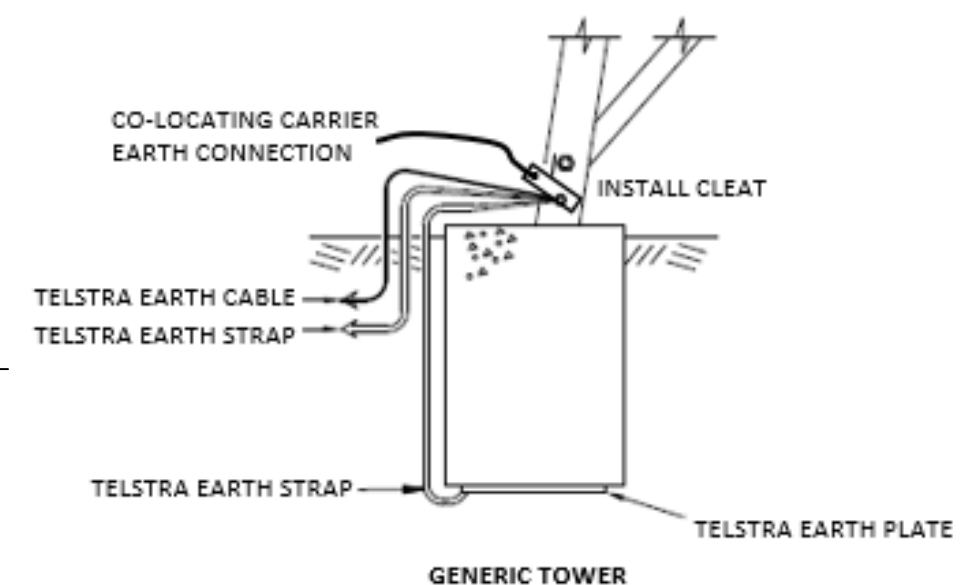
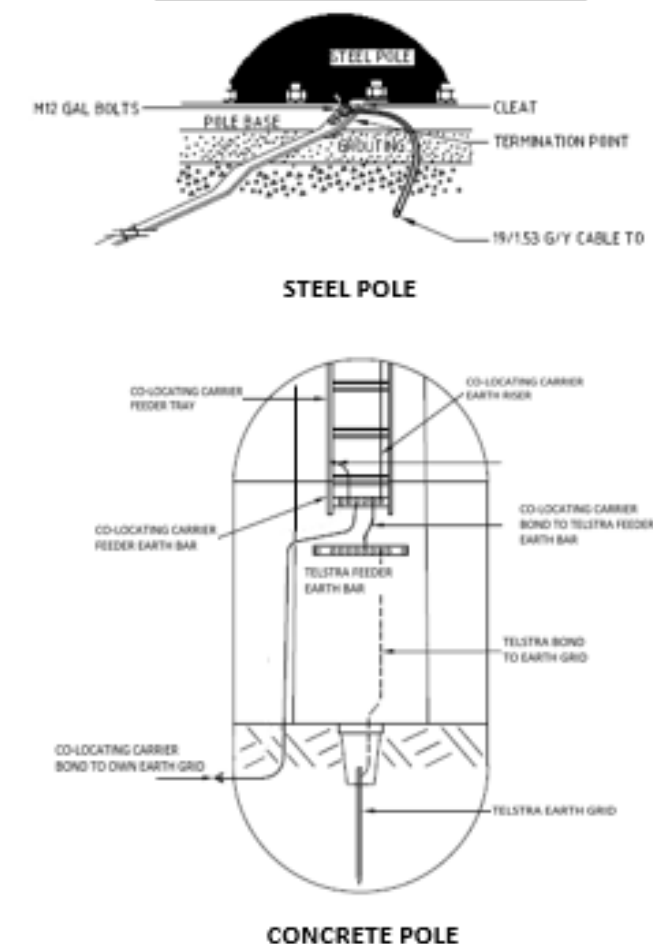
