

U.S. DEPARTMENT OF THE INTERIOR, BUREAU OF LAND MANAGEMENT
EUGENE DISTRICT
BIERCE CREEK AQUATIC HABITAT IMPROVEMENT PROJECT
ENVIRONMENTAL ASSESSMENT No. OR090-EA-01-11

ORIGINAL PLANS

The purpose of this Aquatic Habitat Improvement Project is to provide site specific project detail pertaining to the improvement of the quality and quantity of suitable habitat in Bierce Creek (and tributaries) and other benefits to anadromous and resident fish and other aquatic species in the Siuslaw River drainage.

The proposed action and alternatives are in conformance with the *Record of Decision for Amendments to Forest Service and Bureau of Land Management Planning Documents within the Range of the Northern Spotted Owl, April 1994 (ROD)*, and the *Eugene District Record of Decision and Resource Management Plan, June 1995 (Eugene District ROD/RMP)* as amended by the *Record of Decision for Amendments to the Survey and Manage, Protection Buffer, and other Mitigation Measures Standards and Guidelines, USDA Forest Service and USDI Bureau of Land Management January 2001*. The analysis contained in these EIS's are incorporated by reference.

The above referenced documents are available for review at the Eugene District Office or on the internet at <http://www.or.blm.gov/nwfp.htm>. Additional site-specific information is available for review in the Bierce Creek Aquatic Habitat Improvement Project analysis file at the Eugene District Office.

Information and analysis for the specific project proposals within this EA are tiered to the Upper Siuslaw River Aquatic Restoration Plan OR090-EA-98-17, dated May 19, 1998. No changes related to the actions are made to the decision record for the Upper Siuslaw River Aquatic Restoration Plan. Information summarized in this plan is from the Eugene District Siuslaw Watershed Analysis (February 1996). This EA provides project site specifics and an additional ID team review prior to project implementation. The proposed action and alternatives are also in conformance with the Aquatic Conservation Strategy in the Northwest Forest Plan.

The proposed action will follow general conditions related to fill removal activities as listed in the renewal permit (FP-13963) issued by the Oregon Department of State Lands and the Army Corps of Engineers (September 26, 2000).

PROPOSAL

Proposed projects are located in Bierce Creek, a tributary of the Siuslaw River in south-central Lane County, Oregon. Proposed actions are on public lands in Township 19 south, Range 7 west, Sections 28 and 29. Maps in the Appendix show details of specific project sites. Three separate proposed actions, addressed as Objectives in OR090-EA-98-17, will be delineated in this EA.

The first proposed action for FY01 is to construct instream structures in Bierce Creek, at 43 project sites (see attached map), to enhance spawning and rearing habitat for anadromous and resident fish.

The second proposed action involves removal of the partial migration barrier culvert in Road 19-7-28.2, Township 19 South, Range 7 West, Section 28, Northwest 1/4, Northwest 1/4 (land ownership - Roseburg Resources Co.(RRC)). The influent end of this undersized culvert annually plugs with woody debris and prevents upstream migration by adult coho and steelhead. The effluent end has a drop of ~6 inches onto bedrock and prevents migration at low flows to various fish, amphibian and other aquatic species. In addition to removing the culvert, the road would be closed (dirt berm) just to the northeast of the culvert to prevent vehicular movement in the stream. In a letter dated January 16, 2001, RRC consents to the removal of this culvert and would not need access to their lands beyond the culvert for approximately 30 years.

The third proposed action would involve planting conifer trees in the closed road and riparian zone. Riparian conversion plots were established here in 1993. Monitoring of these plots showed that planted conifers have had high mortality due to lack of sun. Additional falling of hardwoods and consequent increase in sunlight would increase survival of planted conifers.

ALTERNATIVES

Partial Implementation Alternative - This alternative would implement selected portions of the Proposed Action. If implemented, the Proposed Action or selected portions of the proposed action would contribute to the restoration of natural hydraulic function, provide stream complexity for anadromous fish, resident fish, and other aquatic species. Impacts of the Partial Implementation Alternative would be the same as the Proposed Action. The difference would be in the scope, with fewer positive or negative short or long term impacts.

Under a No Action Alternative, none of the proposed actions would be carried out as part of the restoration plan. No additional structuring would be installed in the stream channel. Some actions, such as culvert rehabilitation may be performed as part of other programs such as road maintenance.

EXPECTED IMPACTS

All proposed actions would require some short-term disturbance to the road right-of-way, riparian zone, or stream channel. All actions are in areas that have previously been disturbed by management activities. No new roads would be created as a result of the proposed actions, although temporary accesses would be needed for movement of equipment and materials from existing permanent roads to restoration sites in the stream channel.

Adverse Impacts include a transient increase in sediment from culvert removal/rehabilitation, road stabilization and channel structuring; a reduction in overstory and understory vegetation in riparian areas during riparian site preparation and planting, and potential disturbance of fishes, invertebrates, and aquatic communities in the stream channel during culvert rehabilitation and channel structuring as described in EA-98-17.

The impacts to vegetative characteristics associated with individual fisheries structures are expected to be relatively low except in access routes used to move materials from roadways to the stream channel. Roading and tree yarding would result in soil disturbance and compaction, and would increase the likelihood of non-native and potentially noxious species entering and/or increasing in the project area. Surface soil disturbance may also result in disruption of soil dwelling fungal hyphae that play an important role in nutrient cycling and decomposition. Suggested botanical mitigation measures under the *Additional Mitigation* paragraph below should help alleviate the potential for the increase or spread of non-native species, and high levels of mycorrhizal disturbance.

As a result of the placement of structures in the stream, water surface levels would be raised at all flow levels. During peak flows more water would flow into riparian areas. Project designs limit the potential for erosion. The flooding of riparian areas provides a positive benefit for deposition of silts in riparian areas and increased groundwater infiltration. Previous stream projects that have raised water levels have resulted in an increase in wetlands in the adjoining riparian area. The projects are expected to contribute to an overall improvement in water quality and reduced flooding downstream.

