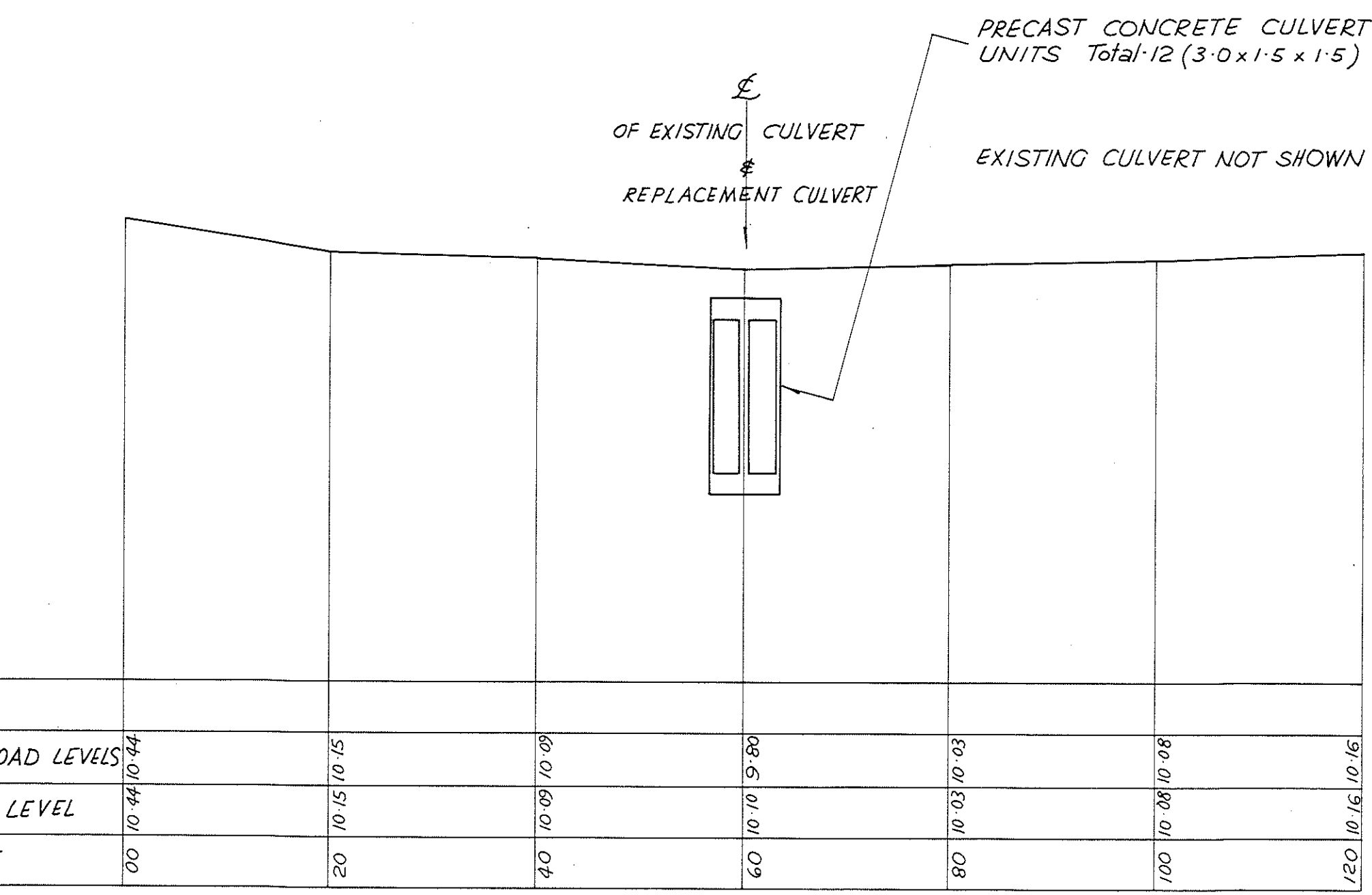
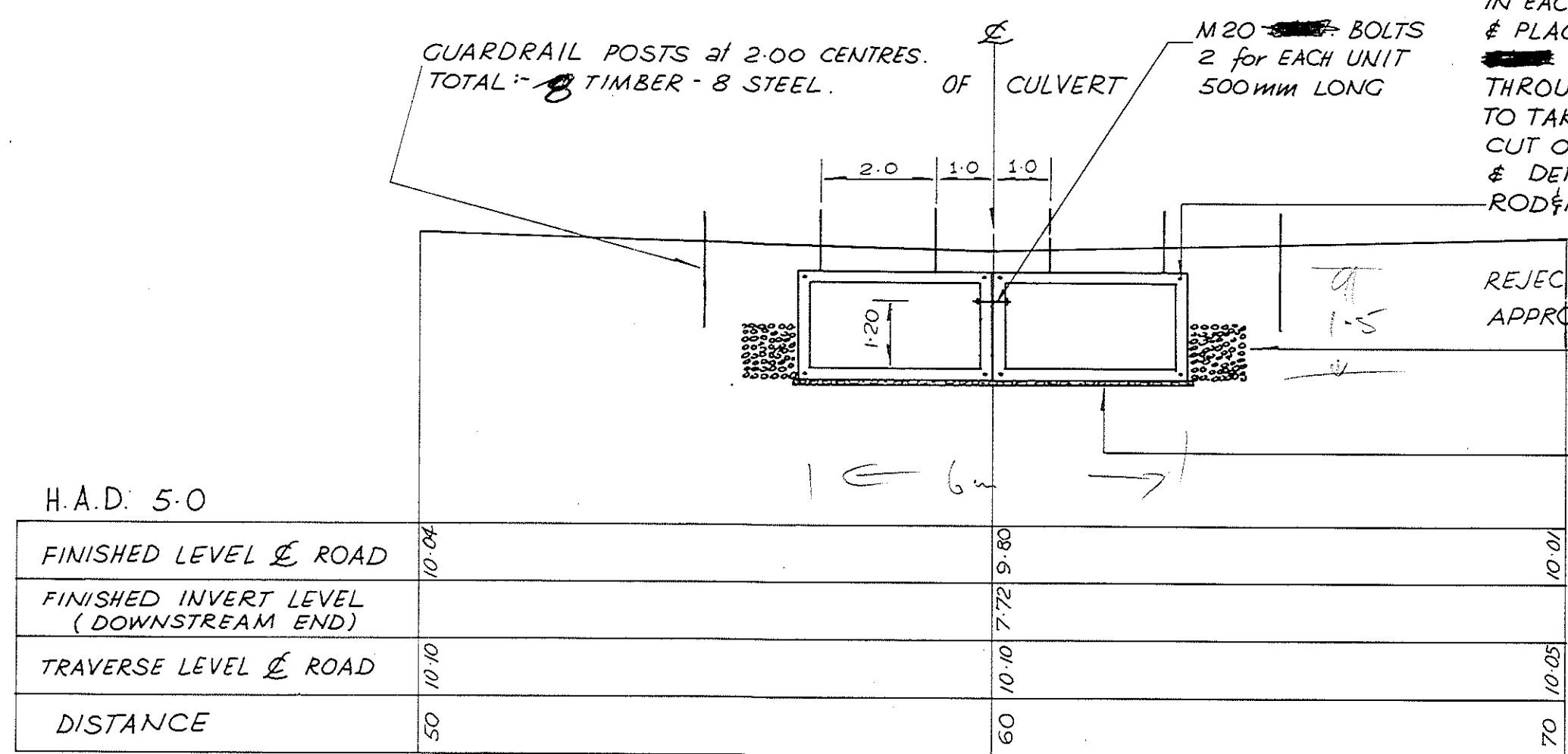


