

**SAMPLE  
CONTRACT**

KT-CT.3.5.5# - INDIVIDUAL TREES, CUT TREE MARKING (06/2009)

Individual trees to be cut are Marked with indicated color above and below stump height in all or parts of the following Payment Units. Areas of Cut Tree Marking are shown on the Contract Area Map with the symbol "CTM."

PAYMENT UNIT(S)

PAINT COLOR

Contract Name: Badger Stewardship

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**SAMPLE CONTRACT**

R9-KT-CT.3.5.5# - INDIVIDUAL TREES. (11/2007)

Cut Tree Marking Table

| Payment Units       | Paint Color |
|---------------------|-------------|
| 1, 3, 4, 5, 7, 8, 9 | Blue        |
| 6                   | Green       |
| 10 (ROW)            | Yellow      |

Payment Unit boundaries: Exterior boundaries are marked with 3 ORANGE paint slashes above stump height; Interior boundaries are marked with 2 ORANGE paint slashes above stump height on each side of the boundary. Boundary trees are also marked below stump height. Paint marks face to the INSIDE of the Payment Unit. **BOUNDARY TREES ARE NOT TO BE CUT.**

Note: there is no Orange-Painted payment unit boundary associated with Payment Unit 10 (Road ROW)

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KT-ET.4 - PAYMENTS NOT RECEIVED (08/2012)

(a) Payments are due and payable on the date of issue indicated on the bill for collection. When a payment for timber cut and other charges is not received at the location designated by Forest Service by the date specified in the bill for collection, Contracting Officer will suspend all or any part of Contractor's Operations until payment or acceptable payment guarantee is received. Other charges include, but are not limited to:

- (i) Slash disposal and road maintenance deposits;
- (ii) Cooperative work at rates established by specific agreement under ET.2.1.8;
- (iii) Damages pursuant to JT.4;
- (iv) Road use fees;
- (v) Restoration of downpayment pursuant to ET.2.2;
- (vi) Periodic payments pursuant to ET.2.1.3;
- (vii) Extension Deposits pursuant to ET.2.1.7; and
- (viii) Other mandatory deposits.

(b) Failure to pay amounts due by the date specified in the bill for collection shall be considered a breach under JT.3. The 30-day notice period prescribed therein shall begin to run as of the end of business on the date specified for receipt of payments. If the performance or payment is guaranteed by surety bond, the surety will receive a copy of the written notification of breach. Demand will be made on the surety or other institution providing the guarantee or bond instrument for immediate payment 10 days after issuance of written notification of the breach.

(c) Pursuant to the Debt Collection Improvement Act of 1996, as amended, if payment is not received by Forest Service within 15 days after the date of issue indicated on the bill for collection:

(i) Simple interest shall be assessed at the Current Value of Funds Rate as established by the Secretary of the Treasury. Interest will begin to accrue as of the date of issue indicated on the initial bill for collection.

(ii) Debtors will be assessed administrative charges, in addition to the delinquent amount due. Administrative charges are those additional costs incurred by the Government in processing, handling, and collecting delinquent debts.

(iii) A penalty charge of six (6) percent per annum will be assessed on any portion of a debt delinquent more than 90 days. This penalty charge is in addition to interest and administrative charges under paragraphs (c)(i) and (c)(ii). The penalty charge shall accrue from the date of issue indicated on the bill for collection and shall be assessed on all outstanding amounts, including interest and administrative costs assessed under paragraphs (c)(i) and (c)(ii).

(iv) Payments will be credited on the date received by the Federal Depository or Collection Officer designated on the bill for collection.

(d) Forest Service remedies for Contractor's failure to make payment for timber cut and other charges when due, except for accrual of interest, suspension of all or any part of Contractor's Operations, and administrative offset, shall be stayed for so long as:

- (i) A bona fide dispute exists as to Contractor's obligation to make such payment and
- (ii) Contractor files and prosecutes a timely Claim.

KT-FT.1.0.3# - APPROACHES TO SURFACED ROADS (06/2009)

Contractor shall apply and maintain PU 5 temporary "back-in": 30 CY pitrun; PU 6 temporary "back-in": 30 CY pitrun; and PU 7 temporary road: 30 CY pitrun. inches of as directed by Forest Service on all Temporary Road approaches to surfaced roads for a distance of as directed by Forest Service feet back from the surfaced road. Surfaced roads include those with:  
gravel - County Road 527 (Thayer Road)

Contract Name: Badger Stewardship

KT-FT.1.2# - USE OF ROADS BY CONTRACTOR (09/2004)

Contractor's use of existing roads identified on Contract Area Map by the following codes is prohibited or subject to restrictive limitations, unless agreed otherwise:

| Code | Use Limitations                                                     |
|------|---------------------------------------------------------------------|
| X    | Hauling prohibited                                                  |
| R    | Hauling restricted                                                  |
| U    | Unsuitable for hauling prior to completion of agreed reconstruction |
| P    | Use prohibited                                                      |
| A    | Public use restriction                                              |
| W    | Regulation waiver                                                   |

Roads coded A will be signed by the Forest Service to inform the public of use restrictions. Contractor's use of roads coded R, A, or W shall be in accordance with the following restrictions:

See Restricted Road List Table.

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FS-2400-13T (94/04)

WO-KT-FT.1.2# - USE OF ROADS BY CONTRACTOR. (09/04)

**SAMPLE  
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**Restricted Road List**

| Road Number                            | Road Name | Termini |      | Map Legend | Description of Restrictions                                         |
|----------------------------------------|-----------|---------|------|------------|---------------------------------------------------------------------|
|                                        |           | From    | To   |            |                                                                     |
| 6914                                   | FR 6914   | MP 0.29 | End  | P          | Use Prohibited                                                      |
| 6916                                   | FR 6916   | MP 0.00 | 0.06 | U          | Unsuitable prior to Required Reconstruction                         |
| 6916                                   | FR 6916   | MP 0.28 | End  | X          | Hauling Prohibited                                                  |
| 6916-A                                 | FR 6916-A | MP 0.24 | End  | X          | Hauling Prohibited                                                  |
| 6919                                   | FR 6919   | MP 0.05 | 0.05 | U          | Unsuitable prior to Required Reconstruction                         |
| 6919                                   | FR 6919   | MP 0.00 | 0.69 | KO         | Keep Open                                                           |
| 6919                                   | FR 6919   | MP 1.24 | End  | X          | Hauling Prohibited                                                  |
| 6919-B                                 | FR 6919-B | MP 0.07 | End  | X          | Hauling Prohibited                                                  |
| 6919-C                                 | FR 6919-C | MP 0.24 | End  | X          | Hauling Prohibited                                                  |
| 6919-H                                 | FR 6919-H | MP 0.22 | End  | X          | Hauling Prohibited                                                  |
| 6922                                   | FR 6922   | MP 0.00 | End  | P          | All Use Prohibited                                                  |
| 6922                                   | FR 6922   | MP 0.00 | End  | KO         | Keep Open                                                           |
| County Line<br>Lake Pit Rd<br>FR 5134  | Gate      |         |      | R          | Gate shall be closed and locked when operations are not in progress |
| All Unidentified Roads Marked with "X" |           |         |      | X          | Hauling Prohibited, Use for skidding must be approved prior to use. |
| All Unidentified Roads Marked with "P" |           |         |      | P          | All Use Prohibited                                                  |

Contract Name: Badger Stewardship

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CONTRACTKT-FT.2.2.1# - MATERIAL SOURCES (09/2004)

Sources of local materials are designated on Plans and Contract Area Map. Forest Service assumes responsibility for the quality and quantity of material in designated sources. Contractor shall determine the equipment and work required to produce the specified product, including the selection of acceptable material that is reasonably available in the source that meets specifications. The designation of source includes the rights of Contractor to use certain area(s) for plant site, stockpiles, and haul roads.

Should the designated source, due to causes beyond the control of Contractor, contain insufficient acceptable material, Forest Service will provide another source with adjustment in accordance with FT.2.5.3.

When Contractor elects not to use designated sources, Contractor shall furnish the specified product with no adjustment in unit rates. Quality testing shall be the responsibility of Contractor. Test results shall be furnished to Forest Service.

When Contractor elects not to use designated sources and Schedule of Items lists pit development separately, cost allowance will be reduced under FT.2.5.3 when Forest Service determines the work will not be required.

When materials are subject to a weight measurement, the specific gravity or weight/volume relationship used as a basis for determination of estimated quantities shall be:

Source I N/A, Source II N/A, and Source III N/A.

Contractor may, when agreed in writing, use on the project such suitable stone, gravel, and sand, or other material found in the excavation, and will earn a cost allowance for the excavation of such materials at the corresponding contract unit price and for the pay items for which the excavated material is used. Contractor shall replace, without additional cost allowance, sufficient suitable materials to complete the portion of the work, which was originally contemplated to be constructed with such material. Contractor shall not excavate or remove any material, except that which is within the excavation limits, without written authorization from Forest Service.

When material is appraised from non-National Forest designated sources, owner charges for the material in terms of unit cost for royalties, purchase of raw materials, or finished products shall be as follows until N/A:

See Material Source Table.

Should quantity vary from that estimated, payment to owners shall be for units actually obtained. Contractor shall make arrangements with owner(s) for measurement and payment for royalties, purchase of raw materials, or finished products, as shown above.

Materials produced or processed from National Forest lands in excess of the quantities required for performance of this contract are the property of Forest Service, unless prior written agreement has been obtained to use excess material on other National Forest contracts. Forest Service is not obligated to reimburse Contractor for the cost of their production.

Materials shall be stored to assure the preservation of their quality and fitness for the work. Stored materials shall be located to facilitate their prompt inspection. Sites on Forest Service administered land, approved by Forest Service, may be used for storage purposes and for the placing of Contractor's plant equipment. All storage sites provided by Forest Service shall be restored at Contractor's expense.

Contract Name: Badger Stewardship

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Contractor shall be responsible for making arrangements for storage on other than Forest Service administered lands.

When the construction of the portion of the project for which Temporary Roads used for hauling materials is completed, all such Temporary Roads shall be restored as nearly as practicable to their original ground profile, unless otherwise agreed in writing.

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FS-2400-13T (09/04)

WO-KT-FT.2.2.1# - MATERIAL SOURCES. (09/04)

| <b>Material</b> | <b>Type of Purchase</b> | <b>Owner(s)</b>           | <b>Unit of Measure</b> | <b>Unit Price</b> | <b>Estimated Quantity</b> | <b>Total</b> |
|-----------------|-------------------------|---------------------------|------------------------|-------------------|---------------------------|--------------|
| Pitrun          | N/A                     | USFS-County Line Lake Pit | CY                     | N/A               | 140 (182 loose)           | N/A          |
| <3" Pitrun      | N/A                     | USFS-County Line Lake Pit | CY                     | N/A               | 31 (40 loose)             | N/A          |
|                 |                         |                           |                        |                   |                           |              |

Contract Name: Badger Stewardship

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KT-FT.3.1# - ROAD MAINTENANCE REQUIREMENTS (09/2004)

Contractor shall maintain roads in accordance with the following Contract Road Maintenance Requirements Summary:

See Contract Road Maintenance Requirements Summary Table.

Contract Name: Badger Stewardship

FS-2400-13T (9/04)

WO-KT-FT.3.1# - ROAD MAINTENANCE REQUIREMENTS. (09/04)

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**Contract Road Maintenance Requirements Summary**

| Road   | Termini |         | Miles | Applicable Prehaul Road Maintenance Specifications |        |        |        |        |        |        |  |  |
|--------|---------|---------|-------|----------------------------------------------------|--------|--------|--------|--------|--------|--------|--|--|
|        | From    | To      |       | T-8030                                             | T-8130 | T-8310 | T-8340 | T-8350 | T-8360 | T-8620 |  |  |
| 6916   | MP 0.06 | MP 0.28 | 0.22  |                                                    | P      | P      | P      |        | P      |        |  |  |
| 6916-A | MP 0.00 | MP 0.24 | 0.24  |                                                    |        | P      | P      |        | P      |        |  |  |
| 6919   | MP 0.00 | MP 1.24 | 1.24  |                                                    | P      | P      | P      |        | P      | P      |  |  |
| 6919-B | MP 0.00 | MP 0.07 | 0.07  |                                                    | P      | P      | P      |        | P      |        |  |  |
| 6919-C | MP 0.00 | MP 0.24 | 0.24  |                                                    |        | P      | P      |        | P      |        |  |  |
| 6919-H | MP 0.00 | MP 0.22 | 0.22  |                                                    |        | P      | P      |        | P      |        |  |  |

P = Contractor Performance Item, D = Deposit to Forest Service, D3 = Deposit to Third Party

| Road   | Termini |         | Miles | Applicable During Haul Road Maintenance Specifications |        |        |        |        |        |        |  |  |
|--------|---------|---------|-------|--------------------------------------------------------|--------|--------|--------|--------|--------|--------|--|--|
|        | From    | To      |       | T-8030                                                 | T-8130 | T-8310 | T-8340 | T-8350 | T-8360 | T-8620 |  |  |
| 6916   | MP 0.00 | MP 0.28 | 0.28  | P                                                      |        | P      | P      |        | P      |        |  |  |
| 6916-A | MP 0.00 | MP 0.24 | 0.24  | P                                                      |        | P      | P      |        | P      |        |  |  |
| 6919   | MP 0.00 | MP 1.24 | 1.24  | P                                                      |        | P      | P      |        | P      | P      |  |  |
| 6919-B | MP 0.00 | MP 0.07 | 0.07  | P                                                      |        | P      | P      |        | P      |        |  |  |
| 6919-C | MP 0.00 | MP 0.24 | 0.24  | P                                                      |        | P      | P      |        | P      |        |  |  |
| 6919-H | MP 0.00 | MP 0.22 | 0.22  | P                                                      |        | P      | P      |        | P      |        |  |  |
| 5134   |         |         |       |                                                        |        |        |        |        |        | P      |  |  |

P = Contractor Performance Item, D = Deposit to Forest Service, D3 = Deposit to Third Party

| Road   | Termini |         | Miles | Applicable Post Haul Road Maintenance Specifications |        |        |        |        |        |        |  |  |
|--------|---------|---------|-------|------------------------------------------------------|--------|--------|--------|--------|--------|--------|--|--|
|        | From    | To      |       | T-8030                                               | T-8130 | T-8310 | T-8340 | T-8350 | T-8360 | T-8620 |  |  |
| 6916   | MP 0.00 | MP 0.28 | 0.28  |                                                      |        | P      | P      | P      | P      | P      |  |  |
| 6916-A | MP 0.00 | MP 0.24 | 0.24  |                                                      |        | P      | P      | P      | P      |        |  |  |
| 6919   | MP 0.00 | MP 1.24 | 1.24  |                                                      |        | P      | P      | P      | P      | P      |  |  |
| 6919-B | MP 0.00 | MP 0.07 | 0.07  |                                                      |        | P      | P      | P      | P      |        |  |  |
| 6919-C | MP 0.00 | MP 0.24 | 0.24  |                                                      |        | P      | P      | P      | P      |        |  |  |
| 6919-H | MP 0.00 | MP 0.22 | 0.22  |                                                      |        | P      | P      | P      | P      |        |  |  |

P = Contractor Performance Item, D = Deposit to Forest Service, D3 = Deposit to Third Party

KT-GT.2.4# - SITE SPECIFIC SPECIAL PROTECTION MEASURES (09/2004)

Special protection measures needed to protect known areas identified on Sale Area Map or on the ground include:

Cultural Resource Protection Measures: None known at this time.

Wildlife and Botanical Protection Measures: None known at this time.

Cave Resource Protection Measures: None known at this time.

KT-GT.3.1.3# - CUTTING SCHEDULE (06/2009)

Unless changed by written agreement, only 2 (not including Payment Unit 10 - Road ROW) Payment Units may be released for operations at one time, and the sequence of cutting Payment Units shall be : at Contractor's option .

Unless there is agreement in writing to postpone specific requirements, all contractual requirements on a Payment Unit shall be accepted by Forest Service prior to the release of an additional Payment Unit.

KT-GT.3.1.4# - OPERATING RESTRICTIONS (06/2009)

Within Contract Area, unless changed by written agreement, the following operating requirements apply:

Restricted operations/activities:

Within Payment Units 1, 4, 5, 6, 7 and 8 - Harvest Operations are restricted during the period of 3/16 through 7/15 (due to soils and residual stem protection) and during the period of 10/1 through 12/14 (due to soils).

Within Payment Unit 3 - Harvest Operations are restricted during the period of 3/16 through 7/31 (due to soils and protection of residual trees) and during the period of 9/1 through 12/14 (due to soils).

Within Payment Unit 9 - Harvest Operations are restricted during the period of 3/16 through 12/14 (due to soils).

Pit restoration in the County Line Lake Pit will be accomplished no later than the end of each operating season.

Temporary Road entrances associated with Payment Units 5, 6 and 7 along Gogebic County Road 527 shall be completed in compliance with Gogebic County Road Commission Permit #1046. Construction permit expires 10/29/2015.

Prohibited operations/activities:

N/A

Contract Name: Badger Stewardship

SAMPLE

KT-GT.4.1.2 - STUMP MARKS (06/2009)

Trees designated for cutting under CT.3.5 have been marked with paint at breast height and below stump height. Trees shall be felled so as to leave paint on stump.

SAMPLE  
CONTRACT

KT-GT.6.2# - SITE SPECIFIC WETLANDS PROTECTION MEASURES (09/2004)

Measures needed to protect wetlands identified on the Sale Area Map or on the ground include:

All logging slash, equipment, and vehicles are prohibited within these areas. Any slash resulting from the Purchaser's Operations shall be removed immediately or treated as directed by the Forest Service.

KT-GT.6.3# - TEMPORARY ROAD CLOSURE (06/2009)

In addition to GT.6.3, measures to effectively block temporary roads to normal vehicular traffic shall consist of the following:

For the Temporary Road exiting Payment Unit 7, a berm will be placed at an angle of 30 to 45 degrees, relative to the road. Dig a trench, 12 to 18 inches below the surface of the road or trail, and extend it to both sides of the road to prevent runoff from bypassing the berm/waterbar. The uphill end should extend beyond the side ditch of the road and into the earth berm to intercept any ditchflows. The outflow end is to be fully open and extended far enough beyond the edge of the road or trail to safely disperse runoff onto the undisturbed forest floor. When placement of the closure device does not require the berm to function as a waterbar for drainage, the trench will not be required. Height of the berm will be approximately 4 feet. Rocks/boulders, logging slash, cull logs, and stumps may be incorporated into the ridge of earth during construction as long as proper drainage is maintained and the road is completely blocked, unless otherwise agreed in writing. (See Typical Drawing)

For the Temporary exits accessing Payment Units 5 and 6, along CR 527, closure of these exits consists of restoring the ditchline and shoulders of CR 527; beyond the clearing limits of CR 527, Contractor shall restore the road to slope of surrounding terrain and cover with logging slash to obliterate the road.

SAMPLE  
CONTRACT

KT-GT.7# - SLASH DISPOSAL MEASURES (06/2009)

Slash resulting from Contractor's operations shall be removed from lakes, ponds, private land, right-of-way clearings for telephone lines, power lines, pipelines and other authorized facilities, and landings to be seeded under KT-GT.6#.

The tops of trees shall not be left hanging in standing trees. All trees cut for landing and other construction clearings shall be completely severed and not left leaning. Slash resulting from construction clearing shall be treated concurrent with harvest operations.

Other specific slash disposal requirements are as follows:

SDZ - Slash resulting from construction clearing (such as from landings and rights-of-way clearing associated with pre-haul maintenance requirements listed in Special Provision KT-FT.3.1#, and Specified Road construction), shall be lopped and scattered to lie within 3 feet of the ground. All root wads shall be severed from the stem and righted on the ground or otherwise disposed of as directed by the Forest Service concurrent with operations.

SDZ(1) - Within a strip 25 feet in width measured from the forested edge along Gogabic County Road 527 (Payment Units 3, 4, 5, 6, 7, 8 and 9) as shown on the Sale Area Map, all slash resulting from the Purchaser's operations shall be lopped and scattered to lie within 3 feet of the ground, concurrent with operations.

SDZ(2) - Within the Sale Area, except as noted elsewhere in this contract, all debris/slash resulting from the use of slashers/processors or other similar equipment will be removed from landings and roadsides and scattered to lie within 3 feet of the ground or otherwise disposed of as directed by the Forest Service, concurrent with operations.

