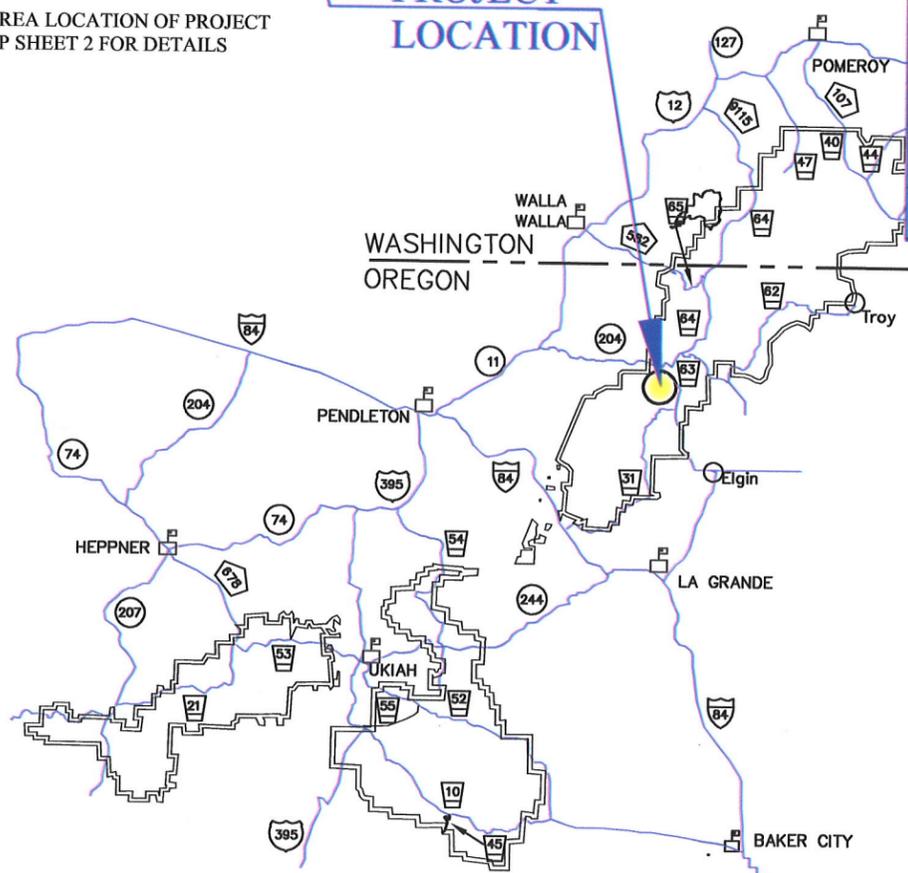


KEY MAP SHOWING AREA LOCATION OF PROJECT
SEE VICINITY MAP SHEET 2 FOR DETAILS

**PROJECT
LOCATION**



LEGEND	
	FOREST SERVICE OFFICE
	FOREST SERVICE BOUNDARY
	ROADS

UNITED STATES DEPARTMENT OF AGRICULTURE
FOREST SERVICE



UMATILLA NATIONAL FOREST
WALLA WALLA RANGER DISTRICT



CONSTRUCTION DRAWINGS FOR PROPOSED

TOFU TIMBER SALE

ROAD NO.	LENGTH	CONST &/or RECONST	TYPE OF WORK*
3715 McDougal	2.37	RECONST	C GDS
3715030	0.55	RECONST	C G D -
3718 Seg 1, 2, 3	3.05	RECONST Seg 1 & 2 CONST Seg 3	C GDS
3718155 Seg 1, 2, 3	0.51	RECONST Seg 1 & 3 CONST Seg 2	C GDS
3718156 JCT	0.06	CONST	C G - S
3718200	0.42	RECONST	C G D -
3719030	1.03	RECONST	C G D -
3719037 MS	0.13	RECONST	C G D -
3719070	0.65	RECONST	C G D -
3719080	2.05	RECONST	C G D -
3700030 MS	0.14	RECONST	C G D -

INDEX TO SHEETS	
NO.	DESCRIPTION
1	TITLE SHEET
2	VICINITY MAP
3	ESTIMATE OF QUANTITIES
4-6	ROAD STRUCTURE TYPICALS & DETAILS
7	CLEARING & GRUBBING TYPICAL
8	DRAINAGE TYPICAL - DRAIN DIP
9	DRAINAGE TYPICAL - ARMORED CROSS DRAIN
10-18	WORKLISTS
19	MATERIAL SOURCE TYPICAL

* TYPE OF WORK:

- C = CLEARING & GRUBBING &/or BRUSHING
- G = EXCAVATION/GRADING/RECONDITIONING
- D = DRAINAGE
- S = SURFACING
- MS = MATERIAL SOURCE

CONSTRUCTION segments identified in Worklists

PROJECT USES "STANDARD SPECIFICATIONS FOR CONSTRUCTION OF ROADS AND BRIDGES ON FEDERAL HIGHWAY PROJECTS (FP-03) - U.S. CUSTOMARY UNITS" AND ASSOCIATED SUPPLEMENTALS.

DESIGNED BY	<i>Marilyn Johnson</i>	4/10/2014
NAME: Marilyn Johnson	TITLE: Designer/Dev. Eng Tech.	DATE
REVIEWED BY	<i>Lonnie Ruchert</i>	4/18/14
NAME: Lonnie Ruchert	TITLE: Forest Road Manager	DATE
RECOMMENDED BY	<i>Steve Anderson</i>	4/17/14
NAME: Steve Anderson	TITLE: North Zone Road	DATE
APPROVED	<i>Mike Rasebach</i>	4/18/2014
NAME: Mike Rasebach	TITLE: District Ranger	DATE
	<i>Joe Ober</i>	4/22/2014
NAME: Joe Ober	TITLE: Operations Engineer	DATE

ESTIMATE OF QUANTITIES TOFU TIMBER SALE

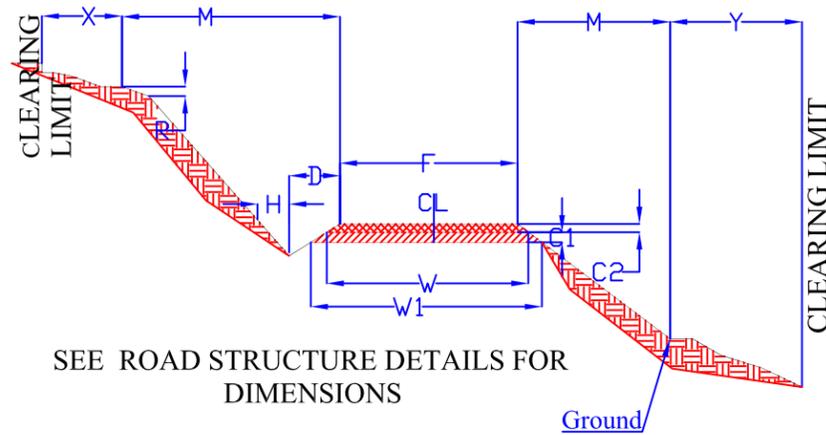
TOFU TIMBER SALE			ESTIMATE OF QUANTITIES											REMARKS
WALLA WALLA RANGER DISTRICT														
UMATILLA NATIONAL FOREST			3700030 Summer Home MS	3715 McDougal	3715030	3718 Seg 1, 2, 3	3718155 Seg 1, 2, 3	3718156 Jct.	3718200	3719030	3719037	3719070	3719080	
ITEM NO.	DESCRIPTION	MILES --> UNIT OF MEASURE	0.14	2.37	0.55	3.05	0.51	0.06	0.42	1.03	0.13	0.65	2.05	
15101	Mobilization	LUMP SUM	-	-		ALL	-	-	-	-	-	-	-	Mobilization for total project. Equipment washing according to BT6.35 for noxious weed control is required and is incidental to Mobilization. Schedule inspection prior to bringing equipment on-forest.
17001	Develop water supply	LUMP SUM	-	-	ALL	-	-	-	-	-	-	-	-	In-water work window of July 1 - August 15 applies. Work MAY occur anytime within the Normal Operating Season IF no water is leaving the impoundment. All removed material shall be hauled to designated waste site.
20103	Clearing and grubbing, disposal of tops and limbs F & K , logs F & J , stumps F	MILE	-	-	-	0.33	0.21	0.06	-	-	-	-	-	Construction, extension, or re-alignment of an existing road across undisturbed ground creating a new road template. Deck logs meeting utilization standard according to Timber Sale contract. Decking and piling location shall be identified on ground.
20157	Cutting and disposal of roadway vegetation; tops and limbs F & K , logs F & J , stumps F	MILE	0.14	2.37	0.55	2.72	0.30	-	0.42	1.03	0.13	0.65	2.05	Reconstruction of roads with an existing template/road prism. Deck logs meeting utilization standard according to Timber Sale contract. Decking and piling location shall be identified on ground.
20301	Removal CULVERTS	EACH	-	5	1	8	-	-	-	6	-	3	7	DISPOSAL: Removed culverts become property of Purchaser and shall be removed from Government Land and legally disposed of. Note: In-water work window as stated in Item 17001 Remarks applies to Rd 3715030 culvert removal.
20402	Roadway excavation, compaction method B finishing method B	MILE	-	-	-	0.33	0.21	0.06	-	-	-	-	-	Road construction between clearing limits and along flagged alignment. Tolerance class D.
20420a	Drainage excavation, type DRAIN DIP	EACH	-	13	7	22	-	-	-	11	3	8	9	See DRAIN DIP Typical: Unless otherwise stated on WORKLIST or PLANS, excavated material shall be hauled to a designated disposal site(s). Waste area recontouring incidental to this item.
20420b	Drainage excavation, type ARMORED CROSS DRAIN	EACH	1	-	-	16	9	-	-	-	-	-	3	See ARMORED CROSS DRAIN Typical: Unless otherwise stated on WORKLIST or PLANS, material excavated to construct Armored cross drains - if suitable - may be placed on and blended in with existing road's surfacing/subgrade.
30359	Roadway reconditioning, compaction method B	MILE	0.14	2.37	0.55	2.72	0.30	-	0.42	1.03	0.13	0.65	2.05	Reconditioning of existing road prism includes but not limited to ditches and drainage structures such as leadout ditches, travel way including turnouts, curve widening, turnarounds, and shoulders. Compaction method applies to both aggregate and native s
32226a (Coyote MS)	Grid Rolled aggregate maximum size 6" , compaction method H	CY (in place)	-	-	-	2090	755	350	-	440	120	-	-	Coyote MS: All production, haul, placement, shaping, and compaction for road and drainage armoring as identified in Work lists, Plans, Details, and/or Typical.
32226b (Summerhome MS)	Grid Rolled aggregate maximum size 6" , compaction method H	CY (in place)	30	990	290	-	-	-	-	-	-	620	480	Summer Home MS: All production, haul, placement, shaping, and compaction for road and drainage armoring as identified in Work lists, Plans, Details, and/or Typical.
32232	Haul and place STOCKPILED aggregate, compaction method H	LUMP SUM	-	ALL	-	-	-	-	-	-	-	-	-	Stockpiled aggregate located at Swamp Creek Material Source located off Forest Road 64 MP 6. Road is closed by gate; make prior arrangements to access stockpile. Estimate in-place quantity is 90 cy.
60211	24" metal culvert (GFM)	LUMP SUM	-	-	ALL	-	-	-	-	-	-	-	-	In-water work window of July 1 - August 15 applies. See Remarks Item 17001.
65102a	Pit and quarry development (Coyote MS)	LUMP SUM	-	-	-	ALL	-	-	-	-	-	-	-	See Sheet 19 for Material Source information. Material sources have flagged areas to avoid to prevent spread of noxious weeds.
65102b	Pit and quarry development (Summer Home MS)	LUMP SUM	-	ALL	-	-	-	-	-	-	-	-	-	See Sheet 19 for Material Source information. Material sources have flagged areas to avoid to prevent spread of noxious weeds.