CRITICAL ELEMENTS

There would be no adverse impacts from the proposed action to regional or local air quality, prime or unique farmlands, cultural resources, floodplains, areas of critical environmental concern, environmental justice, native American religious concerns, threatened or endangered species, invasive nonnative species, hazardous or solid waste, wild and scenic rivers or wilderness. Water quality, riparian zones, and the habitat of the threatened coho salmon are expected to benefit from the proposed actions.

ADDITIONAL MITIGATION

Project areas would be surveyed for Special Status and Survey and Manage species (categories A and

C) using current protocols. These pre-disturbance surveys would be completed prior to the Decision Notice. In the event a Special Status or Survey and Manage species is present, the appropriate mitigation or project modifications would occur.

Prior to beginning on-ground project work BLM would complete all required ESA consultation, conferencing, and protocol clearances.

In addition to mitigating measures identified in EA-98-17 all temporary accesses would be blocked and re-vegetated following completion of project work.

The following botanical recommendations and design features to maintain the native vegetation component within the project area and to prevent the introduction and spread of nonnative and or noxious weeds would be followed: 1) Retain and leave as much existing coarse woody debris (including stumps) as possible on site; 2) Keep roading to a minimum to prevent the further spread of noxious weeds; 3) Require cleaning of heavy equipment prior to entering project areas to prevent the further spread of noxious weeds; 4) Remove any individual Scot's Broom plants in project areas; 5) To help maintain the existing native plant communities, seed roadsides with native species mixtures. If native seed is not available and seeding is necessary for erosion control, use an annual (70%) and perennial (30%) rye mixture with strict guidelines on seed purity (little crop content and no noxious weed content); 6) All tree falling should occur away from BLM sensitive plant sites; 7) No prescribed burning, tree planting, or other human disturbances in or adjacent to BLM sensitive plant sites.

Activities associated with projects within 0.25 miles of suitable murrelet habitat would not begin until 2 hours after sunrise and would end 2 hours before sunset. Installation of instream habitat structures and crossings would be conducted between July 1 and September 15 (Oregon Department of Fish and Wildlife restrictions) to minimize the adverse impacts to aquatic species.

CONSULTATION

The proposed actions are consistent with the description and terms and conditions under the Programmatic Biological *Assessment and Biological Opinion for Ongoing USDA Forest Service and USDI Bureau of Land Management Activities Affecting Oregon Coast Range Province, Oregon* for the Oregon Coast coho salmon issued by the National Marine Fisheries Service (NMFS) - September 1998 and extended on July 5, 2000.

The Programmatic Biological Assessment addressing this proposal related to Federally listed or proposed terrestrial animals was submitted to U.S. Fish and Wildlife Service (USFWS) on December 15, 2000. Because of the potential for audio disturbance to spotted owls and marbled murrelets during the critical nesting period, this proposed action for spotted owls would have a "May Affect, but is Not Likely to Adversely Affect" and for marbled murrelets a "May Affect, Likely to Adversely Affect" call. The USFWS response, in the form of a Biological Opinion, is expected prior to on ground work. This action would not take place prior to the issuance of this Opinion. Activities associated with projects within 0.25 miles of suitable murrelet habitat would not begin until 2 hours after sunrise and would shall end 2 hours before sunset.

CRITICAL HABITAT

Bierce Creek is critical habitat for the Oregon Coast coho salmon. Determination of effects for critical habitat are the same as the determination of effects for restoration activities under the Programmatic Biological Assessment and Biological Opinion, and are covered by the same biological assessment and biological opinion as extended in the NMFS letter of July 5, 2000.

ESSENTIAL FISH HABITAT

Coho salmon use Bierce Creek for migration, spawning and rearing. The proposed project is in the ESU for the federally-listed threatened Coastal coho salmon. Coho salmon use here has declined recently due to a reduction in available rearing habitat and habitat disconnection caused by an undersized barrier culvert. This tributary is too small for use by chinook salmon, however they do spawn in the Siuslaw River near the confluence of Bierce Creek. Construction of instream structures involves placement of materials in the channel (logs, boulders and gravels) to raise channel elevations, increase deposition of spawning gravels and to increase the availability of complex rearing habitat. The proposed culvert removal involves excavating fill around the pipe, followed by extraction of the pipe in it's entirety or pieces. The channel banks here would be sloped to match adjoining banks and adequate protection (e.g., log and boulder placement) would be designed to prevent potential scour. Appropriate measures would be taken to limit potential impacts, but some downstream coho may experience disturbance from sediment production and operation of equipment in the stream channel. The disruption would be short term, and would occur during periods when no eggs or fry are present and low flows would limit impacts. Because of the potential short-term disturbance, the project would be considered likely to adversely affect Essential Fish Habitat for the coho salmon, but is not likely to adversely affect Essential Fish Habitat for chinook salmon. No direct affect would occur to chinook salmon which would not be present in the Siuslaw River near Bierce Creek at the time project work is undertaken. The proposed restoration activities are in accordance with the description and terms and conditions in the NMFS Oregon Coastal Coho Programmatic Biological Opinion. The overall impact of the proposed activity would be to increase the habitat available for use by coho salmon.

REFERENCE

Oregon Department of State Lands and US Army Corps of Engineers. September 2000. Joint fill/removal authorization. Permit number FP-13963 Renewal. 3pp.

USDI, Bureau of Land Management. June 1995. Eugene District Record of Decision and Resource Management Plan. Eugene District Office, Eugene, Oregon.

USDI, Bureau of Land Management. February 1996. Siuslaw Watershed Analysis. Eugene District Office, Eugene, Oregon.

