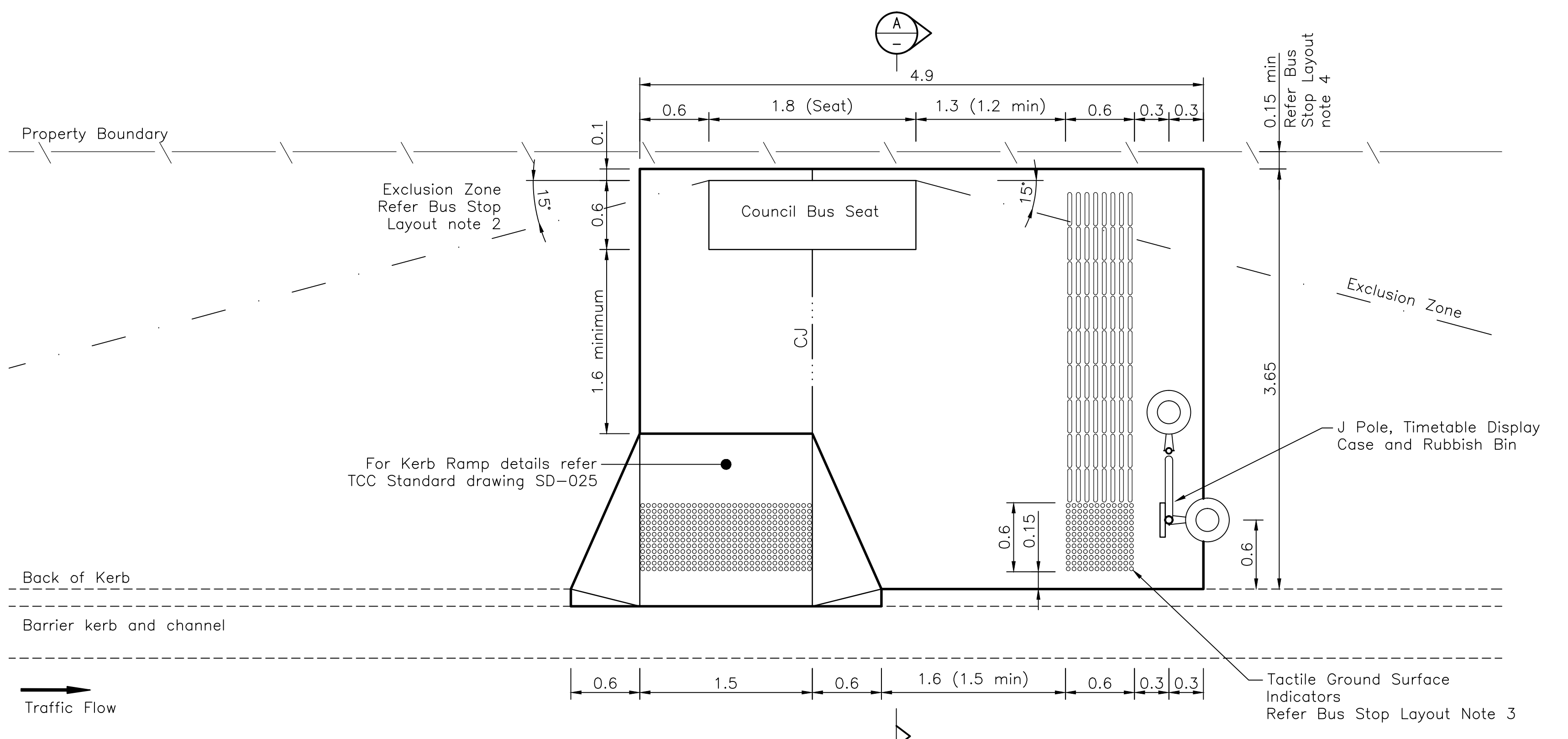
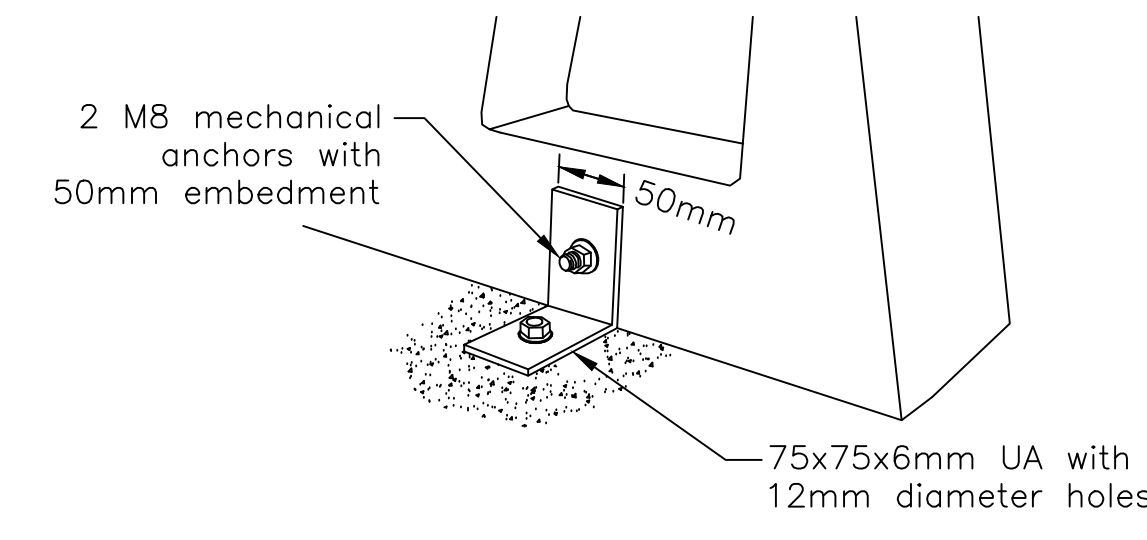