ROAD STRUCTURE TYPICALS & CONSTRUCTION NOTES

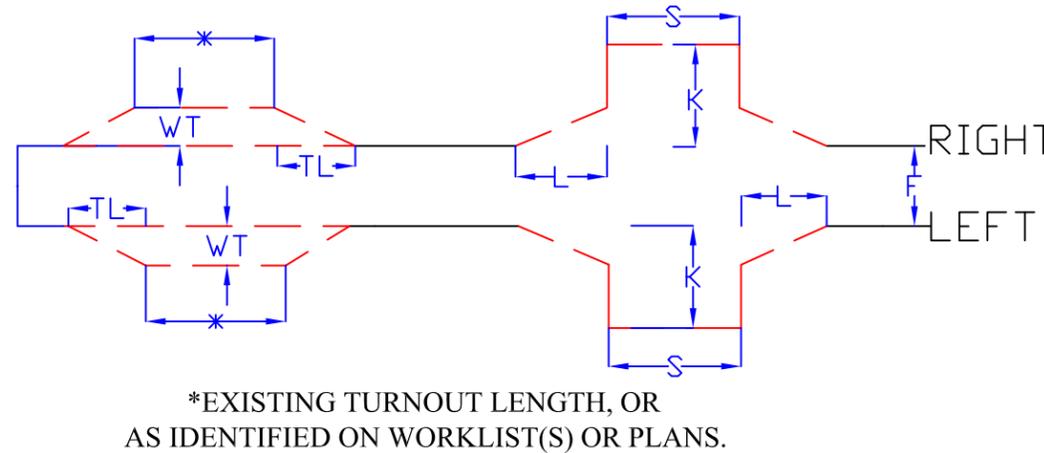
TOFU TIMBER SALE

ROAD NUMBER ALL	SHEET 4	TOTAL SHEETS 19
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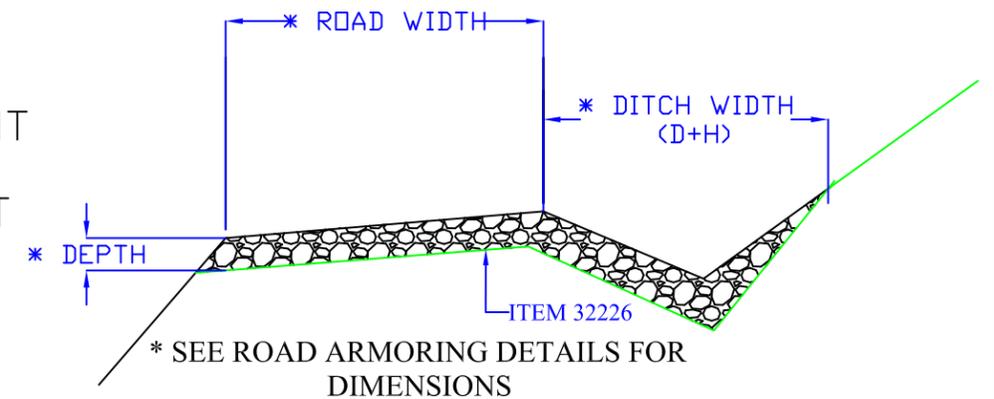
ROAD PRISM CROSS SECTION



**TURNOUT(S) & TURN-AROUND(S)
PLAN VIEW**



**ROAD & DITCH ARMORING
CROSS SECTION**



CONSTRUCTION NOTES

1. ROAD STRUCTURE DETAILS references ROAD STRUCTURE TYPICALS. Mile Posts and/or Stations as shown on PLANS, or WORKLISTS are approximate.
2. Unless otherwise noted on PLANS or WORKLISTS, turnout width and transition length is listed on ROAD STRUCTURE DETAILS. Unless otherwise noted on PLANS or WORKLISTS, turnout length is as exists on ground.
3. Unless otherwise noted on PLANS or WORKLISTS, ditch dimensions (D & H) apply to existing ditches on project roads. Not all roads are ditched, and some roads have ditched segments on both sides of road. Reconditioning (if included) applies to both segments
4. Placement of aggregate shall be down existing Centerline for control, or as determined by Contracting Officer. Unless otherwise noted on PLANS, or WORKLISTS, turnouts, tapers, and curve widening (constructed and existing) shall be rocked to same depth as TRAVEL WAY.
5. Unless included as a separate pay item, Watering is incidental to all applicable pay items.
6. Construction Tolerances apply to work done under Section 204.
7. Transition distance for aggregate depth at beginning/end of project, or segment shall be minimum of 10 feet.
8. Oversize aggregate NOT broken down by designated compaction method shall be removed from travel way.
9. DRAIN DIPS and CROSS DRAIN DIPS (within an armored segment) shall be armored in accordance with applicable DRAINAGE TYPICAL.

ROAD STRUCTURE DETAILS

TOFU TIMBER SALE

ROAD NUMBER	SEGMENT	STATION OR MILEPOST		CLEARING WHICHEVER IS GREATER		CONSTRUCTION TOLERANCE	EX = EXISTING O = OUTSLOPE I = INSLOPE C = CROWN	ROADBED WIDTH		DITCH DIMENSIONS		TURNOUT Width & Taper		TURNAROUND WIDTH, TAPER, LENGTH			TRAVEL WAY WIDTH	GRADING		
		MILEPOST		FEET				FEET		FEET		FEET		FEET			FEET	INCHES	INCHES	
				M = Min. beyond shoulder	Beyond slope stake X Y			W Base	W1 Sub grade	D	H	WT	TL	K	L	S	F	Base = C1	Surface = C2	
3700030 SUMMER HOME MATERIAL SOURCE		1.26	1.4	See Clearing & Grubbing TYPICAL	N/A	N/A	C	EX	12	14	3	1	10	25	EX	EX	EX	12		-
3715 MCDOUGAL		0.67	2.97	See Clearing & Grubbing TYPICAL	N/A	N/A	C	EX	16	18	3	1	10	EX	EX	EX	EX	14	See Road Armoring DETAILS	-
3715 MCDOUGAL		2.97	3.04	See Clearing & Grubbing TYPICAL	N/A	N/A	C		16	18	3	1	10	25	30	25	20	14	See Road Armoring DETAILS	0.33
3715030		0.00	0.55	See Clearing & Grubbing TYPICAL	N/A	N/A	C	EX	14	16	3	1	10	EX	EX	EX	EX	12	See Road Armoring DETAILS	-
3718	Seg. 1	0.00	1.61	See Clearing & Grubbing TYPICAL	N/A	N/A	C	EX	16	18	3	1	10	EX	EX	EX	EX	14	See Road Armoring DETAILS	-
3718	Seg. 2	1.61	2.72	See Clearing & Grubbing TYPICAL	N/A	N/A	C	EX	14	16	3	1	10	EX	EX	EX	EX	12	See Road Armoring DETAILS	-
3718 (CONSTRUCTION)	Seg. 3	2.72	3.05	See Clearing & Grubbing TYPICAL	N/A	N/A	D	OUTSLOPE	14	16	3	1	10	25	30	25	20	12	See Road Armoring DETAILS	-
3718155	Seg. 1	0.00	0.24	See Clearing & Grubbing TYPICAL	N/A	N/A	D	EX	12	14	3	1	10	25	30	25	20	12	-	-
3718155 (CONSTRUCTION)	Seg. 2	0.24	0.45	See Clearing & Grubbing TYPICAL	N/A	N/A	D	OUTSLOPE	12	14	3	1	10	25	30	25	20	12	See Road Armoring DETAILS	-
3718155	Seg. 3	0.45	0.51	See Clearing & Grubbing TYPICAL	N/A	N/A	D	EX	12	14	3	1	10	25	EX	EX	EX	10	-	-
3718156 (CONSTRUCTION)		0.00	0.05	See Clearing & Grubbing TYPICAL	N/A	N/A	D	OUTSLOPE	12	14	3	1	10	25	30	25	20	12	See Road Armoring DETAILS	-
3718200		0.00	0.42	See Clearing & Grubbing TYPICAL	N/A	N/A	D	EX	14	16	3	1	10	25	EX	EX	EX	12	-	-
3719030		0.00	1.03	See Clearing & Grubbing TYPICAL	N/A	N/A	D	EX	12	14	3	1	10	25	EX	EX	EX	12	-	-
3719037 COYOTE MATERIAL SOURCE		0.00	0.13	See Clearing & Grubbing TYPICAL	N/A	N/A	D	EX	12	14	3	1	10	25	EX	EX	EX	12	-	-
3719070		0.00	0.65	See Clearing & Grubbing TYPICAL	N/A	N/A	D	EX	12	14	3	1	10	25	EX	EX	EX	12	See Road Armoring DETAILS	-
3719080		0.00	2.05	See Clearing & Grubbing TYPICAL	N/A	N/A	C	EX	12	14	3	1	10	25	EX	EX	EX	12	See Road Armoring DETAILS	-

