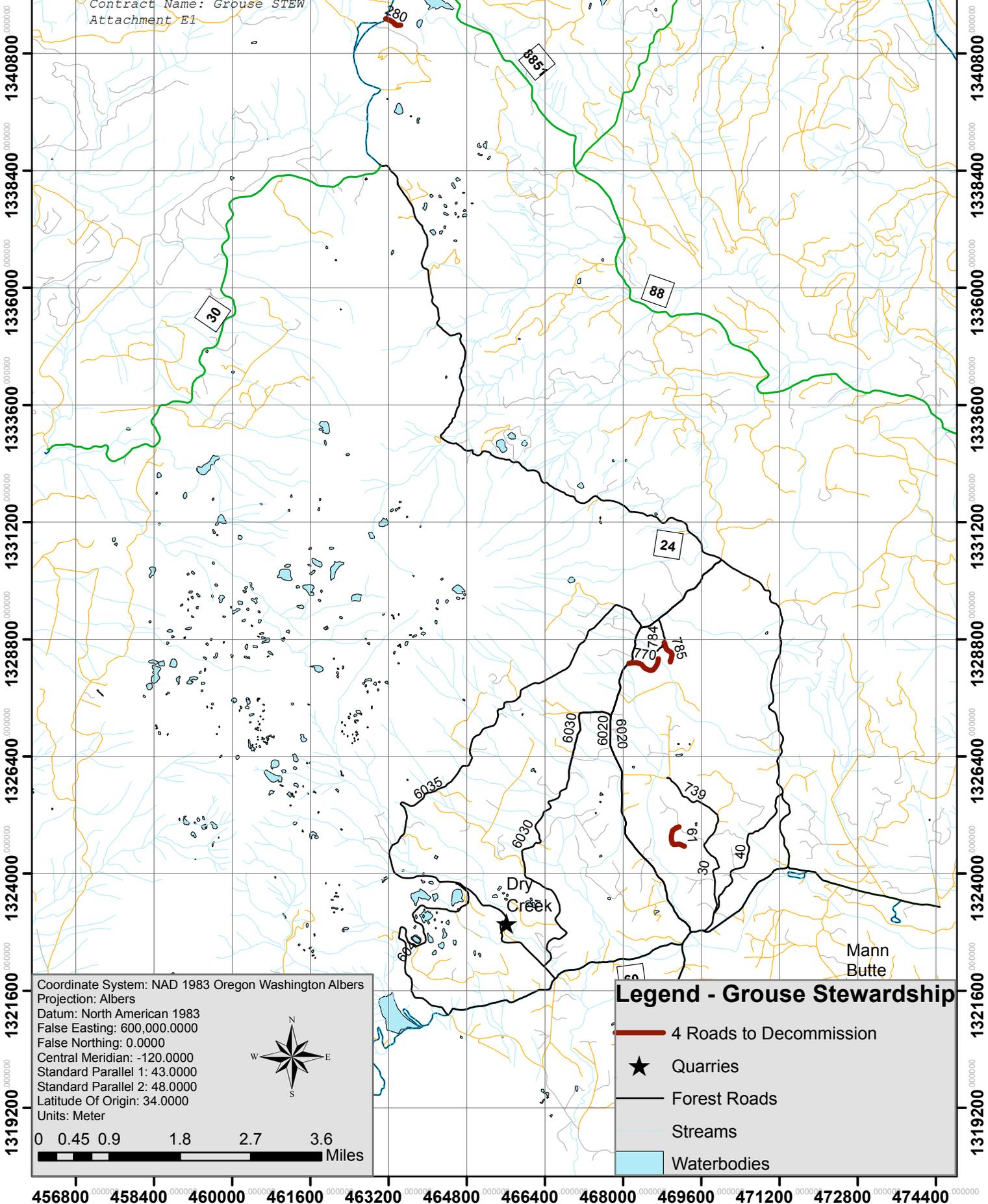
INDEX TO SHEETS

- 1 – TITLE SHEET
- 2 – VICINITY MAP
- 3 – DECOMMISSIONING WORKLIST
- 4 – CULVERT REMOVAL DETAIL
- 5 – ROAD CLOSURE BERM

|                                         |       |
|-----------------------------------------|-------|
| DESIGNER – SUBMITTED BY:                |       |
| _____                                   | _____ |
| NAME                                    | DATE  |
| DISTRICT ENGINEER – RECOMMENDED BY:     |       |
| _____                                   | _____ |
| NAME                                    | DATE  |
| DISTRICT RANGER – RECOMMENDED BY:       |       |
| _____                                   | _____ |
| NAME                                    | DATE  |
| ASST. FOREST ENGINEER – RECOMMENDED BY: |       |
| _____                                   | _____ |
| NAME                                    | DATE  |
| FOREST ENGINEER – APPROVED BY:          |       |
| _____                                   | _____ |
| NAME                                    | DATE  |

456800 458400 460000 461600 463200 464800 466400 468000 469600 471200 472800 474400

Contract Name: Grouse STEW  
Attachment E1



Coordinate System: NAD 1983 Oregon Washington Albers  
 Projection: Albers  
 Datum: North American 1983  
 False Easting: 600,000.0000  
 False Northing: 0.0000  
 Central Meridian: -120.0000  
 Standard Parallel 1: 43.0000  
 Standard Parallel 2: 48.0000  
 Latitude Of Origin: 34.0000  
 Units: Meter



**Legend - Grouse Stewardship**

-  4 Roads to Decommission
-  Quarries
-  Forest Roads
-  Streams
-  Waterbodies

Grouse Stewardship  
VICINITY MAP

DEPARTMENT OF AGRICULTURE  
FOREST SERVICE  
GIFFORD PINCHOT NATIONAL FOREST

SHEET 2  
OF 5

**GROUPSE STEWARDSHIP DECOMMISSIONING WORKLIST**

**ROAD 2400280**

| STATION (FT) | WORK ITEM             | CULVERT DIA (INCH) | BOTTOM WIDTH (FT) | REMARKS            |
|--------------|-----------------------|--------------------|-------------------|--------------------|
| 0            | BEGIN DECOMMISSIONING |                    |                   | 2400 junction      |
| 25           | ROAD CLOSURE BERM     |                    |                   |                    |
| 700          | CULVERT REMOVAL       | 15                 | 3                 |                    |
| 1025         | CULVERT REMOVAL       | 18                 | 3                 |                    |
| 1250         | CULVERT REMOVAL       | 18                 | 3                 |                    |
| 1400         | CULVERT REMOVAL       | 18                 | 3                 |                    |
| 1825         | CULVERT REMOVAL       | 18                 | 3                 |                    |
| 2000         | CULVERT REMOVAL       | 18                 | 3                 |                    |
| 2010         | END ROAD              |                    |                   | END ALL WORK ITEMS |

