

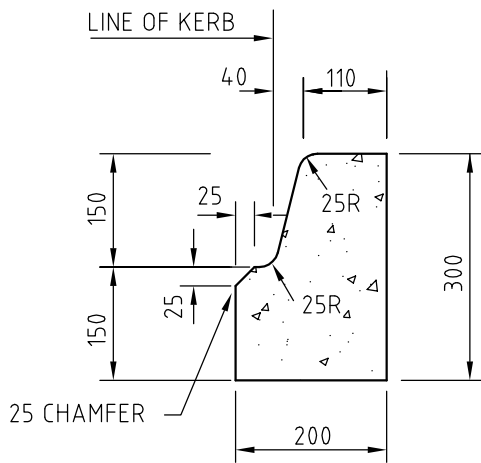


the place  
to live

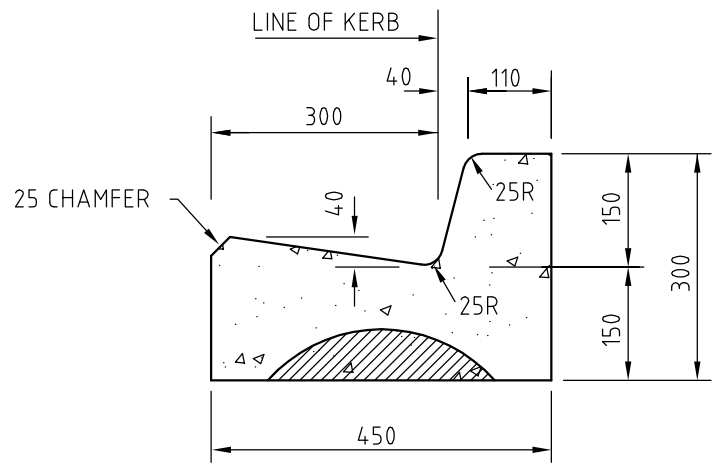
# Darebin Standard Drawings

## **Darebin Council – Standard Drawings Index**

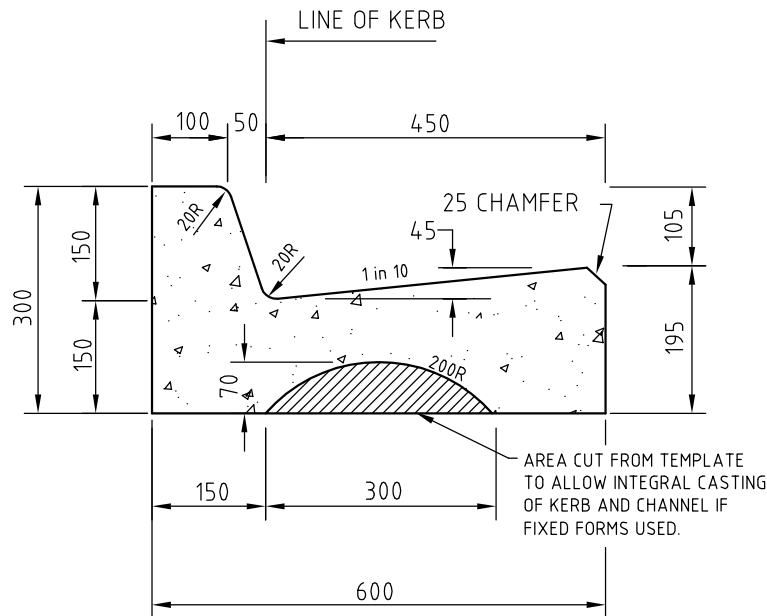
<b>DS1</b>	BARRIER KERB TYPES
<b>DS2A</b>	SEMI-MOUNTABLE KERB TYPES
<b>DS2B</b>	MOUNTABLE KERB TYPES
<b>DS3</b>	INVERT DRAINS & EDGE STRIP
<b>DS4</b>	CONCRETE CROSSINGS
<b>DS5</b>	PERAMBULATOR CROSSING
<b>DS6</b>	CONCRETE RIGHT OF WAY
<b>DS7</b>	CONCRETE FOOTPATH
<b>DS8</b>	JUNCTION PIT
<b>DS8-LW</b>	JUNCTION PIT WITH LIGHT WEIGHT COVER
<b>DS9</b>	MILD STEEL STEP IRON
<b>DS10</b>	SIDE ENTRY PIT
<b>DS10-LW</b>	SIDE ENTRY PIT WITH LIGHT WEIGHT COVER
<b>DS11</b>	SIDE ENTRY GRATING PIT - TYPE B DETAIL
<b>DS12</b>	GRATING PIT TYPE A
<b>DS13</b>	BEDDING AND BACKFILLING FOR DRAINAGE WORKS
<b>DS14</b>	PROPERTY DRAINAGE INLET CONNECTION TYPE C
<b>DS15</b>	PROPERTY DRAINAGE INLET CONNECTION TYPE A & B
<b>DS16</b>	SIDE ENTRY GRATING PIT - TYPE C DETAIL
<b>DS17</b>	SIGN FOOTING DETAILS
<b>DS18</b>	HOARDING DETAIL
<b>DS19</b>	SUB-SURFACE DRAINAGE DETAIL
<b>DS20</b>	STANDARD GRATING PIT-TYPE D
<b>DS21</b>	BOLLARD DETAILS - TYPE A & B
<b>DS22</b>	BOLLARD DETAILS - TYPE C
<b>DS23</b>	GRATING PIT TYPE E
<b>DS24</b>	PAVED FLAT TOP ROAD HUMPS
<b>DS25</b>	ASPHALT FLAT TOP ROAD HUMPS
<b>DS26</b>	BLUESTONE KERB TYPES
<b>DS27</b>	FOOTPATH & CROSSING REPLACEMENT & GRINDING WORKS
<b>DS28</b>	BICYCLE PATH DETAIL
<b>DS29</b>	CONCRETE VEHICULAR DOUBLE CROSSING
<b>DS30</b>	TRAFFIC & PARKING SIGN INSTALLATION DETAILS
<b>DS31</b>	CULVERT CROSSING
<b>DS32</b>	WATTS PROFILE SPEED HUMP DETAIL
<b>DS33</b>	STANDARD GRATED SIDE ENTRY PIT WITH HEAVY DUTY COVER – TYPE F
<b>DS34</b>	BICYCLE SYMBOL DETAIL
<b>DS35</b>	BACKFILL AND SEALING REQ FOR LONGITUDINAL SERVICE OPENINGS IN SEALED ROADS
<b>DS36</b>	BACKFILL AND SEALING REQ FOR SERVICE CROSSINGS IN SEALED ROADS
<b>DS37</b>	COMBINED RAINWATER/ON SITE DETENTION TANK



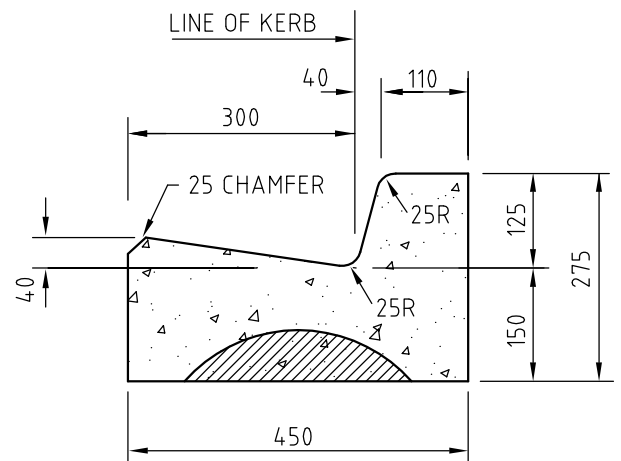
B1



B2



B4



B5

**NOTE**

1. ALL KERBS TO BE BEDDED ON 120mm COMPACTED THICKNESS OF CLASS 3 F.C.R./CRUSHED CONCRETE.
2. JOINTS AT MIN. 2.5m MINIMUM SPACING UNLESS OTHERWISE SPECIFIED.



**CITY OF DAREBIN**

**STANDARD BARRIER TYPE KERBS**

DAREBIN ENGINEERING SERVICES

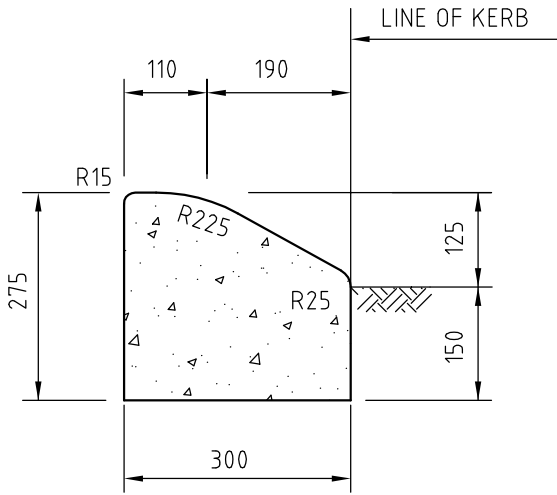
DRAWN JDS/RWK

DATE JUL 03

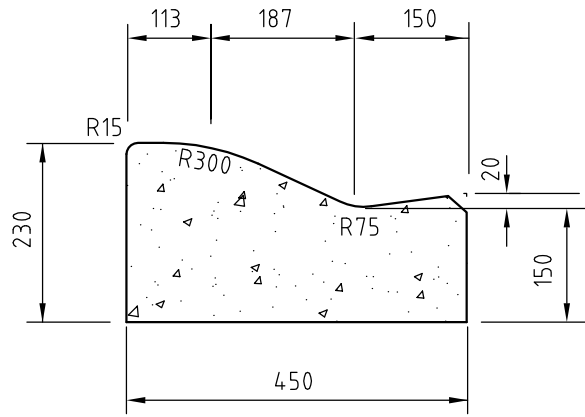
SCALE 1:10

ACAD NAME DS1.DWG

DWG No DS1

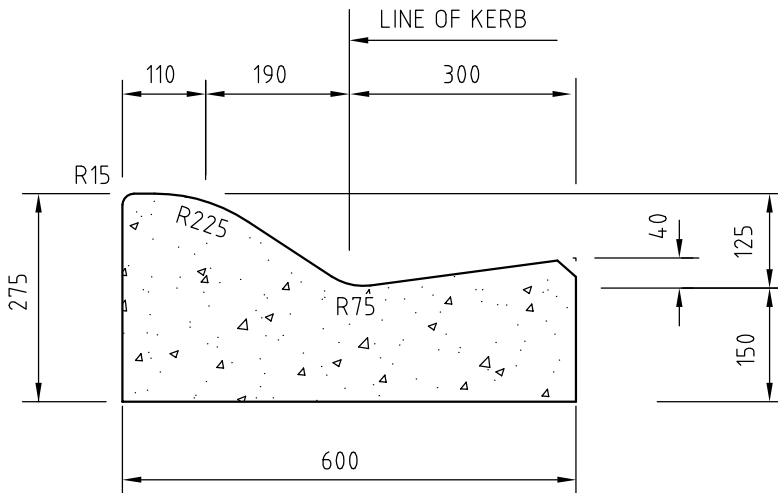


SM1

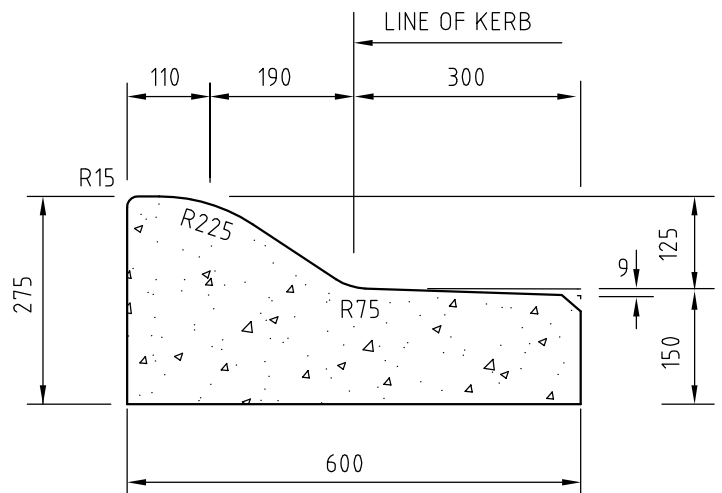


DM3

450mm MODIFIED MOUNTABLE  
KERB & CHANNEL DETAIL



SM2



SM3

**NOTE**

1. ALL KERBS TO BE BEDDED ON 120mm COMPACTED THICKNESS OF CLASS 3 F.C.R./CRUSHED CONCRETE.
2. JOINTS AT MIN. 2.5m MINIMUM SPACING UNLESS OTHERWISE SPECIFIED.



**CITY OF DAREBIN**

**STANDARD DETAIL  
SEMI-MOUNTABLE TYPE KERBS**

**DAREBIN ENGINEERING SERVICES**

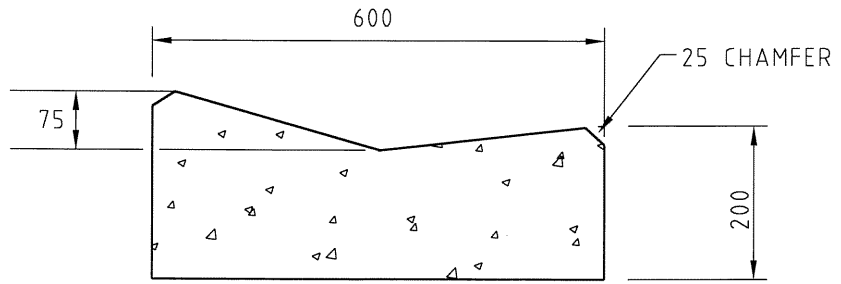
DRAWN JDS/RWK

DATE JUL 03

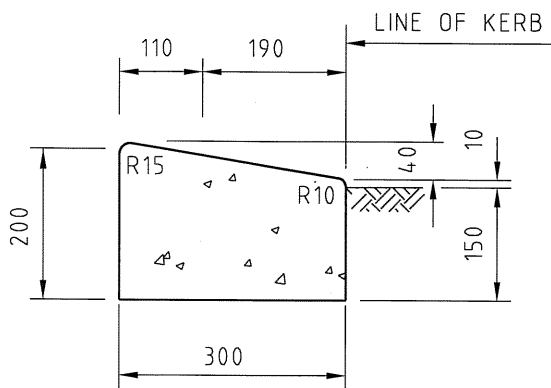
SCALE 1:10

ACAD NAME DS2A.DWG

DWG No DS2A



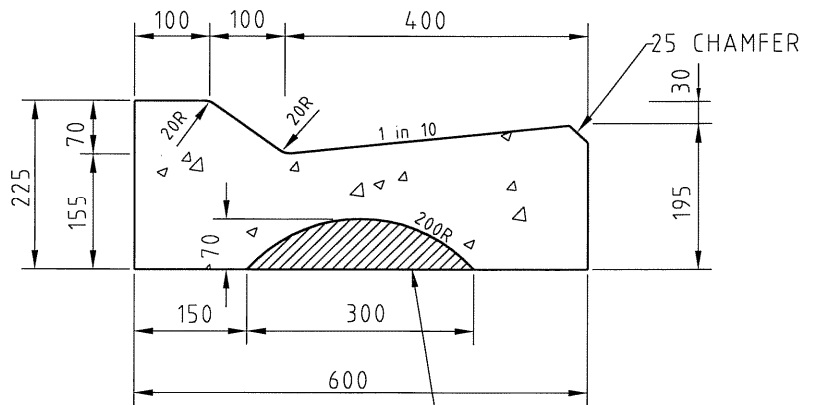
DM2



M1

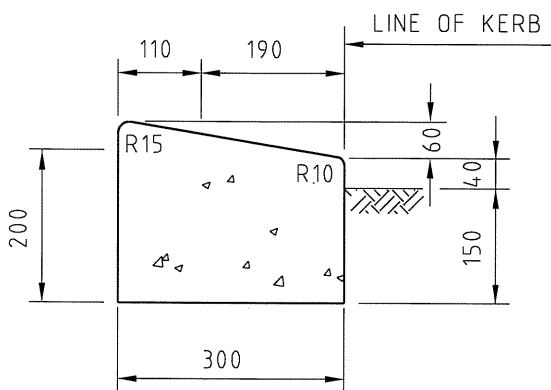
NOTE

ALL KERBS TO BE BEDDED ON 100mm COMPACTED THICKNESS OF CLASS 3 F.C.R./CRUSHED CONCRETE.



DM1

AREA CUT FROM TEMPLATE TO ALLOW INTEGRAL CASTING OF KERB AND CHANNEL IF FIXED FORMS USED.



M4

CITY OF DAREBIN

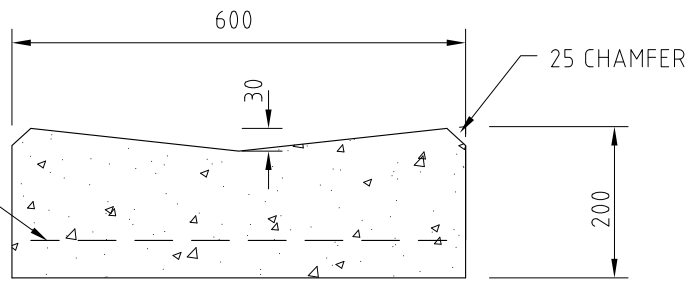
STANDARD  
MOUNTABLE  
KERB TYPES

*G. Houlder*  
DAREBIN ENGINEERING CONSULTANTS

DRAWN	KMH-RWK
DATE	NOV-98
SCALE	1:10

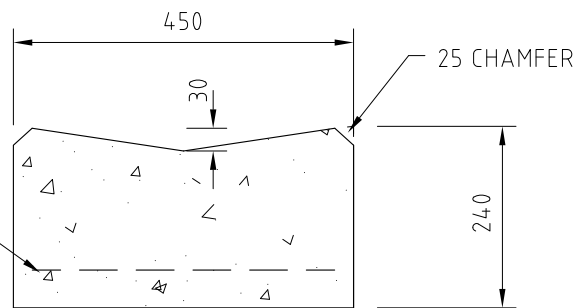
ACAD NAME	DS2.DWG
DWG No	DS2B

REINFORCEMENT TO CONSIST OF F8TM PLACED 50mm ABOVE BOTTOM OF CONCRETE INVERT DRAIN.

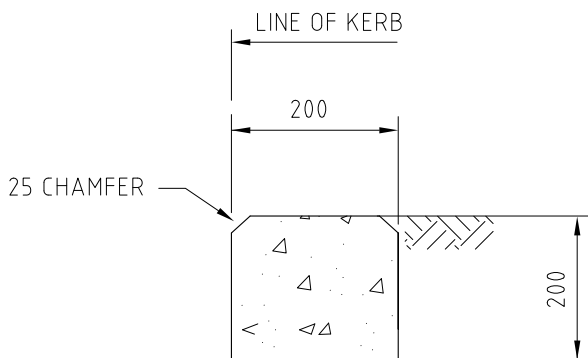


600mm OPEN INVERT

REINFORCEMENT TO CONSIST OF F8TM PLACED 50mm ABOVE BOTTOM OF CONCRETE INVERT DRAIN.



450mm OPEN INVERT



EDGE STRIP

**NOTE**

1. ALL KERBS TO BE BEDDED ON 120mm COMPACTED THICKNESS OF CLASS 3 F.C.R./CRUSHED CONCRETE.
2. JOINTS AT MIN. 2.5m MINIMUM SPACING UNLESS OTHERWISE SPECIFIED.



**CITY OF DAREBIN**

**STANDARD INVERT  
DRAINS & EDGE STRIP**

DAREBIN ENGINEERING SERVICES

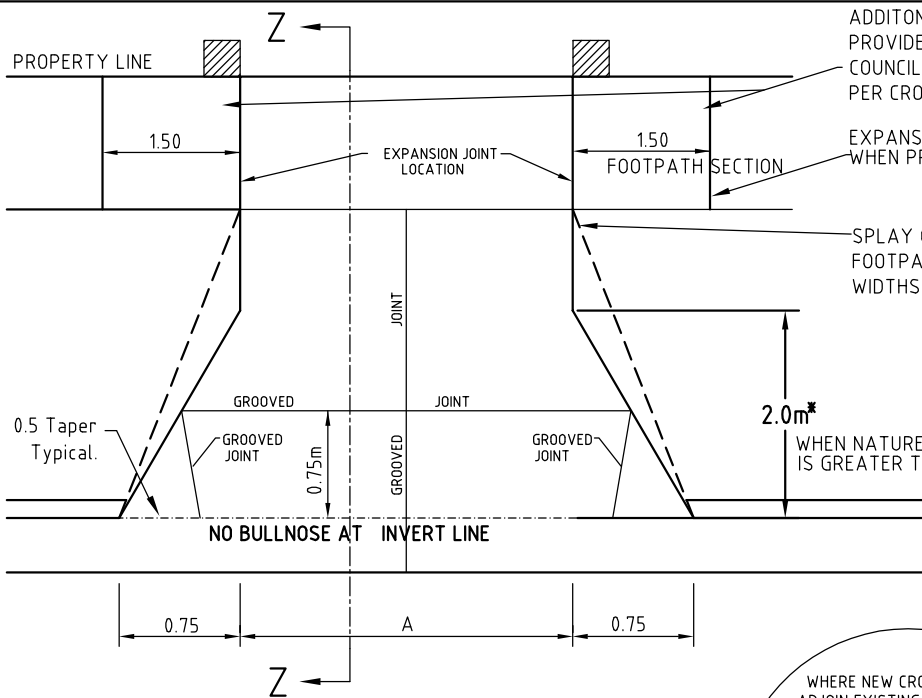
DRAWN JDS/RWK

DATE JUL 03

SCALE 1:10

ACAD NAME DS3.DWG

DWG No DS3



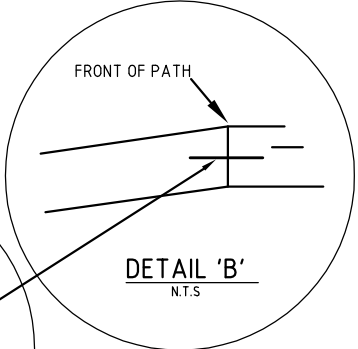
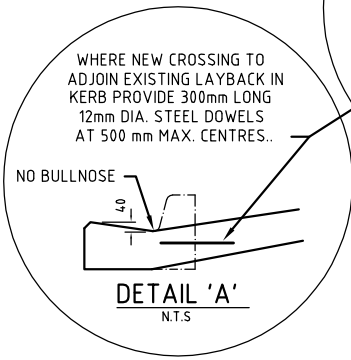
ADDITIONAL CONCRETE BAYS TO BE PROVIDED IN NEW SUBDIVISIONS OR AT COUNCIL'S REQUEST WITH THICKNESS AS PER CROSSING WITH SL62 REIN. 50mm COVER

EXPANSION JOINT LOCATION WHEN PROVIDING ADDITIONAL CONC. BAY

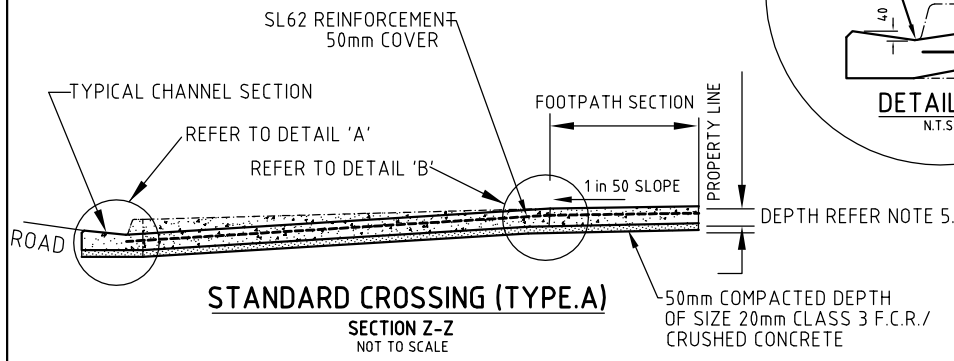
SPLAY OF CROSSING TO BEGIN AT FOOTPATH FOR NATURESTRIP WIDTHS LESS THAN 3.0m

**\*NOTE**  
CROSSINGS ARE NOT TO BE LOCATED WITHIN 10.00m OF AN INTERSECTION.

**PLAN**  
NOT TO SCALE



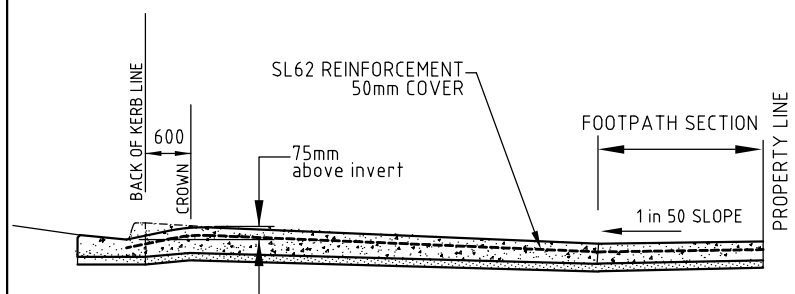
WHERE NEW CROSSING TO ADJOIN EXISTING LAYBACK IN KERB PROVIDE 300mm LONG 12mm DIA. STEEL DOWELS AT 500 mm MAX. CENTRES..



