Road Use Permit

	R10-FS 7700-41 (6/94)
U.S. Department of Agriculture - Forest Service	Authority: Acts of October 13, 1964 and October 21, 1976
ROAD USE PERMIT	(16 U.S.C. 532-38 and 43 U.S.C. 1761-71)
(Re: FSM 7730)	
Alaska Dept. of Natural Resources of	2417 Tongass Avenue, Suite 213 Ketchikan, AK
Division of Forestry & Fire Protection	99901
(Name)	(Address & Zip Code)

(hereafter called the permittee) is hereby granted use of the following road(s) or road segments, and/or related transportation facilities: National Forest System Road (NFSR) 1520000 from MP 9.93-11.38, 1520098 MP 0.0-0.18 and 1525000 between MP 0.0-0.25 and East Edna Bay Log Transfer Facility and associated Sort Yard on the Thorne Bay Ranger District, subject to the provisions of this permit including clauses <u>1</u> through <u>20</u> and Appendixes A, B and C on page(s) <u>6</u> through <u>17</u> for the purpose of hauling timber on the State of Alaska East Charley Timber Sale.

The exercise of any of the privileges granted in this permit constitutes acceptance of all the conditions of the permit.

1. **ROAD USE PERMIT, LTF & SORTYARD FEES.** The rate for sharing under this permit is \$0.8625/MBF/Mile. This rate is a form of investment sharing where the permittee shares in the original cost of the road based on the log haul volume.

Fee calculations are as follows: Road Use Fees = 7,243 MBF x \$0.8625/MBF/Mile x 1.88 miles = \$8,825 Sort Yard Fees = 7,243 MBF x \$0.375/MBF = \$2,716 LTF Fees = 7.243 MBF x \$1.625/MBF = \$11.770

Permittee's share of investment will be met as provided for in Clause 2.

Rate for sharing maintenance is shown in Clause 9.

- 2-1. **WORK REQUIRED TO ACCOMMODATE PERMITTED USE**. In accordance with this use, the permittee shall perform the work described below and in accordance with plans and specifications attached hereto: **See Exhibits A, B & C**
- 2-2. **COOPERATIVE WORK.** Although not required to accommodate the use herein permitted, it is desirable to the Forest Service and the permittee to have certain construction or reconstruction work accomplished coincident to use of the road.
- 2-3. **CASH DEPOSITS REQUIRED IN LIEU OF WORK PERFORMANCE**. The permittee will deposit \$ with the Forest Service on or before _____NA__. The amount deposited will be credited to the share to be borne by the permittee.
- 2-4. **ROAD USE FEE.** In consideration for this use, the permittee shall deposit with the Forest Service, the sum of \$17,139.39 This amount represents the difference in total fees (\$23,311) for use and the costs of work required to accommodate use (\$6,171.61). A bill for collection will be forwarded after the execution of this permit. Permittee is required to forward confirmation of payment to the Forest Service.

This permit is accepted subject to all of its terms and conditions.

	Digitally signed by Greg	
	Greg Staunton Staunton Date: 2024,09,03 17:29:09	Date
ACCEPTED	-08'00' Permitee (Name and Signature)	
APPROVED	William Braun Dep. Det. Ranger Issuing Officer (Name, Title, and Signature)	Date 9/4/202
maintains an accordance up to the Agent, and maintagreement autho	ANTEE. Notwithstanding the provisions of clause 1, if the permittee furnishes eptable payment bond in a penal sum of not less than \$\frac{NA}{NA}\text{guaranteeing} is amount, or in lieu thereof deposits in a Federal depository, through the Region in therein negotiable securities of the United States having a market value in rizing the bond approving officer to sell or collect such securities if payment is	payments for mal Fiscal like sum and not made
	() days of request therefor, the Forest Service shall permit road use in adva e penal sum of such bond, or market value at time of deposit of negotiable sect	
	ardless of penal sum of such payment bond, or the value of such deposited seco	

3. **USE PLANS.** Prior to <u>NA</u> each year this permit is in effect, permittee shall notify the in writing of the approximate time when such use will commence, the anticipated duration of such use, the names and addresses of permittee's contractors or agents who will use the road on behalf of permittee, the estimated extent of use, and such other information relative to permittee's anticipated use as the Forest Service may from time to time reasonably request. If and when during the year there is any significant change with respect to the information so supplied by permittee, the permittee will notify the promptly in writing of such change. Plans and changes will be approved by the <u>NA</u> before use may commence.

permittee shall pay cash within <u>NA</u> () days of request therefor, for all performed road use. If any payment is not received within <u>NA</u> () days of request therefor, the Forest Service may suspend all hauling under this permit until payments due are received, and may take such action as is necessary to collect

such payments from the payment guarantee surety, or by sale or collection of securities guaranteeing payments. In the event the permittee fails to make payment and collection is obtained from the surety, or from the sale or collection of the deposited securities, the Forest Service may thereafter require the permittee

to make payments in advance of road use.

