

TOPICS DISCUSSED Aug 26-27 in EXPERT MP00081
MAJM REV BY
 FRED NATICH

DESIGN BRIEF

DESIGNED BY _____

DATE Aug. 26/96

CHECKED BY _____

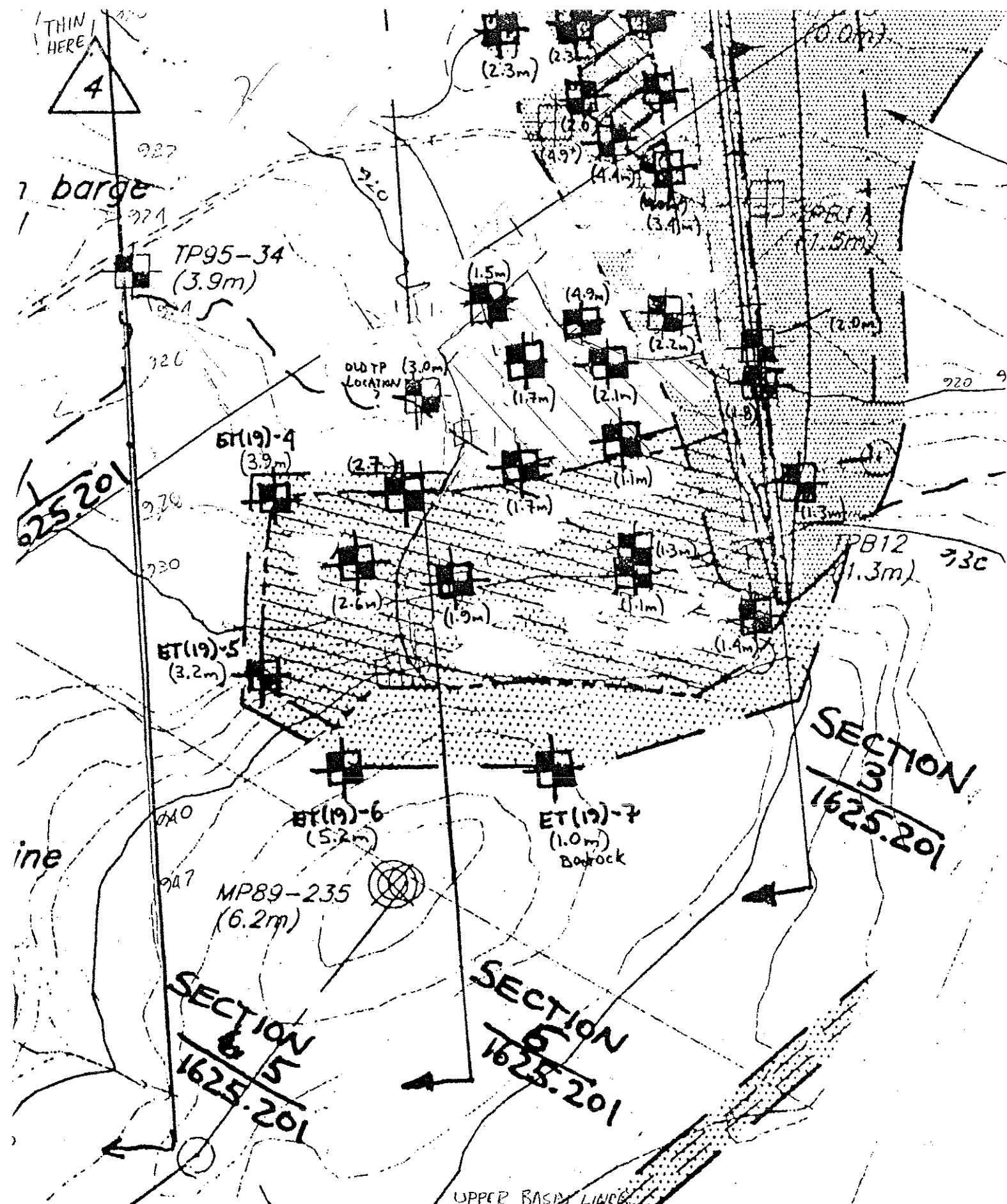
PAGE _____ OF _____

PROJECT NO. _____ SHORT TITLE Imperial Metals

DESIGN SUBJECT Mt. Polley Mine

REF. DWGS. _____

1. Hydrogeological studies.
2. Topography El. 933 Lake El. 924 Swamp
(Bottom in till. Check w/ variation)
3. Seepage containment Pond. Main Dam.
(Possible heave of base)
4. Barge channel. (Extension to be done)
(Check bottom before fill) - *mapology, seep*
5. Artesian Pressures / Springs. *then line*
lake
6. Detailed studies of stratigraphy. *Sept 7.* Main Dam
write up as a report. *settlement cracks*
7. Test Pits. (Backfill A. Re. excavate)
Increase thickness of blanket.
8. Zones in Dam. *11m GS* *similar drain pipe* *11m permeability*
9. Relief wells + relief trenches. *sealing procedures*
Additional checking for segregation. *lab experiment*