REFERENCE (continued)

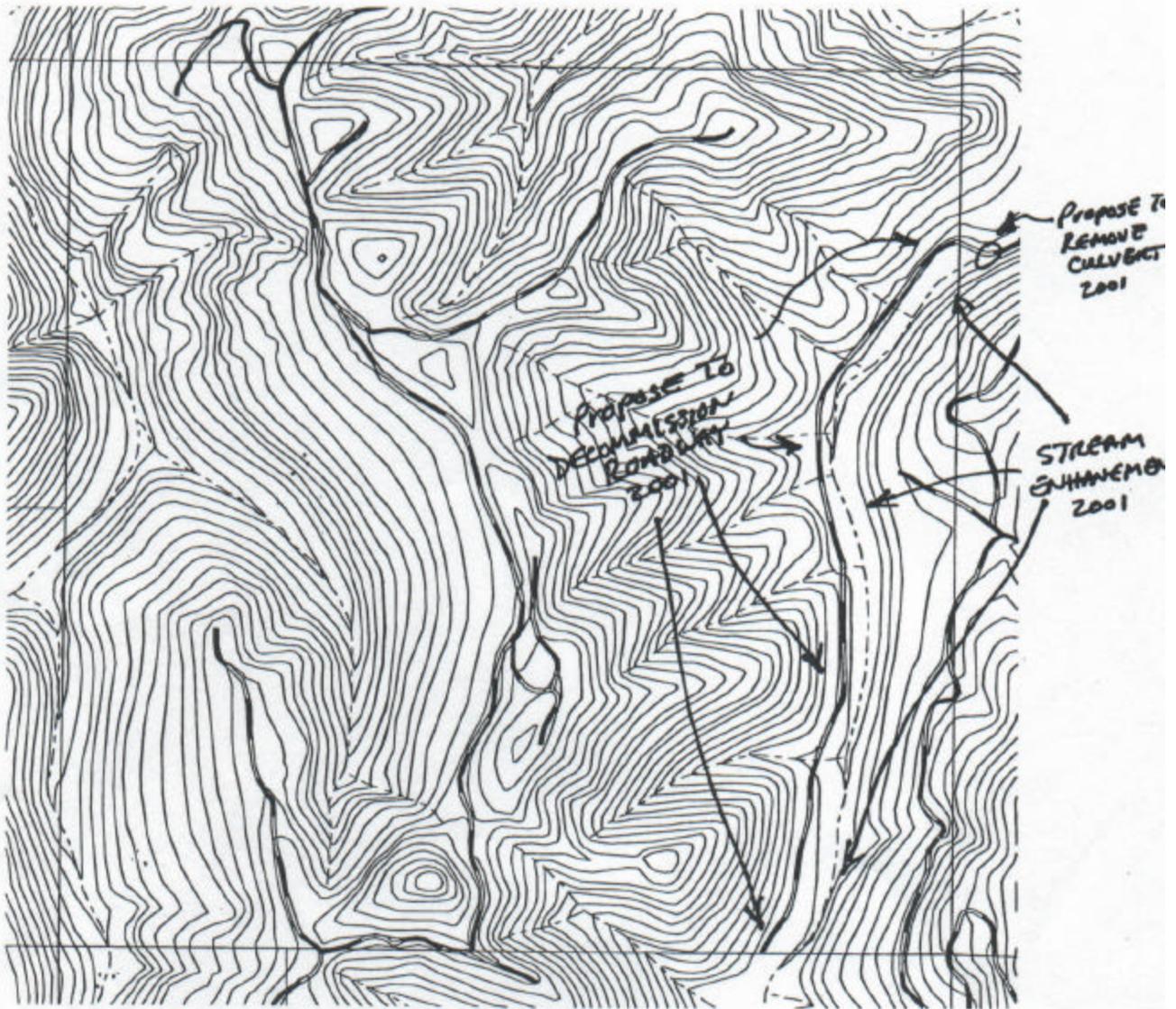
USDA, Forest Service and USDI, Bureau of Land Management. February 1994. Final supplemental

environmental impact statement on management of habitat for late successional and old-growth forest related species within the range of the northern spotted owl (Northwest Forest Plan).

USDA Forest Service and USDI Bureau of Land Management January 2001. Record of Decision for Amendments to the Survey and Manage, Protection Buffer, and other Mitigation Measures Standards and Guidelines.

Responsible Agency: USDI Bureau of Land management, Eugene District, Coast Range Resource Area, Lane County, Oregon

