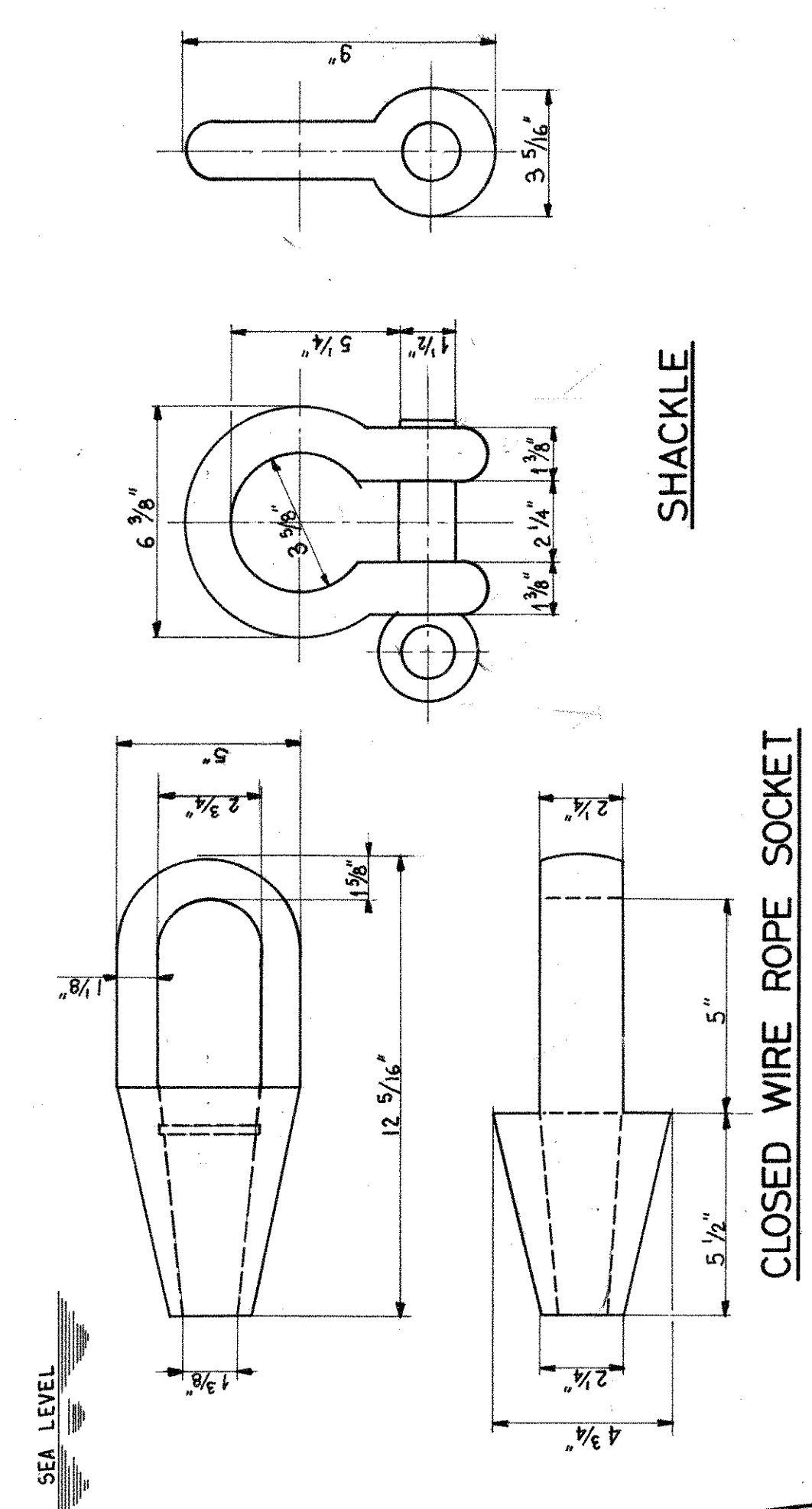


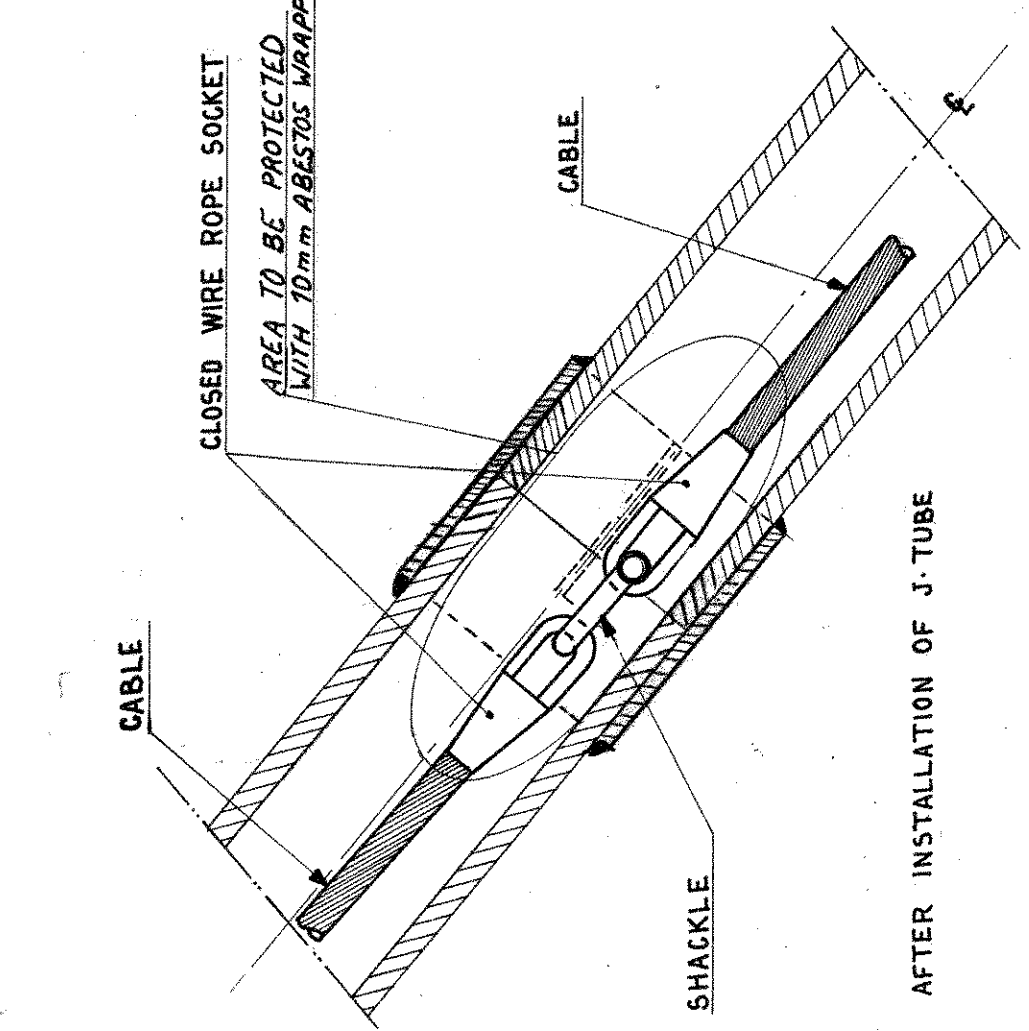
