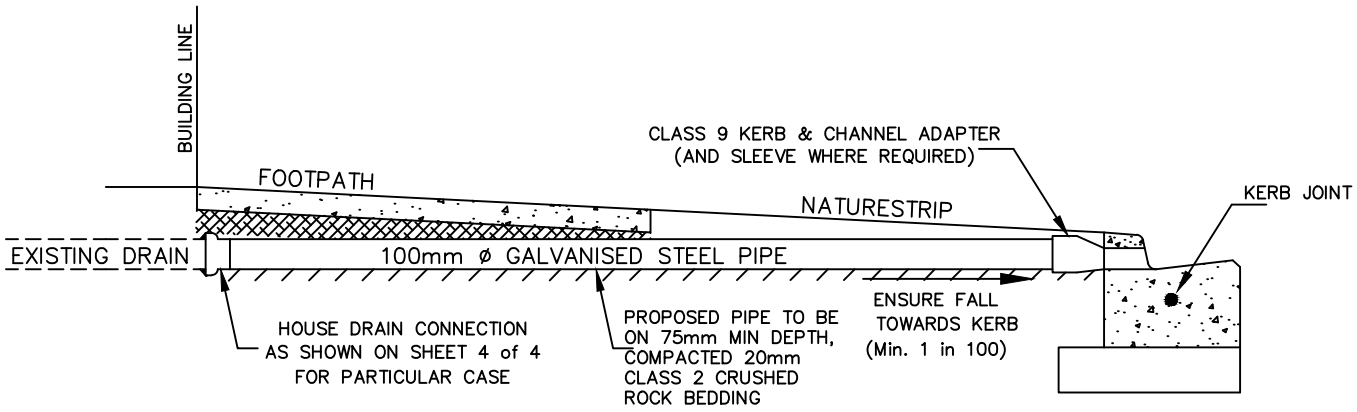
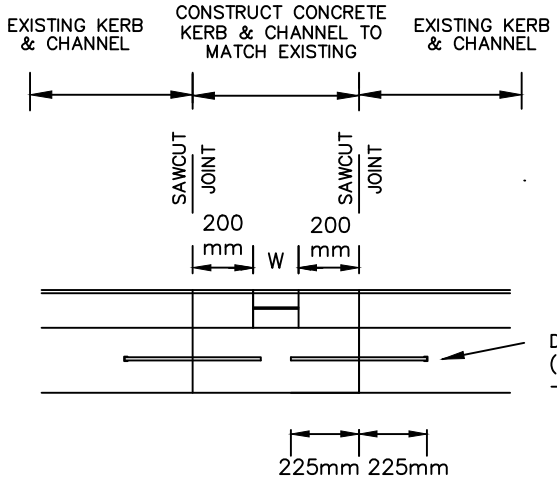
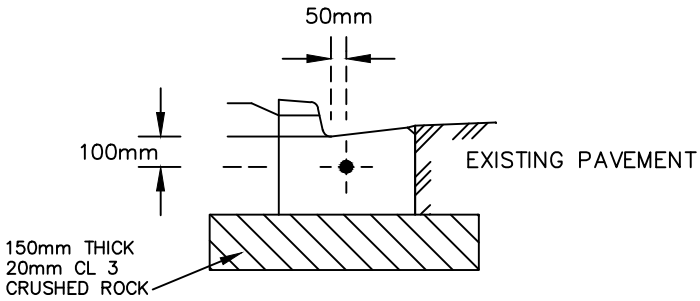