**ROAD 6000061**

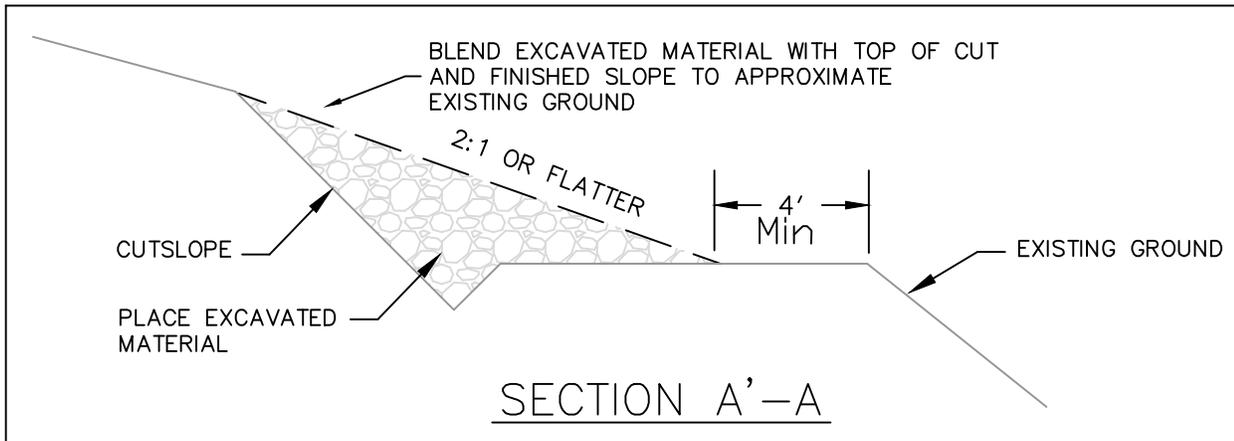
| STATION (FT) | WORK ITEM                         | CULVERT DIA (INCH) | BOTTOM WIDTH (FT) | REMARKS                                                                                                                                           |
|--------------|-----------------------------------|--------------------|-------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| 0            | BEGIN ROAD                        |                    |                   |                                                                                                                                                   |
| 10           | ROAD CLOSURE BERM                 |                    |                   | BUILD BERM BY PLACING 5 BOULDERS, WEIGHING APPROXIMATELY 2 TONS EACH, AND COVERING W/ SOIL TO PREVENT THEIR REMOVAL. DO NOT DIG INTO THE ROADBED. |
| 100          | REMOVE STEEL 18" DIAMETER CULVERT |                    |                   | PERFORM WORK ACCORDING TO CULVERT REMOVAL DETAIL DRAWING SHEET                                                                                    |

**ROAD 6020770**

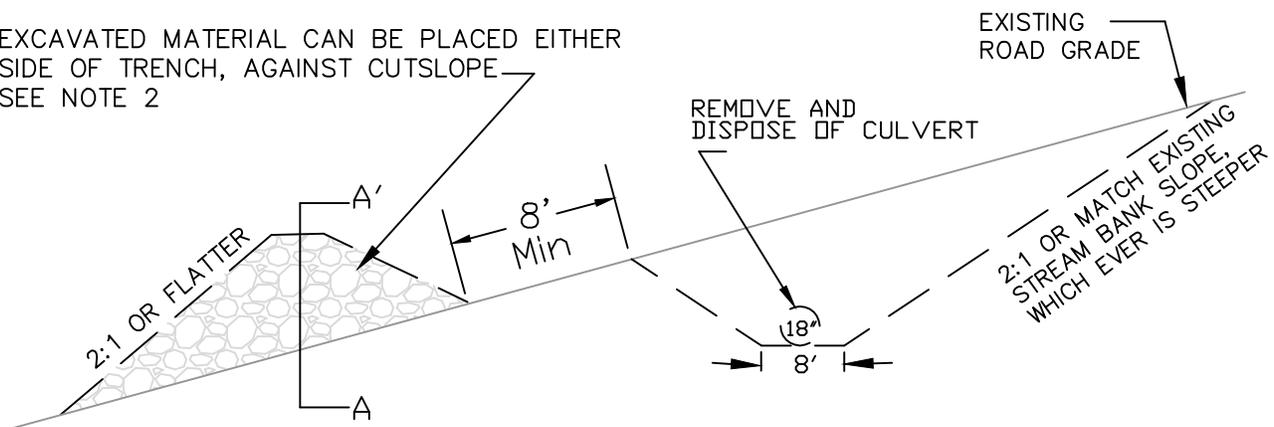
| STATION (FT) | WORK ITEM         | REMARKS                                         |
|--------------|-------------------|-------------------------------------------------|
| 0            | BEGIN ROAD        |                                                 |
| 10           | ROAD CLOSURE BERM | SAME AS 6000061 REMARK ABOVE, FOR BUILDING BERM |

**ROAD 6020785**

| STATION (FT) | WORK ITEM         | REMARKS                                         |
|--------------|-------------------|-------------------------------------------------|
| 0            | BEGIN ROAD        |                                                 |
| 10           | ROAD CLOSURE BERM | SAME AS 6000061 REMARK ABOVE, FOR BUILDING BERM |



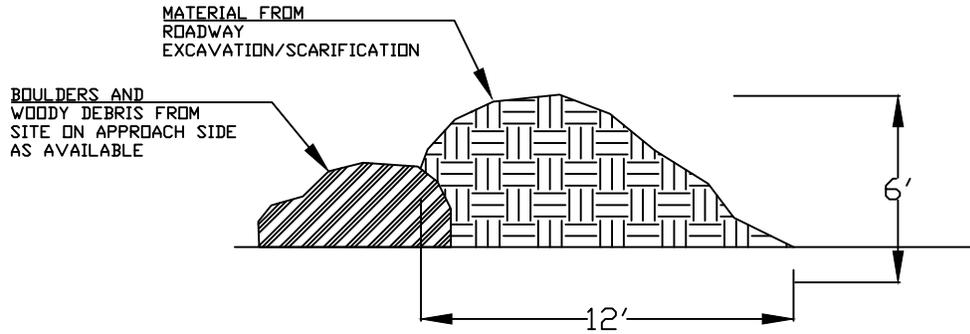
EXCAVATED MATERIAL CAN BE PLACED EITHER SIDE OF TRENCH, AGAINST CUTSLOPE. SEE NOTE 2



