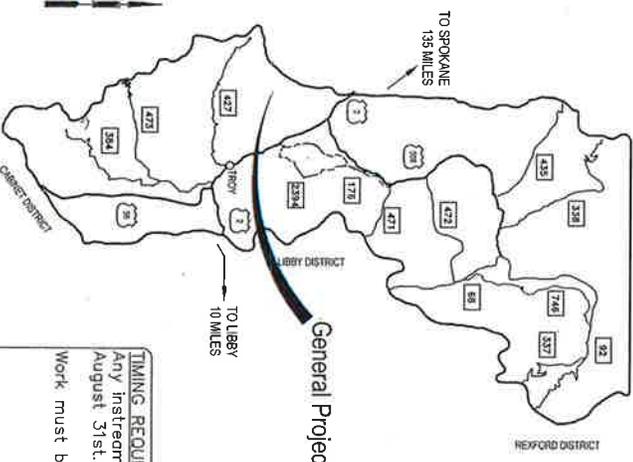
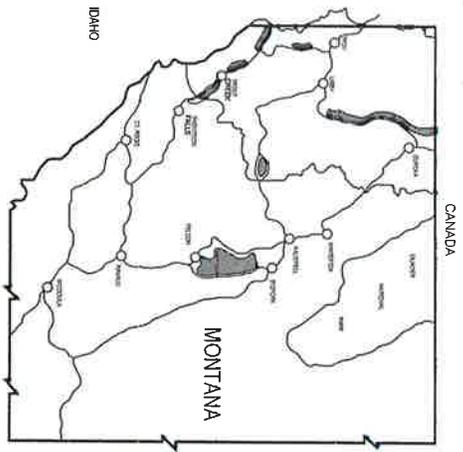


Appendix G, Project 07
 UNITED STATES DEPARTMENT OF AGRICULTURE
 FOREST SERVICE - REGION ONE
 OLY MOLY STEWARDSHIP PLANS FOR
 MANDATORY ROAD MAINTENANCE AND REPAIRS
 LINCOLN COUNTY, MONTANA
**Star Creek Slide Repair
 and Culvert Replacement**
 KOOTENAI NATIONAL FOREST
 THREE RIVERS RANGER DISTRICT



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TIMING REQUIREMENTS:
 Any instream work on live, perennial streams must occur between July 15th to August 31st.
 Work must be completed on or before September 30th, 2019.

PREPARED BY: [Signature] 8/15/16
 PROJECT ENGINEER DATE

REVIEWED BY: [Signature] 8/15/16
 ZONE ENGINEERING TEAM LEADER DATE

MULTIPLE RESOURCE REVIEW BY: [Signature] 8-15-16
 DISTRICT RANGER DATE

I certify that this project has been designed in accordance with sound engineering practice.
[Signature] 8/16/16
 FOREST ENGINEER DATE

SHEET NUMBER	TOTAL SHEETS
1	6

Summary of Quantities & General Notes

ITEM NO	ITEM DESCRIPTION	METHOD OF MEASURE	UNIT OF MEASURE	ROAD SLIDE	CULVERT REPLACEMENT	ENTIRE LENGTH OF ROAD 415	TOTAL
15101	MOBILIZATION	LSQ	LS		ALL		ALL
20102	CLEARING & GRUBBING, SLASH DISPOSAL F	CQ	MI			1.5 (ONLY FROM MP 2.9-4.4)	1.5
20301	REMOVAL OF CULVERTS	AQ	EA	1	1		2
20404	UNCLASSIFIED BORROW, COMPACTION METHOD F	CQ	CY	1200			1200
20701	EARTHWORK GEOTEXTILE, GOVERNMENT FURNISHED	CQ	SY	250			250
23050	ROADWAY BRUSHING	CQ	MI			4.4	4.4
25101	PLACED RIPRAP, CLASS 6, COMMERCIAL SOURCE	CQ	CY	350			350
30357	ROADWAY RECONDITIONING, COMPACTION METHOD A	CQ	MI			4.4	4.4
30801	ROADWAY AGGREGATE, COMPACTION METHOD A	CQ	CY	20			20
60250	18" CSP, INCLUDES EXCAVATION, COMPACTION METHOD B	AQ	FT	100			100
60253	71" x 47" CSP, INCLUDES EXCAVATION, COMPACTION METHOD B	AQ	FT		60		60
62201	EQUIPMENT RENTAL, HYDRAULIC EXCAVATOR WITH THUMB	AQ	HR		16		16
62201	EQUIPMENT RENTAL, 10 YARD DUMP TRUCK	AQ	HR		8		8
62501	SEEDING, DRY METHOD, GOVERNMENT FURNISHED	CQ	ACRE	0.25	0.25		0.5
64808	STREAM GRADE CONTROL STRUCTURES	AQ	EA		1		1