ROAD & DITCH ARMORING DETAILS

TOFU TIMBER SALE

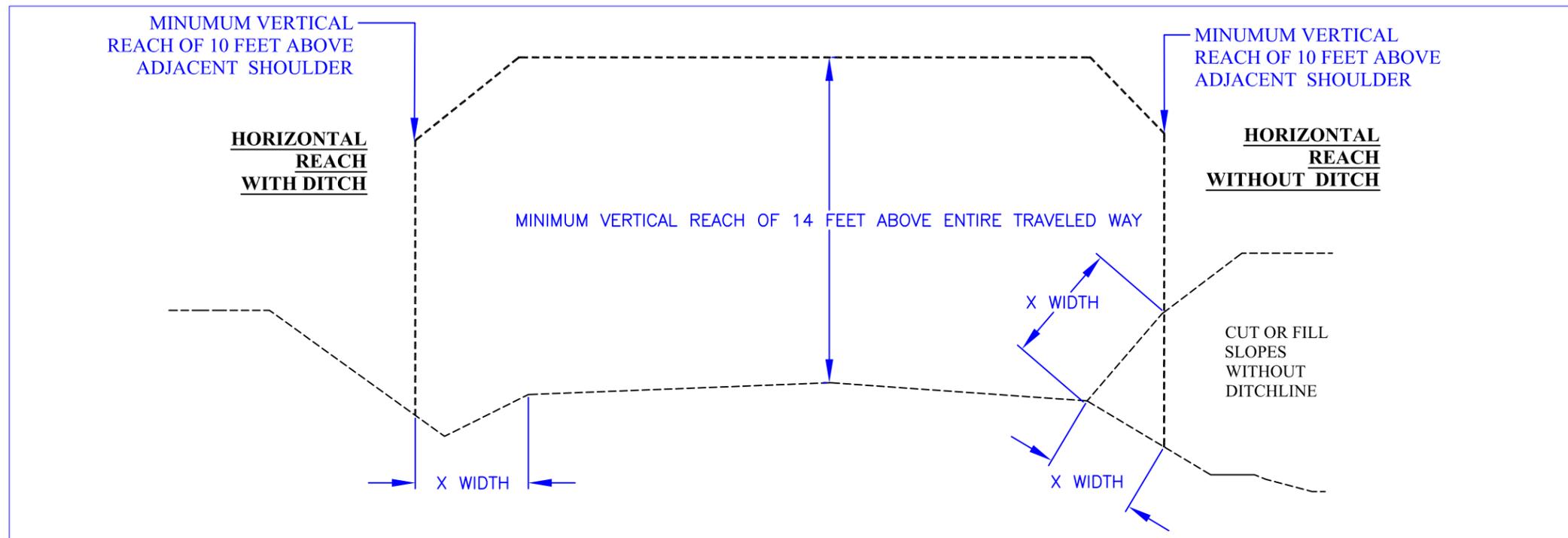
ITEM 32226 GRID ROLLED AGGREGATE, MAXIMUM SIZE 6"		AVE. ROAD WIDTH	DITCH WIDTH	ROAD OR DITCH LENGTH	COMPACTED DEPTH	ITEM 32226
ROAD NUMBER	STATION OR MILEPOST	FEET	FEET	FEET	FEET	CY IN-PLACE
3715 McDougal	MP 2.47 - 2.52	15	4	270	1	190
3715 McDougal	MP 2.97 - 3.02	25 ' (Rd & turnout)	-	265	1	250
3715 McDougal	MP 3.03 TAR	See Sheet 5 Road Details for dimensions			1	30
3718 Seg. 1	MP 0.83 - 1.21	-	5	2010	1	370
3718 Seg. 2	MP 2.34	13	-	100	1	50
3718 Seg. 2	MP 2.66	13	-	100	1	50
3718 Seg. 3	MP 2.72 - 2.77	13	-	264	1	130
3718 Seg. 3	MP 2.73 TAR	See Sheet 5 Road Details for dimensions			1	30
3718 Seg. 3	MP 2.85 TAR	See Sheet 5 Road Details for dimensions			1	30
3718 Seg. 3	MP 3.05 TAR	See Sheet 5 Road Details for dimensions			1	30
3718155 Seg. 2	MP 0.30 - 0.38	13	-	420	2	410
3718155 Seg. 2	0.33 (Turnout)	10	-	100	2	75
3718156 Jct.	MP 0.00 - 0.06	14	-	320	2	350
3719070	MP 0.25 - 0.63	-	4	2010	1	300
3719080	MP 0.81 - 0.85	-	4	215	1	30

NOTE

1. See Sheet 4 ROAD & DITCH ARMORING CROSS-SECTION
2. TAR refers to J-hole turnarounds on Work lists identified for armoring.

CLEARING & GRUBBING TYPICAL

TOFU TIMBER SALE



CLEARING NOTES

1. Debris shall not be scattered on adjacent roadways or trails, on top of fences, or in locations that will disrupt drainage functions such as ditches and lead out ditches..
2. Piling may be required to avoid slash concentrations. Piling locations shall be identified on the ground prior to piling.
3. Deck logs meeting Timber Sale utilization standards according to FSSS 201.04(f).
4. Upon completion of Clearing, all live and dead vegetation, including stumps, shall be completely removed from Travel Way and shoulders and with no more than 6 inches of vegetation remaining above the ground within the remaining cleared area (X WIDTH).
5. Exception to Note 4: Due to obstruction(s), including but not limited to signs, rocks, and existing stumps (if not designated for removal, or within Travel Way or shoulders), up to 18 inches of vegetation may remain above ground within X-Width. Note: this exception does not apply to AS STAKED construction clearing limits.
6. Culvert clearing: In addition to X-WIDTH, clear minimum of 2 feet from inlet end of culvert, or to back of slope or catch basin, whichever is less.
7. Sight distance at junctions and "blind" curves: AS STAKED, clear up to an additional X-WIDTH to provide for sight distance.

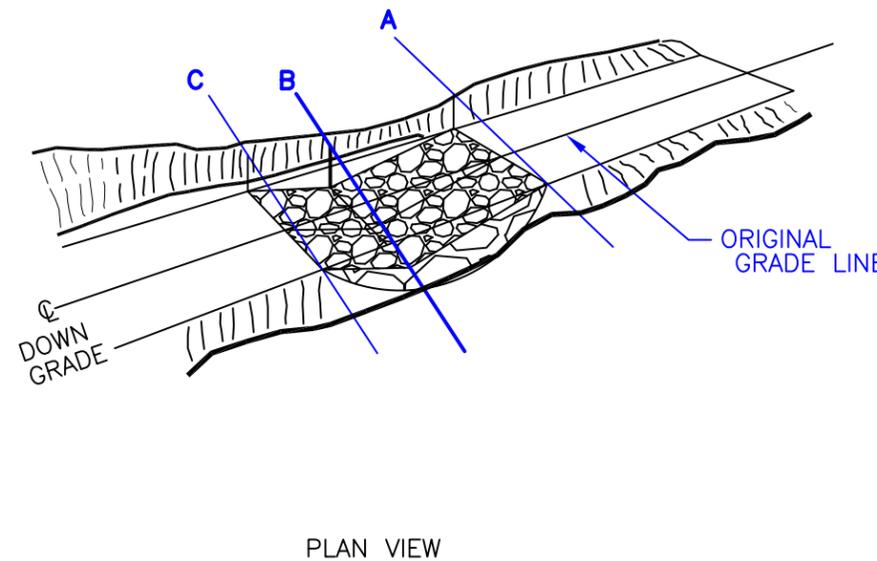
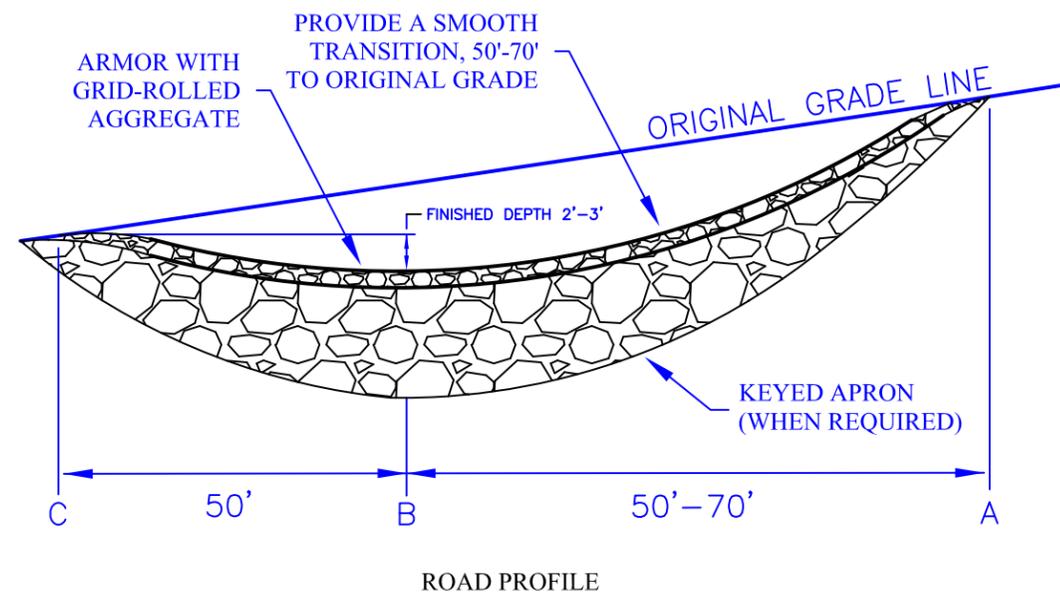
CLEARING LIMITS

ROAD NUMBER	ROAD STATUS*	X-WIDTH	ROAD NUMBER	ROAD STATUS*	X-WIDTH	ROAD NUMBER	ROAD STATUS*	X-WIDTH
3700030 Summer Home Material Source	OPEN	Min. 4 FEET	3718 Seg. 1 & 2	OPEN	Min. 6 FEET	3719030	CLOSED	Min. 4 FEET
3715 McDougal	OPEN	Min. 6 FEET	3718 Seg 3.	CLOSED	AS STAKED min. 10 ft from centerline	3719037 Coyote Material Source	CLOSED	Min. 4 FEET
3715030	OPEN	Min. 4 FEET	8155 Seg. 1 & 3	CLOSED	Min. 4 FEET	3719070	CLOSED	Min. 4 FEET
			3718155 Seg. 2	CLOSED	AS STAKED min. 10 ft from centerline	3719080	OPEN	Min. 4 FEET
			3718156	CLOSED	AS STAKED min. 10 ft from centerline			
			3718200	CLOSED	Min. 4 FEET			