**STANDARD CROSSING (TYPE.A)**  
SECTION Z-Z  
NOT TO SCALE

**NOTES:**

1. VEHICLE CROSSING PERMIT REQUIRED PRIOR TO COMMENCEMENT OF WORKS
2. SUBMISSION OF TRAFFIC MANAGEMENT PLAN REQUIRED PRIOR TO COMMENCEMENT OF WORKS
3. RESIDENTIAL SINGLE MIN A = 2.75 (MAX 3.00)
4. INDUSTRIAL CROSSING MIN A = 3.00 (MAX 5.50)
5. COUNCIL APPROVAL REQUIRED FOR WIDTHS GREATER THAN MAXIMUM
6. REQUIRED DEPTH OF CONCRETE  
125mm RESIDENTIAL (SINGLE LAYER SL62 MESH)  
150mm STANDARD COMMERCIAL & INDUSTRIAL (SINGLE LAYER SL62 MESH)  
200mm HEAVY DUTY INDUSTRIAL & COMMERCIAL (DOUBLE LAYER SL62 MESH)
7. DOWELS TO BE DRILLED WHEN CONCRETE DRY
8. REINFORCEMENT TO EXTEND TO CORNER SPLAYS



**REVERSE FALL CROSSING (TYPE.B)**  
SECTION Z-Z  
NOT TO SCALE



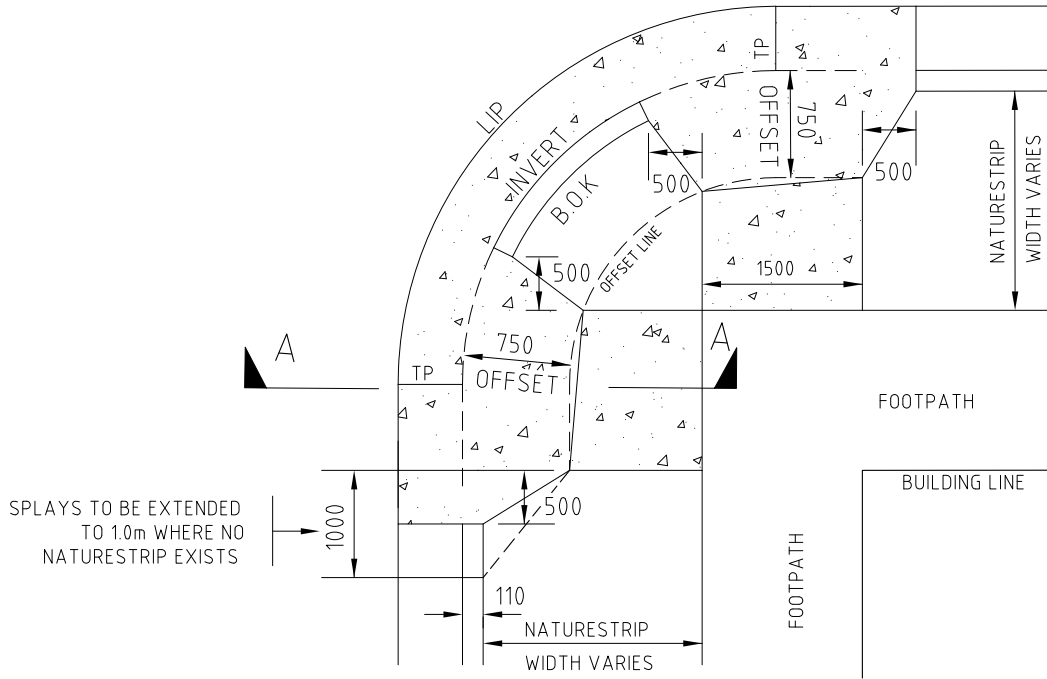
**CITY OF DAREBIN**

**STANDARD CONCRETE VEHICLE CROSSINGS FOR RESIDENTIAL COMMERCIAL & INDUSTRIAL ENTRANCES**

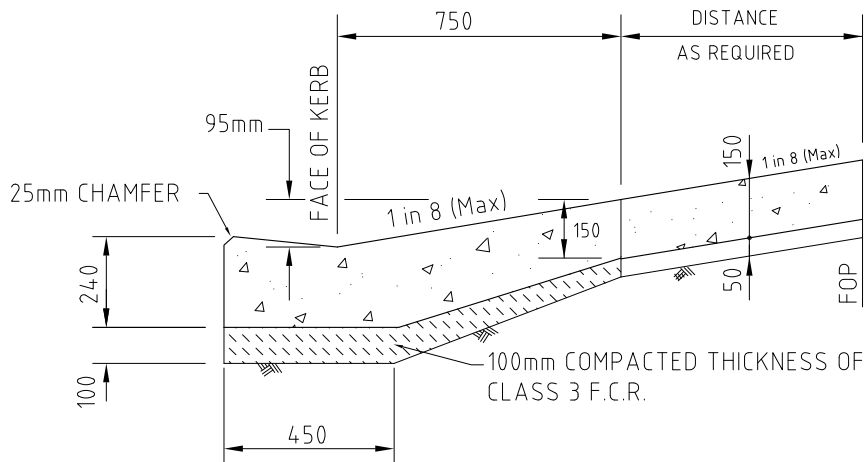
**DAREBIN ENGINEERING SERVICES**

ACAD NAME	DS4.DWG
DWG No	DS4

DRAWN	AM
DATE	NOV14
SCALE	1:50



PLAN



SECTION A - A

SCALE 1:10



CITY OF DAREBIN

STANDARD DETAIL  
PERAMBULATOR CROSSING

DAREBIN ENGINEERING SERVICES

DRAWN KMH/JDS

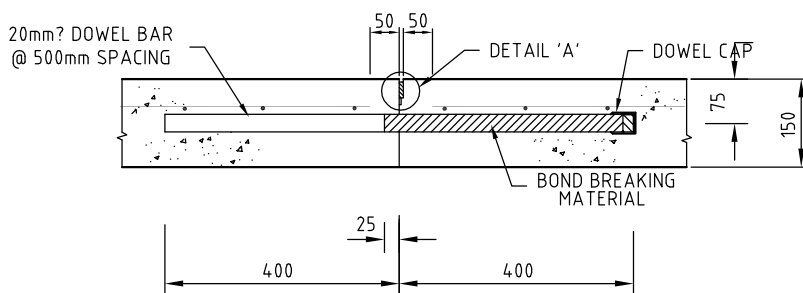
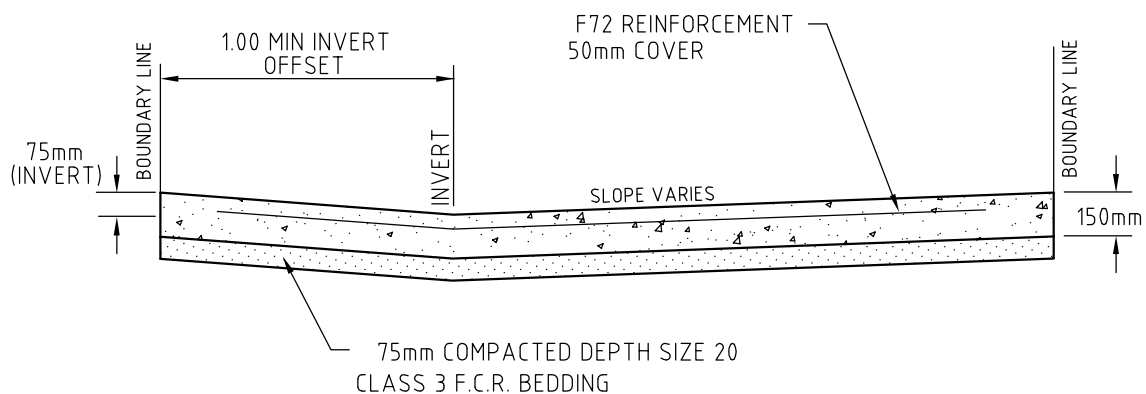
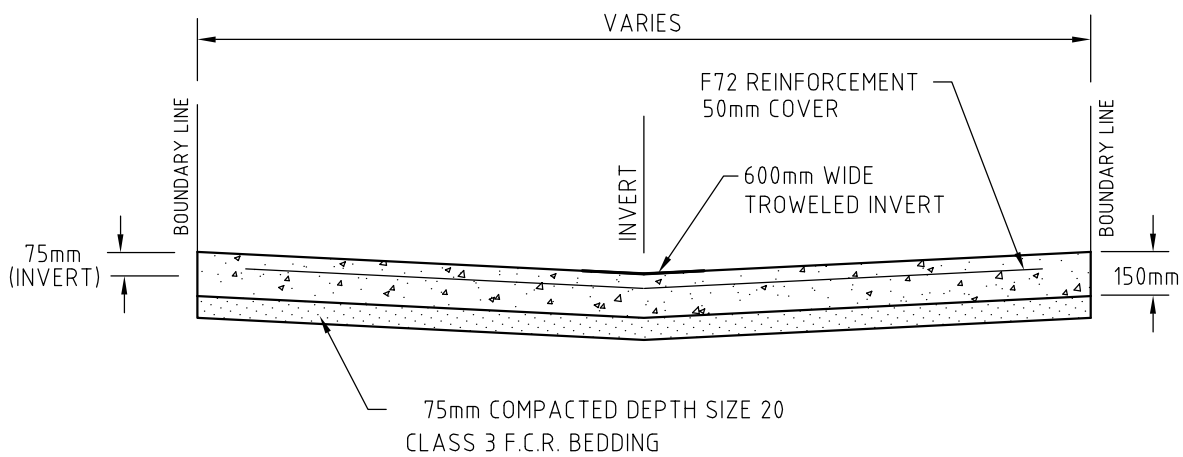
DATE JUL 03

SCALE N.T.S.

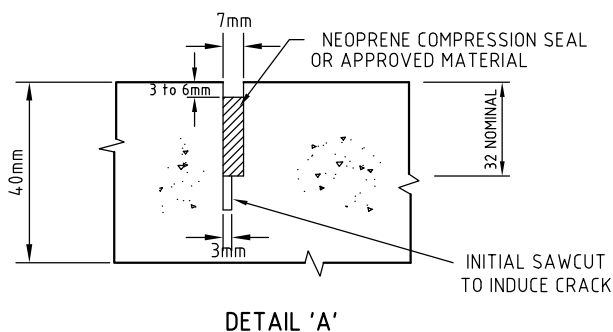
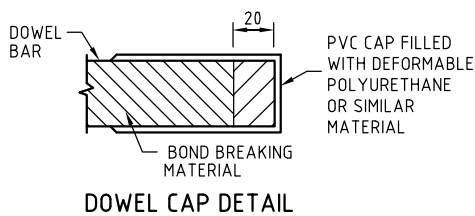
ACAD NAME DS5.DWG

DWG No DS5





**DOWELLED CONTRACTION JOINT  
AT 6.00m CENTRES (MAX)**



**CITY OF DAREBIN**

**STANDARD CONCRETE RIGHT OF WAY**

**DAREBIN ENGINEERING SERVICES**

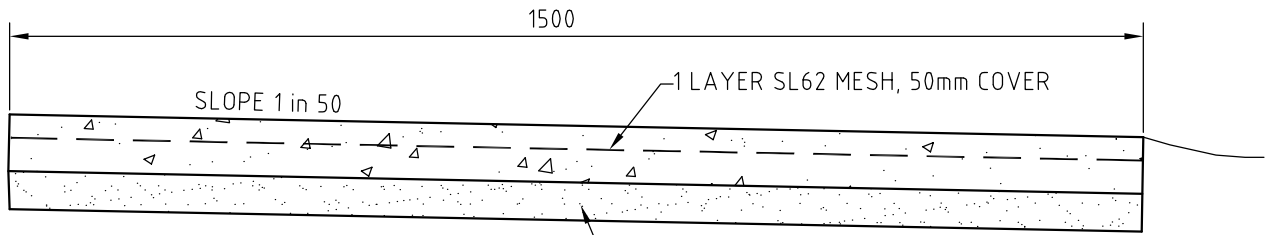
DRAWN KMH

DATE JUL 03

SCALE 1:50

ACAD NAME DS6.DWG

DWG No DS6

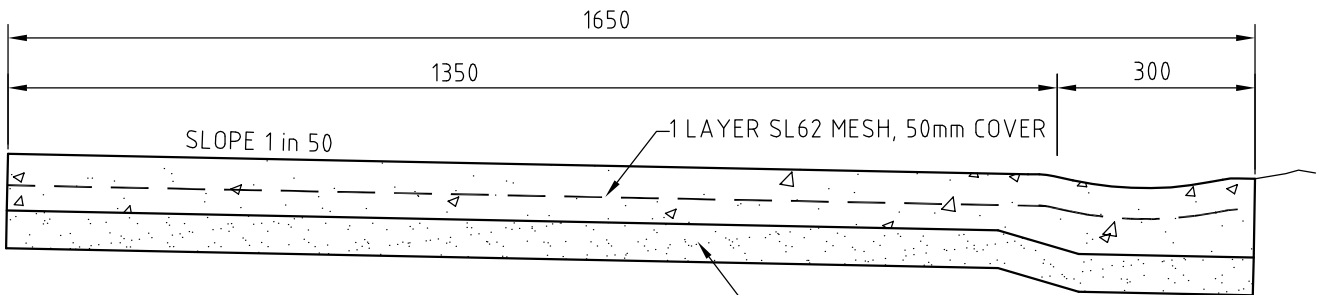


100mm THICK CONCRETE FOOTPATH  
TO BE THICKENED TO 125mm  
AT RESIDENTIAL DRIVEWAYS  
AND 150mm AT COMMERCIAL/INDUSTRIAL  
DRIVEWAYS

50mm F.C.R./CRUSHED ROCK BEDDING

### STANDARD CONCRETE FOOTPATH

SCALE 1:10

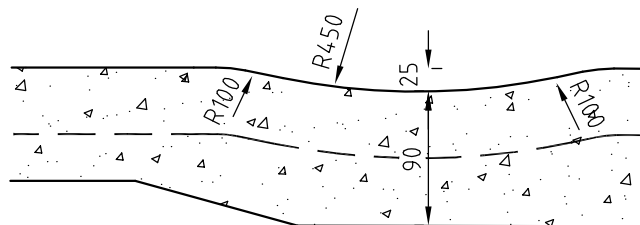


100mm THICK CONCRETE FOOTPATH TO BE  
THICKENED TO 125mm AT RESIDENTIAL DRIVEWAYS  
& 150mm AT COMMERCIAL/INDUSTRIAL DRIVEWAYS.  
FOOTPATH AND SPOON DRAIN TO BE  
CAST INTEGRALLY.

50mm F.C.R./CRUSHED ROCK BEDDING

### INTEGRAL CHANNEL FOOTPATH

SCALE 1:10



SPOON DRAIN DETAIL  
SCALE 1:50



CITY OF DAREBIN

## STANDARD CONCRETE FOOTPATH

DAREBIN ENGINEERING SERVICES

DRAWN KMH

DATE JUN15

SCALE AS SHOWN

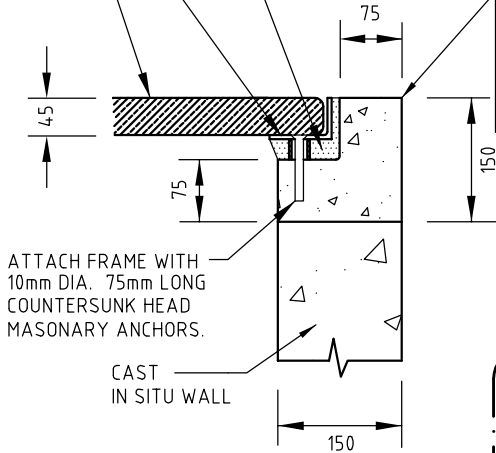
ACAD NAME DS7.DWG

DWG No DS7

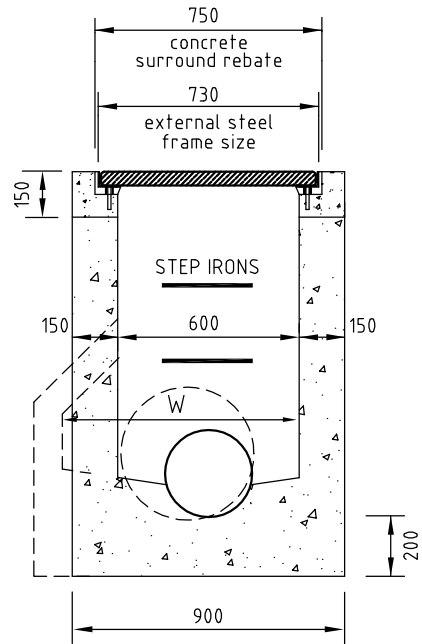
FIBREGLASS COATED MARINE PLY COVER WITH LOCKING MECHANISM AND 75x50x5 GALVANIZED STEEL ANGLE FRAME WITH 25mm HIGH SPACERS AT BOLT HOLES.  
**USE 'TERRA FIRMA' OR EQUIVALENT APPROVED BY DAREBIN COUNCIL.**

INFILL WITH MORTAR BETWEEN STEEL FRAME AND PRE-CAST CONCRETE PIT SURROUND AND PROVIDE ADEQUATE RECESS FOR ENGAGEMENT OF LOCKING MECHANISM AT REQUIRED LOCATION.

PRE-CAST CONCRETE PIT SURROUND WITH 75x75 REBATE.  
**USE 'SVC' OR EQUIVALENT APPROVED BY DAREBIN COUNCIL.**



**SECTION BB**



**SECTION AA**

**COLOUR OF COVER TO BE USED.**

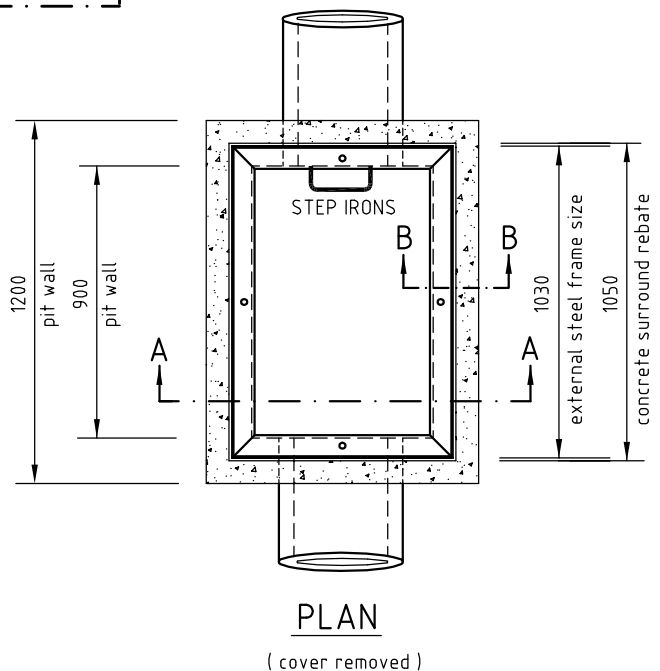
NATURESTRIPS & OTHER GRASSED AREAS:  
**GREEN.**

PLAIN & CHARCOAL COLOURED CONCRETE PAVING:  
**GREY.**

**NOTES:**

1. ALL PITS GREATER THAN 1200mm IN DEPTH ARE TO BE FITTED WITH STEP IRONS 20mm  $\phi$  M.S. ROD AT 300mm CENTRES (SEE DS9).
2. ALL PIT COVERS ARE TO CONFORM TO SLOPE OF FINISHED SURFACE.
3. FOR PIPES LARGER THAN 450mm WIDTH (W) = D + 200mm
4. FOR REINFORCEMENT DETAIL REFER TO THE SPECIFICATION FOR THE COSTRUCTION OF UNDERGROUND DRAINS.
5. BASE OF PIT TO BE SHAPED UP TO SPRING IN LINE TO ASSIST DIRECTION OF FLOW.
6. THE LOCK ON THE PIT LID TO BE LOCATED SO THAT THE COVER CAN BE CONVENIENTLY OPENED BY SLIDING AWAY FROM ANY NEARBY OBSTRUCTIONS AND WHEREVER POSSIBLE AWAY FROM ANY ADJACENT VEHICULAR TRAFFIC AREAS.

*i.e. TYPICALLY THE LOCK SHOULD BE LOCATED THE FURTHEST POSSIBLE DISTANCE AWAY FROM ANY ADJACENT KERBS .*



**PLAN**

( cover removed )

DIMENSIONS ARE IN MILLIMETRES



**CITY OF DAREBIN  
STANDARD JUNCTION PIT  
WITH LIGHT WEIGHT COVER**

FOR USE IN FOOTPATHS, NATURE STRIPS &  
OTHER NON VEHICULAR LOCATIONS EXCLUDING  
EASEMENTS ON PRIVATE PROPERTY.

DAREBIN ENGINEERING SERVICES

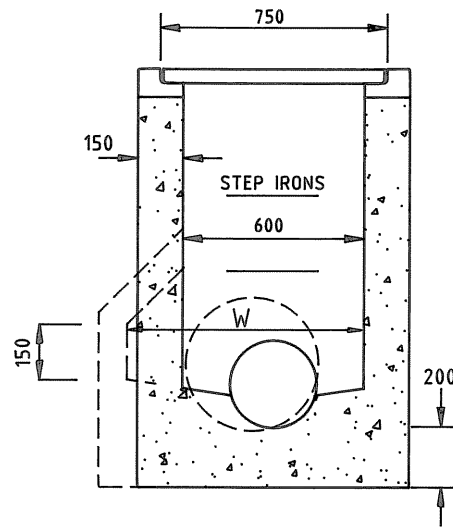
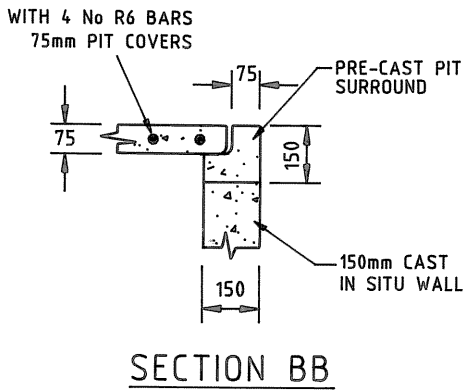
DRAWN RWK

DATE AUG-2012

SCALE NOT TO SCALE

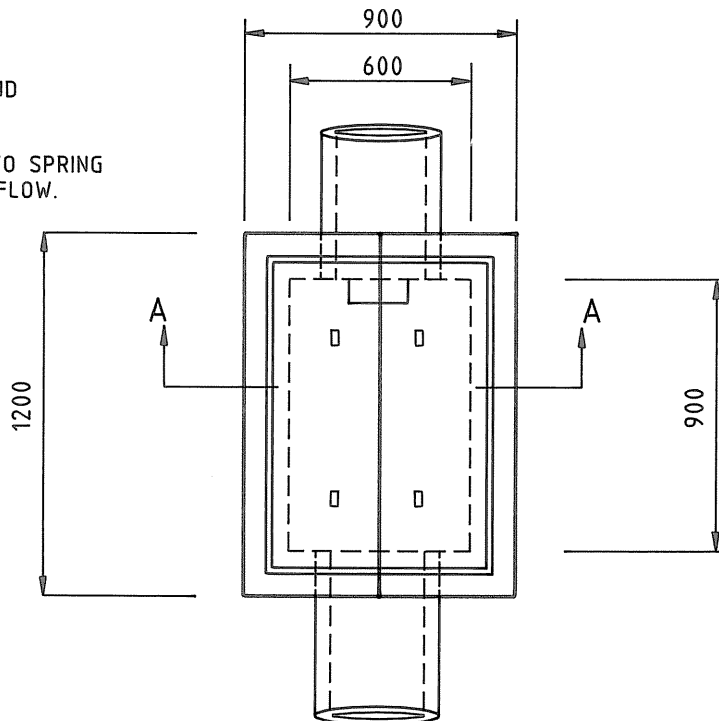
ACAD NAME DS8-LW.DWG

DWG No DS8-LW



**NOTE:**

1. ALL PITS GREATER THAN 1200mm IN DEPTH ARE TO BE FITTED WITH STEP IRONS 20mm $\phi$  M.S. ROD AT 300mm CENTRES (SEE DS9).
2. ALL PIT COVERS ARE TO CONFORM TO SLOPE OF NATURE STRIP.
3. FOR PIPES LARGER THAN 450mm WIDTH (W) = D + 200mm
4. FOR REINFORCEMENT DETAIL REFER TO THE SPECIFICATION FOR THE COSTRUCTION OF UNDERGROUND DRAINS.
5. BASE OF PIT TO BE SHAPED UP TO SPRING IN LINE TO ASSIST DIRECTION OF FLOW.



DIMENSIONS ARE IN MILLIMETRES

**CITY OF DAREBIN**

**STANDARD  
JUNCTION PIT**

*[Signature]*  
MANAGER PHYSICAL SERVICES

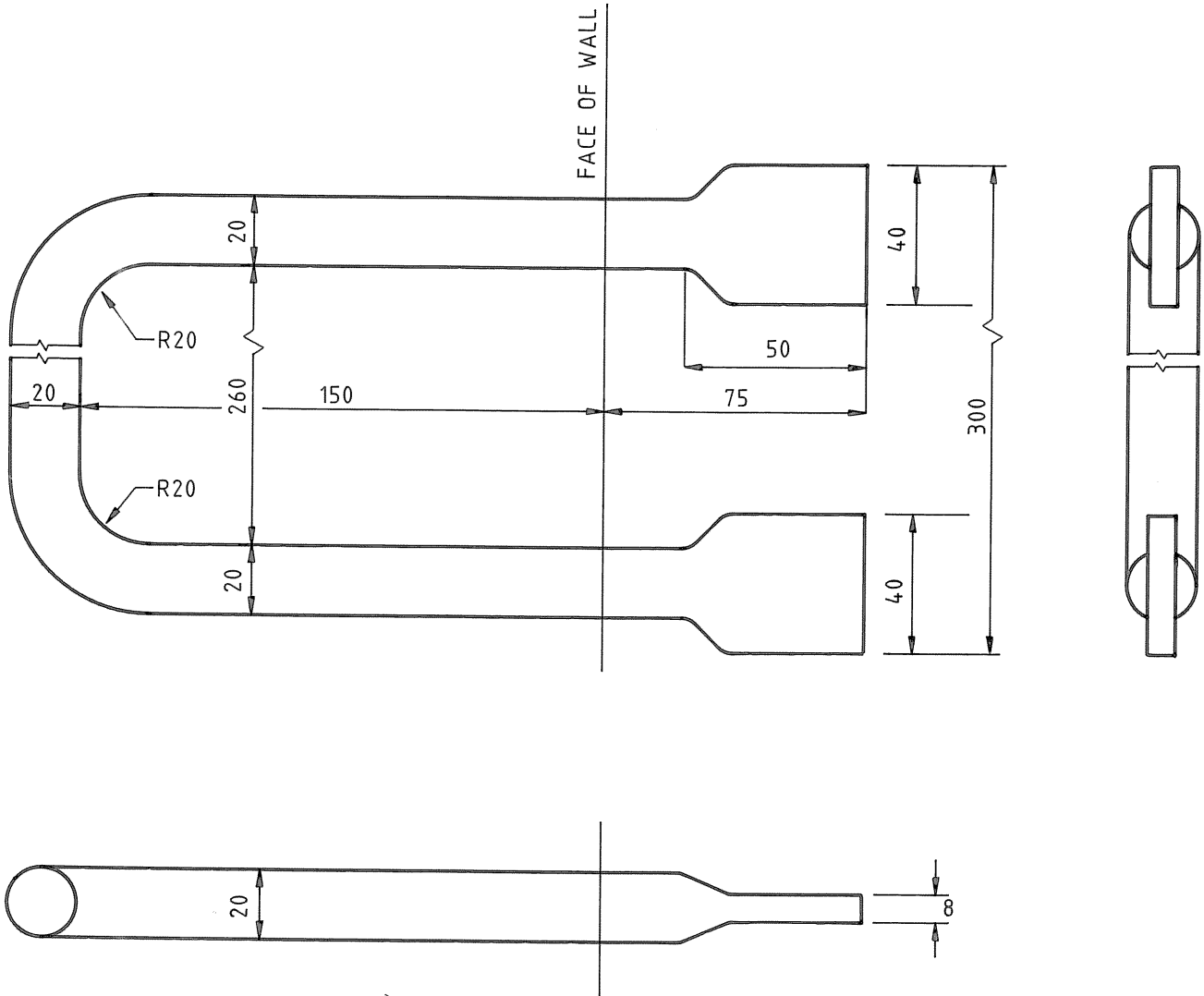
DRAWN JDS

DATE SEP'95

SCALE 1:25

ACAD NAME DS8.DWG

DWG No DS8



300mm M.S. STEP IRON

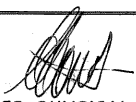
NOTE

STEP IRONS ARE TO BE PROVIDED IN ALL PITS DEEPER THAN 1200mm. THE FIRST IRON SHALL BE WITHIN 600mm OF THE TOP OF THE PIT, AND THE LAST IRON SHALL BE NOT MORE THAN 400mm ABOVE THE SPRINGING LINE OF THE PIPE, AND GENERALLY 300mm CENTRES.

CITY OF DAREBIN

STANDARD

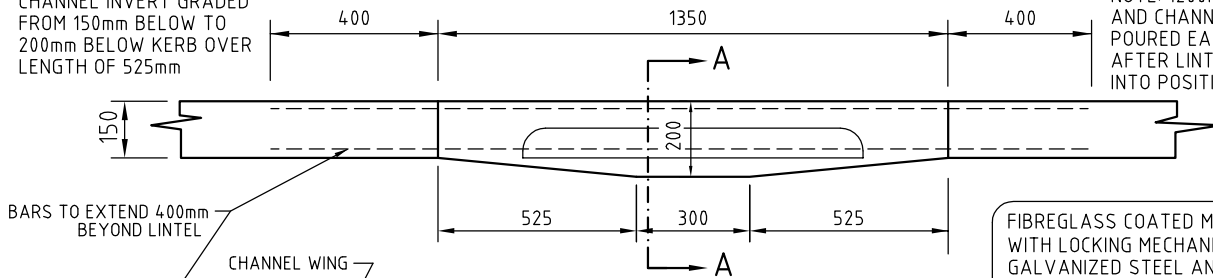
MILD STEEL STEP IRON

 MANAGER PHYSICAL SERVICES	
DRAWN	KMH
DATE	JUL-94
SCALE	1:2

ACAD NAME	DS9.DWG
DWG No	DS9

CHANNEL INVERT GRADED FROM 150mm BELOW TO 200mm BELOW KERB OVER LENGTH OF 525mm

NOTE: 1200mm LENGTHS OF KERB AND CHANNEL SECTION SHALL BE POURED EACH SIDE OF LINTEL AFTER LINTEL HAS BEEN SET INTO POSITION.

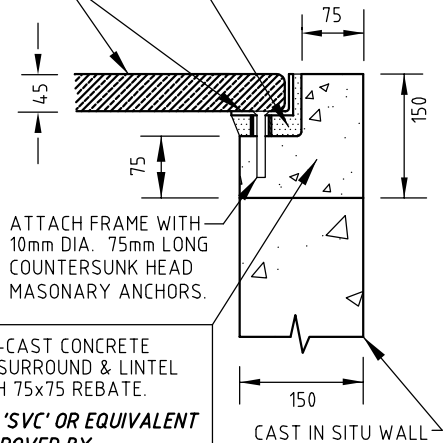


LINTEL FRONT ELEVATION

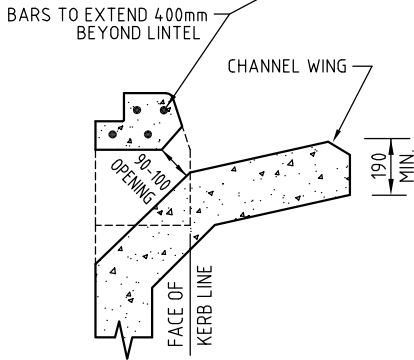
FIBREGLASS COATED MARINE PLY COVER WITH LOCKING MECHANISM AND 75x50x5 GALVANIZED STEEL ANGLE FRAME WITH 25mm HIGH SPACERS AT BOLT HOLES.

