

- This drawing is to be read in conjunction with relevant engineering drawings, specifications and reports.
- Dimensions are in millimeters, & coordinate system is ITM, unless noted otherwise.
- Drawings are not to be scaled use figured dimensions only.

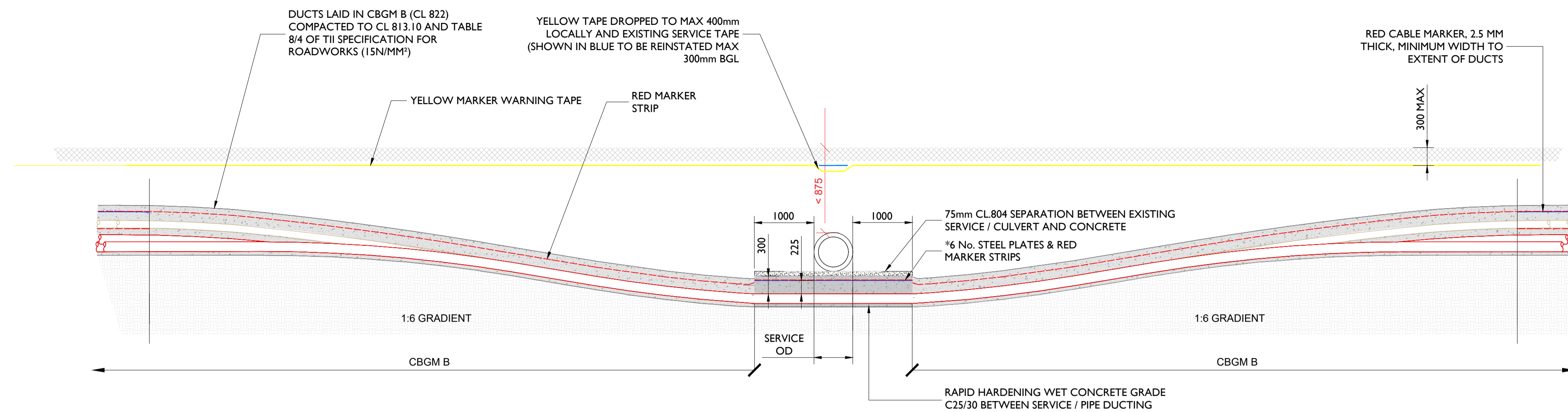
- 160mm Ø HDPE POWER DUCT WITH 12mm DIAMETER PULL ROPE
- 125mm Ø HDPE COMMUNICATION DUCT WITH 12mm DIAMETER PULL ROPE
- 63mm Ø HDPE EARTH CONTINUITY CONDUCTOR WITH 12mm DIAMETER PULL ROPE
- RED MARKER STRIP OR STEEL PLATES
- YELLOW MARKER WARNING TAPE
- 6mm GALVANISED STEEL PLATE
- EXISTING SERVICE TAPE

P2	13.03.26	Issued for Planning
P1	29.10.25	Issued for Planning
N1	02.04.25	Issued for Review
I/R	DATE	DESCRIPTION

300-100920

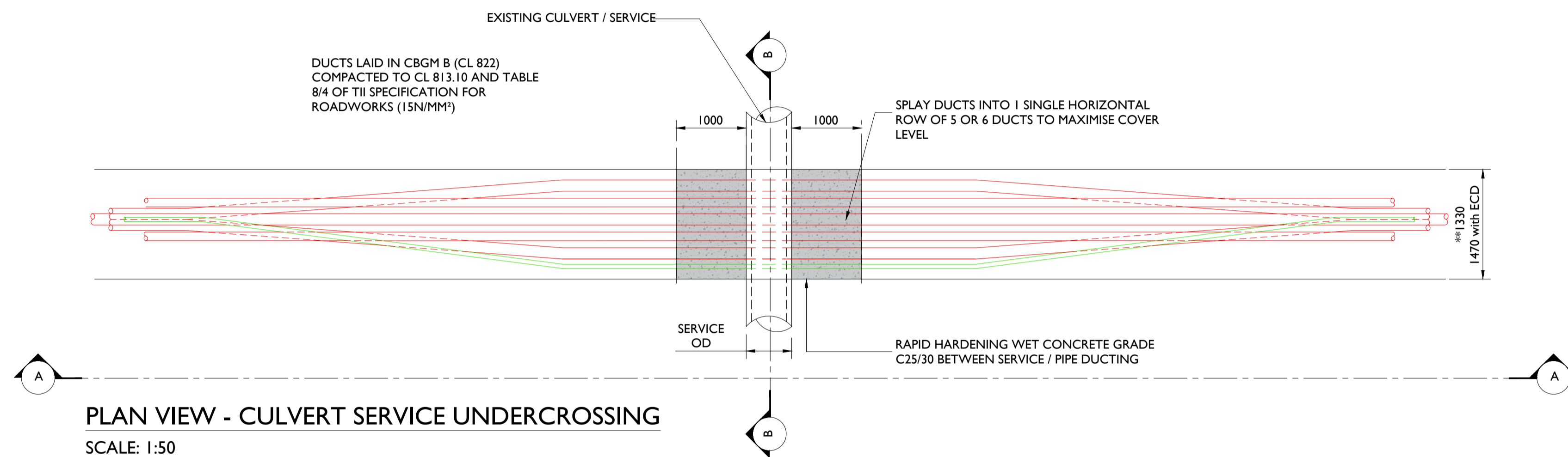
Trench Sections For Undercrossing
 Existing Culvert Service

