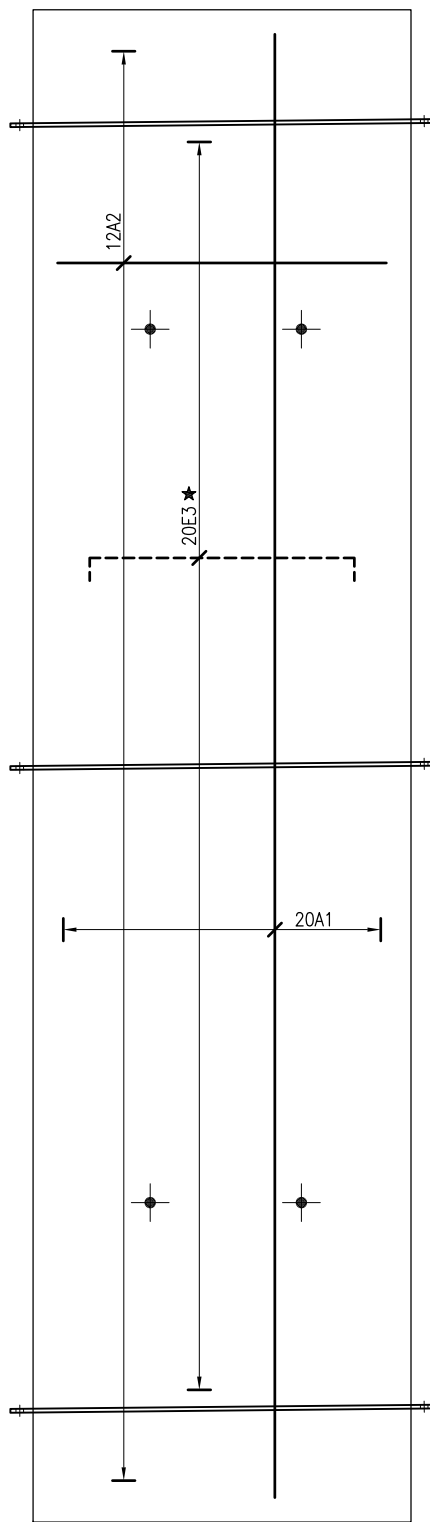
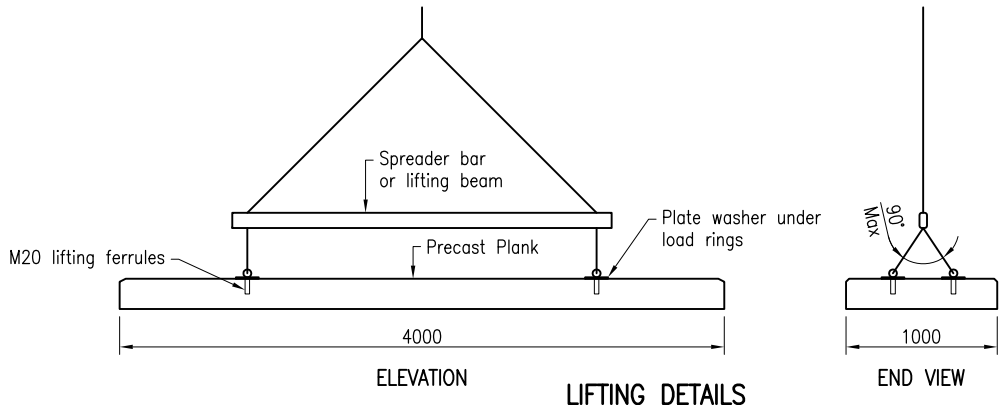