TYPE 1 – HOUSE DRAIN CONNECTION TO KERB & CHANNEL

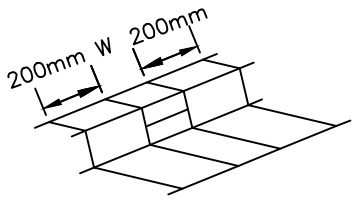


ELEVATION VIEW OF KERB JOINT

Scale 1:25



CROSS SECTION VIEW OF KERB JOINT



3D VIEW SHOWING SAWCUT JOINTS IN KERB

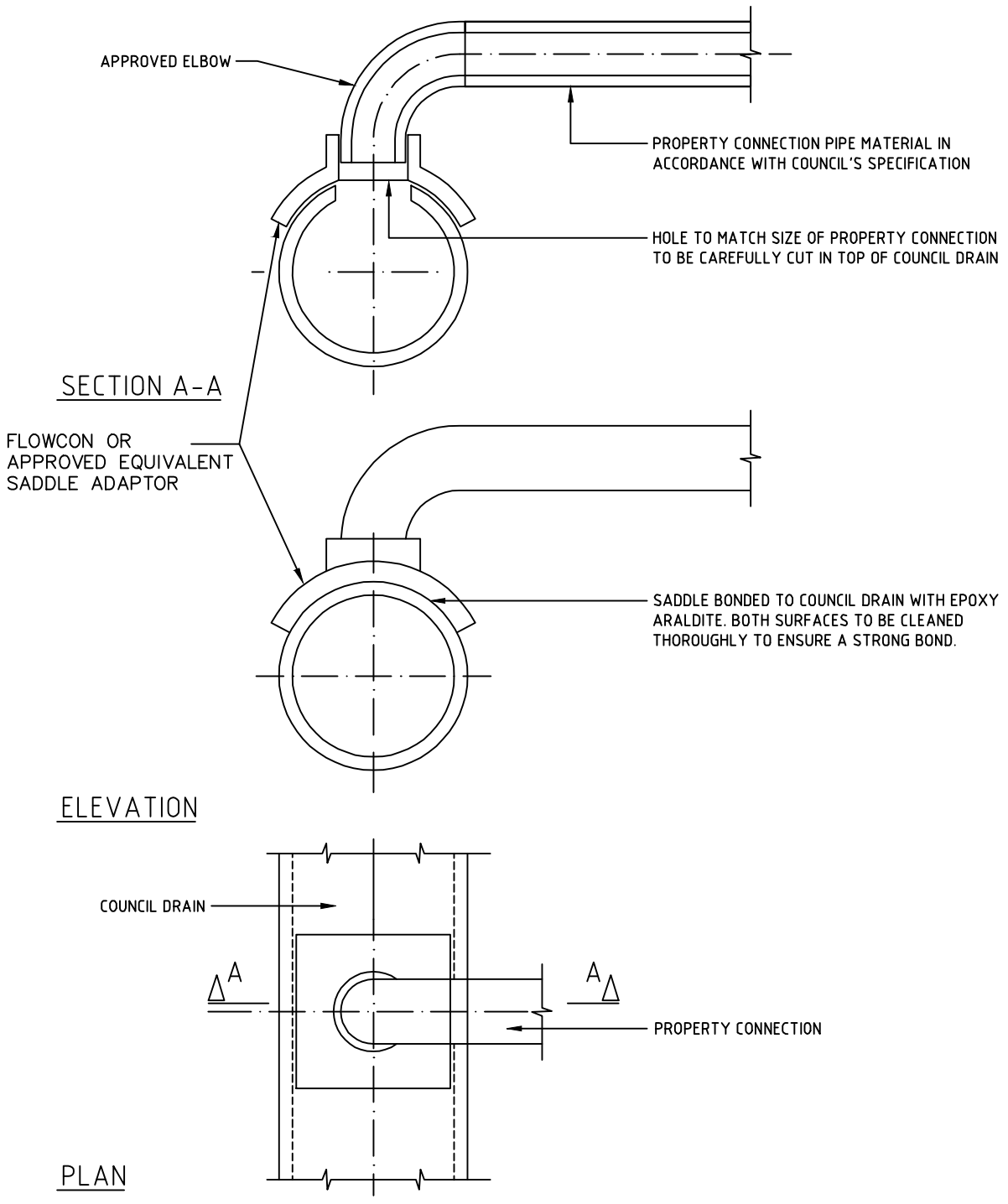
NOTES:

- GALVANISED PIPE TO BE 100mm DIA. GALVANISED STEEL PIPE, 4.5mm WALL THICKNESS – AS1074
- ANY ASBETOS PIPE SHOULD BE REMOVED IN ACCORDANCE WITH "APPROVED CODE OF PRACTICE" (HOW TO SAFELY REMOVE ASESTOS) UNDER SECTION 274 OF THE WORK HEALTH AND SAFETY ACT (THE WHS ACT).
- WIDTH OF SAWCUT JOINT AT LOCATION DENOTED VIA 'W' TO REFLECT WIDTH OF PROPOSED HOUSE DRAIN KERB ADAPTOR
- PVC PIPES & FITTINGS TO REFLECT REQUIREMENTS STIPULATED IN AS/NZS 1252:2002

TYPE 1 - HOUSE DRAIN PIPE CONNECTIONS (TO KERB)

INFRASTRUCTURE SERVICES
Maribyrnong CITY COUNCIL

DRAWN : I .VANIKIOTIS		DRAWING No.	Rev.
APPROVED : T.LAM		S.D. D1 (1 of 4)	A
DATE : MAY 2015			



NOTES:

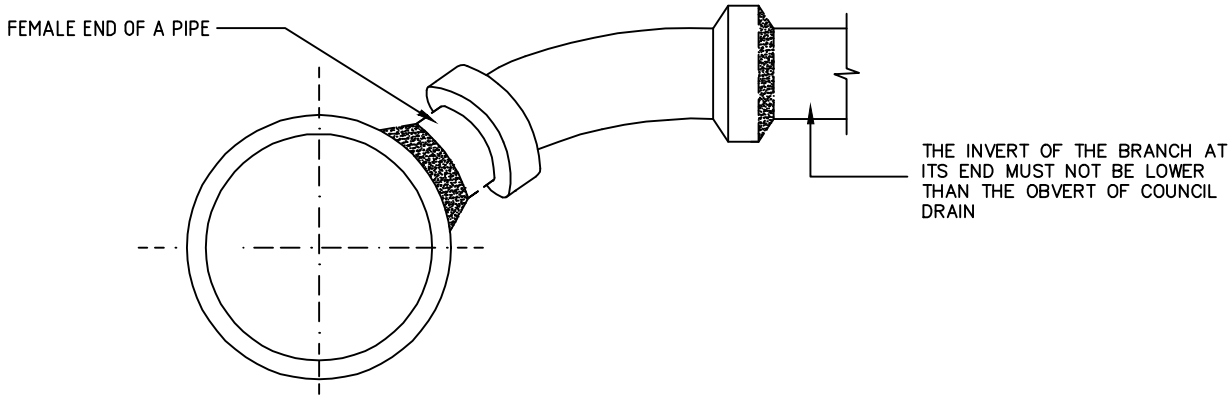
1. NEW CONNECTIONS 150ø AND ABOVE INTO COUNCIL DRAINS REQUIRE THE CONSTRUCTION OF A PIT TO COUNCIL STANDARDS
2. ALL DRAIN CONNECTIONS SHALL BE AT RIGHT ANGLES TO THE STREET ALIGNMENT

