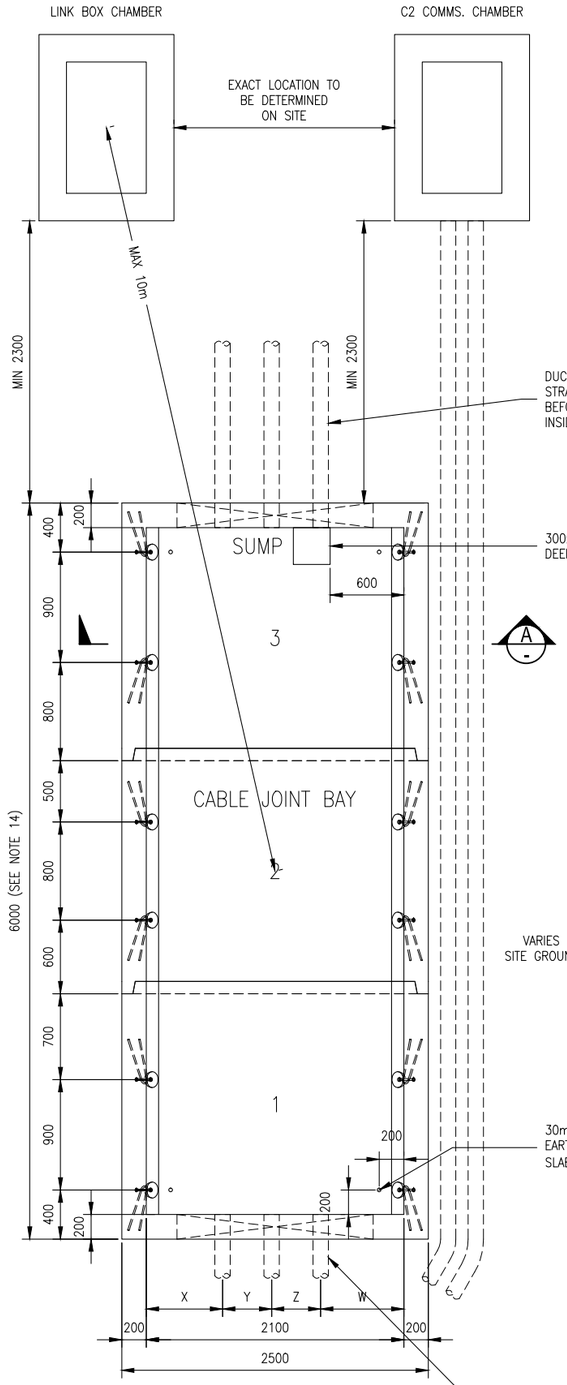
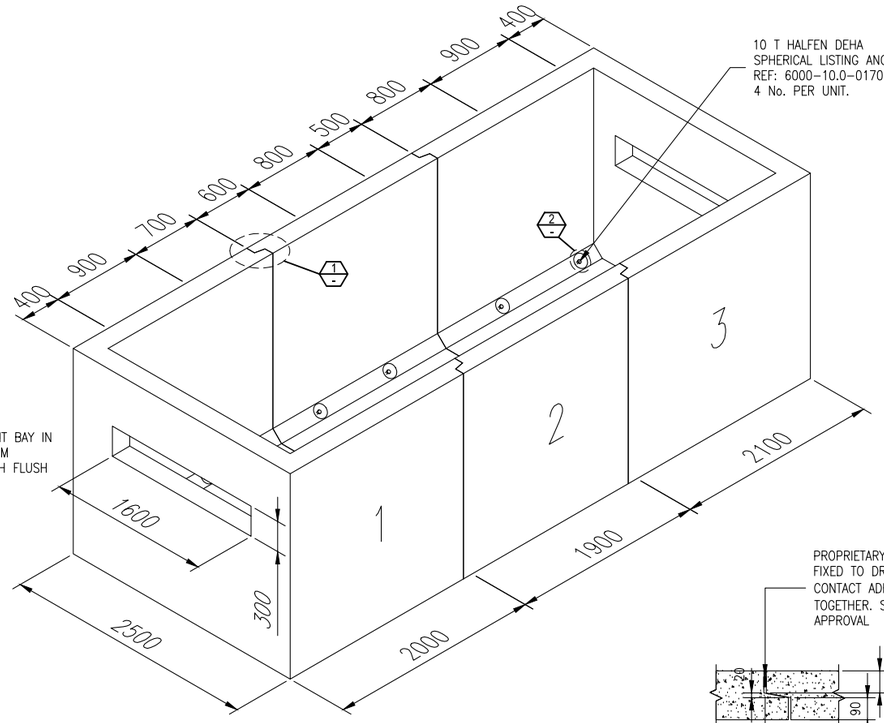
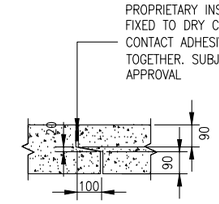