- 4. **USE RECORDS.** The permittee shall <u>NA</u>, or at other Forest Service approved intervals when the permittee is hauling over this road, furnish the <u>NA</u> scale records, or other records satisfactory to the which give the volume of road use in terms related to rates in clause 1 under the authority of this permit.
- 5. **COMPLIANCE WITH LAWS AND REGULATIONS.** The Permittee, in exercising the privileges granted by this permit, shall comply with the regulations of the Department of Agriculture and all Federal, State, county and municipal laws, ordinances or regulations which are applicable to the area or operations covered by this permit.
- 6. **USE NONEXCLUSIVE.** The privileges granted in this permit to use this road are not exclusive. The Forest Service may use this road and authorize others to use it at any and all times. The permittee shall use said road in such manner as will not unreasonably or unnecessarily interfere with the use thereof by other authorized persons, including Forest Service.
- 7. **RULES GOVERNING USE.** The permittee, its agents, employees, contractors or employees of contractors, shall comply with all reasonable rules prescribed by the Forest Service for control and safety in the use of this road and to avoid undue damage to the road. Such rules will include:
 - (1) Closing the road or restricting its use when, due to weather conditions or the making of alterations or repairs, unrestricted use would in Forest Service judgement, cause excessive damage, or create hazardous conditions;
 - (2) Closing the road during periods when, in Forest Service judgement, there is extraordinary fire danger;

(3) Traffic controls, which in Forest Service judgement, are required for safe and effective use of the road by authorized users thereof; (4) Prohibiting the loading of logs on trucks while such trucks are standing on the roadway surface, except to recover lost logs; and (5) Prohibiting the operation on this road of any vehicles or equipment having cleats or other tracks which will injure the surface thereof; (6) Prohibiting the operation of log-hauling vehicles (of a width in excess of ___14' __ and a gross weight of vehicles and load in excess of 52 tons for a 2 axle vehicle, 72 tons for a 3 axle vehicle, or 80 tons for a 5 axle vehicle. For tracked vehicles the average ground pressure shall be less than 2000 pounds per square foot)* (not in excess of limits established by Regional Road Order or lower limits established by Forest Supervisor's Road Order) (7) Regulating the number of vehicles so as to prevent undue congestion of this road. (8) Prohibiting the use of an "active ingredient" as defined in Section 2 of the Federal Insecticide, Fungicide, and Rodenticide Act, as amended (86 Stat. 973), in violation of said act on the Land described in this permit. (9) Other - Specify (Optional) 8. INSURANCE. Permittee or his contractors and assigns shall be required to carry public liability and property damage insurance for the operation of vehicles in the amounts established by applicable state laws, cooperative agreements, or easements issued on the subject road or roads. In any event, the permittee must carry liability insurance and property damage insurance of not less than \$250,000 for injury or death to one person, \$500,000 for injury or death to two or more persons, and \$250,000 for damage to property. The permittee itself shall be responsible for furnishing to the Thorne Bay Ranger District proof of satisfactory insurance when said insurance is to be furnished by other than the permittee. Proof of satisfactory insurance may be required by the Thorne Bay Ranger District prior to hauling over the road(s) and will be for the duration of the permit and such insurance policy shall bear an endorsement requiring the issuing company to give 10 days prior written notice to the Thorne Bay District Ranger, of cancellation or material change. 9. MAINTENANCE. The permittee shall bear the expense of maintenance proportionate to his use. This expense will be borne by When deposit or payments are required in lieu of performance of maintenance the rate will be which is agreed to be the cost of such works; the deposits or payments to be made at such times and in such amounts as requested by the NA; Provided, however, that the rate shall be revised upward or downward on NA of each year hereafter, based on estimated costs and uses anticipated; Provided

Maintenance shall be performed in accordance with Forest Service specifications or requirements for maintenance as hereinafter listed, or as may be mutually agreed upon from time to time and shall consist of (1) current maintenance as necessary to preserve, repair, and protect the roadbed, surface and all structures and appurtenances, and (2) resurfacing equivalent in extent to the wear and loss of surfacing caused by operations authorized by this permit.

further, that payment shall not relieve the permittee from liability for repair of damages due to carelessness

9a. MAINTENANCE AND RESURFACING REQUIREMENTS AND SPECIFICATIONS. (Specify)

See attached maintenance specifications and drawings.

or negligence on its part or on the part of its contracts or agents.

- 10. **PERFORMANCE BOND.** In the event the permittee is to perform its proportionate share of road maintenance, road resurfacing, or betterment, as determined and within time periods established by the Forest Supervisor, the Forest Service may require as a further guarantee of the faithful performance of such work that the permittee furnish and maintain a surety bond satisfactory to the Forest Service in the sum of dollars (\$_NA_), or in lieu of a surety bond, deposit into a Federal depository, as directed by the Forest Service, and maintain therein cash in the sum of __NA__dollars (\$_NA__), or negotiable securities of the United States having market value at time of deposit of not less than __NA__ (\$_NA__). As soon as security for the performance of road maintenance (and betterment) requirements or the settlement of claims incident thereto is completed, unencumbered cash guarantees or negotiable securities deposited in lieu of surety bond will be returned to the permittee. **Because the permittee is a State of Alaska Agency, no bond shall be required.**
- 11. **FIRE PREVENTION AND SUPPRESSION.** The permittee shall take all reasonable precautions to prevent and suppress Forest fires. No material shall be disposed of by burning in open fires during the closed season established by law or regulation without a permit from the Forest Service.
- 12. **DAMAGES**. The permittee shall exercise diligence in protecting from damage the land and property of the United States covered by and used in connection with this permit, and promptly upon demand shall pay the United Sates for any damage resulting from negligence, or from violation of the terms of this permit or of any law or regulation applicable to the National Forests, by the permittee, or by his agents, contractors, or employees of the permitee acting within the scope of their agency, contract, or employment.
- 13. **OFFICIALS NOT TO BENEFIT.** No Member of or Delegate to Congress or Resident Commissioner shall be admitted to any share or part of this agreement or to any benefit that may arise herefrom unless it is made with a corporation for its general benefit.
 - 14. **OUTSTANDING RIGHTS.** This permit is subject to all outstanding rights.
- 15. **SUSPENSION.** Upon the failure of the permittee, its agents, employees or contractors to comply with any of the requirements of this permit, the officer issuing the permit may suspend operations in pursuance of this permit.
- 16. **TERMINATION.** This permit shall terminate on **June 30, 2025** unless extended in writing by the Forest Service. It may be terminated upon breach of any conditions herein.
- 17. **CLAUSE CONTROL.** In the event of any conflict between any of the preceding printed clauses or any provision thereof and any of the following clauses or any provisions thereof, the following clauses will control.
- 18. **SAFETY.** Unless otherwise agreed in writing, when Permittee's Operations are in progress adjacent to or on Forest Service controlled roads and trails open to public travel, Permittee shall provide the use with adequate warning of hazardous or potentially hazardous conditions associated with Permittee's Operation. A specific traffic control plan for each individual project shall be agreed to by Permittee and Forest Service prior to commencing operations. Devices shall be appropriate to current conditions and shall be covered or removed when not needed. Except as otherwise agreed, flager and devices shall be as specified in the "Manual on Uniform Traffic Control Devices for Streets and Highways" (MUTCD), and in specifications attached hereto.
- 19. **DRIVER'S COPY.** Drivers of all vehicles hauling logs shall have a copy of page 1 of this agreement in their possession. This copy will be presented, on request, to any Forest Officer.
- 20. **LOAD MARKING.** Unless stated otherwise in writing by the District Ranger, all wood products shall be painted with a blue letter "P" on each log across the top layer on the front and back of the load.
- 21. **SNOW REMOVAL.** Snow removal shall be done in a manner to preserve and protect the roads, to the extent necessary to ensure safe and efficient transportation of materials, and to prevent excessive erosion damage to roads, streams, and adjacent lands. **Permittee** shall:

- (1) Remove snow from the entire road surface width including turnouts.
- (2) Remove snow slides, earth slides, fallen timber, and boulders that obstruct normal road surface width.
- (3) Remove snow, ice, and debris from culverts so that the drainage system will function efficiently at all times.
- (4) Perform all items of snow removal currently to ensure safe, efficient transportation. Work shall be done in accordance with the following minimum standards of performance:
- (5) Deposit all debris, except snow and ice, removed from the road surface and ditches at agreed locations and away from stream channels.
- (6) Not undercut roadbanks nor remove gravel or other selected surfacing material off the roadway surface.
- (7) Assure that ditches and culverts are kept functional during and following roadway use.
- (8) Not leave snow berms on the road surface. Berms on the shoulder of road shall be removed and/or drainage holes shall be opened and maintained. Drainage holes shall be spaced as required to obtain satisfactory surface drainage without discharge on erodible fills.
- (9) Not use dozers to plow snow on system roads without written approval of the Forest Service.
- (10) Leave a minimum of 2-inches of snow depth to protect the roadway.
- (11) Restore any damage resulting from the snow removal in a timely manner.

APPENDIX A East Charley Road Reconditioning Work List

WORK REQUIRED TO ACCOMMODATE PERMITTED USE.

1. Road 1520000

Roadside Brushing, Method A – MP 9.93-11.38 Furnish & Install 24"x40' CPP

2. Road 1520098

Roadway Reconditioning, Placement Method 3 – MP 0.0-0.18 Spot Surfacing, 40CY as staked

Technical Specifications

STANDARD SPECIFICATIONS FOR CONSTRUCTION OF ROADS AND BRIDGES ON FEDERAL HIGHWAY PROJECTS, FP-14, U.S. Customary Units

The specifications are included by reference only. The requirements contained in these Standard Specifications are hereby made a part of this permit and any resulting work.

These specifications can be ordered from FHWA. For information on how to order books, go to the

FHWA's website, Standard Specifications (FP) | FHWA (dot.gov).

Special Project Specification and Forest Service Supplementation

The following specifications and supplementations to FP-14 are herby made part of this permit

156 - Public Traffic

156.00_nat_us_04_17_2007

Delete Section 156 in its entirety and replace with the following:

Description

156.01 This work consists of controlling and protecting public traffic adjacent to and within the project.

Material

156.02 Conform to the MUTCD and the following Sections and Subsections:

Construction sign panels	633
Retro-reflective sheeting	718.01
Temporary concrete barrier	618
Temporary plastic fence	710.11
Temporary traffic control devices	718.22

156.03 General. Unless otherwise provided for in Table 156-1, keep existing roads open to all traffic during operations, and maintain them in a condition that will adequately accommodate traffic. Delays may not exceed <u>30</u> minutes at any one time followed by an open period of no less than <u>25</u> minutes.

Perform no work that interferes or conflicts with traffic or existing access to the roadway surface until a traffic control plan has been approved. Post construction signs and traffic control devices in conformance with MUTCD. All required signs will be in place and approved prior to beginning work on project.

If the Permittee agrees in writing to allow public traffic to use a new road being constructed prior to completion, it will be considered an existing road for traffic control purposes.

156.04 Temporary Traffic Control. Install and maintain temporary traffic control devices adjacent to and within the project as required by the approved traffic control plan and the MUTCD. Install and maintain traffic control devices as follows:

(a) Furnish and install traffic control devices before the start of construction or hauling operations as follows:

MINIMUM LETTER <u>SIZE</u> AND LEGEND	MINIMUM SIZE AND SHAPE	WHEN AND WHERE REQUIRED
1. LOGGING OPERATIONS NEXT <> MILES (4" letters)	24" (rectangle) 36"	Min. 100 ft. outside of any continuous work areas.