NOT TO SCALE

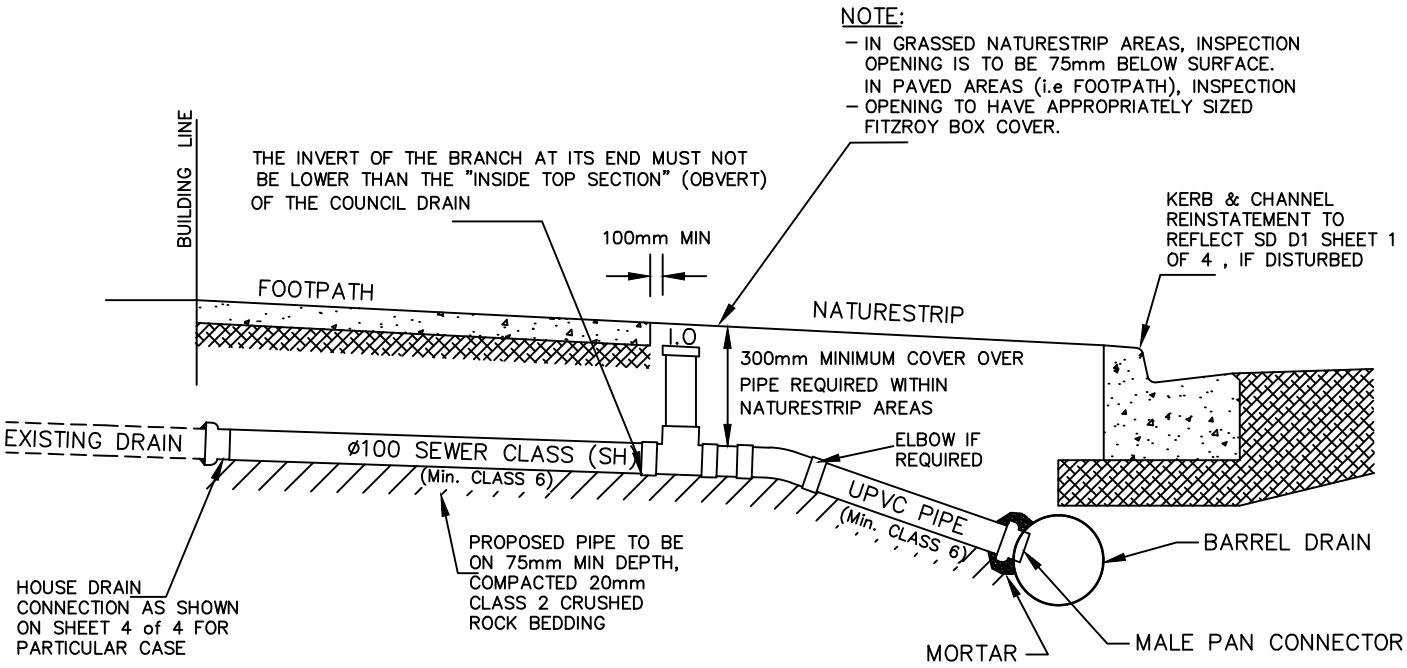
TYPE 2: HOUSE DRAIN SADDLE CONNECTION TO COUNCIL STORMWATER DRAIN

INFRASTRUCTURE SERVICES
Maribyrnong CITY COUNCIL

DRAWN: I .VANIKIOTIS	DRAWING No.	Rev.
APPROVED : T.LAM	S.D. D1 (2 of 4)	A
DATE : DECEMBER 2014		



ELEVATION
NOT TO SCALE



TYPE 3: HOUSE DRAIN CONNECTION TO UNDERGROUND BARREL DRAIN

Scale 1:25

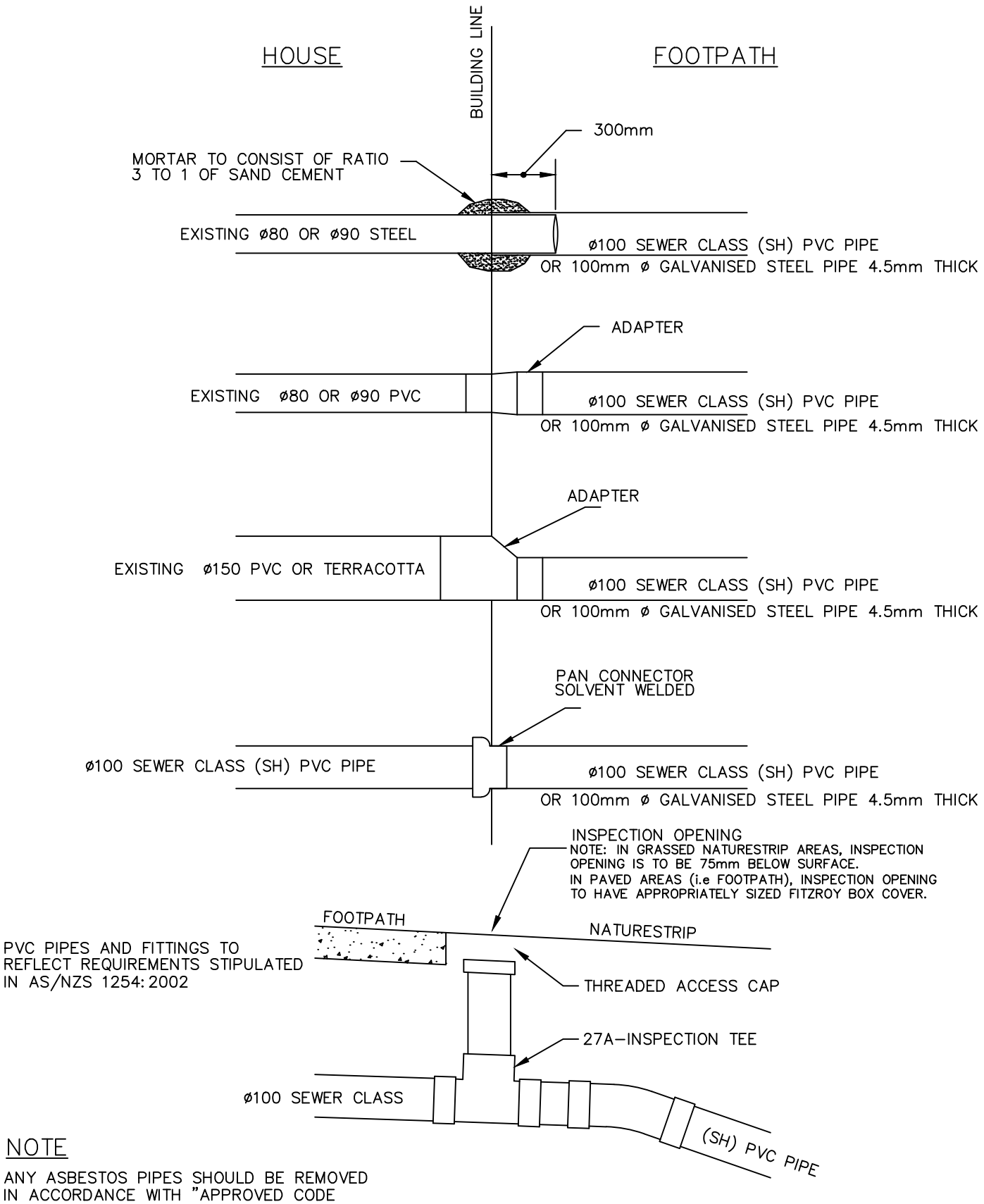
NOTES:

- NEW CONNECTIONS 150ø AND ABOVE INTO COUNCIL DRAINS LESS THAN 450ø REQUIRE THE CONSTRUCTION OF A PIT TO COUNCIL STANDARDS.
- FOR NEW SUBDIVISIONS, PROPERTY DEVELOPMENTS, AND WHEN UPGRADING INTERNAL PROPERTY STORMWATER DRAINAGE, THE INSPECTION OPENING (I.O.) IS TO BE LOCATED WITHIN THE PROPERTY BOUNDARY.