10. Additional GS curves. *in situ*
Sand / Filter Sand / Nat'l sand in fdn.
If stratified nat'l sand, check strata.
11. Buried channel to Hazelton Creek?
12. Key/cut. off on U/S side of blanket.
13. Possible relief well + trench on D/S side. (Neutralize existing)
14. As-built 14A. Evapⁿ vs loss in moisture.
lab testing *borrow material*
15. Strength vs m/c in fill ISA Review piezos in fill.
16. Limited X. section. Interior drain. Toe drain *934 Planned*
El. 629.5 max
17. Air photo interpretation.
18. Fracturing +
Fissuring in till.
19. Frost Action,
Drying / Shrinkage
cracks.
20. Deformation of
Dam.
21. Drain system for
rising
22. Operations Manual
in words
23. Geological exploration
Drill rig to check
on lining of till.
24. Gradation of till
25. Blockage of drains
w/ decomposing
26. tiller compatibility



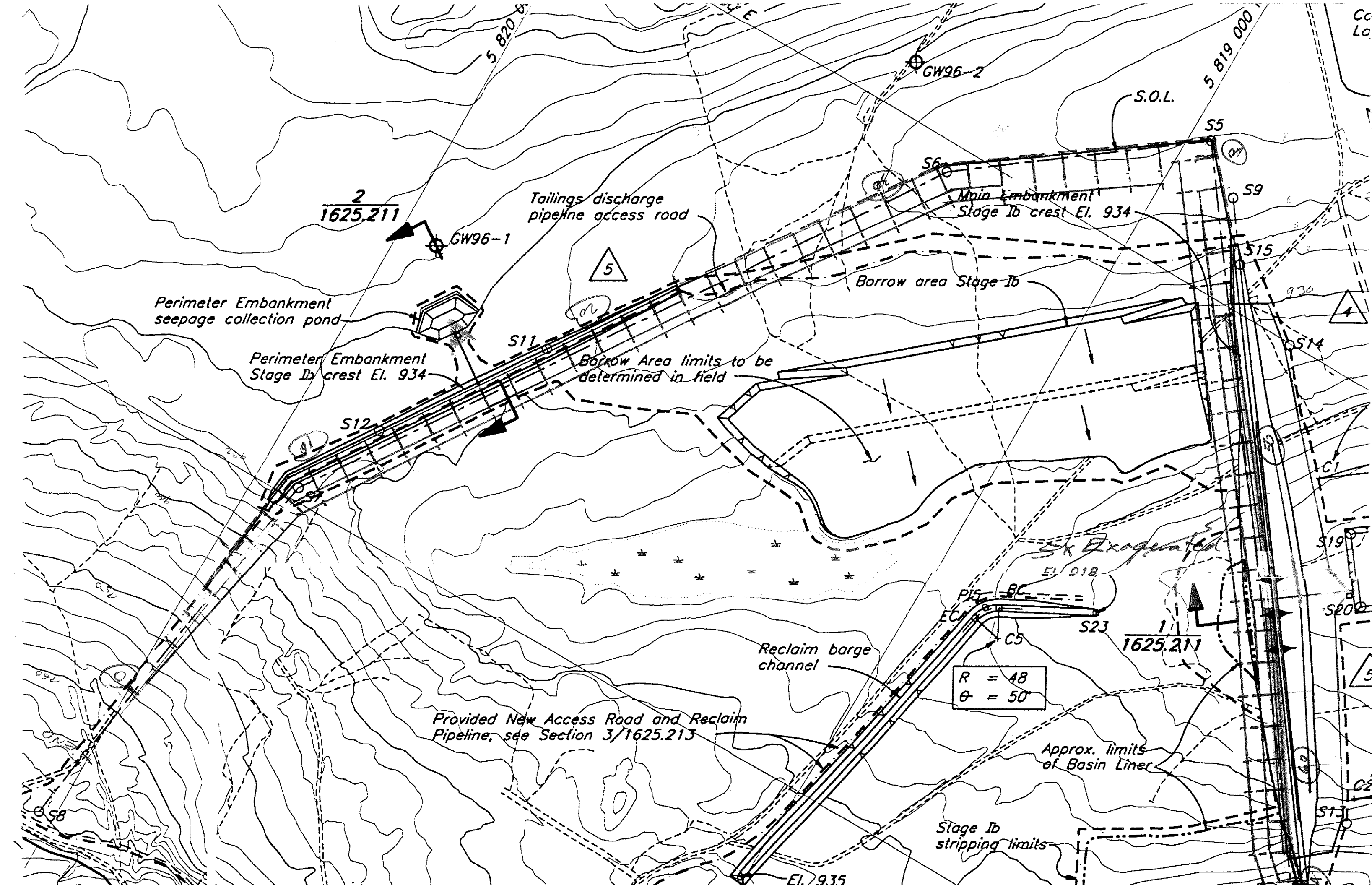
☒ - LOWER BASIN LINER
(1st Lift Placed)