DRAINAGE TYPICAL
TOFU TIMBER SALE

DRAIN DIP TYPICAL

(NOT TO SCALE, AND EXAGGERATED FOR ILLUSTRATIVE PURPOSES)



Armoring Material Notes

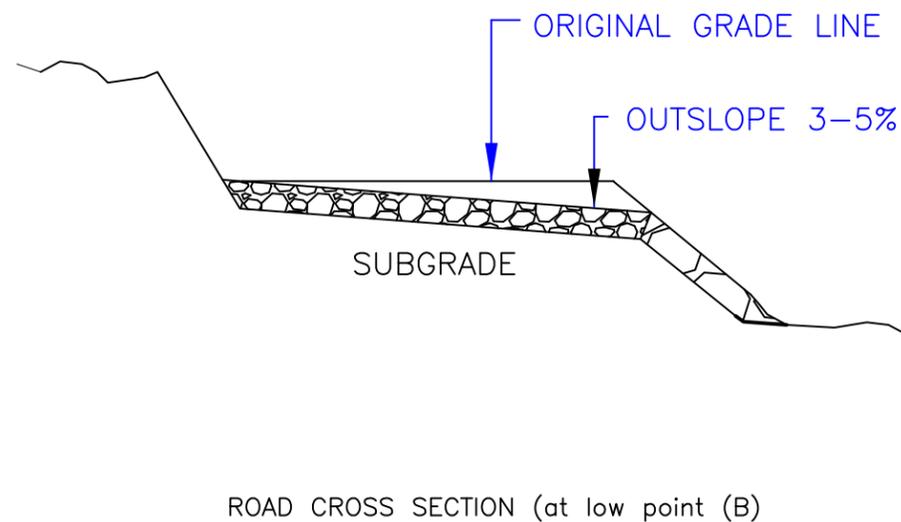
Armor full width of dip with suitable rocky material, grid-rolled to a thickness of not less than 1 foot for a distance of 25 feet from the low point in each direction. Taper thickness from 1 foot to 0 (zero) feet within a distance of 10 feet at each end to provide a uniform transition back to existing grade.

Width of dips at low point varies, depending upon terrain. For volume calculations, an average overall width of 18 feet is assumed.

VOLUME BY DESIGN = 40 CY IN PLACE

Construction Notes

1. The inlet and outlet of DRAIN DIP shall be smooth, free draining, and out-sloped.
2. Excavated material (Dimensions A-C) shall be hauled to designated waste area(s) unless otherwise stated on PLANS, or WORK LIST.
3. Compaction of DIP subgrade required prior to placing armoring material.
4. Tie armoring material* to ditch line and/or toe of cut slope to completely intercept water passage.
5. Extend armoring material to edge of fill slope and ensure dip drains onto a vegetated surface.
6. Oversized armoring material NOT broken down by designated compaction method shall be removed from the travel way.
7. When required, key in clean armoring material (see PLANS or WORK LIST for quantity) to form an apron to dissipate outflow and protect the fill slope.

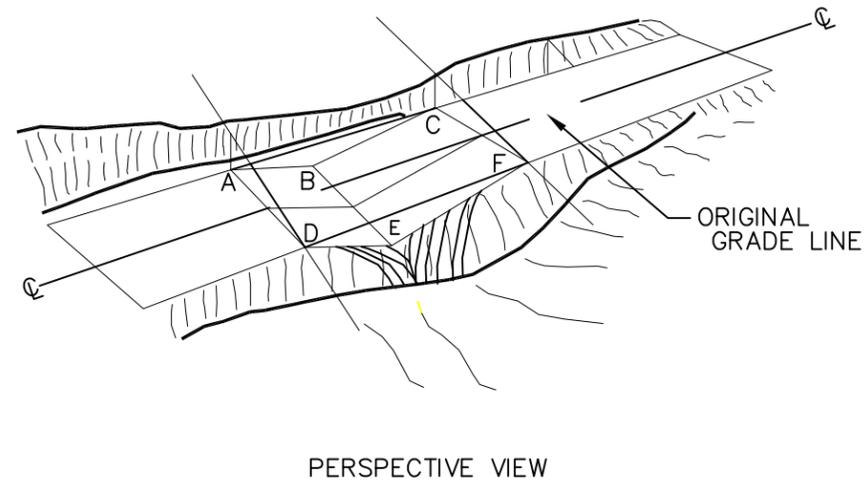
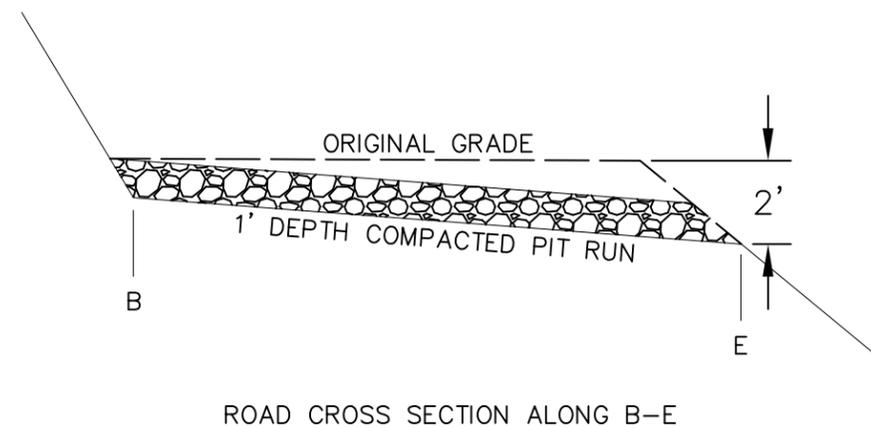
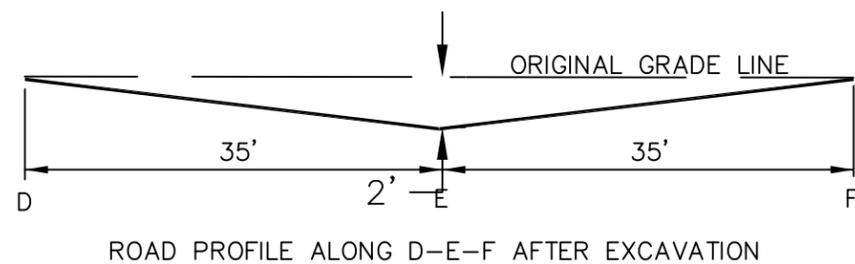
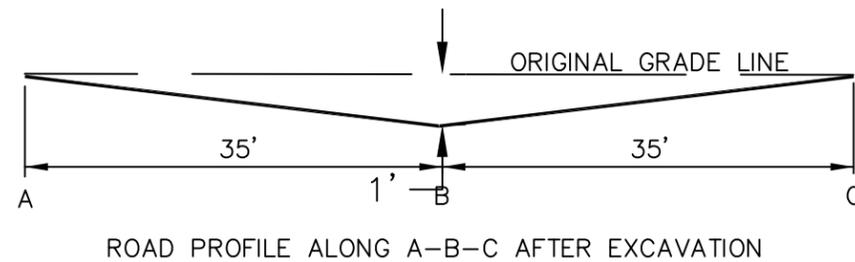


ROAD CROSS SECTION (at low point (B))

DRAINAGE TYPICAL
TOFU TIMBER SALE

ARMORED CROSS DRAIN TYPICAL

(NOT TO SCALE, AND EXAGGERATED FOR ILLUSTRATIVE PURPOSES)



Armoring Material Notes

Armor full width of dip with suitable rocky material, grid-rolled to a thickness of not less than 1 foot for a distance of 20 feet from the low point in each direction. Taper thickness from 1 foot to 0 (zero) feet within a distance of 15 feet at each end to provide a uniform transition back to existing grade.

Width of dips at low point varies, depending upon terrain. For volume calculations, an average overall width of 15 feet is assumed.

VOLUME BY DESIGN = 30 CY IN PLACE

Construction Notes

1. The inlet and outlet of CROSS DRAIN shall be smooth, free draining, and out-sloped.
2. Note that ROAD PROFILE excavation depth varies.
3. Unless otherwise stated on PLANS, or WORK LIST, excavated material may be placed on, and spread out over a suitable distance (i.e. not piled up at inlet &/or outlet of dip) along the existing road and blended in as part of Reconditioning. Except for the dip, the existing road profile (longitudinally and in profile) is not to be significantly changed by the wasted material.
4. Tie armoring material* to ditch line and/or toe of cut slope to completely intercept water passage.
5. Extend armoring material to edge of fill slope and ensure dip drains onto a vegetated surface.
6. Oversized armoring material NOT broken down by designated compaction method shall be removed from the travel way.
7. When required, key in clean armoring material (see PLANS or WORK LIST for quantity) to form an apron to dissipate outflow and protect the fill slope.

CONSTRUCTION NOTES

GENERAL

1. Mileposts shown on PLANS, or identified on WORK LISTS are approximate.
2. Transition distance between varying Traveled Way widths shall be minimum of 25 feet.
3. Contractor responsible for all work required to access Project Roads including but not limited to removal of berms, and log out of access roads.
 - a. Project signing shall be according to BT 6.33 Safety: Sign Plan required

WATERING & WATER SUPPLY

1. DESIGNATED water source(s) for TOFU TS are located on Forest Roads 3715030 (McDougall) and 3700030 Summer Home Pit. ALTERNATE water source located on Forest Road 64 MP 6.0 at Swamp Creek.
2. Drafting may be limited at times due to low flows.
3. Unless a Pay Item included, no separate payment shall be made for water, including but not limited to, work needed to access water source(s).

CLEARING & GRUBBING

1. Limb and deck logs meeting utilization standard of Timber Sale contract.
2. Slash pile locations shall be flagged on ground.
3. No slash piles shall be constructed within stream channels.