2. LOGGING OPERATIONS (3" letters)	24" (diamond) 24"	To be used in conjunction with "Logging Operations Next <> Miles" and where work area is not continuous.
4. TRUCKS (4" letters)	24" (diamond) 24"	At critical intersections on roads when traffic is heavy or otherwise exceeds volumes stated in Part II below. Remove or cover when the sign is not applicable.
5. END LOGGING OPERATIONS (4" letters)	24" (rectangle) 36"	Use in conjunction with "Logging Operations Next <> Miles" and "Logging Operations."
6. TREE FELLING AHEAD (3" letters)	24" (diamond) 24"	Required 200 feet in advance of danger area where timber is being felled adjacent to all roads, including temporary roads, and trails.
7. ROAD MACHINERY AHEAD (3" letters)	24" (diamond) 24"	Required at least 200 feet in advance of Purchaser road maintenance operations on roads.

- (b) Install only those traffic control devices needed for each stage or phase.
- (c) Relocate temporary traffic control devices as necessary.
- (d) Remove devices that no longer apply to the existing conditions.
- (e) Immediately replace any device that is lost, stolen, destroyed, or inoperative.
- (f) Keep temporary traffic control devices clean.
- (g) Remove all temporary traffic control devices upon permit expiration or when approved.
- (h) The Forest Service reserves the right to require the Permittee to use flaggers certified by the American Traffic Safety Services Association, the National Safety Council, the International Municipal Signal Association, a state agency, or other acceptable organization during periods of peak recreation season. Perform the work described under MUTCD Part 6. Use type III, VII, VIII, or IX retroreflective sheeting on flagger paddles. Do not use flags. Flaggers must wear high visibility safety apparel as required by MUTCD 6E.02.

156.05 Temporary Closures. Road closures will not be allowed under this permit, unless approved in writing by the District Ranger. If authorization has been given to temporarily close any Forest Service road, the Permittee must maintain traffic control devices during closure period(s). Appropriate barricades and signs will be erected and maintained as shown in the traffic control plan or as otherwise designated.

Prior to closing roads during construction, give written notice to the District Ranger at least 10 days in advance.

156.06 Maintaining Roadways During Work.

Do not construct detours outside of the clearing limits or use alternate route detours without the approval of the District Ranger.

156.07 Acceptance. Public traffic work will be evaluated under Subsection 106.02.

Delete Section 303 in its entirety and replace with the following.

Section 303. — ROAD RECONDITIONING

Description

303.01 This work consists of reconditioning ditches, shoulders, roadbeds, and aggregate surfaces. **Material**

303.02 N/A.

Construction Requirements

303.03 Ditch Reconditioning. Remove all slide material, sediment, vegetation, blowdown, and other debris from ditches and culvert inlets/outlets. Reshape ditches and culvert inlets/outlets to achieve positive drainage ad uniform ditch width, depth, and grade. Dispose of waste material on the downhill side of the road away from any live streams.

301.04 Shoulder Reconditioning. Remove all slide material, sediment, vegetation, blowdown, and other debris from existing shoulders in parking areas, turnouts, and other widened areas. Repair soft and unstable areas according to Subsection 204.07. Reshape shoulders. Dispose of waste material on the downhill side of the road away from any live streams.

303.05 Roadbed Reconditioning. Remove all slide material, sediment, vegetation, blowdown, and other debris from the roadbed. Dispose of waste material on the downhill side of the road away from live streams. Materials dislodged by work activities such as rocks, roots, branches, and trees shall be removed from the roadway and ditches. Pull any trees larger than 2 inches in diameter. Repair holes, soft, and unstable areas according to Subsection 204.07. Compact according to Subsection 204.11.

303.06 Aggregate Surface Reconditioning. Repair soft and unstable areas to the full aggregate surface according to Subsection 204.07. Remove irregularities and shape to a uniform surface. Finish and compact the surface according to Subsection 302.05.

303.07 Roadway Reconditioning. Perform applicable work described in Subsections 303.03 through 303.06.

303.08 Acceptance. Road Reconditioning work will be evaluated under Subsection 106.02. The road will be smooth, uniform appearance, and free from any debris.

Measurement

303.09 Measure the Section 303 pay items listed in the bid schedule according to Subsection 109.02.

Payment

303.10 The accepted quantities will be paid at the contract price per unit of measurement for the Section 303 pay items listed in the bid schedule. Payment will be full compensation for the work prescribed in this Section. See Subsection 109.05.

842.01 Service Required.

Remove vegetation, including trees, on roadway surfaces and roadsides.

842.02 Performance Standard.

Roadway vegetation maintenance is complete when the vegetation has been removed from the designated treatment area which interferes with traffic, obscures signs, impedes the flow of water or diverts water from drainage structures.

- **Method A Treatment Area:** From 5 ft. slope distance beyond toe of ditch to 10 ft. slope distance on fill slope.
- Method B Treatment Area: From toe of ditch to 5 ft. slope distance on fill slope.
- **General Notes:** Cut all brush within treatment area which is less than or equal to 6 inches in diameter measured 6 inches above the ground.

Cut all brush within 5 feet of culvert inlets.

Cut brush to provide overhead clearance of 14 feet on road surface.

Remove debris from road surface, ditches, and cut slope above the road. Scatter to fill slopes below the road, no debris piles allowed at culvert outlets.

Clean culvert inlets and outlets of debris a minimum of 2 culvert diameters.

Cut brush to provide sufficient site distance on the inside of sharp curves to eliminate blind corners and intersections.