USE 'TERRA FIRMA' OR EQUIVALENT APPROVED BY DAREBIN COUNCIL.

INFILL WITH MORTAR BETWEEN STEEL FRAME AND PRE-CAST CONCRETE PIT SURROUND AND PROVIDE ADEQUATE RECESS FOR ENGAGEMENT OF LOCKING MECHANISM AT REQUIRED LOCATION.

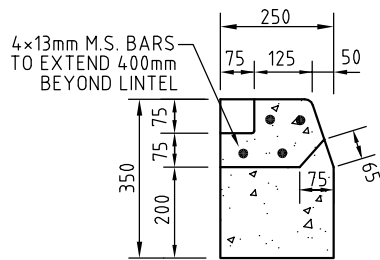


SECTION BB



SECTION AA

**COLOUR OF COVER TO BE USED.**  
 NATURESRTIPS & OTHER GRASSED AREAS: **GREEN.**  
 PLAIN & CHARCOAL COLOURED CONCRETE PAVING: **GREY.**

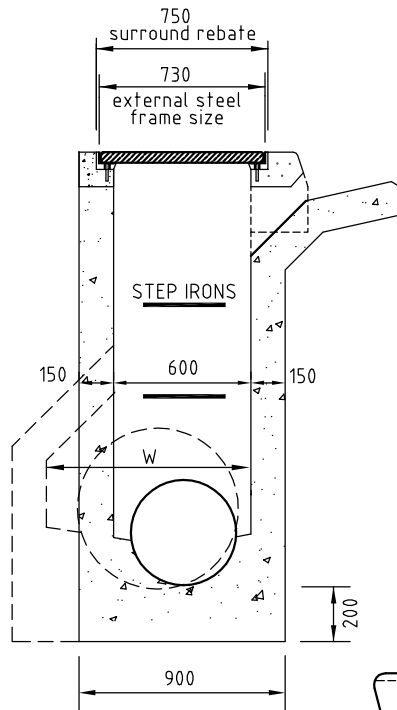


LINTEL DETAIL

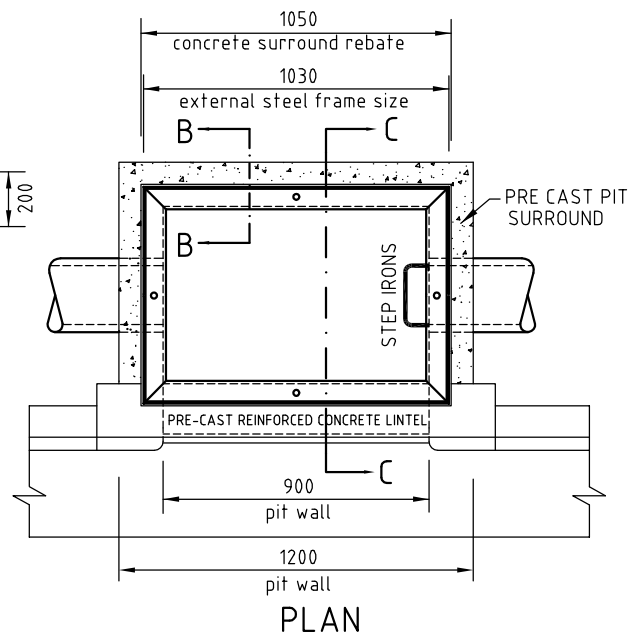
NOTE: LINTELS TO MATCH KERB PROFILE

**NOTES:**

- ALL PITS GREATER THAN 1200mm IN DEPTH ARE TO BE FITTED WITH STEP IRONS 20mmØ M.S. ROD AT 300mm CENTRES (SEE DS9).
- ALL PIT COVERS ARE TO CONFORM TO SLOPE OF FINISHED SURFACE.
- FOR PIPES LARGER THAN 450mm WIDTH (W) = D + 200mm
- FOR REINFORCEMENT DETAIL REFER TO THE SPECIFICATION FOR THE COSTRUCTION OF UNDERGROUND DRAINS.
- BASE OF PIT TO BE SHAPED UP TO SPRING IN LINE TO ASSIST DIRECTION OF FLOW.
- THE LOCK ON THE PIT LID TO BE LOCATED SO THAT THE COVER CAN BE CONVENIENTLY OPENED BY SLIDING AWAY FROM ANY NEARBY OBSTRUCTIONS AND WHEREVER POSSIBLE AWAY FROM ANY ADJACENT VEHICULAR TRAFFIC AREAS.  
*i.e. TYPICALLY THE LOCK SHOULD BE LOCATED THE FURTHEST POSSIBLE DISTANCE AWAY FROM ANY ADJACENT KERBS.*



SECTION CC



PLAN  
(cover removed)

DIMENSIONS ARE IN MILLIMETRES



CITY OF DAREBIN

**STANDARD SIDE ENTRY PIT WITH LIGHT WEIGHT COVER**

DAREBIN ENGINEERING SERVICES

DRAWN: RWK

DATE: SEP-2016

SCALE: NOT TO SCALE

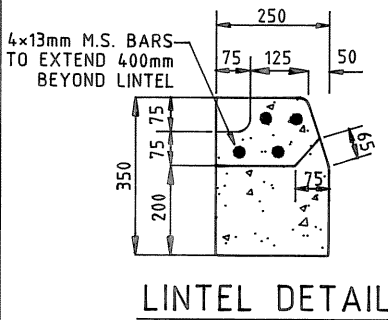
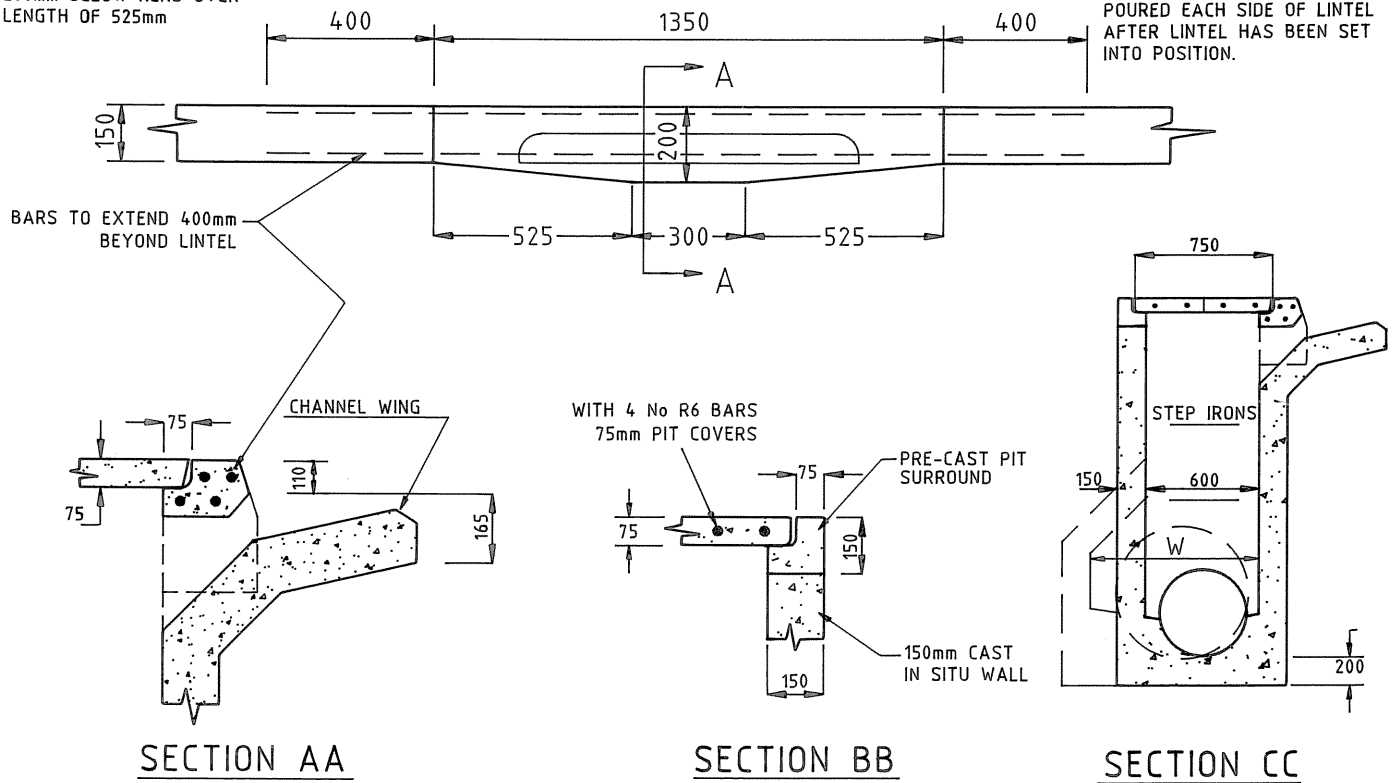
ACAD NAME: DS10LW.DWG

DWG No: DS10-LW

VERSION-2 SEP 2016

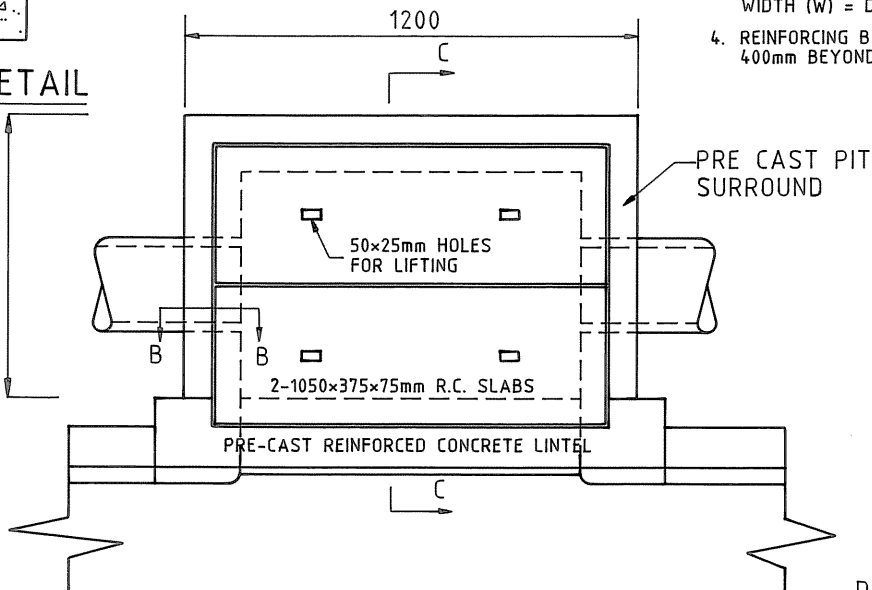
CHANNEL INVERT GRADED FROM 150mm BELOW TO 200mm BELOW KERB OVER LENGTH OF 525mm

NOTE: 1200mm LENGTHS OF KERB AND CHANNEL SECTION SHALL BE POURED EACH SIDE OF LINTEL AFTER LINTEL HAS BEEN SET INTO POSITION.



NOTE:

1. ALL PITS GREATER THAN 1200mm IN DEPTH ARE TO BE FITTED WITH STEP IRONS 20mm $\phi$  M.S. ROD AT 300mm CENTRES (SEE DS9).
2. ALL PIT COVERS ARE TO CONFORM TO SLOPE OF NATURE STRIP.
3. FOR PIPES LARGER THAN 450mm WIDTH (W) = D + 200mm
4. REINFORCING BARS TO EXTEND 400mm BEYOND LINTELS.



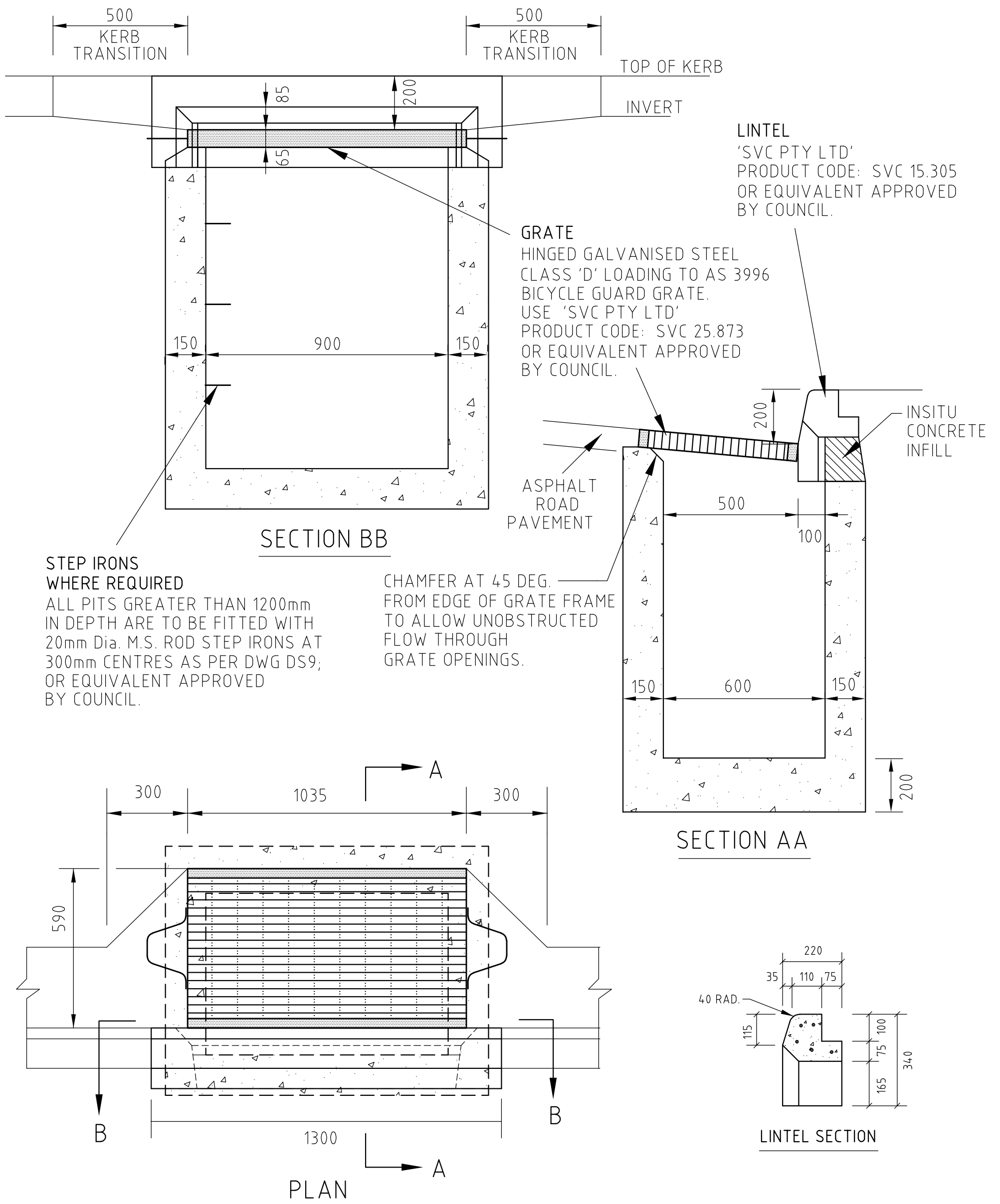
DIMENSIONS ARE IN MILLIMETRES

CITY OF DAREBIN

STANDARD  
SIDE ENTRY PIT

MANAGER PHYSICAL SERVICES	
DRAWN	JDS/PJM
DATE	AUG'95
SCALE	1:100

ACAD NAME	DS10.DWG
DWG No	DS10



GRATE FINISH TO BE HOT DIPPED GALVANISED TO AS 4880 - 1999

DIMENSIONS ARE IN MILLIMETRES



# CITY OF DAREBIN

## STANDARD SIDE ENTRY GRATING PIT - TYPE B DETAIL

ACAD NAME DS11 (2014).DWG

DWG No DS11-2017

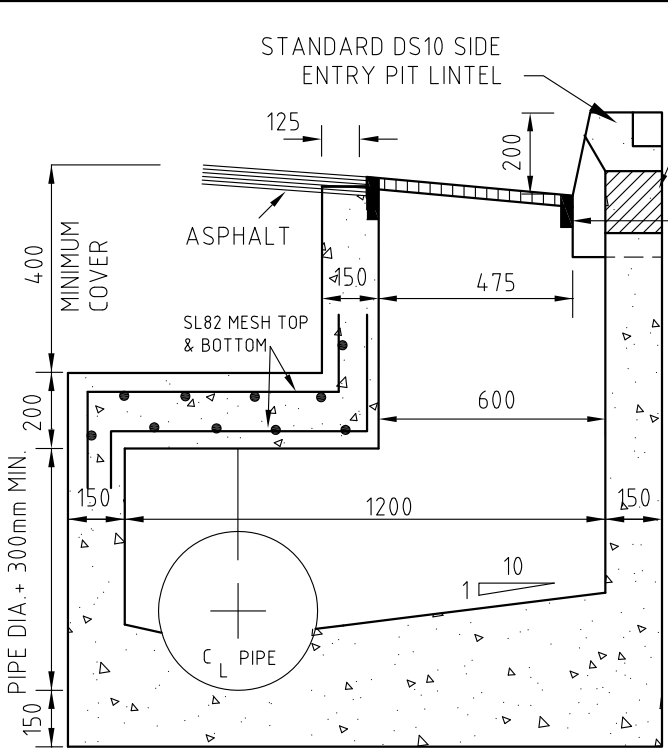
DAREBIN ENGINEERING SERVICES

DRAWN RWK

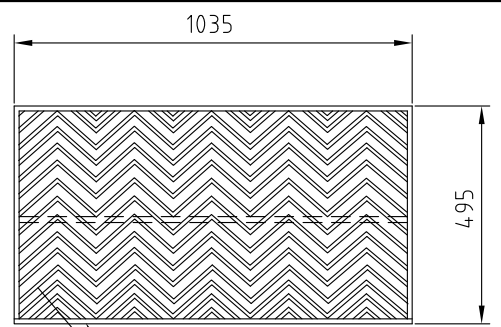
DATE APR-2017

SCALE 1:20



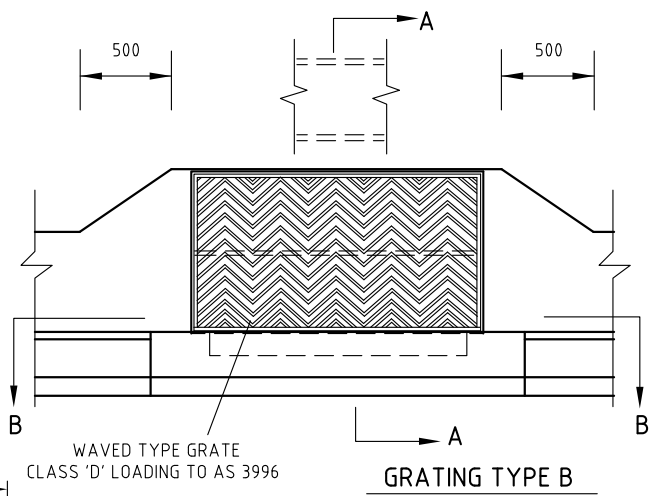


SECTION AA

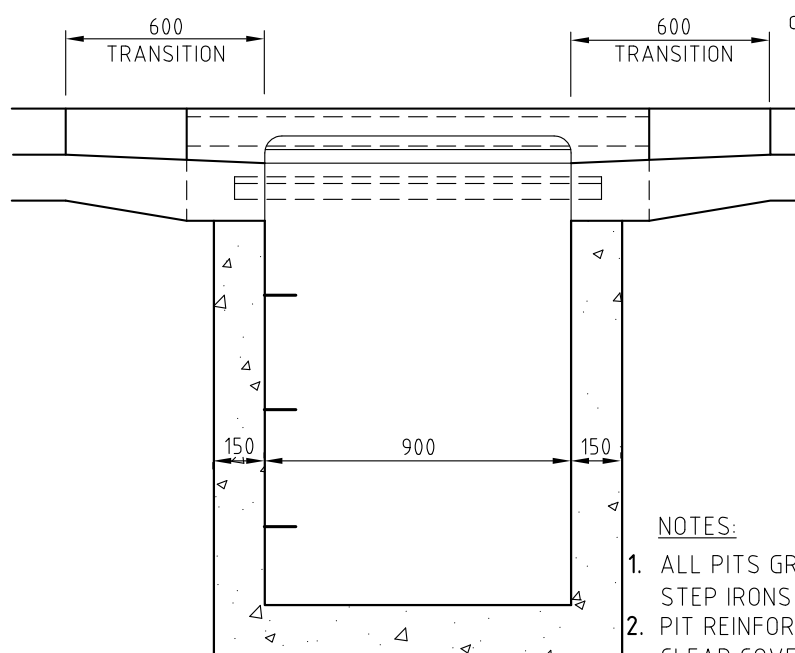


50 x 16 BAR  
LINTEL FACE 55x55x5 ANGLE  
20mm dia BRACE ROD

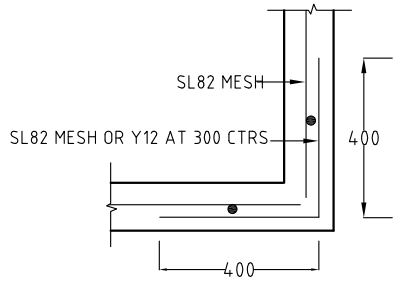
GRATE FINISH TO BE HOT DIPPED GALVANISED TO AS 4880 - 1999



GRATING TYPE B



SECTION BB



PLAN OF CORNER DETAIL  
NOT TO SCALE

NOTES:

1. ALL PITS GREATER THAN 1200mm IN DEPTH ARE TO BE FITTED WITH STEP IRONS 20mm $\phi$  M.S. ROD AT 300mm CENTRES( SEE DWG DS9)
2. PIT REINFORCEMENT TO HAVE 400mm MIN. LAPS AND 50mm MIN. CLEAR COVER

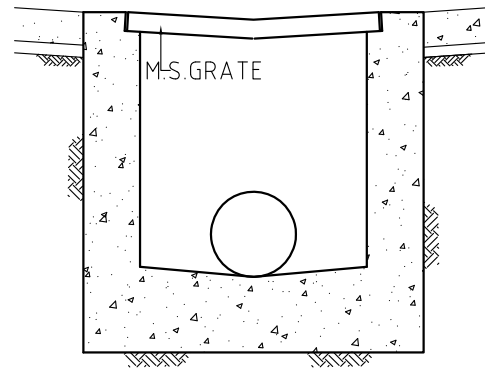
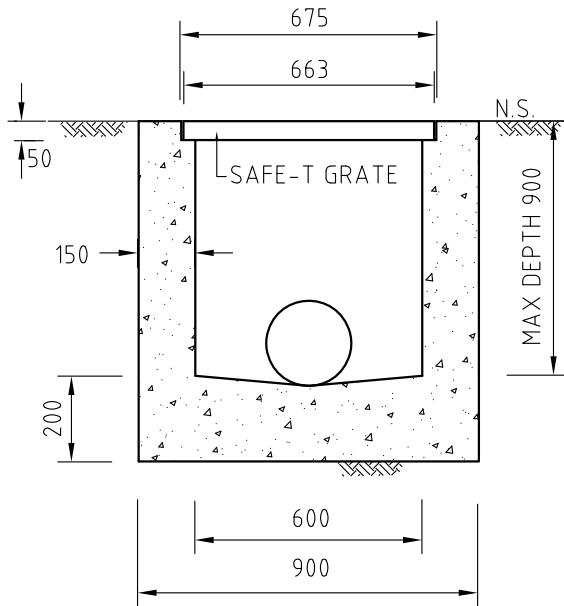
DIMENSIONS ARE IN MILLIMETRES

	
ACAD NAME	DS11-H.DWG
DWG No	DS11-H

**CITY OF DAREBIN**

**STANDARD SIDE ENTRY PIT  
SAFETY GRATE TYPE B WITH  
HAUNCHING IN ROADWAY**

<b>DAREBIN ENGINEERING SERVICES</b>	
DRAWN	AM
DATE	MAR11
SCALE	1:20



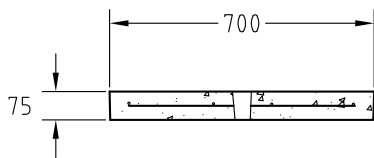
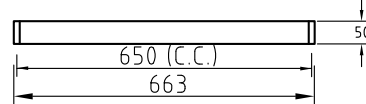
(FOR USE IN RIGHT OF WAYS)

**SECTION A-A**

(RIGHT-OF-WAY)

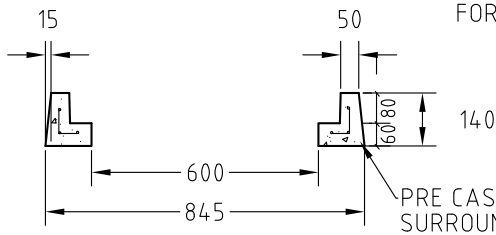


(STANDARD)



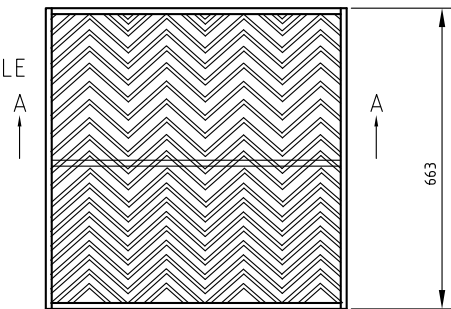
50 x 16 BAR  
LINTEL FACE 55x55x5 ANGLE

20mm dia BRACE ROD  
FOR PITS 600x900

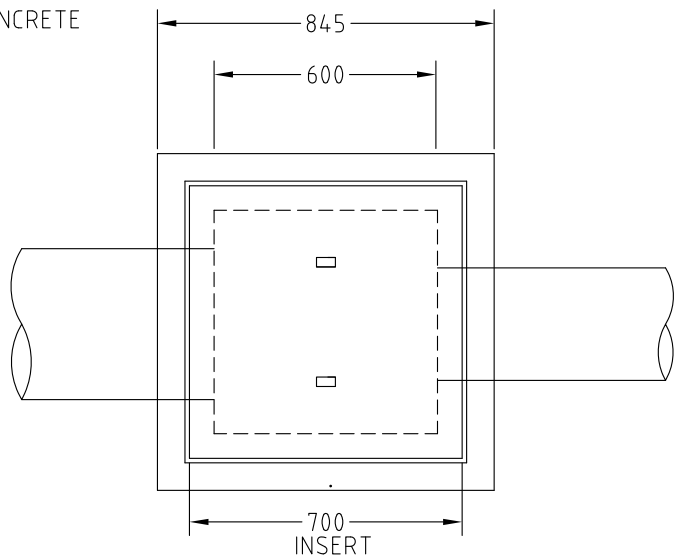


PRE CAST CONCRETE  
SURROUND

(FOR USE IN GRASSED AREAS)



GRATE FINISH TO BE HOT DIPPED  
GALVANISED TO AS 4880 - 1999



NOTE:- FOR PITS DEEPER THAN 900mm USE 600 x 900 PIT (DS8)