- PVC PIPES AND FITTINGS TO REFLECT REQUIREMENTS STIPULATED IN AS/NZS 1252:2002
- TYPE 3 METHOD TO BE USED IF THE PIPE LEVELS ARE SUCH THAT TYPE 2 STANDARD METHOD CANNOT BE USED

TYPE 3 – HOUSE DRAIN PIPE CONNECTIONS (TO BE USED WHERE TYPE 2 CONNECTION CANNOT BE USED)

INFRASTRUCTURE SERVICES
Maribyrnong CITY COUNCIL

DRAWN :	I .VANIKIOTIS	DRAWING No.	Rev.
APPROVED :	T.LAM	S.D. D1 (3 of 4)	A
DATE :	MAY 2015		



NOTE

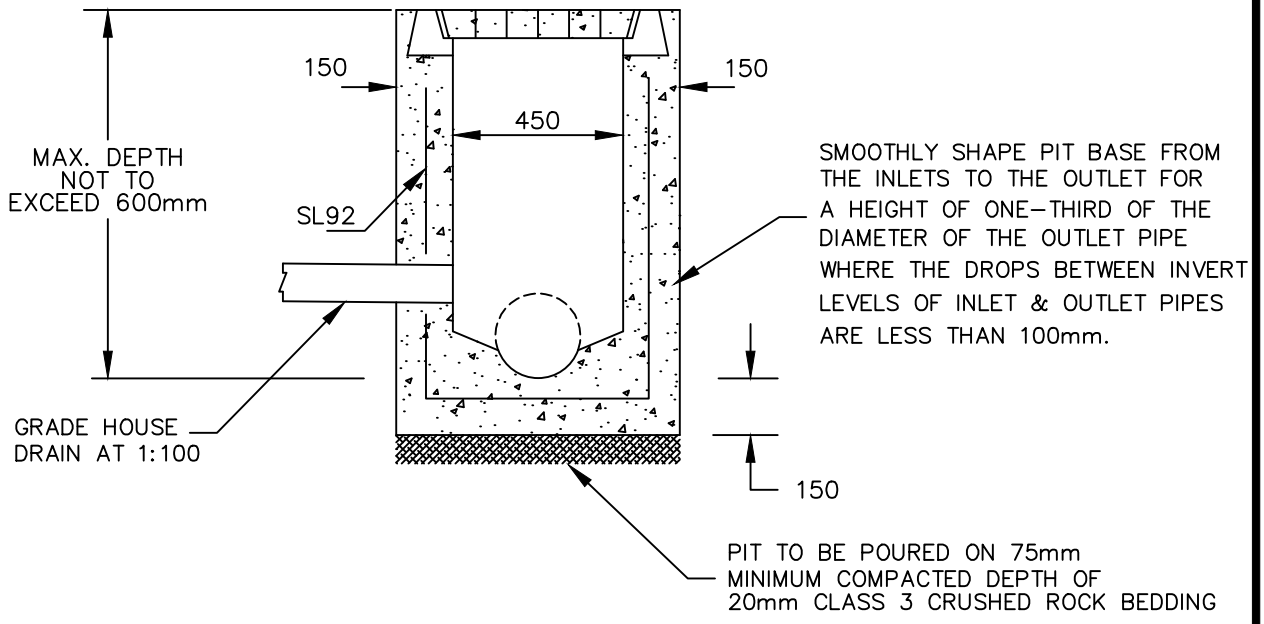
ANY ASBESTOS PIPES SHOULD BE REMOVED IN ACCORDANCE WITH "APPROVED CODE OF PRACTICE" (HOW TO SAFELY REMOVE ASBESTOS) UNDER SECTION 274 OF THE WORK HEALTH AND SAFETY ACT (THE WHS ACT)

