

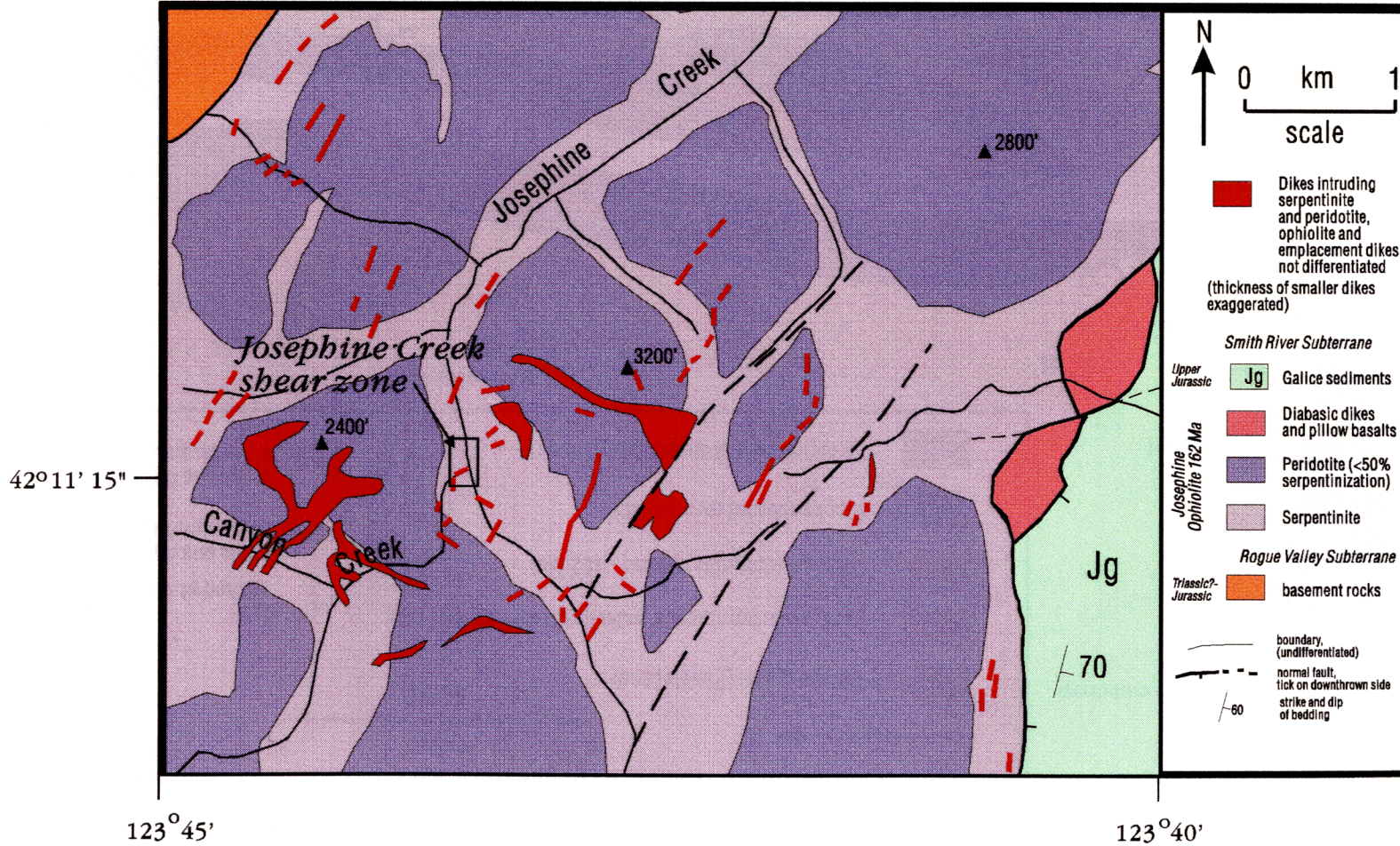
1. Josephine Creek shear zone
2. Vulcan Peak shear zone
3. Patrick Creek shear zone
4. Low Divide shear zone