**CITY OF DAREBIN**

**STANDARD GRATING PIT TYPE A**

DAREBIN ENGINEERING SERVICES

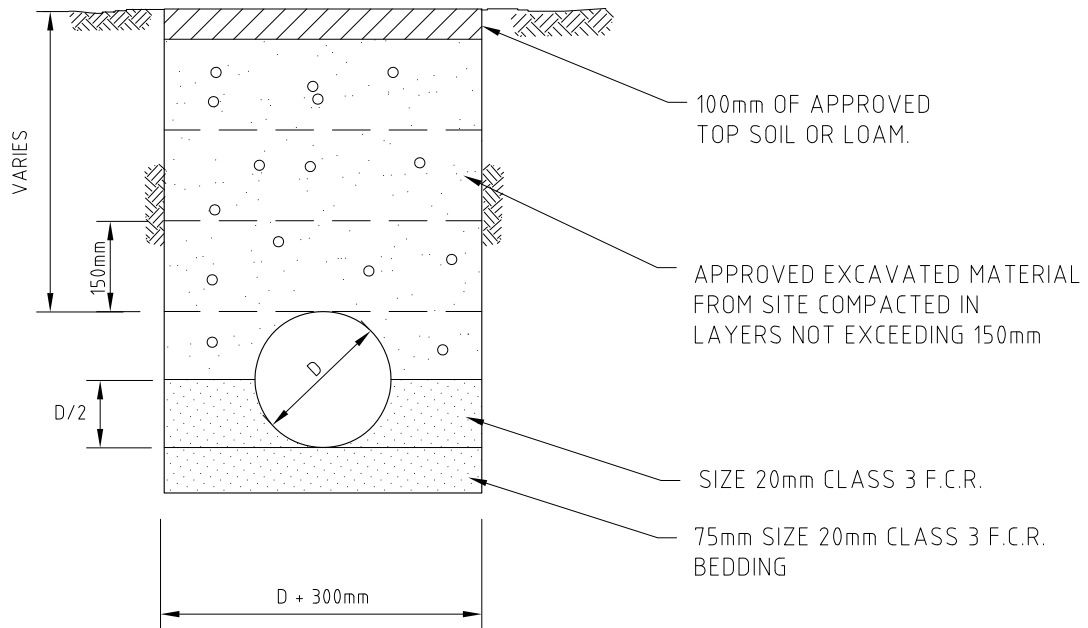
DRAWN JDS/PJM

DATE APR11

SCALE N.T.S

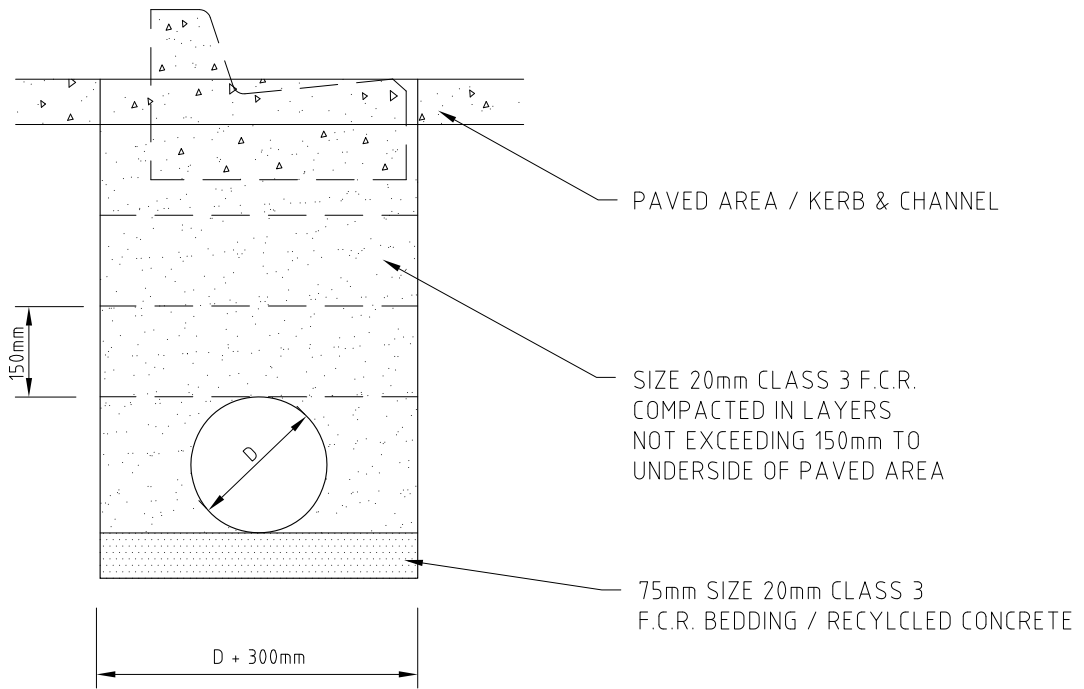
ACAD NAME DS12.DWG

DWG No DS12



**TYPE A BACKFILL**

FOR TRENCHES NOT COVERED BY TYPE B BACKFILL



**TYPE B BACKFILL**

FOR TRENCHES UNDER ALL EXISTING AND PROPOSED PAVED AREA & IN ROAD RESERVE

- NOTE:
1. ALL BACKFILLING AND BEDDING TO BE COMPACTED AS PER SPECIFICATION
  2. ALL DEPTHS SHOWN AREA COMPACTED DEPTHS.



**CITY OF DAREBIN**

**BEDDING AND BACKFILLING FOR DRAINAGE WORKS**

DAREBIN ENGINEERING SERVICES

DRAWN PJM/JDS

DATE JUL 03

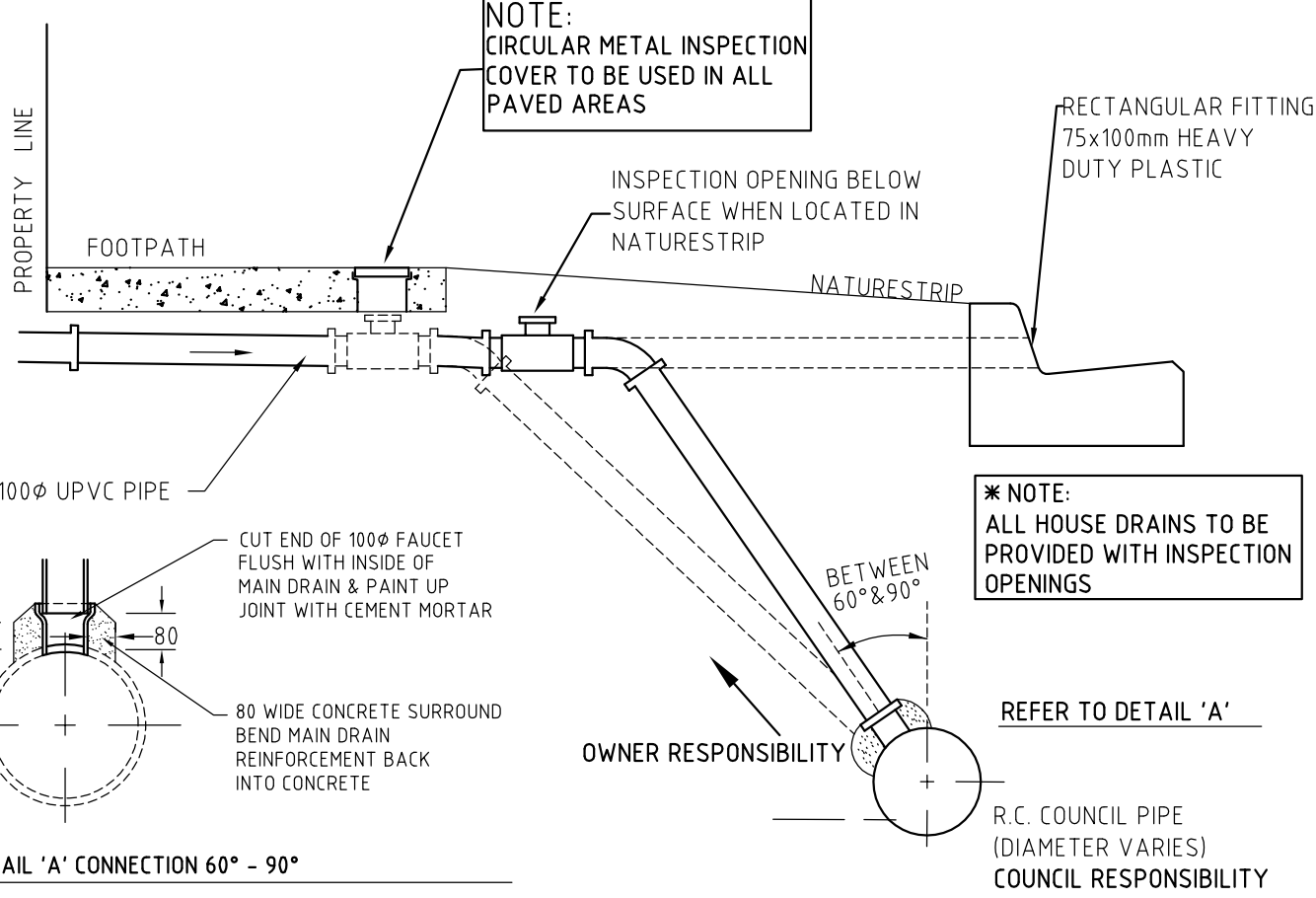
SCALE N.T.S

ACAD NAME DS13.DWG

DWG No DS13

**NOTE:**  
CIRCULAR METAL INSPECTION  
COVER TO BE USED IN ALL  
PAVED AREAS

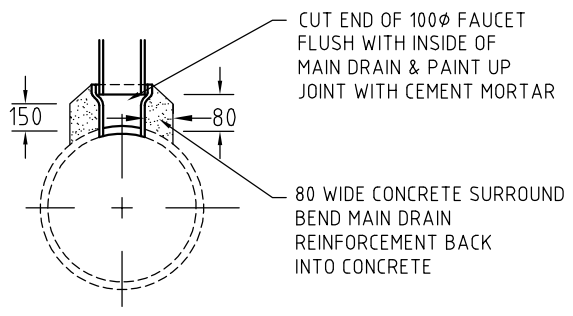
RECTANGULAR FITTING  
75x100mm HEAVY  
DUTY PLASTIC



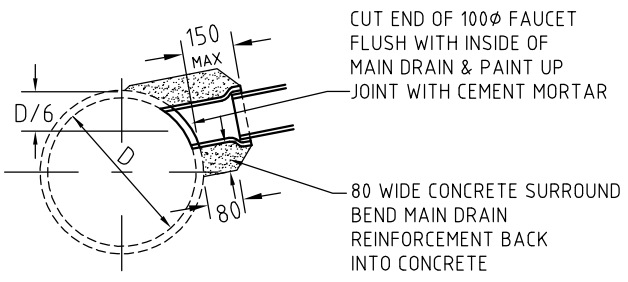
**\* NOTE:**  
ALL HOUSE DRAINS TO BE  
PROVIDED WITH INSPECTION  
OPENINGS

REFER TO DETAIL 'A'

R.C. COUNCIL PIPE  
(DIAMETER VARIES)  
COUNCIL RESPONSIBILITY



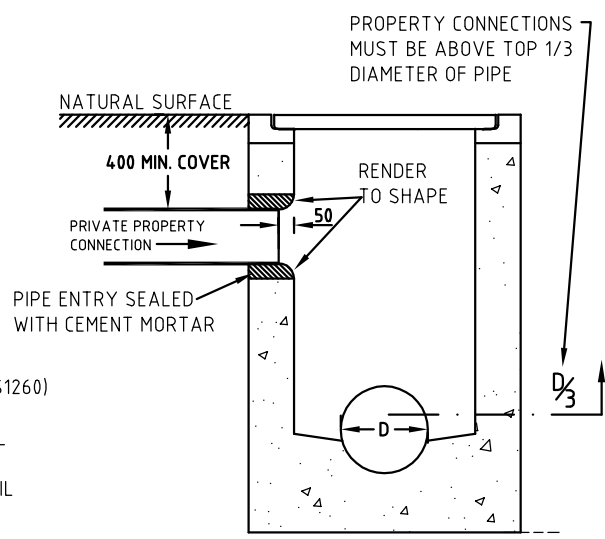
**DETAIL 'A' CONNECTION 60° - 90°**



**DETAIL 'B' CONNECTION LESS THAN 60°**  
SUBJECT TO COUNCIL APPROVAL ONLY

**NOTES:**

1. PROPERTY CONNECTIONS MUST BE TO TOP THIRD OF PIPE. INVERT OF PROPERTY CONNECTION SHALL NOT BE BELOW 1/3 DIAMETER OF COUNCIL PIPE INCLUDING PIT CONNECTIONS
2. PROPERTY CONNECTION PIPE TO BE 100mm DIAMETER SEWER GRADE PVC (CLASS SH, AS1260)
3. CONNECTIONS TO COUNCIL PIPE MUST BE CORE DRILLED
4. PAN ADAPTOR WITH FLANGE TO BE USED - FLOWCON "CONCONNECT" OR SIMILAR COUNCIL APPROVED
5. WHERE PROPERTY CONNECTION PIPE IS LARGER THAN 1/3 THE DIAMETER OF THE COUNCIL DRAIN A STANDARD COUNCIL PIT MUST BE CONSTRUCTED
6. ALL CONNECTIONS TO BE INSPECTED BY COUNCIL BEFORE BACKFILLING
7. BACKFILL OF PIPE TO BE AS PER DS13 OR AS DIRECTED BY COUNCIL OFFICER
7. 'IO' OR 'O' TO BE STAMPED ON KERB AND CHANNEL
8. PROPERTY CONNECTIONS FROM THE PRIVATE PROPERTY TO THE LEGAL POINT OF DISCHARGE ARE THE RESPONSIBILITY OF THE PROPERTY OWNER. THIS INCLUDES THE PORTION WITHIN THE ROAD RESERVE
9. PROPERTY CONNECTION TO BE TRIMMED SO THAT IT IS AT LEAST 50mm SETBACK FROM INSIDE WALL OF PIT



**SECTION**  
**CONNECTION TO COUNCIL PIT**

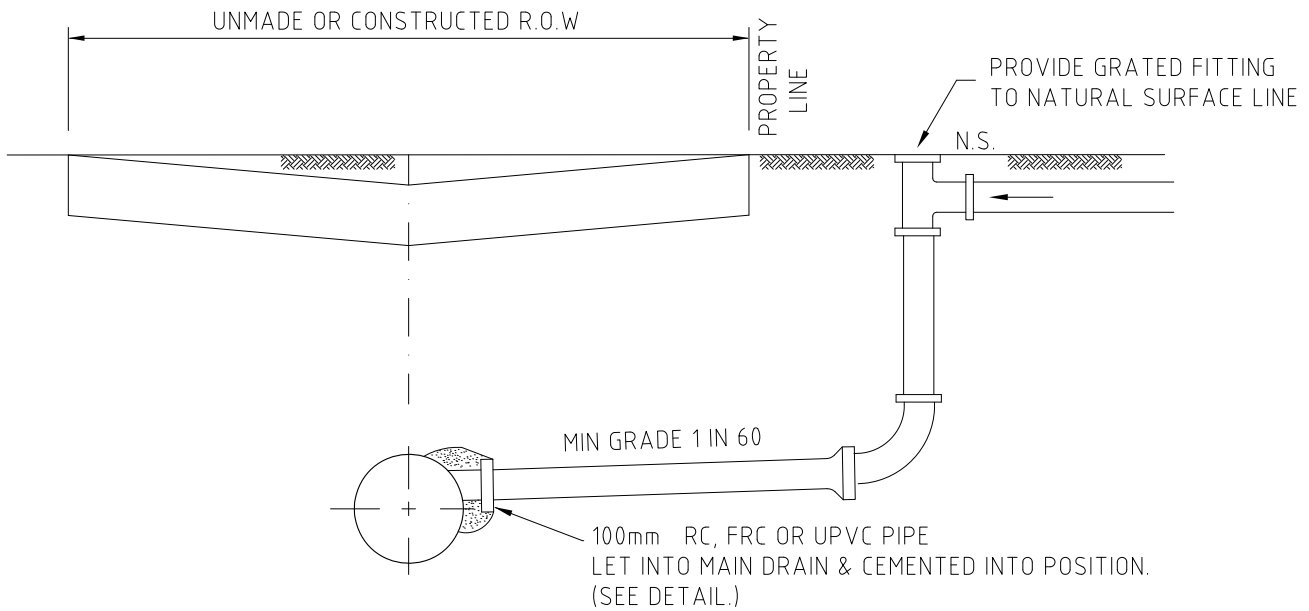
NOTE:- ALL DIMENSIONS ARE IN MILLIMETRES

ACAD NAME	DS14 300119.DWG
DWG No	DS14

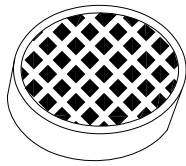
**CITY OF DAREBIN**

**STANDARD PROPERTY DRAINAGE  
INLET CONNECTION**

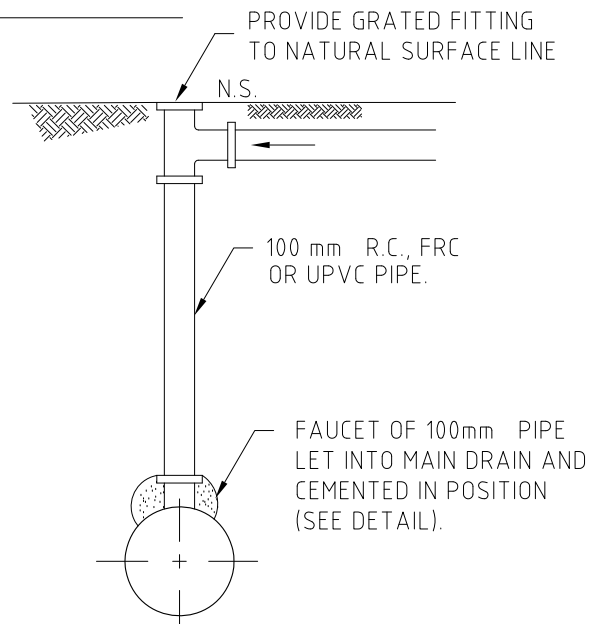
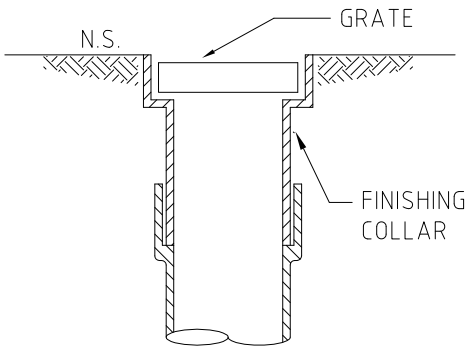
DAREBIN ENGINEERING SERVICES	
DRAWN	AM
DATE	MAR19
SCALE	N.T.S



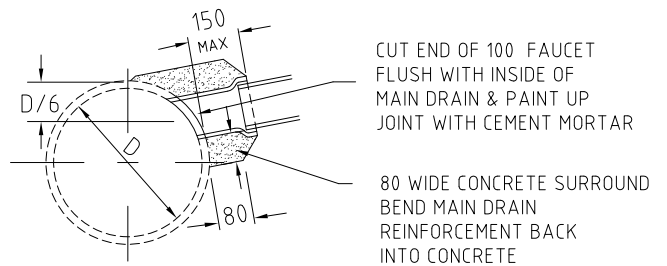
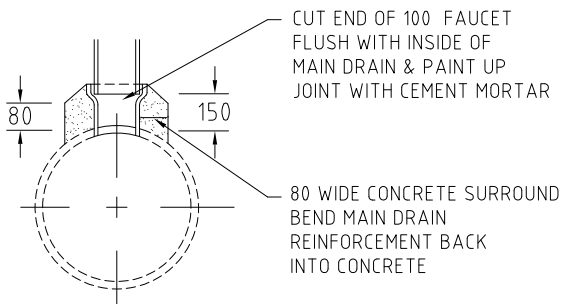
TYPE 'A' CONNECTION



100 DIA GRATE (UPVC)



TYPE 'B' CONNECTION



CONNECTION DETAIL TO DRAIN

NOTE:- ALL DIMENSIONS ARE IN MILLIMETRES



CITY OF DAREBIN

STANDARD PROPERTY DRAINAGE  
INLET CONNECTION TYPE A & B

DAREBIN ENGINEERING SERVICES

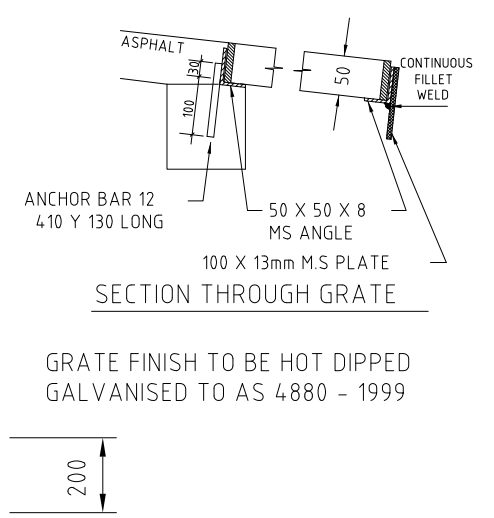
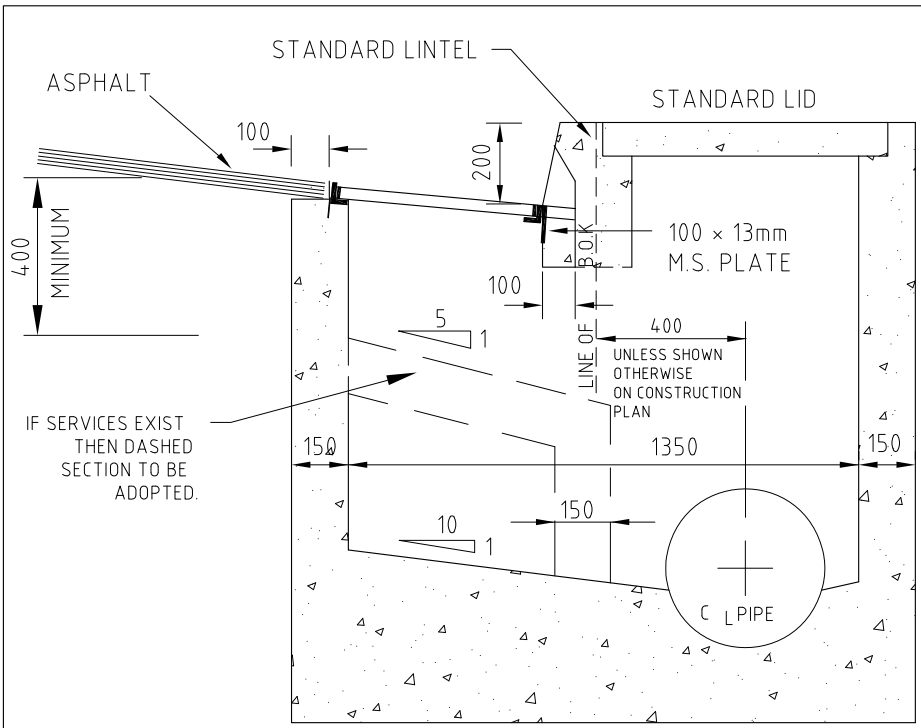
DRAWN PJM/JDS

DATE JUL 03

SCALE N.T.S

ACAD NAME DS15.DWG

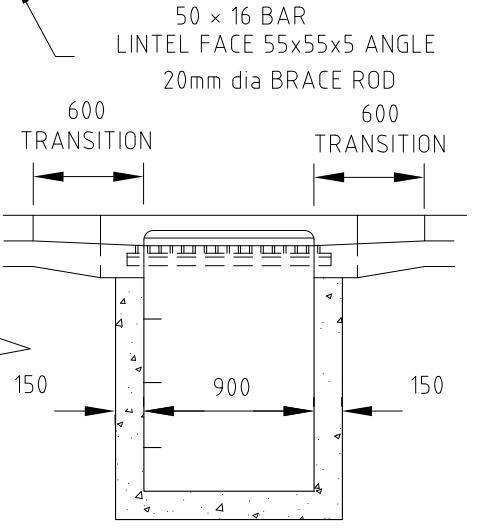
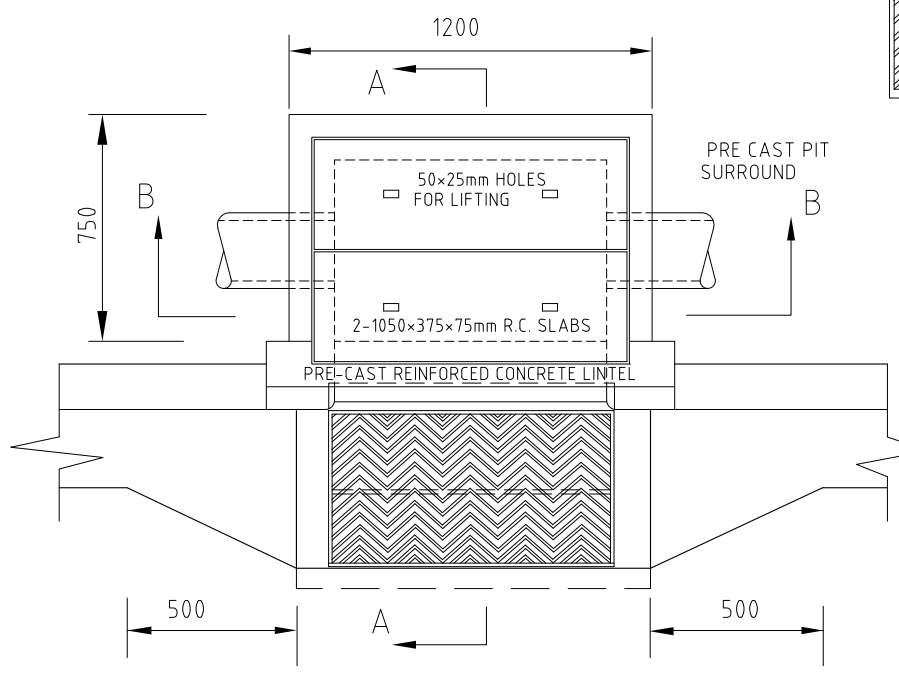
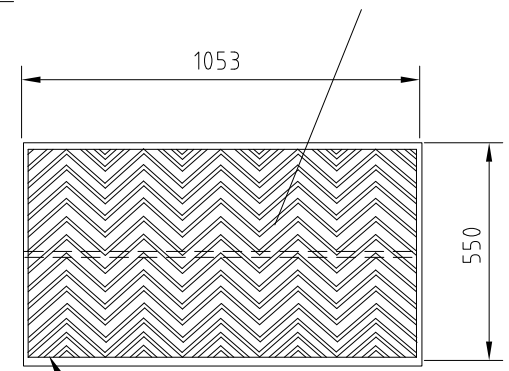
DWG No DS15



GRATE FINISH TO BE HOT DIPPED GALVANISED TO AS 4880 - 1999  
 WAVED TYPE GRATE CLASS 'D' LOADING TO AS 3996

NOTE ALL PITS GREATER THAN 1200mm IN DEPTH ARE TO BE FITTED WITH STEP IRONS 20mm M.S. ROD AT 300mm CENTRES( SEE DWG S4)

SECTION AA



GRATING TYPE 'C'