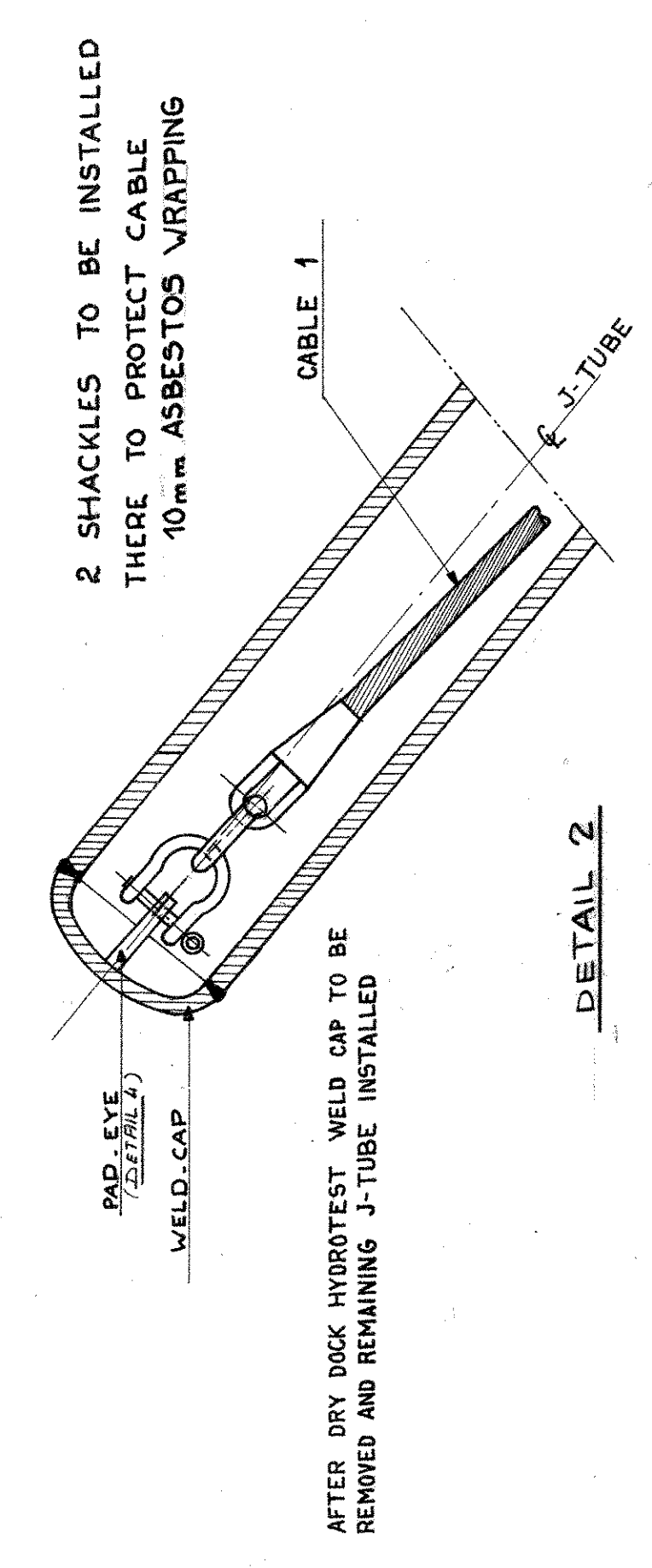
TABLE 1