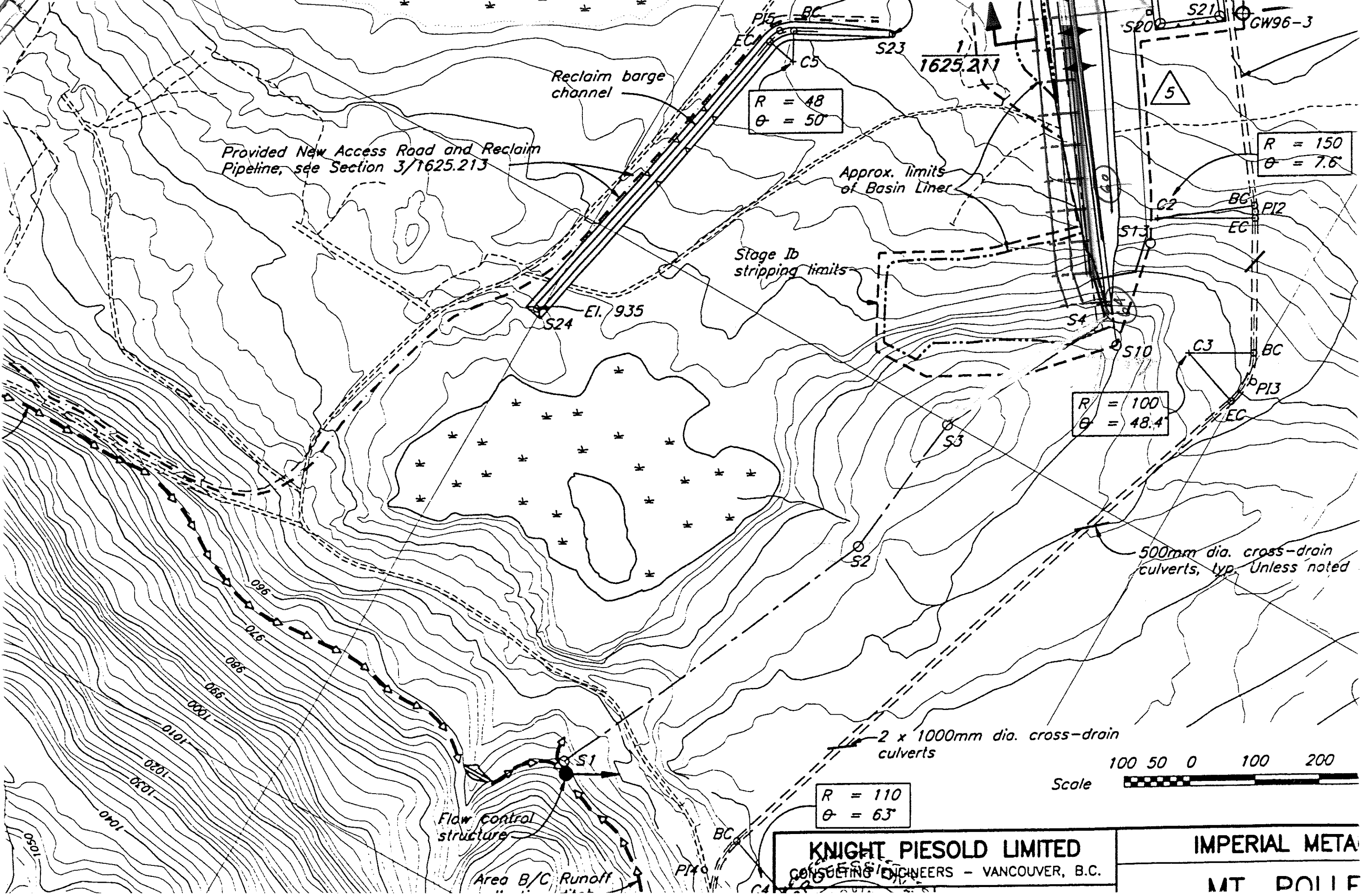
ORIGINAL
NOT NEEDED → 13300 m²
NEEDED → 36500 m²
TOTAL (CONTRACT) → 50,000 m²
Additional (To Date) 13,300 m²
Remaining