SECTION BB

DIMENSIONS ARE IN MILLIMETRES



**CITY OF DAREBIN**  
**STANDARD SIDE ENTRY PIT**  
**SAFETY GRATE TYPE C DETAIL**

DAREBIN ENGINEERING SERVICES

ACAD NAME	DS16.DWG
DWG No	DS16

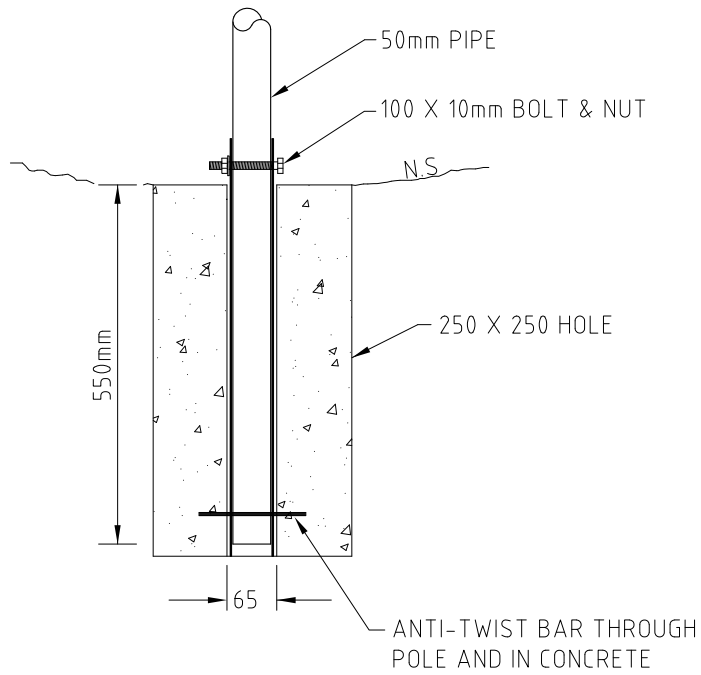
DRAWN	PJM
DATE	MAY17
SCALE	N.T.S

**TYPE 'A' FOOTINGS:**

- STOP / GIVEWAY SIGNS
- ROUND-A-BOUT SIGNS
- SPEED HUMP SIGNS
- PARKING SIGNS

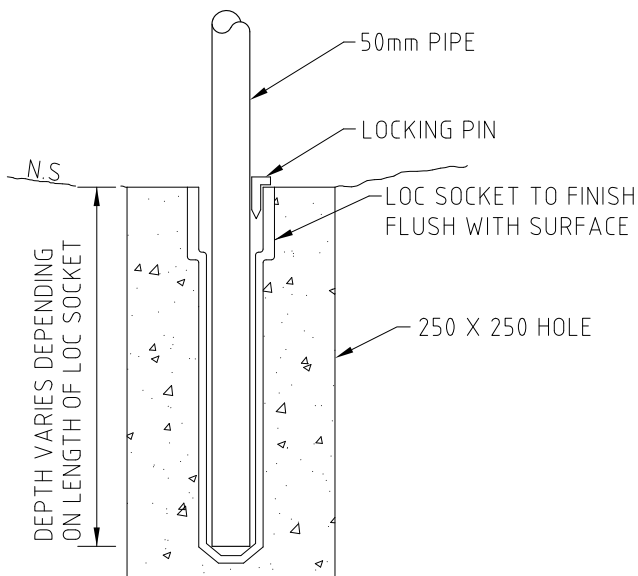
**TYPE 'B/C' FOOTINGS:**

- KEEP LEFT SIGNS
- HAZARD MARKERS



**TYPE 'A' FOOTING**

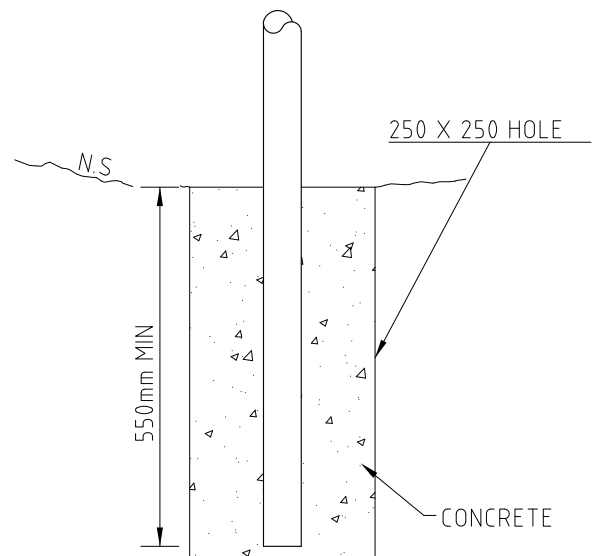
SCALE 1:10



**TYPE 'B' FOOTING**

SCALE 1:10

(CONCRETED OR PAVED AREAS)



**TYPE 'C' FOOTING**

SCALE 1:10

(NATURAL GROUND AREAS)



**CITY OF DAREBIN**

**SIGN FOOTING DETAILS**

DAREBIN ENGINEERING SERVICES

DRAWN JDS

DATE JUL 03

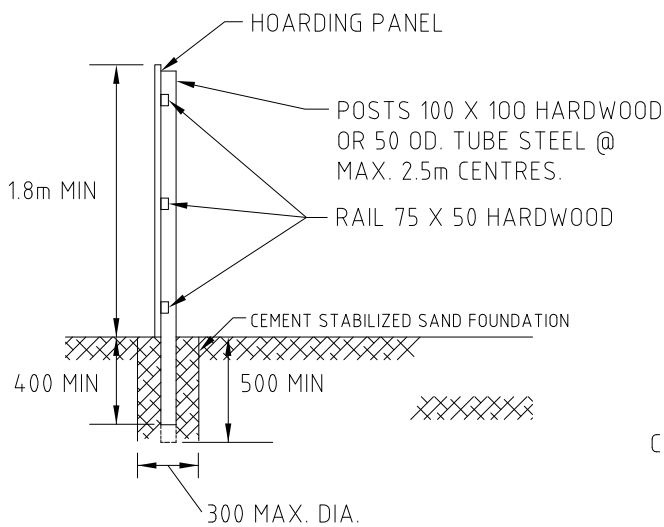
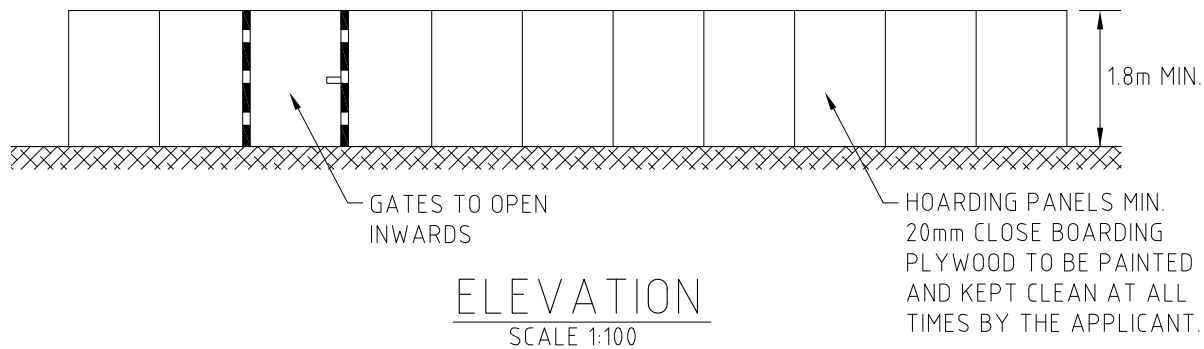
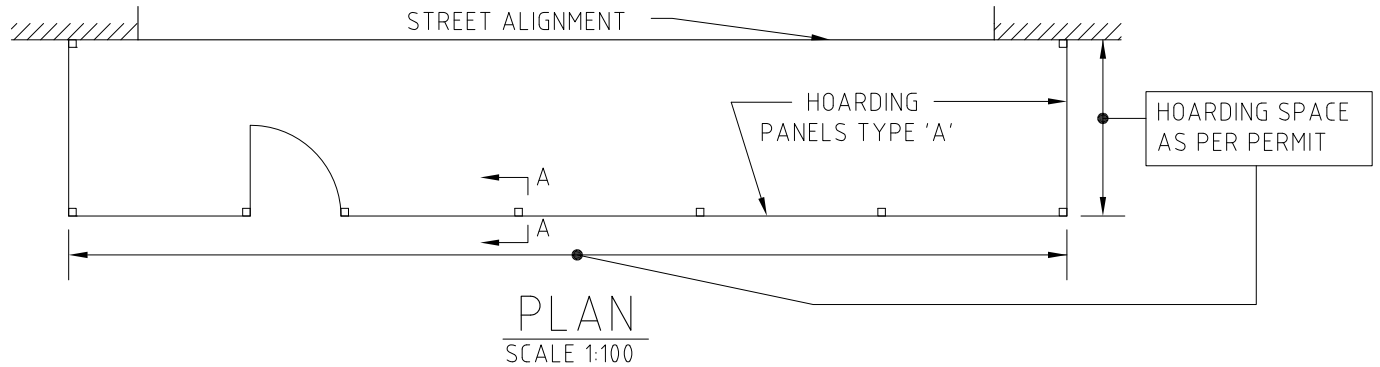
SCALE 1:10

ACAD NAME DS17.DWG

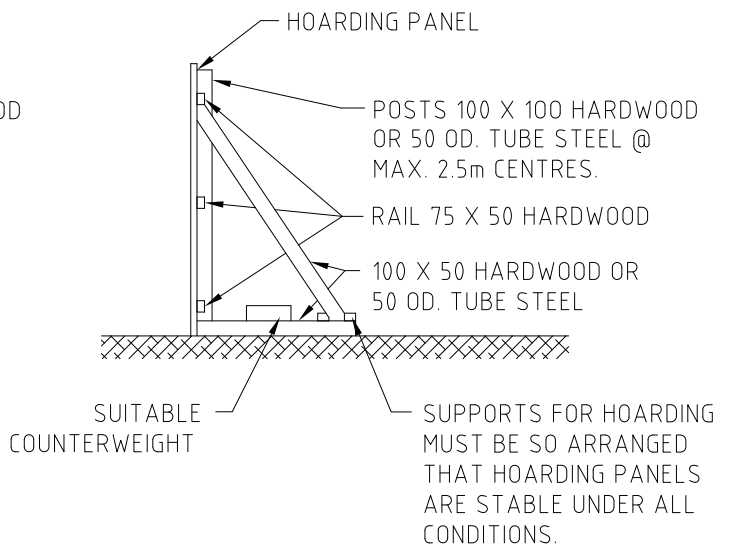
DWG No DS17

**NOTES:**

- BEFORE A HOARDING CAN BE ERECTED ON A STREET OR A ROADWAY A HOARDING PERMIT SHALL BE OBTAINED FROM THE PHYSICAL SERVICES DEPARTMENT
- A HOARDING THAT WILL REMAIN LONGER THAN 2 MONTHS MAY BE ERECTED USING POSTHOLES. A DRAWING SHOWING ALL SERVICES IN THE AREA WHERE POSTHOLES WILL BE USED WILL BE REQUIRED BEFORE A PERMIT WILL BE ISSUED.
- TIMBER USED TO BE AUSTRALIAN HARDWOOD OR OREGON OF NOT LESS THAN STRESS GRADE F.7.
- RED LIGHTS OR AMBER FLASHING LIGHTS WILL BE REQUIRED ON OUTER ANGLES AND AT A MAXIMUM OF 10m CENTRES FROM SUNSET TO SUNRISE
- DOORWAYS TO BUILDING ETC. STILL IN USE TO BE KEPT CLEAR OR HOARDED AROUND AS REQUIRED
- DAMAGED PORTIONS ARE TO BE REPAIRED AND/OR REPLACED IMMEDIATELY.
- PUBLIC AUTHORITY SERVICES LOCATION CALL 1100 BEFORE YOU DIG



**HOARDINGS WITH POSTHOLES**  
SCALE 1:50  
(TYPE 'A')



**HOARDINGS WITHOUT POSTHOLES**  
SCALE 1:50  
(TYPE 'B')

**TYPICAL SECTION A-A**



**CITY OF DAREBIN**

**HOARDING DETAIL**

DAREBIN ENGINEERING SERVICES

DRAWN JDS

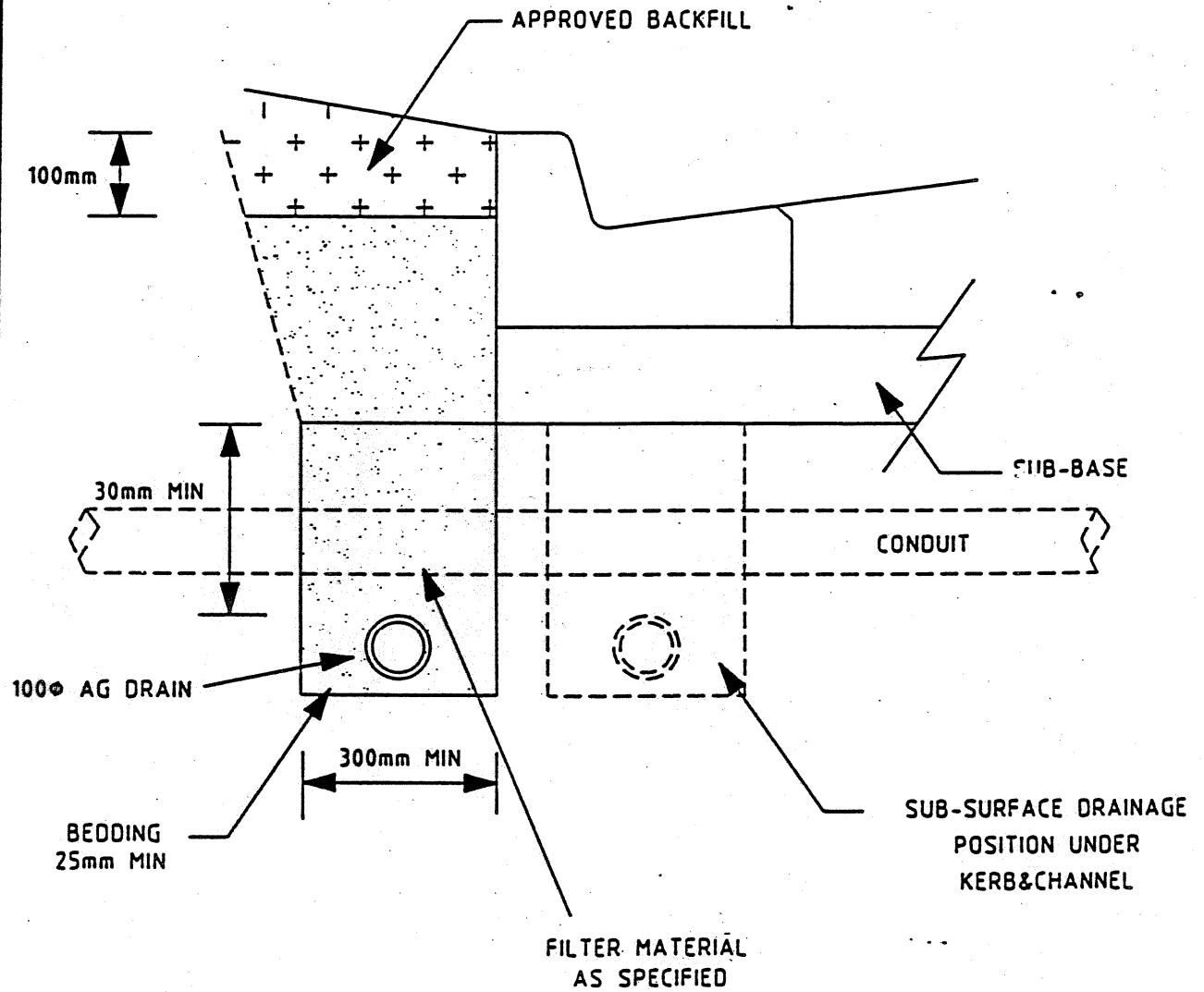
DATE JUL 03

SCALE 1:100

ACAD NAME DS18.DWG

DWG No DS18



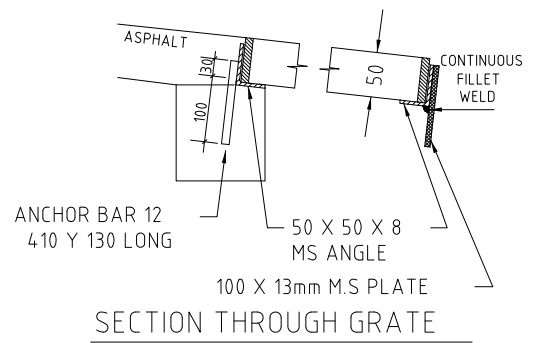
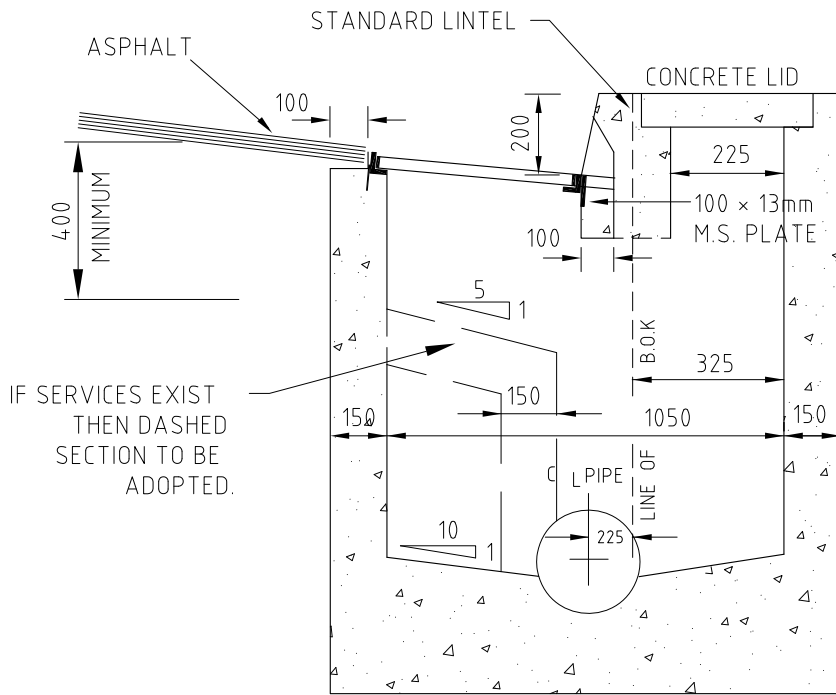


DESIGN CO-ORDINATOR PHYSICAL SERVICES	
ACAD NAME	DS19 DWG
DWG No	DS19

**CITY OF DAREBIN**

TYPICAL  
SUB-SURFACE DRAINAGE DETAIL

DESIGNED	PJM
DRAWN	PJM
DATE	NOV96
SCALE	1:10

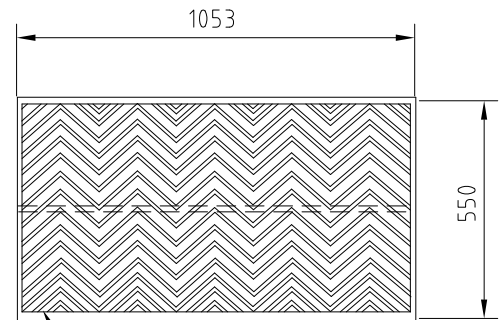


SECTION THROUGH GRATE

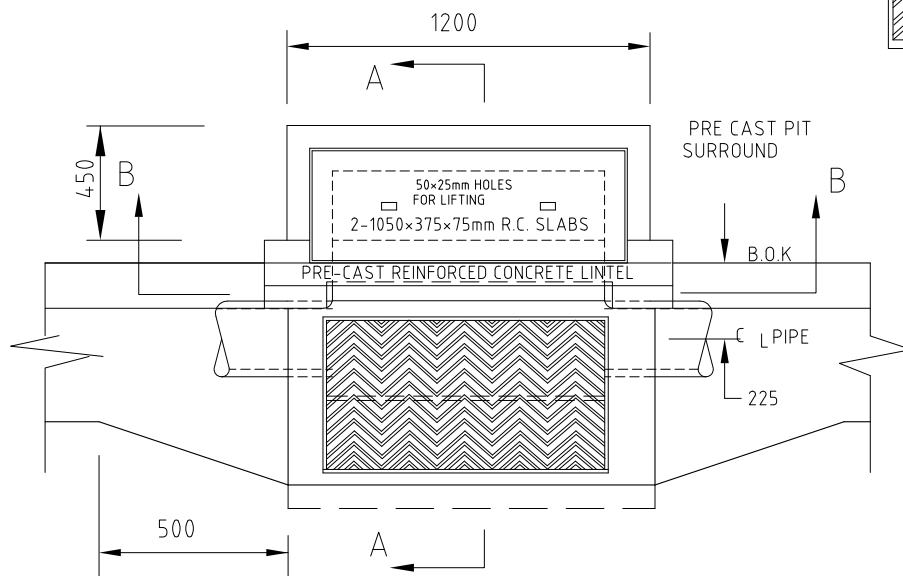
NOTE ALL PITS GREATER THAN 1200mm IN DEPTH ARE TO BE FITTED WITH STEP IRONS 20mm M.S. ROD AT 300mm CENTRES( SEE DWG S4)

SECTION AA

GRATE FINISH TO BE HOT DIPPED GALVANISED TO AS 4880 - 1999

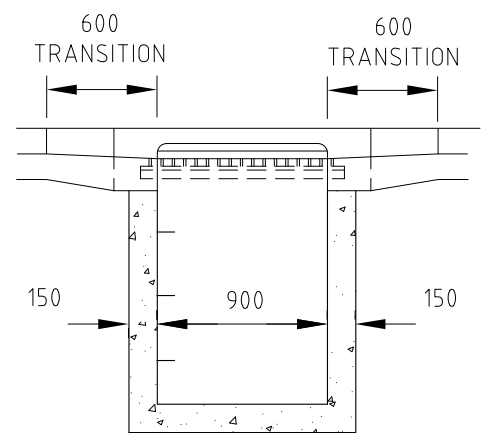


50 x 16 BAR  
LINTEL FACE 55x55x5 ANGLE  
20mm dia BRACE ROD



GRATING TYPE 'C'