5. Basal sole
6. Toll Road shear zone
7. Red mountain shear zone

# Josephine Creek shear zone

# Map 1

Sketch map of geology of Josephine Creek and surrounding area

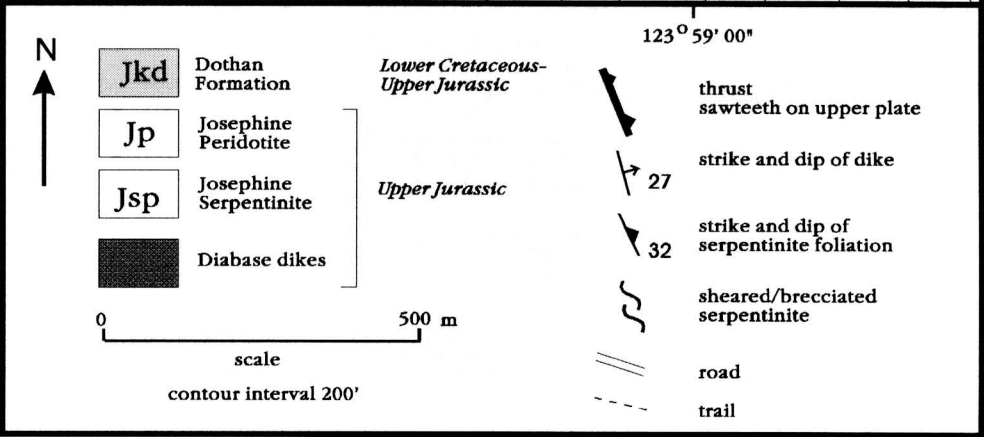
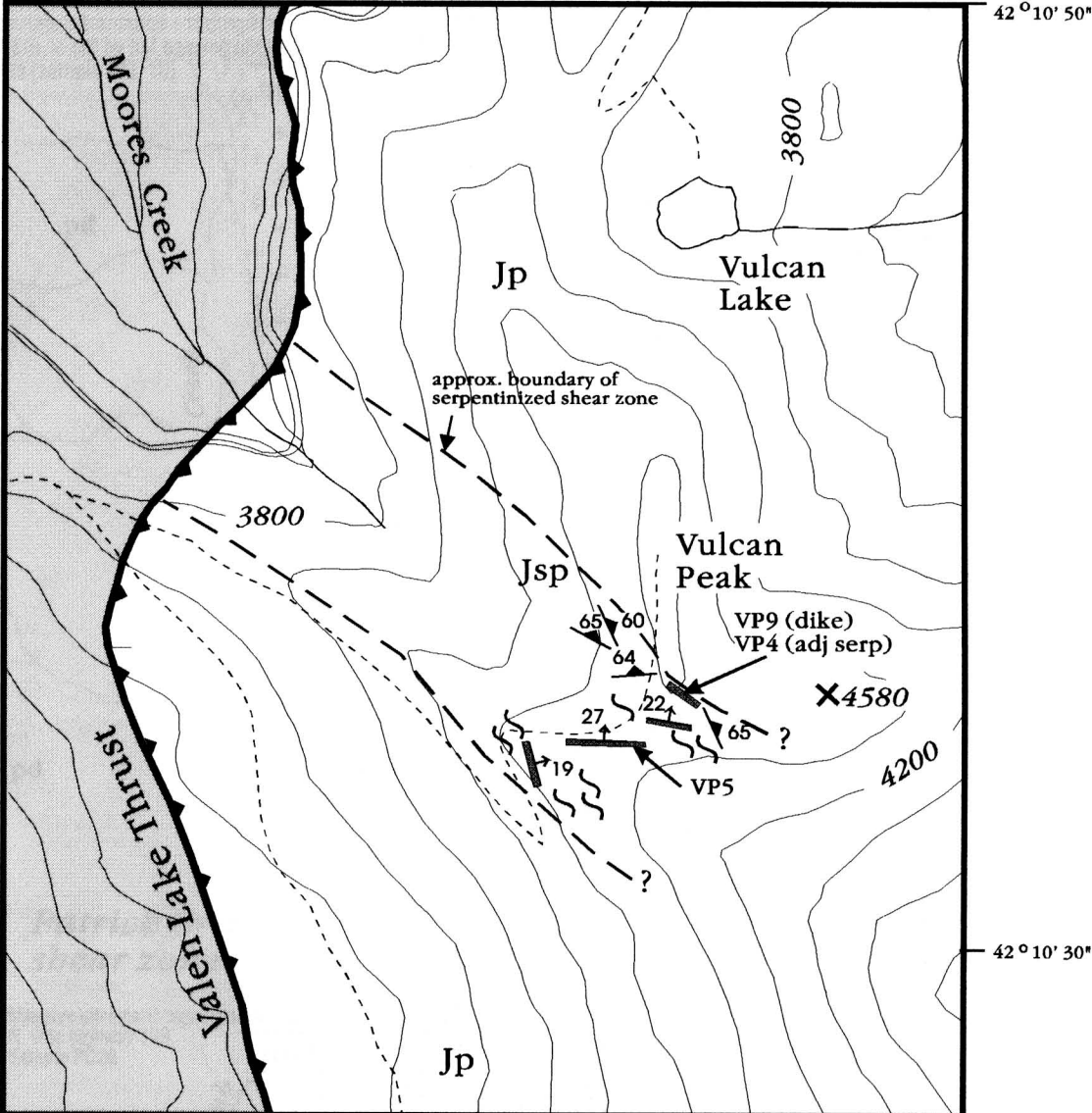