NOT TO SCALE

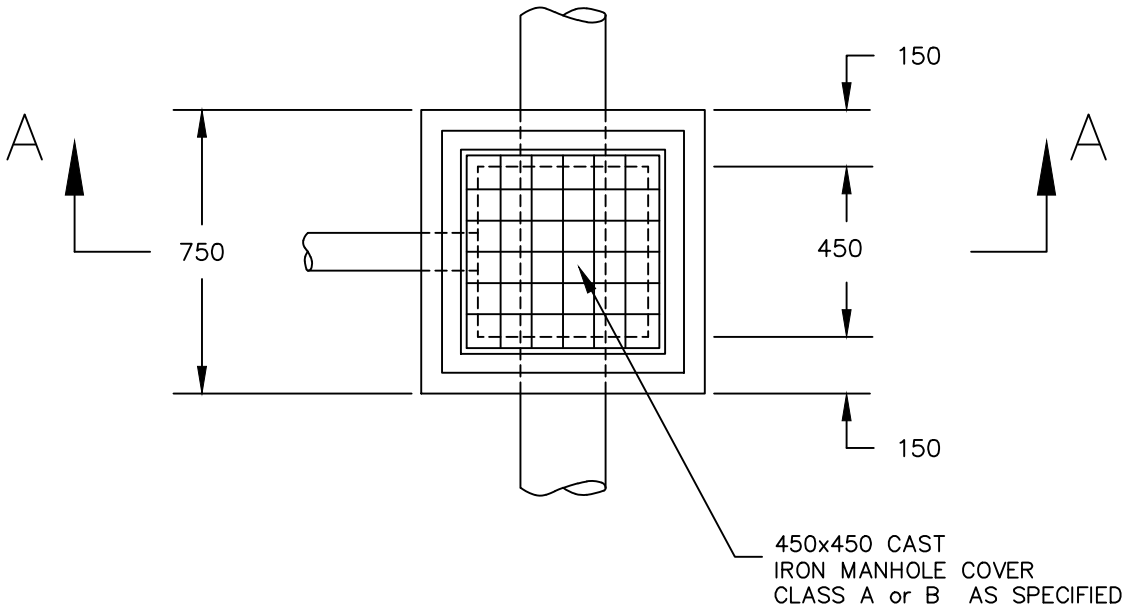
HOUSE DRAIN CONNECTIONS, ADAPTORS AND INSPECTION OPENING

INFRASTRUCTURE SERVICES
Maribyrnong CITY COUNCIL

DRAWN : I .VANIKIOTIS		DRAWING No.	Rev.
APPROVED : T.LAM		S.D. D1 (4 of 4)	A
DATE : MAY 2015			



SECTION A–A



NOTES

– PIT TO BE 32 MPa CONCRETE

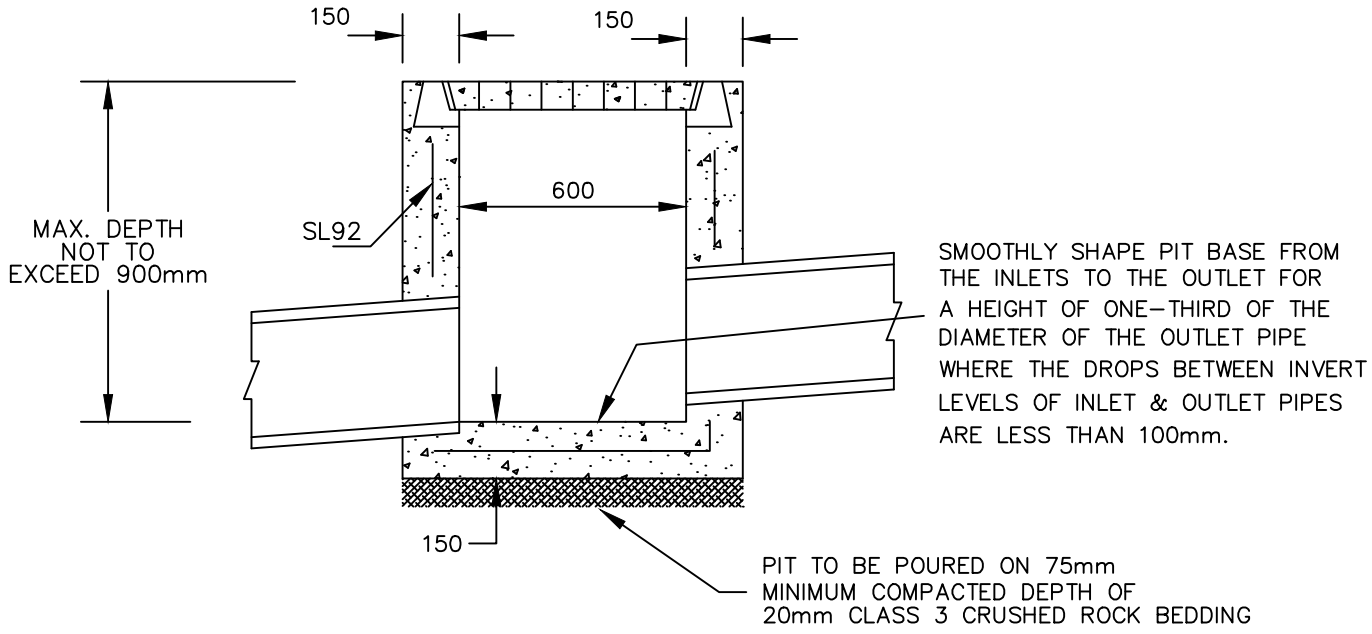
– USE SL 92 REINFORCEMENT WITH 300mm MINIMUM LAP LENGTH AND CLEAR COVER OF 65mm. CORNER RETURN REINFORCEMENT MAY BE FABRIC OR EQUIVALENT BARS