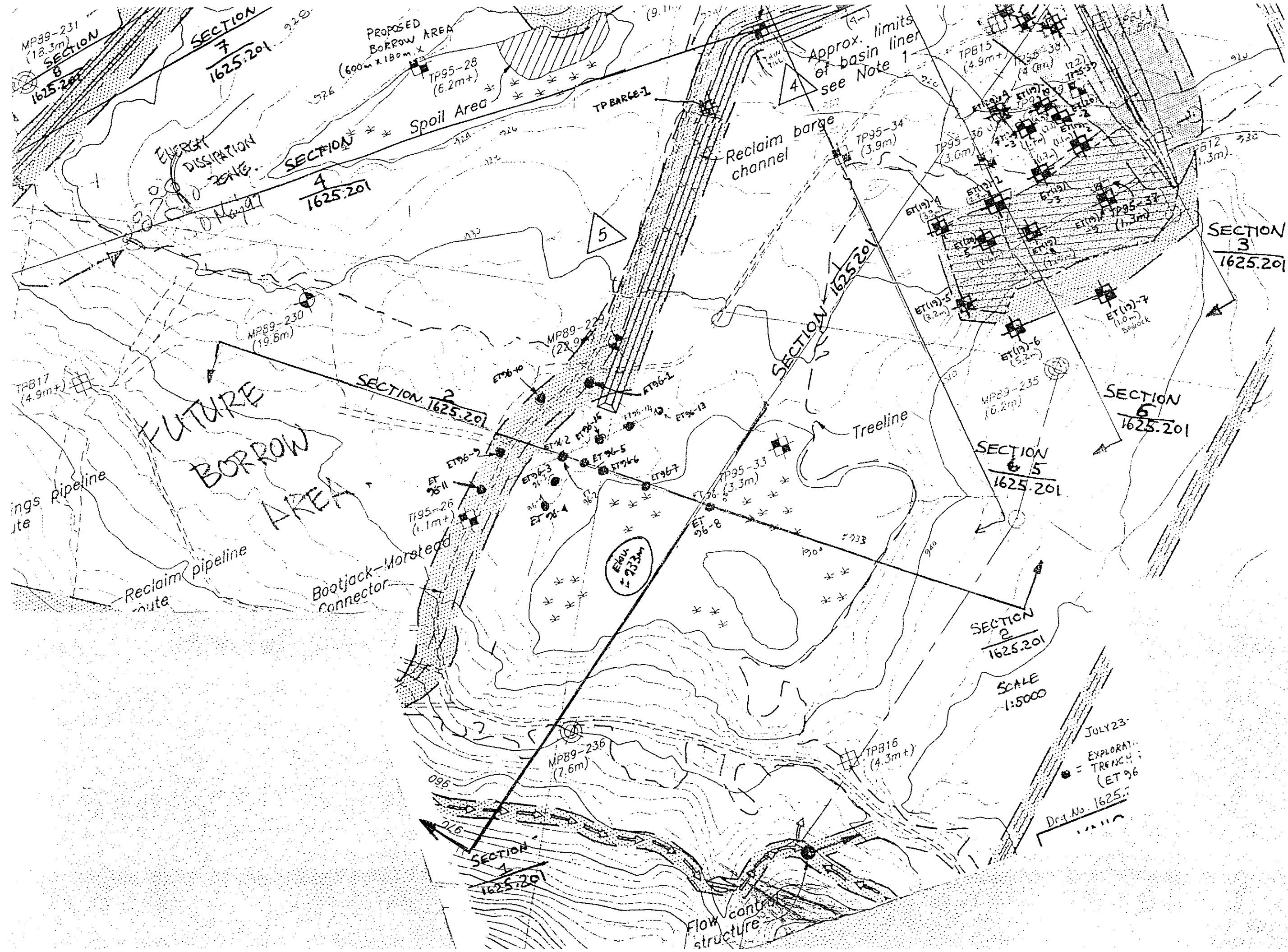
PROPOSED

SCALE
1:3333

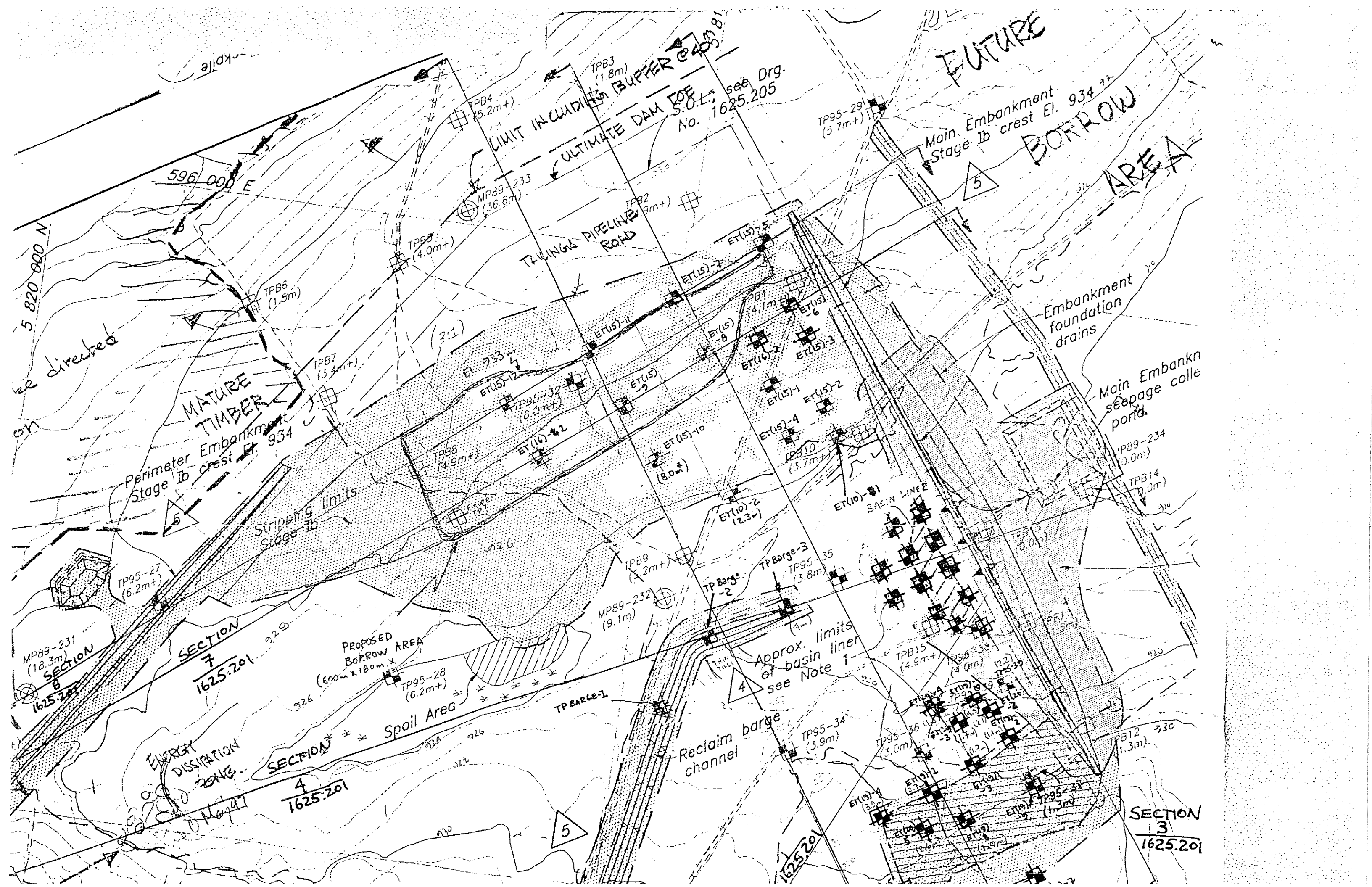
AUG 21/96