Map modified from Ramp (1986)  
 JC samples from area outlined (see JCSZ Map 2)



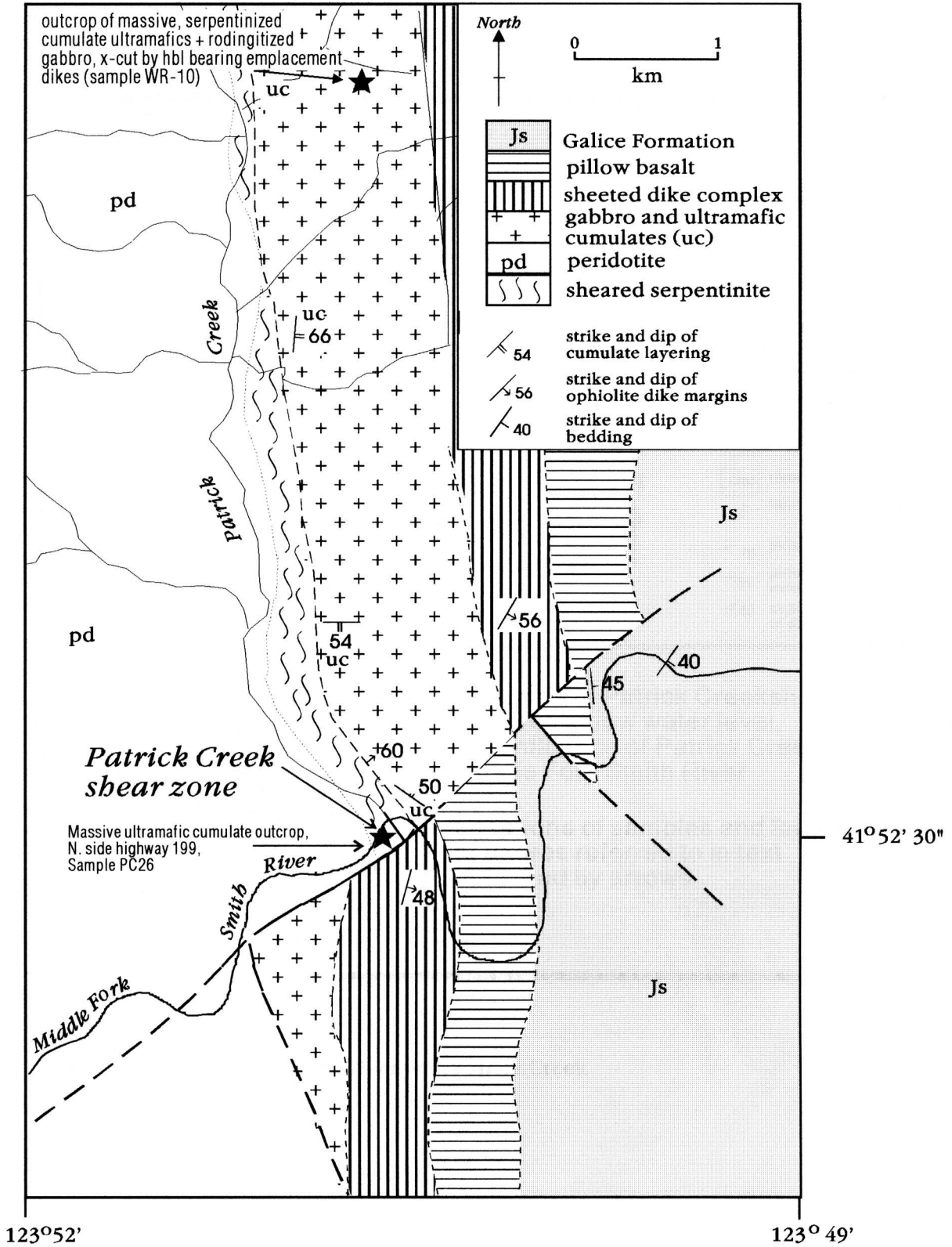


# Vulcan Peak shear zone



