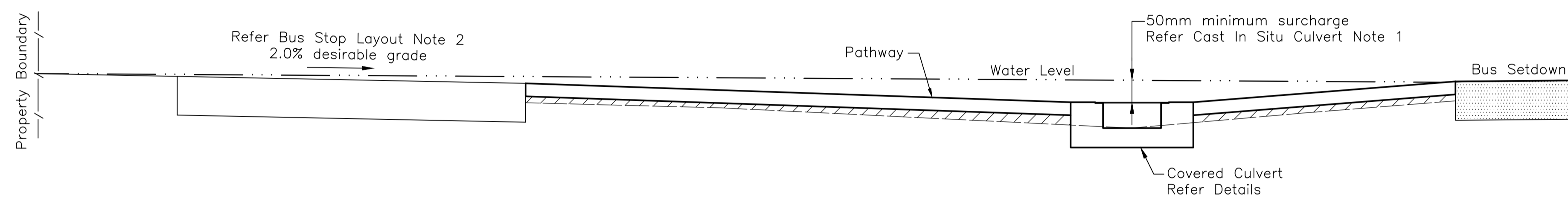
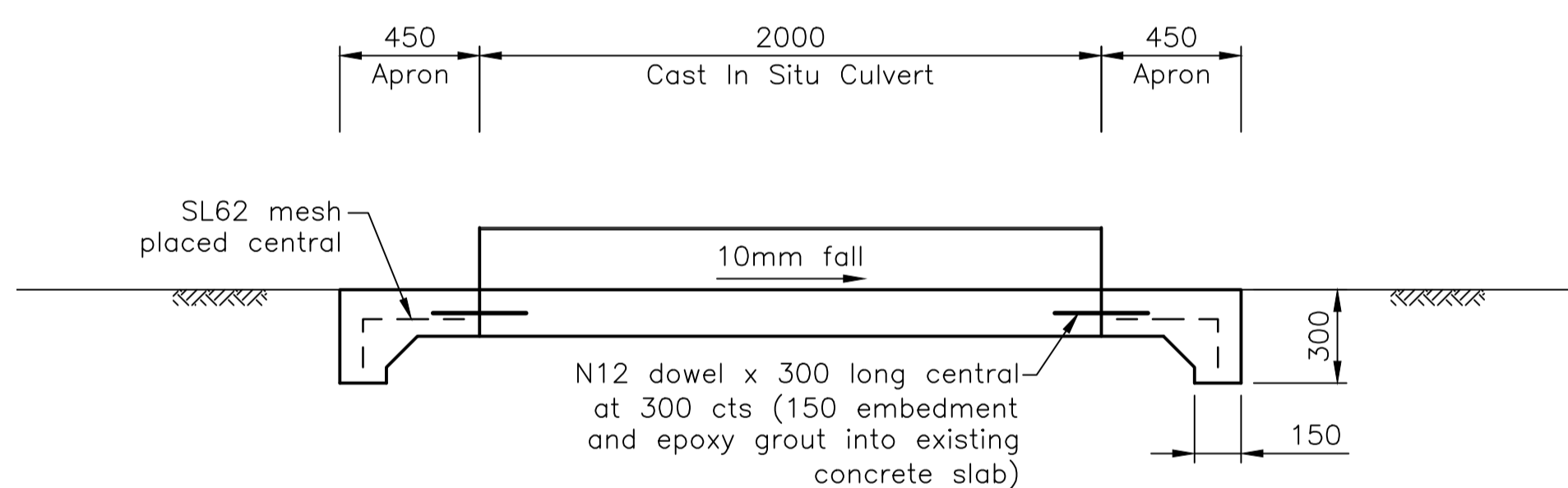