842.03 Location of Work.

As specified on roads listed on the Road List, shown on the Plans, or as ordered by the Contracting Officer.

842.04 Measurement.

Measurement under this Section will be made by the total number of units for each item listed in the Schedule of Items completed and accepted.

A. Work activity will be measured along the centerline of the road regardless of the number of lanes. One mile of road includes treatment on both sides of the road.

842.05 Payment.

The accepted quantities will be paid at the contract price per unit of measurement for the Section 842 pay items listed in the schedule of items. Payment will be full compensation for the work prescribed in this Section.

842.06 Acceptable Quality Levels

Description	Standard	Maximum Allowable Deviation from Standard	Corrective Action for Work Exceeding Standard
	10		

Tree Damage	No Unnecessary Damage to a tree bole greater than 6" in diameter	Unnecessary damage resulting in more than 30% of the tree bole that is greater than 6" in diameter	Remove or Treat
Slope Distance Clearance	Vegetation cleared to the specified distance from road edge on each side of road	None	Rework
Vertical Clearance	Vegetation cleared to a specified distance of 14 feet from road surface elevation	None	Rework
Height Above Ground Surface	Vegetation shall be removed to a maximum height of 6 inches above the nearby ground surface	None	Rework
Drainage	Vegetation shall be removed from drainage structures or ditches that impede flow or divert water	None	Rework
Oversized Material	Material greater than 3" in diameter and 24" in length remaining on the roadway surface and/or roadways drainages or has the potential to move into drainages	None	Rework
Concentrations	Any concentration that affect sight distance or drainage	None	Rework
Work Area Management	Following approved safety plan which may include signs and other temporary traffic control measures	None	Suspend work until in compliance

813 - Spot Surfacing

813.01 Service Required.

Load, haul, and place surface material to repair or stabilize road surfaces.

813.02 Performance Standard.

Spot surfacing is complete when the designated quantity of the ordered material has been placed, shaped and compacted.

813.03 Location of Work.

As specified on roads listed on the Work List, shown on the Plans, or as ordered by the Contracting Officer.

813.04 Measurement.

Measurement under this Section will be made by the total number of units for each item listed in the Schedule of Items completed and accepted.

A. The quantity will be the number of cubic yards measured in the vehicles, or cubic yards of aggregate placed.

813.05 Payment.

The accepted quantities will be paid at the contract price per unit of measurement for the Section 813 pay items listed in the Schedule of Items. Payment will be full compensation for the work prescribed in this Section.

APPENDIX B East Charley LTF Maintenance Items

MAINTENANCE AND SURFACING REQUIREMENTS AND SPECIFICATIONS.

- 1) Take necessary actions to ensure Best Management Practices 14.26 Daily LTF Cleanup and 14.27 Log Storage/Sort Yard Erosion Control are met. See excerpt from Forest Service Handbook 2509.22, attached.
- 2) LTF and sortyard will be graded to maintain water flow into settling ponds and not directly into saltwater or other waterways.
- 3) Construct diversion ditches or berms as required to ensure proper drainage patterns.
- 4) Ensure the use of and replacement (as needed) of skids or roll out logs to minimize loose bark and wood and to minimize churning of compacted aggregate.
- 5) Cleanup bark, debris, or other solid materials daily when accumulations are present at the LTF and dispose of materials in an acceptable manner and off federal lands.
- 6) The generation of fine materials at sortyards are expected but can be minimized by the use of skids. Clean debris and other loose material on a regular basis and before the depth of rutting reaches 6 inches if material is liquifying. Dispose of materials in an acceptable manner and off federal lands.
- 7) Ensure settling ponds are functioning properly, clean out settling ponds weekly during operations, clean culvert outflow, and add or replace filter fabric when required.
- 8) If excessive breakdown of the aggregate surfacing or rutting occurs, spot surfacing or resurfacing will be required. Surface shall be graded and surfacing material added to ensure ruts are no deeper than 4 inches.
- 9) If operations cease for an extended duration (the off season or due to market conditions), the LTF and sortyard will be left clean of bark, debris, or other solid materials, left in a self-maintaining state with proper drainage patterns, clean and functioning settling ponds, and generally tidy and orderly.

MAINTENANCE AND SURFACING REQUIREMENTS PRIOR TO CLOSEOUT.

- 1) All improvements will be removed, unless explicitly requested otherwise by the District Ranger.
- 2) All garbage, cable, buckets, or other refuse will be removed from the facilities and

- disposed of properly.
- 3) All logs and wood chunks will be removed from the facilities.
- 4) Bark, wood debris, and any muck generated from operations will be scraped up and disposed of in an acceptable manner off federal lands.
- 5) Settling ponds and culvert outflow will be cleaned and will be properly functioning. Outflow culvert will be replaced if additional damage is sustained during operations.
- 6) LTF and sortyard will be left in a manner as good or better than found. Grade surfacing to ensure drainage into settling ponds and away from saltwater and other water bodies. Compact surface with vibratory roller.