Patrick Creek shear zone

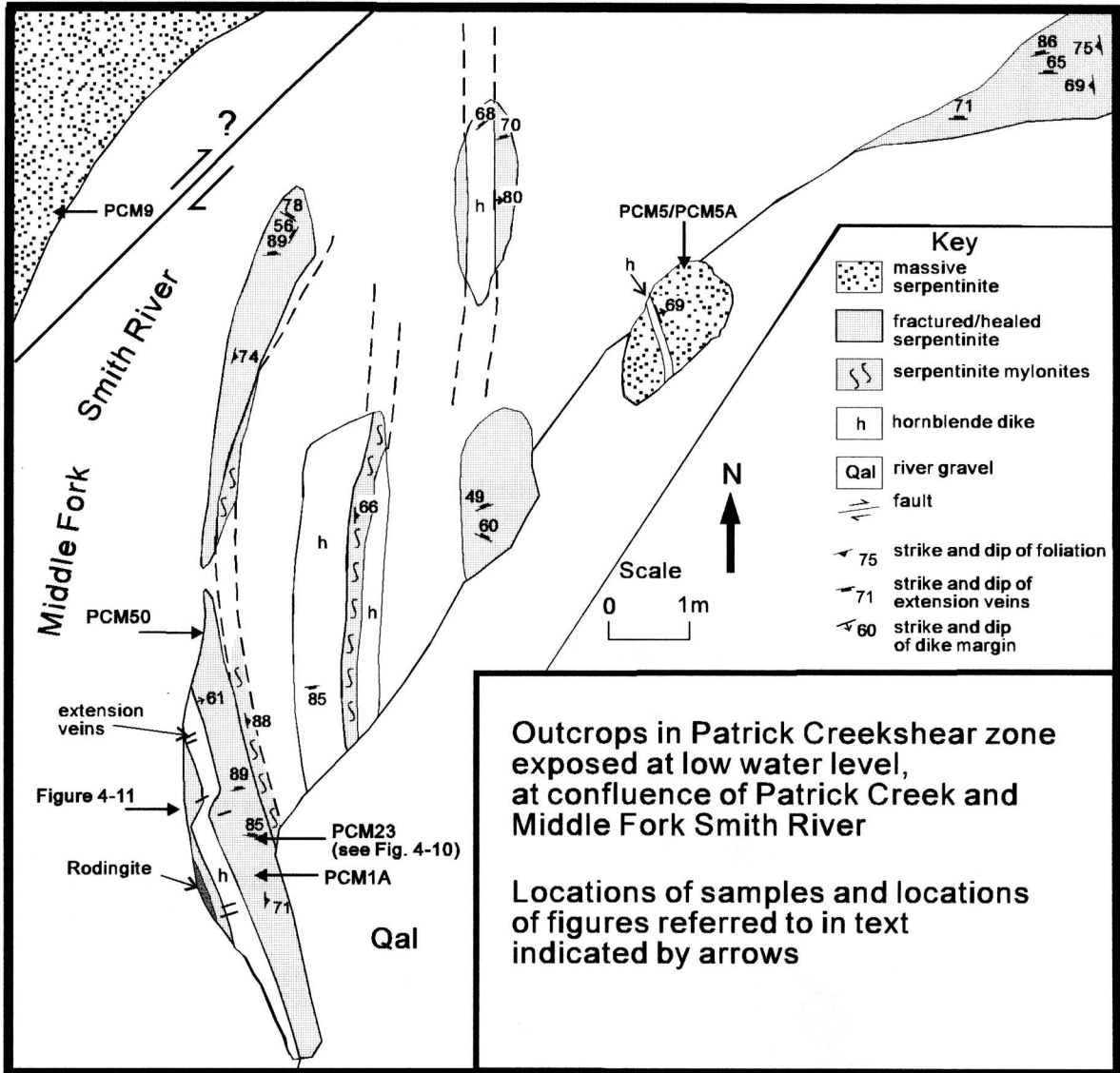
Map1



Geologic Mapping by Harper (1980, unpublished mapping), Alexander (1992)