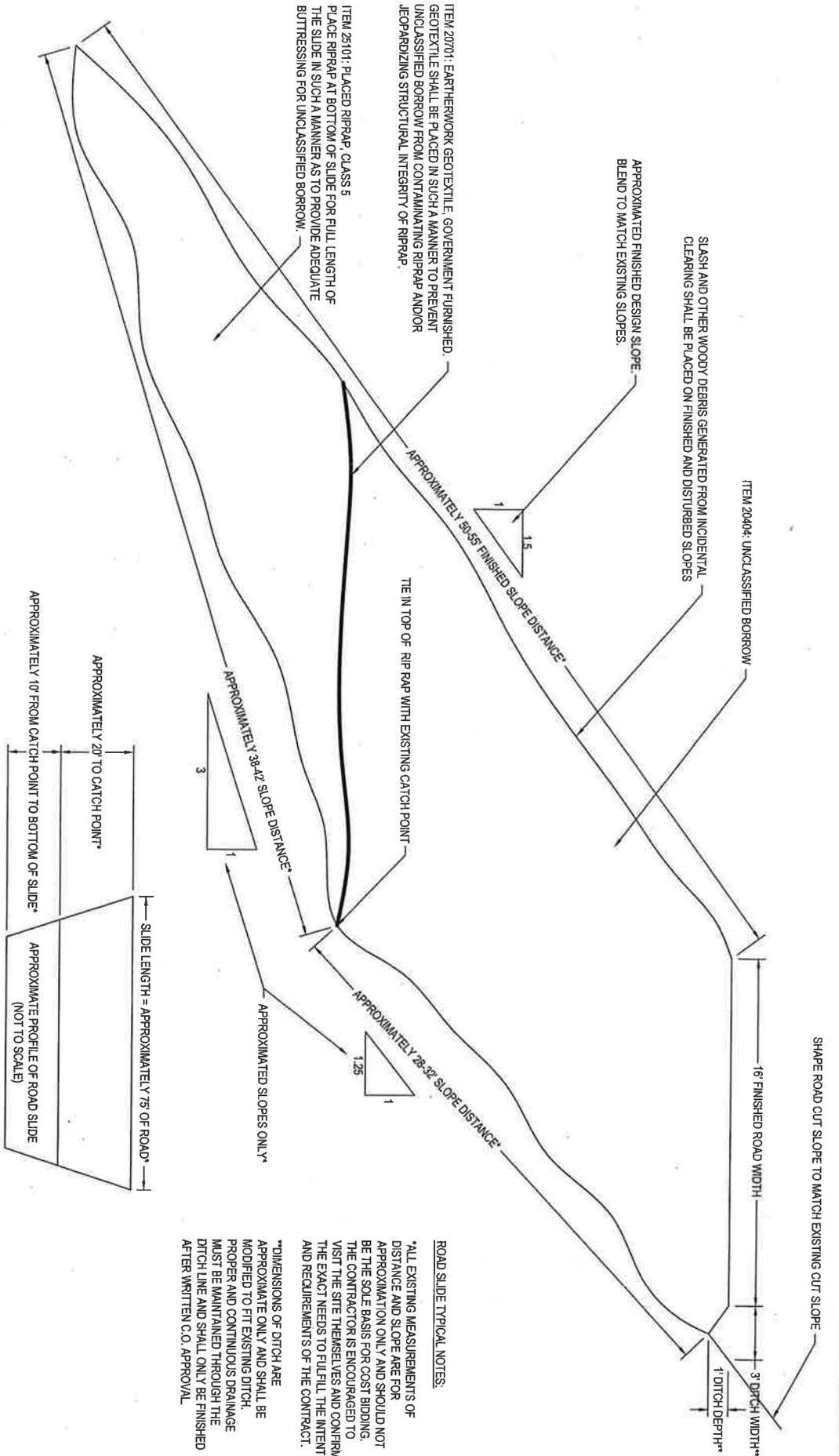
GENERAL NOTES:

- A. THE INTENT OF THIS PROJECT IS TO FIX ROAD FAILURES AND MAINTAIN FOREST SERVICE ROAD #415.
 - A.1. THE ROAD SLIDE REPAIR WORK ENCOMPASSES APPROXIMATELY 75 FEET OF ROAD FILL FAILURE. THE PROJECT INVOLVES MACHINE PLACEMENT AND KEYING OF 300 CUBIC YARDS OF RIP RAP AND 250 SQUARE YARDS OF GEOTEXTILE FABRIC TO CREATE A STABLE FOUNDATION FOR THE REMAINING 1200 CUBIC YARDS OF UNCLASSIFIED BORROW. 20 YARDS OF ROADWAY AGGREGATE SHALL BE PLACED IN A 3' LIFT OVER THE COMPACTED SLIDE REPAIR WITH 12 TRANSITIONS ON EITHER SIDE OF THE SLIDE. EXISTING CUT SLOPES AND FINISHED FILL SLOPES SHALL MATCH THE ROADWAY BEFORE AND AFTER THE PROJECT LOCATION. PROPER DITCH DRAINAGE AND FUNCTION SHALL BE COMPLETED THROUGH CONSTRUCTION OF NEW ROAD FILL. THE DRAWING TYPICALS ON SHEET 4 INDICATE APPROXIMATE DIMENSIONS ONLY AND SHOULD BE FIELD VERIFIED BY PROSPECTIVE BIDDERS.
 - A.2. THE CULVERT REPLACEMENT WORK ENCOMPASSES THE REMOVAL OF A FAILED INTERMITTENT STREAM CULVERT AND REPLACEMENT WITH A 71"x47" CORRUGATED STEEL PIPE ARCH. A STREAM GRADE CONTROL STRUCTURE SHALL BE BUILT ABOVE THE INLET OF NEW CULVERT. EXISTING CUT SLOPES AND FINISHED FILL SLOPES SHALL MATCH THE ROADWAY BEFORE AND AFTER THE PROJECT LOCATION.
 - A.3. THE REMAINDER OF THE WORK ASSOCIATED WITH THIS PROJECT ENCOMPASSES
 - A.3.1. BASIC CLEARING AND GRUBBING FROM THE ROAD SLIDE (MP 2.9) TO THE END OF ROAD #415 (MP 4.4). SEE SHEET 6 FOR TYPICALS.
 - A.3.2. ROAD MAINTENANCE IN THE FORM OF ROADWAY BRUSHING (ITEM 30357) AND RECONDITIONING (ITEM 30357) FOR THE ENTIRE LENGTH OF ROAD#415 (4.4 MI. ES). SEE SHEET 6 FOR TYPICALS.
 - B. CONSTRUCT THE PROJECT IN COMPLIANCE WITH FEDERAL HIGHWAY ADMINISTRATION STANDARD SPECIFICATIONS FOR CONSTRUCTION OF ROADS AND BRIDGES ON FEDERAL HIGHWAY PROJECTS (FH-09) AND APPLICABLE FOREST SERVICE SUPPLEMENTAL SPECIFICATIONS (FSSS) FOUND IN THE MASTER STEWARDSHIP AGREEMENT.
 - C. ITEM 20301 REFERS TO EXISTING DITCH RELIEF CULVERT LOCATED AT THE ROAD SLIDE SITE. REMOVAL INCLUDES REMOVAL OF DROP INLET AND ALL OTHER PARTS ASSOCIATED WITH EXISTING CULVERT FROM FEDERAL LANDS.
 - D. ITEM 20701 SHALL BE GOVERNMENT FURNISHED. THE GOVERNMENT SHALL BE ALLOWED 5 BUSINESS DAYS AFTER REQUEST SUBMITTED BY CONTRACTOR TO GO FOR TRANSFER OF RESPONSIBILITY. ALL GEOTEXTILE FABRIC FOUND IN EXCESS TO PROJECT REQUIREMENTS SHALL REMAIN IN OWNERSHIP OF THE GOVERNMENT AND SHALL BE RETURNED TO THE CO. AT TIME OF PROJECT COMPLETION.
 - E. ITEM 60250 SHALL BE FLAGGED AND LOCATED IN THE FIELD BY THE CO. AT TWO SEPARATE LOCATIONS. ONE SUCH LOCATION WILL BE IN APPROXIMATELY THE SAME LOCATION AS ORIGINAL CORRUGATED STEEL PIPE REMOVED VIA ITEM 20301. ANOTHER LOCATION WILL BE JUST BEYOND THE SLIDE REPAIR LOCATION. INSTALLATION TO BE TYPE II ACCORDING TO PAGE 5.
 - F. ITEM 60253 SHALL BE FLAGGED AND LOCATED IN THE FIELD BY THE CO. PLACEMENT OF NEW CULVERT SHALL BE AT A GRADE APPROXIMATE TO 8%, BUT FINAL ALIGNMENT AND BEDDING MUST BE APPROVED BY CO PRIOR TO BACKFILLING. INSTALLATION TO BE TYPE I ACCORDING TO PAGE 5.
 - G. ITEMS 60250 & 60253 SHALL INCORPORATE AVAILABLE SLASH INTO THE LAST 6" OF FILL ALONG THE FILL SLOPE OF NEW CULVERT INSTALLATIONS. CONTRACTOR SHALL SUBMIT A DEMATERING PLAN AND EROSION CONTROL PLAN TO THE CO IN WRITING PRIOR TO THE START OF WORK.
 - H. ITEMS 62201 SHALL BE CONSIDERED FOR WORK BEYOND WHAT IS LISTED IN THE SCHEDULE OR CONSIDERED INCIDENTAL TO WORK LISTED IN THE SCHEDULE. THE GOVERNMENT RESERVES THE RIGHT TO EXERCISE THE OPTIONAL EQUIPMENT RENTAL BY THE END OF THE PROJECT.
 - I. ITEM 64808 SHALL BE FLAGGED AND LOCATED IN THE FIELD BY THE CO.
 - J. ALL ITEMS OF REQUIRED WORK FOR THE ROAD SLIDE/CULVERT REPLACEMENT NOT FOUND IN THE SCHEDULE ABOVE SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION AND WILL NOT BE PAID OUT AS SEPARATE PAY ITEMS. THESE ITEMS INCLUDE BUT ARE NOT LIMITED TO: CLEARING AND GRUBBING, EXCAVATION REQUIRED TO BENCH DOWN TO BOTTOM OF ROAD/FILL FAILURE, AND HAULING AND STOCKPILING OF MATERIAL.