CULVERT REMOVAL

1. Removed culverts become property of PURCHASER and shall be removed from Government land, and legally disposed of.

EXCAVATION & EMBANKMENT

1. Unless otherwise shown on PLANS, TYPICALS, or DETAILS:
 - a. Back slopes = 1:1 in loose rock and soil, and 4:1 in solid rock.
 - b. Fill slopes = 1:2
 - c. FP-03 slope notation is Vertical/Horizontal.

EXCESS & UNSUITABLE MATERIAL

1. Waste sites identified on work lists are **POTENTIAL** Waste Sites: **Designated Waste Sites** shall be staked prior to issuing Notice to Proceed.
2. Unless otherwise stated in WORK LISTS, material excavated to construct DRAIN DIPS, and other unsuitable material shall be hauled to a Designated Waste site.
3. Contractor may request (in writing) use of alternative locations.
4. Waste site(s) used by Purchaser shall be re-contoured to blend with surrounding ground and to drain away from road or other facility. Compaction not required.
5. No separate payment shall be made for Waste Site clean-up.

RECONDITIONING

1. Roadway reconditioning includes all surfaces including travel way, shoulders, existing ditch line(s), lead-out ditches, turnouts, tapers, and curve widening. Note: Some roads have ditch lines on both sides.

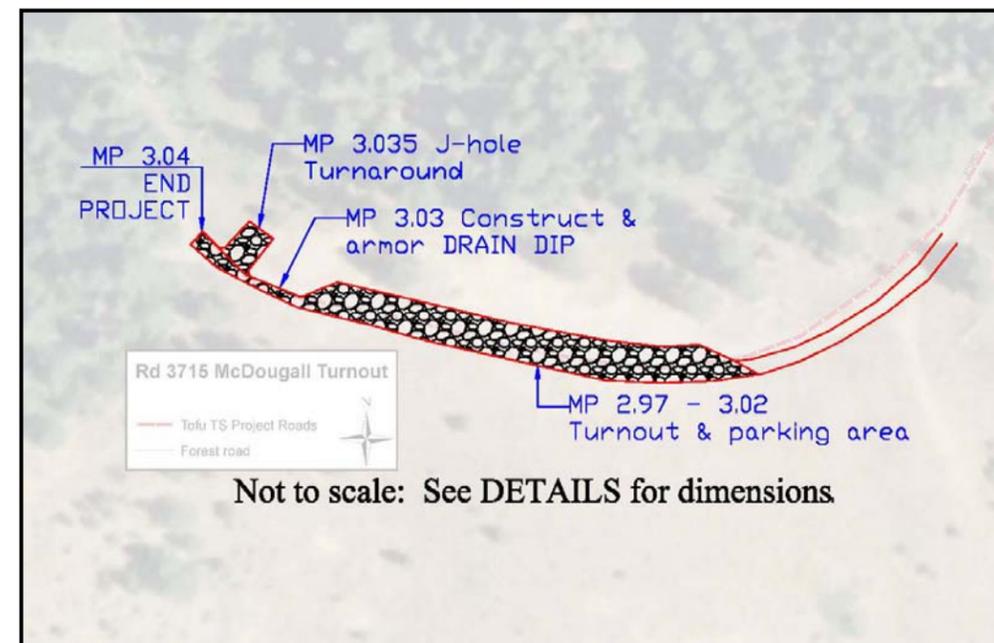
DEVELOPMENT OF PITS & QUARRIES

1. See PLANS Sheet 19 for Material Sources.
2. Material Source excavation limits shall be reviewed on the ground.
3. Pit Development plan required.
4. Avoid use of, and equipment parking in areas flagged due to presence of noxious weeds.

WORK LISTS FOR TOFU TIMBER SALE

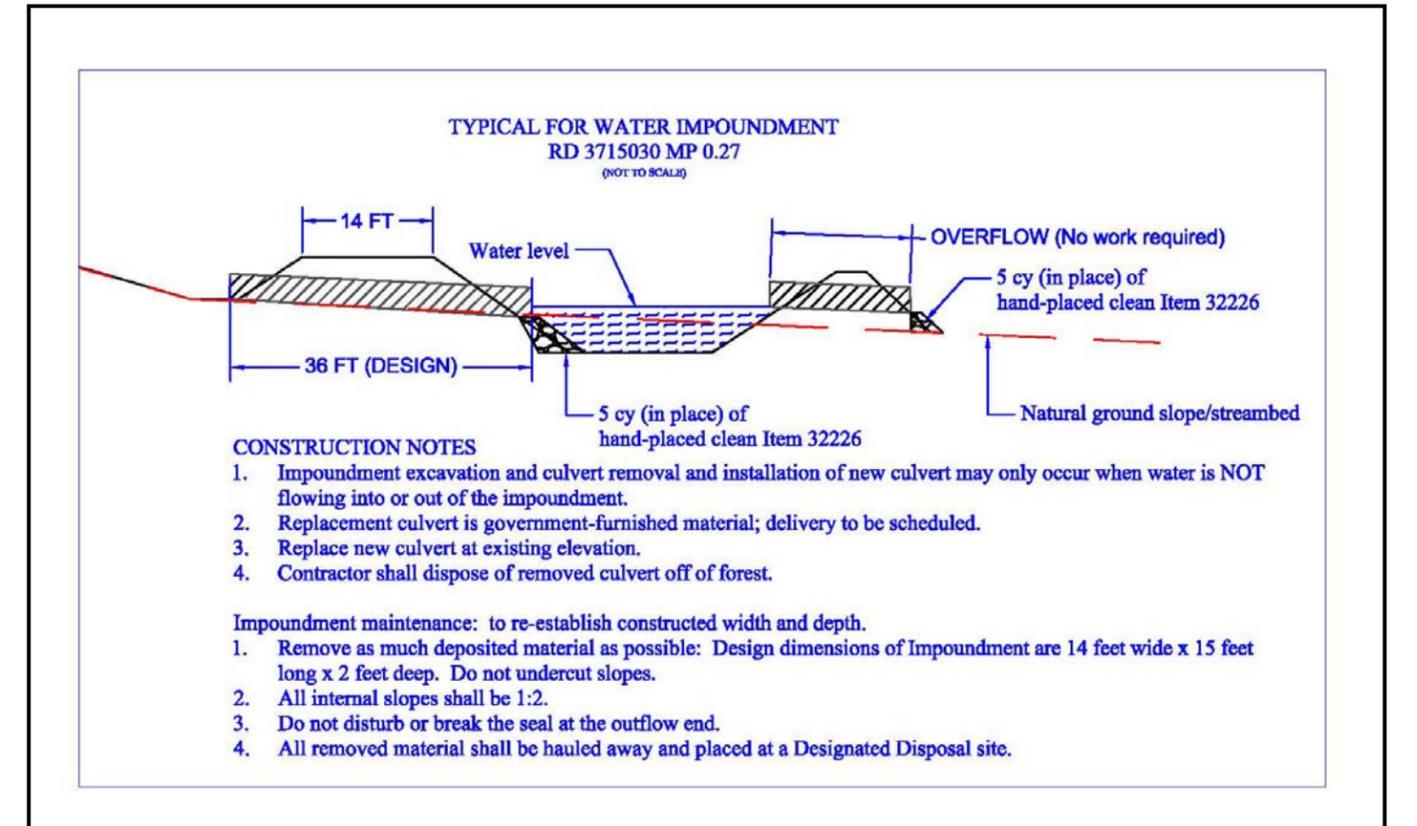
FOREST ROAD 3715 MCDOUGALL CAMP ROAD	
MILEPOST	DESCRIPTION & WORK ITEMS
0.00 – 0.43	Junction State Highway 204 MP 15.4 Note: cabins and access driveways and power poles both sides of road.
0.67	BEGIN PROJECT, Forest Road 3715 Tofu Timber Sale BEGIN CUTTING & disposal of roadway vegetation BEGIN RECONDITIONING of roadway including shoulders, existing ditch line(s), lead-out ditches, turnouts, tapers, and curve-widening. Note: 1. Private lands continue ahead on both sides of roadway. 2. Ditch line(s) may be located on one or both sides of road. 3. Turnouts NOT identified on Work list, or staked on ground.
1.5	Construct & armor DRAIN DIP
1.53	Existing metal culvert: in draw. Do not remove.
1.77	Sign right: Entering National Forest Land
1.84	REMOVE & DISPOSE OF existing culvert. Construct & armor DRAIN DIP
1.87	Junction left, Road 3715020; Junction right, Road 3715030
2.08	Construct & armor DRAIN DIP. Install 20 ft. Lead out ditch left
2.14	Junction right, Road 3715037 (closed road with boulder barricade). POTENTIAL waste site.
2.18	Construct & armor DRAIN DIP
2.35	Junction left to MATERIAL SOURCE: McDougall Material Source is NOT available for project use due to weed infestation. Open area between road 3715 and tree line is POTENTIAL waste site.
2.37	REMOVE & DISPOSE OF existing culvert. Construct & armor DRAIN DIP
2.38	Flat area/old landing right: POTENTIAL waste site.
2.47 – 2.52	Enter trees Scoured Ditch line right: Reshape ditch to collapse and compact holes. Armor ditch and road by placing Item 32226 Pit-run aggregate, compaction method GRIDROLL according to ROAD & DITCH ARMORING TYPICAL.
2.52	REMOVE & DISPOSE OF existing culvert. Construct & armor DRAIN DIP Note: Tie dip to armored ditch line
.60	Construct & armor DRAIN DIP
2.67	Construct & armor DRAIN DIP
2.73	REMOVE & DISPOSE OF existing culvert. Construct & armor DRAIN DIP
2.77	REMOVE & DISPOSE OF existing culvert. Construct & armor DRAIN DIP Note: This Milepost is the END of this Drain Dip. Low point shall be staked.
2.81	Unit corner left
2.88	Existing metal culvert (Do not remove)

2.9	Large water bar - Construct & armor DRAIN DIP
2.92	Wheel tracks left to viewpoint: POTENTIAL waste site.
2.94	Construct & armor DRAIN DIP
2.97	Wheel track loop (towards fence) and turnout/parking area right BEGIN TURNOUT/parking area right: See Sheet 5 Road Details for dimensions. BEGIN PLACEMENT and compaction of Item 32226 Pit-run aggregate according to ROAD & DITCH ARMORING TYPICAL on road and turnout. BEGIN PLACEMENT Item 32232 STOCKPILED AGGREGATE (GFM): 6" compacted depth, compaction method H on road and turnout. POTENTIAL waste area: Wheel track loop
3.02	Wheel track loop right re-joins main road. END turnout END PLACEMENT of pit-run aggregate on road and turnout.
3.03	Construct & armor DRAIN DIP: tie dip armoring to road and turnaround armoring
3.035	Construct and armor J-Hole turnaround right according to Sheet 4 ROAD & DITCH ARMORING CROSS SECTION. See Sheet 5 ROAD DETAILS for dimensions.
3.04	Lick Creek Trail ahead END CUTTING & disposal of roadway vegetation END RECONDITIONING END PLACEMENT, crushed aggregate END PROJECT, Road 3715 Tofu Timber Sale