Patrick Creek shear zone

Map 2



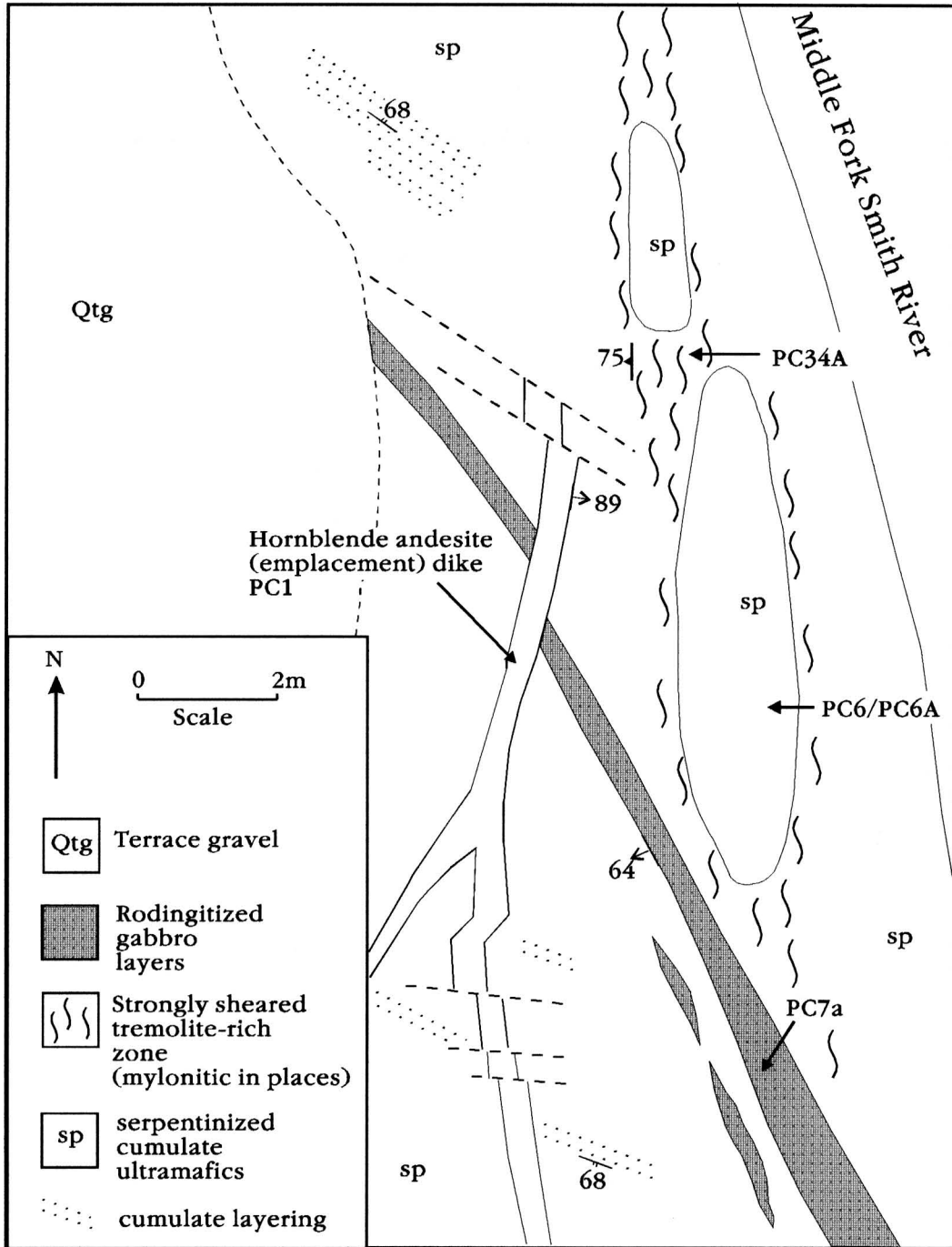
Locality 1

Junction of Middle Fork Smith River with Patrick Creek

41° 52' 30" N 123° 50' 32" W