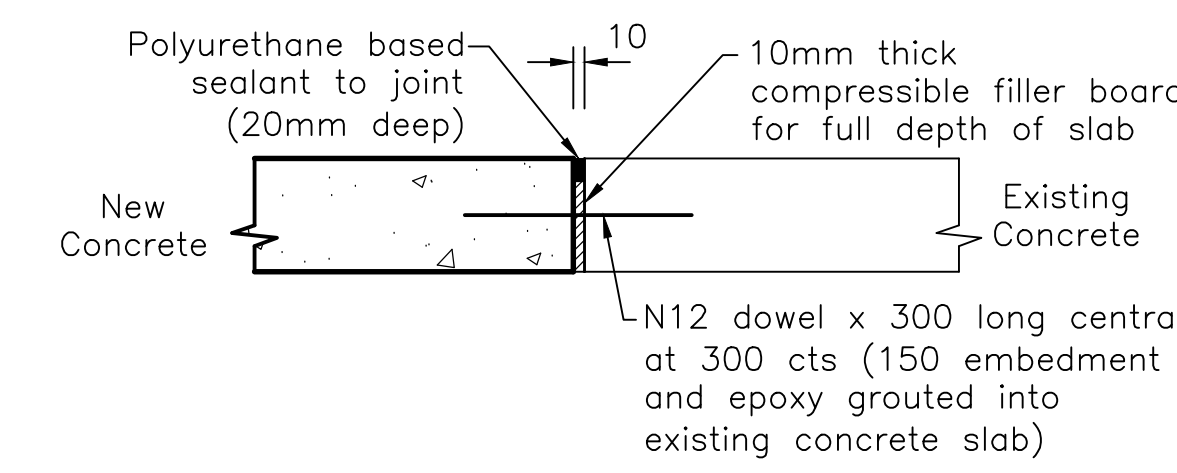
**BASIC BUS STOP
TYPE 5**



**BASIC BUS STOP – KERB RAMP
TYPE 6**

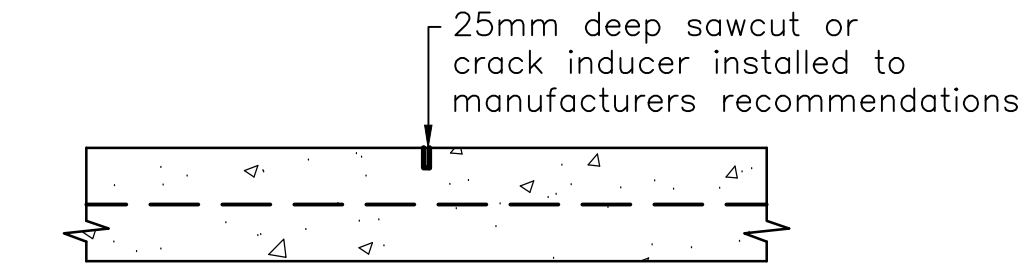


ANGLE BRACKET DETAILS



KEY CONSTRUCTION JOINT – KCJ

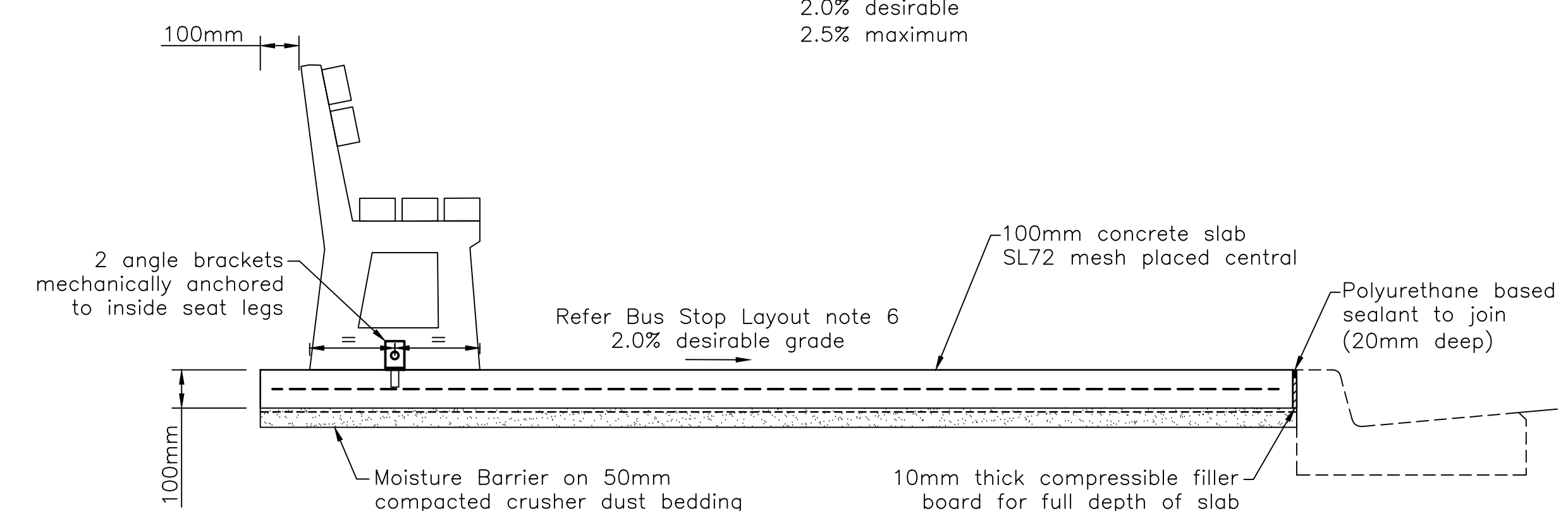
Key Construction Joints to be provided between all abutting new and existing concrete works



CONTRACTION JOINT – CJ

LEGEND

- Warning Tactile Ground Surface Indicators as per AS/NZS1428.4.1
- Directional Tactile Ground Surface Indicators as per AS/NZS1428.4.1



SECTION A

**NOTES
GENERAL**

1. All dimensions are in metres, unless noted otherwise.
2. Do not scale these drawings. Use figured dimensions.
3. 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.
4. 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.
5. 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.
6. During construction any structure and neighbouring structures shall be maintained in a stable condition, ensuring no parts are overstressed.
7. It is the contractors responsibility to ensure that the project is carried out in accordance with the drawings and specifications.

CONCRETE

1. All concrete N32 unless noted otherwise.
2. Concrete cover to reinforcement shall be 40mm unless noted otherwise.
3. 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.
4. Exposed edges of formed concrete elements shall have a 20mm chamfer unless noted otherwise.
5. All concrete shall be mechanically vibrated. Hand held vibrators must be held upright. Concrete must not be spread using vibrator.

BUS STOP LAYOUT