J-TUBE	LENGTH OF CABLE IN METRES
J-1	26.0
J-2	23.5
J-3	28.5
J-4	21.5
J-5	23.5
J-6	46.5
J-7	19.5

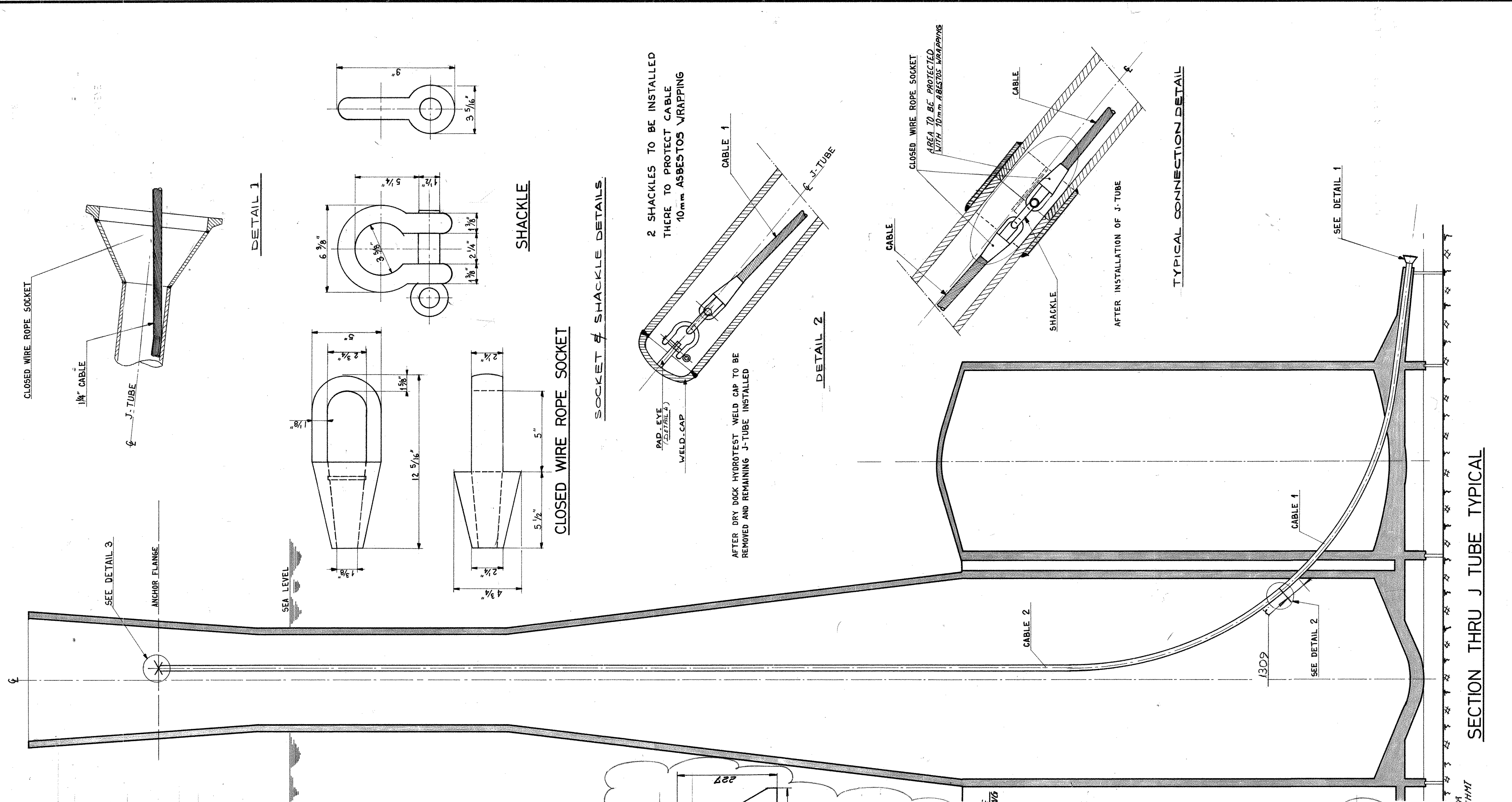
NOTE: CABLE LENGTHS ARE FROM TIP OF SOCKET TO TIP OF SOCKET. TOLERANCE ± 200 MM.