Patrick Creek shear zone

Map 3



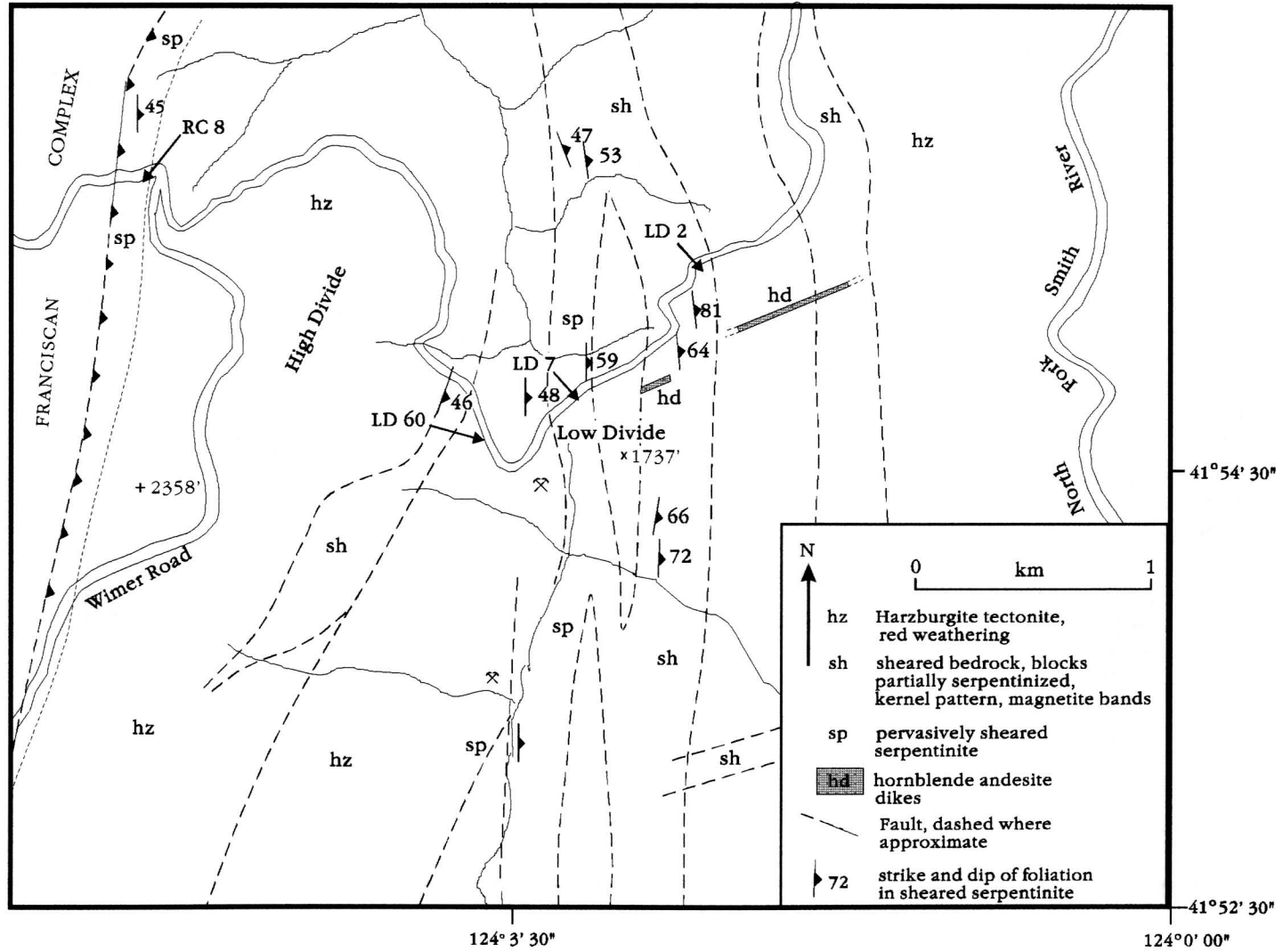
Locality 2

West bank, Middle Fork Smith River, 100m south of junction with Patrick Creek