2001

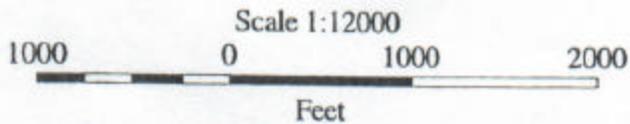


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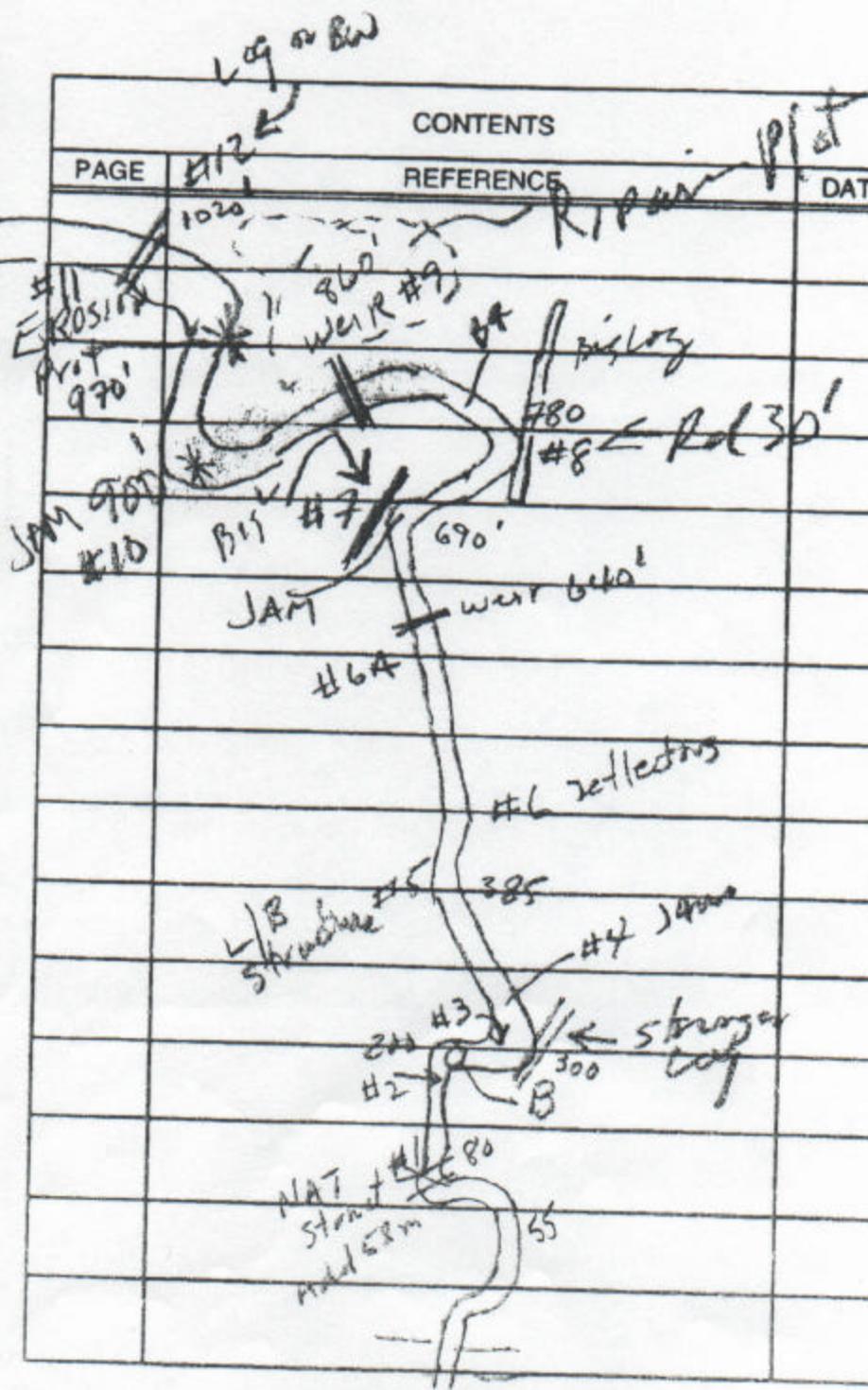
BIERCE CREEK RESTORATION