Slash Disposal treatment zones are shown on the Contract Area Map with symbol "SDZ."

KT-GT.9# - STEWARDSHIP PROJECTS (09/2004)

Performance of stewardship projects shall be in accordance with the following specifications.

Stewardship Projects

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**SAMPLE  
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**Stewardship Projects**

| <b>Mandatory Stewardship Projects</b> |                                                                            |                            |
|---------------------------------------|----------------------------------------------------------------------------|----------------------------|
| <b>Project Number</b>                 | <b>Project Description</b>                                                 | <b>Specification Pages</b> |
| 6-001                                 | Illegal River Ford Closure                                                 | SP-2                       |
| 6-002                                 | Opening Maintenance (Hand Tools, Chainsaws or Motorized Equipment Allowed) | SP-3                       |

| <b>Optional Stewardship Projects</b> |                                                                 |                            |
|--------------------------------------|-----------------------------------------------------------------|----------------------------|
| <b>Project Number</b>                | <b>Project Description</b>                                      | <b>Specification Pages</b> |
| 6-003                                | Long-lived Conifer Tree Release (Hand Tools and Chainsaws Only) | SP-4 and SP-5              |

Contract Name: Badger Stewardship

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KT-HT.2 - FIRE PRECAUTIONS (06/2009)

Unless otherwise agreed in writing between the Contractor and the Contracting Officer, the following are specific precautionary measures applicable during Contractor's Operations in Fire Precautionary Period as indicated in AT.9:

1. Contractor shall maintain Forest Service-approved spark arresting devices on any piece of equipment operated by an internal combustion motor. In addition, each piece of motorized equipment shall be equipped with a serviceable round-pointed shovel and an operational fire extinguisher of at least five-pound rating suitable for the equipment being used. All chainsaw operators will have a serviceable round-pointed shovel and one-pound multipurpose fire extinguisher readily available.
2. Contractor shall require that smoking and the building of lunch or warming fires by Contractor's employees, contractors, or subcontractors be confined to designated safe places where flammable debris has been cleared away and where, at the option of the Contractor, smoking or the building of lunch or warming fires may be permitted.
3. Adequate spark arresters shall be maintained on chimneys or stovepipes where wood or coal is being burned in an enclosed device.
4. Contractor shall furnish serviceable firefighting tools. Location, numbers, and types of tools shall be specified in the Fire Prevention and Control Plan in accordance with HT.1.

KT-IT.2.1.2 - MARKET-RELATED CONTRACT TERM ADDITION (11/2008)

The term of this contract may be adjusted when a drastic reduction in wood product prices has occurred in accordance with 36 CFR 223.52. The Producer Price Index used to determine when a drastic reduction in price has occurred is stated in AT.17. Contractor will be notified whenever the Chief determines that a drastic reduction in wood product prices has occurred. If the drastic reduction criteria specified in 36 CFR 223.52 are met for 2 consecutive calendar quarters, after contract award date, Contracting Officer will add 1 year to the contract term, upon Contractor's written request. For each additional consecutive quarter such a drastic reduction occurs, Contracting Officer will, upon written request, add an additional 3 months to the term during Normal Operating Season, except that no single 3-month addition shall extend the term of the contract by more than one year. Contracting Officer must receive Contractor's written request for a market-related contract term addition before the expiration of this contract.

No more than 3 years shall be added to a contract's term by market-related contract term addition unless the following conditions are met:

- (i) The contract was awarded after December 31, 2006; and
- (ii) A drastic reduction in wood product prices occurred in at least ten of twelve consecutive quarters during the contract term, but not including the quarter in which the contract was awarded.

For each qualifying quarter meeting the criteria in paragraphs (i) and (ii) of this provision, the Forest Service will, upon the Contractor's written request, add an additional 3 months during the normal operating season to the contract, except no single 3-month addition shall extend the term of a contract by more than 1 year.

In no event shall a revised contract term exceed 10 years as a result of market-related contract term addition.

Additional contract time may not be granted for those portions of the contract that have a required completion date or for those portions of the contract where Contracting Officer determines that the timber is in need of urgent removal or that timber deterioration or resource damage may result from delay.

# BADGER STEWARDSHIP ROAD MAINTENANCE REQUIREMENTS

FS-2400-13T Contracts (09/04)

WO-KT-FT.3.1# Special Provisions

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## SECTION 1. GENERAL

Purchaser's main Road Maintenance responsibility begins: (1) after Purchaser performs Prehaul Maintenance on a road listed in the Road Maintenance Requirements Schedule; or (2) for all other roads, when Purchaser begins to use the road. Occasional travel by Purchaser's light vehicles, prior to beginning of construction clearing or logging operations in the area accessed by the road, does not constitute beginning of use. Purchaser is not required to perform routine maintenance during periods of inactivity. During periods of inactivity, Forest Service will perform maintenance only as required to meet its needs.

The Purchaser shall maintain roads, commensurate with the Purchaser's use, in accordance with the Road Maintenance Requirements Summary and Road Maintenance Specifications. Performance of road maintenance work by the Purchaser may be required prior to, during, or after each period of use. The timing of work accomplishment shall be based on the Purchaser's operating schedule under Standard Provision **GT.3.1**.

If the Purchaser elects to use different roads than those listed in the Road Maintenance Requirements Summary, the Contracting Officer (CO) or designee shall determine the Purchaser's commensurate share of road maintenance and/or revise road maintenance deposits.

Unless the CO or designee agrees in writing, all Prehaul Maintenance requirements shall be completed on any portion of road prior to hauling on that portion.

The Forest Service shall prepare a revised Road Maintenance Requirements Schedule to reflect changes in the original haul routes when needed.

Any work or materials that are determined to no longer be needed and are waived shall have the estimated cost charged to the Timber Sale Account as described in **IT.3.3**.

# BADGER STEWARDSHIP ROAD MAINTENANCE REQUIREMENTS

FS-2400-13T Contracts (09/04)

WO-KT-FT.3.1# Special Provisions

SAMPLE  
CONTRACT

## SECTION 2. ROAD MAINTENANCE DEFINITIONS

Wherever the following terms are used in the Road Maintenance Specifications, the meaning shall be:

Base Course. Material placed on the Subgrade to distribute concentrated wheel loads.

Borrow. Select Material taken from designated borrow sites.

Crown, Inslope, and Outslope. The cross slope of the Traveled Way to aid in drainage and traffic maneuverability.

Culverts. A conduit or passageway under a road, trail, or other obstruction. A culvert differs from a bridge in that it is usually entirely below the elevation of the Traveled Way.

Drainage Dip. A dip in the Traveled Way which intercepts surface runoff and diverts the water off the Traveled Way. A Drainage Dip does not block the movement of traffic.

Drainage Structures. Manufactured structures which control the runoff of water from the Roadway including Inslope, overside drains, aprons, flumes, downdrains and downpipes.

During Haul Maintenance. Road maintenance work to be accomplished during the period of timber removal.

Geotextile. A group of construction fabrics with varying attributes designed for different purposes.

Lead-off Ditches. A ditch used to transmit water from a Culvert, Drainage Structure or Drainage Dip outlet to the natural drainage area.

Maintenance Activity. Items of work leading to the restoration and upkeep of a road and necessary to sustain the road's anticipated traffic.

Material. Any substance specified for use in the performance of the work.

Post Haul Maintenance. Road maintenance work to be accomplished after timber removal is completed.

Prehaul Maintenance. Road maintenance work to be accomplished prior to the roads use. Roads receiving prehaul maintenance shall be shown on the Sale Area Map.

Road Maintenance Cost. An estimate of the cost to perform road maintenance activities; as determined by the Forest Service. Estimates may include any or all of the work activities listed in Section 4, Road Maintenance Activity Specifications.

Roadbed. The portion of a road between the intersection of Subgrade and sideslopes, excluding that portion of the ditch below Subgrade.

Roadside. A general term denoting the area adjoining the outer edge of the Roadway.

Roadway. The portion of a road within the limits of excavation and embankment.

# BADGER STEWARDSHIP ROAD MAINTENANCE REQUIREMENTS

FS-2400-13T Contracts (09/04)

WO-KT-FT.3.1# Special Provisions

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**Sand Hole.** A hole that develops in the running surface of the road which is quite soft and dangerous in nature. Usually found in very sandy soils.

**Shoulder.** That portion of Roadway contiguous with Traveled Way for accommodation of stopped vehicles, for emergency use, and lateral support of Base and Surface Course, if any.

**Slide.** A concentrated deposit of materials from above or on backslope extending onto the Traveled Way or Shoulders, whether caused by mass land movements or accumulated ravelling.

**Slough.** Material eroded from the backslope which partially or completely blocks the ditch, but does not encroach on the Traveled Way so as to block passage of traffic.

**Slump.** A localized portion of the Roadbed which has slipped or otherwise become lower than that of the adjacent Roadbed and constitutes a hazard to traffic.

**Subgrade.** Top surface of Roadbed upon which Base Course or Surface Course is constructed. For roads without Base Course or Surface Course, that portion of Roadbed prepared as the finished wearing surface.

**Surface Course.** The Material placed on the Base Course or Subgrade to enhance traction, distribute concentrated wheel loads and resist abrasion and the effects of climate. Surface Course may be referred to as surfacing.

**Traveled Way.** That portion of Roadway, excluding Shoulders, used for the movement of vehicles.

**Turnouts.** That portion of the Traveled Way constructed as additional width on single lane roads to allow for safe passing of vehicles.

## SECTION 3. ROAD MAINTENANCE REQUIREMENTS SCHEDULE

See WO-KT-FT.3.1# Summary Table

## SECTION 4. ROAD MAINTENANCE SPECIFICATIONS

### INCLUDED SPECIFICATIONS

| <u>Specification No.</u> | <u>Specification Title</u>                    |
|--------------------------|-----------------------------------------------|
| T-8030                   | Snow Removal                                  |
| T-8130                   | Spot Surface Course Replacement/Replenishment |
| T-8310                   | Ditch Cleaning                                |
| T-8340                   | Drainage Structure Maintenance                |
| T-8350                   | Roadway Drainage Maintenance                  |
| T-8360                   | Composite High Clearance Road Maintenance     |
| T-8620                   | Miscellaneous Maintenance                     |

# BADGER STEWARDSHIP ROAD MAINTENANCE REQUIREMENTS

FS-2400-13T Contracts (09/04)  
WO-KT-FT.3.1# Special Provisions

SAMPLE  
CONTRACT

T-8030 Snow Removal

## DESCRIPTION

**1.1** This Section provides for removal of snow from roads to facilitate logging operations and safe use. Remove snow from all or part of the traveled way, including sufficient turnouts for safe and efficient use for timber transportation and to protect the road. Remove intruding windfalls, debris or slough and slide material and dispose of only as necessary to provide passage for timber transportation. Removed materials may be deposited off the traveled way or outside the traveled way at locations designated by the Forest Service Representative (FSR). Snow may also be compacted as needed to freeze down soft areas or wet areas. This work is considered part of this specification. Equipment used for this work shall be in accordance with this specification and approved in advance by the FSR.

## EQUIPMENT

- 2.1** Purchaser may use any type of equipment to remove snow, providing:
- Type or use of equipment is not restricted in **KT-FT.1.2#** or Schedule document.
  - Equipment is of the size and type commonly used to remove snow and will not cause damage to the road. Tracked or cledated vehicles shall not be used unless approved in writing by the FSR.
  - The Blade will be equipped with skid shoes to prevent loss of surfacing and damage to the road bed. On gravel and native surface roads, a minimum 4 -inch depth compacted snow mat will be maintained on the roadbed during blading.

## REQUIREMENTS

- 3.1** Erect signs required by the Sign Plan in the SUPPLEMENTAL SPECIFICATIONS or as shown on the Section 3. Road Maintenance Requirements Schedule. Perform work in a manner to preserve and protect roads and appurtenances, and prevent erosion damage to roads, streams, and other forest values.
- 3.2** Space, construct, and maintain drainage holes in the dike of snow or berm caused by snow removal operations. Place drain holes to obtain surface drainage without discharging on erodible fills.
- 3.3** Upon seasonal completion of Purchaser's Operations, effectively block the road by a snow barricade, unless otherwise approved by the Contracting Officer.
- 3.4** Ice control may be performed by Purchaser when approved by the FSR in writing. Such approval will include ice control materials, application rates, and any specific requirements of use.
- 3.5** Snow berms will be reduced at road intersections where plowed road segments join unplowed road segments. Reduce the piled snow in the roadway to create a smooth transition from plowed road to normal snow depth.

# BADGER STEWARDSHIP ROAD MAINTENANCE REQUIREMENTS

FS-2400-13T Contracts (09/04)  
WO-KT-FT.3.1# Special Provisions

SAMPLE  
CONTRACT

## T-8130 Spot Surface Course Placement/Replenishment

### DESCRIPTION

1.1 Spot Surface Course Placement/Replenishment includes Subgrade preparation, furnishing, hauling, spreading and shaping materials in accordance with the requirements.

### MATERIALS

2.1 Surface Course Material will be in accordance with the subsection 3.2 of these specifications. Only commercial sources of aggregate will be accepted, except surfacing material may also be purchased from the government, where available, by filling out a form 2600, paying the required fees, and obtaining a permit.

### REQUIREMENTS

3.1 Subgrade Preparation. Prepare Subgrade to receive Surface Course Material at locations as designated on-the-ground by the Forest Service on roads listed below. Prepare the Subgrade by shaping the Roadbed to approximately the original cross-section and consistent with adjacent sections.

3.2 Furnish, haul and spread Material at locations designated on the ground by the Forest Service (FS). Compact the aggregate by operating spreading and hauling equipment over the full width of each layer of the aggregate, or by other methods as specified below.

| Road Number              | Type Material                     | Finished Compacted Thickness Specified | Total Quantity (Tons or cu.yds.) | Compaction Method |
|--------------------------|-----------------------------------|----------------------------------------|----------------------------------|-------------------|
| 6916<br>(MP 0.16)        | Pit Run Gravel <sup>1/</sup>      | 50'L x 13.5' x 1'D                     | 30 CY (39) <sup>2/</sup>         | See 3.2 Above     |
| 6919<br>(MP 0.00 - 0.01) | Crushed Aggregate <sup>3/</sup>   | As Directed by USFS                    | 15 CY (19.5) <sup>2/</sup>       | See 3.2 Above     |
| 6919<br>(MP 0.01 - 0.05) | 3" Screened Pit Run <sup>4/</sup> | 200'L x 12.5' x 0.33'D                 | 31 CY (40) <sup>2/</sup>         | See 3.2 Above     |
| 6919<br>(MP 0.95 - 0.96) | Local Borrow                      | As Directed by USFS                    | 30 CY                            | See 3.2 Above     |
| 6919-B<br>(MP 0.04)      | Geotextile Fabric <sup>5/</sup>   | 60'L x 15'W                            | 100 SY                           | See 3.2 Above     |
| 6919-B<br>(MP 0.04)      | Pit Run Gravel <sup>1/</sup>      | As Directed by USFS                    | 30 CY (39) <sup>2/</sup>         | See 3.2 Above     |

<sup>1/</sup>County Line Lake Pit (as shown on Contract Area Map)

<sup>2/</sup>Quantity of Material in ( ) = Approximate Loose Volume

<sup>3/</sup>Furnish, haul and place. Must meet M-DOT Designation 22A.

<sup>4/</sup>Screened pitrun which passes through 3" grizzly.

<sup>5/</sup>Furnish, haul and place. Must be equivalent or greater than US 205-8 oz. non-woven geotextile fabric.

3.3 Variations. The Purchaser will be required to furnish weight tickets to the FS for each load of commercially obtained crushed aggregate prior to the final inspection. For aggregate

# BADGER STEWARDSHIP ROAD MAINTENANCE REQUIREMENTS

FS-2400-13T Contracts (09/04)

WO-KT-FT.3.1# Special Provisions

purchased from the government, a count of truck loads will be required in addition to finished depth checks for the placed and compacted aggregate. Widths and lengths will be as staked or from schedule. When it is mutually agreed that all or part of the Surface Course Material is not needed, the estimated cost of surfacing not placed shall be charged to the Timber Sale Account in accordance with IT.3.3.

## T-8310 Ditch Cleaning

### DESCRIPTION

- 1.1 Ditch cleaning is the removal and disposal of all accumulated organic and Slough Material from Roadway ditches to provide a positive draining waterway of uniform width, depth, and grade.

### REQUIREMENTS

- 3.1 Ditch cleaning shall be repeated during sale operations as often as necessary to facilitate proper drainage.
- 3.2 All Slough Material or other debris which might obstruct water flow in the Roadway ditch shall be removed. Material removed from ditches that are not suitable for blending into the existing surface course shall be disposed of in places agreed to in writing by the FSR.
- 3.3 Roadway back slopes shall not be undercut.

## T-8340 Drainage Structure Maintenance

### DESCRIPTION

- 1.1 This work consists of maintaining and/or installation/removal of Drainage Structures and related items such as: inlet and outlet channels, existing riprap, trash racks, necessary geotextiles, pipes, and drop-inlets.

### MATERIALS

- 2.1 All Materials used in the maintenance and/or installation/removal of Drainage Structures shall conform by type and specification to the Material in the structure being maintained or as indicated in the subsection 3.3 below.

### REQUIREMENTS

- 3.1 Drainage Structures and related items shall be cleared of all foreign Material deposited above the bottom of the structure and all vegetative growth which interferes with the water flow. Material removed that cannot be incorporated into maintenance work shall be uniformly placed on fill slopes unless agreed otherwise.
- 3.2 Perform maintenance to insure the proper functioning of the head walls, aprons, inlet assemblies, riprap, trash racks and other facilities related to the Drainage Structure.

# BADGER STEWARDSHIP ROAD MAINTENANCE REQUIREMENTS

FS-2400-13T Contracts (09/04)

## WO-KT-FT.3.1# Special Provisions

**3.3** Install/remove ditches, drainage dips, rock crossings and/or culverts as shown below, and as marked on the ground. Installation of structures shall not begin without the presence of a FSR unless agreed to in writing by the FSR.

SAMPLE  
CONTRACT

| Road Number | Location | Remove/Install | Type of Structure     | Size          | Quantity    |
|-------------|----------|----------------|-----------------------|---------------|-------------|
| 6916        | MP 0.16  | Install        | Culvert <sup>1/</sup> | 15' x 24'     | 1           |
| 6919        | MP 0.96  | Remove/Install | Culvert <sup>1/</sup> | 24' x 30'     | 1           |
| 6919-B      | MP 0.04  | Install        | Hardened Dip          | <sup>2/</sup> | 1           |
| 6919-B      | MP 0.04  | Install        | Offtake Ditch         | As Directed   | As Directed |
| 6919-B      | MP 0.07  | Install        | Offtake Ditch         | As Directed   | As Directed |

<sup>1/</sup> Furnish, haul and place. Smooth-lined, dual-walled, high-density polyethylene drainage pipe

<sup>2/</sup> Per Typical Drawing – Typical Hardened Dip

**3.4** Installation shall be in accordance with construction industry standards and practices.

**3.5** Culverts designated for removal/disposal shall become the property of the Purchaser and shall be disposed of properly.

**3.6** Temporary culverts provided by the USFS shall remain the property of the government.

**3.7** Bridges. Any miscellaneous parts needing repair or replacement during normal use of any bridge during haul shall be considered maintenance. This includes minor items such as object markers, running planks that have loosened or cracked deck boards, or drainage structures which may become plugged. Bridge decks that are dirt and dust covered shall be cleaned to allow for proper drainage and for safety of the user.

## T-8350 Roadway Drainage Maintenance

### DESCRIPTION

**1.1** This work consists of providing Post Haul drainage on roads.

### MATERIALS

**2.1** All Materials used in the maintenance and/or installation/removal of Drainage Structures shall conform by type and specification to the Material in the structure being maintained, or as indicated in subsection **3.3**.

### REQUIREMENTS

**3.1** Upon completion of work, shape the roadway to provide for the removal of surface water. The roadway need not be passable to vehicles (ML-1 roads). Repair and reinstall waterbars, barriers or berms existing prior to the Purchaser's operation. Areas where water is ponded by existing centerline profile sags in through cuts may be left untreated.

**3.2** Any of the following methods are acceptable for use at eroded or rutted locations:

(a) Method A: Outsloping the roadbed at not less than ½ inch per yard of width.