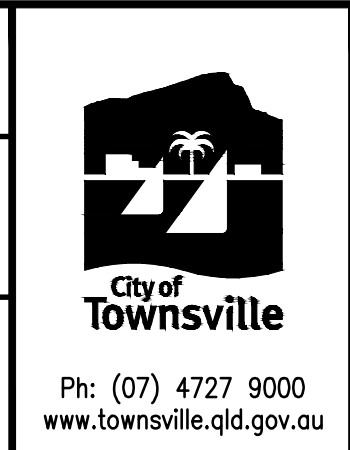
1. Where existing accessible path is steeper than 1:14 reconstruct and regrade as required.
2. Where plantings exist or made available, use only ground cover or low shrubs (<0.5m high). Trees for shade should be long-trunked with minimum branch height of 4.5m. Plantings should not obstruct line of sight between approaching bus and waiting passengers.
3. Tactile Ground Surface Indicators (Tactile Ground Surface Indicators, AS1428.1 and AS4586 Slip Resistance of Pedestrian Surfaces. Install Indicators as per manufacturers specification and in accordance with AS1884. Warning and Directional Tactile Ground Surface Indicators shall be:
 - drill and lock
 - yellow for grey concrete
4. Concrete slab to be 0.15m minimum offset from property boundary.
5. Clear zone requirements to be taken into consideration, if necessary, dependant on bus stop location.
6. Bus Stop concrete slab crossfall
 - 1.0% minimum
 - 2.0% desirable
 - 2.5% maximum

No.	DATE	DESCRIPTION	AP'D
B	16/3/2015	NOTES AND DIMENSIONS AMENDED TO SUIT NEW AUSTRALIAN STD	
A	13/09/2009	ORIGINAL ISSUE	
REVISIONS			

NOTES :
 REFERENCE DRAWINGS
 SD-025 – KERB RAMP
 SD-535 – J POLE, TIMETABLE DISPLAY CASE, RUBBISH BIN AND SLEEVE
 INSTALLATION DETAILS

Full Size A1
 Not to scale

DRAWN: DESIGN OFFICE
 CHECKED: WJP
 Design Engineer Approved: Original signed by J EL-KHOURI
 Date: 19/3/2015
 Manager Approved: Original signed by C DEKIEVIT (Acting)
 Date: 20/3/2015



**BASIC BUS STOP
URBAN LOCATION
LAYOUT DETAILS – TYPE 5 AND 6**

**STANDARD
DRAWING
TRANSPORT**

SD-525 B