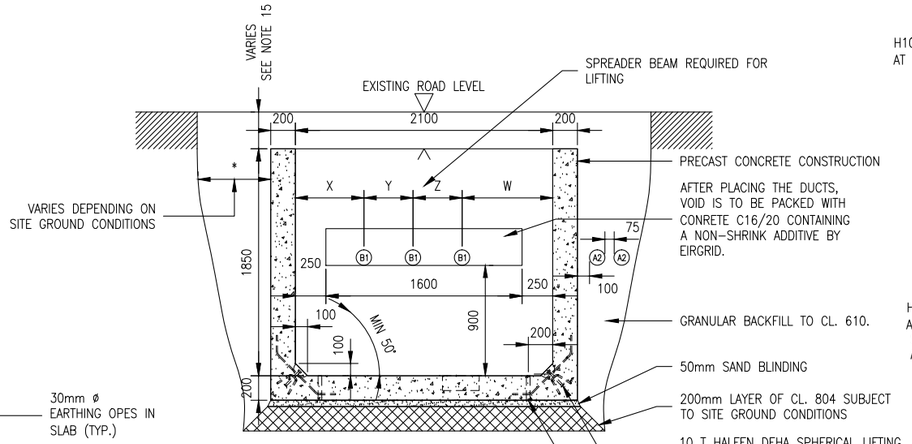
TYPICAL PLAN OF JOINT BAY
SCALE 1:50



ISOMETRIC: JOINT BAY ARRANGEMENT
NOT TO SCALE

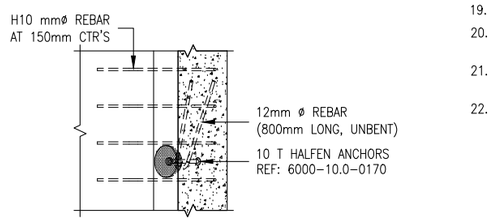


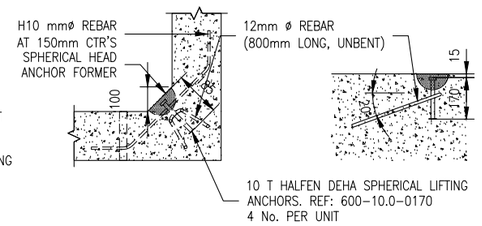
1 - DETAIL 1 – SOCKET AND SPIGOT DETAIL (WALL & FLOOR)
SCALE 1:25



A - SECTION A
SCALE 1:50

A2 125mm OD HDPE DUCT (COMMS)
B1 125/200mm/250mm OD HDPE DUCT (POWER)