APPENDIX C - Forest Service Handbook 2509.22 Soil and Water Conservation Handbook Best Management Practices

14.26 - PRACTICE: Daily LTF Cleanup

- 1. <u>OBJECTIVE</u>. Assure cleanup of bark, debris, or other solid materials daily when accumulations are present. Dispose of the materials in an acceptable manner, to prevent water quality degradation.
- 2. <u>EXPLANATION</u>. This is a preventive practice. It reflects stipulations in permits and housekeeping requirements in pollution prevention plans that are common in recent LTF permits. Disposal methods may vary with the contents collected. Much of the material removed will function as lightweight fill and may be used for reclamation or recycling by land placement. Hazardous wastes, and oil-contaminated materials are not included in this BMP. See BMP 12.16 for additional discussion.
- 3. <u>IMPLEMENTATION</u>: The objective is to minimize the bark and the other small materials being introduced into marine waters. Daily cleanup when accumulations are present is intended to keep the site clean and avoid repeated wheel traffic over loose bark. A permit from Alaska Department of Environmental Conservation may be required prior to placement of the removed materials.
- 4. <u>REFERENCES</u>. T-845 Log Transfer Facility Operation, Maintenance, and Monitoring; 402 Permits issued for Log Transfer Facilities.

14.27 - PRACTICE: Log Storage/Sort Yard Erosion Control

- 1. <u>OBJECTIVE</u>. To avoid generation of fine particles, and control the overland flow of particles carrying hazardous materials into waterways.
- 2. <u>EXPLANATION</u>. This is a preventive practice. Log storage and log sort yards, including log-scaling areas, involve the handling and movement of logs and bundles of logs. Loose bark, small limbs, and needles are dislodged in the handling, and are ground into fine particles under the wheels of equipment. Some fine particulate material may also come from trucks, or may be developed by breakdown of the rock surfacing of the yard. If these sites are essential to National Forest Management and cannot be avoided, the following mitigation measures should be employed: 13

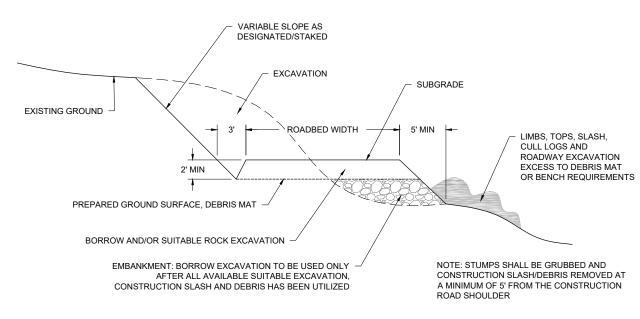
- a. Clean debris and bark and other loose material from log storage areas/yards before the depth of loose materials reaches 6 inches (depth of rutting) if the material is liquefying. Cleanup of accumulations will prevent excessive churning of overland flows of water and the generation of fine particulate materials in the yard.
- b. Placement of materials removed from log storage/sort yards must be done in a manner that assures water quality protection. Petroleum and solvent contaminated material and hazardous substances must be kept separated from the materials that are removed and treated appropriately (see BMPs 12.8 12.9). Loose materials removed from log storage/sort yards are to be placed in locations where water may decant without direct discharges to streams or other water bodies (see BMP 12.16). Slope the materials to drain and seed slopes and surfaces to maintain stability. Look for sites that can be reclaimed, such as unneeded rock pits, old landings, and similar locations to place loose materials. Assure future needs are considered before reclaiming rock pits and landing. Avoid depositing materials at the edge of sort yards or LTF clearings to prevent killing trees and extending the yard size.
- c. Use filter strips where possible along log sort yards and log storage areas. Filter strips have good efficiency in settling and removing small particulate material from overland flows. Directly disperse overland flows from log storage/sort yards through vegetated filter strips. Assure filter strips are large enough to perform for several years. Where filter strips are not practicable, provide settling ponds or sediment traps.
- 3. <u>IMPLEMENTATION</u>. The avoidance practice suggests that in the planning and implementation of timber sales, log sort yards will not be constructed unless essential. Log scaling prior to rafting is generally preferred, but may not be practicable at sites with limited space or small amounts of use.

The practices for management of sort yards and storage yards provide for keeping loose materials from accumulating into mire in the yard areas. Decanting the excess water while keeping the solids in place is the objective of the practice.

Loose materials removed can be used as lightweight fill. It can effectively be used to reclaim areas that have been disturbed, such as rock pits and landings. A permit for the placement of the removed material may be required from the Alaska Department of Environmental Conservation. Utilize the IDT process to select sites for the placement of sort yard material that minimizes water quality concerns.

Oil contaminated wastes should not be included in the lightweight fill material, and should be disposed in accordance with applicable regulations. Hazardous substances are not included in these practices.

4. <u>REFERENCES</u>. 40 CFR 122.27; NPDES general permit for storm water discharges, Federal Register Vol 57, No. 175, Sept 9, 1992; Timber Sale Contract Provisions B(T)6.66.



NOTES

- 1. PROFILE ELEVATIONS ARE SHOWN TO SUBGRADE.
- 2. CROWN TRAVELED WAY OR ROADBED 2%.
- UNDISTURBED STUMPS AND OTHER CLEARING DEBRIS IN EMBANKMENT AREAS MAY BE LEFT IN PLACE IF THEY DO NOT EXTEND CLOSER THAN 24" TO ANY SUBGRADE. (REFERENCE SPEC. 201.05B)
- 4. UNLESS OTHERWISE INDICATED OR STAKED, ALL FILL SLOPES SHALL BE 1:1.25 AND ALL CUT SLOPES SHALL BE 1:1 OR AS SHOWN IN THE STAKING NOTES.
- 5. ROAD NO. STA. TO STA. TOLERANCE CLASS FINISH METHOD