PROFILE VIEW  
CULVERT REMOVAL  
(NOT TO SCALE)

NOTES

- 1) EXCAVATE TO BOTTOM OF CULVERT OR NATURAL CHANNEL, WHICH EVER IS LOWER.
- 2) EXCAVATED MATERIAL SHALL BE PLACED AWAY FROM CHANNEL IN A STABLE MANNER AND BE SHAPED TO DRAIN – SLOPES TO BE 2:1 OR FLATTER.
- 3) SOLID ROCK ENCOUNTERED DURING EXCAVATION NEED NOT BE REMOVED.
- 4) PROVIDE FOR DRAINAGE AT END OF EXCAVATED MATERIAL PILES.
- 5) REMOVAL OF CULVERTS TO COMPLY WITH THE PROVISIONS OF THE WASHINGTON STATE / FOREST SERVICE MOU.
- 6) REMOVED BRUSH & TREES SHALL BE SCATTERED ON NEW EXPOSED SLOPES, EXCAVATION DISPOSAL PILES, AND CHANNEL BOTTOM.



## ROAD CLOSURE BERM DETAIL

(NOT TO SCALE)

### NOTES

- 1) EXCAVATED TRENCH SHALL BE LOCATED ON THE SIDE FROM WHICH TRAFFIC WILL APPROACH.
- 2) PROVIDE DRAINAGE IN TRENCH, WHERE POSSIBLE, BY SKEWING OR UTILIZING TOPOGRAPHY
- 3) SHAPE AREA ADJACENT TO BARRIER MOUND TO DRAIN

Contract Name: Grouse STEW  
Attachment F

PROJECT 004 - Road Repair

End Results - Repair (3) roads to return road surfaces to a hydrologically stable functionality with appropriate hydrologic capacity to reduce soil erosion and displacement.

1. DESCRIPTION OF WORK

Refer Schedule of Items Attachment F1.

2. PROJECT LOCATION

Refer to the Contract Area Map for locations.

3. PROJECT SPECIFICATIONS

All work shall conform to the design specifications in Attachment F2 and the Washington State/ Forest Service MOU Attachment G.

4. OPERATION SCHEDULE

A. In-water work will be restricted to between: July 15 through September 15

B. All other work must be done in the dry season July 16 through September 30

5. CONTRACTOR'S OBLIGATIONS

The Contractor shall furnish all labor, materials, equipment, tools, transportation and supplies, and perform all work required according to the drawings and specifications of the contract.

6. PROSECUTION AND COMPLETION OF WORK

The Contractor shall be required to commence work under this contract after a pre-work meeting agreed upon by the Contractor and Forest Service, prosecute the work diligently, and complete the entire work not later than September 30, 2021. The time stated for completion shall include final cleanup of the premises.

7. INSPECTION

The Forest Service will make periodic inspections to verify that the Contractor is meeting contract specifications. Inspections shall be performed in a manner that will not unduly delay work.

8. MEASUREMENT AND CREDIT

Accepted work will be credited at the contract unit rate for the items shown in AT.4.3.

ENGINEERS ESTIMATE  
Grouse Stewardship  
Mt. Adams Ranger District  
Gifford Pinchot National Forest

| Item No. | Description                                                                 | Quantity | Unit | Method of Measure |
|----------|-----------------------------------------------------------------------------|----------|------|-------------------|
| 15101    | Mobilization                                                                | 1        | LS   | LSQ               |
|          | <b>6035</b>                                                                 |          |      |                   |
| 32203A   | Aggregate base, compaction method B, 8" thickness                           | 160      | CY   | AQ                |
| 32211A   | Aggregate surface course, compaction method C, 4" thickness                 | 80       | CY   | AQ                |
| 25104A   | Keyed riprap, class 2, Government furnished from Dry Creek East Pit         | 40       | CY   | AQ                |
| 30304A   | Road reconditioning, aggregate surface, compaction method B                 | 2,215    | LF   | AQ                |
| 30304B   | Road reconditioning, ditch                                                  | 1,800    | LF   | AQ                |
| 20407A   | Select Borrow, compaction method B, finishing method B, commercial source   | 300      | CY   | AQ                |
| 60211A   | 90 inch Corrugated Steel Pipe, 12 gauge with double step 1:1 bevelled inlet | 82       | FT   | AQ                |
|          | <b>6030</b>                                                                 |          |      |                   |
| 32203B   | Aggregate base, compaction method B, 8" thickness,                          | 80       | CY   | AQ                |
| 32211B   | Aggregate surface course, compaction method C, 4" thickness                 | 40       | CY   | AQ                |
| 30304C   | Road Recondition, Ditchline                                                 | 260      | LF   | AQ                |
| 32225A   | 8"-12" dia. rock, Compaction B                                              | 30       | CY   | AQ                |
| 60211B   | 18" HDPE Culvert Installation                                               | 46       | LF   | AQ                |