DIMENSIONS ARE IN MILLIMETRES



SECTION BB



CITY OF DAREBIN

STANDARD SIDE ENTRY PIT  
SAFETY GRATE TYPE D DETAIL

ACAD NAME DS20.DWG

DWG No DS20

DRAWN

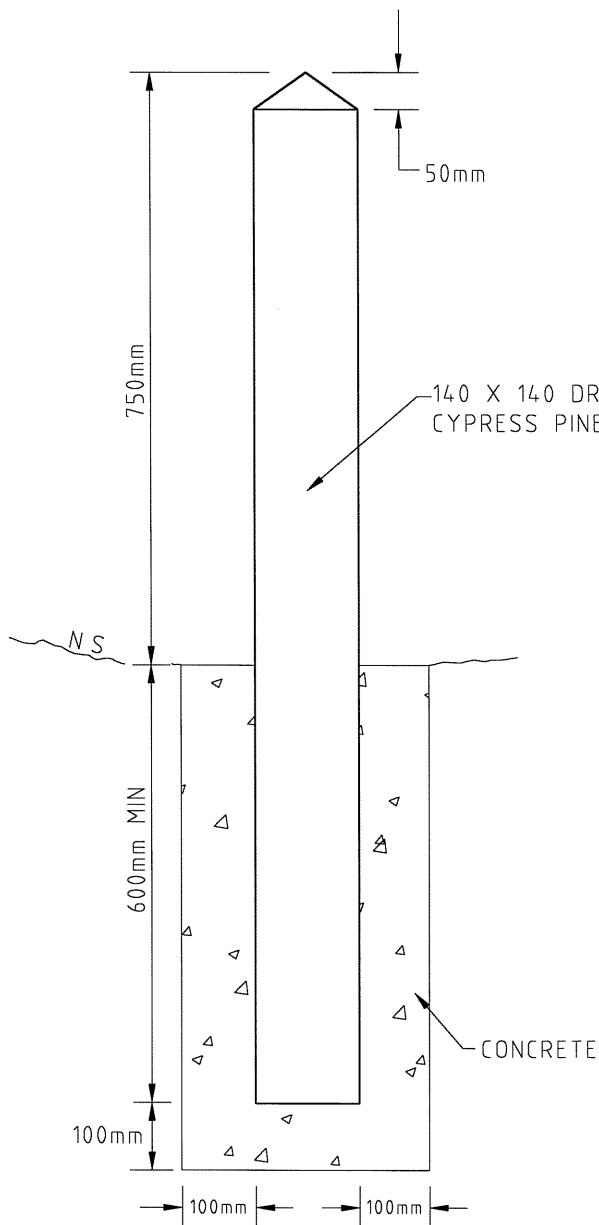
PJM

DATE

MAY17

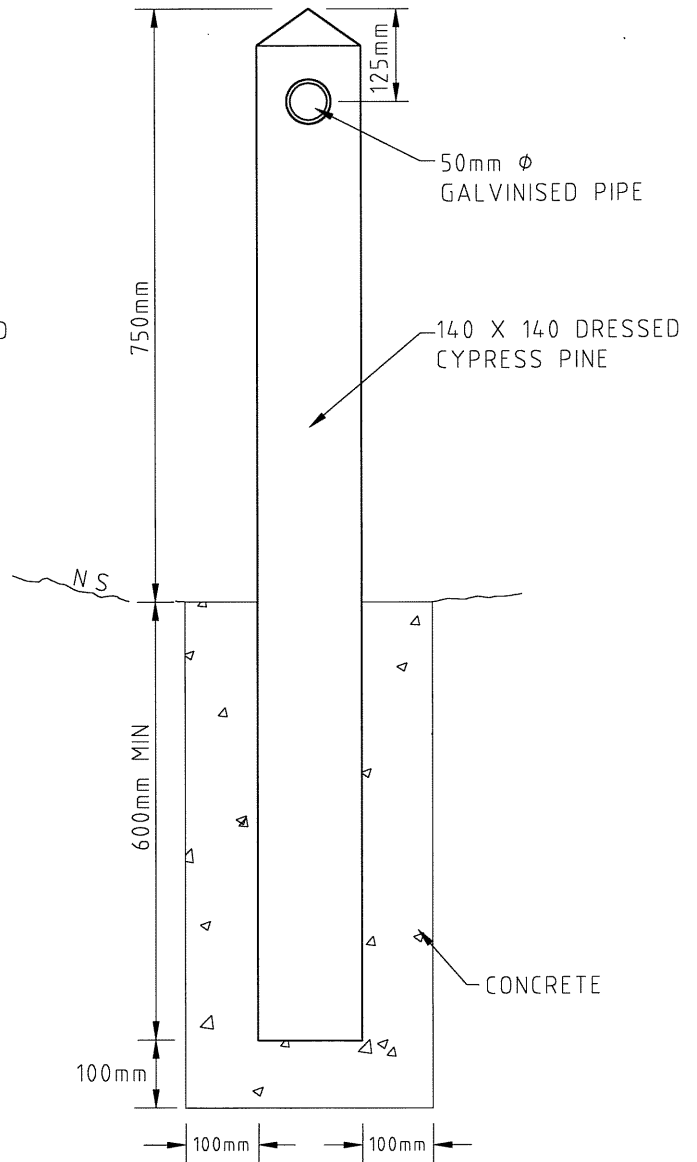
SCALE

1:20



TYPE 'A' BOLLARD

SCALE 1:10



TYPE 'B' BOLLARD

SCALE 1:10

CITY OF DAREBIN

BOLLARD DETAILS

*C. Newell*  
MANAGER CIVIC WORKS

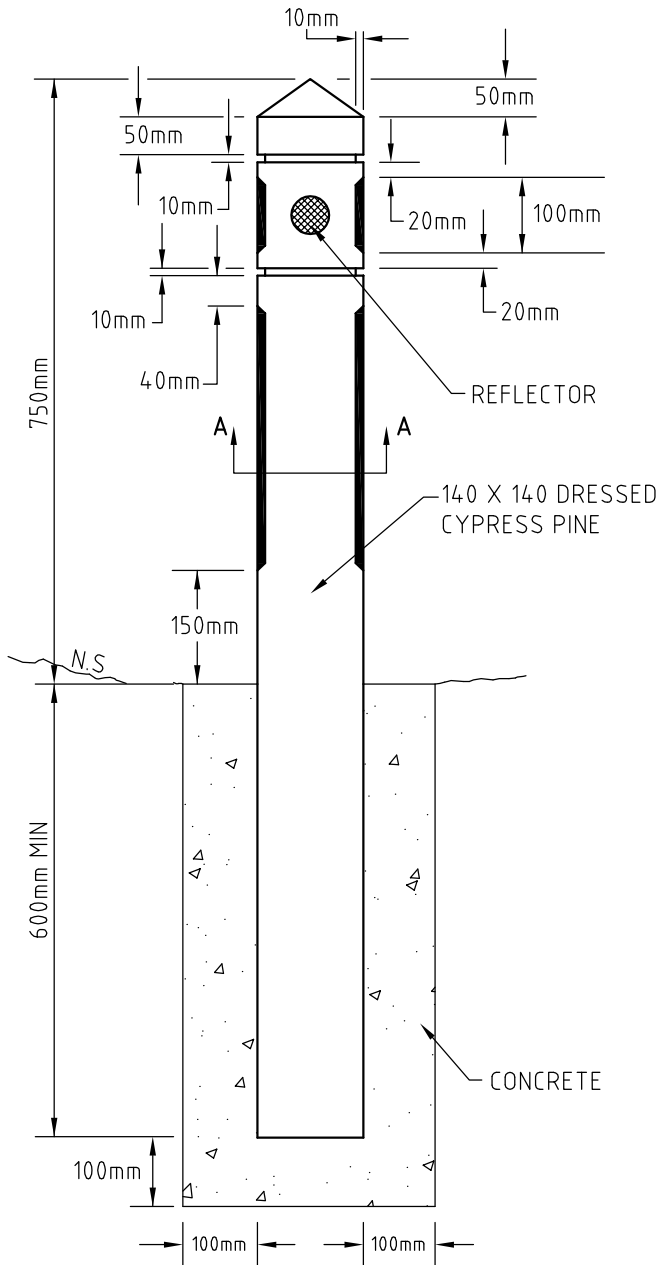
DESIGNED JDS

DATE SEP'97

SCALE 1:10

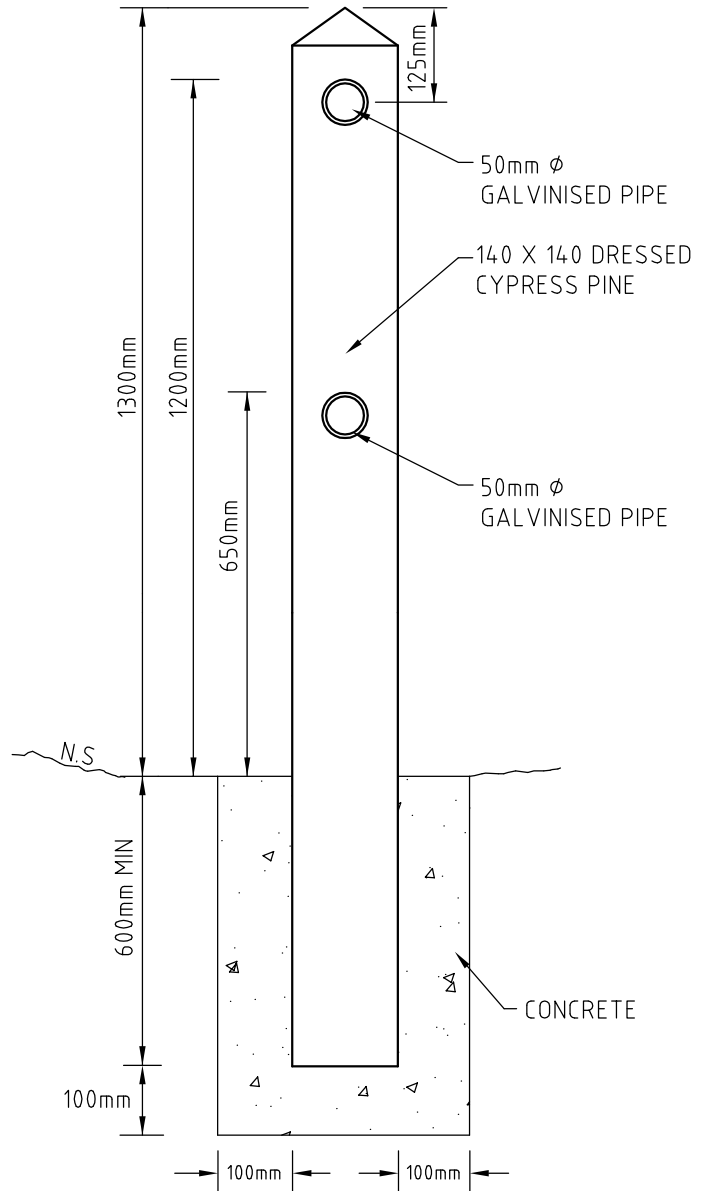
ACAD NAME DS17 DWG

DWG No DS21



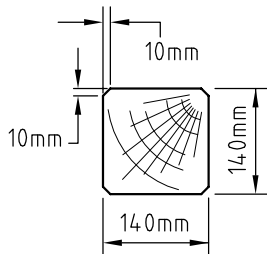
TYPE 'C' BOLLARD

SCALE 1:10



TYPE 'D' BOLLARD

NTS



SECTION A-A

SCALE 1:10



CITY OF DAREBIN

BOLLARD DETAILS

DAREBIN ENGINEERING SERVICES

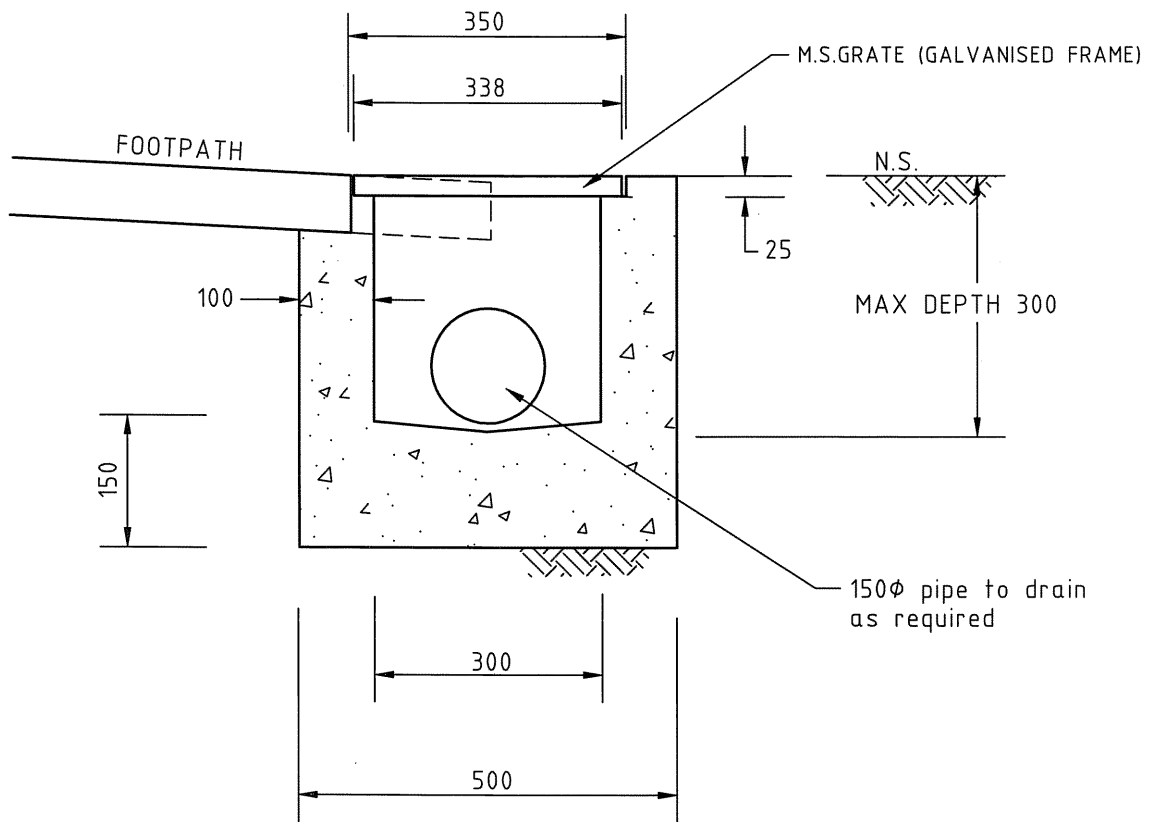
DRAWN JDS

DATE NOV11

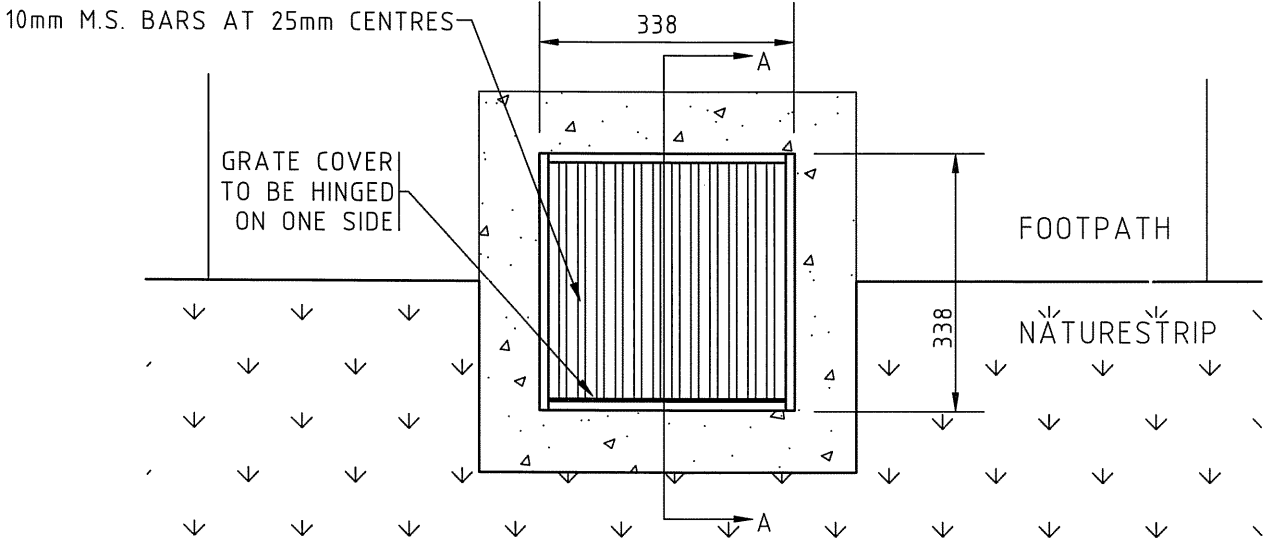
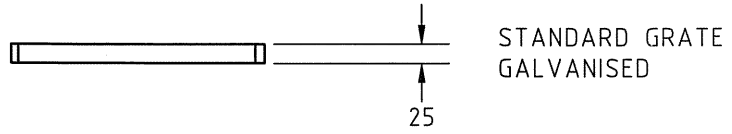
SCALE 1:10

ACAD NAME DS22.DWG

DWG No DS22



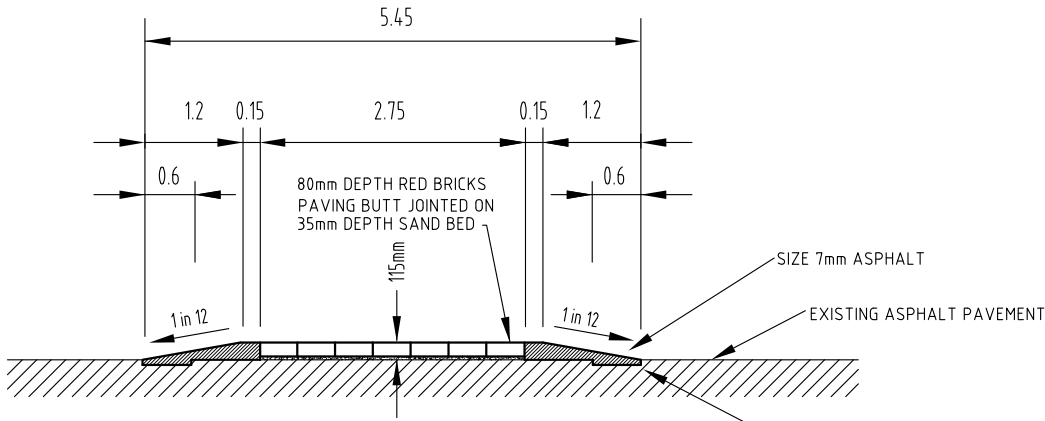
SECTION A-A



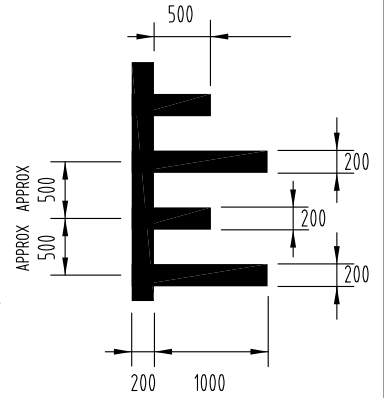
CITY OF DAREBIN  
STANDARD  
GRATING PIT TYPE E

<i>G. Howden</i> DAREBIN ENGINEERING SERVICES	
DRAWN	JDS
DATE	SEP'99
SCALE	1:10

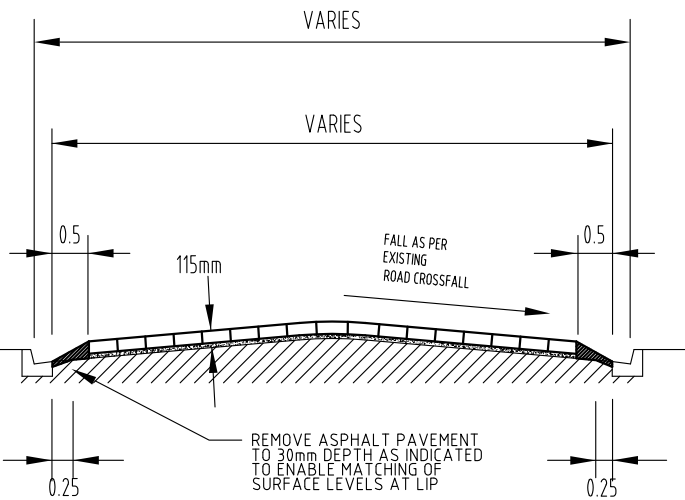
ACAD NAME	DS12.DWG
DWG No	DS23



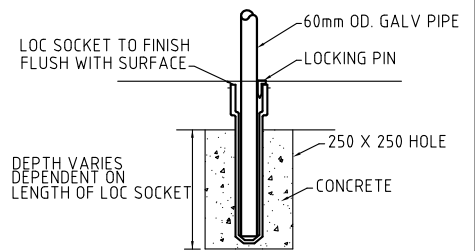
**SECTION AA**  
NOT TO SCALE



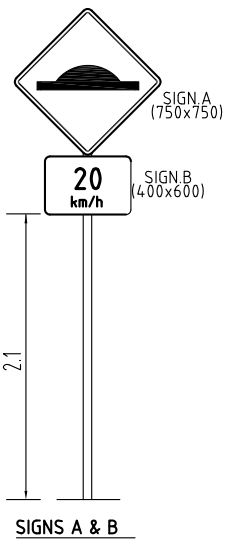
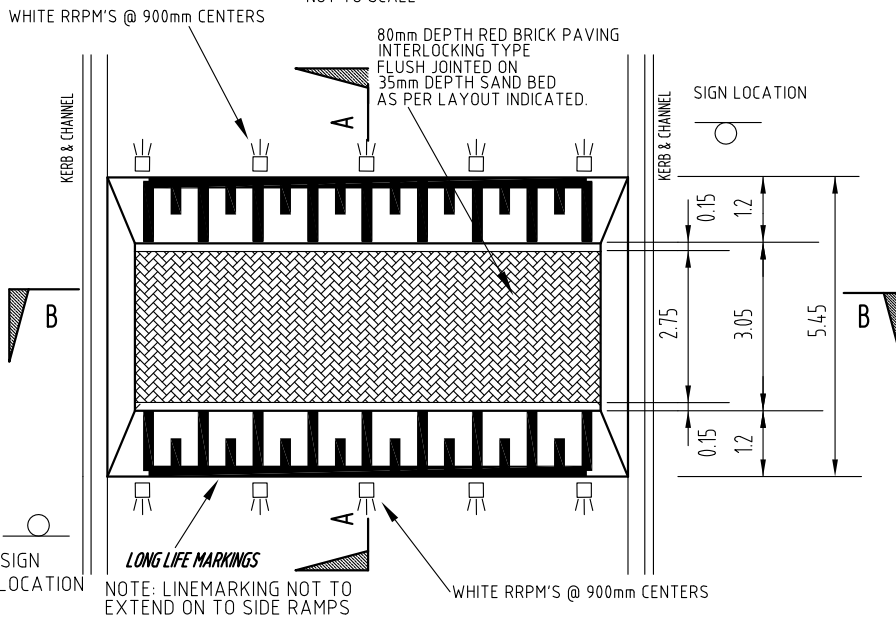
**SPEED HUMP  
LINEMARKING DETAIL**



**SECTION BB**  
NOT TO SCALE



**SIGN FOOTING DETAIL**  
NOT TO SCALE



**SIGNS A & B**

NOTE: 65mm OD GALV. STEEL PIPE POSTS TYPICAL.

**SIGN LEGEND**  
NOT TO SCALE



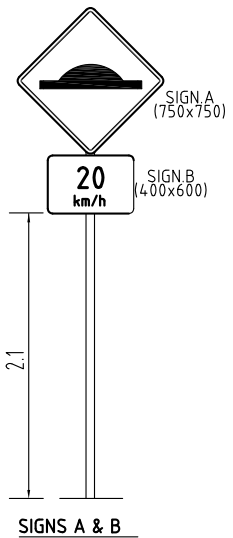
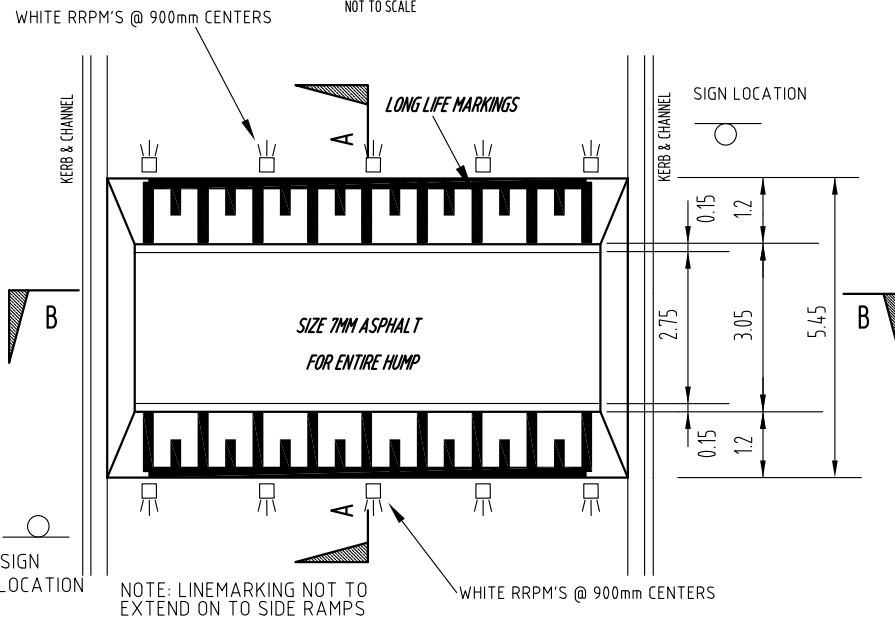
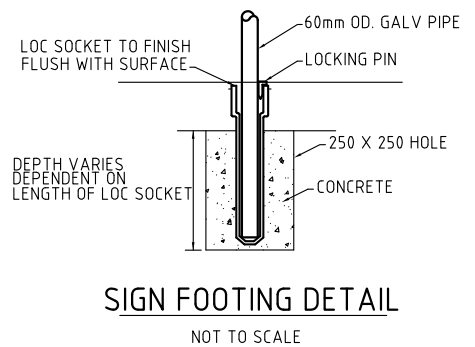
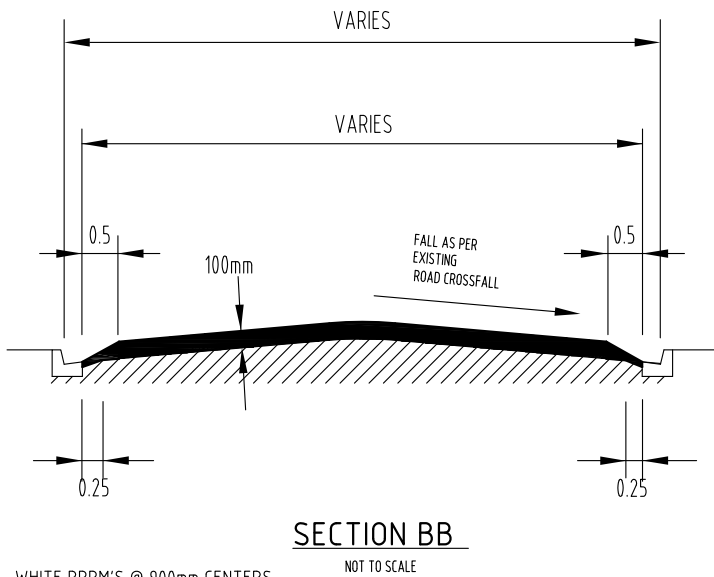
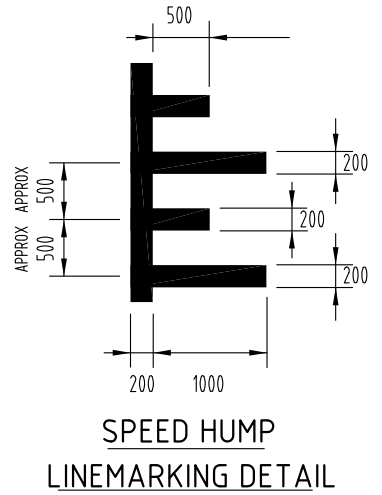
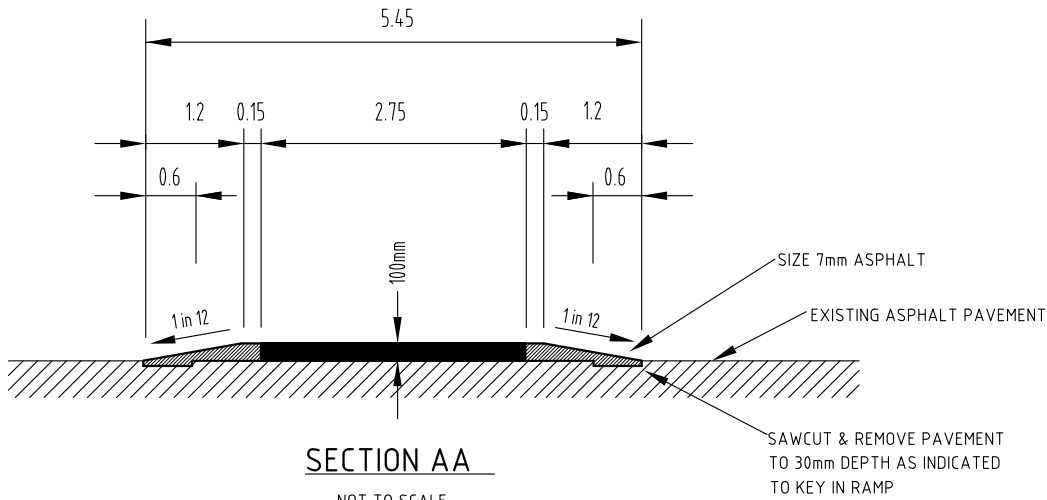
**CITY OF DAREBIN**

**PAVED FLAT TOP ROAD HUMPS**

DAREBIN ENGINEERING SERVICES

ACAD NAME	DS24.DWG
DWG No	DS24

DRAWN	RWK
DATE	DEC11
SCALE	N.T.S



NOTE: 65mm OD GALV. STEEL PIPE POSTS TYPICAL.

**SIGN LEGEND**  
NOT TO SCALE



**CITY OF DAREBIN**

**ASPHALT FLAT TOP ROAD HUMP**

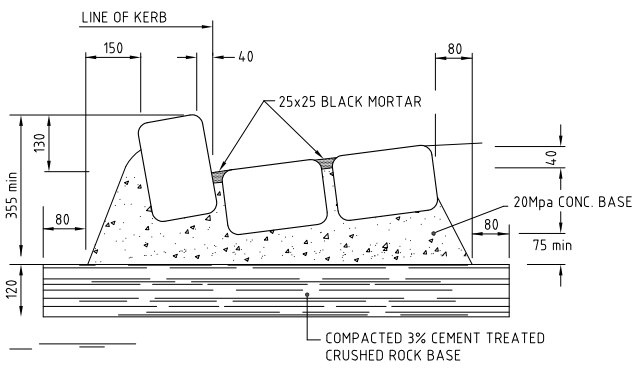
ACAD NAME	DS25.DWG
DWG No	DS25

DAREBIN ENGINEERING SERVICES

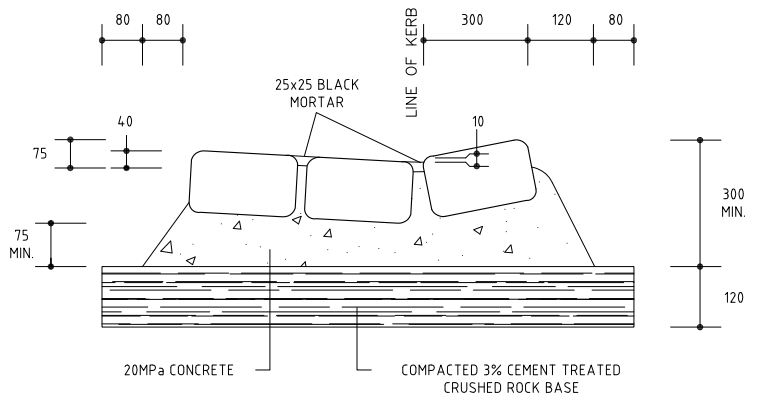
DRAWN RWK

DATE DEC11

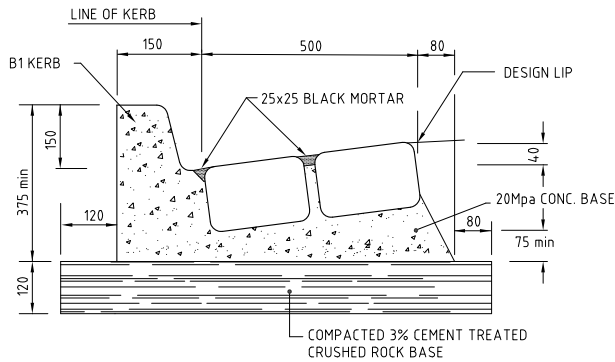
SCALE N.T.S



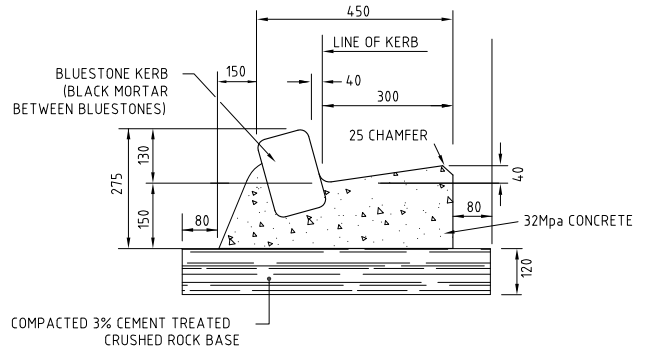
**BLUESTONE KERB  
AND TWO PITCHER TRAY**  
N.T.S



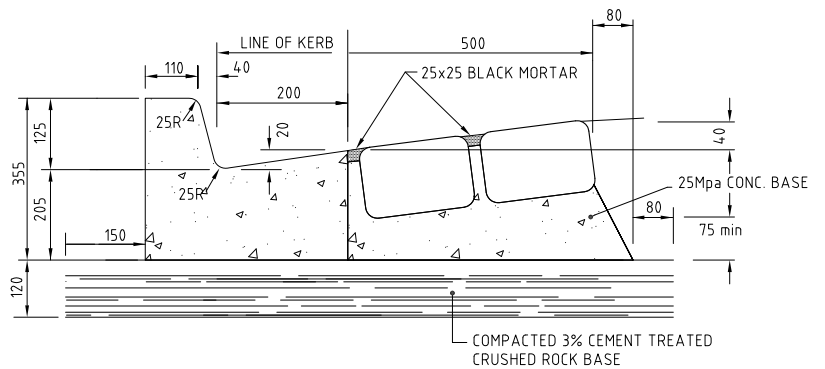
**MOUNTABLE KERB**  
TO BE USED FOR VEHICLE CROSSINGS



**CONCRETE KERB & TWO  
PITCHER BLUESTONE TRAY**  
N.T.S



**BLUESTONE KERB AND CHARCOAL  
COLOURED CONCRETE CHANNEL**  
N.T.S



**850mm WIDE CONCRETE KERB & SHORT  
CHANNEL WITH TWO PITCHER TRAY**  
N.T.S

**COLOURED CONCRETE:**

ABILOX-CAF-X2  
1 x 25kg bag per  
2 cub.m (4.15%)