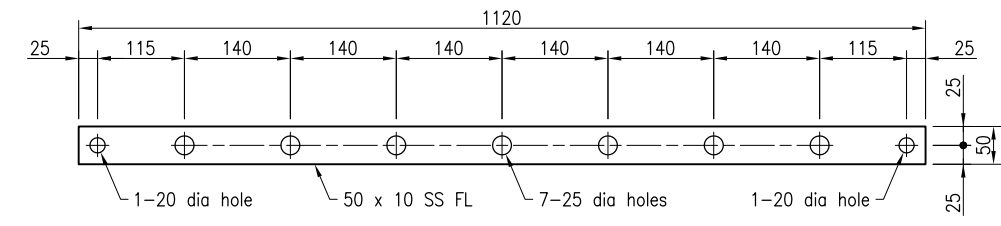
PLAN



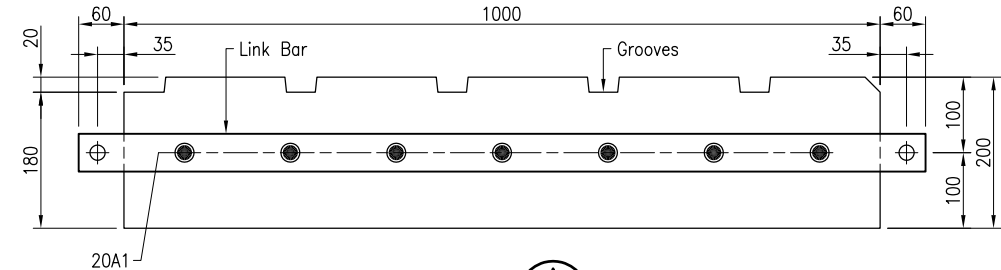
REINFORCEMENT PLAN



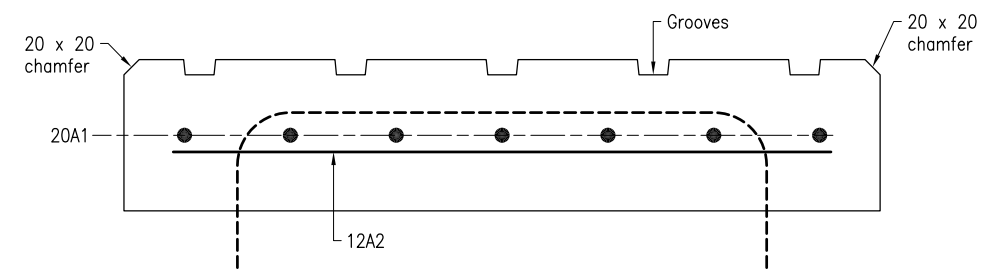
LIFTING DETAILS



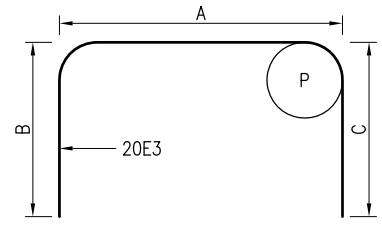
LINK BAR DETAIL  
(No OFF = 3)



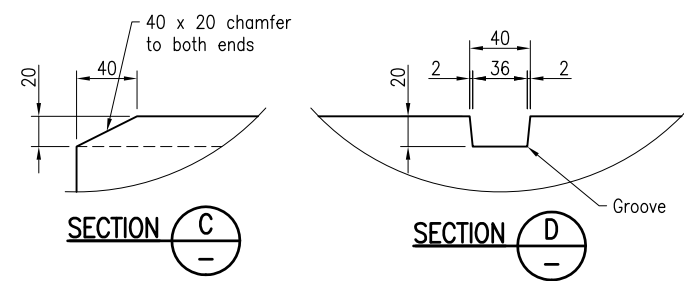
SECTION A



SECTION B



BAR DIMENSIONS



SECTION C

SECTION D

SCHEDULE

PLANK TYPE	DIMENSIONS		REINFORCEMENT									
	'X'	'Y'	Bar Mark	Grade & Size	Shape	P	A	B	C	Length	Quantity	Centres
OS4000	4000	1700	20A1	N20	A	-	3870	-	-	3870	7	140
			12A2	N12	A	-	870	-	-	870	28	140
			20E3 ★	20 dia SS round bar	E	100	700	430	430	1469	4	1100
OS3500	3500	1450	20A1	N20	A	-	3370	-	-	3370	7	140
			12A2	N12	A	-	870	-	-	870	24	145
			20E3 ★	20 dia SS round bar	E	100	700	430	430	1469	4	1000

**NOTES:**

- PRECAST PLANKS to be manufactured to MRTS72.
- DESIGN LOADING: This plank shall only be used for recreational boating situations. The maximum design load is for a dual axle trailer - 2 tonnes per axle at 750 centres.
- CONCRETE to be in accordance with MRTS70. Concrete to be S50/20, exposure classification C.
- REINFORCING STEEL to be in accordance with AS/NZS 4671 and MRTS71. Deformed bars Grade D500N. Minimum cover to reinforcing steel shall be 65 unless shown otherwise. All carbon reinforcing steel to be Australian Certification Authority for Reinforcing Steel (ACRS) certified. All carbon steel reinforcing bars, reinforcing mesh and tie wires shall be hot dip galvanised to AS/NZS 4680. Stainless Steel reinforcing to be in accordance BS 6774 and MRTS71A. Stainless Steel round bar Grade 316.
- STAINLESS STEEL to be in accordance with ASTM A276. Stainless Steel flat bar Grade 316. All work shall be neatly finished with sharp edges removed.
- TRAFFICABLE SURFACE FINISH: The aggregate shall be lightly or medium exposed and level with or slightly above the concrete matrix to achieve a non-slip finish.
- MASS of OS4000 Precast Plank is 2000 kg. MASS of OS3500 Precast Plank is 1750 kg. The mass of the plank shall be clearly and permanently marked on a side surface.
- M20 FERRULES shall be stainless steel Grade 316 Elephant Foot Ferrules with the following capacities:

Ferrule	Length	Minimum Working Load Limit
M20	95mm	(Tension) 26.6kN for concrete strength of 32MPa

Cross bars (if required to achieve minimum strength requirements) shall be Stainless Steel Grade 316. The manufacturer shall seek approval for the proposed ferrules in accordance with Clause 5.6 of MRTS72.
- LIFTING, TRANSPORTATION AND STORAGE shall be in accordance with MRTS72. Planks shall not be moved before attaining a minimum strength of 32 MPa.
- DIMENSIONS are in millimetres unless shown otherwise.

**REFERENCED DOCUMENTS:**

- Departmental Specifications:
- MRTS70 Concrete
  - MRTS71 Reinforcing Steel
  - MRTS71A Stainless Steel Reinforcing
  - MRTS72 Manufacture of Precast Elements
- Australian and International Standards:
- AS/NZS 1594 Hot Rolled Steel Flat Products
  - AS/NZS 3678 Structural Steel - Hot-rolled Plates, Floor Plates and Slabs
  - AS/NZS 4671 Steel Reinforcing Materials
  - AS/NZS 4680 Hot-dip Galvanized (Zinc) Coatings on Fabricated Ferrous Articles
  - ASTM A276 Standard Specification for Stainless Steel Bars and Shapes
  - BS 6744 Stainless Steel Reinforcement for use in Concrete

Department of Transport and Main Roads

**PRECAST PLANKS FOR BOAT RAMP**

TYPES OS4000 and OS3500

Standard Drawing No **4001**

Date 10/16

Scale: A3, Not to Scale

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