# BADGER STEWARDSHIP ROAD MAINTENANCE REQUIREMENTS

FS-2400-13T Contracts (09/04)

## WO-KT-FT.3.1# Special Provisions

- (b) Method B: Insloping the roadbed at not less than ½ inch per yard of width.
- (c) Method C: Water bar roadbed at locations staked on the ground and constructed as shown on the enclosed detail.
- (d) Method D: Crown the roadbed as shown in the attached detail as the typical section for that length of road.

SAMPLE  
CONTRACT

**3.3** Drainage structures located in roadbed through fills and natural watercourses shall be fully functional without obstructions, including inlet and outlet channel within 20 feet of the structure. (All structures within termini indicated in WO-KT-FT.3.1# Summary Table).

**3.4** Entrance Devices. Upon completion of work, replace entrance devices to effectively eliminate access by motorized vehicles (ML-1).

**3.5** Seed and fertilize all disturbed areas in accordance with requirements set forth in T-8410 Vegetation Establishment.

## T-8360 Composite High Clearance Road Maintenance

### DESCRIPTION

**1.1** This work consists of making limited use roads passable for project use by Purchaser and providing drainage from the traveled way and roadbed.

### MATERIALS

**2.1** Required materials are listed in subsection **3.2**.

### REQUIREMENTS

#### **3.1** Traveled Way

A. Purchaser may smooth or fill existing cross ditches and waterbars and, by agreement, modify existing road junction to enable vehicle access. Prior to beginning haul and resumption of haul after an extended stoppage:

1. Remove brush, fallen trees, rocks, and other debris from traveled way, including turnouts, turnarounds, and other locations that interfere with needed maintenance. No object extending over 4 inches above the road surface shall remain within the 12 feet usable traveled way.
2. Center the usable width of the roadbed or position away from the fill slope.
3. Cut and remove standing or down trees, logs, brush, and limbs from within the 12 feet usable traveled way. Remove encroaching limbs to a height of 14 feet above the traveled way surface. Scatter material not meeting utilization standards outside and below the roadbed on the fill side. Limb and remove designated timber which meets utilization standards or deck at agreed locations.

# BADGER STEWARDSHIP ROAD MAINTENANCE REQUIREMENTS

FS-2400-13T Contracts (09/04)

## WO-KT-FT.3.1# Special Provisions

SAMPLE  
CONTRACT

4. Place all removed material away from drainages and in locations previously agreed to in writing by the FSR.
5. During use, maintain drainage structures including dips, ditches and culverts in a usable condition and surface in a flat, Insloped or Outsloped, or Crowned usable condition, per **Typical Drawing**.

**3.2 Drainage Facilities.** Clean and recondition drainage facilities in accordance with T-8310 Ditch Cleaning and T-8340 Drainage Structure Maintenance. See Table in T-8340 for new structures; maintain all other structures per 3.1, Item 5 above within termini indicated in WO-KT-FT.3.1# Summary Table.

### **3.3 Slough and Slides**

1. Slough and Slides may be left in place provided surface drainage is adequately provided and at least 12 feet of width is available for vehicle passage.
2. Purchaser may reposition or ramp over Slides and Slough when the Traveled Way is

less than 12 feet providing the material is capable of supporting vehicles. Limit Outslope to no more than six percent.

3. Reposition Slough or Slide materials, which are not capable of supporting a vehicle, on the roadbed to provide the 12 feet width. When directed by Forest Service, Slough or Slide material will be removed under Section T-8320 Slide, Slump, and Erosion Repair.

### **3.4 Slumps, Eroded areas, and Washouts**

1. Drain the roadbed immediately upgrade of Slumps and longitudinal cracks to prevent water from entering Slump area.
2. Slumps and longitudinal cracks at the edge of the roadbed shall not be considered a part of the usable width. Usable width may be reduced to ten feet in the area of the Slump.
3. Unless Forest Service agrees to material being placed on Slumps, ramp the Slumps on both ends into undisturbed roadbed to provide at least ten feet usable width. Use removed materials to guide vehicles to the ramp location or to aid in draining the area.
4. Eroded areas/washouts may be filled with suitable material and compacted by operating equipment over the fill area.

### **3.5 Posthaul**

A. At the end of hauling or prior to entering into seasonal shutdowns or a period of extended inactivity:

1. Shape the traveled way and disturbed roadbed to provide functional drainage.
2. Reinstall removed cross ditches and waterbars and provide any additional drainage structures necessary to offset changes caused through use and maintenance.
3. Leave roads useable for high clearance vehicles. Remove or reshape Purchaser modifications at road junctions to leave the entrance as it was before use, or as agreed at the time of improvement.
4. Close all roads which were closed previously, using prior existing methodology.

# BADGER STEWARDSHIP ROAD MAINTENANCE REQUIREMENTS

FS-2400-13T Contracts (09/04)

WO-KT-FT.3.1# Special Provisions

SAMPLE  
CONTRACT

T-8620 Miscellaneous Maintenance

## DESCRIPTION

1.1 Maintenance of miscellaneous structures includes cattle guards, gates (this includes all types of closure devices such as logs, rocks, dirt berms, dirt and slash berms, metal gates, etc), signs, and other similar structures that have been previously installed to insure safe and efficient operation of the road.

## MATERIALS

2.1 Any Materials needed in the maintenance of miscellaneous structures shall be similar in type and quality to the Material in the structure being maintained.

## REQUIREMENTS

3.1 Cattle guards. Loose rails shall be welded or bolted back in place.

Excess Material carried into the cattle guard shall be removed when drainage is blocked or when it reaches six inches from the bottom of the cattle guard frame. Drainage into and from the cattle guard shall be kept open.

3.2 Gates (and other closure devices). Gates shall be kept in good repair and made to swing easily. Hinges or latches shall be repaired if not operating properly. Brush and debris shall be removed from within the swinging radius. Weathered berms or wood piles shall be reconstructed to a height which discourages use and blocks the road.

3.3 Signs. Any signs needing repair or replacement shall be installed per sign placement detail or MUTCD direction. All roads shall have legible sign numbers. ML 3-5 roads shall have horizontal numbering and ML 1-2 roads shall have vertical numbers. The material used shall be as directed by the Forest Service Representative. All new signs must meet retroreflectivity requirements.

| Road Number | Road Name | Location | Remove/Install | Type of Item | Size | Quantity |
|-------------|-----------|----------|----------------|--------------|------|----------|
| 6916        | FR 6916   | 1/       | Install        | Berm         | 2/   | 1        |
| 6919        | FR 6919   | 1/       | Install        | Berm         | 2/   | 1        |
| 5134        | FR 5134   | 3/       | Maintain       | Gate         | N/A  | 1        |
| 6919        | FR 6919   | 3/       | Maintain       | Gate         | N/A  | 1        |

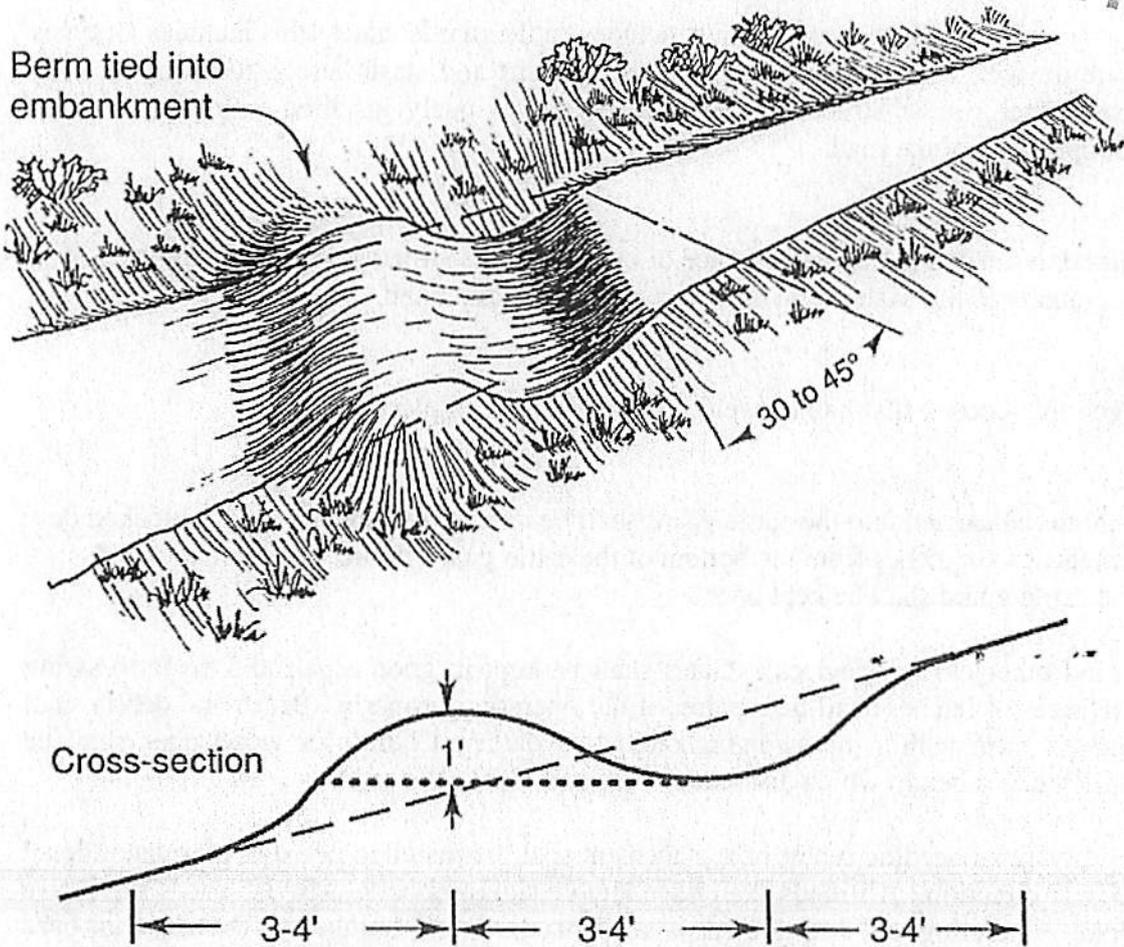
1/ At Location Designated by Forest Service

2/ Per Typical Drawing – Earthen Berms/Road Closure Devices

3/ Shown on Contract Area Map

Earthen Berms/Road Closure Devices (Typical Drawing)

SAMPLE  
CONTRACT



**Earth berm/water bars** are narrow, earthen ridges built across roads or trails. They divert water off and away from roads or trails into vegetated areas before it causes erosion. When properly built, they prevent exposed soil from moving, protecting the area until grass vegetation is firmly established.

As shown in the above drawing, the berm/water bar should be placed at an angle of 30 to 45 degrees, relative to the road, to allow for runoff to drain from the inlet, through the trench, and into the adjacent forest floor or vegetation.

Dig a trench, 12 to 18 inches below the surface of the road or trail, and extend it beyond both sides of the road or trail to prevent runoff from bypassing the water bar. The uphill end of the water bar should extend beyond the side ditch of the road and into an earth-berm to fully intercept any ditch flows. The outflow end of the water bar is to be fully open and extended far enough beyond the edge of the road or trail to safely disperse runoff water onto the undisturbed forest floor. When placement of the closure device does not require the berm to also function as a water bar for drainage, the trench will not be required.

Height of the berm will be approximately 4 feet. Rocks/boulders, logging slash, cull logs, and stumps may be incorporated into the ridge of earth during construction of the berm as long as proper drainage will be maintained and the road is completely blocked; unless otherwise agreed in writing.

BADGER STEWARDSHIP

Supplemental Specifications to Special Provision KT-GT.9# - Stewardship Projects

SAMPLE  
CONTRACT

**PROJECT SPECIFICATIONS INDEX:**

| <b>Project Number</b> | <b>Project Description</b>                                                 | <b>Specification Pages</b> |
|-----------------------|----------------------------------------------------------------------------|----------------------------|
| 6-001                 | Illegal River Ford Closure                                                 | SP-2                       |
| 6-002                 | Opening Maintenance (Hand Tools, Chainsaws or Motorized Equipment Allowed) | SP-3                       |
| 6-003                 | Long-lived Conifer Tree Release (Hand Tools and Chainsaws Only)            | SP-4 and SP-5              |

Supplemental Specifications to Special Provision KT-GT.9# - Stewardship Projects

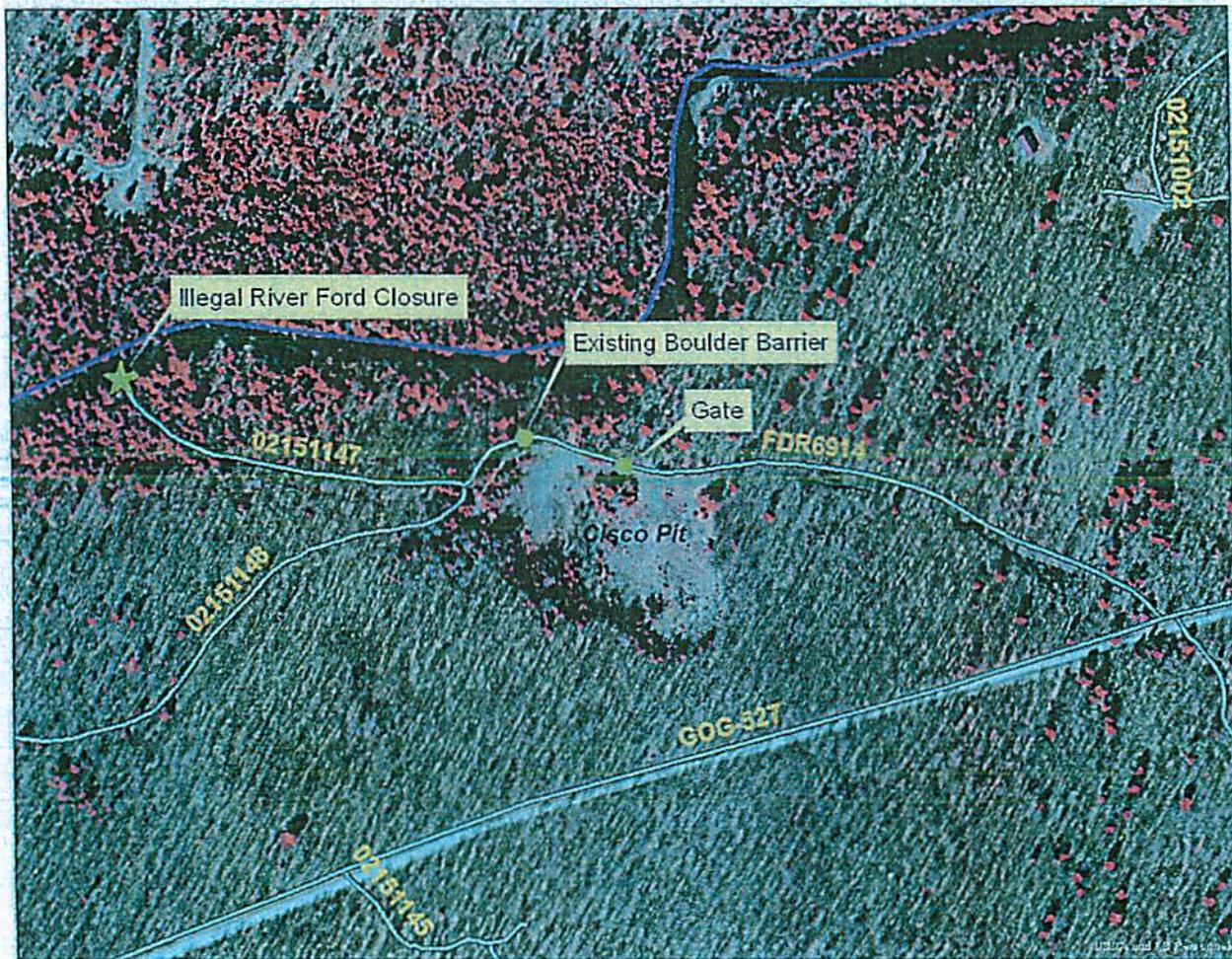
Illegal River Ford Closure (Cisco Branch Ontonagon River Illegal Ford Blockage)

Mandatory Stewardship Project #6-001: Location, T46N R41W, Section 23

SAMPLE  
CONTRACT

Material and Placement Requirements

- Six (6) large boulders (minimum 30-inch diameter) are required to be placed along the top of the river bank at locations designated by Forest Service to block the illegal ATV ford across the Cisco Branch Ontonagon River.
- Boulders shall be machine placed, 30 to 36 inches apart and partially buried
- Boulders may be taken/hailed from the Pit Lake Pit at T45N R40W, Section 25.
- Boulders may come from alternative location(s) if approved and accepted by the Forest Service.
- Access to the site will be from Forest Road 6914.
- Coordination with the Forest Service to provide access through a locked gate will be required.
- Existing boulder barrier between the gate and the illegal ford will need to be removed and replaced in the same location upon ingress and egress.



Wildlife Opening Maintenance

SAMPLE  
CONTRACT

| Project Number <sup>1</sup> | Item                | Unit of Measure | Quantity | Location                             |
|-----------------------------|---------------------|-----------------|----------|--------------------------------------|
| 6-002                       | Opening Maintenance | Acres           | 4 acre   | Opening is between FR 6914 and PU 6. |

<sup>1</sup>/ Contractor is responsible for assessing tree size and felling direction for cost determination.

**Objective:** To reduce encroachment of trees and shrubs within existing wildlife opening by felling and girdling trees and shrubs to improve wildlife habitat.

**Specifications:**

1. The boundary is marked on the ground by TRIPLE Slash PINK Painted Boundary facing in to the treatment area.
2. Do not cut any shrubs or trees within 10 feet of and perpendicular to gate (at end of FR 6914) in order to retain existing shrubs as barrier on each side of gate.
3. Maintenance activities may be accomplished by use of hand tools (approximately 20% expected on slopes and around boulders) or heavy equipment maybe used as long as the ground is dry to ensure protection of soils.
4. **Seasonal Restrictions: No cutting from May 1 – September 15** to protect Sensitive Species and to avoid spreading of invasive species (spotted knapweed).
5. Cut all shrubs and trees EXCEPT white pine, hemlock. Avoid felling of cut trees on leave species.

**Felling & Girdling:**

6. Girdle all hardwood trees, except aspen, greater than 8” DBH (diameter at 4.5 feet from the high side of the stump): girdling is defined as 2 horizontal cuts (chainsaw kerf width) a minimum of 2” apart, with depth of cuts defined as through the bark and cambium only (so as not to weaken the bole).
7. In order to prevent re-sprouting of aspen, do not girdle or cut the largest aspen trees (> 8 dbh); girdle any smaller aspen using criteria in #6. For smallest aspen seedlings (1” – 3”): cut seedlings at such an angle from one side as to leave approximately 1-2 inches of bark with enough wood to create a “hinge” at 12 – 16 inches from ground level when practical and try not to completely sever stem to prevent re-sprouting.
8. Fell all other trees (except white pine and hemlock) within the treatment area regardless of diameter. Fell (completely sever from stump) and pile spruce/fir species on top of each other to create large brush piles to the extent practical. Spruce/balsam fir >10” DBH may be girdled and not felled.
9. Stump heights: for trees > 10” DBH stump heights shall not exceed 16 inches; and for trees and shrubs <10” DBH stump heights shall not exceed 6 inches. All stumps must be cut horizontal to the ground (no sharp stubs).

Wildlife Habitat Project – Long Lived Conifer Release

SAMPLE  
CONTRACT

| Project Number <sup>1</sup> | Item             | Unit of Measure | Quantity | Felling Location                                                                                                    |
|-----------------------------|------------------|-----------------|----------|---------------------------------------------------------------------------------------------------------------------|
| 6-003                       | Fell/Girdle Tree | Acres           | 16 acres | (16 acre) is adjacent to the north-eastern boundary of PU 6 (along FR 694) and Co. Rd. 527 is the Eastern Boundary. |

<sup>1/</sup> Location of Project Work will be within designated area, see Contract Area Map. Contractor is responsible for assessing tree size and felling direction for cost determination. Most tree species to release are hemlock with few cedars. GPS locations of trees to release available upon request (an estimated 92 trees for release). Trees to release are scattered throughout stand as individuals and in clumps of multiple trees.

**Objective:** Improve wildlife habitat and ecosystem diversity by releasing long-lived conifer trees (hemlock, cedar or white pine) from competition; thereby, promoting growth and survival as a seed source to propagate other conifers.