**CITY OF DAREBIN**

**STANDARD BLUESTONE KERB TYPES**

ACAD NAME DS26.DWG

DWG No DS26

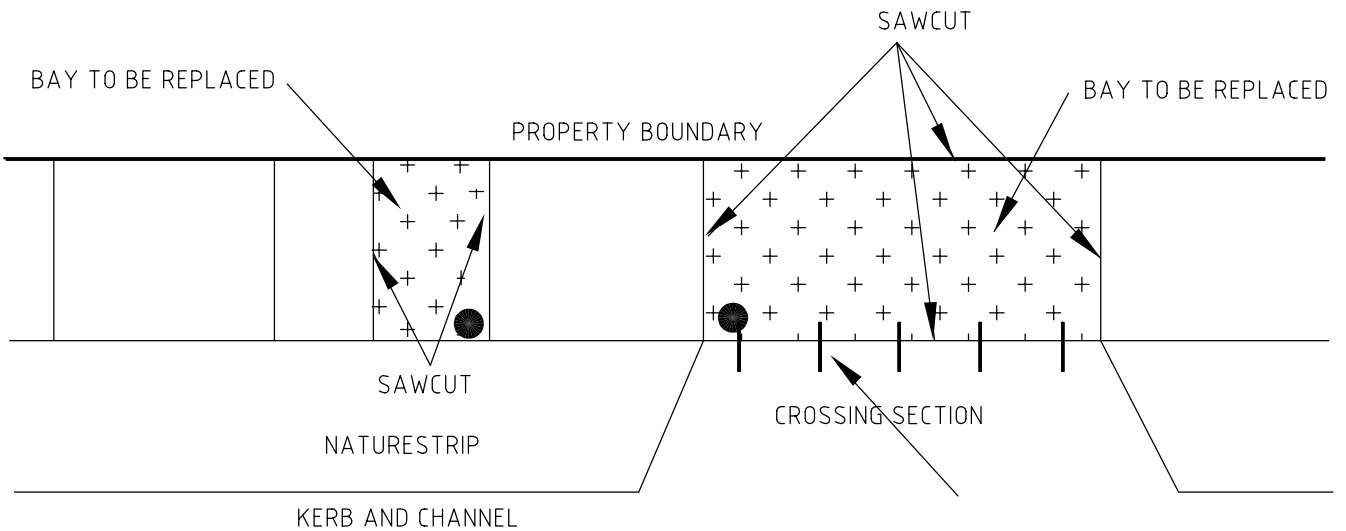
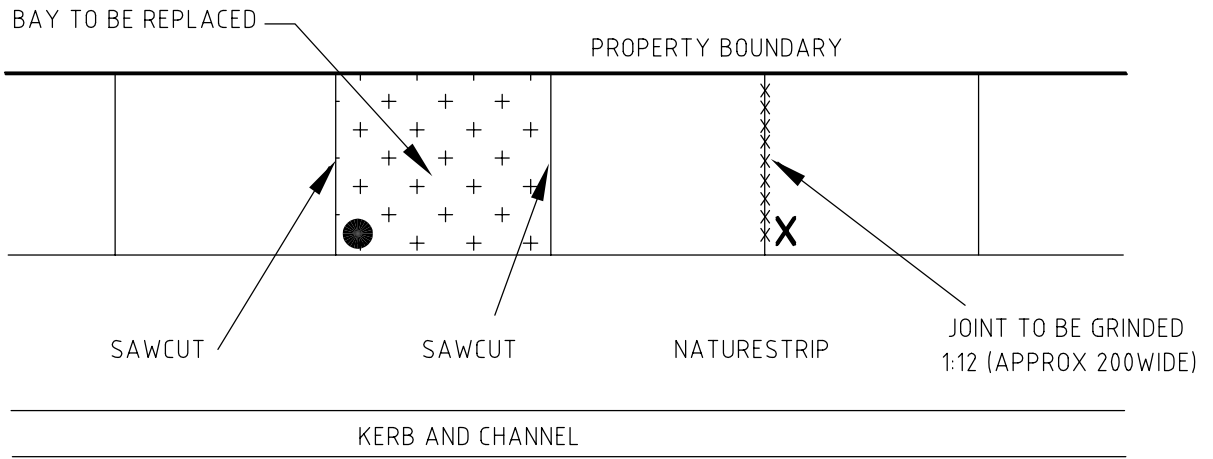
DAREBIN ENGINEERING SERVICES

DRAWN JDS

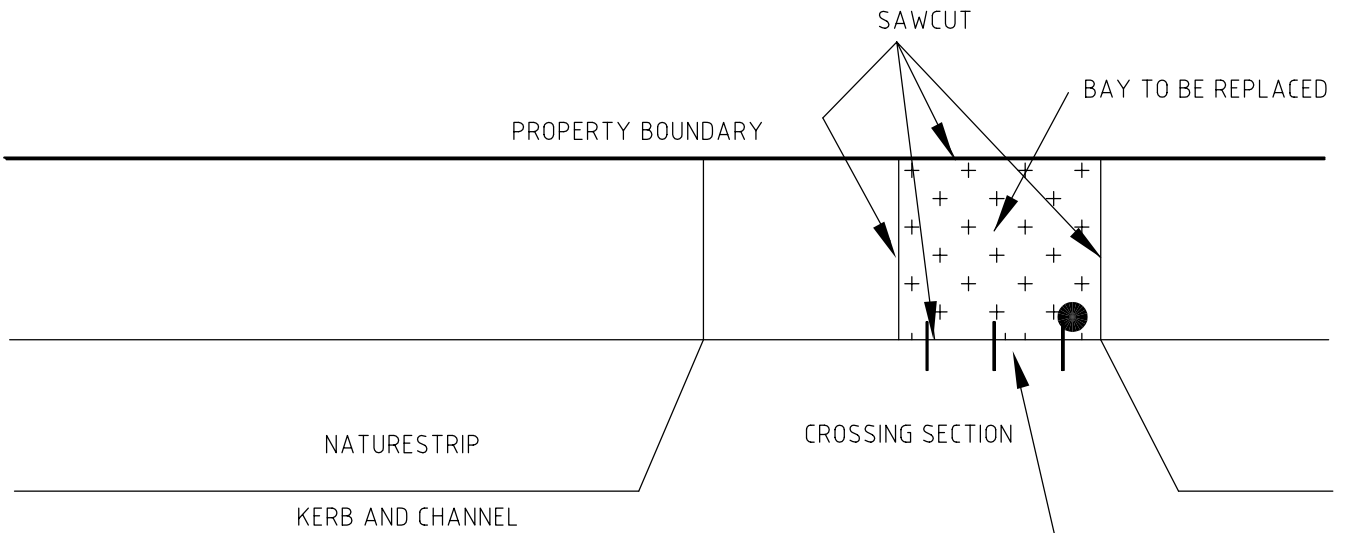
DATE AUG12

SCALE N.T.S





12MM DIA DOWELS AT 500 MAX CENTRES  
AS PER DS4



12MM DIA DOWELS AT 500 MAX CENTRES  
AS PER DS4



# CITY OF DAREBIN

## STANDARD FOOTPATH & CROSSING REPLACEMENT AND GRINDING WORKS

DAREBIN ENGINEERING SERVICES

DRAWN PJM

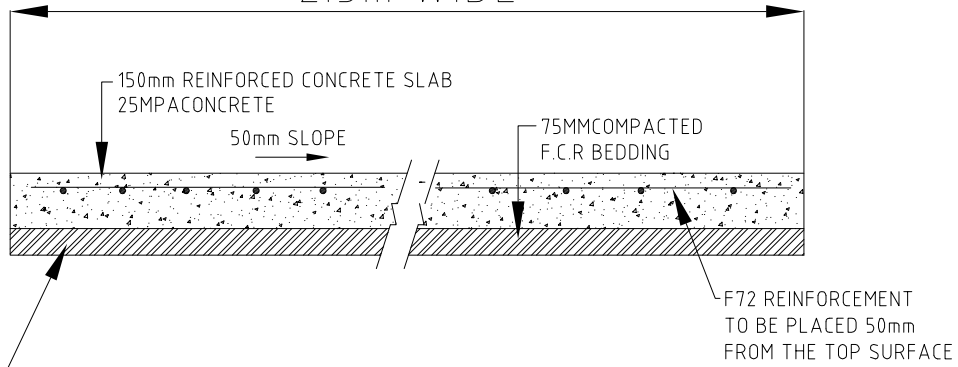
DATE JUL 03

SCALE N.T.S

ACAD NAME DS27.DWG

DWG No DS27

2.5m WIDE

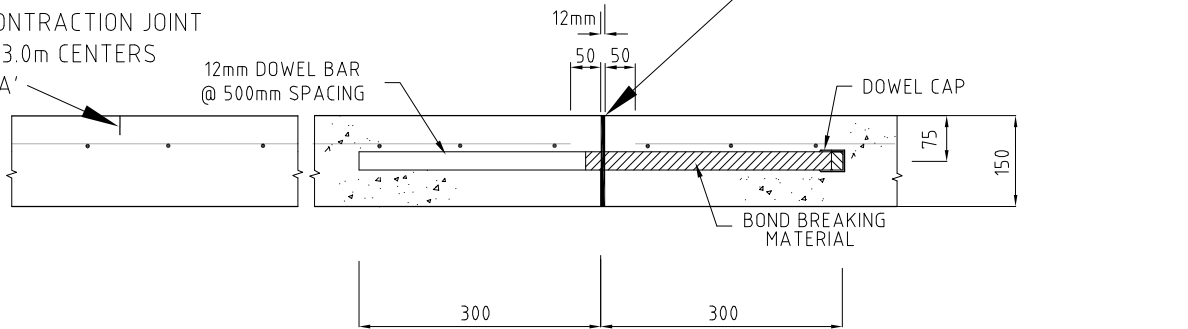


PATH CROSS SECTION

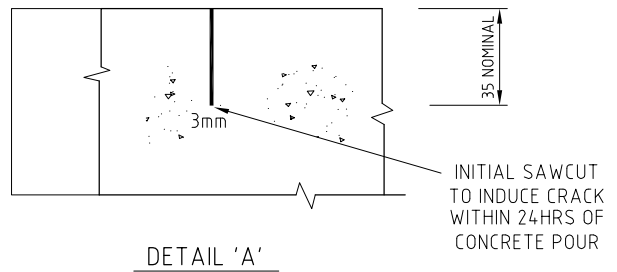
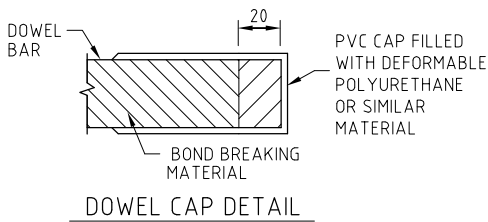
N.T.S

VEHICLE CROSSING LOCATIONS TO BE THICKENED TO 200mm WITH F72 MESH TOP AND BOTTOM WITH 50mm COVER

SAWN CONTRACTION JOINT AT MAX 3.0m CENTERS  
DETAIL 'A'

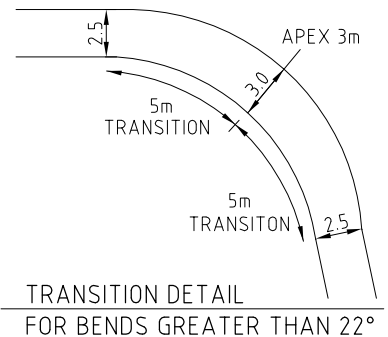


DOWELLED EXPANSION JOINT AT 12.0m CENTRES (MAX)



NOTES:

1. CONSTRUCTION/EXPANSION JOINTS AT 12.0m CENTERS
2. WITHIN 24HOURS OF CONCRETE POUR, SAWCUTTING AT 3.0m CENTERS TO BE MINIMUM 35mm DEEP STRAIGHT ACROSS PATH.
3. PATH IS TO BE BROOM FINISHED ACROSS PATH.
4. 150mm CONCRETE SLAB (25Mpa CONCRETE) REINFORCED WITH F72 REINFORCEMENT
5. SUBGRADE TO BE STRIPPED OF TOPSOIL AND SOFT SPOTS, THEN COMPACTED PRIOR TO PLACEMENT OF 75MM FCR BEDDING
6. AT BENDS GREATER THAN 22° PATH TO BE GRADUALLY INCREASED TO 3m WIDE AT APEX OF CURVE OVER 5m



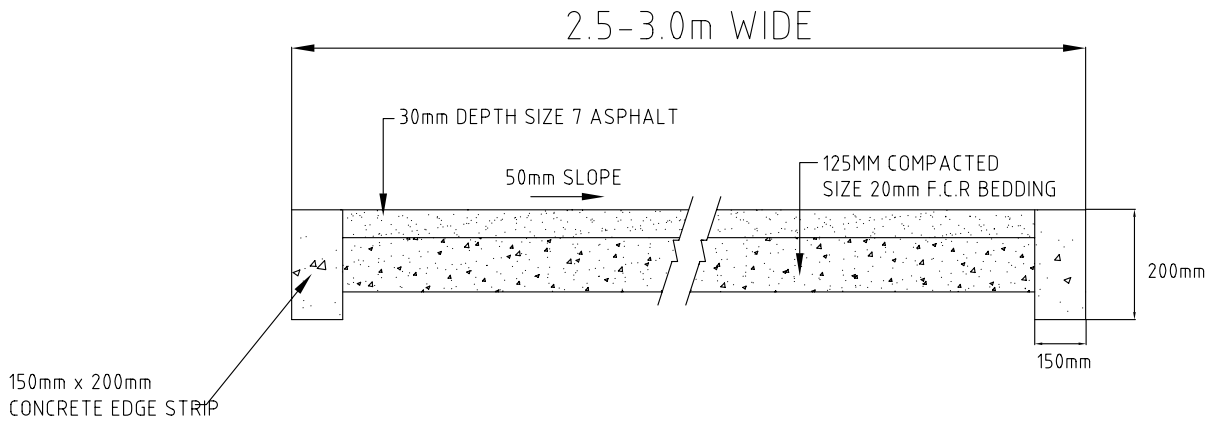
CITY OF DAREBIN

STANDARD CONCRETE BICYCLE PATH DETAIL

DAREBIN ENGINEERING SERVICES

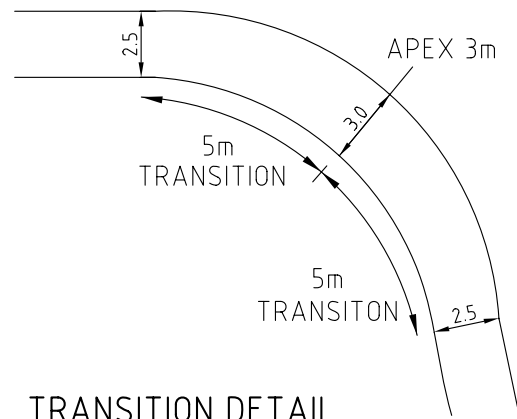
DRAWN	SFL
DATE	MAR 07
SCALE	N.T.S

ACAD NAME	DS28.DWG
DWG No	DS28



### ASPHALT PATH CROSS SECTION

N.T.S



### TRANSITION DETAIL FOR BENDS GREATER THAN 22°

NOTES:

1. SUBGRADE TO BE STRIPPED OF TOPSOIL AND SOFT SPOTS, THEN COMPACTED PRIOR TO PLACEMENT OF 125MM FCR BEDDING
2. AT BENDS GREATER THAN 22° PATH TO BE GRADUALLY INCREASED TO 3m WIDE AT APEX OF CURVE OVER 5m



CITY OF DAREBIN

## STANDARD ASPHALT BICYCLE PATH DETAIL

DAREBIN ENGINEERING SERVICES

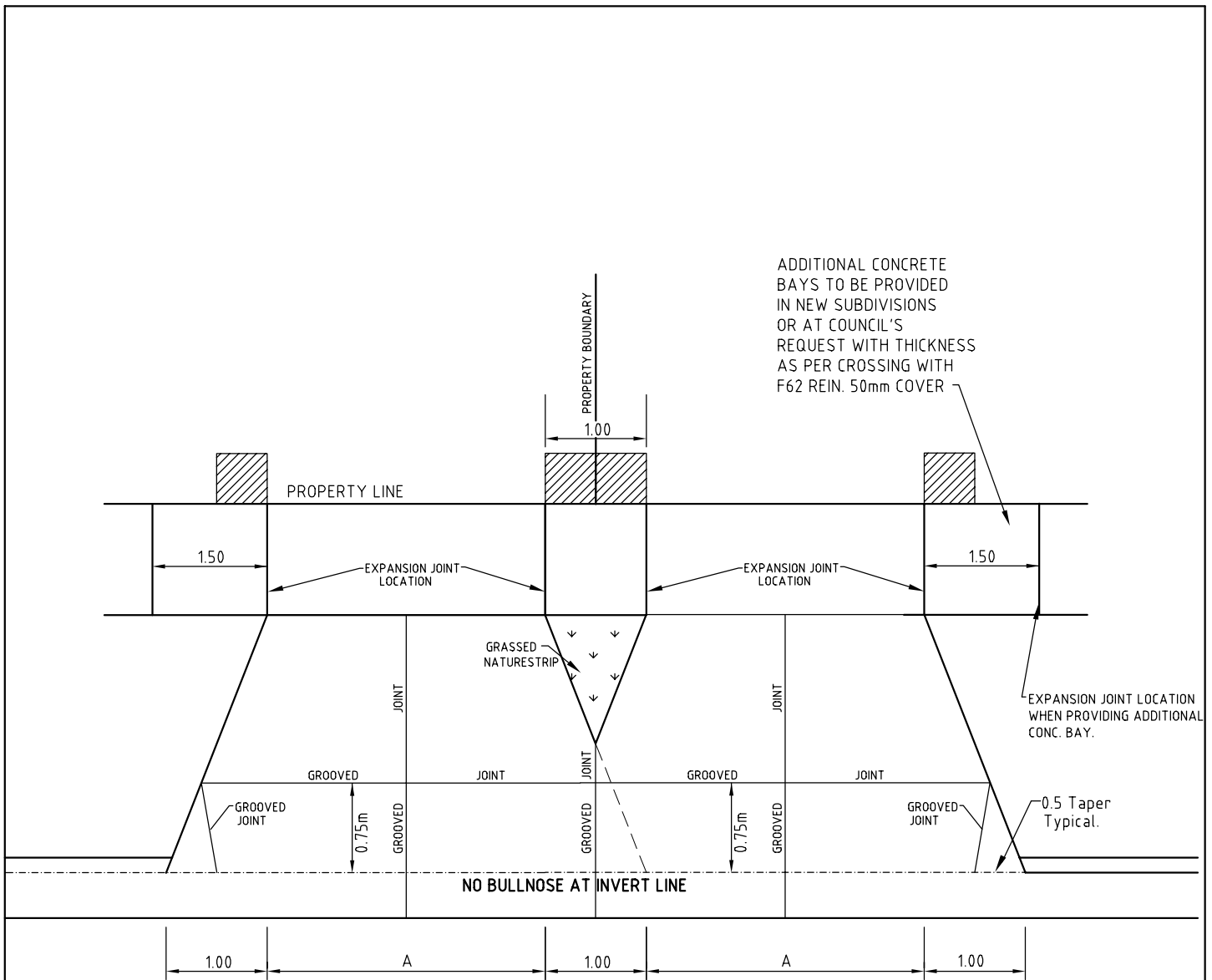
DRAWN AM

DATE AUG07

SCALE N.T.S

ACAD NAME DS28.DWG

DWG No DS28B



**PLAN**

SCALE 1:50

**NOTES:**

1. MIN A = 3.00 RESIDENTIAL STREETS (MAX 4.50)\*
2. MIN A = 4.50 INDUSTRIAL CROSSING & RESIDENTIAL CROSSINGS ON MAIN ROADS (MAX 6.00)\*
- 3.\* COUNCIL APPROVAL REQUIRED FOR WIDTHS GREATER THAN MAXIMUM
4. REFER TO STANDARD DS4 FOR SECTION AND REINFORCEMENT DETAILS

**\*NOTE**

CROSSINGS ARE NOT TO BE LOCATED WITHIN 9.00m OF AN INTERSECTION.



CITY OF DAREBIN

**STANDARD CONCRETE  
VEHICULAR DOUBLE CROSSING**

DAREBIN ENGINEERING SERVICES

DRAWN AK

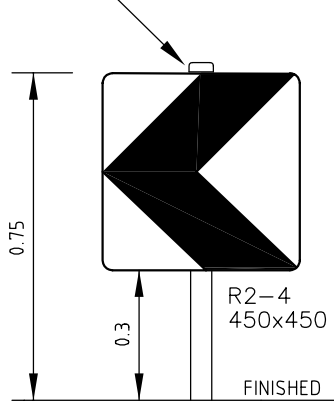
DATE JUL 03

SCALE 1:50

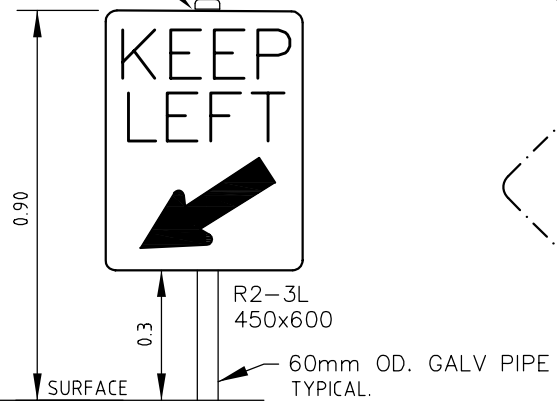
ACAD NAME DS29.DWG

DWG No DS29

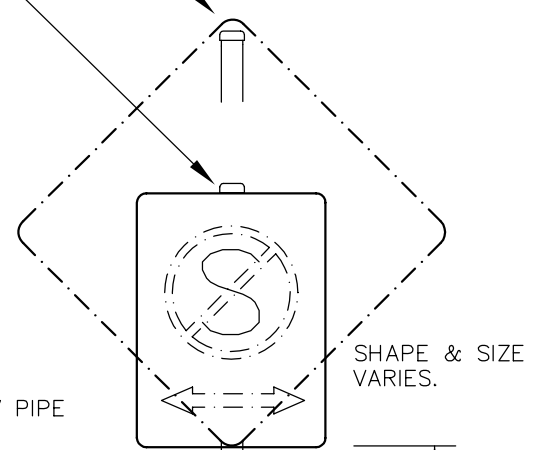
BASE OF GALV. STEEL CAP TO BE LEVEL WITH TOP OF SIGN.  
 ( EXCEPT FOR DIAGONAL TOPPED SIGN WHERE CAP TO BE CONCEALED  
 BEHIND THE SIGN AS SHOWN TO PROVIDE NEAT APPEARANCE. )



HAZARD MARKER SIGN



KEEP-LEFT SIGN



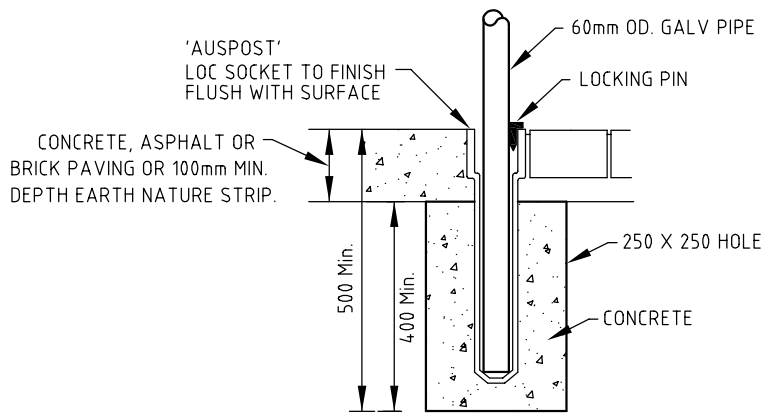
REGULATORY,  
 ADVISORY & PARKING SIGNS.

LOW SIGNS ON TRAFFIC ISLANDS  
 & ROUNDABOUTS

NOT TO SCALE

60mm OD. GALV PIPE  
 TYPICAL.

2.1  
 TYPICAL UNLESS INDICATED OTHERWISE.



TYPICAL FOOTING DETAIL

NOT TO SCALE

STANDARD HEIGHT SIGNS

NOT TO SCALE

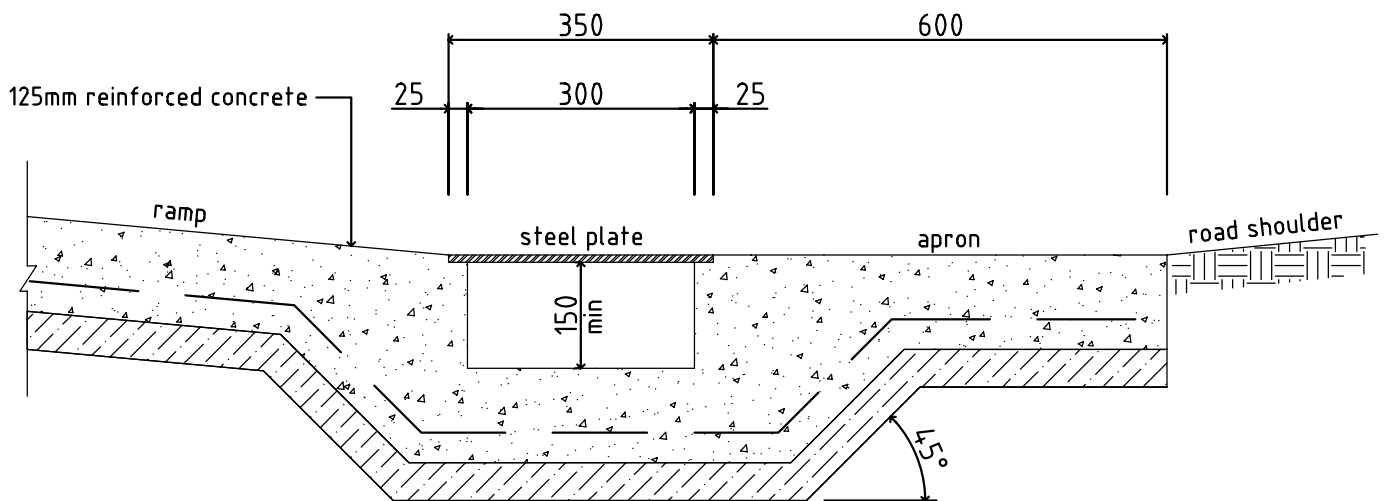
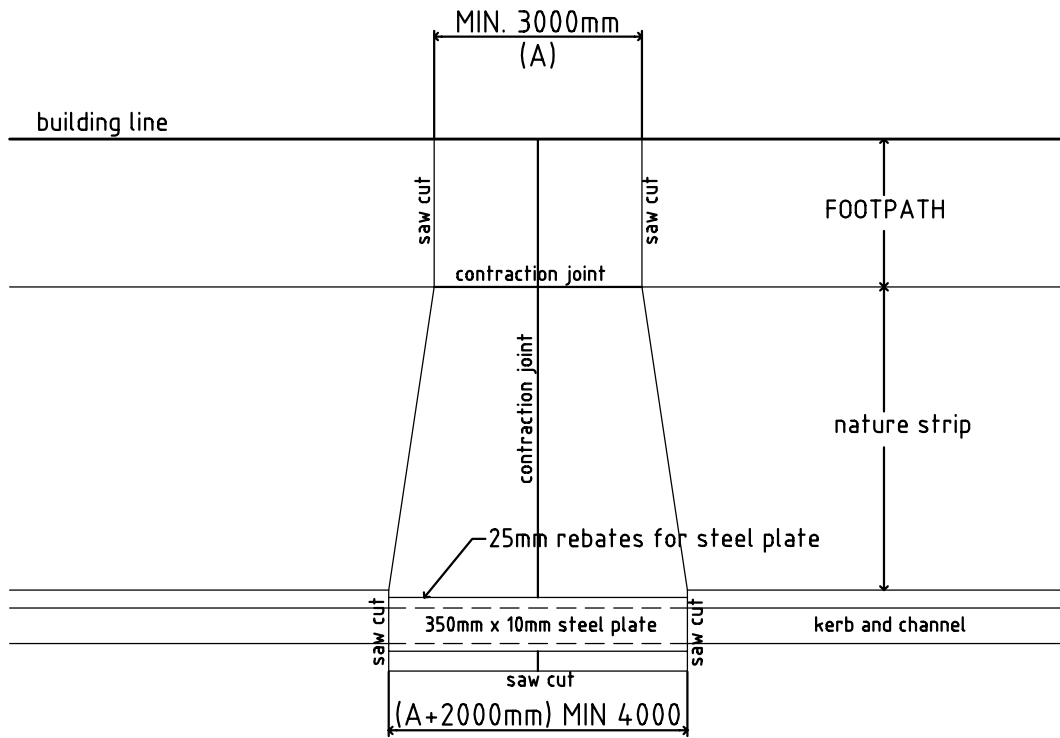


CITY OF DAREBIN  
 TRAFFIC & PARKING SIGN  
 INSTALLATION DETAILS

DAREBIN ENGINEERING SERVICES

ACAD NAME	DS30.DWG
DWG No	DS30

DRAWN	RWK
DATE	JUL 03
SCALE	NTS



TYPICAL SECTION

NOTES:

1. GRADE ON APRON AND RAMP TO SUIT WATERWAY BUT NOT TO EXCEED 1 IN 7.
2. STEEL CULVERT PLATE SHALL BE BEDDED SO THAT THERE IS NO RATTLING OR UNEVEN CONTACT BETWEEN THE PLATE AND THE CONCRETE.
3. REINFORCEMENT TO CONSIST OF F62 FABRIC OR APPROVED EQUIVALENT PLACED 40mm ABOVE BOTTOM OF CONCRETE SLAB.
4. CONCRETE TO BE 25 Mpa MINIMUM 28 DAY STRENGTH USING 20mm GRADED SCREENINGS.
5. SURFACE TO BE TROWELLED TO A MATT DENSE FINISH.