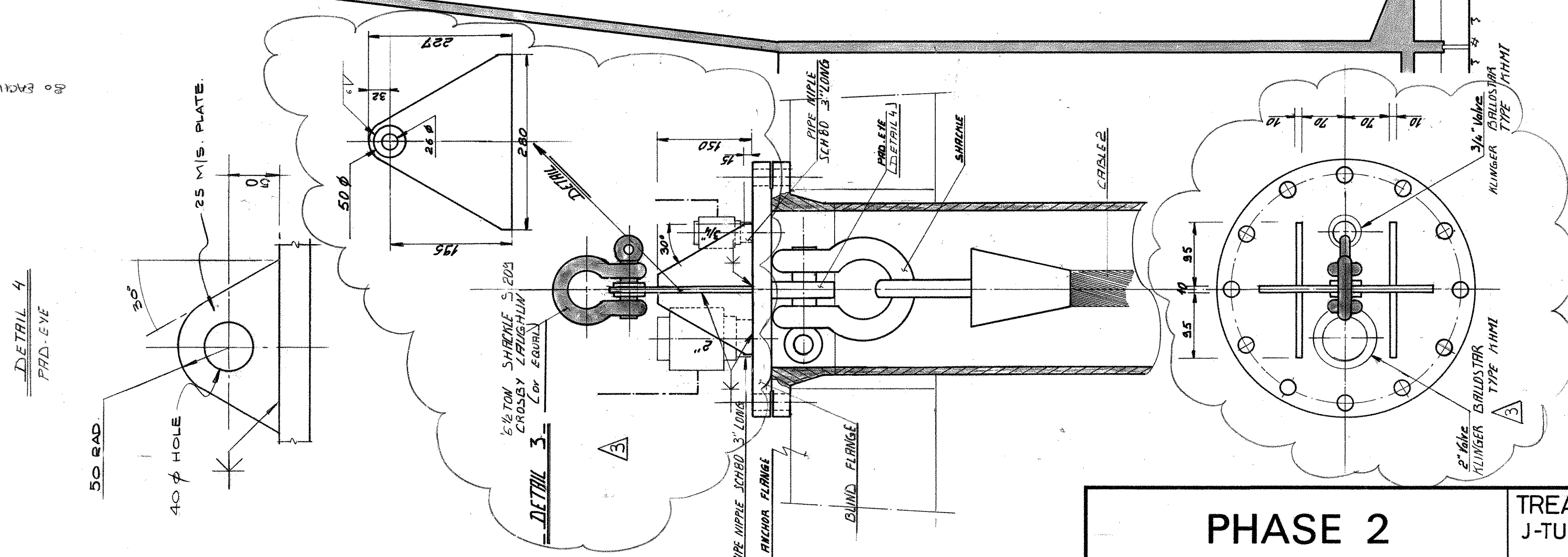
SOCKET & SHACKLE DETAILS



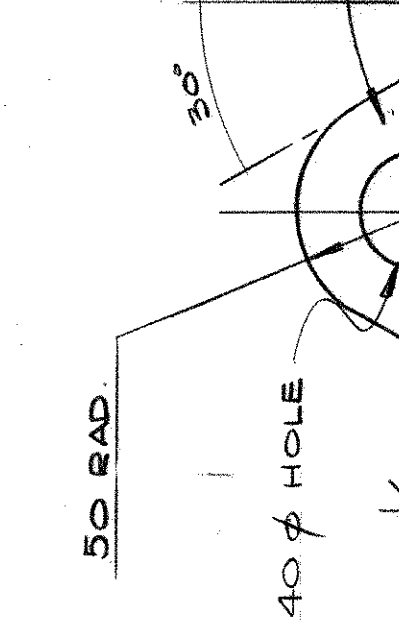
TYPICAL CONNECTION DETAIL



SECTION THRU J TUBE TYPICAL



DETAIL 4



PHASE 2

TREATMENT PLATFORM TCP 2 J-TUBE MESSENGER CABLE INSTALLATION & DETAILS

NUMBER	REFERENCE DRAWINGS	TITLE	NUMBER	REFERENCE DRAWINGS	TITLE
A1.TCP2.L.243	J-TUBE J 7-18	SETTING OUT DETAILS	A1.TCP2.L.230	J-TUBE J 1-10	SETTING OUT DETAILS
			A1.TCP2.L.228	J-TUBE J 2-18	SETTING OUT DETAILS
			A1.TCP2.L.229	J-TUBE J 3-12	SETTING OUT DETAILS
			A1.TCP2.L.231	J-TUBE J 4-18	SETTING OUT DETAILS
			A1.TCP2.L.232	J-TUBE J 5-18	SETTING OUT DETAILS
			A1.TCP2.L.241	J-TUBE J 6-12	SETTING OUT DETAILS

REV. NO.	REVISION	BY	DATE	CHKD
0	ISSUED FOR APPROVAL		22-08	
1	CABLE LENGTH & SHACKLE NUMBERS	JHS	15-09	
2	DIMENSIONS MODIFIED. REISSUED FOR CONSTRUCTION.	JHS	02-29-9	
3	MODIFIED DETAIL 3 Reissued for Construction	SD	17-11	
4	J6 BELLMOUTH CAP REMOVED. REISSUED	JHS	18-05	

DATE	BY	CHECKED	CHECKED	APPROVED
21-08-1975	AF	JHS	JHS	JHS
28 Aug 75			15-9-75	15-9-75

Brown & Root De France
Engineers. Constructors
PARIS, FRANCE

elf . NORGE - A/S

FRIGG FIELD DEVELOPMENT PROJECT

SCALE: PROJECT No. DRAWING NUMBER REV.

AI-TCP2.U817 4

NOTES:

- CABLE DETAILS
PURPOSE : MESSENGER CABLE