1. Boundary of unit designated by a painted TRIPLE PINK-SLASH and single stump mark; except for Co. Road 527 that is the East boundary.
2. Trees designated to “fall” are located within unit (16 acre) and is adjacent to the North-Eastern boundary of PU 6 and West of Co Road 527.
3. Within a 25 feet buffer of Co Road 527 boundaries: all slash must be lopped and scattered to lie within 24 inches of ground to ensure visual quality; use directional felling to fell trees away from this buffer and road.
4. Only hand tools (includes chainsaws) may be used.
5. Trees may need to be limbed and/or bucked so the bole of tree lies in a horizontal resting position where all portions of the bole lie within two feet of the ground.
6. Trees shall be felled away (where possible) from long-lived conifer trees (defined as hemlock, cedar, pine) which may be located adjacent to the felled tree. Felling shall be done in a manner to avoid unnecessary damage to live or dead standing trees  $\geq 5.0$ ” dbh and to comply with **Contract Provision GT.3.2 – Protection of Residual Trees**. If the Contractor can safely fell the tree without causing excessive damage then they may do so, otherwise, girdling is an option using 2 horizontal cuts (chainsaw kerf width) a minimum of 2” apart, with depth of cuts defined as through the bark and cambium only (so as not to weaken the bole).
7. Preference is to girdle trees instead of felling when they are larger, preferable greater than 12” if contractor can do so safely, applying above #6 girdle methods.
8. Stumps shall not exceed 14” in height for sawtimber-sized trees (12.0”+ dbh) or 10” in height for pulpwood-sized trees and smaller ( $\leq 11.99$ ” dbh). The bole of the tree shall be completely severed from the stump.
9. All portions of felled trees (limbs and bucked sections) must be left where they fall but may be pushed aside if necessary to fell other trees.

Wildlife Habitat Project – Long Lived Conifer Release

SAMPLE  
CONTRACT

**Selection Criteria for Trees to Be Felled (the Contractor will select the cut trees based on these criteria, trees will not be designated with paint):**

- 1) **Determine the residual trees to release.** "Release trees" should appear healthy and exhibit physical attributes that would indicate long-term, normal function for decades. Release trees will be flagged by the contractor and will require approval from the Forest Service prior to any cutting. Contractor is expected to successfully locate and flag 90% of the hemlock, cedar and pine that need to be released.
- 2) **Individual Tree Release**
  - a) Within a 20 foot radius around each "release tree", all trees greater than 5.0" DBH shall be cut except hemlock, pine, cedar, yellow birch, black cherry, ironwood and spruce. This radius is measured from the face of the released tree at 4.5 feet above the ground.
  - b) Annuals such as grasses, sedges, ferns, etc. are not required to be cut.
  - c) The cut tree shall not be on top of, or otherwise positioned, to impede the growth or form of the trees being released (See #7 on previous pages for girdling).
  - d) **DO NOT CUT ANY TREES GREATER THAN 20" DBH.**

**BADGER STEWARDSHIP TIMBER SALE  
SPECIFIED ROAD SCHEDULE OF ITEMS**

**SAMPLE  
CONTRACT**

| Item Number | Item Description & Milepost                                                                                                                                                                                                                            | C or R <sup>1</sup> | Unit & M of M <sup>2</sup> | Quantity | Road Std. (W,D,S) <sup>3</sup> | Unit Allowance | Estimated Allowance |
|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|----------------------------|----------|--------------------------------|----------------|---------------------|
|             | <b>FR 6916</b>                                                                                                                                                                                                                                         | <b>R</b>            |                            |          |                                | DATE:          | 8/1/2013            |
|             | <b>M.P. 0.00 - 0.06</b>                                                                                                                                                                                                                                |                     |                            |          | <b>D</b>                       |                |                     |
| 249(02)     | Composite Road Construction work includes clear, grub, and shape road. Right ditch to be installed and shaped, upon completion of local borrow excavation and pipe installation, to promote drainage. Excavated material to be incorporated into road. |                     | LS<br>LSQ                  | 1        |                                | 450            | \$ 450.00           |
| 204(01)     | Clear and excavate 50 CY local borrow from right to widen entrance radius right and incorporate into road at milepost 0.01.                                                                                                                            |                     | CY<br>DQ                   | 50       |                                | 5              | \$ 250.00           |
| 204(52)     | Unclassified borrow. Work includes hauling and placing 30 C.Y. (39 C.Y. loose) pit run borrow, from County Line Lake Pit, at entrance milepost 0.0-0.02 Place in lift (90'L x 13.5'W x 0.67'D).                                                        |                     | CY<br>DQ                   | 30       |                                | 12             | \$ 360.00           |
| 301(03)     | Untreated Aggregate Courses. Work includes furnishing, hauling and placing 15 C.Y. of crushed aggregate surfacing onto entrance. (19.5 loose material)                                                                                                 |                     | CY<br>DQ                   | 15       |                                | 25             | \$ 375.00           |
| 203(04)     | Removal of Culvert at M.P. 0.04. Remove and dispose of culvert off of government land.                                                                                                                                                                 |                     | EA<br>AQ                   | 1        |                                | 250            | \$ 250.00           |
| 249(03)     | Composite Road Construction Work includes preparing and lowering bed 6" at milepost 0.04.                                                                                                                                                              |                     | LS<br>LSQ                  | 1        |                                | 150            | \$ 150.00           |
| 602 74      | Furnish and install 24" x 30' High Density Polyethylene drainage pipe.                                                                                                                                                                                 |                     | LF<br>AQ                   | 30       |                                | 26             | \$ 780.00           |
| 204(01)     | Excavate 50 CY local borrow from right and place into travel way over/near pipe.                                                                                                                                                                       |                     | CY<br>DQ                   | 50       |                                | 5              | \$ 250.00           |
| 204(01)     | Ditch to be excavated and installed from existing seasonal drainage to culvert inlet. Excavated material to be incorporated into road.                                                                                                                 |                     | LS<br>LSQ                  | 1        |                                | 100            | \$ 100.00           |
| 207(04)     | Place Geotextile fabric (100' long x 15' wide) as subgrade stabilizer under pit run borrow at milepost 0.04-0.06.                                                                                                                                      |                     | SY                         | 167      |                                | 2.5            | \$ 417.50           |
| 204(52)     | Unclassified borrow. Work includes hauling and placing 50 C.Y. (65 C.Y. loose) pit run borrow milepost 0.03-0.06 from County Line Lake Pit. (150'L x 13'W x 0.67'D)                                                                                    |                     | CY<br>DQ                   | 50       |                                | 12             | \$ 600.00           |
| 157 02      | Soil Erosion control, silt fence. Work includes furnishing and installing as directed by the Forest Service.                                                                                                                                           |                     | FT<br>DQ                   | 100      |                                | 3              | \$ 300.00           |

<sup>1</sup>C = Construction, R = Reconstruction

<sup>2</sup>Method of Measure

<sup>3</sup>W = Winter, D = Dry Summer, S = Summer

**BADGER STEWARDSHIP TIMBER SALE  
SPECIFIED ROAD SCHEDULE OF ITEMS**

**SAMPLE  
CONTRACT**

| Item Number | Item Description & Milepost                                                                                                                                           | C or R <sup>1</sup> | Unit & M of M <sup>2</sup> | Quantity | Road Std. (W,D,S) <sup>3</sup> | Unit Allowance | Estimated Allowance |
|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|----------------------------|----------|--------------------------------|----------------|---------------------|
|             | <b>FR 6916 (CONT.)</b>                                                                                                                                                |                     |                            |          |                                |                |                     |
| 251 01      | Machine placed riprap class III. Work includes furnishing and placing riprap over geotextile fabric to armor ditch and pipe inlet, in accordance with typical detail. |                     | CY<br>DQ                   | 10       |                                | 60             | \$ 600.00           |
| 207(04)     | Place Geotextile fabric, under riprap material used to armor ditch and pipe inlet. Cut and installed as directed by the Forest Service. (17.5'L x 15'W)               |                     | SY                         | 30       |                                | 2.5            | \$ 75.00            |
|             | <b>FR6916 SPECIFIED ROAD TOTAL</b>                                                                                                                                    |                     |                            |          |                                |                | <b>\$ 4,882.50</b>  |
|             | <b>FR 6919</b>                                                                                                                                                        | <b>R</b>            |                            |          |                                |                |                     |
|             | <b>M.P. 0.05</b>                                                                                                                                                      |                     |                            |          | <b>W/D</b>                     |                |                     |
| 203(04)     | Removal of structures. Work includes removing gate and disposing off of Government property.                                                                          |                     | LS<br>LSQ                  | 1        |                                | 250            | \$ 250.00           |
| 650 (01)    | Road closure device. Furnish and Install 3' x 20' Forest Service Steel Gate (SEE TYPICAL DRAWINGS FOR CONSTRUCTION and INSTALLTION REQUIREMENTS)                      |                     | EA<br>AQ                   | 1        |                                | 1,500          | \$ 1,500.00         |
|             | <b>FR 6919 Total Specified Road</b>                                                                                                                                   |                     |                            |          |                                |                | <b>\$ 1,750.00</b>  |
|             | <b>Grand Total Badger Stewardship Specified Road Schedule of Items</b>                                                                                                |                     |                            |          |                                |                | <b>\$ 6,632.50</b>  |

<sup>1</sup>C = Construction, R = Reconstruction

<sup>2</sup>Method of Measure

<sup>3</sup>W = Winter, D = Dry Summer, S = Summer

**BADGER STEWARDSHIP TIMBER SALE**

**SPECIFIED ROAD NOTES**

**SAMPLE  
CONTRACT**

- NOTE:** All finished roadbeds shall be 12' as shown in the typical details for crowned roads with no ditches, 1' ditches and out sloped roads.
- NOTE:** In the narrative compacted and loose volumes are noted with loose volumes in parenthesis
- NOTE:** There may be underground utility lines in unknown locations on this project. Call MISS DIG THREE full working days before any work begins. Phone 1-800-482-7171
- NOTE:** Reconstructed roads have areas that need shaping to allow for cross drainage. When working in locations with high rock content shaping may have to be reduced due to lack of available soil/surface conditions.
- NOTE:** High Density Polyethylene drainage pipe shall have a smooth interior and meet the requirements stated in Supplemental Specification section 602. Minimum cover over HDPE culverts shall be 1.5 feet as shown in the typical detail.
- NOTE:** There is 80 C.Y. of pitrun borrow/surfacing material required for lifts over culverts and spot surfacing of road beds. This volume plus the normal compaction factor of 130% for pitrun surfacing computes to a loose volume of 104 C.Y. This material may be taken from the County Line Lake Pit which is located at T45N, R40W, Section 2. Some pit development may be required and is considered incidental to associated items.
- NOTE:** There is 15 C.Y. (19.5 C.Y. loose material) of crushed aggregate surfacing to be placed at the entrances of the project area. There is no government source available for this project. Purchaser furnished material shall meet gradation requirements for the Michigan Department of State Highway Transportation-Designation 22A. Compact the aggregate by operating spreading and hauling equipment over the full width.
- NOTE:** During borrow hauling operations "Trucks Hauling" signs shall be placed on County Road 527. Hauling shall not commence until all signs have been put in place as directed by the Forest Service.
- NOTE:** Winter standard typical roads shall be built to minimize soil disturbance and potential erosion, and allow for proper cross drainage.
- NOTE:** During clear and grub operations all slash resulting from purchasers operation shall be treated as per KT-GT.7#.

**SAMPLE  
CONTRACT**

**Standard Specifications for Construction of Roads & Bridges on Federal Highway Projects**

## Specification List

**Project Name BADGER STEWARDSHIP TIMBER SALE**

**Date Prepared 8/5/13**

| Road Number     |                                        | FR 6916<br>FR 6919 | FR 6916                        | FR 6919 |                              |
|-----------------|----------------------------------------|--------------------|--------------------------------|---------|------------------------------|
| Road Name       |                                        |                    | Termini.....                   |         |                              |
|                 |                                        |                    | Construction<br>Reconstruction | 0.06    | 0.01                         |
| Spec.<br>No.    | Title                                  |                    |                                |         | Latest<br>Revised<br>Edition |
| 101 thru<br>109 | General Requirements                   |                    | X                              | X       | 2003                         |
| 157             | Soil Erosion Control                   |                    | X                              |         | 2003                         |
| 203             | Removal of Structures and Obstructions |                    | X                              |         | 2003                         |
| 204             | Excavation and Embankment              |                    | X                              |         | 2003                         |
| 207             | Earthwork Geotextiles                  |                    | X                              |         | 2003                         |
| 249             | Composite Road Construction            |                    | X                              |         | 2003                         |
| 251             | Riprap                                 |                    | X                              |         | 2003                         |
| 301             | Untreated Aggregate Courses            |                    | X                              |         | 2003                         |
| 602             | Culverts and Drains                    |                    | X                              |         | 2003                         |
| 650             | Road Closure Device                    |                    |                                | X       | 2003                         |

**NOTE: The Forest Service, US Department of Agriculture has adopted FP-03 for construction of National Forest System Roads.**

**BADGER STEWARDSHIP TIMBER SALE**

**SUPPLEMENTAL SPECIFICATIONS**

**SAMPLE  
CONTRACT**

Section 101-109 General Requirements

Section 157 Soil Erosion Control

Section 203 Removal of Structures and Obstructions

Section 204 Excavation of Embankment

Section 249 Composite Road Construction

Section 251 Riprap

Section 301 Aggregate Courses

Section 602 Culverts and Drains

Section 650 Road Closure Device

**SUPPLEMENTAL SPECIFICATION**

**PREFACE**

**SAMPLE  
CONTRACT**

Delete all but the first paragraph and add the following:

The Forest Service, US Department of Agriculture has adopted FP-03 for construction of National Forest System Roads.

**SUPPLEMENTAL SPECIFICATION**

**Section 101 – TERMS, FORMAT, AND DEFINITIONS**

**101.01 Meaning of Terms.**

Add the following:

Delete all references in FP-03 to Transportation Acquisition Regulations (TAR). For Timber Sales, delete all references in FP-03 to Federal Acquisition Regulations (FAR).

**101.03 Abbreviations.**

Add the following to (a) Acronyms:

|       |                                                       |
|-------|-------------------------------------------------------|
| AFPA  | American Forest and Paper Association                 |
| MSHA  | Mine Safety and Health Administration                 |
| NIST  | <u>National Institute of Standards and Technology</u> |
| NESC  | National Electrical Safety Code                       |
| WCLIB | West Coast Lumber Inspection Bureau                   |

Add the following to (b) SI Symbols:

|     |                  |
|-----|------------------|
| mp  | Milepost         |
| ppm | Part Per Million |

**SAMPLE  
CONTRACT**

**101.04 Definitions.**

Delete the following definitions and substitute the following:

**Bid Schedule--The Schedule of Items.**

**Bridge--No definition.**

**Contractor--The individual or legal entity contracting with the Government for performance of prescribed work. In a timber sale contract, the contractor is the "purchaser".**

**Culvert--No definition.**

**Right-of-Way--A general term denoting (1) the privilege to pass over land in some particular line (including easement, lease, permit, or license to occupy, use, or traverse public or private lands), or (2) Real property necessary for the project, including roadway, buffer areas, access, and drainage areas.**

Add the following:

**Adjustment in Contract Price--"Equitable adjustment," as used in the Federal Acquisition Regulations, or "construction cost adjustment," as used in the Timber Sale Contract, as applicable.**

**Change--"Change" means "change order" as used in the Federal Acquisition Regulations, or "design change" as used in the Timber Sale Contract.**

**Design Quantity-- "Design quantity" is a Forest Service method of measurement from the FS-96 *Forest Service Specifications for the Construction of Roads and Bridges*. Under these FP specifications this term is replaced by the term "Contract Quantities".**

**Forest Service--The United States of America, acting through the Forest Service, U.S. Department of Agriculture.**

**Neat Line--A line defining the proposed or specified limits of an excavation or structure.**

**Pioneer Road--Temporary construction access built along the route of the project.**

**Purchaser--The individual, partnership, joint venture, or corporation contracting with the Government under the terms of a Timber Sale Contract and acting independently or through agents, employees, or subcontractors.**

**Protected Stream course--A drainage shown on the plans or timber sale area map that requires designated mitigation measures.**

**Road Order--An order affecting and controlling traffic on roads under Forest Service jurisdiction. Road Orders are issued by a designated Forest Officer under the authorities of 36 CFR, part 260.**

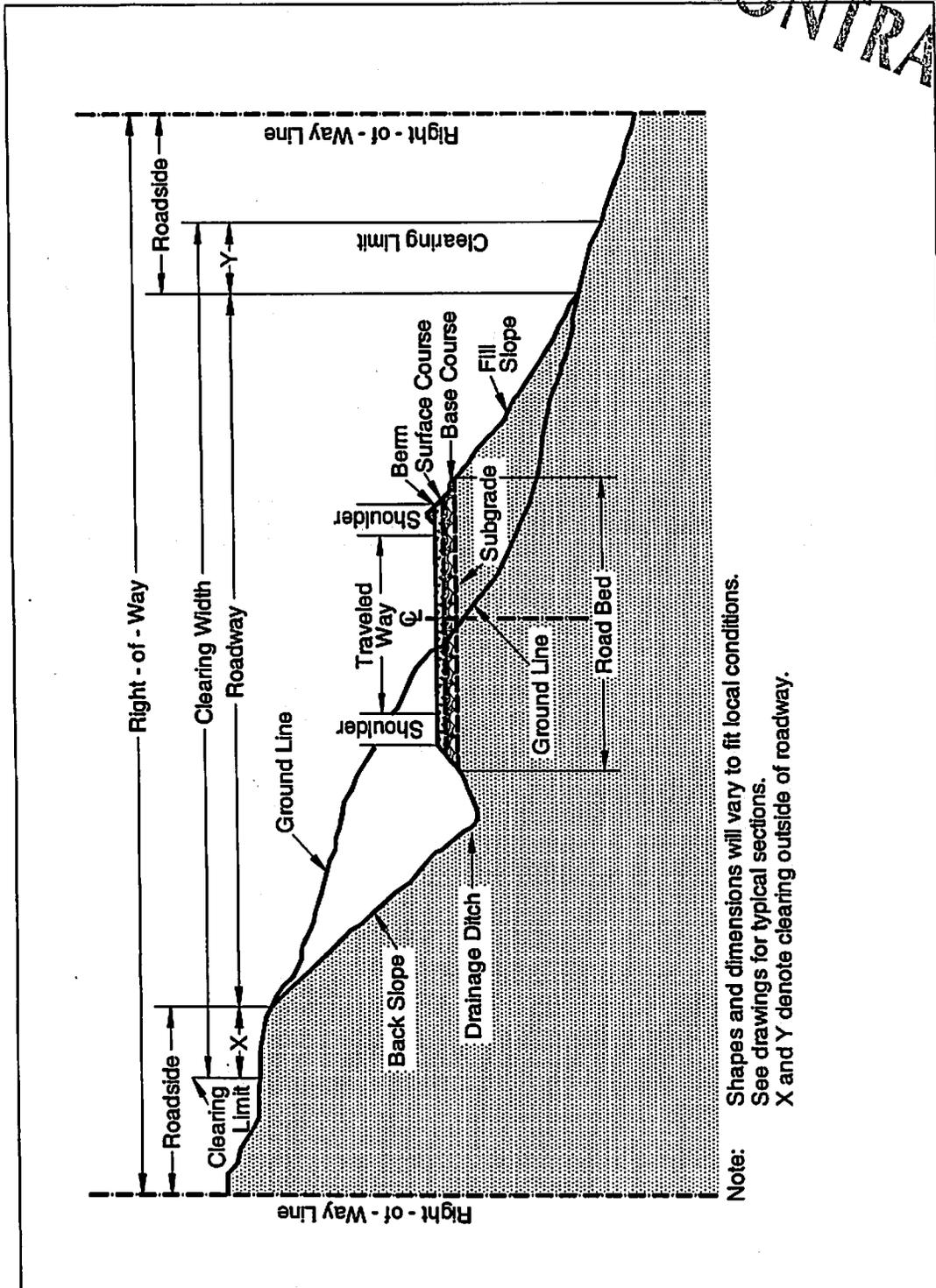
**Schedule of Items--A schedule in the contract that contains a listing and description of construction items, quantities, units of measure, unit price, and amount.**

**Utilization Standards--The minimum size and percent soundness of trees described in the specifications to determine merchantable timber.**

**Add Figure 101-1—Illustration of road structure terms:**

Figure 101-1—Illustration of road structure terms.