United States Department of Agriculture Forest Service

R10 ALASKA REGION

PROJECT NAME

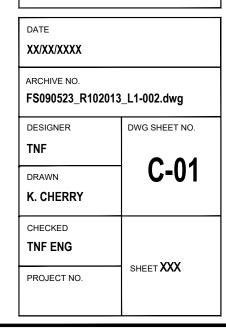
EAST EDNA BAY RUP

TONGASS NATIONAL FOREST

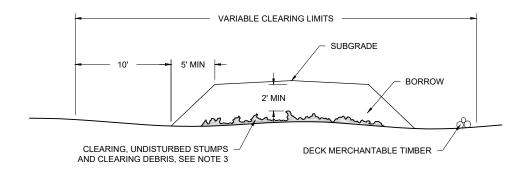
DISTRICT NAME

DRAWING TITLE

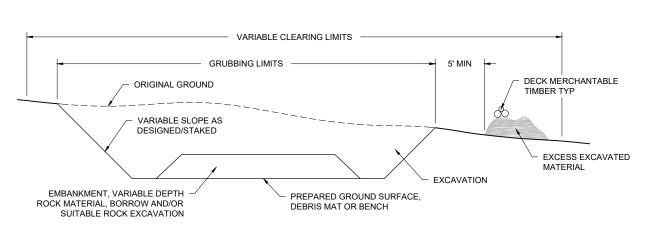
TYPICAL CROSS-SECTION



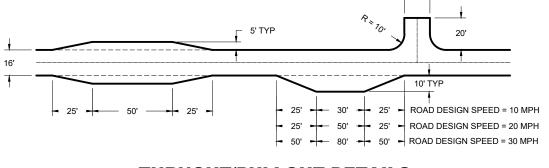
TYPICAL SIDEHILL SECTION



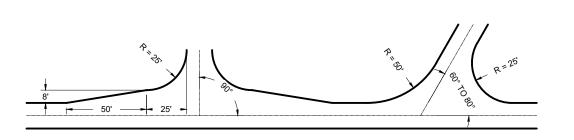
TYPICAL OVERLAY SECTION



TYPICAL THROUGH CUT SECTION

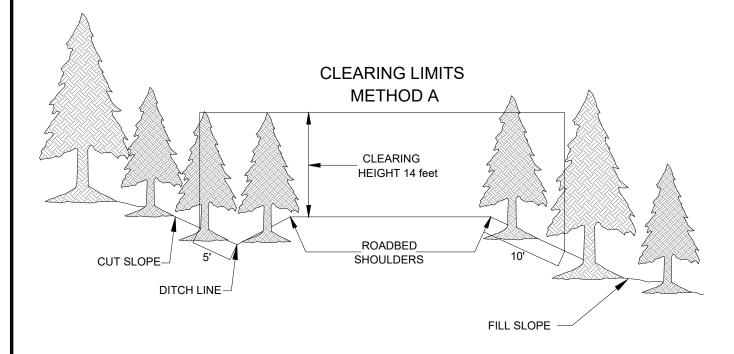


TURNOUT/PULLOUT DETAILS

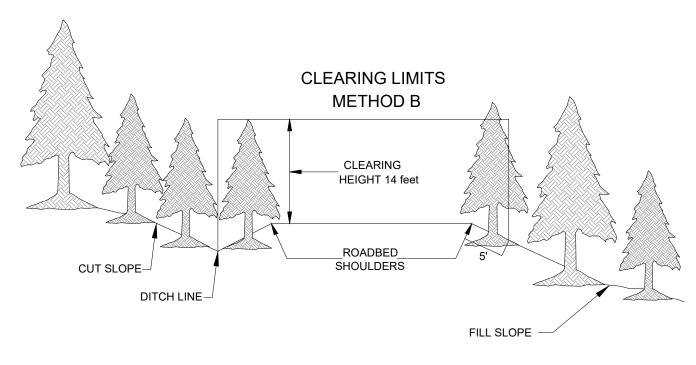


INTERSECTION DETAILS

METHOD A TREATMENT AREA: FROM 5' SLOPE DISTANCE BEYOND TOE OF DITCH TO 10' SLOPE DISTANCE ON FILL SLOPE



METHOD B TREATMENT AREA: FROM TOE TO DITCH TO 5' SLOPE DISTANCE ON FILL SLOPE



General Notes:

- 1. Cut all brush within treatment area which is less than or equal to 6 inches in diameter measured 6 inches above the ground.
- 2. For Method A, cut brush back 5' slope distance beyond bottom of ditch or 15' slope distance from road shoulder, whichever is less, and10' slope distance beyond the edge of road shoulder on fill slope.
- 3. For Method B, cut all brush within 5' of culvert inlets.
- 4. Cut brush to provide overhead clearance of 14 feet on road surface.
- 5. Remove debris from road surface, ditches, and cut slope above road. Scatter to fill slopes below road, no debris piles allowed at culvert outlets.
- 6. Clear ditches of woody debris. Clean culvert inlets and outlets of debris a minimum of 2 culvert diameters.
- 7. Cut brush to provide sufficient site distance on the inside of sharp curves to eliminate blind corners and intersections.