UNITED STATES DEPARTMENT OF AGRICULTURE  
FOREST SERVICE – REGION SIX

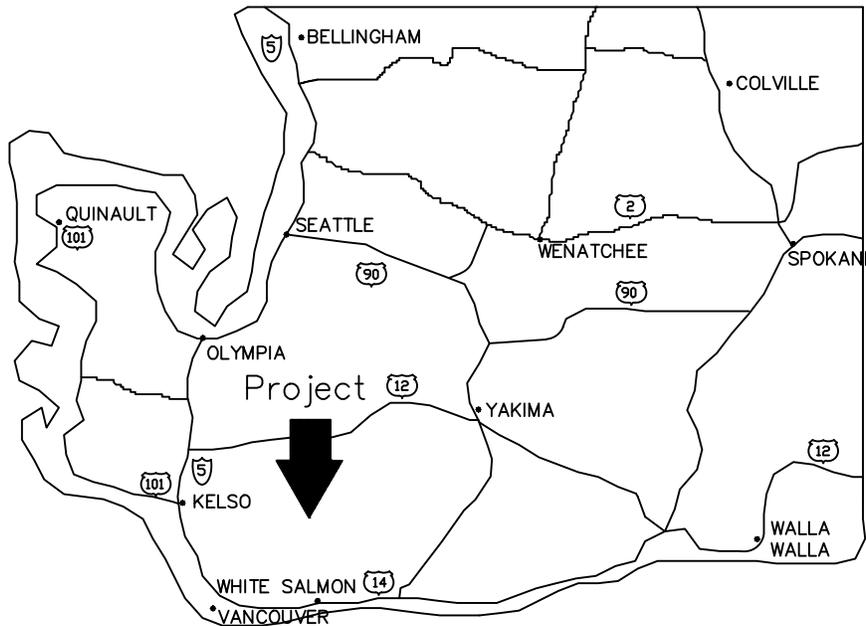
GIFFORD PINCHOT NATIONAL FOREST

MT ADAMS RANGER DISTRICT

SKAMANIA COUNTY, WA



Grouse Stewardship – Stewardship Projects  
6030 & 6035 Road Repairs



KEY MAP OF WASHINGTON  
SHOWING PROJECT LOCATION

INDEX TO SHEETS

- 1 – TITLE SHEET
- 2 – VICINITY MAP
- 3 – GENERAL NOTES
- 4 – WORKLIST
- 5 – PLAN VIEW
- 6 – CROSS-SECTIONS 1 & 2
- 7 – CROSS-SECTIONS 3 & 4
- 8 – CROSS-SECTIONS 5 & 6
- 9 – PIPE ELEVATIONS

|                                         |            |
|-----------------------------------------|------------|
| DESIGNER – SUBMITTED BY:                |            |
| NAME _____                              | DATE _____ |
| DISTRICT ENGINEER – RECOMMENDED BY:     |            |
| NAME _____                              | DATE _____ |
| DISTRICT RANGER – RECOMMENDED BY:       |            |
| NAME _____                              | DATE _____ |
| ASST. FOREST ENGINEER – RECOMMENDED BY: |            |
| NAME _____                              | DATE _____ |
| FOREST ENGINEER – APPROVED BY:          |            |
| NAME _____                              | DATE _____ |

463200

464800

466400

468000

469600

471200

Contract Name: Grouse STEW  
Attachment: F2

132880

132880

132640

132640

132400

132400

132160

132160

131920

131920

463200

464800

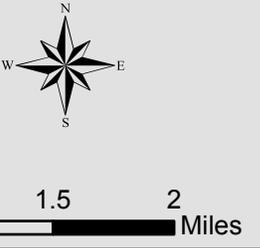
466400

468000

469600

471200

Coordinate System: NAD 1983 Oregon Washington Albers  
 Projection: Albers  
 Datum: North American 1983  
 False Easting: 600,000.0000  
 False Northing: 0.0000  
 Central Meridian: -120.0000  
 Standard Parallel 1: 43.0000  
 Standard Parallel 2: 48.0000  
 Latitude Of Origin: 34.0000  
 Units: Meter



**Legend - Grouse Stewardship**

-  Stewardship Roads
-  Quarries
-  Forest Roads
-  Streams
-  Waterbodies
-  DECOMMISSIONED ROAD

WATER SOURCE  
DRY CREEK

Dry  
Creek

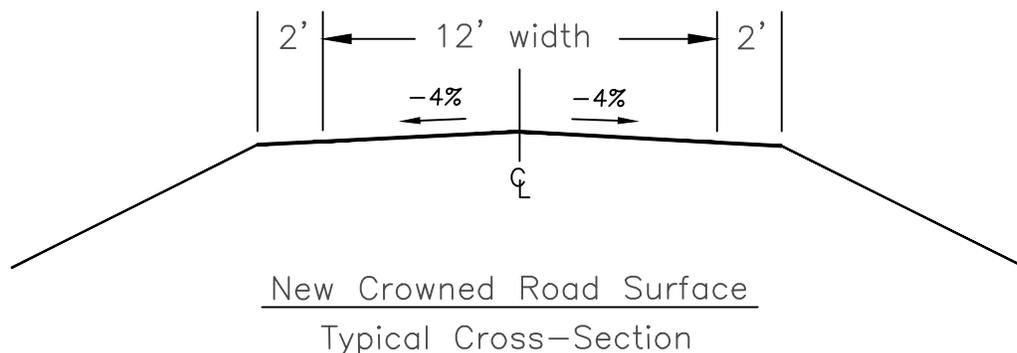
Grouse Stewardship  
Stewardship Roads  
VICINITY MAP

DEPARTMENT OF AGRICULTURE  
FOREST SERVICE  
GIFFORD PINCHOT NATIONAL FOREST

SHEET 12  
OF 19

### GENERAL NOTES

1. THE MEMORANDUM OF UNDERSTANDING (MOU) BETWEEN THE FOREST SERVICE (FS) AND THE WASHINGTON DEPT OF FISHERIES IS PART OF THIS CONTRACT. A COPY MUST BE ON THE PROJECT SITE DURING ALL CONSTRUCTION ACTIVITIES.
2. ALL WORK IN AND NEAR WATER SOURCES SHALL COMPLY WITH THE REQUIREMENTS OF THE MOU.
3. THE CONTRACTOR IS REQUIRED TO STAKE AND MARK ALL LIMITS OF WORK. CONTRACTOR SHALL OBTAIN THE AUTHORIZED REPRESENTATIVE'S APPROVAL OF THE STAKING BEFORE CONSTRUCTION CAN PROCEED.
4. MOBILIZATION INCLUDES ALL MOVEMENT OF EQUIPMENT AND MATERIAL TO THE PROJECT SITE.
5. CLEANING EQUIPMENT AND OIL SPILL PREVENTION ARE REQUIREMENTS OF SECTION H OF THE CONTRACT.
6. CLEARING AND GRUBBING: ALL TREES, LIMBS, AND STUMPS SHALL BE DISPOSED OF IN ACCORDANCE WITH FSSS 203.05 METHOD E.
7. EXCAVATION: EXCESS AND UNSUITABLE EXCAVATION SHALL BE DISPOSED OF AT THE SITE SHOWN ON THE CONTRACT DRAWINGS. ALL DISPOSAL SITES SHALL BE SLOPED TO DRAIN. BORROW EXCAVATION SHALL BE OBTAINED AT A SOURCE APPROVED BY THE AUTHORIZED GOVERNMENT REPRESENTATIVE.
8. LOAD AND HAUL WASTE MATERIAL FROM EXCAVATION OF DITCH TO THE DESIGNATED WASTE LOCATED ON THE CONTRACT DRAWINGS. CONSOLIDATE BY LUMPING WASTE MATERIAL INTO ONE LARGE PILE AND COMPACT PILE WITH TRACK WHEELED EQUIPMENT PRIOR TO SEEDING AND MULCHING.
9. EXCESS MATERIALS TEMPORARILY STORED ON THE DITCH SLOPE OR ROAD SHOULDER SHALL BE REMOVED DAILY.
10. ALL DISTURBED AREAS, NOT PART OF THE ROADWAY SHALL BE SEEDED, MULCHED, AND IF REQUIRED BY THE SPECIFICATIONS, FERTILIZED. THIS INCLUDES BORROW AND EXCESS DISPOSAL SITES, TEMPORARY STORAGE SITES AND STAGING AREAS. SEED SHALL BE APPLIED BEFORE THE MULCH.
11. CULVERT INSTALLATION: ALL INSTALLED CULVERTS ARE TO HAVE A 2 CY RIPRAP APRON AT OUTFALL.