DIMENSIONS ARE IN MILLIMETRES



CITY OF DAREBIN

CULVERT CROSSING

DAREBIN ENGINEERING SERVICES

DRAWN GJL

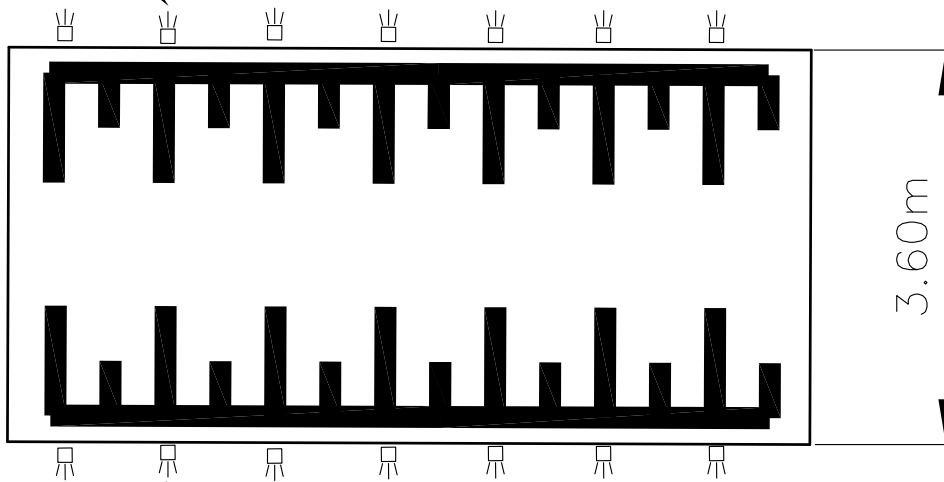
DATE SEPT.'05

SCALE 1:10

ACAD NAME DS31.DWG

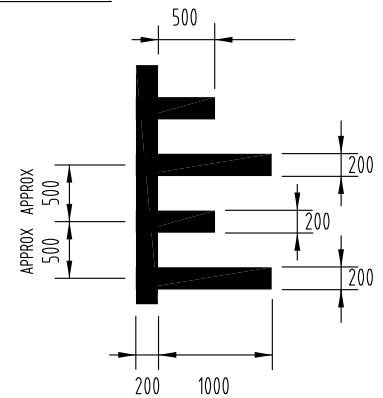
DWG No DS31

WHITE RRPM'S @ 900mm CENTERS

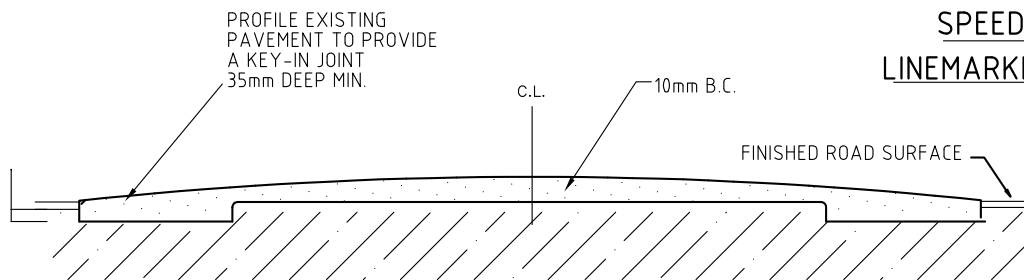


WHITE RRPM'S @ 900mm CENTERS

WATTS PROFILE HUMPS PLAN  
NOT TO SCALE

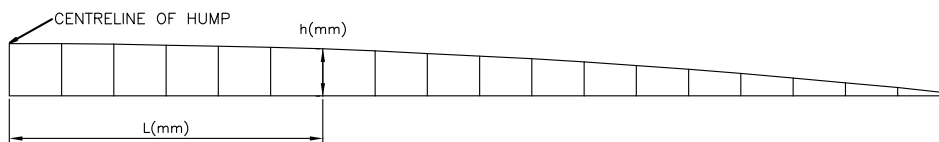


SPEED HUMPS  
LINEMARKING DETAIL



WATTS PROFILE HUMPS (CROSS SECTION)

L(mm)	0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8
h(mm)	100	100	99	97	95	93	90	86	81	76	71	65	58	51	43	34	25	16	5



WATTS PROFILE ROAD HUMPS  
NOT TO SCALE

DIMENSIONS ARE IN MILLIMETRES



CITY OF DAREBIN

WATTS PROFILE SPEED HUMPS

DAREBIN ENGINEERING SERVICES

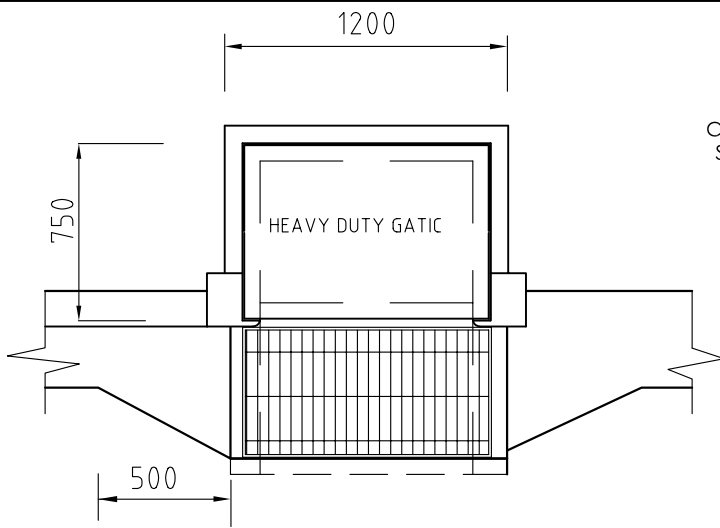
DRAWN AM

DATE DEC11

SCALE N.T.S

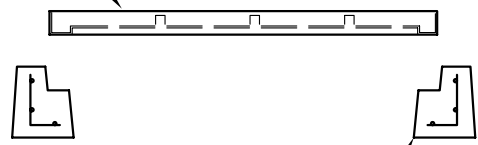
ACAD NAME DS32.DWG

DWG No DS32



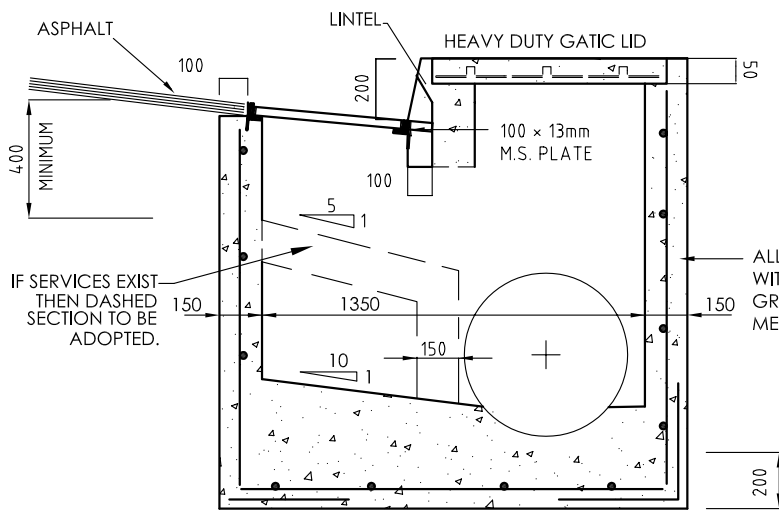
**HEAVY DUTY SIDE ENTRY COVER DETAIL**  
NOT TO SCALE

CAST IRON CONCRETE FILLED  
SIDE ENTRY PIT COVER

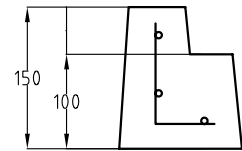


PRE CAST CONCRETE SURROUND  
(CONCRETE 32mpa)

**HEAVY DUTY SIDE ENTRY COVER DETAIL**  
NOT TO SCALE

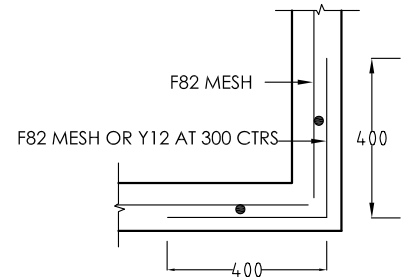


**SECTION A-A**  
NOT TO SCALE



**FRAME DETAIL**  
NOT TO SCALE

ALL WALLS OF PITS TO BE REINFORCED  
WITH F82 MESH FOR PITS WITH DEPTHS  
GREATER THAN 2.0m.  
MESH TO BE CENTRALLY LOCATED



**PLAN OF CORNER DETAIL**  
NOT TO SCALE

NOTE:

1. ALL PITS GREATER THAN 1200mm IN DEPTH ARE TO BE FITTED WITH STEP IRONS 20mm  $\square$  M.S. ROD AT 300mm CENTRES (SEE DS9).
2. ALL PIT COVERS ARE TO CONFORM TO SLOPE OF NATURE STRIP.
3. FOR PIPES LARGER THAN 450mm WIDTH (W) = D + 200mm
4. REINFORCING BARS TO EXTEND 400mm BEYOND LINTELS.
5. LINTELS TO MATCH KERB PROFILE



**CITY OF DAREBIN**  
**STANDARD GRATED SIDE ENTRY PIT**  
**WITH HEAVY DUTY COVER**  
**TYPE F**

DAREBIN ENGINEERING SERVICES

DRAWN AM

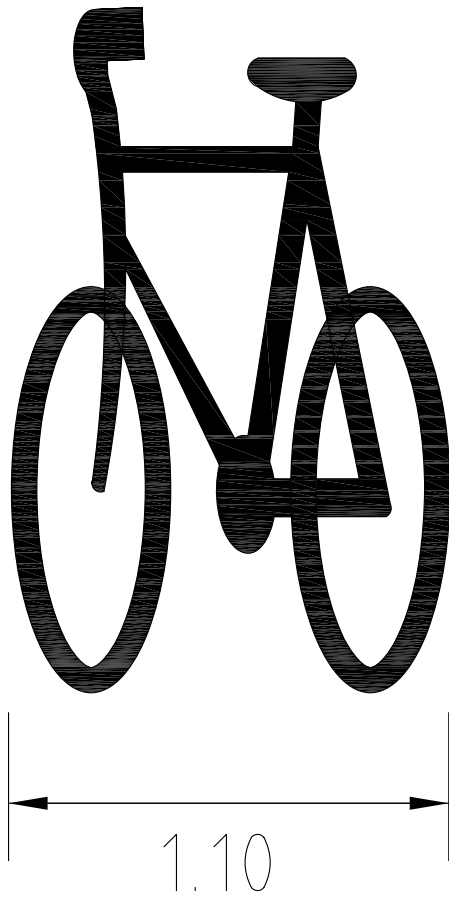
DATE AUG06

SCALE N.T.S

ACAD NAME DS33.DWG

DWG No DS33





1.80

1.10

## BICYCLE SYMBOL DETAIL

NOT TO SCALE

SOURCE: AS1742.9 MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES



CITY OF DAREBIN

**BICYCLE SYMBOL DETAIL**

DAREBIN ENGINEERING SERVICES

DRAWN

AM

DATE

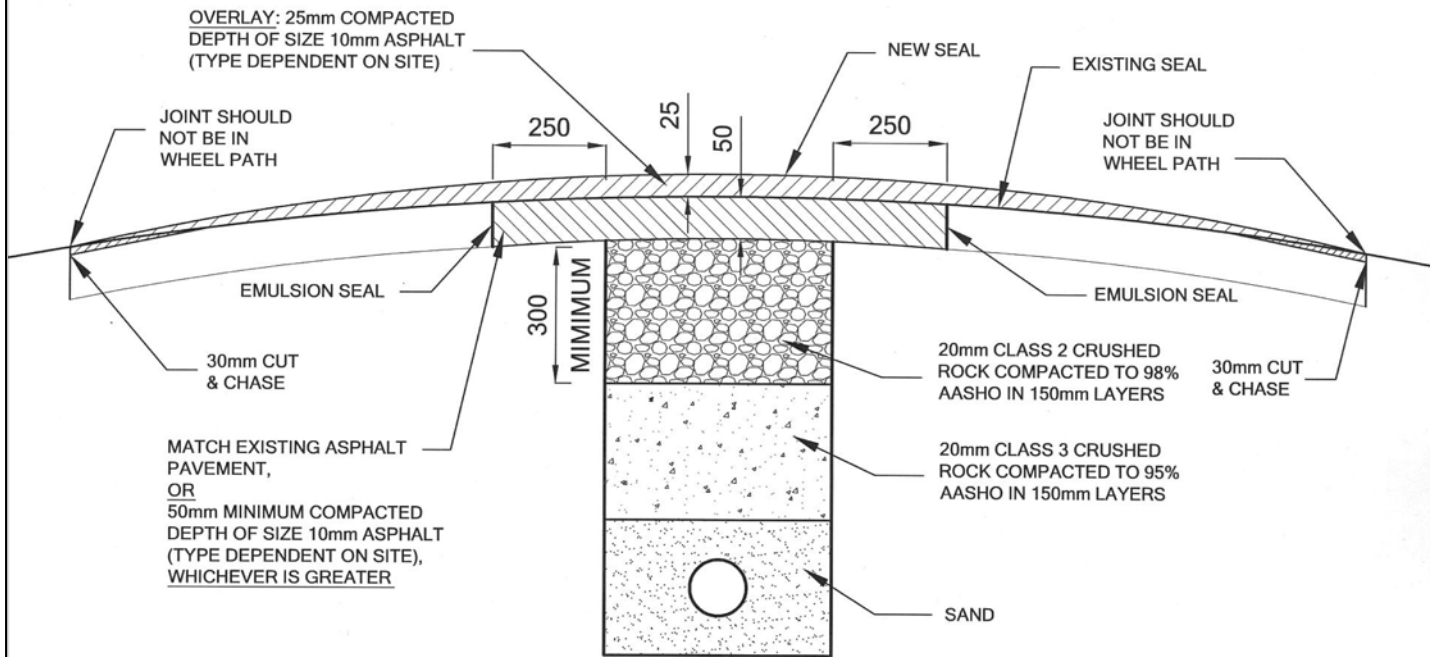
NOV07

SCALE

N.T.S

ACAD NAME DS34.DWG

DWG No DS34



**NOTES:**

- 1. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS STATED OTHERWISE



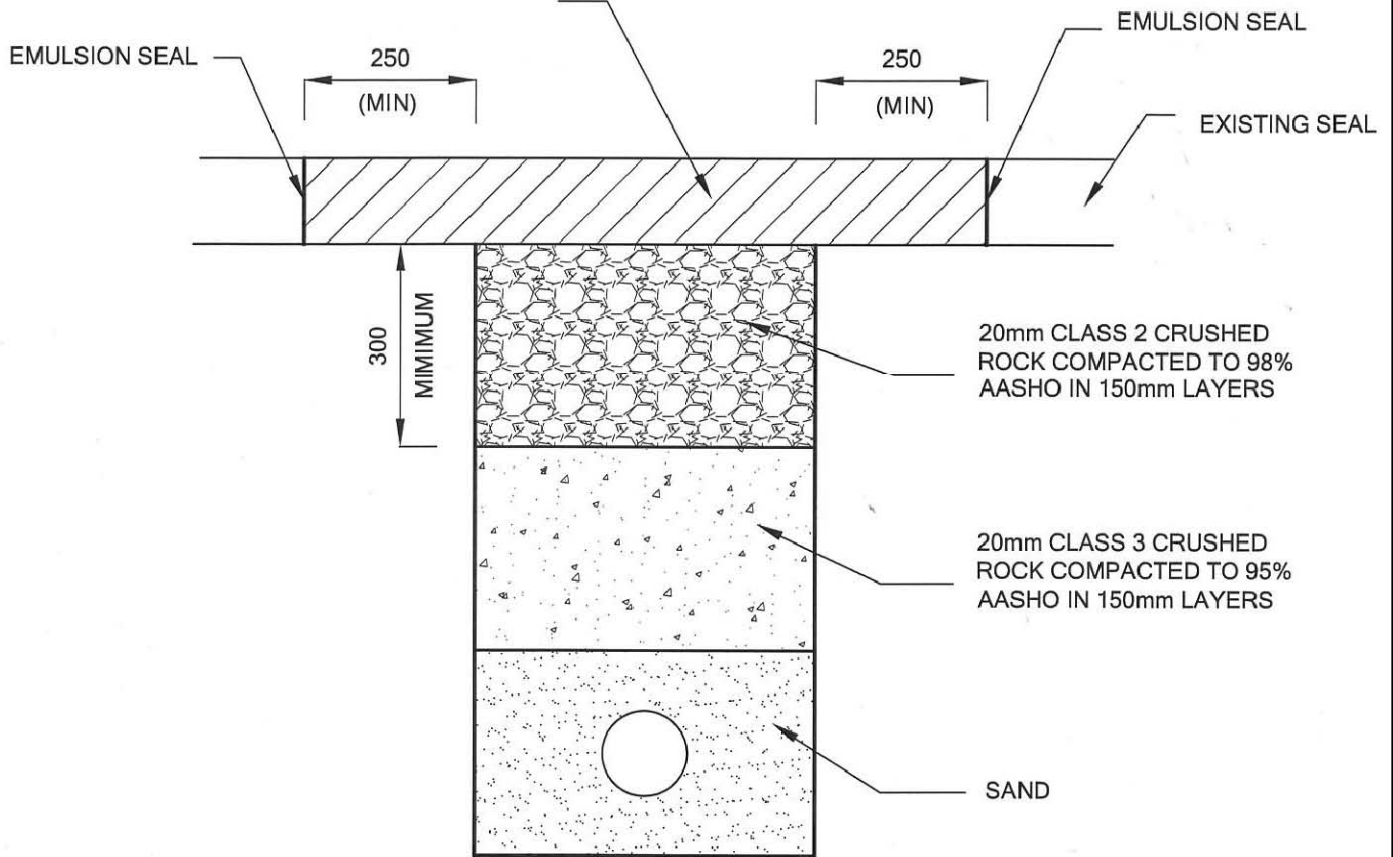
**CITY OF DAREBIN**  
**BACKFILL AND SEALING REQUIREMENTS**  
**FOR LONGITUDINAL SERVICE OPENINGS**  
**IN SEALED ROADS**

DAREBIN ENGINEERING SERVICES

ACAD NAME	DS35.DWG
DWG No	DS35

DRAWN	AM
DATE	MAR08
SCALE	N.T.S

MATCH EXISTING ASPHALT PAVEMENT AND ASPHALT TYPE,  
OR  
 50mm MINIMUM COMPACTED DEPTH 10mm ASPHALT (TYPE DEPENDENT ON SITE),  
WHICHEVER IS GREATER



NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS STATED OTHERWISE



**CITY OF DAREBIN**  
**BACKFILL AND SEALING REQUIREMENTS**  
**FOR SERVICE CROSSINGS**  
**IN SEALED ROADS**

DAREBIN ENGINEERING SERVICES

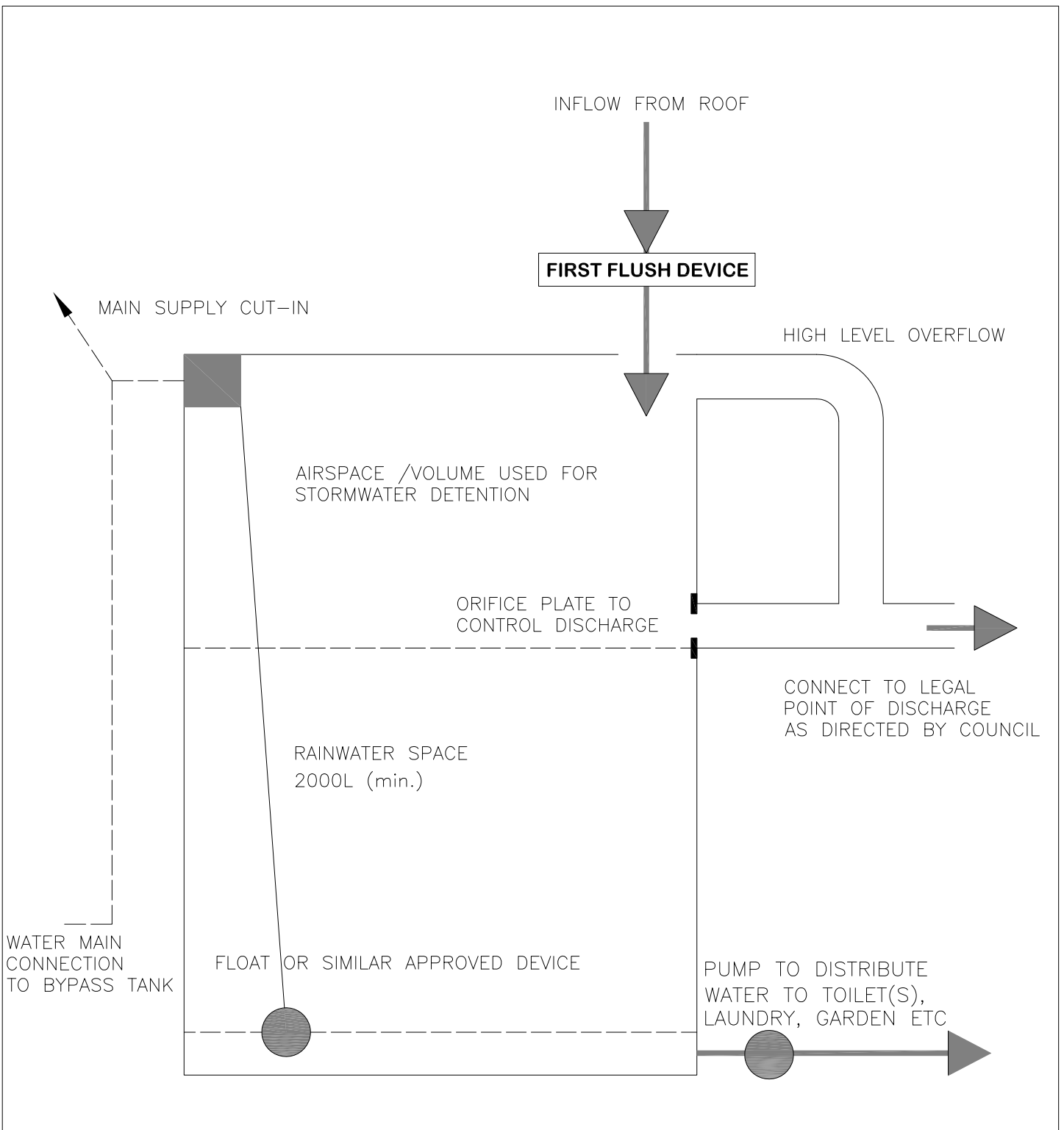
DRAWN AM

DATE MAR08

SCALE N.T.S

ACAD NAME DS36.DWG

DWG No DS36



TYPICAL SECTION OF COMBINED OSD/RAINWATER TANK

NOTE

1. WATER MAIN CONNECTION TO BE IN ACCORDANCE WITH YARRA VALLEY WATER & PLUMBING CODE



**CITY OF DAREBIN**

**COMBINED RAINWATER / ON-SITE  
DETENTION TANK**

DAREBIN ENGINEERING SERVICES

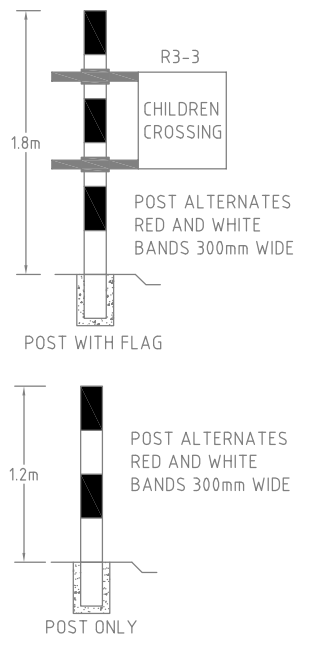
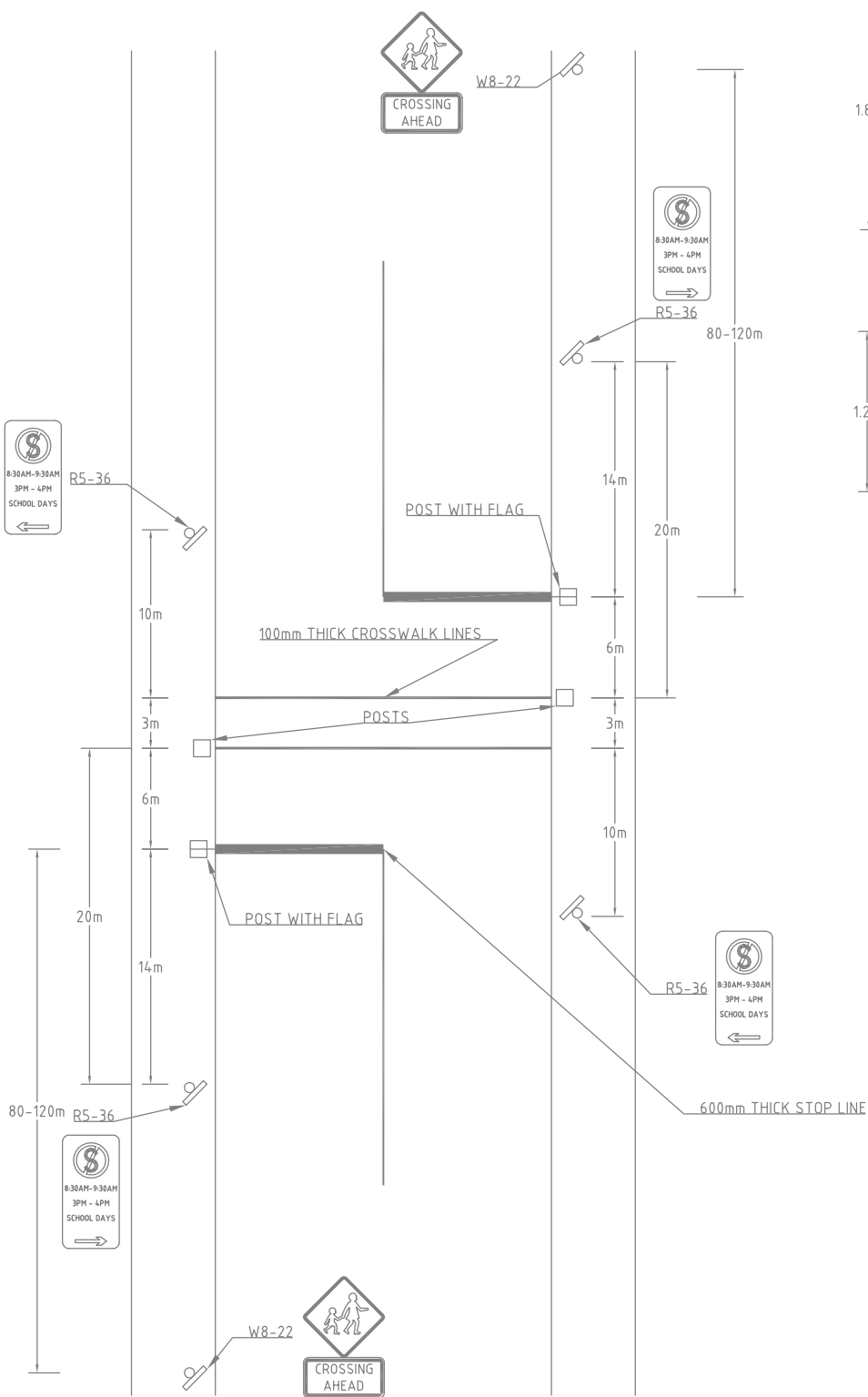
DRAWN AM

DATE NOV11

SCALE NTS

ACAD NAME DS37.DWG

DWG No DS37



CITY OF DAREBIN

SCHOOL CROSSING DETAILS  
(AS PER AS 1742.10)

DAREBIN ENGINEERING SERVICES

ACAD NAME	DS38.DWG
DWG No	DS38

DRAWN	JB
DATE	MAR13
SCALE	NTS