41°52' 20" N 123°50' 32" W



# Low Divide shear zone

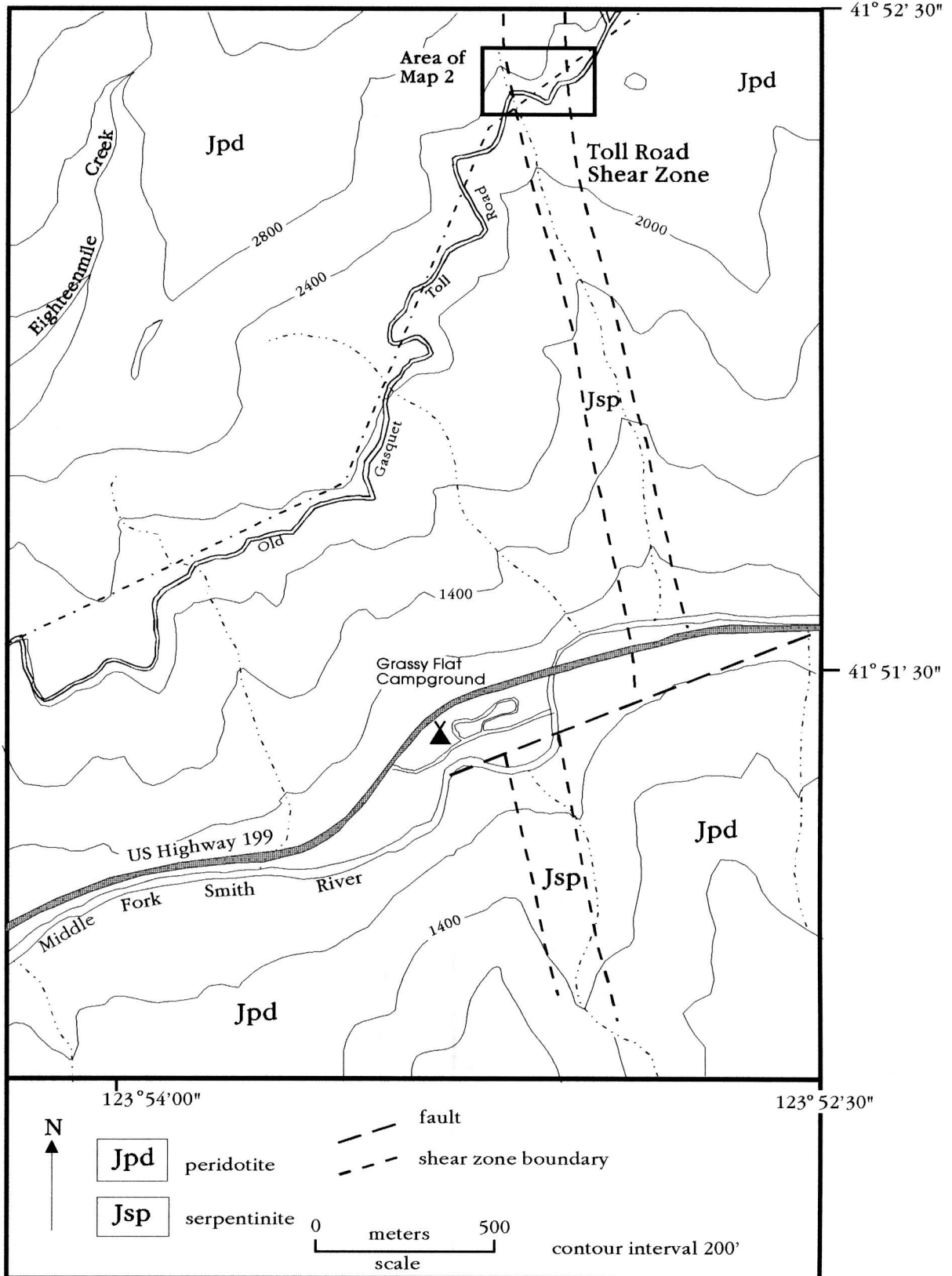


Geologic mapping by Harper (1983, unpublished mapping)