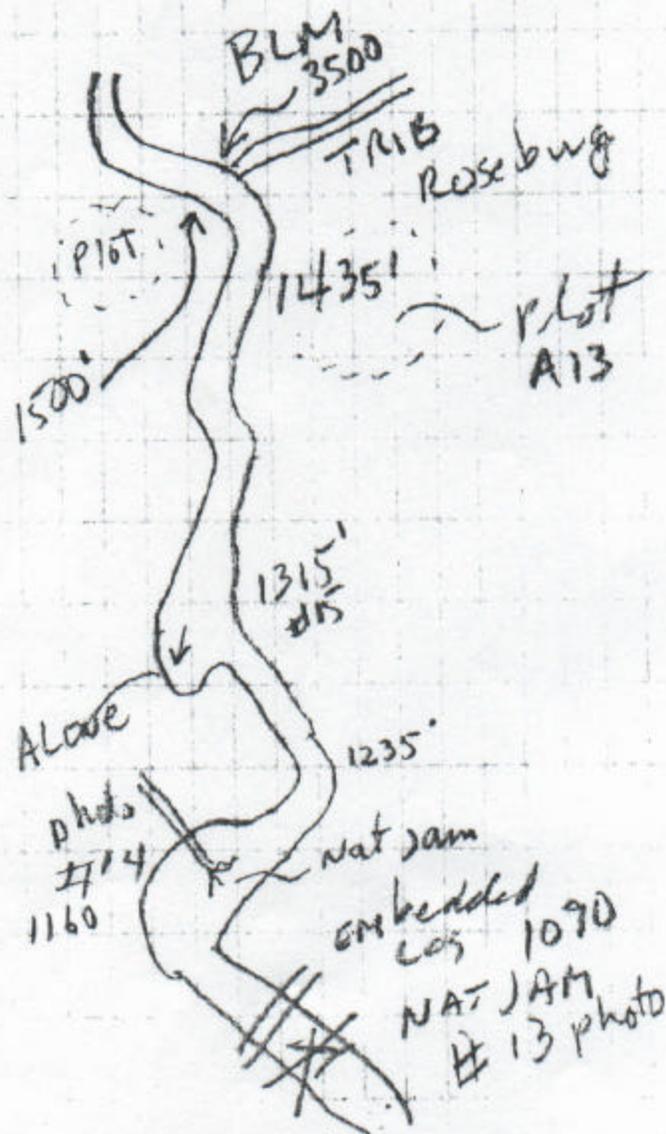
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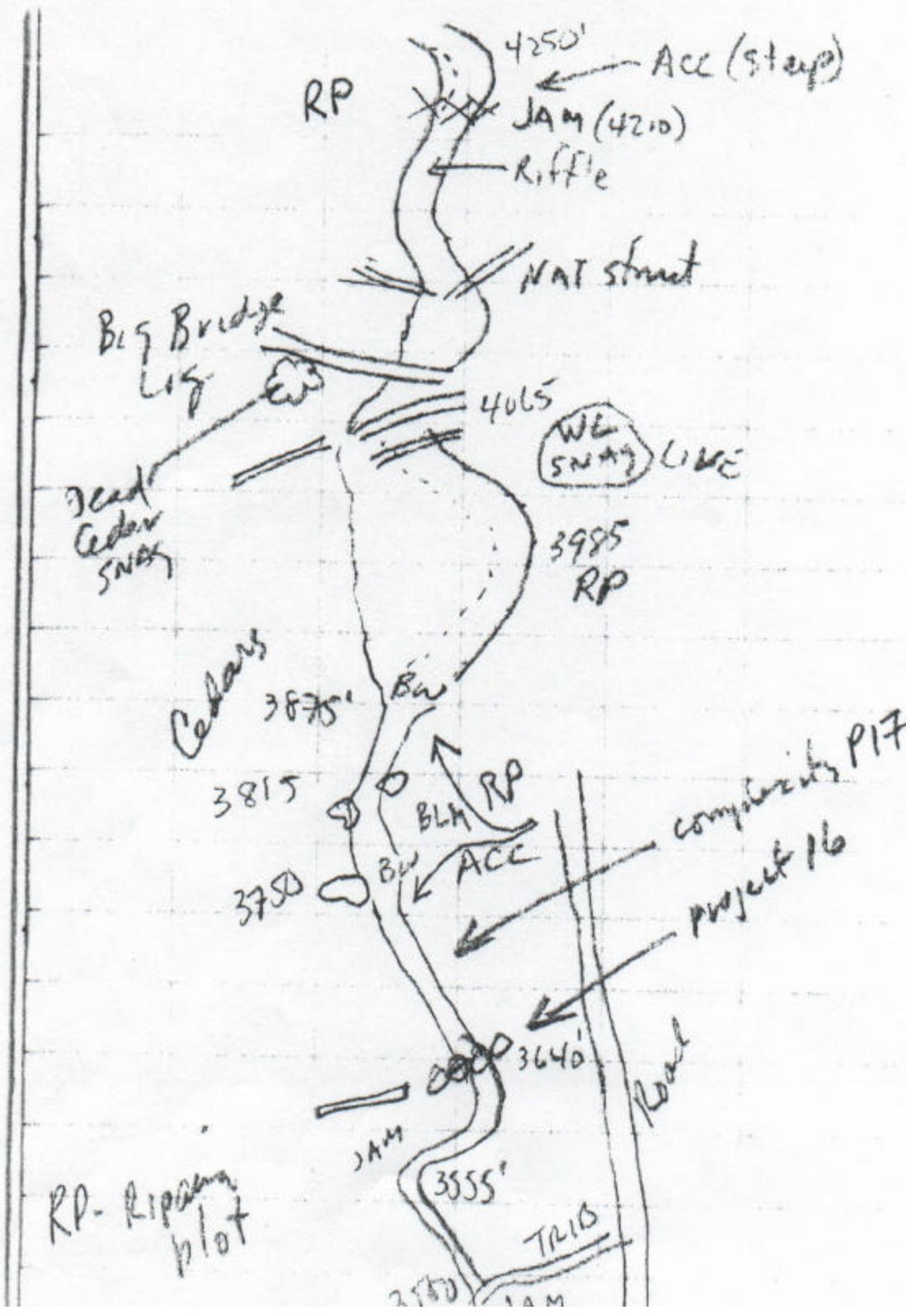
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#11 EROSION PROT 970'	#12 #8 weir #9 #7 #6 #5 #4 #3 #2 #1	RIPAN
JAM 900' #10	BIS #7 690' weir 640'	#8 ← Rd 30'
	#6A	
	#6 reflector	
	L/B structure #5 385	#4 JAPAN
	#3	← stringer cap
	#2	B 300
	NAT STON 58m	80 55