2 - DETAIL 2 – LIFTING EYE DETAIL
SCALE 1:25

GENERAL NOTES

1. ALL PRECAST CONCRETE ELEMENTS TO BE MANUFACTURED TO B.S. EN 13369:2004 "COMMON RULES FOR PRECAST CONCRETE PRODUCTS"
2. LIFTING INSERTS TO BE DESIGNED & INSTALLED TO PD CEN/TR 15728:2008 "DESIGN AND USE OF INSERTS FOR LIFTING AND HANDLING OF PRECAST CONCRETE ELEMENTS."
3. SPECIFIED LIFTING INSERTS HAVE A S.W.L. OF 10 TONNE.
4. LOCATION AND SPECIFICATION OF LIFTING INSERTS ARE ASSUMED TO FACILITATE DEMOULDING AND HANDLING IN PRECAST MANUFACTURING FACTORY. IT IS THE RESPONSIBILITY OF THE CUSTOMER TO NOTIFY EIRGRID IF THESE ARE UNSUITABLE FOR THEIR MANUFACTURING METHODOLOGY. EIRGRID IS TO BE INFORMED OF ANY ALTERNATIVE LIFTING LOCATIONS FOR FACTORY HANDLING & DEMOULDING.
5. CONCRETE TO HAVE A MINIMUM STRENGTH OF 30 N/mm^2 PRIOR TO HANDLING OF DEMOULDING.
6. CUSTOMER IS TO ENSURE THAT A METHOD STATEMENT AND RISK ASSESSMENT, INCLUDING A LIFTING PLAN, IS PRODUCED FOR INSTALLATION AND ARE AVAILABLE TO EIRGRID FOR REVIEW IF REQUESTED. LIFTING PLAN TO INCORPORATE REQUIREMENTS OF LIFTING INSERTS AND LIFTING LOOP EYES.
7. A MINIMUM LIFTING SLING ANGLE OF 50° TO THE HORIZONTAL IS REQUIRED.
8. A LIFTING SYSTEM WHICH ENSURES ALL LIFTING POINTS TAKE ON AN EQUAL LOAD IS REQUIRED.
9. HALFEN DEHA SPHERICAL LIFTING ANCHORS TO BE USED AS SPECIFIED. ANY DEVIATION FROM THIS MUST BE NOTIFIED TO EIRGRID BY THE CUSTOMER. LIFTING INSERTS TO BE INSTALLED AS PER MANUFACTURER'S GUIDELINES AND IN ACCORDANCE WITH PD CEN/TR 15728:2008.
10. FORMWORK FOR PRECASTING TO BE OF A MINIMUM STANDARD OF VARNISHED WOODEN MOULD WITH PLANED BOARDS.
11. COVER TO REINFORCEMENT TO BE 40mm.
12. CONCRETE TO BE GRADE C30/37 AS SPECIFIED IN TABLE 1.
13. ALL CONCRETE TO BE IN ACCORDANCE WITH I.S. EN 206-1:2013 WITH THE MIX DESIGNS SHOWN IN TABLE 1.
14. FOR 7.9m JOINT BAY INSERT 1 No. ADDITIONAL PRECAST SECTION 2.
    FOR 9.8m JOINT BAY INSERT 2 No. ADDITIONAL PRECAST SECTION 2.
15. THE DEPTH FROM GROUND/ROAD LEVEL TO THE TOP OF THE CONCRETE WALL SHALL BE:
    A. 500mm – IN CULTIVATED FIELDS AND GRASSED LANDS
    B. 300mm – IN PAVED ROADS AND GRASS VERGES
    C. 350mm – IN PAVED CITY ROADS AND GRASSED VERGES.
16. LINK BOX CHAMBER TO BE POSITIONED AT THE EDGE OF OR OFF ROAD.
17. ALLOWABLE BEARING PRESSURE TO BE AT LEAST 185kPa
18. FOR HIGHLY AGGRESSIVE ENVIRONMENTS, TABLE 1 IS NOT APPLICABLE. CONSULT WITH EIRGRID FOR BESPOKE DESIGN.
19. JOINT BAY TO BE UNIFORMLY BACKFILLED IN LAYERS NOT EXCEEDING 300mm THICK.
20. WHERE JOINT BAY IS TO BE INSTALLED ADJACENT TO TRAFFICKED LANE, A 1m WIDE LATERAL SAFETY ZONE IS TO BE PROVIDED TO SATISFY DESIGN LOADING ASSUMPTIONS.
21. CUSTOMER IS RESPONSIBLE FOR ALL TRAFFIC MANAGEMENT INCLUDING WHERE NECESSARY SAFETY BARRIERS, AS PER D.R.A.
22. LINK BOX CHAMBER AND C2 COMM CHAMBER FINAL POSITIONING TO BE AGREED WITH EIRGRID PRIOR TO INSTALLATION.

TABLE 1

CONCRETE SPECIFICATION TO I.S. EN 206-1		
	BLINDING & MASS CONCRETE, DRAINAGE PIPE & MANHOLE SURROUNDINGS	FOUNDATIONS & WALLS
EXPOSURE CLASS	X0	XC2, XA2
MIN. CEMENT CONTENT (kg/m^2)	240	340
MAX. WATER/CEMENT RATIO	–	0.50
CEMENT TYPE TO I.S. EN 197-1	CEM 1 N	CEM 1 N
CHLORIDE CONTENT CLASS	Cl. 1,0	Cl. 0,40
MAX. AGGREGATE	10	20
MIN. COVER (CMin) (mm)	–	40
*COMPRESSIVE STRENGTH CLASS	C16/20	C30/37

NOTES:
1. *C16/20 TO BE READ AS FOLLOWS: 16 – REFERS TO MIN. CHARACTERISTIC CYLINDER STRENGTH (N/mm2/). 20 – REFERS TO MIN. CHARACTERISTIC CUBE STRENGTH (N/mm2/).
2. DESIGN WORKING LIFE TO BE 50 YEARS MINIMUM.

TABLE 2 – DUCT SEPERATION

	X	Y	Z	W
110kV	560	400	400	740
220kV	375	675	675	375

REV	DESC	DRAWN	CHECKED	APPROVED	DATE
00	FIRST ISSUE	DA	DG	CF	09/03/2020

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PROJECT
STANDARD 110kV CABLE DRAWINGS

DRAWING TITLE
JOINT BAY
GENERAL ARRANGEMENT

No of Shts	SIZE	SCALE
8	A3	N/A

DRAWING NUMBER	SHEET	REV
XDC-CBL-STND-H-012	002	00