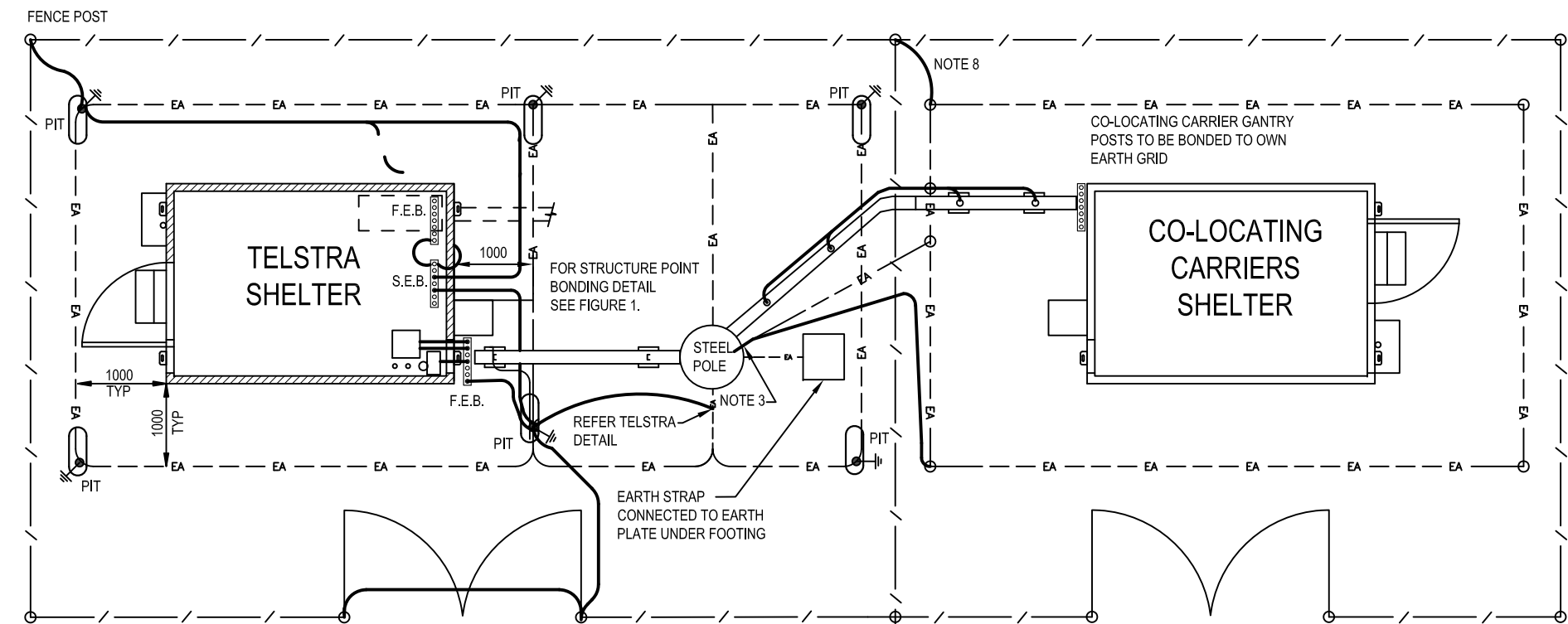