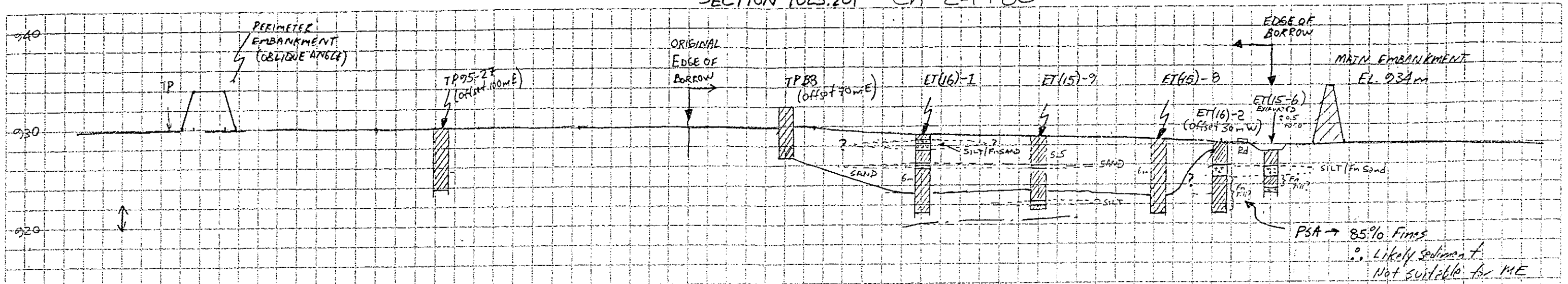




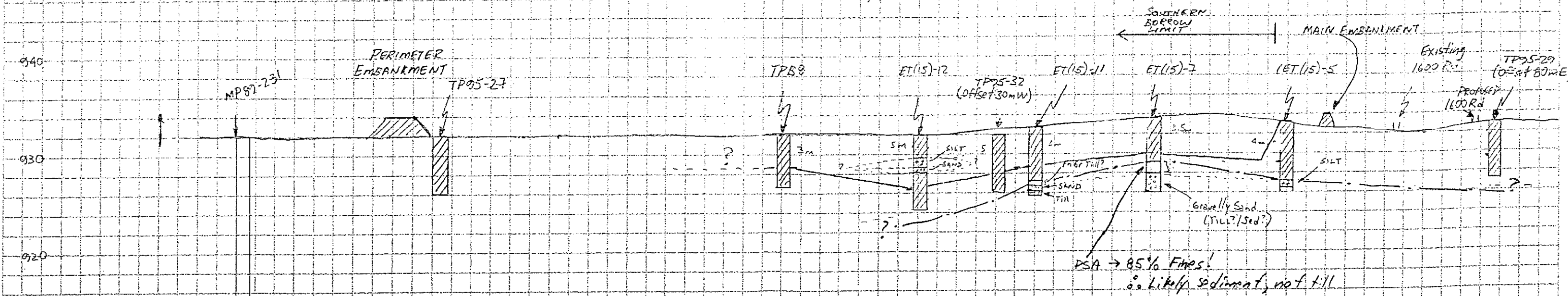
Mt. Pelley
G. Headley
copy.



