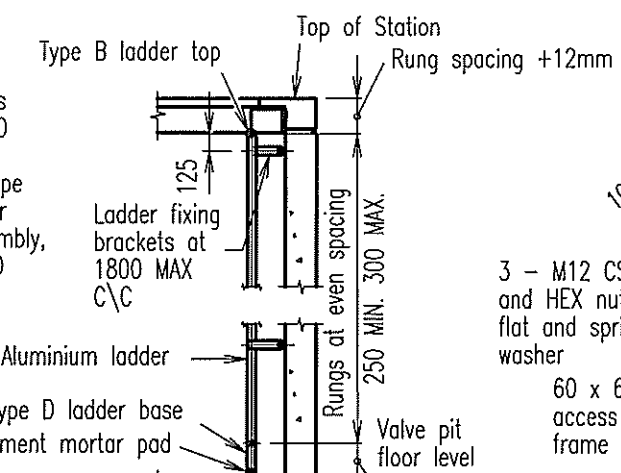
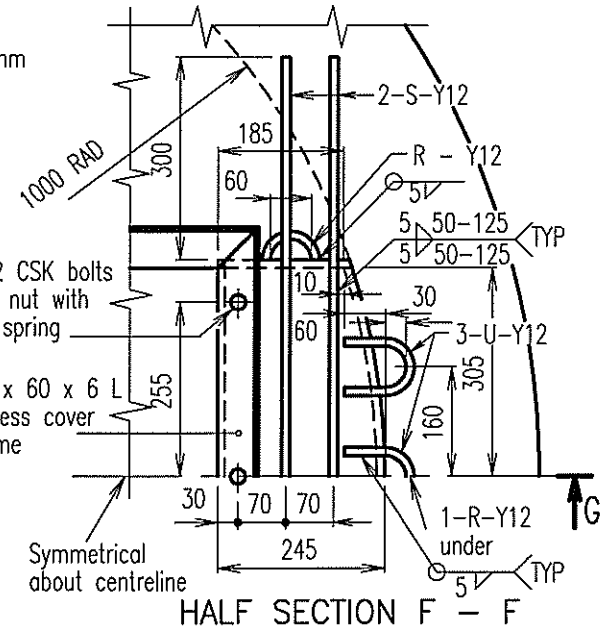