Grouse Stewardship – Stewardship Package Work List

**6030 road**

- MP 0.11 – 0.16 Recondition ditch to 18" deep right side. Armor road fill w/ 20 CY of 8" to 12" riprap.
- MP 0.4-0.5 Recondition roadbed with 80 CY of 8" thick subbase aggregate and 40 CY of 4" thick surface aggregate
- MP 0.82 Replace 15" X 46' long pipe w/ 18" X 46' long HDPE pipe.
- MP 5.13 Replace existing 60" CMP with 90" dia. x 82' long CMP (12 gauge thickness), beveled 1:1 at inlet, with a double step, armor inlet with 10 CY of 8" to 12" Riprap, and armor outlet with 10 CY of 8" to 12" Riprap. Rebuild road AS SHOWN ON DRAWINGS.

**6035 road**

- MP 0.0 – 7.8 linear grading to repair pot holes
- MP 2.51 Recondition roadbed at washout for approximately 200' with 40 CY of 8" thick subbase aggregate and 20 CY of 4" thick surface aggregate
- MP 2.59 Recondition roadbed at washout for approximately 175' with 30 CY of 8" thick subbase aggregate and 15 CY of 4" thick surface aggregate
- MP 4.08 Remove log at inlet of culvert
- MP 4.10 Recondition roadbed at washout for approximately 10' with 10 CY of 8" thick subbase aggregate and 5 CY of 4" thick surface aggregate
- MP 4.60 Recondition roadbed at washout for approximately 10' with 10 CY of 8" thick subbase aggregate and 5 CY of 4" thick surface aggregate
- MP 5.13 Replace existing 24" CMP with 90" dia. x 82' long CMP (12 gauge thickness), beveled 1:1 at inlet, with a double step, armor inlet with 10 CY of 8" to 12" Riprap, and armor outlet with 10 CY of 8" to 12" Riprap. Rebuild road AS SHOWN ON DRAWINGS.
- MP 7.07 Recondition roadbed at washout for approximately 10' with 10 CY of 8" thick subbase aggregate and 5 CY of 4" thick surface aggregate.
- MP 7.21-7.55 Reestablish roadbed left side to 12' wide with 40 CY of 8" subgrade and 20 CY 4" surface materials. Recondition ditch left side and armor road fill with 20 CY of 8" to 12" Riprap.
- MP 7.21 Recondition roadbed at washout for approximately 10' with 20 CY of 8" thick subbase aggregate and 10 CY of 4" thick surface aggregate. Add a 24" X 70' long ditch relief culvert at low point.

Notes-

1. All new culverts are to be HDPE plastic pipe.
2. All culvert installations - conserve existing aggregate and place prior to new aggregate when called for.
3. Dispose of all culverts off National Forest Lands.
4. Work area mileposts will be staked by Forest Service.
5. 4"-6" & 6"-8" rock and riprap to be provided by the Government from either the Oklahoma or Dry Creek East Rock pits.
6. Subbase aggregate to be provided by the Government from the Oklahoma rock pit, 1-2" pit run.
7. Surface aggregate to be provided by the Government from the Dry Creek East rock pit, 1.5" minus.
8. Water source and unsuitable material disposal area are shown on Vicinity Map.
9. Staging area on the 6035 Rd located at MP 5.23.
10. See Road Maintenance Provisions for other road related work.