SAMPLE  
CONTRACT



Note: Shapes and dimensions will vary to fit local conditions. See drawings for typical sections. X and Y denote clearing outside of roadway.

**SAMPLE  
CONTRACT**

**SUPPLEMENTAL SPECIFICATION**

**Section 102 – BID, AWARD, AND EXECUTION OF CONTRACT**

**102 Delete**

Delete Section 102 in its entirety.

**SUPPLEMENTAL SPECIFICATION**

**Section 103 – SCOPE OF WORK**

**103 Delete**

Delete all but subsection 103.01 Intent of Contract.

**SUPPLEMENTAL SPECIFICATION**

**Section 105- CONTROL OF MATERIAL**

**105.02 Material Sources.**

**105.02(a) Government Provided Sources.**

Add the following:

Comply with the requirements of 30 CFR 56, subparts B and H. Use all suitable material for aggregate regardless of size unless otherwise designated. When required, re-establish vegetation in disturbed areas according to section 625.

Government-provided optional sources for this project are identified as follows:

Material is available for use as (Borrow/pitrun surfacing material) as needed for the project from County Line Lake Pit, T45N, R40W, Sec2.

There is no charge for material taken from these pits for use on this project.

**105.05 Use of Material Found in the Work.**

Delete 105.05 (a) and (b) and the last sentence of the second paragraph and substitute the following:

Materials produced or processed from Government lands in excess of the quantities required for performance of this contract are the property of the Government. The Government is not obligated to make reimbursement for the cost of producing these materials.

**SAMPLE  
CONTRACT**

**SUPPLEMENTAL SPECIFICATION**

**Section 106- ACCEPTANCE OF WORK**

**106.07 Partial and Final Acceptance.**

Delete subsection 106.07

**SUPPLEMENTAL SPECIFICATION**

**Section 107- LEGAL RELATIONS AND RESPONSIBILITY TO THE PUBLIC**

**107.05 Responsibility for Damage Claims.**

Delete the entire subsection.

**107.09 Legal Relationship of the Parties.**

Delete the entire subsection.

**SUPPLEMENTAL SPECIFICATION**

**Section 108- PROSECUTION AND PROGRESS**

Delete Section 108 in its entirety.

**SUPPLEMENTAL SPECIFICATION**

**Section 109- MEASUREMENT AND PAYMENT**

**109.02 Measurement Terms and Definitions**

Add: One of the following methods of measurement for determining final payment is DESIGNATED on the SCHEDULE OF ITEMS for each pay item:

**SAMPLE  
CONTRACT**

(a) Designated Quantities (DQ). These quantities denote the final number of units to be paid for under the terms of the contract. They are based upon the original design data available prior to advertising the project. Original design data include the preliminary survey information, design assumptions, calculations, drawings, and the presentation in the contract. Changes in the number of units SHOWN in the SCHEDULE OF ITEMS may be authorized under any of the following conditions:

- (1) As a result of changes in the work authorized by the Contracting Officer.
- (2) As a result of the Contracting Officer determining that errors exist in the original design that cause a pay item quantity to change by 15 percent or more.
- (3) As a result of the contractor submitting to the Contracting Officer a written request showing evidence of errors in the original design that cause a pay item quantity to change by 15 percent or more. The evidence must be verifiable and consist of calculations, drawings, or other data that show how the designated quantity is believed to be in error.

(b) Staked Quantities (SQ). These quantities are determined from staked measurements prior to construction.

(c) Actual Quantities (AQ). These quantities are determined from measurements of completed work.

(d) Vehicle Quantities (VO). These quantities are measured or weighed in hauling vehicles.

(e) Lump Sum Quantities (LSQ). These quantities denote one complete unit of work as required by or described in the contract, including necessary materials, equipment, and labor to complete the job. They will not be measured.

**Quantity Measurements.** The Forest Service shall make all measurements for computation of quantities for all work items except those specified for payment by Design Quantity (DQ). The Engineer shall compute the quantities for periodic payments and for final payment.

The Contractor shall certify in writing at the completion of contract work, that the quality of construction conforms to the drawings, specifications, and requirements of the Contract.

SAMPLE  
CONTRACT

**109 Deletions**

Delete the following entire subsections:

- 109.06 Pricing of Adjustments.**
- 109.07 Eliminated Work.**
- 109.08 Progress Payments.**
- 109.09 Final Payment.**

**SUPPLEMENTAL SPECIFICATION**

**Section 157. - SOIL EROSION CONTROL**

**157.03 General**

(a) Add the following:

Prior to the start of construction, submit a written plan that provides permanent and temporary erosion control measures to minimize erosion and sedimentation during and after construction. Do not begin work until the necessary controls for that particular phase of work have been implemented.

**157.16**

Delete (a), (b), & (c).

Replace with:

- (a) 50 percent of the contract quantity at the unit bid price will be paid upon installation.
- (b) Payment of the remaining contract quantity at the unit bid price will be paid at completion and acceptance of the contract.

**SUPPLEMENTAL SPECIFICATION**

**Section 203 – REMOVAL OF STRUCTURES AND OBSTRUCTIONS**

**203.01 Work.**

Delete and replace with the following:

This work consists of disposing of clearing slash, salvaging, removing, and disposing of buildings, fences, structures, pavements, culverts, utilities, curbs, sidewalks, and other obstructions.

**203.05 Disposing of Material.**

(a) **Remove from project.** Delete second and third sentence. Add: Culverts shall be removed from the project and disposed of off Government land.

SAMPLE  
CONTRACT

Add the following disposal method:

(f) **Scattering.** Scatter construction slash outside the clearing limits without damaging trees. Limb all logs. Stumps shall be severed from all trees, and set in an upright position with their root masses resting on the ground. Place logs and stumps away from trees, positioned so that they will not roll, and are not on top of one another. Limb and scatter other construction slash to a maximum height of 3-feet.

## SUPPLEMENTAL SPECIFICATION

### Section 204-EXCAVATION AND EMBANKMENT

#### **204.05 Conserved Topsoil.**

Delete the subsection.

#### **204.09 Preparing Foundation for Embankment Construction.**

Delete subsection (a) and replace it with the following:

(a) **Embankment less than 4 feet high over natural ground.** When designated, remove topsoil and break up the ground surface to a minimum depth of 6 inches by plowing or scarifying. Compact the ground surface according to Subsection 204.11.

#### **204.10 Embankment Construction.**

Add the following:

When an embankment is to be placed across swampy ground and removal of unsuitable material or subgrade treatment is not required, the lower part of the embankment shall be constructed in a single layer to the minimum depth necessary to support construction equipment.

#### **(c) Individual rock fragments and boulders.**

Add the following:

(5) Such rocks and boulders shall be at least 6 inches below subgrade.

#### **204.11 Compaction.**

Add the following:

All embankments shall be placed and compacted by one or more of the following methods as SHOWN ON THE DRAWINGS and listed in the SCHEDULE OF ITEMS.

SAMPLE  
CONTRACT

Add the following compaction method:

**(d) Layer Placement Method (Hauling and Spreading Equipment).** Place material by end dumping to the minimum depth needed for operation of spreading equipment. Level and smooth each embankment layer before placing the next layers. Operate hauling and spreading equipment uniformly over the full width of each layer. Construct a solid embankment with adequate compaction by working smaller rock and fines in with the larger rocks to fill the voids, and by operating hauling and spreading equipment uniformly over the full width of each layer as the embankment is constructed.

**(e) Layer Placement Method (Roller Compaction).** Place material by end dumping to the minimum depth needed for operation of spreading equipment. Adjust the moisture content of the material to obtain a mass that will not visibly deflect under the load of the hauling and spreading equipment. Operate compaction equipment over the full width of each layer until visible deformation of the layer ceases or, in when a sheepsfoot roller is used, the roller "walks out" of the layer. Make at least three complete passes.

#### **204.13 Sloping, Shaping, and Finishing.**

##### **(a) Sloping.**

Add the following:

Slope rounding is not required on tolerance class D though M roads.

##### **(c) Shaping.**

Add the following:

When excavation is measured on a station basis, excavating, placing of embankment, and shaping and compacting the roadway template shall include only those areas where cuts and fills are generally less than five feet in depth as measured from the finished shoulder grade to the top of the adjacent cut or toe of fill. These areas of station grading shall consist of light dozing or grading of such character that the excavation from backslopes, ditches, and roadbed shall be used in shaping the subgrade, shoulders, and adjacent fills.

When excavation is measured by the station (station grading) as designated in the SCHEDULE OF ITEMS, turnouts, side entrances, approaches, radii and T-turnarounds shall not be measured separately, but will be included as part of the station measurement along the construction centerline.

SAMPLE  
 CONTRACT

This work shall include all necessary scarifying, dozing, disking, moving, shaping, and compacting to develop the cross-sections SHOWN ON THE DRAWINGS. Loading and hauling will not be included or required in the work.

Compaction of the subgrade shall be accomplished with the construction and hauling equipment.

**Delete section (d) and add the following:**

**(d) Finishing.** For surfaced roads, remove all material larger than 6 inches from the top 6 inches of the roadbed. For all roads, finish the roadbed to be smooth and uniform, and shaped to conform to the typical sections. Remove unsuitable material from the roadbed and replace it with suitable material. Finish roadbeds to the tolerance class shown in table 204-2.

Ensure that the subgrade for both surfaced and unsurfaced roads is visibly moist during shaping and dressing. Bring low sections, holes, cracks, or depressions to grade with suitable material. Maintain proper ditch drainage.

For unsurfaced roads, use one of the following methods to finish the roadbed

- (1) Method A. Remove all material larger than 6 inches from the top 6 inches of the roadbed and replace with suitable material.
- (2) Method B. Use a vibratory grid roller or approved equal with a minimum weight of 10 tons. Roll at least 5 full-width passes or until visible displacement ceases.
- (3) Method C. For roads designated as Construction Tolerance Class K, L, or M, finish the roadbed by spreading the excavation. Eliminate rock berms.

**Add Table 204-2—Construction Tolerances:**

**Table 204-2 Construction tolerances.**

|                                                              | Tolerance Class <sup>(a)</sup> |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------------------------------------------|--------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
|                                                              | A                              | B    | C    | D    | E    | F    | G    | H    | I    | J    | K    | L    | M    |
| Roadbed width (ft)                                           | +0.5                           | +0.5 | +1.0 | +1.0 | +1.0 | +1.0 | +1.5 | +1.0 | +2.0 | +2.0 | +2.0 | +2.0 | +2.0 |
| Subgrade elevation (ft)                                      | ±0.1                           | ±0.2 | ±0.2 | ±0.5 | +0.5 | ±1.0 | ±1.0 | ±1.5 | ±2.0 | ±3.0 | ±2.0 | ±3.0 | (c)  |
| Centerline alignment (ft)                                    | ±0.2                           | ±0.2 | ±0.5 | ±0.5 | ±1.0 | ±1.0 | ±1.5 | ±1.5 | ±2.0 | ±3.0 | ±3.0 | ±5.0 | (c)  |
| Slopes, excavation, and embankment (% slope <sup>(b)</sup> ) | ±3                             | ±5   | ±5   | ±5   | ±5   | ±5   | ±10  | ±10  | ±10  | ±10  | ±20  | ±20  | ±20  |

a. Maximum allowable deviation from construction stakes and drawings.

b. Maximum allowable deviation from staked slope measured from slope stakes or hinge points.

c. Unless otherwise shown the centerline alignment and subgrade elevation, as built, have no horizontal curves with a radius of less than 80 feet, and no vertical curves with a curve length of less than 80 feet when the algebraic difference in the grade change is less than 10 percent, or a curve length of less than 100 feet when the algebraic difference of the grade change is greater than or equal to 10 percent. The centerline grade is not to exceed 20 percent in 100 feet of length.

CONTRACT

204.16

(b) Unclassified borrow, select borrow, and select topping.

Add the following:

When borrow is designated as a pay item by the cubic yard in the SCHEDULE OF ITEMS, measurement will be in the final position.

### SUPPLEMENTAL SPECIFICATION

#### Section 249. – COMPOSITE ROAD CONSTRUCTION

##### Description

249.01 This work consists of clearing and grubbing, excavation and embankment, and removal of all construction slash including all trees designated for removal. Excavation and embankment includes on site borrow excavation; drainage excavation; placing all excavated material; and shaping the roadway; including approaches, turnarounds, ditches and drainage dips. Construct the roadway in conformance with the dimensions “shown on the plans” or as staked on the ground.

##### Construction Requirements

#### 249.02 Clearing & Disposal

Protect construction stakes and construction control markers. Remove or treat all trees, snags, downed timber, brush, and stumps within the clearing limits according to the following specifications.

(a) **Merchantable Timber.** Treat according to the Utilization Standards of the Timber Sale Contract.

(b) **Unmerchantable Timber.** Treat according to Subsection 249.02 Method A.

(c) **Large Construction Slash.** Treat construction slash larger than 3 inches in diameter and longer than 3 feet by one or more of the following methods.

(1) **Method A.** Construction slash shall be scattered outside the clearing limits without damaging trees outside the clearing area. Logs shall be placed away from trees, positioned so that they will not roll, not placed on top of one another or left leaning on other trees. Scattered stumps shall be placed in an upright position.

(2) **Method B.** Stumps, roots, rocks, topsoil and other grubbing debris shall be concentrated in stump dump areas. Stump dump areas shall be located by the Engineer, be a maximum of 300 feet apart along the road centerline, and generally be located in natural depressions or tucked away behind denser vegetation or ground rises. Stump dumps will vary in size depending on each site, but shall not be closer than 10 feet outside of the clearing limits. Stump dump material shall be matted down as much as possible and shall not obstruct natural drainages.

(d) **Small Construction Slash.** Construction slash less than 3 inches in diameter and less than 3 feet in length may be incorporated into embankments so long as the material is distributed so that it does not result in concentrations or matting.

Immediately remove slash deposited in stream courses.

#### **249.03 Pioneering.**

Do not undercut the final back slope during pioneer operations. Deposite material inside the roadway limits. Do not restrict drainages.

#### **249.04 Grubbing.**

Grub within the specified limits. Stumps outside the grubbing limits remain if cut no higher than 1 foot or one-third of the stump diameter, whichever is greater, above the original ground, measured on the uphill side, unless otherwise designated. Grub all stumps from the Roadway, or stumps that have less than 1 foot of cover, in the Fill slopes, providing they do not interfere with the placement or compaction of embankments.

#### **249.05 Excavation and Embankment.**

Construct the roadway to conform to the typical sections shown on the plans. Protect backslopes from being undercut. Embankment shall be placed in layers no more than 12 inches thick.

Locate and use borrow material, and remove and treat unsuitable excess material, as designated.

Place rocks that are too large to be incorporated in the embankment outside the traveled way on the downhill side such that they will not roll, obstruct drainage, or hinder roadbed use and maintenance.

Shape and finish the roadbed to the condition ordinarily accomplished by a crawler tractor with dozer blade to provide drainage of surface water. Do not permit individual rocks to protrude more than 4 inches above the subgrade of the roadbed. A motor grader finish is not required.

Observe a width tolerance of (+) 18 inches max. for the roadbed.

Where shown on the drawings or designated on the ground, offtake ditches shall be constructed to drain water away from the roadbed.

**249.06 Erosion Control.**

Perform erosion control measures, where shown on the drawings, or staked on the ground.

**Measurement**

**249.07 Method.**

Measure the section 249 items listed in the schedule of items according to subsection 109.02

**Payment**

**249.08 Basis.**

The accepted quantities will be paid at the contract price per unit of measurement for Section 249 pay items listed in the Bid Schedule. Payment will be full compensation for the work prescribed in this section. See Subsection 109.05

**SUPPLEMENTAL SPECIFICATION**

**Section 251 - RIPRAP**

**251.04** Add: Place geotextile under all placed riprap.

SUPPLEMENTAL SPECIFICATION

SAMPLE  
CONTRACT

**Section 301- UNTREATED AGGREGATE COURSES**

**301 Title Change.**

Change the title to:

**Section 301- AGGREGATE COURSES**

**301.01 Work.**

Add the following:

Work includes producing aggregate by pit-run, grid rolling, screening, or crushing methods, or placing Government furnished aggregate. Work may include additive mineral filler, or binder.

**301.03 General.**

Add the following:

Request approval in writing of the roadbed before placing aggregate.

For pit run or grid-rolled material, furnish material smaller than the maximum size. No gradation other than maximum size will be required for pit-run or grid-rolled material. For grid rolling, use all suitable material that can be reduced to maximum size. After processing on the road, remove all oversize material from the road and dispose of it as directed by the CO.

Provide additives or binder, if required, at the proportions specified.

Develop and use Government furnished sources according to Section 105.

If the aggregate is produced and stockpiled before placement, handle and stockpiled according to Section 320. Establish stockpile sites at locations approved. Clear and grub stockpile sites according to Section 201.

**301.04 Mixing and Spreading.**

Delete the first sentence of the first paragraph and add the following:

Ensure that aggregate and any required additives, water, mineral filler, and binder are mixed by the specified method except, if crushed aggregate products are being produced and mineral filler, binder, or additives are required, uniformly blend during crushing. Control additive proportions to 0.5 percent dry weight.

The aggregate shall be spread in a uniform layer, with no segregation of size, and to a loose depth that shall have the required thickness when compacted.

SAMPLE  
CONTRACT

**Stationary Plant Method.** Mix the aggregate with other required materials in an approved mixer. Add water during the mixing operation in the amount necessary to provide the moisture content for compacting to the specified density. After mixing, transport the aggregate to the jobsite while it contains the proper moisture content, and place it on the roadbed or base course using an aggregate spreader.

**Travel Plant Method.** After placing the aggregate for each layer with an aggregate spreader or windrow-sizing device, uniformly mix it with other required materials using a traveling mixing plant. During mixing, add water to provide the necessary moisture content for compacting.

**Road Mix Method.** After placing the aggregate for each layer, mix it with other required materials at the required moisture content until the mixture is uniform throughout. Mix aggregate, water, and all other materials until a uniform distribution is obtained.

Spread the aggregate in a uniform layer, with no segregation of size, and to a loose depth that will provide the required compacted thickness.

When placing aggregate over geotextile, place aggregate in a single lift to the full depth specified.

Route and distribute hauling and leveling equipment over the width and length of each layer.

**301.05 Compacting.**

Delete the first and third paragraphs and add the following:

Compact the aggregate using one of the following methods as specified:

- (a) Compaction A. Compact the aggregate by operating spreading and hauling equipment over the full width of each layer of the aggregate.
- (b) Compaction B. Moisten or dry the aggregate to a uniform moisture content between 5 and 7 percent based on total dry weight of the mixture. Operate rollers and compact as specified in Subsection 204.11(a).
- (c) Compaction C. Compact each layer of aggregate to a density of at least 95 per-cent of the maximum density, as determined by AASHTO T 99, method C or D.
- (d) Compaction D. Compact each layer of aggregate to a density of at least 95 percent of the maximum density, as determined by AASHTO T 180, method C or D.
- (e) Compaction E. Operate rollers and compact as specified in Subsection 204.11(a).

For all compaction methods, blade the surface of each layer during the compaction operations to remove irregularities and produce a smooth, even surface. When a density requirement is specified, determine the in place density and moisture content according to AASHTO T 310 or other approved test procedures.

**301.06 Surface Tolerance.**

Add the following:

Badger Stewardship

SAMPLE  
CONTRACT

Thickness and Width requirements:

The thickness of the compacted nominal aggregate shall not vary more than ½ inch for aggregates with a maximum particle size of 1 inch or less, nor more than 1 inch for aggregates with a nominal maximum particle size greater than 1 inch from the thickness SHOWN ON THE DRAWINGS. The compacted thickness shall not be consistently above or below the specified thickness.

**301.09 Measurement.**

Delete:

Measure aggregate by the cubic yard in the hauling vehicle and substitute with the following:

Measure aggregate by cubic yard compacted in place when payment is by contract quantities.

**Payment**

When materials are produced and furnished by the Forest Service, the note "Government furnished materials" will be added to the description of the pay item.