**UNIVERSAL JOINT DETAIL**

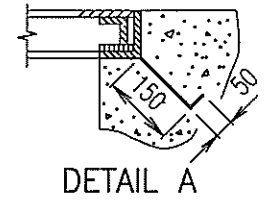
IF REQUIRED



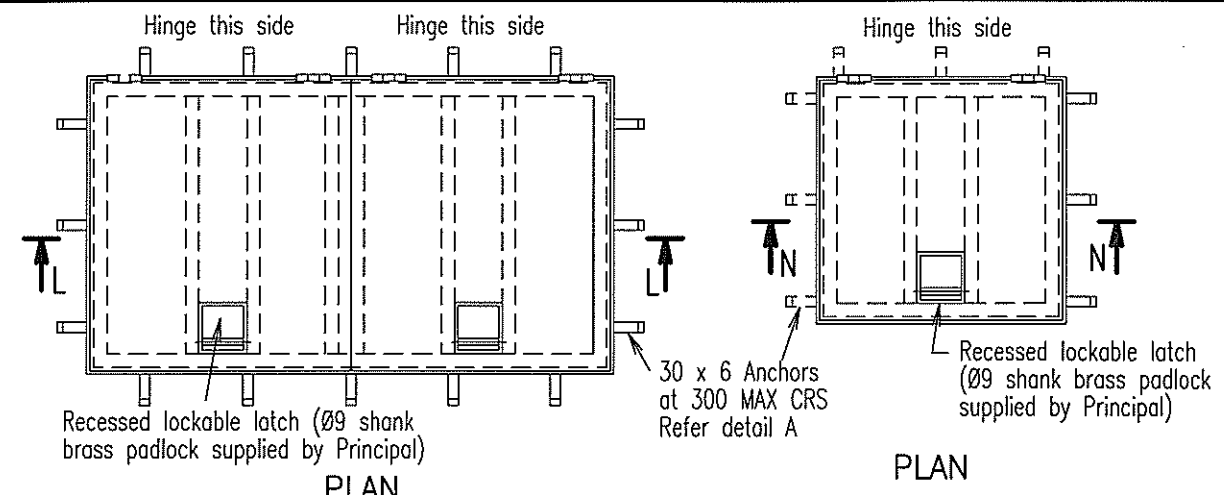
**VALVE PIT LADDER**



**HALF SECTION F - F**

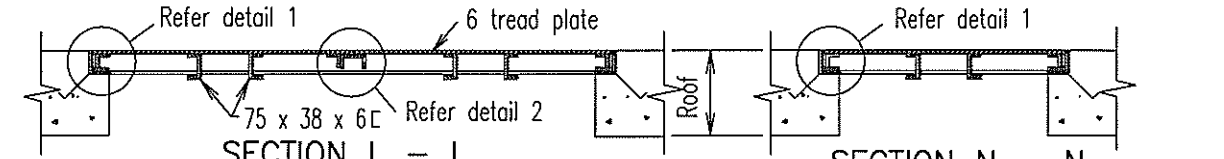


**DETAIL A**



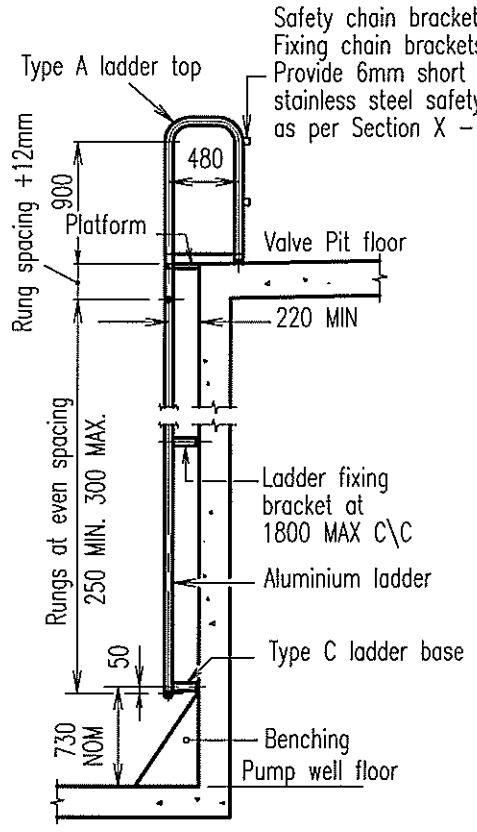
**PLAN**

**PLAN**



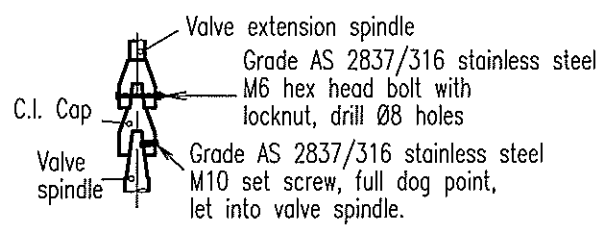
**SECTION L - L  
PUMP ACCESS  
COVER AND FRAME**