SIZE : 1 1/4" φ
TYPE : 6 x 37S + 1 WRC
FINISH : GALVANISED
GRADE : IMPROVED PLOW STEEL
BREAKING STRENGTH : 66 SHORT TONS
LAY : RIGHT REGULAR LAY
INSPECTION : B & R
PREFORMING : NO
LUBRIFICATION : YES
PACKING : COILS
- CABLE TO BE SUPPLIED IN LENGTHS INDICATED IN TABLE 1.
- EACH CABLE TO BE SUPPLIED WITH CLOSED WIRE ROPE SOCKET FITTED TO EACH END.
- THE CABLE IS TO BE INSTALLED IN THE J TUBES. DURING THE INSTALLATION OF J TUBES THE CABLE IS TO BE THREADED THROUGH THE J TUBE CAST INTO THE CONCRETE AND ATTACHED TO QUICK RELEASE DOOR. THE CABLE IS THEN THREADED THROUGH THE NEXT SECTION CONNECTED TO THE ALREADY INSTALLED CABLE. THE J TUBES ARE THEN WELDED TOGETHER. THIS PROCEDURE IS CONTINUED UNTIL COMPLETION OF DRY DOCK INSTALLATION. THE CABLE IS THEN ATTACHED TO THE WELD CAP IN COLUMN (SEE DETAIL 2.) FOR HYDROTEST. AFTER HYDROTEST WELD CAP IS REMOVED AND J TUBE AND CABLE INSTALLATION CONTINUE AS BEFORE UNTIL COMPLETE. THE CABLE IS THEN ATTACHED TO BLIND FLANGE (SEE DETAILS).
- PADYES TO BE FABRICATED & INSTALLED WHERE REQ'D. BY CHRISTIANI & NIELSEN FROM FREE ISSUE MATERIAL.
- No. of SHACKLES REQ'D = TOTAL NO. OF CABLES PLUS FOURTEEN
- EACH CABLE TO BE SUPPLIED WITH METAL IDENTIFICATION TAGS AT EACH END OF CABLE SHOWING J-TUBE NUMBER AND CABLE LENGTH.