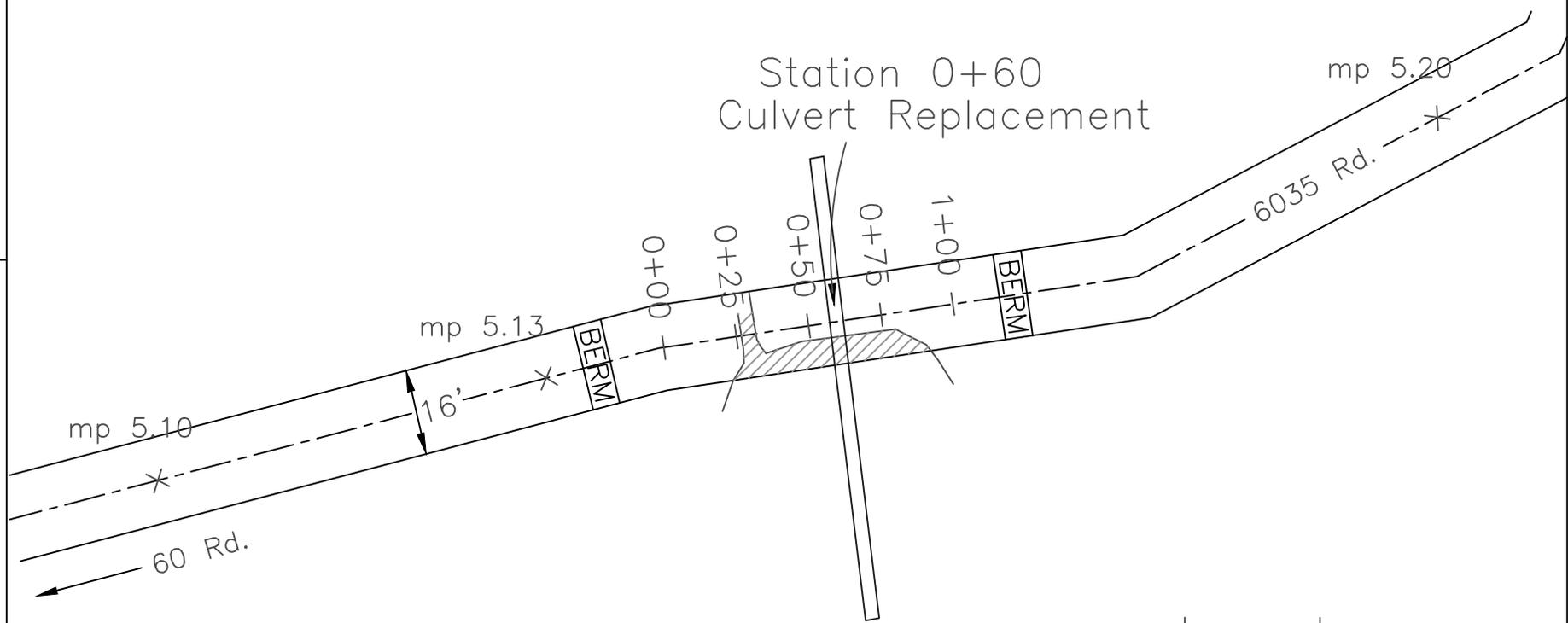
Grouse Stewardship TS  
Stewardship Project  
6035 Plan View

DEPARTMENT OF AGRICULTURE  
FOREST SERVICE  
GIFFORD PINCHOT NATIONAL FOREST

SHEET 5  
OF 9

NOTES:

- 1. CLEAN ROAD SURFACE IN WORK AREA UPON COMPLETION OF WORK.
- 2. NECESSARY CLEARING IS INCIDENTAL TO WORK - SCATTER DEBRIS.
- 3. DIMENSIONS ARE APPROXIMATE.
- 4. PLACE MATERIAL IN 2 FT. LIFTS AND COMPACT WITH EQUIPMENT (BUCKET) UNTIL VISUAL DISPLACEMENT CEASES.