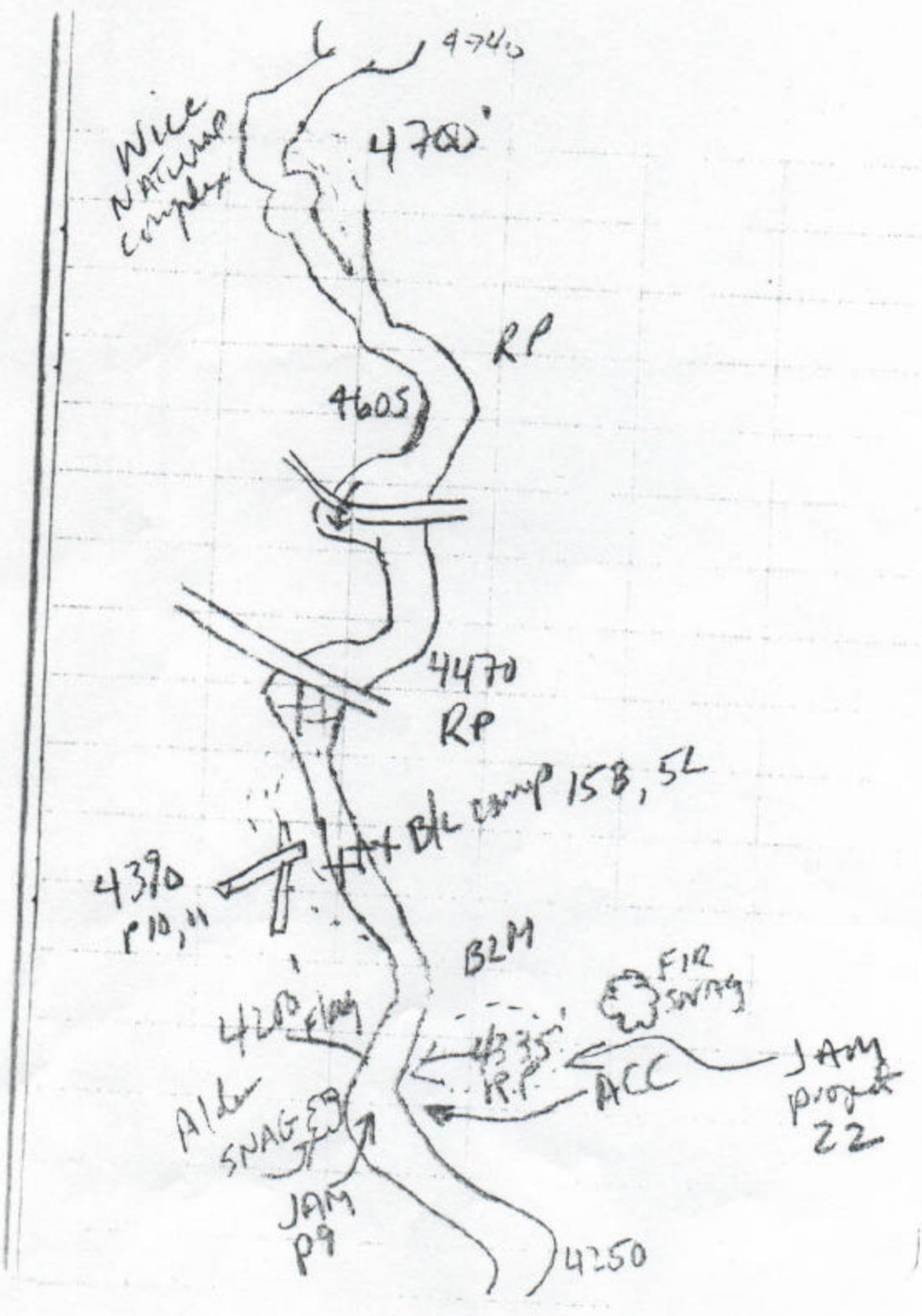


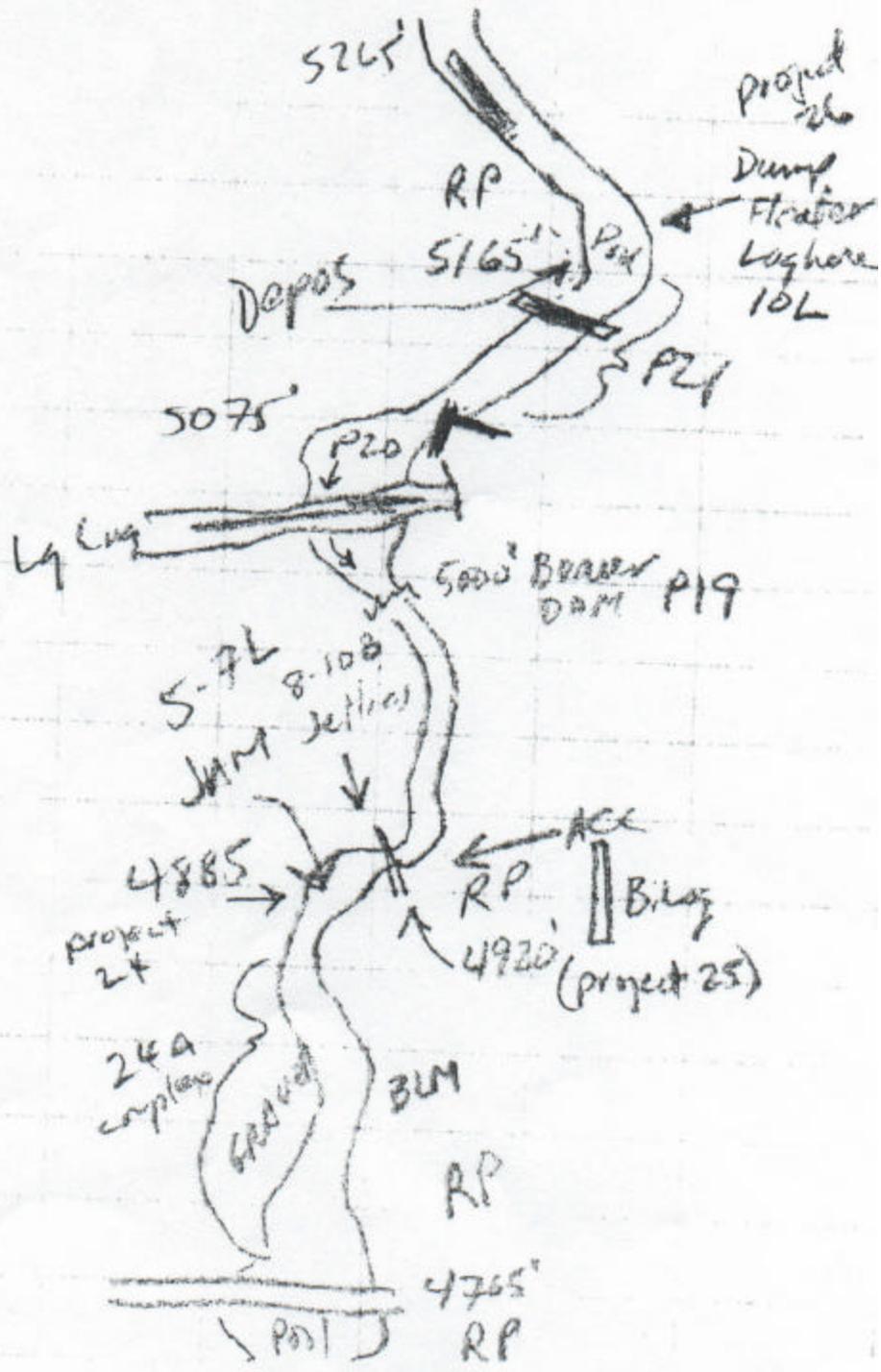


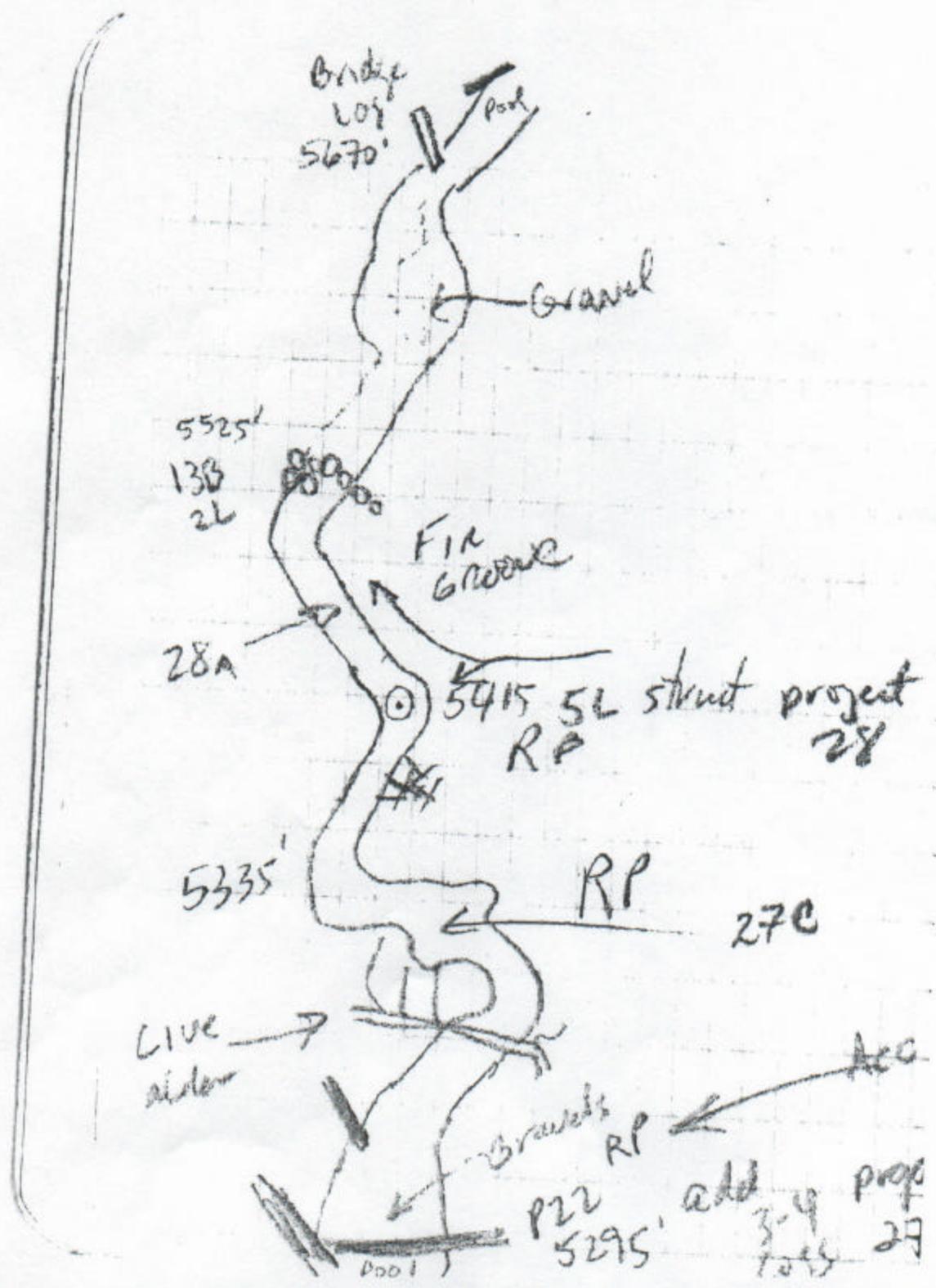