FOREST ROAD 3715030	
MILEPOST	DESCRIPTION & WORK ITEMS
0.00	Junction Forest Road 3715 MP 1.85 BEGIN PROJECT, Forest Road 3715030 Tofu Timber Sale BEGIN CUTTING & disposal of roadway vegetation BEGIN RECONDITIONING of roadway including shoulders, existing ditch line(s), Lead-out ditches, Turnouts, Tapers, and Curve Widening. Note 1. Ditch line(s) may be located on one or both sides of road 2. Turnouts NOT identified on Work list or staked on ground.
0.02	Construct and armor DRAIN DIP
0.07	Construct and armor DRAIN DIP
0.10	Wheel track right to open area (meadow): POTENTIAL waste area
0.25	Junction right, Road 3715034
0.26	Construct & armor DRAIN DIP
0.27	Designated WATER SOURCE right: <ul style="list-style-type: none"> Item 20301: Remove and dispose of damaged metal culvert draining into WATER SOURCE. Item 60211: Install new culvert (Government-furnished): 24" x 36 feet (estimated length) at existing elevation. Item 1701: Recondition and clean-out impoundment basin: Hand place clean Item 32226 as armoring. See TYPICAL FOR WATER EMPOUNDMENT TYPICAL Notes: 1. Unless the stream is dry, work can only be done during the in-stream work window of July 1 to August 15 th . 2. If stream is dry, work may occur outside the in-stream work window. 3. All material removed from the impoundment shall be hauled to DESIGNATED waste area.
0.31	Construct & armor DRAIN DIP
0.33	Junction right, Road 3715036
0.43	Construct & armor DRAIN DIP
0.47	Construct & armor DRAIN DIP
0.49	Construct & armor DRAIN DIP
0.53	Begin full width of double-wide turnout

0.55	End double-wide turnout END CUTTING & disposal of roadway vegetation END RECONDITIONING END PROJECT, Road 3715030 Tofu Timber Sale
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WORK LISTS FOR TOFU TIMBER SALE

FOREST ROAD 3718 Segment 1 COYOTE RIDGE	
MILEPOST	DESCRIPTION & WORK ITEMS
0.00	Junction Forest Road 3919 MP 0.68 BEGIN PROJECT, Road 3718 Segment 1, Tofu Timber Sale BEGIN CUTTING & disposal of roadway vegetation BEGIN RECONDITIONING of roadway Note 1. Ditch line(s) may be located on one or both sides of road 2. Turnouts NOT identified on Work list or staked on ground.
0.11	Remove and dispose of existing metal culvert. Construct and armor DRAIN DIP.
0.25	Remove and dispose of existing metal culvert. Construct and armor DRAIN DIP.
0.45	Construct and armor DRAIN DIP.
0.47	Bermed spur left: POTENTIAL disposal site.
0.63	In slope/sag approaching hairpin turn: Construct and armor DRAIN DIP.
0.69	Mid-point of hairpin turn: ensure that ditch line and lead out ditch functioning.
0.74	Construct and armor DRAIN DIP.
0.83	Before Utah dip: Construct and armor DRAIN DIP. BEGIN Ditch armoring section according to ROAD & DITCH ARMORING TYPICAL
0.86	Remove and dispose of existing metal culvert. Construct and armor DRAIN DIP.
0.9	Draw with existing metal culvert – do not remove
0.96	Construct and armor DRAIN DIP.
1.0	Remove and dispose of existing metal culvert. Construct and armor DRAIN DIP.
1.07	Remove and dispose of existing metal culvert. Construct and armor DRAIN DIP.
1.14	Remove and dispose of existing metal culvert. Construct and armor DRAIN DIP.
1.16	Draw with existing metal culvert – do not remove. (Utah dip ahead)
1.17	Construct and armor DRAIN DIP.
1.21	Draw with existing metal culvert – do not remove. END Ditch armoring.
1.27	Remove and dispose of existing metal culvert. Construct and armor DRAIN DIP.
1.32	Construct and armor DRAIN DIP.
1.35	Corner Unit 84 and junction right to unnumbered spur (to be used as temp road). POTENTIAL waste disposal site.
1.4	Existing Utah dip: Construct and armor DRAIN DIP.
1.42	Existing metal culvert (shallow draw with large catch basin area): Do not remove. Open out the outlet. Construct and armor DRAIN DIP (downgrade from center of culvert AS STAKED)

1.47	Construct and armor DRAIN DIP.
1.52	Existing Utah dip: Construct and armor DRAIN DIP.
1.57	Existing Utah dip: Construct and armor DRAIN DIP.
1.61	Junction right, Road 3718150 END Road 3718 Segment 1 END CUTTING & disposal of roadway vegetation, Road 3718 Segment 1 END RECONDITIONING, Road 3718 Segment 1 END PROJECT, Road 3718 SEGMENT 1, Tofu Timber Sale

FOREST ROAD 3718 Segment 2 COYOTE RIDGE	
MILEPOST	DESCRIPTION & WORK ITEMS
1.61	Junction right, Road 3718150 BEGIN Road 3718 Segment 2, Tofu Timber Sale BEGIN CUTTING & disposal of roadway vegetation BEGIN RECONDITIONING Construct and armor DRAIN DIP: AS STAKED this dip angles across road approximately 45 degrees from ditch line to edge of fill, an estimated 35 feet. <ul style="list-style-type: none"> Haul, place and compact total of 75 cy (in place) to armor this dip: Note this is 35 cy more than required according to Drain Dip Typical (40 cy + 35 cy) End dump 5 CY (in place) clean pit-run aggregate at outlet end of drain dip to function as a splash apron. Do not compact the splash apron.
1.66	Construct and armor DRAIN DIP
1.85	Remove and dispose of existing metal culvert. Construct and armor DRAIN DIP.
1.88	Construct ARMORED CROSS DRAIN DIP. CONSTRUCTION NOTE: 1. From this point on, the roadbed is a designated disposal site for suitable material excavated to construct <u>CROSS DRAIN DIPS</u> and <u>DRAIN DIPS</u> . 2. Spread suitable material evenly across full width of road prism drifting/spreading material ahead and back of dip location. Incorporate it into road during reconditioning. 3. Haul unsuitable material to Disposal site off of road template.
1.94	Existing water bar: Construct ARMORED CROSS DRAIN DIP.
1.98	Existing water bar: Construct ARMORED CROSS DRAIN DIP.
2.03	Open area left: POTENTIAL slash disposal site.

2.07	Existing water bar: Construct ARMORED CROSS DRAIN DIP.
2.11	Downgrade into draw ahead. Construct ARMORED CROSS DRAIN
2.12	Existing culvert in draw. Do not remove.
2.15	Upgrade out of draw MP 2.12. Construct ARMORED CROSS DRAIN DIP
2.28	Swale: insure outlet end open and free draining.
2.31	Clearing left: designated slash disposal site.
2.34	Existing culvert in draw Place and compact Item 32226 Grid rolled aggregate centered on draw. See ROAD & DITCH ARMORING DETAILS for dimensions.
2.37	Construct ARMORED CROSS DRAIN DIP.
2.41	Construct ARMORED CROSS DRAIN DIP.
2.49	J-Hole turnaround left: 20 feet x 30 feet. Brush out and recondition.
2.51	Junction right, Forest Road 3718200 J-Hole turnaround left: 20 feet x 30 feet. Brush out and recondition.
2.53	Existing water bar: Construct ARMORED CROSS DRAIN DIP.
2.58	Entrenched section: Use excavated material from dips to fill in the entrenched section. Construct ARMORED CROSS DRAIN DIP.
2.64	Washed and rutted section: Construct ARMORED CROSS DRAIN DIP using excavated material to fill in the washed and rutted section.
2.66	Draw without a culvert Place and compact Item 32226 Grid rolled aggregate centered on draw. See ROAD & DITCH ARMORING DETAILS for dimensions.
2.7	Downgrade of MP 2.66 draw: Construct ARMORED CROSS DRAIN DIP.
2.72	Junction right Road 3718300. END Road 3718 Segment 2 END CUTTING roadway vegetation, Road 3718 Segment 2 END RECONDITIONING, Road 3718 Segment 2 END PROJECT, Road 3718 SEGMENT 2, Tofu Timber Sale