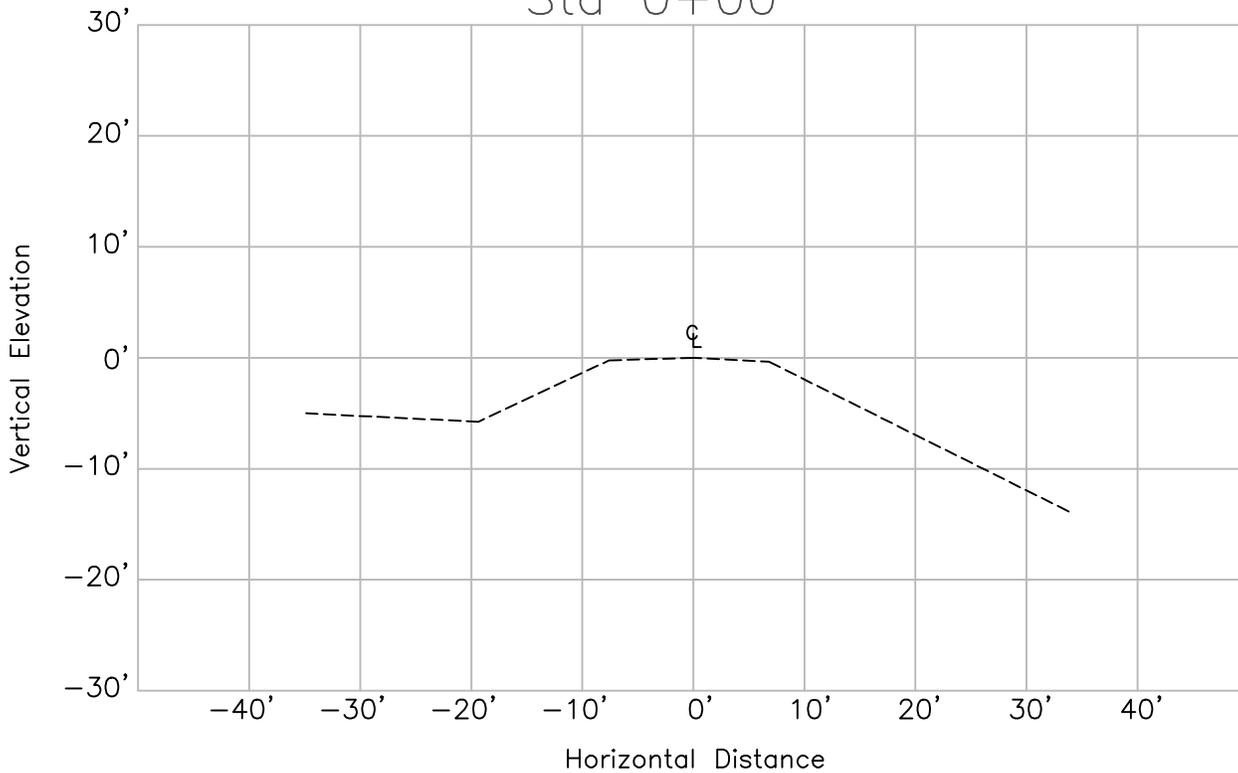


Legend

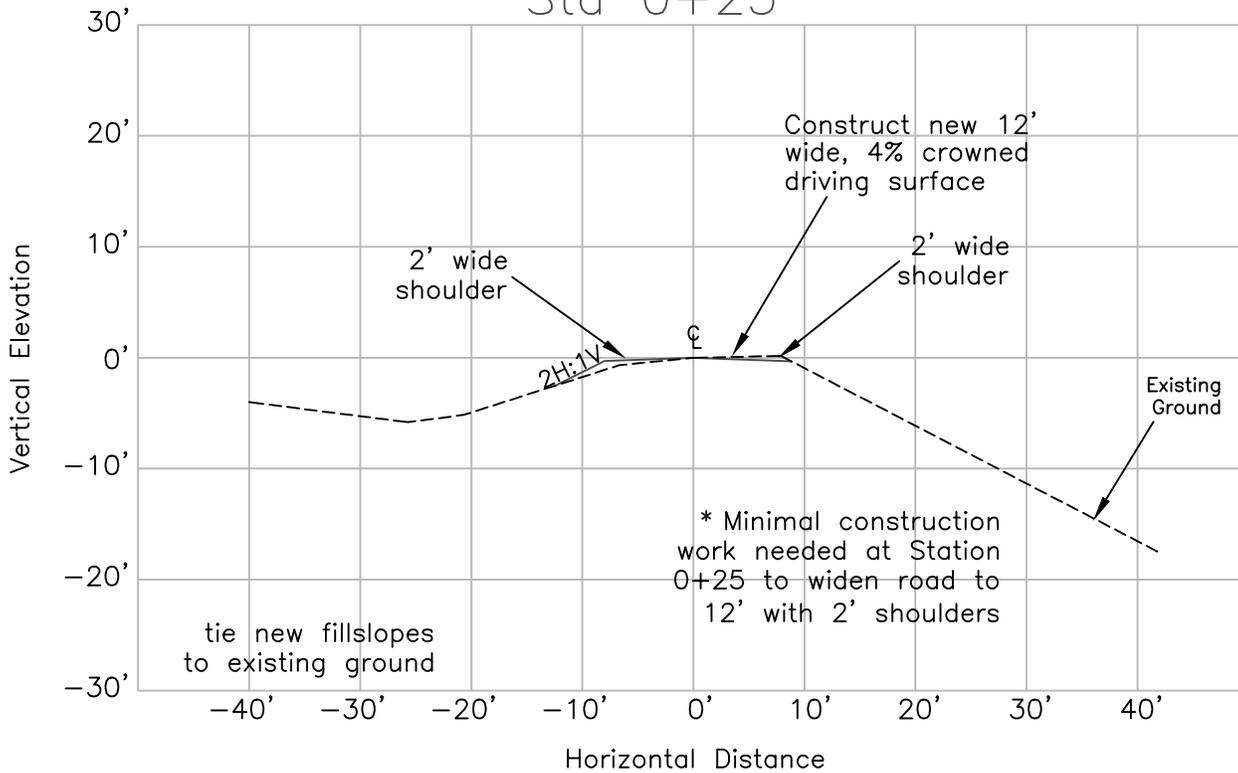
- alignment
- ▨ Fillslope failure
- Edge of Road