**FIGURE 1 DETAIL
STRUCTURE POINTS OF CONNECTION**



LEGEND

EARTH STRAP	— — — — — EA
35mm ² G/Y INSULATED CABLE (19/1.53).	—————
EARTH ELECTRODE	● —
EARTH INSPECTION PIT	○
SITE FENCING	— / — / — / —



- NOTES:**
- CO-LOCATING CARRIERS ARE TO INSTALL THEIR OWN INDIVIDUAL EARTH SYSTEM IN MEETING WITH TELSTRA STANDARDS AND AUSTRALIAN STANDARDS AS/NZS 3015 AND AS/NZS 1768. SYSTEMS ARE REQUIRED FOR HUTS & CABINETS. THE NEW CARRIER EARTH SYSTEM IS TO BE OF THE SAME MATERIAL AS THAT OF TELSTRA'S EXISTING EARTH MAT (I.E. 50 X 3MM GAL STRAP). THE CO-LOCATING DESIGNER SHOULD ENSURE THEY HAVE IDENTIFIED THE EXISTING EARTHING MATERIAL, CONTACT THE TELSTRA SME IF UNABLE TO VERIFY MATERIAL TYPE.
 - EARTH STRAP AND EARTH ELECTRODES INSTALLED BY CO-LOCATING CARRIERS ARE TO BE INSTALLED AT A MINIMUM DISTANCE OF 300MM FROM ANY TELSTRA IN GROUND EARTHING SYSTEMS. CO-LOCATING CARRIER EQUIPMENT CABINETS AND STRUCTURES ARE NOT TO BE INSTALLED WITHIN 500MM OF TELSTRA EARTH PITS.
 - CO-LOCATING CARRIERS ARE ONLY PERMITTED ONE POINT OF CONNECTION TO THE TELSTRA EARTH SYSTEM. THIS SHALL BE AT THE ANTENNA STRUCTURE BY PROVIDING AN INDIVIDUAL EARTH POINT IN THE FORM OF A CLEAT. USE AN ADJACENT BOLT ON POLE BASE OR TOWER/MAST LEG. NO DRILLING OF THE STRUCTURE IS PERMITTED. DO NOT DISTURB THE TELSTRA SITE EARTH POINT UNLESS IT IS PART OF A STRENGTHENING REQUIREMENT. SEE DETAILS FOR ATTACHMENTS TO DIFFERENT STRUCTURES.
 - IT IS RECOMMENDED FOR THE CO-LOCATING CARRIER TO BOND TO THE TELSTRA EARTH SYSTEM VIA BOTH AN EARTH STRAP AND AN INSULATED CABLE. AN INSULATED CABLE PROVIDES REDUNDANCY AND MAINTAINS EQUAL POTENTIALS THROUGHOUT THE LIFE OF THE SYSTEM. IF ONLY ONE CONDUCTOR IS REQUIRED PREFERENCE IS: 35mm² G/Y INSULATED CABLE IN P20 CONDUIT.
 - CO-LOCATING CARRIERS LOCATING EQUIPMENT SHELTERS OR CABINETS WITHIN TELSTRA LEASE AREAS AND EARTH RINGS ARE STILL REQUIRED TO INSTALL AN INDIVIDUAL EARTH SYSTEM, THIS COULD BE AN INDIVIDUAL EARTH ELECTRODE OR STRAP EARTH RING PROVIDED THE CARRIER IS SATISFIED THEY COMPLY WITH AS/AZS 1768. POINTS 1 TO 4 MUST ALSO BE COMPLIED WITH.
 - WHERE FEEDER EARTH BARS ARE REQUIRED TO BE MOUNTED ON TELSTRA STRUCTURES THEY ARE TO BE MOUNTED ON SUITABLE INSULATORS TO AVOID CONTACT OF DISSIMILAR METALS. PREFERENCE IS TO MOUNT ON THE CO-LOCATING CARRIERS FEEDER TRAY AS THERE IS TO BE NO DRILLING OF TELSTRA STRUCTURES, STEEL OR CONCRETE. FEEDER EARTH BARS MAYBE BONDED TO THE TELSTRA STRUCTURE VIA 35mm² G/Y INSULATED CABLE AT EXISTING BOLT POINTS OR VIA APPROVED CLAMPING TO THE STRUCTURE.
 - STRUCTURE STRENGTHENING INSTALLED BY CO-LOCATING CARRIERS SHALL NOT DAMAGE OR IMPEDE THE EXISTING TELSTRA EARTHING. WHERE STEEL JACKETS ARE PROPOSED TELSTRA DRAWINGS 017866P204 SHEET 18 AND 017866P205 SHEET 34 ARE TO BE UTILISED AS A REFERENCE FOR THE CO-LOCATION DESIGN. SLAB AND FOOTING UPGRADES MAY AFFECT TELSTRA EARTH STRAPS AND EARTH ELECTRODES, AFFECTED EARTHING IS TO BE REPLACED LIKE FOR LIKE WITH TELSTRA APPROVAL.
 - FENCE BONDING IS PERMITTED PROVIDED THE CONNECTION TO THE FENCE IS OPENABLE FOR ISOLATION TESTING. WHERE A CO-LOCATING CARRIER HAS AN ENCLOSED COMPOUND FENCE CONNECTIONS ARE REQUIRED TO BE EXTERNAL TO ALLOW ACCESS. NO CADWELDING IS PERMITTED TO TELSTRA STRUCTURES.
 - THE SITE AC POWER INSTALLATION SHALL HAVE A SINGLE MEN POINT AS PER TELSTRA DOCUMENT 007338C4-3 AND AS/NZS3000 CLAUSE 5.5.3.1
 - EARTHING AS BUILT DRAWINGS ARE REQUIRED AT COMPLETION, THIS INCLUDES REQUIRED PHOTOGRAPHS FOR PROOF OF SINGLE MEN INSTALLATION.

FOR REFERENCE ONLY

ORDER	DRAWN	CHKD	AMENDMENT	EXAM	APPD	DATE	ISS
-	CF	NS	FORMERLY 017866P200 SHEET 16	NS	JDW	29.02.12	1
-	CF	NS	AMEND NOTES 5&6, ADD NOTES 7-12.	NS	JDW	27.08.13	2
-	CF	NS	AMEND SITE AND NOTES FOR CO-LOCATION	NS	JDW	16.05.18	3
-	CF	NS	AMEND SITE AND NOTES FOR CO-LOCATION	NS	JDW	29.06.18	4

Telstra

**MOBILE NETWORK SITE
EARTHING STANDARDS**

CO-LOCATE TELSTRA SITE
USING MOBILES LOW IMPACT SHELTER

DWG NO. **017866P203** SHT NO. 11

DO NOT SCALE