Scale 1:20

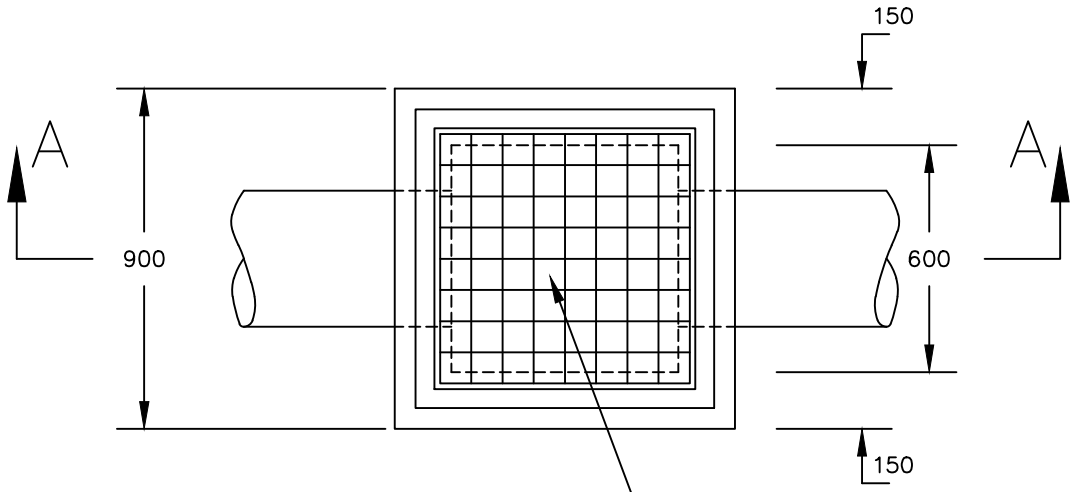
HOUSE DRAIN & PROPERTY JUNCTION PIT (450 x 450 INTERNAL DIMENSIONS)

INFRASTRUCTURE SERVICES
Maribyrnong CITY COUNCIL

DRAWN : I .VANIKIOTIS	DRAWING No.	Rev.
APPROVED : T.LAM	S.D. D2	C
DATE : DECEMBER 2014		



SECTION A–A



NOTES

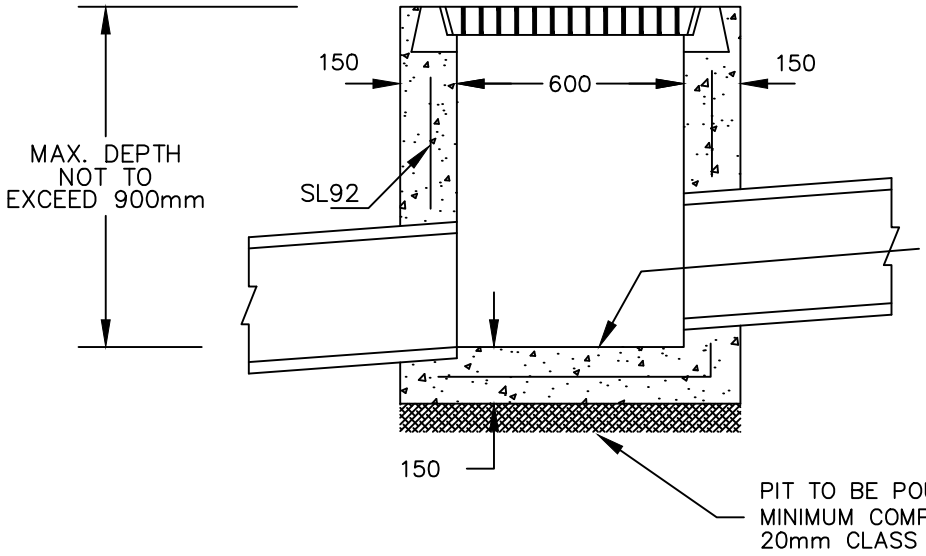
– PIT TO BE 32 MPa CONCRETE
– USE SL 92 REINFORCEMENT WITH 300mm MINIMUM LAP LENGTH AND CLEAR COVER OF 65mm. CORNER RETURN REINFORCEMENT MAY BE FABRIC OR EQUIVALENT BARS