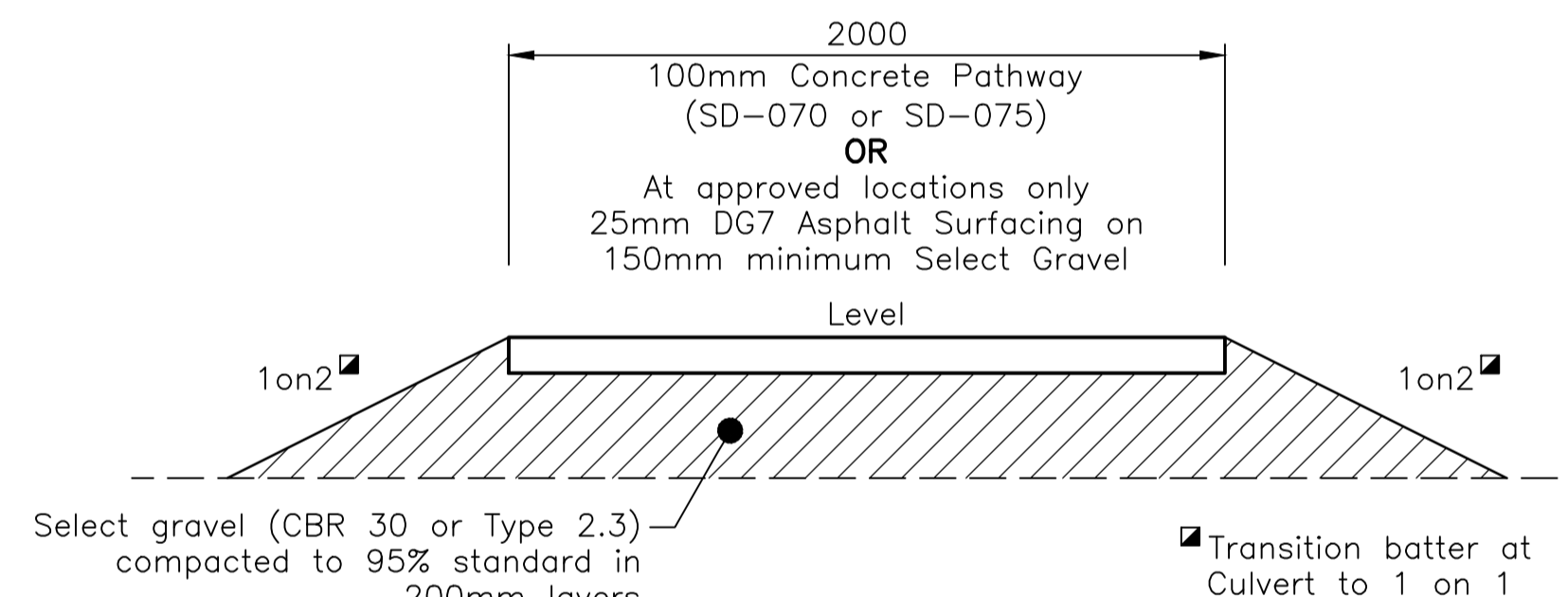
PLAN



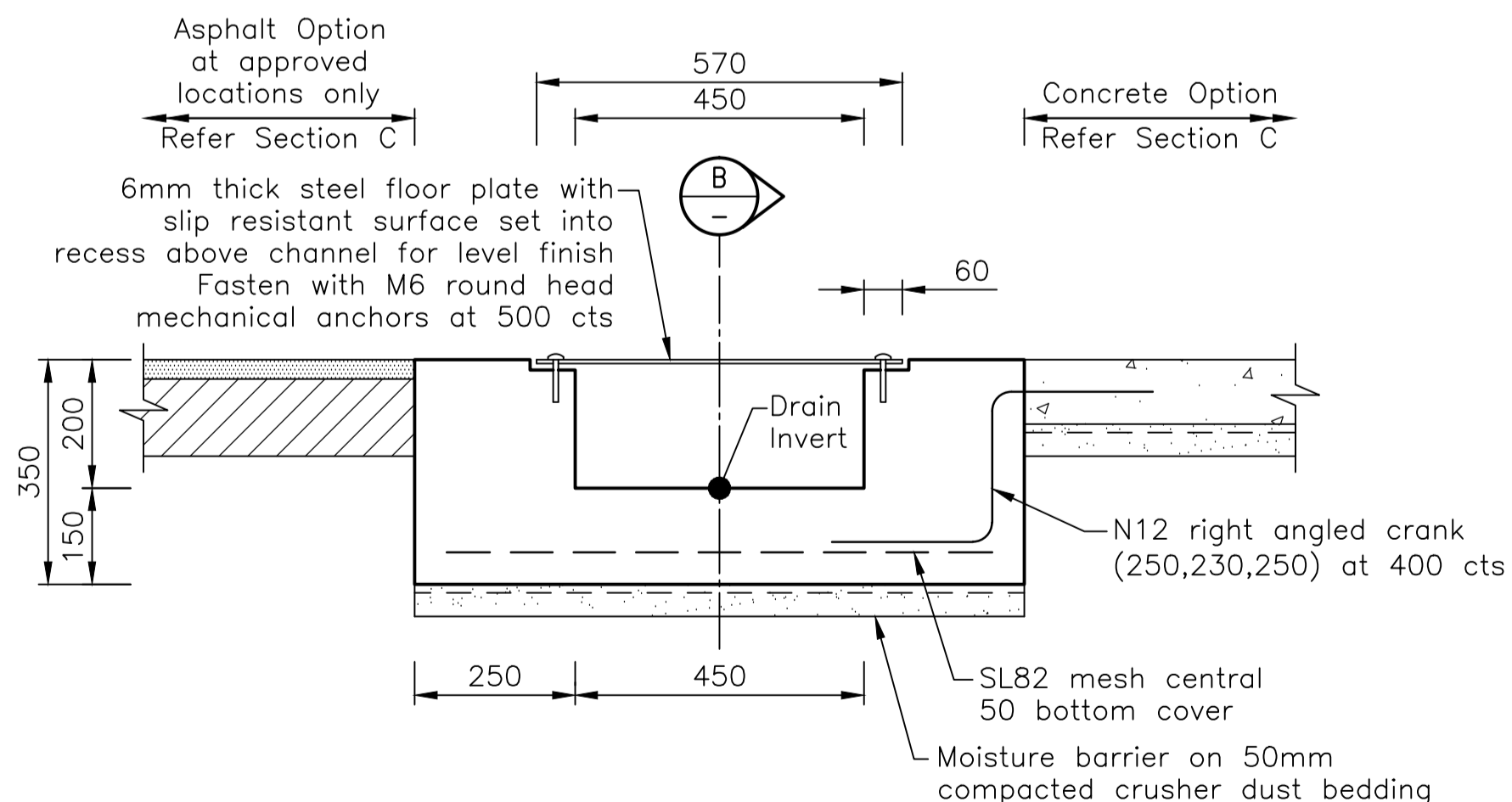
SECTION A



SECTION B



SECTION C



CAST IN SITU CULVERT

NOTES
GENERAL

- All dimensions are in millimetres, unless noted otherwise.
- Do not scale these drawings. Use figured dimensions.
- The Contractor shall check, verify on site and be responsible for the correctness of all dimensions shown on the drawings and discrepancies shall be reported immediately to the Superintendent before any work proceeds.
- These drawings shall be read in conjunction with all other drawings and specifications and with such other written instructions as may be issued during the course of construction. All discrepancies shall be reported immediately for decision before proceeding with the project.
- All workmanship and materials shall be in accordance with the requirements of the Townsville City Council Design Specifications and Construction Standards, Standards Australia Codes and the by-laws and ordinances of the relevant authorities.
- During construction any structure and neighbouring structures shall be maintained in a stable condition, ensuring no parts are overstressed.
- It is the contractors responsibility to ensure that the project is carried out in accordance with the drawings and specifications.

CAST IN SITU CULVERT

- The available depth of the table drain must be sufficient to ensure a 50mm minimum clearance below the level at the property boundary or the edge of the bitumen roadway (whichever is lower) to the top of the access. This clearance must be achieved to allow water flowing in the drain to surcharge over the access before entering onto the roadway or the adjacent property.
- An alternative size culvert may be used, however the size and number of culverts required shall be subject to final approval by the Council's authorised person.