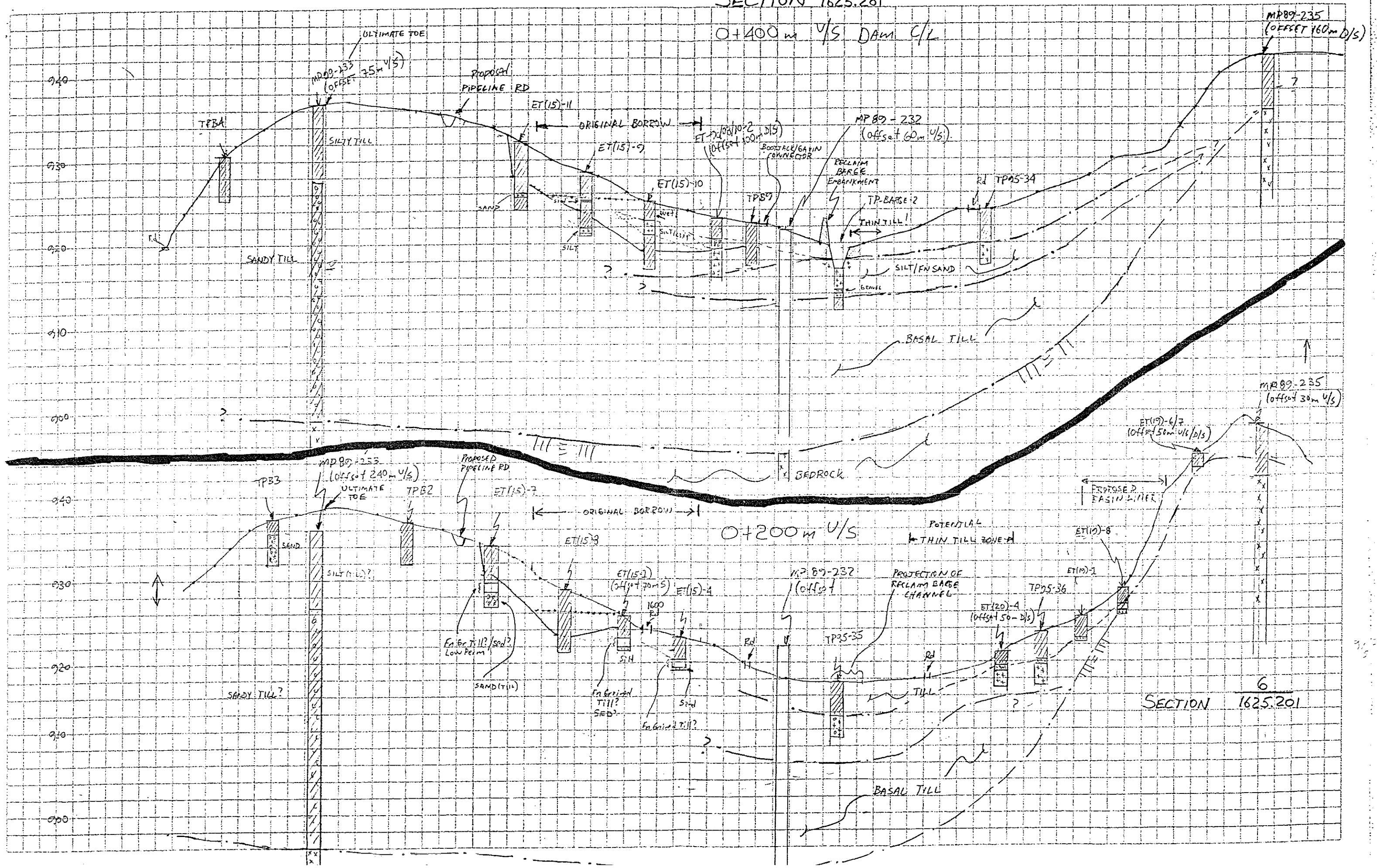
7
SECTION 1625.201 Ch 24+80



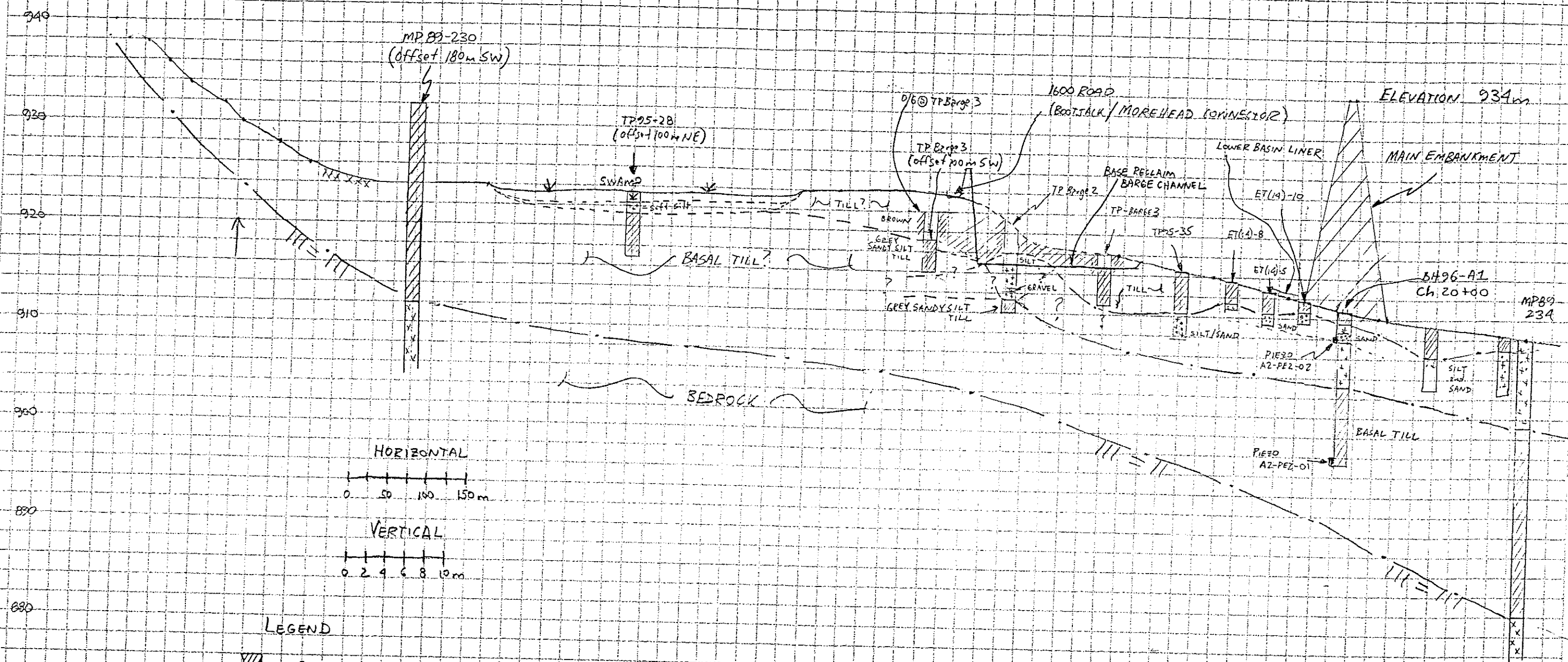
8
SECTION 1625.201 Ch 25+90
(≈ 50m NE of ORIGINAL BORROW AREA)



SECTION 5
1625.201



SECTION A 1625.201



LEGEND

- GLACIAL TILL
- SILT ± Fm Sand ± Clay
- SILT + Fm Sand
- BEDROCK
- PEAT

offset 450m N
BH MP
89-231

offset 130m
TPBZ

MOUNT POLLEY

SECTION @ 050°

THROUGH MAIN EMBANKMENT C/L
ELEV 934m TOP STAGE 1B

offset 10m
TPB1

offset 50m
TPB10

PRW-4

TPB12

GLACIAL TILL
TIT-TIT?