**SUPPLEMENTAL SPECIFICATION**

**Section 602- CULVERTS AND DRAINS**

**Description**

**602.01** Delete 602.01 in its entirety and substitute with the following:

**602.01** This work shall consist of furnishing and installing, or installing only, metal pipe and Corrugated High Density Polyethylene (HDPE) with smooth interior and pipe appurtenances, including all bedding and backfilling required to complete the work. The term metal refers to aluminum and steel.

**Material**

**602.02** Add: Corrugated High Density Polyethylene Drainage Pipe shall meet the requirements of AASHTO M252, ASTM F405, and ASTM 667 and be non-perforated. Advance Drainage systems N – 12 pipe meets these requirements.

**602.03 General.**

Add the following:

**SAMPLE  
CONTRACT**

Ensure that the final installed alignment of all pipes allows no reverse grades, and does not permit horizontal and vertical alignments to vary from a straight line drawn from center of inlet to center of outlet by more than 2 percent of pipe center length or 1.0 foot, whichever is less.

Backfill material shall be readily compactible material free of frozen lumps, chunks of highly plastic clay (Plasticity Index greater than 10), or other objectional material. Rocks larger than 3 inches in greatest dimension shall not be used within 1 foot of the pipe.

### **Payment**

When materials are produced and furnished by the Forest Service, the note "Government furnished materials" will be added to the description of the pay item.

## **SUPPLEMENTAL SPECIFICATION**

### **Section 650— ROAD CLOSURE DEVICES**

#### **Description**

**650.01 Work.** Furnish and install, or install only, road closure devices using fabricated gates and accessories, combination post and rail barriers, concrete barriers, earth mound barriers, and other devices.

#### **Materials**

##### **650.02 Requirements.**

Furnish concrete that meets the requirements of Subsection 601.03, method B or C.

Construct earth mound barriers from excavated material adjacent to the barrier location, or from other designated locations.

#### **Construction**

**650.03 Performance.** Place road closure devices at designated locations. Construct all devices to the required dimensions. In assembling gates, perform required welding in accordance with the best modern practice and the applicable requirements of AWS D1.1.

After assembly, clean non-galvanized steel pipe gates and paint them with one coat of zinc-rich primer and two coats of exterior enamel of the required type and color.

Set all posts vertically and embed them to the required depth. Place concrete for embedment against undisturbed earth within an excavation sized to achieve the embedment dimensions. Compact the backfill in 6 inch layers to finished grade.

Install all signs and/or reflective warning markers accessory to the road closure device as shown on DRAWINGS.

**650.04 Acceptance.** Construction of road closure devices will be evaluated under Subsections 106.02 and 106.04.

SAMPLE  
CONTRACT

**Measurement**

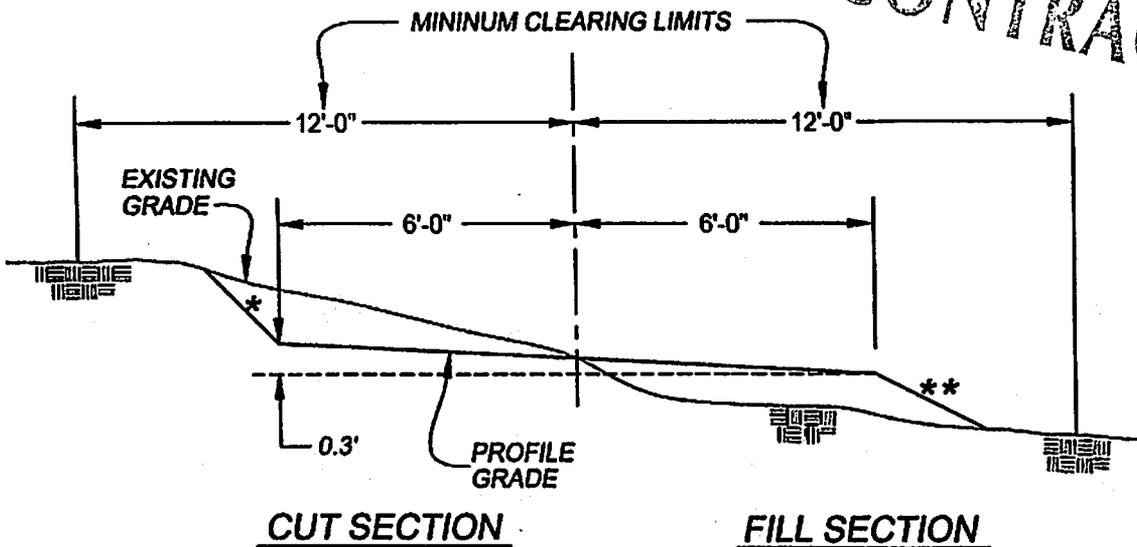
**650.05** Measure the items listed in the bid schedule according to Subsection 109.02.

**Payment**

**650.06** The accepted quantities, measured as provided in Subsection 109.02 and above, will be paid at the contract price per unit of measurement for the Section 650 pay item listed in the bid schedule. Payment will be full compensation for the work prescribed in this Section. See Subsection 109.05.

When materials are produced and furnished by the Forest Service, the note "Government furnished materials" will be added to the description of the pay item.

SAMPLE CONTRACT

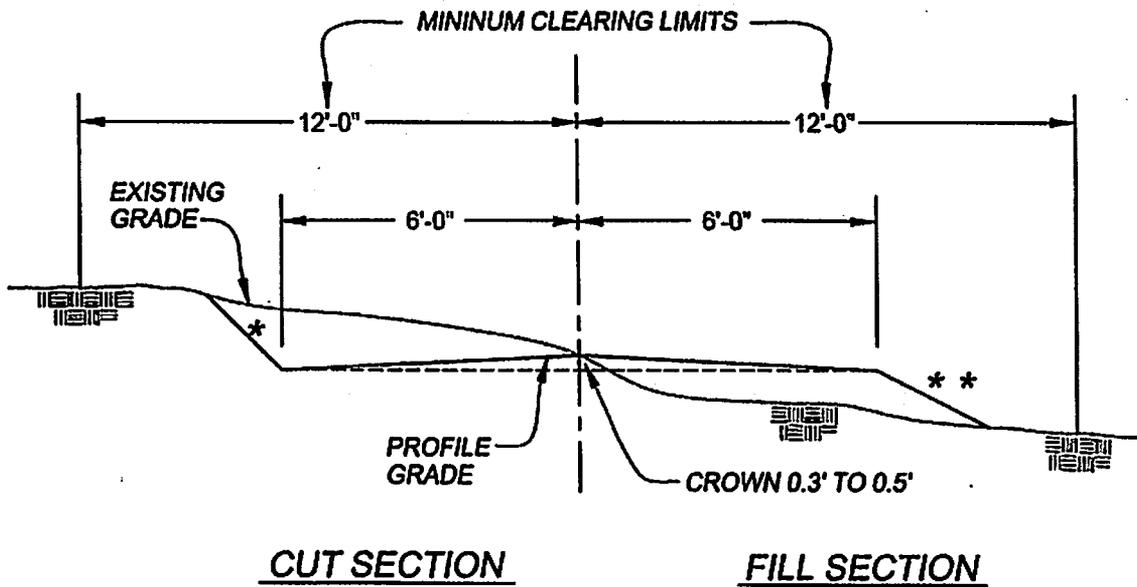


**TYPICAL OUTSLOPE DETAIL**

NOT TO SCALE

\*BACKSLOPE AND DITCH SLOPES MAY VARY FROM 1H:1V TO 2H:1V WHEN CUTS ARE UNDER 2 FT. CUTS OVER 2 FT. SHALL HAVE SLOPES OF 2H:1V

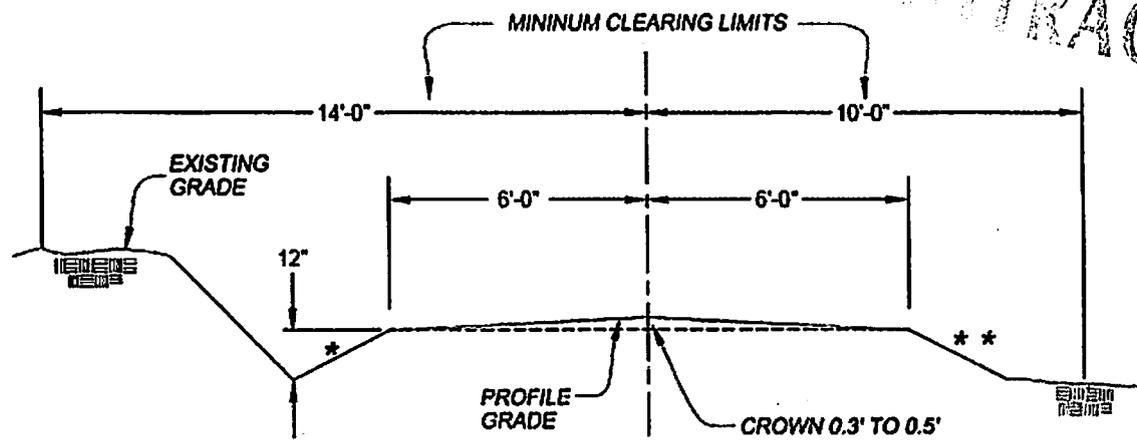
\*\*FILL SLOPES MAY VARY FROM 1-1/2H:1V TO 3H:1V



**TYPICAL CROSS SECTION CROWN NO DITCHES**

NOT TO SCALE

**SAMPLE CONTRACT**



DITCH SECTION

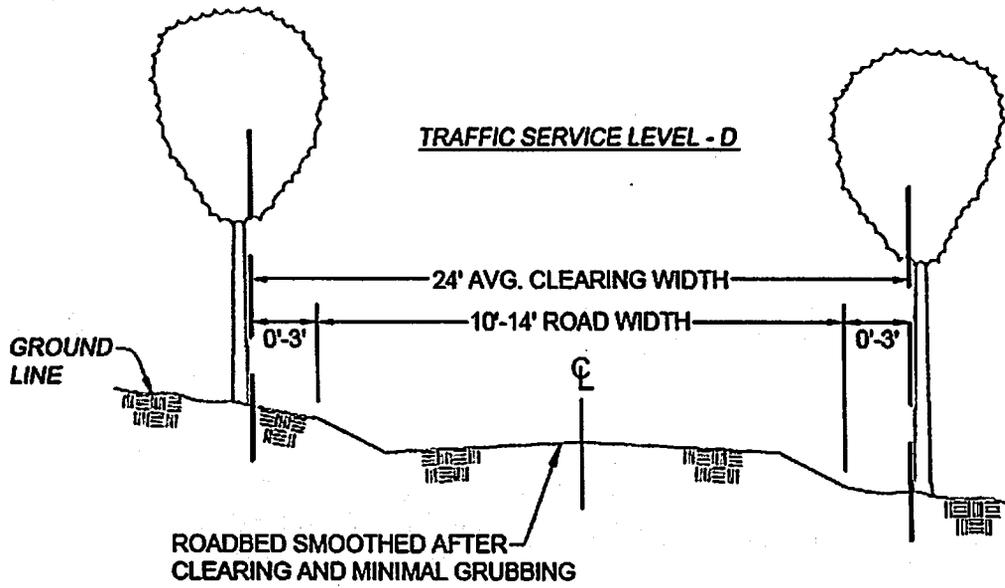
FILL SECTION

\*BACKSLOPE AND DITCH SLOPES MAY VARY FROM 1H:1V TO 2H:1V WHEN CUTS ARE UNDER 2 FT. CUTS OVER 2 FT. SHALL HAVE SLOPES OF 2H:1V

\*\*FILL SLOPES MAY VARY FROM 1-1/2H:1V TO 3H:1V  
(SEE NARRATIVE FOR LOCATION)

**TYPICAL CROSS SECTION WITH 1 FOOT DITCH**  
NOT TO SCALE

SAMPLE  
CONTRACT



TRAFFIC SERVICE LEVEL - D

24' AVG. CLEARING WIDTH

10'-14' ROAD WIDTH

0'-3'

C

0'-3'

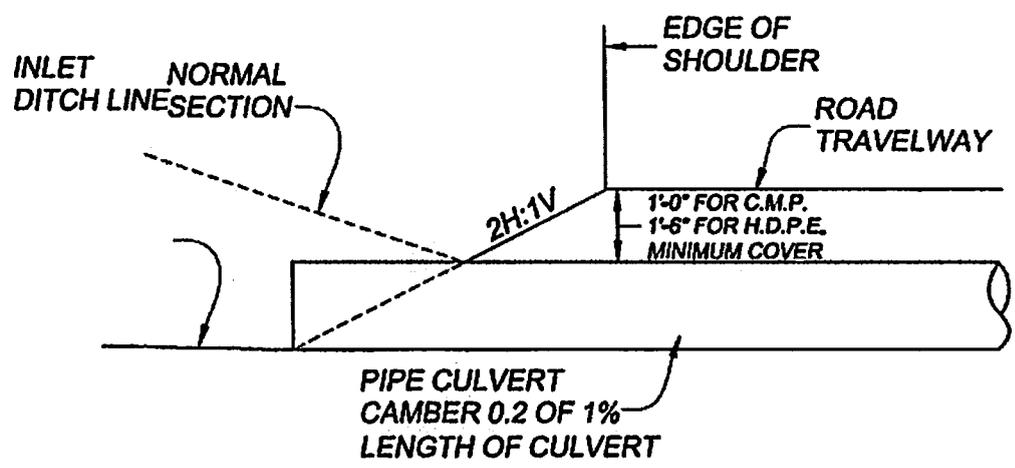
GROUND  
LINE

ROADBED SMOOTHED AFTER  
CLEARING AND MINIMAL GRUBBING

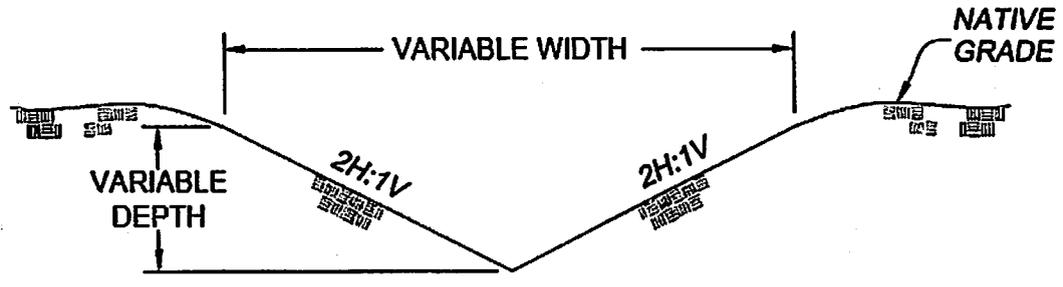
CROSS SECTION VIEW

**WINTER ONLY ROAD STANDARD**

NOT TO SCALE

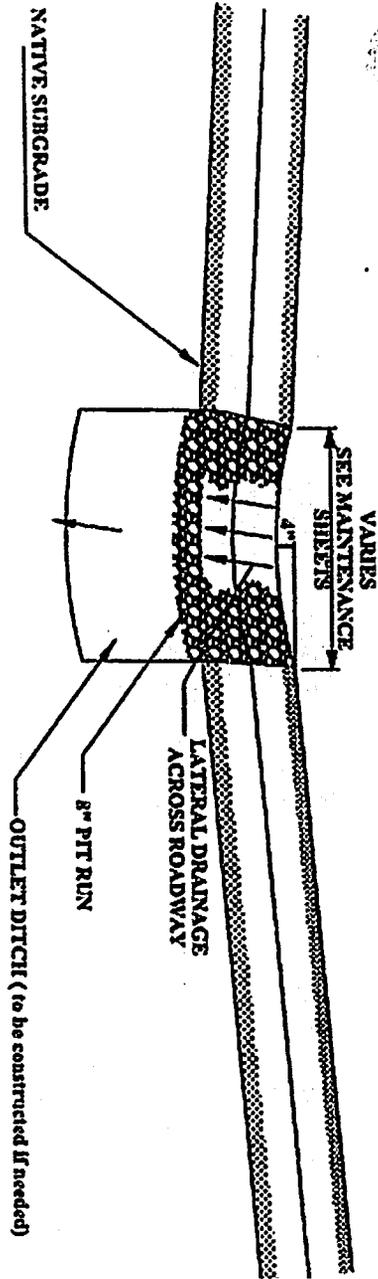


**TYPICAL DITCH SECTION AT CULVERT INLET**  
NOT TO SCALE



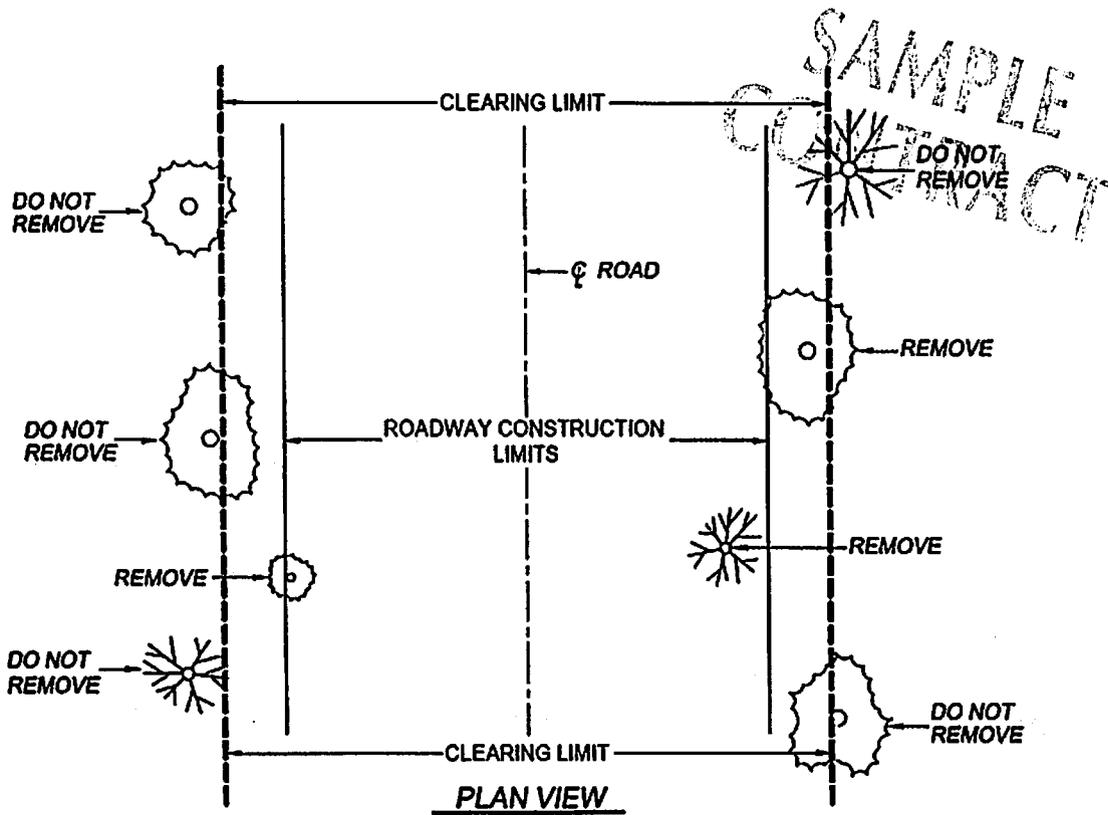
**TYPICAL INLET AND OUTLET DITCH SECTION**  
NOT TO SCALE

SAMPLE  
CONTRACT



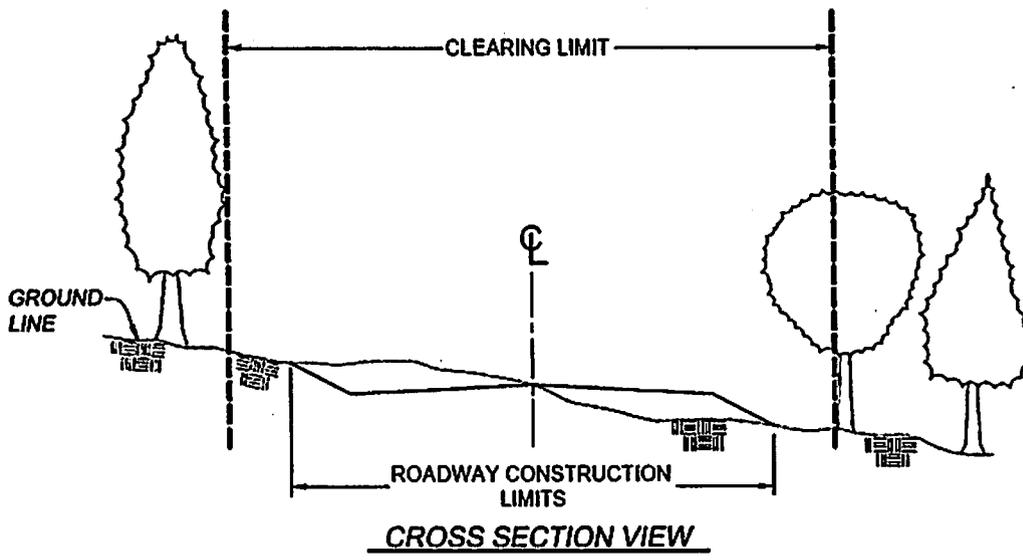
NOTE: HARDEDDED DIPS WILL BE EXCAVATED 12" DEEP  
AND BACKFILLED WITH 8" PIT RUN. GEOTEXTILE SHALL  
BE PLACED UNDER ALL PIT RUN MATERIAL.