300100920-DR-240



SECTION A-A

SCALE: 1:50

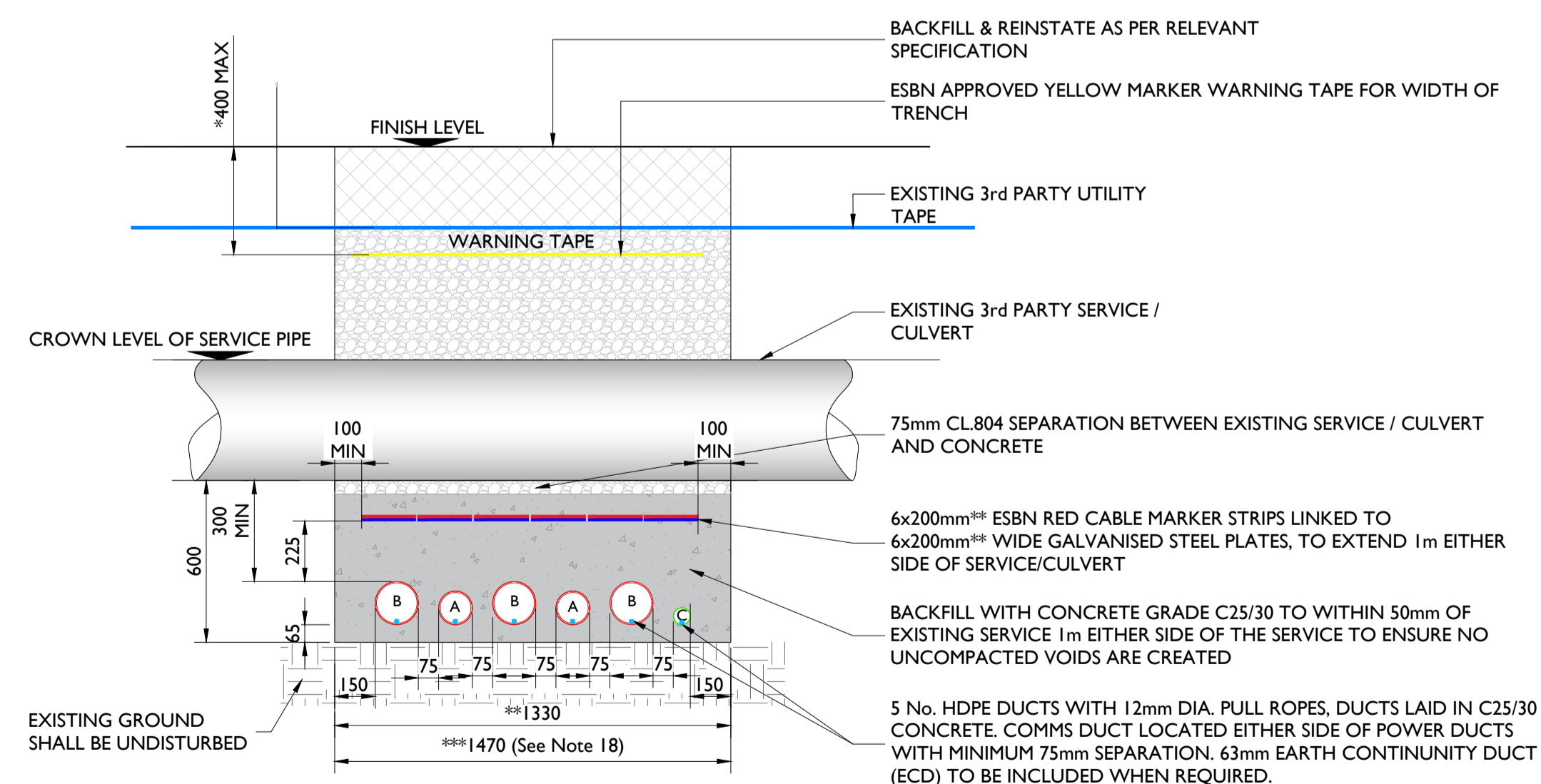


PLAN VIEW - CULVERT SERVICE UNDERCROSSING

SCALE: 1:50

GENERAL NOTES:

- THIS DRAWING IS SUBJECT TO DESIGN APPROVAL AND IS NOT TO BE USED FOR CONSTRUCTION.
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT DOCUMENTATION.
- DO NOT SCALE FROM THIS DRAWING USE ONLY PRINTED DIMENSIONS
- ALL DIMENSIONS ARE IN MILLIMETRES, ALL CHAINAGES, LEVELS AND CO-ORDINATES ARE IN METRES UNLESS DEFINED OTHERWISE.
- NO EXCAVATION SHALL COMMENCE UNTIL THE CONTRACTOR HAS CONSULTED UP TO DATE SERVICES DRAWINGS AND CARRIED OUT AN ELECTROMAGNETIC LOCATOR (EML) SCAN.
- HAND DIG ONLY WITHIN 500MM OF EXISTING SERVICES.
- IF COMPACTING CBGM B COULD CAUSE DAMAGE TO THE CULVERT / SERVICE BELOW, USE RAPID HARDENING CEMENT GRADE C25/30 FOLLOWING ENGINEERS PRIOR APPROVAL.
- FOR STANDARD TRENCH CROSS SECTION DRAWINGS AND MINIMUM HORIZONTAL SEPARATION TO EXISTING SERVICES, SEE 300100920-DR-230 (TREFOIL)
- WHERE DEPTHS EXCEED 2500MM TO THE TOP OF DUCT THE CONTRACTOR SHALL CONSULT THE CABLE SYSTEM DESIGN ENGINEER FOR PHASE SPACING REQUIREMENTS.
- BACKFILL AS PER GUIDELINES FOR THE OPENING, BACKFILLING AND REINSTATEMENT OF OPENINGS IN PUBLIC ROADS (2015).
- ESB'S PREFERENCE IS TO CROSS UNDER EXISTING SERVICES WHERE POSSIBLE.
- BACKFILL AS PER GUIDELINES FOR THE OPENING, BACKFILLING AND REINSTATEMENT OF OPENINGS IN PUBLIC ROADS (2015)
- THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN AND CONSTRUCTION OF ALL TEMPORARY WORKS. THE CONTRACTOR SHALL APPOINT A TEMPORARY WORKS DESIGNER, AND SUBMIT TEMPORARY WORKS DESIGN TO PSDP FOR REVIEW.
- 225MM MINIMUM CONCRETE OVER DUCTS WHERE THEY TRANSITION FROM STANDARD CROSS SECTION AND WHERE THEY ARE AT LESS THAN STANDARD COVER TO GROUND LEVEL.
- REPLACE EXISTING SERVICE MARKER TAPE OVER YELLOW MARKER TAPE.
- THE OWNER OF THE EXISTING UTILITY BEING CROSSED MUST BE CONSULTED IN ADVANCE OF WORKS COMMENCING AS PER THEIR GUIDELINES.
- THE CONTRACTOR SHALL RECORD DETAILED AS-BUILT INFORMATION AS PER THE SPECIFICATION. AT ALL CROSSING LOCATIONS THESE RECORDS SHALL INCLUDE PHOTOGRAPHIC EVIDENCE CLEARLY DEMONSTRATING THAT MINIMUM SERVICE CLEARANCES AND DUCT SEPARATIONS HAVE BEEN ACHIEVED.
- WHERE DUCT FOR EARTH CONTINUITY CONDUCTOR (ECC) IS REQUIRED FOR SINGLE POINT BONDED SECTIONS, ATTACH THE 63MM ECC DUCT TO THE A DUCT AND UPDATE THE TRENCH WIDTH ACCORDINGLY.



SECTION B-B

SCALE: 1:20

- ** 5 x 200mm STEEL PLATES & RED MARKER WHERE ECC IS NOT REQUIRED
- *** MIN 1330 WHERE ECC IS NOT REQUIRED
- **** ALL EXISTING SERVICES WITH COVERS LESS THAN MIN. DIMENSIONS ABOVE SHALL BE CROSSED BY UNDERCROSSING METHOD

- A = 125mm: OUTER DIAMETER HDPE APPROVED DUCT, SDR = 17.6 (COMMS)
- B = 160mm: OUTER DIAMETER HDPE APPROVED DUCT, SDR = 21.0 (POWER)
- C = 63mm: ECC (EARTH CONTINUITY CONDUCTOR) DUCT,

ISSUED FOR PLANNING
13.03.2026