Scale 1:20

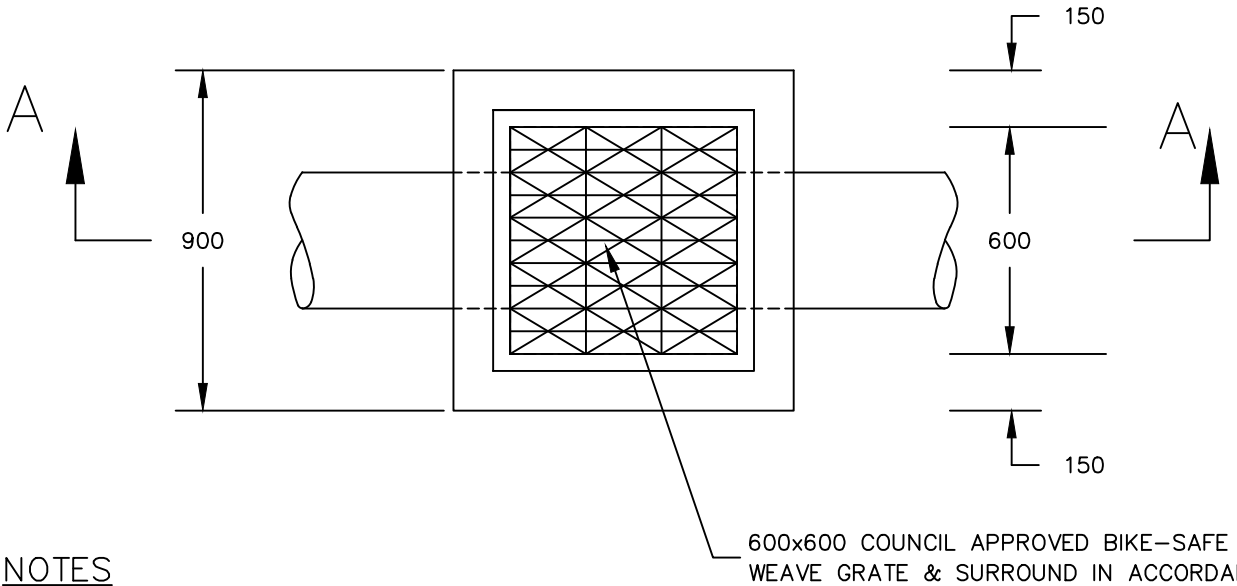
STANDARD JUNCTION PIT (600 x 600 INTERNAL DIMENSIONS)