TYPICAL HARDEDDED DIP



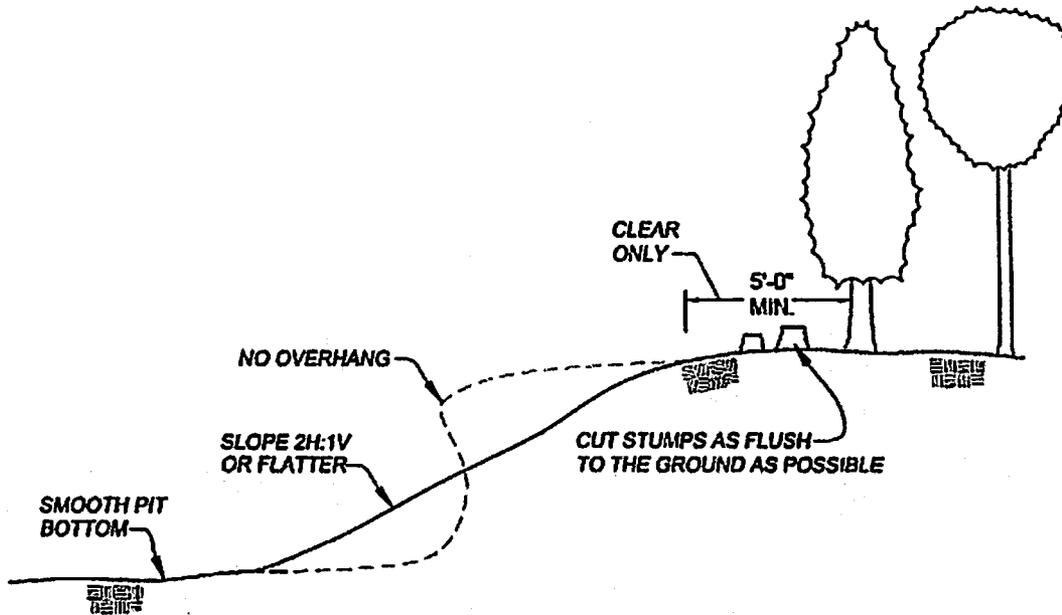
**NOTE: TREES ON THE CLEARING LIMIT LINE ARE TO REMAIN UNLESS OTHERWISE DESIGNATED BY THE ENGINEER.**

**NOTE: YELLOW PAINT INDICATES TREES TO BE REMOVED.**



**CONSTRUCTION STAKING**  
NOT TO SCALE

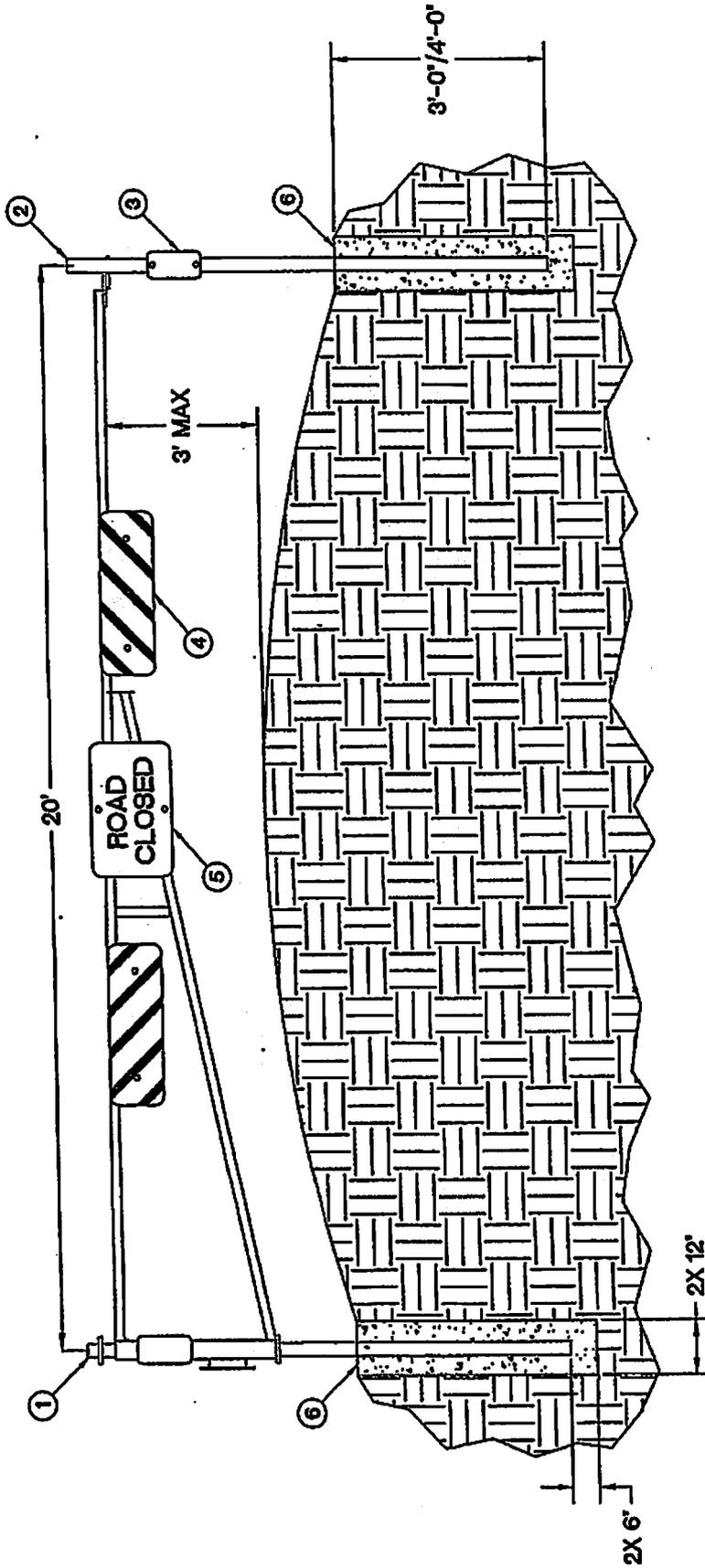
# SAMPLE CONTRACT



**NOTE: TOPS, STUMPS AND TRUNKS SHALL BE DISPOSED OF AS DIRECTED BY THE ENGINEER. STUMPS SHALL BE SEVERED FROM ALL TREES. ALL TIMBER SHALL REMAIN PROPERTY OF THE GOVERNMENT. OVERSIZED ROCK SHALL BE DISPOSED OF IN EXISTING PILES OR AS DIRECTED BY THE ENGINEER. SMOOTH PIT BOTTOM TO REDUCE THE COLLECTION OF WATER. HAUL ROADS SHALL BE MADE SMOOTH AND REPAIRED OF DAMAGE CAUSED BY THE CONTRACTORS HAULING OPERATION OR EQUIPMENT.**

## **BORROW PIT CLEAN UP**

SAMPLE  
CONTRACT



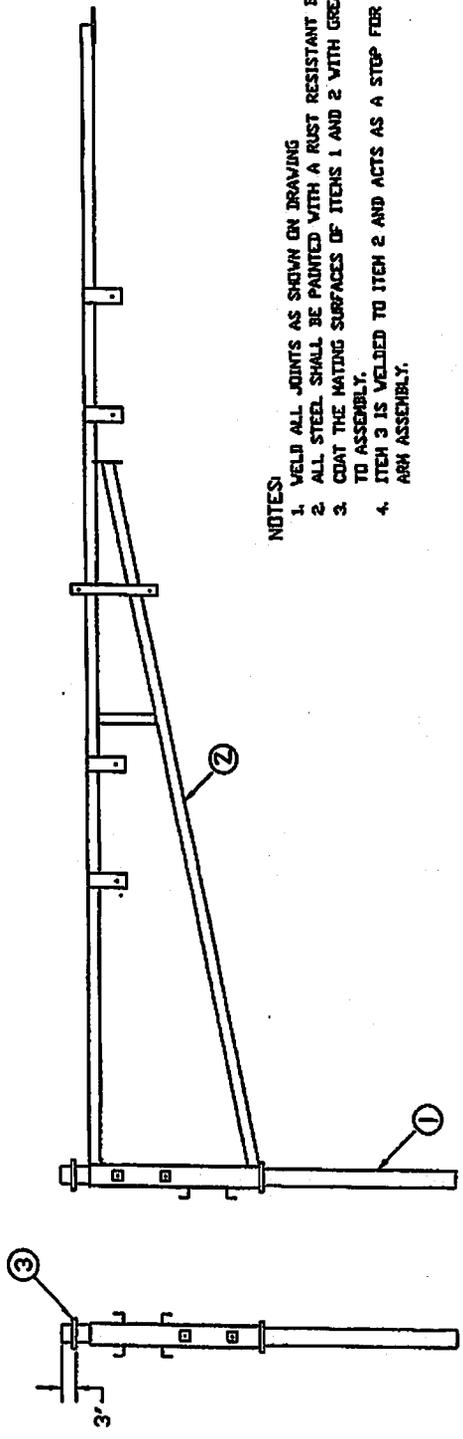
### GATE INSTALLATION

**NOTES:**

1. GATE SHALL BE LOCATED BY THE ENGINEER.
2. TOUCH UP THE FINISH IN ANY AREAS THAT WERE DAMAGED DURING INSTALLATION.
3. ITEMS 3, 4 AND 5 (SIGNS AND MARKERS) WILL BE PROVIDED BY THE PURCHASER, WITH INSTALLATION TO BE DONE BY THE ENGINEER.
4. ITEM 7 (NOT SHOWN) IS A RESTING POST FOR THE GATE WHEN IT IS OPEN. THE POST SHALL BE BURIED TO A DEPTH OF 2 TO 3 FEET AND CUT TO THE APPROPRIATE HEIGHT. LOCATE PER THE ENGINEER.

| ITEM | PART NO | QTY | DESCRIPTION                             |
|------|---------|-----|-----------------------------------------|
| 1    | 01      | 1   | GATE BRING ASSY                         |
| 2    | 009     | 1   | LOCK POST ASSY                          |
| 3    | --      | 6   | 8CM YELLOW ORANGE MARKER                |
| 4    | --      | 4   | 8CM, RED AND WHITE GATE MARKERS         |
| 5    | --      | 1   | 8CM, ROAD CLOSED                        |
| 6    | --      | 2   | CONCRETE OR CURBNO YARDS (METHOD C)     |
| 7    | --      | 1   | 4" X 4" X 6' TREATED LUMBER (NOT SHOWN) |

SAMPLE CONTRACT



NOTES:

1. WELD ALL JOINTS AS SHOWN ON DRAWING
2. ALL STEEL SHALL BE PAINTED WITH A RUST RESISTANT BROWN PAINT.
3. COAT THE MATING SURFACES OF ITEMS 1 AND 2 WITH GREASE PRIOR TO ASSEMBLY.
4. ITEM 3 IS WELDED TO ITEM 2 AND ACTS AS A STOP FOR THE SWING ARM ASSEMBLY.

GATE SWING ASSEMBLY

| ITEM | PART NO. | QTY | DESCRIPTION                |
|------|----------|-----|----------------------------|
| 1    | 098      | 1   | SWING POST                 |
| 2    | 100      | 1   | SWING ARM                  |
| 3    | --       | 1   | 4' SCHEDULE 40 X 3/4" PIPE |

PART #101

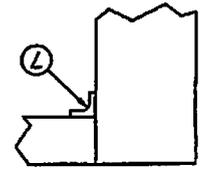
PART #100

WELDMENT - SWING ARM

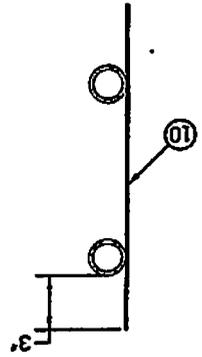
NOTES:  
 1. WELD ALL JOINTS AS SHOWN ON DRAWING  
 2. ALL STEEL SHALL BE PAINTED WITH A RUST RESISTANT BROWN PAINT.

| ITEM | PART NO | QTY | DESCRIPTION              |
|------|---------|-----|--------------------------|
| 1    | —       | 1   | SCHEDULE 40 X 19-4" PIPE |
| 2    | 007     | 1   | ARM SUPPORT              |
| 3    | —       | 1   | SCHEDULE 40 X 12-6" PIPE |
| 4    | —       | 1   | SCHEDULE 40 X 12" PIPE   |
| 5    | —       | 1   | SCHEDULE 40 X 3" PIPE    |
| 6    | 008     | 6   | SIGN BRACKET             |
| 7    | 002     | 1   | STEEL ANGLE              |
| 8    | 004     | 1   | EYE BOLT                 |
| 9    | 001     | 8   | SIGN BRACKET             |
| 10   | 005     | 1   | SIGN BRACKET             |

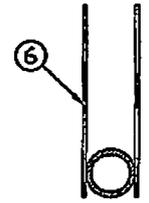
DETAIL A



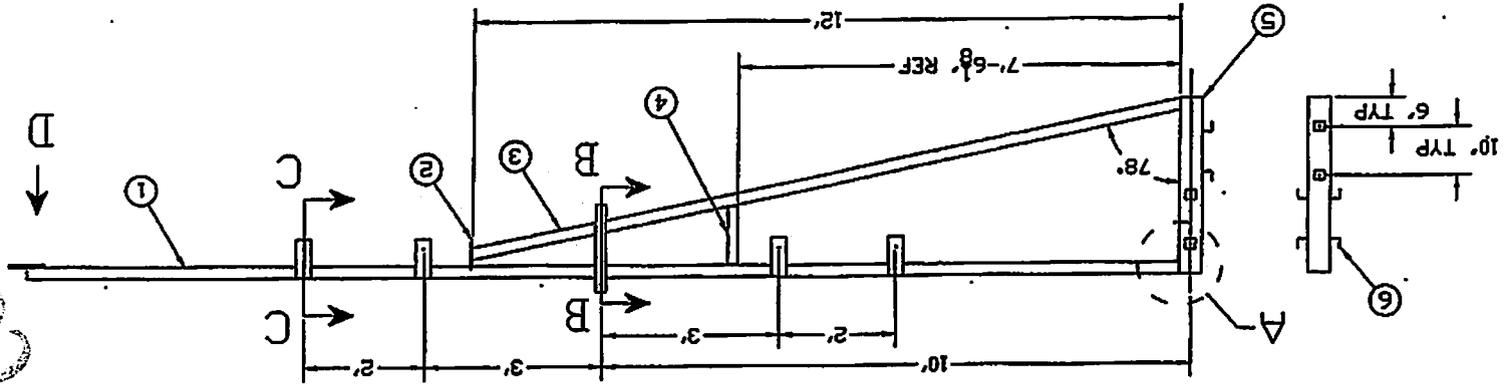
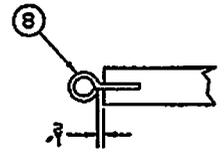
SECTION B-B



SECTION C-C  
 4 PLACES



VIEW D



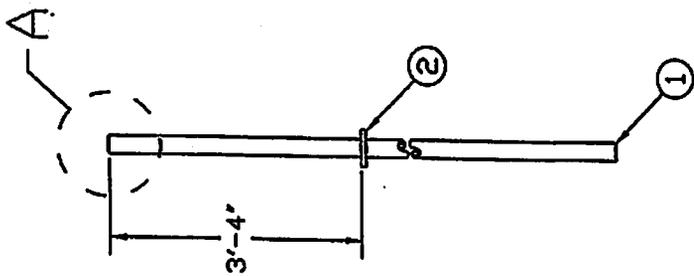
CONTINUED ON DRAWING SR-33

**SAMPLE CONTRACT**

**NOTES:**

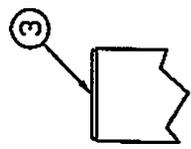
- 1. WELD ALL JOINTS AS SHOWN ON DRAWING
- 2. ALL STEEL SHALL BE PAINTED WITH A RUST RESISTANT BROWN PAINT.
- 3. ITEM 2 IS WELDED TO ITEM 1 AND ACTS AS A STOP FOR THE SWING GATE ASSEMBLY.
- 4. ALL LOCATION DIMENSIONS APPLY PRIOR TO CAP INSTALLATION.

| ITEM | PART NO | QTY | DESCRIPTION                |
|------|---------|-----|----------------------------|
| 1    | --      | 1   | 3' SCHEDULE 40 X 7' PIPE   |
| 2    | --      | 1   | 4' SCHEDULE 40 X 3/4" PIPE |
| 3    | 003     | 1   | POST CAP                   |



WELDMENT - SWING POST

PART #098



DETAIL A

**SAMPLE  
CONTRACT**

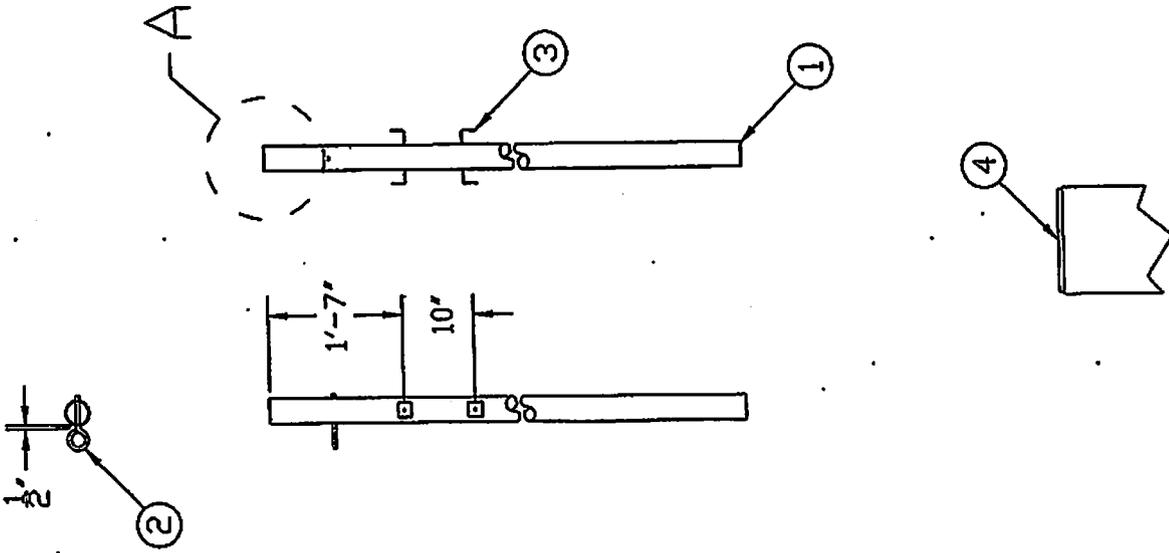
**NOTES:**

1. WELD ALL JOINTS AS SHOWN ON DRAWING
2. ALL STEEL SHALL BE PAINTED WITH A RUST RESISTANT BROWN PAINT.
3. ALL LOCATION DIMENSIONS APPLY PRIOR TO CAP INSTALLATION.

| ITEM | PART NO | QTY | DESCRIPTION  |
|------|---------|-----|--------------|
| 1    | 006     | 1   | STEEL PIPE   |
| 2    | 004     | 1   | EYE BOLT     |
| 3    | -008    | 4   | SIGN BRACKET |
| 4    | 003     | 1   | POST CAP     |