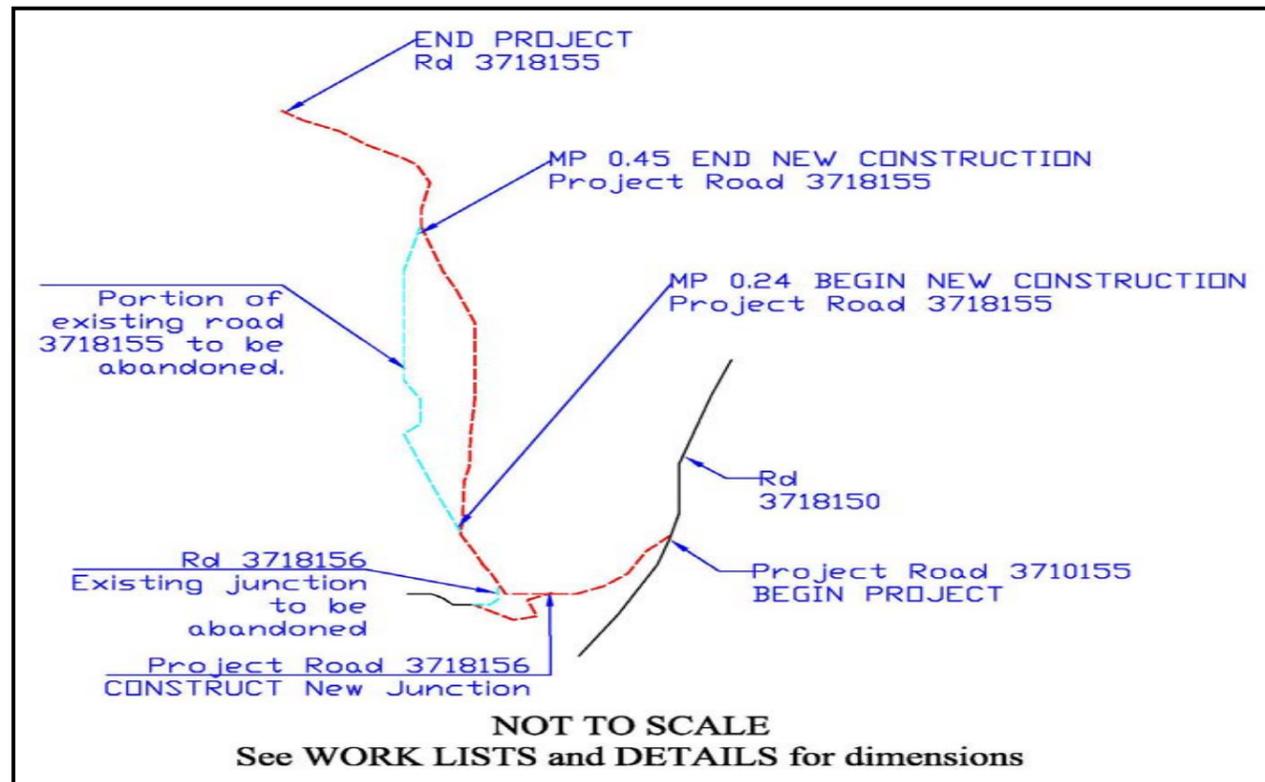
FOREST ROAD 3718 SEGMENT 3 - CONSTRUCTION	
MILEPOST	DESCRIPTION & WORK ITEMS
2.72	Junction right, Road 3718300 BEGIN PROJECT: ROAD 3718 Segment 3 – CONSTRUCTION, Tofu Timber Sale BEGIN CLEARING AND GRUBBING BEGIN ROAD Construction in accordance with FSSS 204 – Excavation and embankment AS STAKED. BEGIN PLACEMENT Item 32226 grid rolled aggregate for subgrade reinforcement according to ROAD & DITCH ARMORING TYPICAL. NOTE: Center Line and Clearing Limits shall be flagged. Clearing Limits shall also be staked
2.73	Construct and armor J-Hole turnaround left according to Sheet 4 ROAD & DITCH ARMORING CROSS SECTION. See Sheet 5 ROAD DETAILS for dimensions.
2.77	END subgrade reinforcement
2.78	Unit 97 south boundary Construct turnout left, 50 feet full width. See ROAD DETAILS for dimensions. Construct ARMORED CROSS DRAIN DIP.
2.81	Large sag in ground Construct turnout left, 75 feet full width: See ROAD DETAILS for dimensions. Note: turnout may shift ahead or back up to 50 ft. to provide for better alignment and sight distance. Construct ARMORED CROSS DRAIN DIP.
2.85	Construct and armor J-Hole turnaround left according to Sheet 4 ROAD & DITCH ARMORING CROSS SECTION. See Sheet 5 ROAD DETAILS for dimensions.
2.92	Original alignment appears to be blocked with a berm. Construct ARMORED CROSS DRAIN DIP
2.98	Construct ARMORED CROSS DRAIN DIP
3.05	Unit 12 north boundary Construct and armor J-Hole turnaround left according to Sheet 4 ROAD & DITCH ARMORING CROSS SECTION. See Sheet 5 ROAD DETAILS for dimensions. END CLEARING and grubbing END ROAD Construction END PROJECT, Road 3718 SEGMENT 3, Tofu Timber Sale

FOREST ROAD 3718155 SEGMENTS 1, 2, and 3	
MILEPOST	DESCRIPTION & WORK ITEMS
0.00	Junction Road 3718150 MP 0.29 BEGIN PROJECT: ROAD 3718155 Segment 1, Tofu Timber Sale BEGIN CUTTING & disposal of roadway vegetation BEGIN RECONDITIONING of roadway including shoulders, existing ditch line(s), Lead-out ditches, Turnouts, Tapers, and Curve Widening.
0.01	Metal gate – protect from damage
0.03	Existing water bar: Construct ARMORED CROSS DRAIN DIP
0.04 – 0.09	Large rocks embedded in road: reduce in place
0.12	Construct ARMORED CROSS DRAIN DIP
0.13	Construct ARMORED CROSS DRAIN DIP
0.14	Proposed junction Road 3718156 (to be constructed)
0.15	Construct ARMORED CROSS DRAIN DIP: Construct Lead-out ditch to drain across Road 3718156 – estimated length 30 feet.
0.17	Existing junction Road 3718156: Recondition a turnout across junction. DESIGNATED slash disposal area between MP 0.15 lead out ditch and back of turnout.
0.19	Recondition existing J-Hole/turnaround left.
0.21	Construct Lead-out ditch left – estimated length 20 feet.
0.24	END CUTTING & disposal of roadway vegetation, Segment 1 END RECONDITIONING Segment 1
	BEGIN PROJECT: ROAD 3718155 Segment 2 (CONSTRUCTION) TOFU Timber Sale BEGIN CLEARING and grubbing BEGIN ROAD Construction in accordance with FSSS 204 – Excavation and embankment AS STAKED NOTE: 1. Center Line and Clearing Limits shall be flagged. Clearing Limits shall also be staked. 2. Designated Slash Disposal site: portion of existing road to be abandoned.
0.26	Centerline is on right edge of existing road: Construct ARMORED CROSS DRAIN DIP. Construct Lead-out ditch to drain across Road 3718155 into tree line – estimated length 40

	feet.
0.27	Centerline continues to move away from the existing template
0.29	Construct ARMORED CROSS DRAIN DIP. Construct 20 foot Lead-out ditch left. If necessary, angle the Lead out ditch so the outlet does not drain onto the abandoned roadbed.
0.30	Nearside of existing swale BEGIN placement of Item 32226 grid rolled aggregate for subgrade reinforcement. See Sheet 6 ROAD & DITCH ARMORING DETAILS for dimensions.
0.305	Low spot of swale/grade sag: maintain grade sag and existing drainage pattern
0.32	Far side of existing swale
0.33	Crest of ridge Construct 75 ft turnout right. See Sheet 5 ROAD STRUCTURE DETAILS for dimensions.
0.37	Nearside of swale
0.375	Low spot of swale/grade sag: maintain grade sag and existing drainage pattern
0.38	Far side of existing swale END placement of grid rolled aggregate
0.40	Slight grade sag Construct ARMORED CROSS DRAIN DIP
0.43	Alignment approaching existing roadway.
0.44	Edge of existing roadway
0.45	At centerline of existing roadway. END CLEARING & grubbing, Segment 2 END ROAD construction, Segment 2
	BEGIN Road 3718155 Segment 3, TOFU Timber Sale BEGIN CUTTING & disposal of roadway vegetation BEGIN RECONDITIONING of roadway including shoulders, existing ditch line(s), Lead-out ditches, Turnouts, Tapers, and Curve Widening.
0.48	Existing water bar Construct ARMORED CROSS DRAIN DIP. Extend lead-out ditch left 20 feet.
0.5	Open area/wheel tracks right/spur road; property line ahead. Construct ARMORED CROSS DRAIN DIP
0.51	END CUTTING roadway vegetation END RECONDITIONING END PROJECT, Road 3718155 Segment 3, Tofu Timber Sale

FOREST ROAD 3718156 JUNCTION (CONSTRUCTION)	
MILEPOST	DESCRIPTION & WORK ITEMS
0.00	Junction Forest Road 3718155 MP 0.14 BEGIN PROJECT ROAD 3718156, Tofu Timber Sale BEGIN CLEARING & Grubbing BEGIN ROAD Construction in accordance with FSSS 204 – Excavation and embankment to relocate and construct junction AS STAKED. BEGIN placement of Item 32226 grid rolled aggregate. See Sheet ROAD STRUCTURE DETAILS for dimensions. NOTE: Center Line and Clearing Limits shall be flagged. Clearing Limits shall also be staked.
0.06	Tie relocated junction into existing centerline of Road 3718156. END CLEARING & Grubbing END ROAD Construction END PLACEMENT grid rolled aggregate END PROJECT, Road 3718156, Tofu Timber Sale

FOREST ROAD 3718200	
MILEPOST	DESCRIPTION & WORK ITEMS
0.00	Junction Forest Road 3718 MP 2.51 BEGIN PROJECT ROAD 3718200, Tofu Timber Sale BEGIN CUTTING & disposal of roadway vegetation BEGIN RECONDITIONING of roadway including shoulders, existing ditch line(s), Lead-out ditches, Turnouts, Tapers, and Curve Widening. NOTE: This entrenched road from MP 0.00 to MP 0.05 is a DESIGNATED waste area for Drain Dip material.
0.01	Existing berm across original junction. Re-open 20 foot lead-out ditch left. Utilize all available material to reduce entrenched junction and roadway. Bypass junction is designated waste area for slash.
0.03	Bypass junction joins road alignment: Install 20 foot lead-out ditch left.
0.035	Install 20 foot lead-out ditch left
0.04	Re-open 20 foot lead-out ditch left
0.18	Opening – grassy area: Designated slash disposal site right Maintain 100 foot turnout right Re-establish ditch line and ensure lead-out ditch functioning.
0.21	Large blow down snag/log across roadway.
0.22	Road width ahead is reduced by washing and slough off: Use material generated by reconditioning and ditch cleanout to fill-in and re-establish road width.
0.24	Existing water bar and narrowest road width. End rocky section.
0.26	Re-open 20 foot lead-out ditch left
0.28	Re-open 20 foot lead-out ditch left.
0.29	Existing Grade Sag: Ensure inlet and outlet open and free-draining.
0.33	Bermed spur right into Unit 10
0.36	Existing Grade Sag: Ensure inlet and outlet open and free-draining.
0.39	Double wide turnout left: designated slash disposal site.
0.42	Unit 10 boundary END CUTTING & disposal of roadway vegetation END RECONDITIONING END PROJECT, Road 3718200, Tofu Timber Sale