Plan view  
not to scale

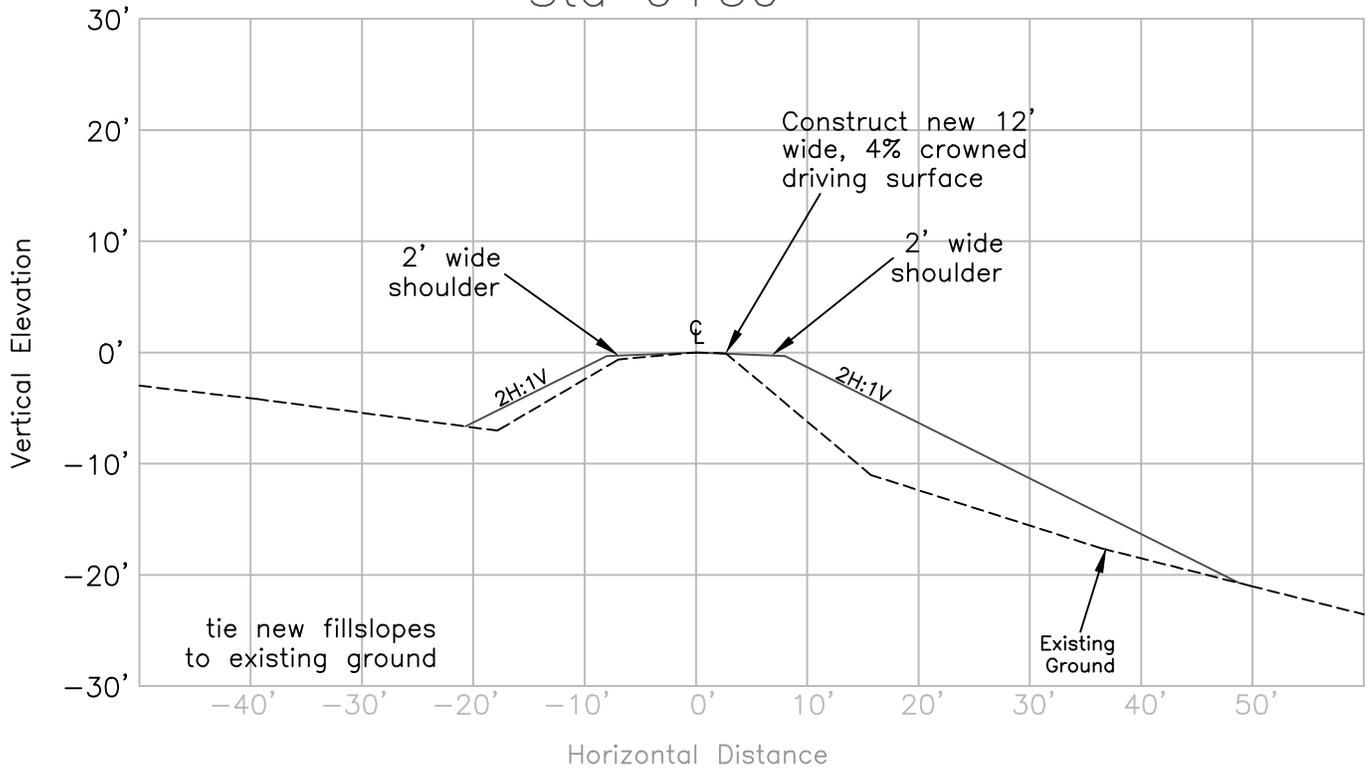
### Cross-Section 1 Sta 0+00



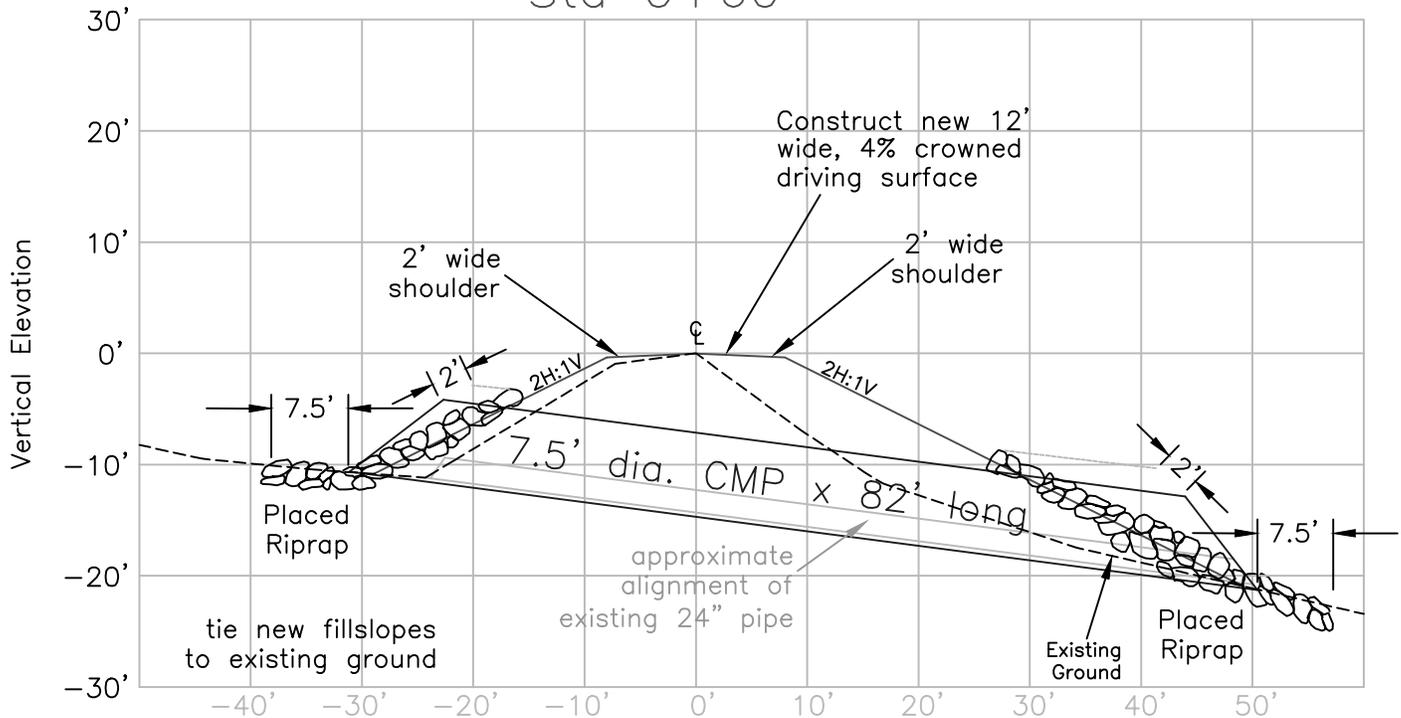
### Cross-Section 2 Sta 0+25



### Cross-Section 3 Sta 0+50

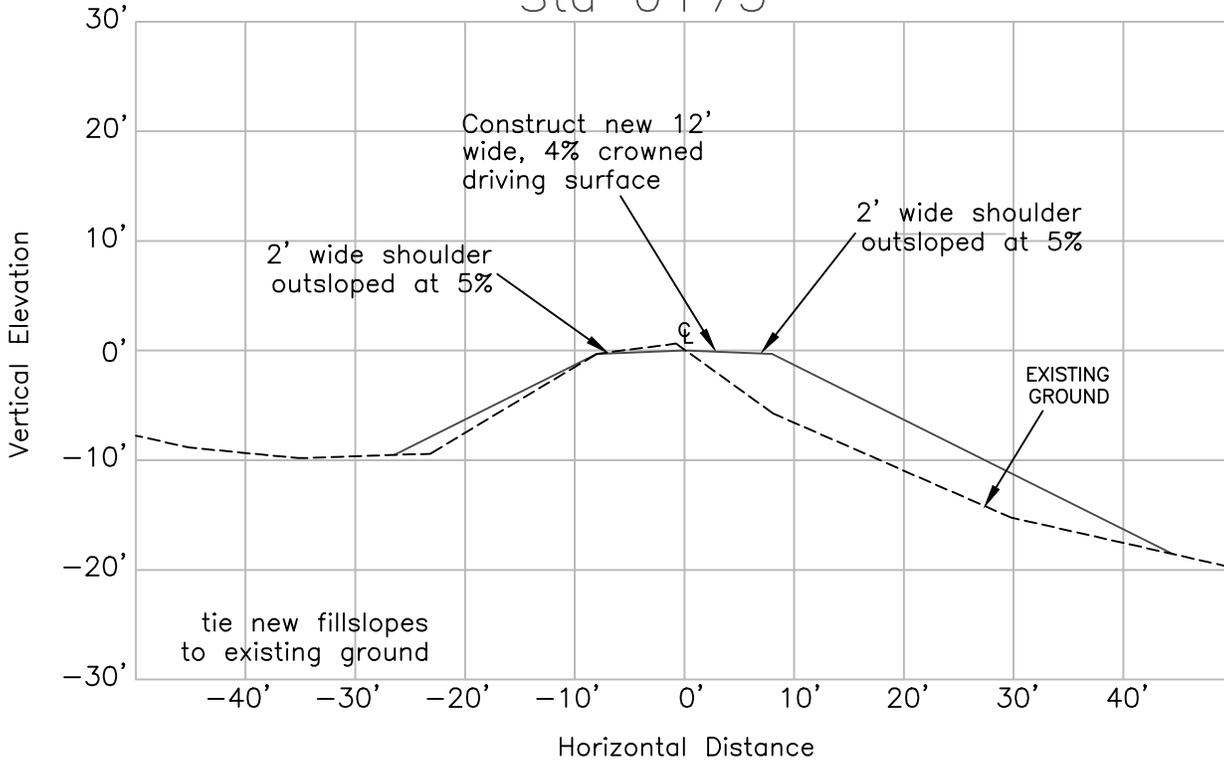


### Cross-Section 4 Sta 0+60



Acceptance of proposed new alignment, by Forest Service Engineer, is required before placing pipe. Elevations & Horizontal distance are provided for assistance, but are not to be regarded as being exceedingly accurate.

### Cross-Section 5 Sta 0+75



### Cross-Section 6 Sta 1+00