**SECTION N - N  
ACCESS CHAMBER  
COVER AND FRAME**

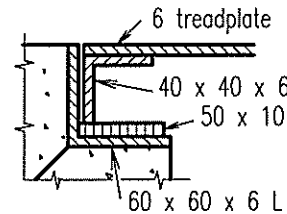


**SECTION C - C  
PUMP WELL LADDER**

Refer Standard Drawing S-0056

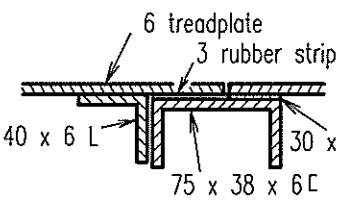


**SPINDLE FIXING DETAIL**



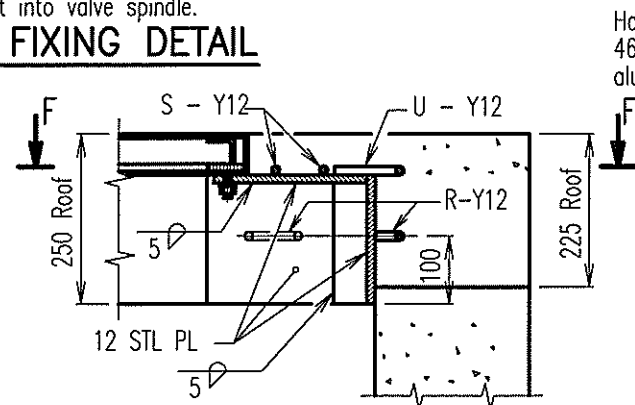
**DETAIL 1**

All edges

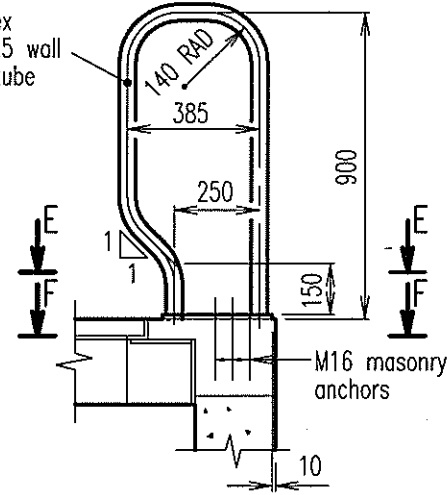


**DETAIL 2**

Centre only



**SECTION G - G**



**SECTION D - D**

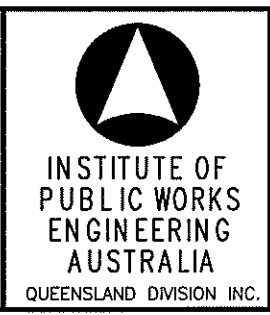
Refer Standard Drawing S-0050

**NOTES**

- Ladders, handrails and hand grips shall be constructed generally as shown and shall comply with AS 1657. Pay special attention to Clause 5.2. Aluminium plate shall be alloy 5083-H321, aluminium sections shall be alloy 6061-T6, to AS 2848. All sharp edges shall be ground off after fabrication.
- Unless noted otherwise, all metalwork connections shall be welded as follows:
  - All welding shall be weld quality 'B' in accordance with AS 1665.
  - Welds shall be made using Filler Alloy 5356.
  - Grind welds flush only at contact points with other members and concrete surfaces.
- All fasteners, chains, set screw and bolts shall be Grade AS 2837/316 stainless steel. Where handrails & ladders are fixed to concrete the fastener shall be either:
  - M16 x 150 MIN long HEX bolt projecting 50mm from concrete, fitted with nut and washer, or
  - M16 masonry anchor of approved type.
- Nylon or polyethylene separation inserts shall be used between stainless steel fasteners and aluminium sections.
- Anti-galling lubricant "Loctite 222 or 567" or similar shall be used on all threads and between all stainless steel mating surfaces
- Unless noted otherwise, steelwork shall be hot dip galvanized after fabrication to AS 1650.
- The covers shall be gastight similar to those produced by Hallco Engineering. All components of access covers and frames shall be fabricated from aluminium alloy 6061-T6, to AS 2848. The covers shall be designed as a platform in accordance with AS 1657. Fabrication details to be submitted to Superintendent for approval prior to manufacture.
- If covers are subject to vehicular loading, use appropriately rated C.I. covers.
- Aluminium surfaces in contact with concrete shall be painted with two heavy coats of alkali resistant bituminous paint.
- Reinforcement identification is in accordance with Section 3, AS1100.501.
- All dimensions in millimetres.

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	REVISIONS	DATE

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**SUBMERSIBLE SEWAGE  
PUMPING STATION  
FABRICATED METALWORK  
SHEET 1**

**SEWERAGE  
Standard  
Drawing  
S-0055**