FOREST ROAD 3700030 SUMMER HOME MATERIAL SOURCE	
MILEPOST	DESCRIPTION & WORK ITEMS
0.00	Highway 204
1.26	Junction right, Road 3719080 BEGIN CUTTING & disposal of roadway vegetation BEGIN RECONDITIONING of Travel way, shoulders, existing ditch line(s), and turnouts, including tapers, and curve widening.
1.3	Construct ARMORED CROSS DRAIN DIP
1.4	Summer Home Material Source: Note flagging of areas to avoid due to presence of noxious weeds. END CUTTING & disposal of roadway vegetation END Reconditioning END Project, Road 3700030, Tofu Timber Sale

0.69	Unit corner and wheel tracks right
0.79	Remove and dispose of metal culvert. Construct and armor DRAIN DIP
0.87	Beginning of heavy alder thicket right. Junction right, Road 3719037 access to Material Source
0.94	Remove and dispose of metal culvert. Construct and armor DRAIN DIP
1.03	End Road 3719030 END CUTTING & disposal of roadway vegetation END RECONDITIONING END PROJECT, ROAD 3719030 Tofu Timber Sale

FOREST ROAD 3719030	
MILEPOST	DESCRIPTION & WORK ITEMS
0.00	Junction right with Road 3719 MP 1.43 BEGIN PROJECT, ROAD 3719030, Tofu Timber Sale BEGIN CUTTING & disposal of roadway vegetation BEGIN RECONDITIONING of Travel way, shoulders, existing ditch line(s), and turnouts, including tapers, and curve widening
0.04	Construct and armor DRAIN DIP
0.09	Guardrail barricade: Remove and dispose of metal culvert. Construct and armor DRAIN DIP
0.12	Construct and armor DRAIN DIP
0.2	Construct and armor DRAIN DIP
0.22	Remove and dispose of metal culvert. Construct and armor DRAIN DIP
0.28	Construct and armor DRAIN DIP
0.46	Construct and armor DRAIN DIP
0.52	Remove and dispose of metal culvert. Construct and armor DRAIN DIP
0.6	Remove and dispose of metal culvert. Construct and armor DRAIN DIP

FOREST ROAD 3719037 Coyote Material Source	
MILEPOST	DESCRIPTION & WORK ITEMS
0.00	Junction right with Road 3719030 BEGIN PROJECT, Road 3719037, Tofu Timber Sale BEGIN CUTTING & disposal of roadway vegetation BEGIN RECONDITIONING of Travel way, shoulders, existing ditch line(s), and turnouts, including tapers, and curve widening
0.01	Existing water bar. Construct and armor DRAIN DIP
0.03	Existing water bar.
0.04	Existing water bar. Construct and armor DRAIN DIP
0.08	Existing water bar. Construct and armor DRAIN DIP
0.09	Edge of clearing Material Source ahead
0.13	End Road 3719037 AS STAKED END CUTTING & disposal of roadway vegetation END RECONDITIONING END PROJECT, ROAD 3719037 Tofu Timber Sale

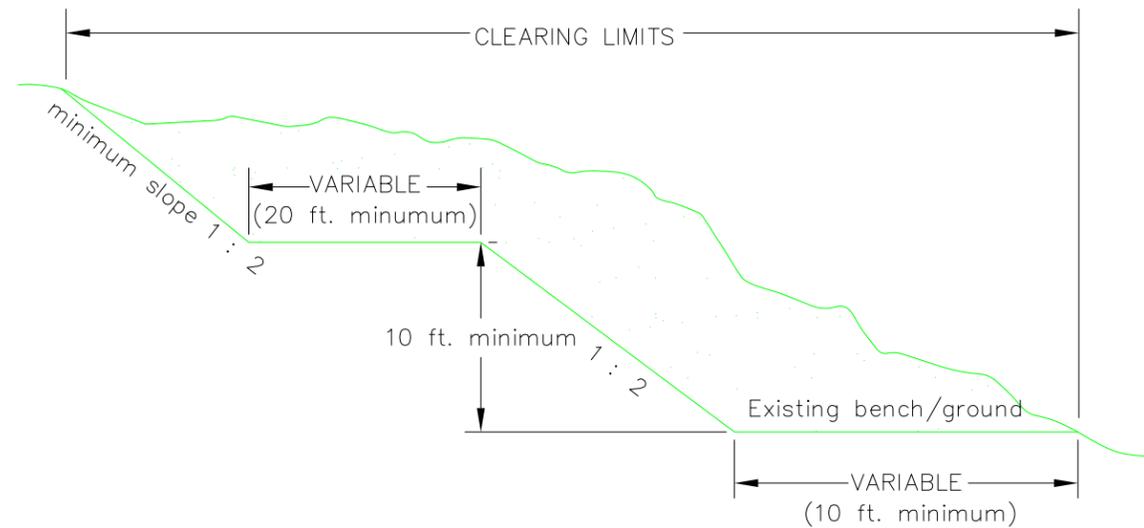
FOREST ROAD 3719070	
MILEPOST	DESCRIPTION & WORK ITEMS
0.00	Junction, Forest Road 3719 MP 3.24 BEGIN PROJECT, ROAD 3719070, Tofu Timber Sale BEGIN CUTTING & disposal of roadway vegetation BEGIN RECONDITIONING of Travel way, shoulders, existing ditch line(s), and turnouts, including tapers, and curve widening Note: No equipment or motorized use beyond staked EOP at MP 0.65.
0.02	Construct ARMORED CROSS DRAIN DIP
0.03	Stump/earth berm between metal gateposts: Protect metal posts and leave in place.
0.14	Draw with existing metal culvert (do not remove).
0.23	Draw with existing metal culvert (do not remove).
0.24	Construct ARMORED CROSS DRAIN DIP
0.25	Begin Ditch armoring according to ROAD & DITCH ARMORING TYPICAL. Construct ARMORED CROSS DRAIN DIP
0.27	Remove and dispose of metal culvert. Construct ARMORED CROSS DRAIN DIP
0.31	Remove and dispose of metal culvert. Construct ARMORED CROSS DRAIN DIP.
0.42	Unit corner left
0.47	Remove and dispose of metal culvert. Construct ARMORED CROSS DRAIN DIP.
0.59	Wet areas on cut slope with defined channels. Construct ARMORED CROSS DRAIN DIP
0.63	Unit corner left End Ditch armoring Construct ARMORED CROSS DRAIN DIP
0.65	END CUTTING & disposal of roadway vegetation END RECONDITIONING END PROJECT, Road 3719070 Tofu Timber Sale.

FOREST ROAD 3719080	
MILEPOST	DESCRIPTION & WORK ITEMS
0.00	Junction right with Road 3719 MP 4.20 BEGIN PROJECT, ROAD 3719080, Tofu Timber Sale BEGIN CUTTING & disposal of roadway vegetation BEGIN RECONDITIONING of Travel way, shoulders, existing ditch line(s), and turnouts, including tapers, and curve widening
0.001	Remove and dispose of metal culvert. Construct and armor DRAIN DIP
0.16	Remove and dispose of metal culvert. Construct and armor DRAIN DIP
0.21	Construct and armor DRAIN DIP
0.28	Existing Utah dip - Construct and armor DRAIN DIP
0.32	Existing Utah dip - Construct and armor DRAIN DIP
0.39	Remove and dispose of metal culvert. Construct and armor DRAIN DIP
0.4	Existing Utah Dip
0.45	Open area right: POTENTIAL waste disposal site
0.6	Construct and armor DRAIN DIP
0.51	Unnumbered spur right
0.81	Remove and dispose of metal culvert. Construct and armor DRAIN DIP BEGIN Ditch Armoring
0.83	Wheel tracks over bermed spur ahead left: rutted slope holding water. Install Lead-out Ditch left to disperse water ponded by berm.
0.85	Junction right, Road 3719083 END Ditch armoring
1.12	Remove and dispose of metal culvert. Construct ARMORED CROSS DRAIN DIP
1.43	Remove and dispose of metal culvert. Construct ARMORED CROSS DRAIN DIP
1.75	Remove and dispose of metal culvert. Construct ARMORED CROSS DRAIN DIP
2.0	Junction Road 3700030: right to Material Source. Left to Hwy 204. END CUTTING & disposal of roadway vegetation END RECONDITIONING END PROJECT, Road 3719080 Tofu Timber Sale

MATERIAL SOURCE TYPICAL

TOFU TIMBER SALE

HILLSIDE PITS (no scale)



OTHER AREAS (no scale)



CONSTRUCTION NOTES

1. Pit clearing and development limits will be staked on the ground by the Contracting Officer.
2. Pit development work is incidental to Item 65101 Pit & Quarry Development.
 - 2.1. Pit Development Plan required;
 - 2.2. Clearing, grubbing, slash removal, and disposal methods shall be in accordance with FP-03 Section 201 and supplementals.
 - 2.3. Disposal methods: 'F'-scattering for tops & limbs, Deck all logs according to FSSS 201.04f.
 - 2.4. Access Road(s) shall be cleared and reconditioned in accordance with Section 204.
3. Pit rehab includes the following:
 - 3.1. Roads that were reopened for project use shall be closed;
 - 3.2. Drainage (dips and/or waterbars) shall be re-established on Access Road(s)
 - 3.3. Haul route(s) shall be bladed and shaped after use..
 - 3.4. Pit slopes shall be left as shown on TYPICAL, or flatter.

MATERIAL SOURCES			
Source Name	Road Number	Location	Material
1. Coyote Ridge	Rd 3719037	Sec. 07, T03N, R38E	6" minus grid rolled aggregate
Designated Material Source for Item 32226 Grid rolled aggregate: Rds 3718 Seg. 1, 2, 3; Rd 3718155 Seg. 1, 2, 3; 3718156; 3719030, and 3719037.			
2. Summer Home	Rd 3700030	Sec. 09, T03N, R38E	6" minus pitrun aggregate
Designated Material Source for Item 32226 Grid rolled aggregate: Rds 3715, 3715030, 3719070, 3700080, and 3700030.			
3. Swamp Creek	Rd 6400157	Sec. 23, T04N, R38E	Stockpiled aggregate
Designated material source for Item 32232 STOCKPILE AGGREGATE (GFM) to be placed on Rd 3715 MP 2.97 - 3.04. Directions to Swamp Creek Material Source: Turn on to Forest Road 64 and proceed towards Jubilee Lake for approximately 6 miles to Forest Road 6400150. Turn left onto Forest Road 6400150: Note this road is gated. Make arrangements for access. Proceed ahead approximately 0.7 miles to Forest Road 6400157. Turn onto Rd 6400157: Swamp Creek material source & stockpile is approximately 0.5 miles ahead.			