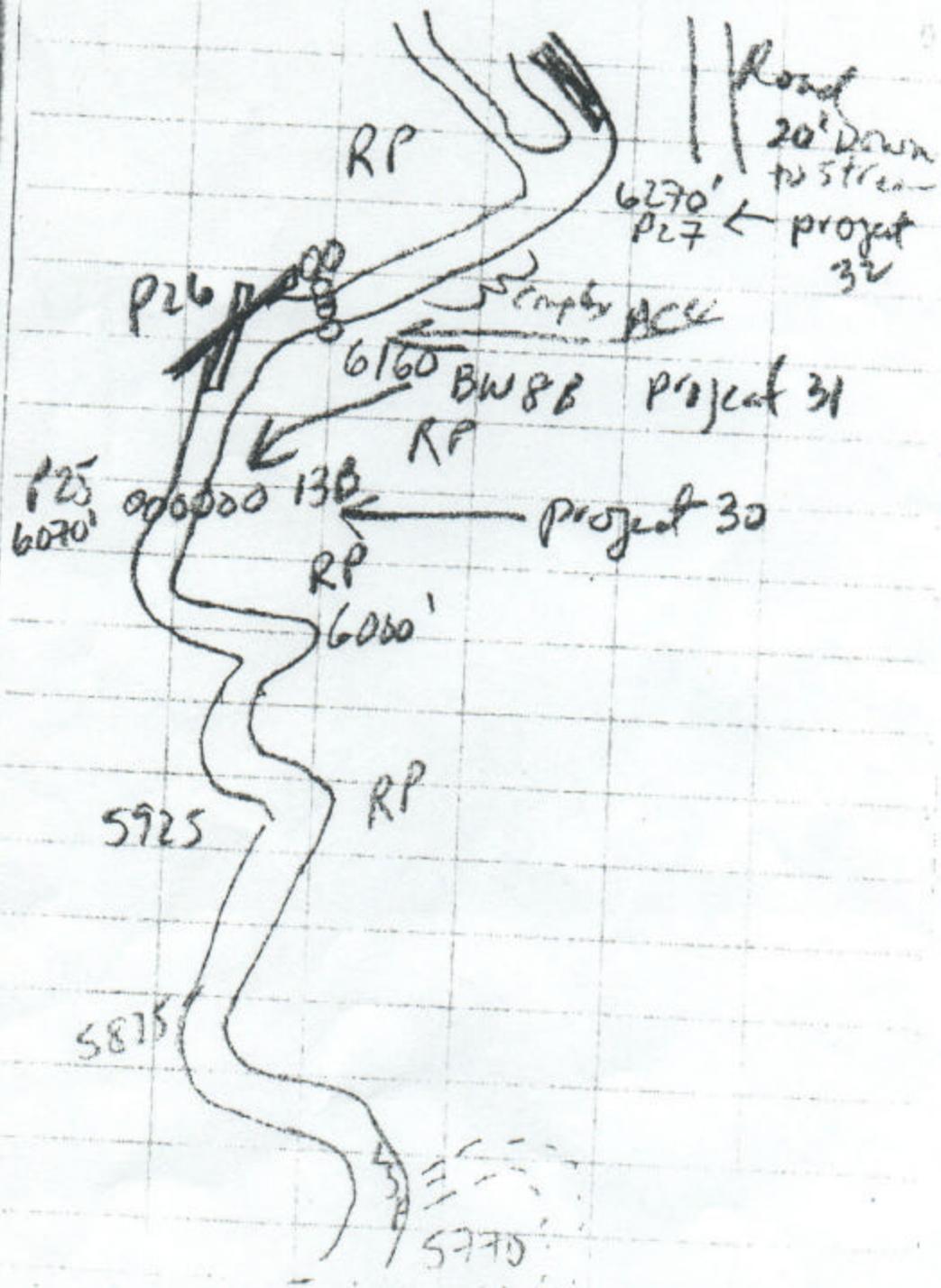
RP - Riparian plot

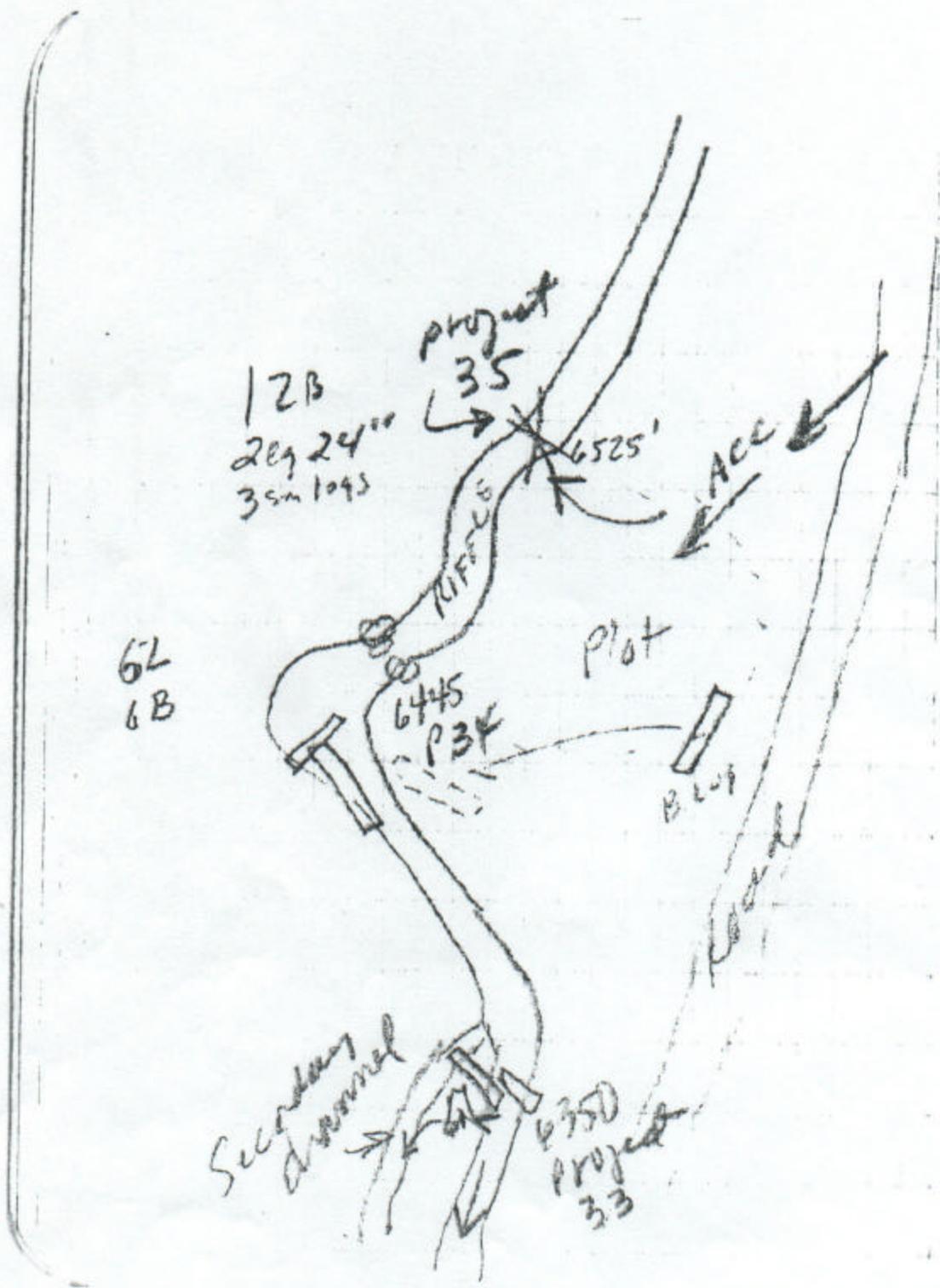
completing P17
 project 16











BIERCE CREEK CULVERT



Effluent VIEW

- NOTE BEDROCK SUBSTRATES



Influent