- Culverts shall be designed for a ten (10) year Average Recurrence Interval storm allowing for surcharge over the access. The surcharge shall not enter onto the roadway or the adjacent property. These designs are to be certified by the Engineer (RPEQ) and are to be supplied to Council for approval.
- Steel floor plate with slip resistant surface shall comply with AS4586

CONCRETE

- All concrete N32 unless noted otherwise.
- Concrete cover to reinforcement shall be 40mm unless noted otherwise.
- All concrete must be cured in accordance with the following:
 - AS3600
 - Aliphatic alcohol must be used. The aliphatic alcohol should be applied after screeding and bull floating operations.
 - No water should be added to concrete.
 - An impermeable membrane should be applied. All joints in membrane are to be taped and the edges secured to prevent the ingress of air.
 - Minimum curing period shall be not less than 7 days for strength grade N32 and not less than 4 days for high early strength concrete.
- Exposed edges of formed concrete elements shall have a 20mm chamfer unless noted otherwise.
- All concrete shall be mechanically vibrated. Hand held vibrators must be held upright. Concrete must not be spread using vibrator.

BUS STOP LAYOUT

- Clear zone requirements to be maintained.
- Bus Stop concrete slab crossfall
 - 1.0% minimum
 - 2.0% desirable
 - 2.5% maximum

No.	DATE	DESCRIPTION	AP'D
B	30/3/2015	GRATE REPLACED WITH FLOOR PLATE	
A	07/09/2011	ORIGINAL ISSUE	
REVISIONS			

NOTES :
REFERENCE DRAWINGS
 SD-070 - CONCRETE PATHWAY REINFORCED CONCRETE (MESH) ALTERNATIVE
 SD-075 - CONCRETE PATHWAY REINFORCED CONCRETE (FIBRE) ALTERNATIVE
 SD-555 - BUS SETDOWN RURAL LOCATIONS LAYOUT DETAIL

Full Size A1
 Not to scale

DRAWN: DESIGN OFFICE
 CHECKED: WJP
 Design Engineer Approved: Original signed by J EL-KHOURI
 Date: 15/4/2015
 Manager Approved: Original signed by M WILKINSON
 Date: 16/4/2015



**BUS SETDOWN
 RURAL LOCATIONS
 TABLE DRAIN
 CAST IN SITU CULVERT CROSSING**

**STANDARD
 DRAWING
 TRANSPORT**
 SD-565 B