2.3 meters from headwall top  
 2.5 meters from headwall top  
 \* Want be able to fully excavate until headwall removed.



LONG SECTION OF ROAD  
 Scale  
 Horiz. 1:500 Vert. 1:50



DETAIL OF CULVERT  
 END SECTION  
 Scale 1:100

NOTE... 1. ROAD CONSTRUCTION

Replace material excavated with compacted crushed metal to achieve subbase levels specified. Place layer of M/4 basecourse 80mm compacted thickness. Prime & second coat seal to surface. Feather into existing road.

2. CREEK EXCAVATION

Excavate material from Creek to invert levels specified and to extend width to match dimensions of culvert. Taper widening back to existing width at 30m either side of road CL.

3. CULVERT CONSTRUCTION

Total No. of units = 12 x 3.0m x 1.5m x 1.5m bolted together as detailed to form a 6.0m wide x 1.5m deep x 9.0m long structure.

4. EXISTING CULVERT

Existing structure to be completely removed and carted to V.C.C. yard for storage.

DESIGN HYDRAULIC DATA

REFERENCES..... T.M 61 October 1975  
 Humes Design Bulletin  
 RETURN PERIOD... 4.5 years  
 RAINFALL DURATION... 1.2 hours  
 DISCHARGE..... 85 m<sup>3</sup>/s  
 PEAK VELOCITY... 9.7 m/s  
 FOR TWIN 3.0 x 1.5m BOX CULVERTS LAID FOR  
 S = 0.02 m/m

ORIGINAL SIZE  
 mm INCHES  
 0 10 20 30 40 50 60 70 80 90 100 110 120

| AMENDMENTS |    |       |        | NAME DATE    |               | JOB NO.  |       | Sheet No |
|------------|----|-------|--------|--------------|---------------|----------|-------|----------|
| NO.        | BY | DATE  | Appvd. | Surveyed     | H. NORDEN     | JULY '85 | 13151 | 1        |
| 1          | HN | 10/85 |        | Drawn        | H. NORDEN     | JULY '85 |       |          |
|            |    |       |        | Calculations | H. NORDEN     | JULY '85 |       |          |
|            |    |       |        | Traced       | M. J. CASSIDY | AUG. '85 |       |          |
|            |    |       |        | Checked      |               |          |       |          |
|            |    |       |        | Approved     |               |          |       |          |