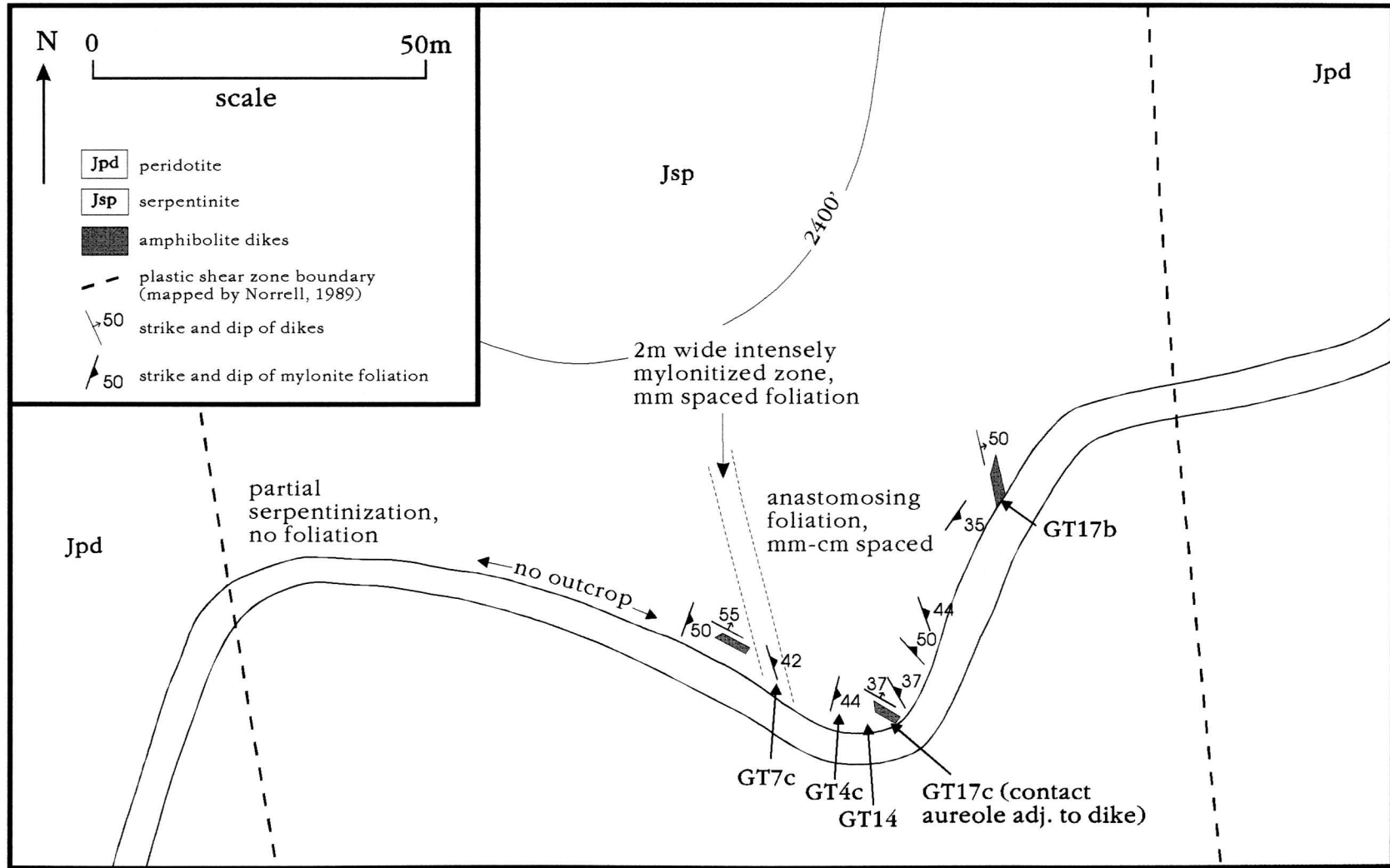
# Toll Road shear zone

# Map1



Toll Road shear zone

Map2 (see Map1 for location)



Locations of additional samples referred to in text

Sample	Description	Latitude	Longitude	Location Description	Source
IL1b	diabase (ophiolite) dike*	42° 15.31'	123° 41.52'	E. bank, Illinois River, 1km N of bridge IL5, at bridge	This study
IL5	hornblende-bearing (emplacement) dike	42° 14.60'	123° 40.99'	E. bank, Josephine Creek, 10m S of junction with Illinois River	This study
IL6	diabase dike	42° 14.60'	123° 40.99'	X-cut by IL5	This study
F86	diabase dike	41° 49.70'	123° 53.40'	Dike in minor serpentinized shear zone	Harper (unpublished data)
K17	diabase dike	41° 49.83'	123° 53.18'	"	Harper (unpublished data)
Y36b	hornblende-bearing dike	41° 48.12'	123° 50.60'	"	Harper (unpublished data)
K40	hornblende-bearing dike	41° 47.87'	123° 50.80'	"	Harper (unpublished data)
J6	hornblende-bearing dike	41° 45.48'	123° 52.98'	"	Harper (unpublished data)
a34b	Fe-Ti dike in sheeted dike complex	41° 50.29'	124° 02.06'	SE bank, Smith River	Alexander (1992)
CH8	sheared serpentinite	42° 08.96'	123° 57.09'	5m above contact with amphibolite, nr Chetco lake	This study
SA14	serpentinite mylonite	42° 08.89'	123° 57.13'	Along contact with amphibolite, nr Chetco Lake	Grady (1990)
KG752b	serpentinite mylonite	41° 33.61'	123° 54.48'	Red Mtn shear zone	Norrell (1989)
Z107	serpentinite mylonite	41° 31.46'	123° 54.32'	Red Mtn shear zone	Norrell (1989)
FH1	serpentinite mylonite	41° 48.90'	123° 54.06'	Continuation of Toll Road shear zone, S. of Smith River	Norrell (1989)
GQ32	serpentinite mylonite	41° 52.41'	123° 53.07'	Toll Road Shear zone, same locality as GT samples in this study	Norrell (1989)

\*All dikes, except a34b, cross-cut serpentinite

APPENDIX 2

**SAMPLE LOCATIONS**

Shear zone location map

Josephine Creek shear zone (2 maps)

Vulcan Peak shear zone

Patrick Creek shear zone (3 maps)

Low Divide shear zone

Toll Road shear zone (2 maps)

Table of additional sample localities