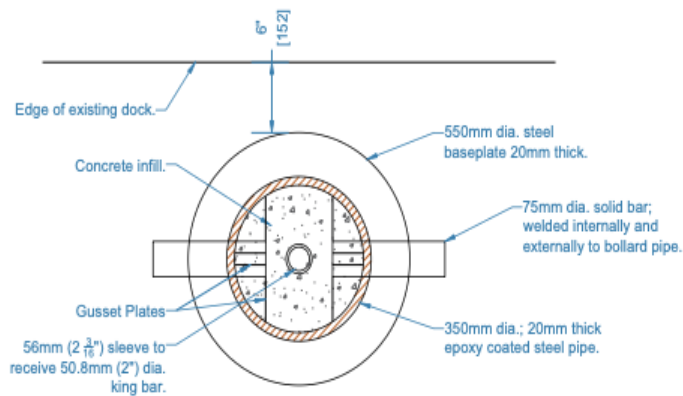




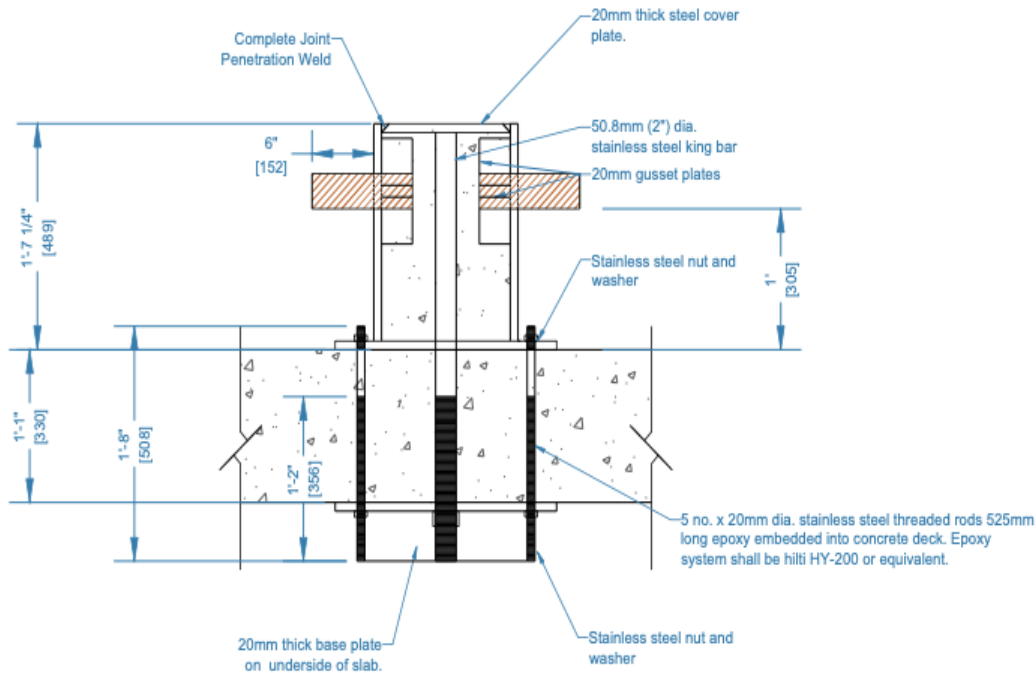
Figure 1 - Typical 15T mooring bollard



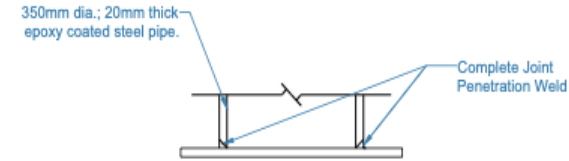
Figure 2 - Typical 15T bollard location



1 BOLLARD PLAN
SCALE: 1=12.5



2 BOLLARD SECTION
SCALE: 1=12.5



4 BASE PLATE STEEL PIPE CONNECTION DETAILS
SCALE: 1=12.5

Notes:

- All threaded fasteners, washers and nuts are to be stainless steel; type 316 in conformance with ASTM A666 with a tensile yield strength of 517 MPa.
- All welds to be complete penetration joint welds and done using the flux core arc welding (FCAW) method.
- Holes for 20mm diameter threaded rods to base plates shall be **field drilled**.
- All steel (base plate, ears and bollard pipe) to have a minimum yield strength of 345 MPa (50 ksi).
- All steel surfaces to be prepared to SSPC-SP10 prior to application of epoxy paint system.
- Bollard to be coated with the corrosion protection system as outlined below or similarly approved and applied in accordance with the manufacturer's specifications:
 - Primer (1 coat) - Interzinc 52, dft 3-4 mils
 - Intermediate (1 coat for airless, 4 coats for other applications) - Interzone 954 - 10-20 mils
 - Alternate Intermediate - Intershield 300 - 4-7 mils
 - Top Coat (1 coat) - Interthane 990 - 2 - 4 mils
- Welds and edges to be stripe coated.
- Provision shall be made for a Certified Coating Inspection Report for all bollard(s).