V=1:400

GLACIAL TILL

GLACIOFLUVIAL
SANDS & GRAVELS?
Note large offset!

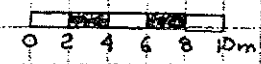
BASAL TILL

BEDROCK

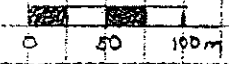
LEGEND

- LOOSE TO MEDIUM DENSE TILL (Ablation Till?)
- DENSE TO VERY DENSE TILL (Basal Till?)
- SILT, CLAY ± FINE SAND (GLACIOFLUVIAL/LACUSTRINE)
- FINE TO MEDIUM GRAINED SAND (GLACIOFLUVIAL/LACUSTRINE)

VERTICAL SCALE



HORIZONTAL SCALE



JULY 29/76

CH 22+40

CH 20+00

CH 18+50

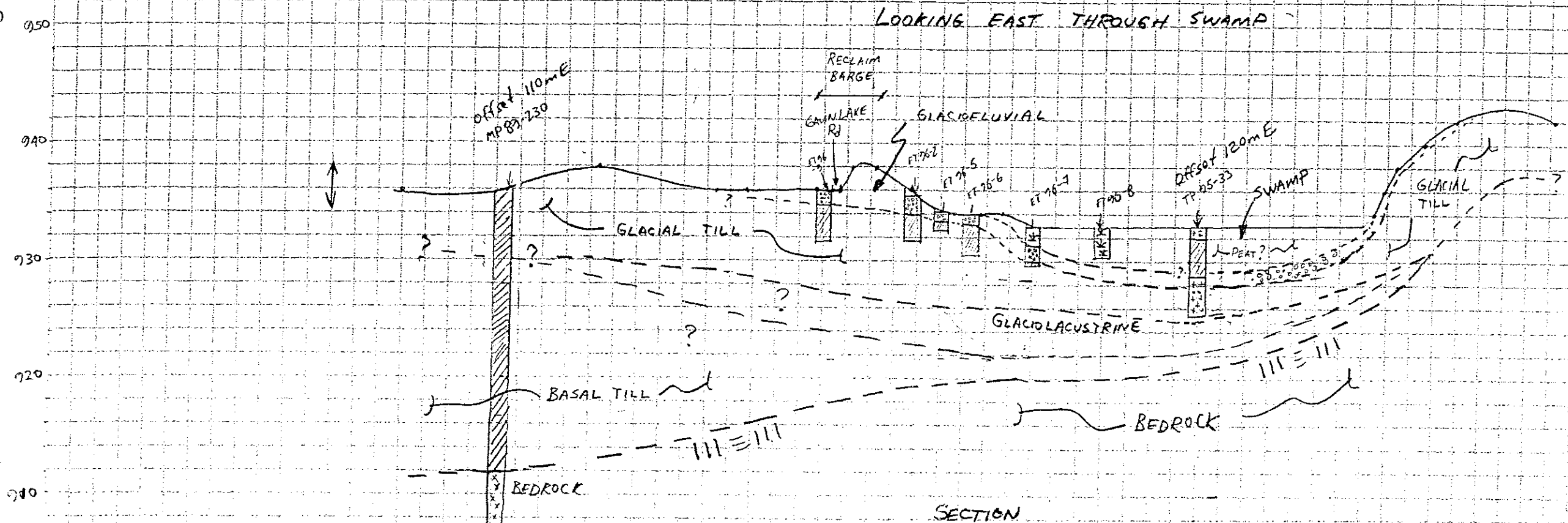
SECTION 3

1625.210

MOUNT POLLEY

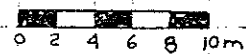
SECTION ② 190°

LOOKING EAST THROUGH SWAMP

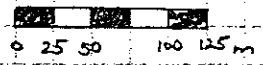


SECTION
2
1625.201

VERTICAL SCALE



HORIZONTAL SCALE



JULY 24, 25/96

SECTION ② $\approx 110^\circ$
LOCATED THROUGH
SWAMP + MAIN EMBANKMENT