United States Department of Agriculture Forest Service

> R10 ALASKA REGION

PROJECT NAME

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TONGASS NATIONAL FOREST

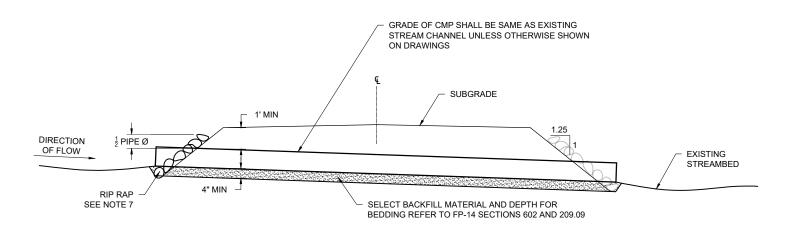
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DRAWING TITLE

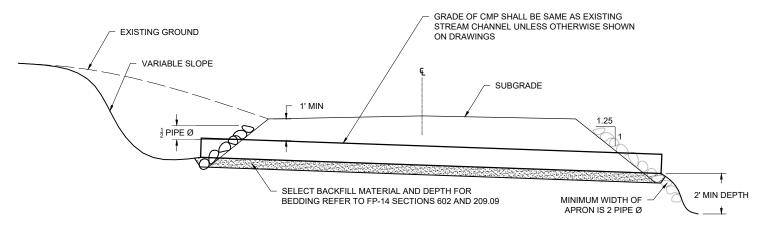
DATE

ROADSIDE BRUSHING

11/9/2018		
ARCHIVE NO. FS090523_R102013_L1-002.dwg		
DESIGNER	DWG SHEET NO.	
R. SCHMOHL	V 04	
DRAWN	X-01	
K. CHERRY		
CHECKED		
R. BERRY		
PROJECT NO.	SHEET 002 OF 100	



TYPICAL CULVERT INSTALLATION AT LIVE STREAMS



TYPICAL CULVERT INSTALLATION FOR DITCH RELIEF

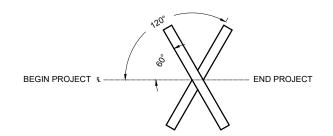
ALUMINUM & STEEL CULVERT CORRUGATIONS SHALL CONFORM TO THE FOLLOWING:			
MINIMUM (IN./GAGE)		CORRUGATIONS	
STEEL	ALUMINUM		
0.064"/16	0.060" / 16	2 $\frac{2}{3}$ " X 0.5"	
0.079" / 14	0.075" / 14	2 ½" X 0.5"	
0.079" / 14	0.075" / 14	5" X 1"	
0.109" / 12	0.105" / 12	5" X 1"	
	MINIMU STEEL 0.064"/16 0.079" / 14 0.079" / 14	SHALL CONFORM TO THE FOLLOW MINIMUM (IN./GAGE) STEEL ALUMINUM 0.064"/16 0.060" / 16 0.079" / 14 0.075" / 14 0.079" / 14 0.075" / 14	

POLYETHYLENE (PE) CULVERT PER ASTM D 3350 CORRUGATED			
PIPE SIZE Ø	MIN COVER	CELL CLASS NO. 315412C	CELL CLASS NO. 324420C
		MAX FILL HE	IGHT IN FEET
18"	12"	12'	10'
24"	12"	12'	10'
30"	12"	12'	10'
36"	12"	11'	10'

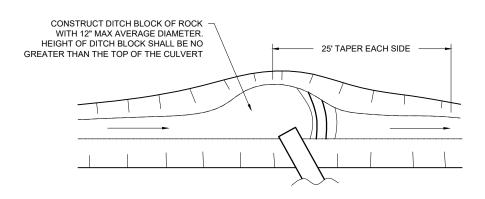
POLYETHYLENE (PE) CULVERT PER ASTM D 3350 RIBBED				
PIPE SIZE Ø	MIN COVER	CELL CLASS NO. 334433C	CELL CLASS NO. 335434C	
		MAX FILL HE	IGHT IN FEET	
18"	12"	18'	24'	
24"	12"	22'	28'	
30"	12"	22'	28'	
36"	12"	25'	31'	
40"	12"	21'	27'	
48"	12"	21'	26'	

NOTES

- 1. PLACE CULVERT IN ALIGNMENT WITH THE NATURAL STREAM CHANNEL. WHERE NO CHANNEL IS APPARENT, INSTALL CULVERTS AT SKEWS SHOWN ON THE DRAWINGS OR AS DIRECTED BY THE CO.
- 2. MINIMUM CULVERT GRADES SHALL BE 5% OR ½ OF THE TRIBUTARY DITCH GRADE.
- 3. CAMBER WILL DEPEND ON SITE CONDITIONS. MAXIMUM CAMBER IS 2% (STEEL OR ALUMINUM CULVERTS) OR 1% (POLYETHYLENE CULVERTS) OF CULVERT LENGTH BY NO MORE THAN 2.5" AT CENTER.
- 4. CATCH BASIN CONSTRUCTION IS REQUIRED WHEN SHOWN ON THE DRAWINGS AND AT ALL INSTALLATIONS WHERE THE INLET IS LOWER THAN NATURAL GROUND.
- 5. CULVERT INLETS AND OUTLETS SHALL EXTEND 24" BEYOND THE TOE OF THE FILL UNLESS AGREED TO BY THE CO.
- MINIMUM COVER OVER CULVERTS UNLESS OTHERWISE SHOWN ON THE DRAWINGS IS 12".
- 7. PLACE RIPRAP AT SITES SHOWN ON THE DRAWINGS OR AS DIRECTED BY THE CO. MINIMUM WIDTH OF RIPRAP IS 1.5 PIPE Ø. MINIMUM RIPRAP SIZE IS CLASS 4.
- 8. THE CONTRACTOR SHALL PROVIDE THE CO A LIST OF AS-SLOPE STAKED CULVERT LENGTHS AND LOCATIONS.



CULVERT SKEW DIAGRAM



TYPICAL CATCH BASIN WITH DITCH BLOCK



United States Department of Agriculture Forest Service

> R10 ALASKA REGION

PROJECT NAME

EAST EDNA BAY RUP

TONGASS NATIONAL FOREST

DISTRICT NAME

DRAWING TITLE

TYPICAL CULVERT DETAILS