**WELDMENT - LOCK POST**

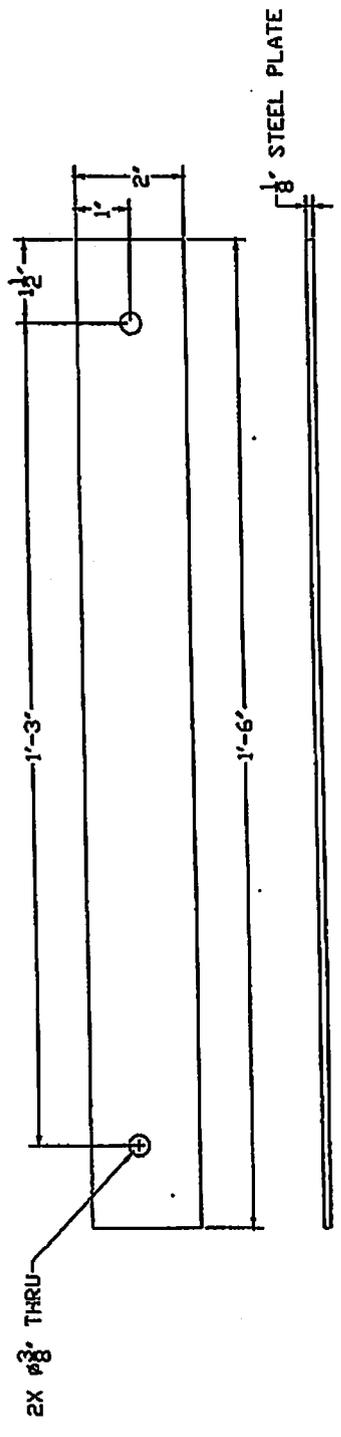
**PART #099**



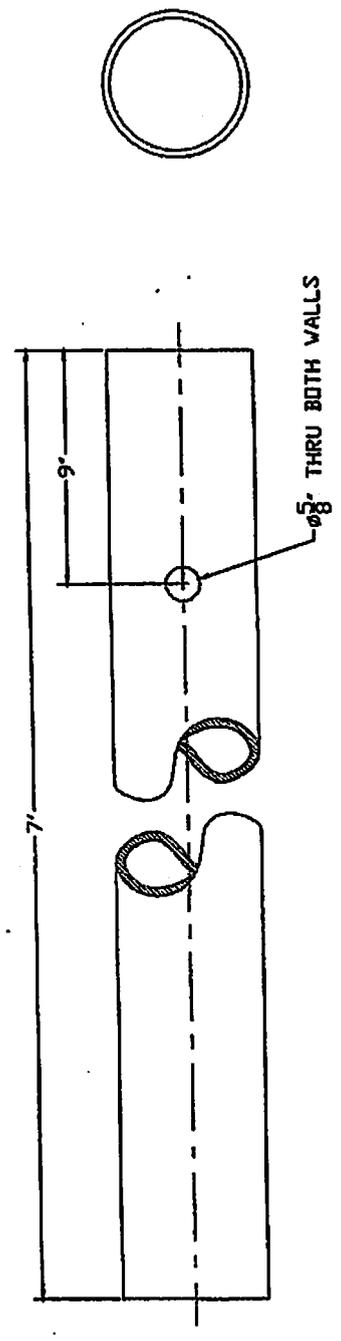
**DETAIL A**



SAMPLE CONTRACT



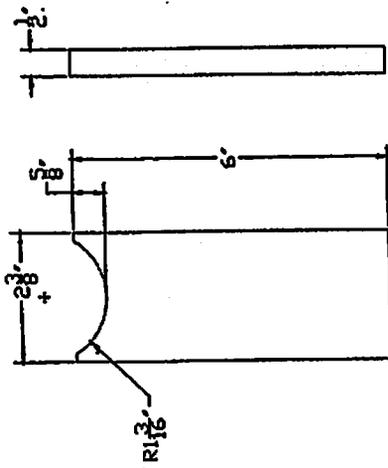
PART #005 - SIGN BRACKET



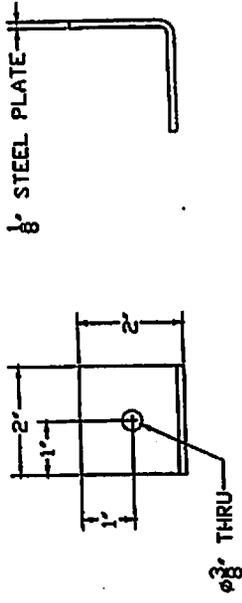
NOTE:  
1. 3" SCHEDULE 40 PIPE

PART #006 - LOCK POST

SAMPLE CONTRACT

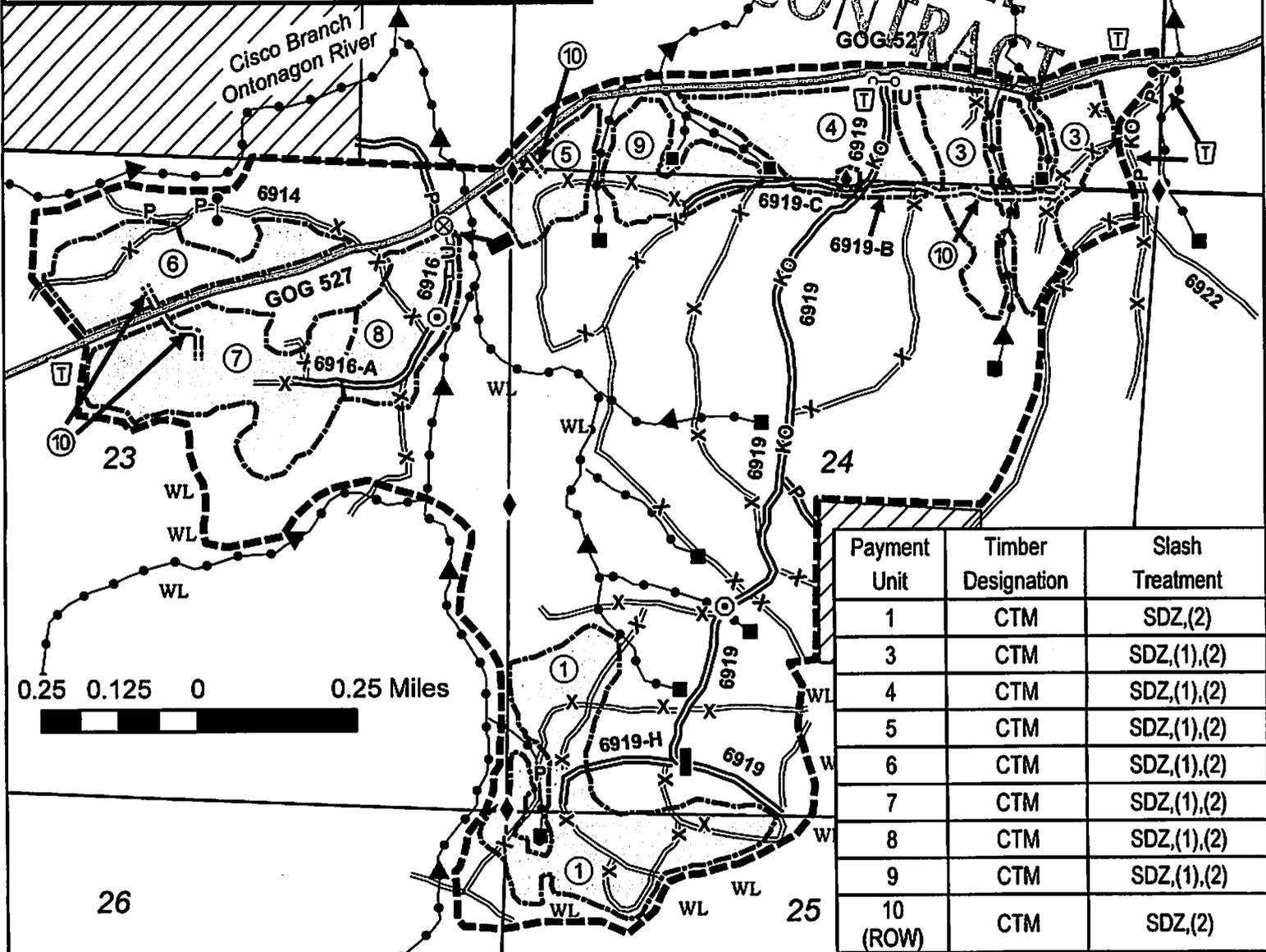
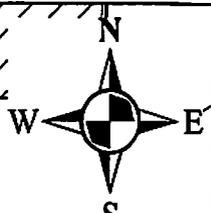


PART #007 - ARM SUPPORT

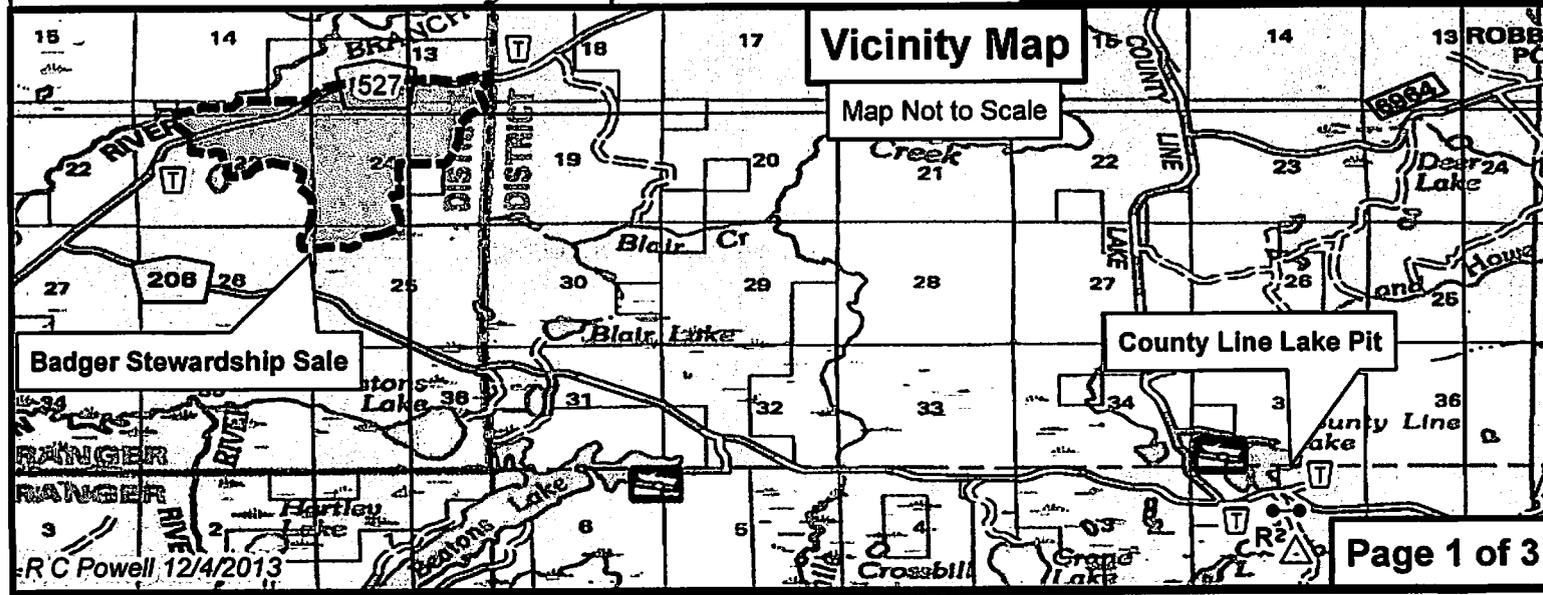


PART #008 - SIGN BRACKET

**CONTRACT AREA M**  
**Badger Stewardship Ottawa National Forest**  
**Bessemer RD Compartment 151**  
**T46N R41W, Sections 13, 23, 24, 25 & 26**  
**Gogebic County, MI**  
**Gross Acres: 808 Net Acres: 254**



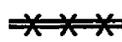
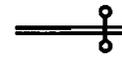
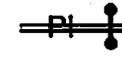
| Payment Unit | Timber Designation | Slash Treatment |
|--------------|--------------------|-----------------|
| 1            | CTM                | SDZ,(2)         |
| 3            | CTM                | SDZ,(1),(2)     |
| 4            | CTM                | SDZ,(1),(2)     |
| 5            | CTM                | SDZ,(1),(2)     |
| 6            | CTM                | SDZ,(1),(2)     |
| 7            | CTM                | SDZ,(1),(2)     |
| 8            | CTM                | SDZ,(1),(2)     |
| 9            | CTM                | SDZ,(1),(2)     |
| 10 (ROW)     | CTM                | SDZ,(2)         |



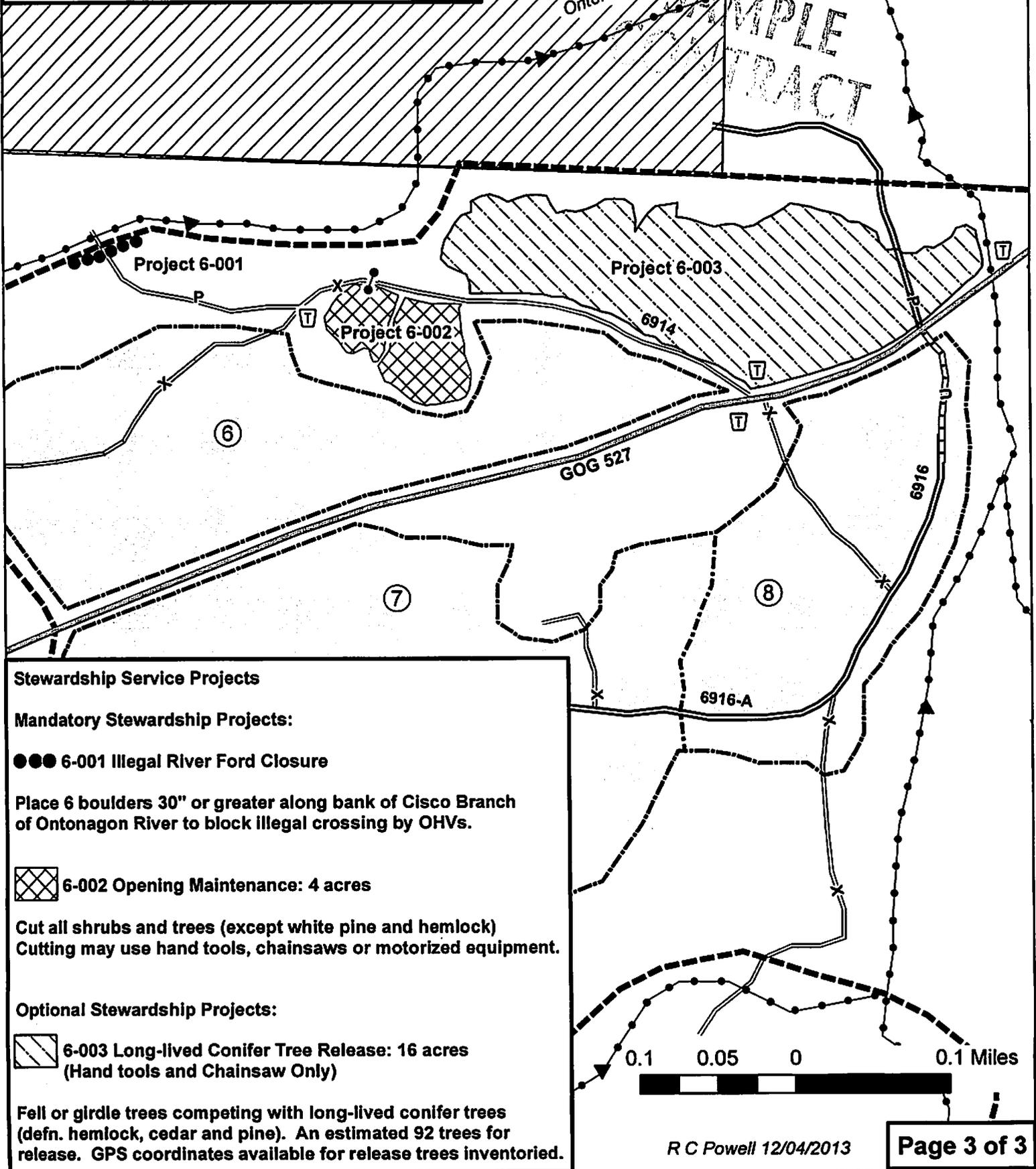
# BALGER STEWARDSHIP CONTRACT

## Legend

SAMPLE CONTRACT

|                                                                                     |                                                                                                                                        |
|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|
|     | Sale Area Boundary, BT.1                                                                                                               |
|     | Payment Unit Boundary, BT.1                                                                                                            |
|    | Payment Unit Number, BT.1                                                                                                              |
|     | Payment Unit 10 – road corridors & skid trail clearing; Payment Unit Boundary, BT.1                                                    |
|    | Cut Tree Marked Prior to Advertisement, CT.3.5, KT-CT.3.5.5#, GT.4.1.2                                                                 |
|     | Existing Transportation System Road, FT.1                                                                                              |
|     | Existing Transportation System Road, Unsuitable for hauling prior to completion of agreed reconstruction, FT.1.2, KT-FT.1.2#           |
|     | Existing Road, Hauling Prohibited, FT.1.2, KT-FT.1.2#                                                                                  |
|     | Existing Road, Use Prohibited, FT.1.2, KT-FT.1.2#                                                                                      |
|     | Existing Road, Use Restricted, FT.1.2, KT-FT.1.2#                                                                                      |
|    | Existing Road, Keep Open, FT.1.2, KT-FT.1.2#                                                                                           |
|     | Specified Road Reconstruction, AT.7, AT.8, FT.2, GT.2.2, GT.2.2.2, GT.3.6.1, Schedule of Items                                         |
|    | Specified Road Reconstruction, Purchaser Remove/Install Gate, FR 6919, AT.7, AT.8, FT.2, GT.2.2, GT.2.2.2, GT.3.6.1, Schedule of Items |
|  | Specified Drainage Structure, AT.7, AT.8, FT.2, GT.2.2, GT.2.2.2, GT.3.6.1, Schedule of Items                                          |
|  | Purchaser Install Culvert, FRs 6916 and 6919, KT-FT.3.1#, T-8340                                                                       |
|   | Contractor Install Berms, FRs 6916 & 6919 (near end), FT.3, KT-FT.3.1#, T-8620                                                         |
|   | Protect Improvement, Gate – FRs 5134 (County Line Lake Road Pit), 6914 and 6922, GT.2.2, KT-FT.1.2#                                    |
|  | Streamcourse Protection, Block Marks Upper Limit, Arrow indicates Flow Direction, GT.5                                                 |
|  | Wetland Protection, GT.6.2, KT-GT.6.2#                                                                                                 |
|  | Slash Disposal, GT.7, KT-GT.7#                                                                                                         |
|  | Slash Disposal Area, GT.7, KT-GT.7#                                                                                                    |
|  | Slash Disposal Area, GT.7, KT-GT.7#                                                                                                    |
|  | Other Ownership                                                                                                                        |
|  | Safety– Purchaser to Provide and Maintain Traffic Control Signs, GT.3.3                                                                |
|  | Protect Known Survey Monuments, GT.2.3                                                                                                 |
|  | Material Source, Pit-Run Gravel, KT-FT.2.2.1#, (County Line Lake Pit, T45N-R40W, Section 2)                                            |

**STEWARDSHIP PROJECT MAP**  
 Badger Stewardship Ottawa National Forest  
 Bessemer RD Compartment 151  
 T46N R41W, Sections 13, 23, 24, 25 & 26  
 Gogebic County, MI  
 Gross Acres: 808 Net Acres: 254



**Stewardship Service Projects**

**Mandatory Stewardship Projects:**

●●● 6-001 Illegal River Ford Closure

Place 6 boulders 30" or greater along bank of Cisco Branch of Ontonagon River to block illegal crossing by OHVs.

▨ 6-002 Opening Maintenance: 4 acres

Cut all shrubs and trees (except white pine and hemlock)  
 Cutting may use hand tools, chainsaws or motorized equipment.

**Optional Stewardship Projects:**

▨ 6-003 Long-lived Conifer Tree Release: 16 acres  
 (Hand tools and Chainsaw Only)

Fell or girdle trees competing with long-lived conifer trees  
 (defn. hemlock, cedar and pine). An estimated 92 trees for  
 release. GPS coordinates available for release trees inventoried.