STAR CREEK SLIDE REPAIR AND CULVERT REPLACEMENT

SHEET NUMBER	TOTAL SHEETS
3	6

Road Slide Repairs Typical Section



ROAD SLIDE TYPICAL NOTES:

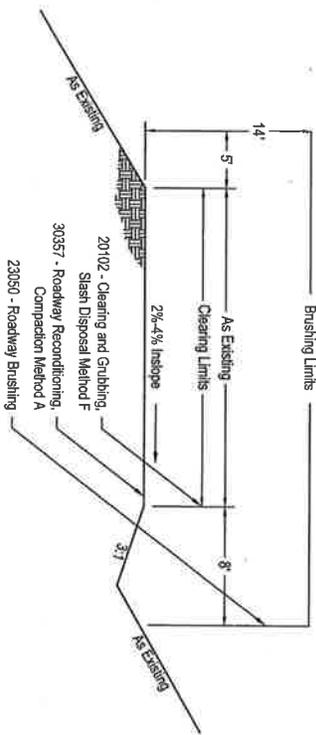
*ALL EXISTING MEASUREMENTS OF DISTANCE AND SLOPE ARE FOR APPROXIMATION ONLY AND SHOULD NOT BE THE SOLE BASIS FOR COST BIDDING. THE CONTRACTOR IS ENCOURAGED TO VISIT THE SITE THEMSELVES AND CONFIRM THE EXACT NEEDS TO FULFILL THE INTENT AND REQUIREMENTS OF THE CONTRACT.

*DIMENSIONS OF DITCH ARE APPROXIMATE ONLY AND SHALL BE MODIFIED TO FIT EXISTING DITCH. PROPER AND CONTINUOUS DRAINAGE MUST BE MAINTAINED THROUGH THE DITCH LINE AND SHALL ONLY BE FINISHED AFTER WRITTEN C.O. APPROVAL.

STAR CREEK SLIDE REPAIR AND CULVERT REPLACEMENT

SHEET NUMBER	TOTAL SHEETS
4	6

Typical Section



Note: If surface is crowned or outsloped, maintain existing profile at 2%-4%. Typical ditch depth is 1'.

STAR CREEK SLIDE REPAIR AND CULVERT REPLACEMENT

SHEET NUMBER	TOTAL SHEETS
6	6