INFRASTRUCTURE SERVICES
Maribyrnong CITY COUNCIL

DRAWN : I .VANIKIOTIS	DRAWING No.	Rev.
APPROVED : T.LAM	S.D. D3	C
DATE : DECEMBER 2014		



SECTION A–A



NOTES

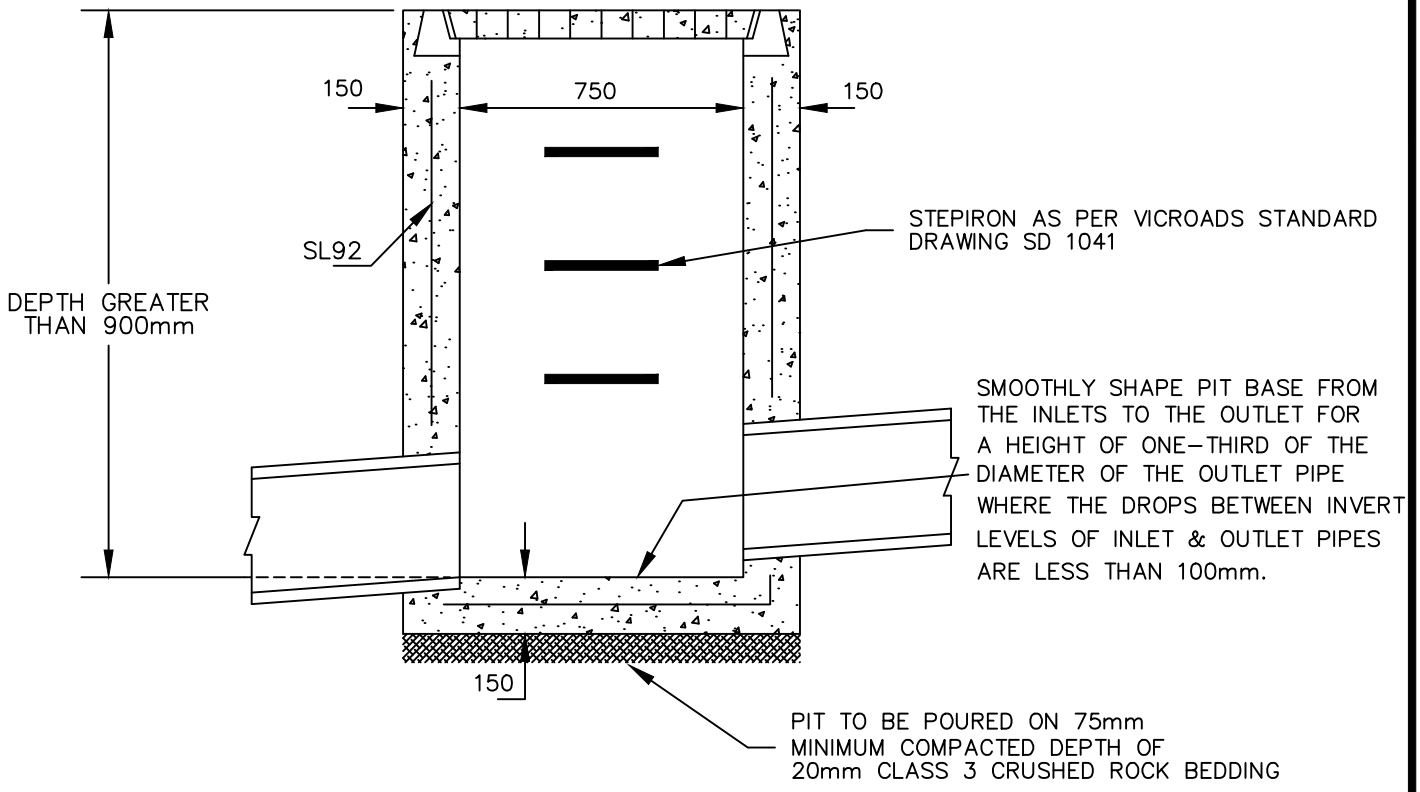
– PIT TO BE 32 MPa CONCRETE
– USE SL 92 REINFORCEMENT WITH 300mm MINIMUM LAP LENGTH AND CLEAR COVER OF 65mm. CORNER RETURN REINFORCEMENT MAY BE FABRIC OR EQUIVALENT BARS

Scale 1:20

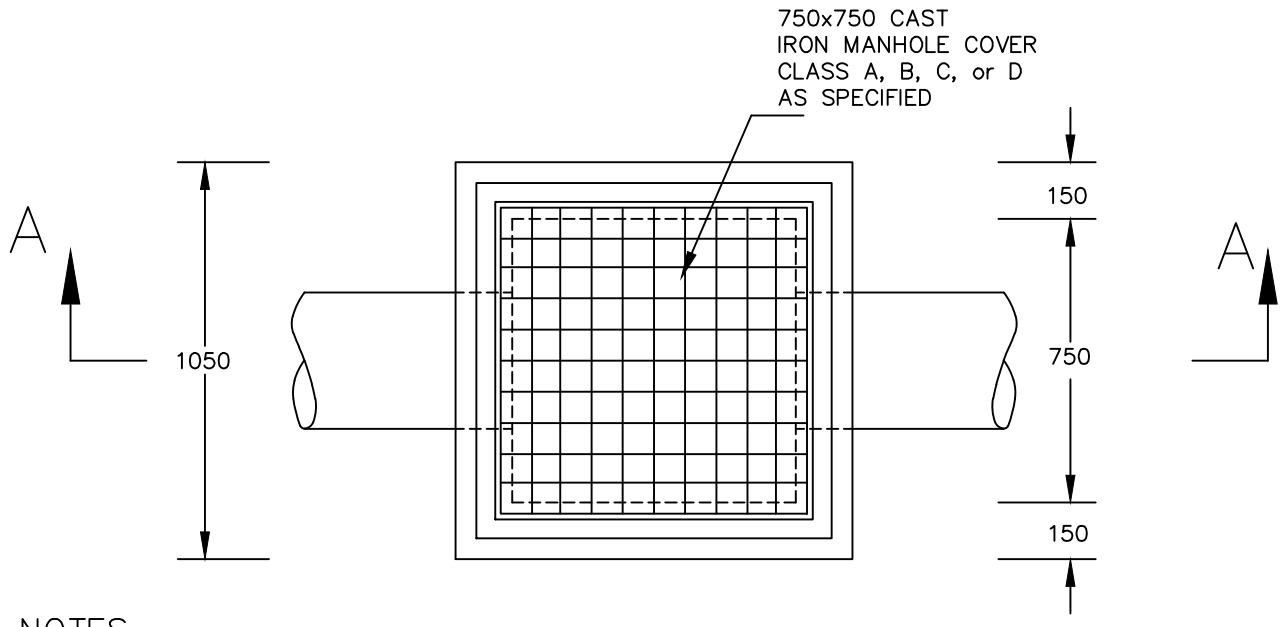
STANDARD GRATED PIT (600 x 600 INTERNAL DIMENSIONS)

INFRASTRUCTURE SERVICES
Maribyrnong CITY COUNCIL

DRAWN : I .VANIKIOTIS	DRAWING No.	Rev.
APPROVED : T.LAM	S.D. D4	C
DATE : DECEMBER 2014		



SECTION A–A



Scale 1:20

NOTES

– PIT TO BE 32 MPa CONCRETE

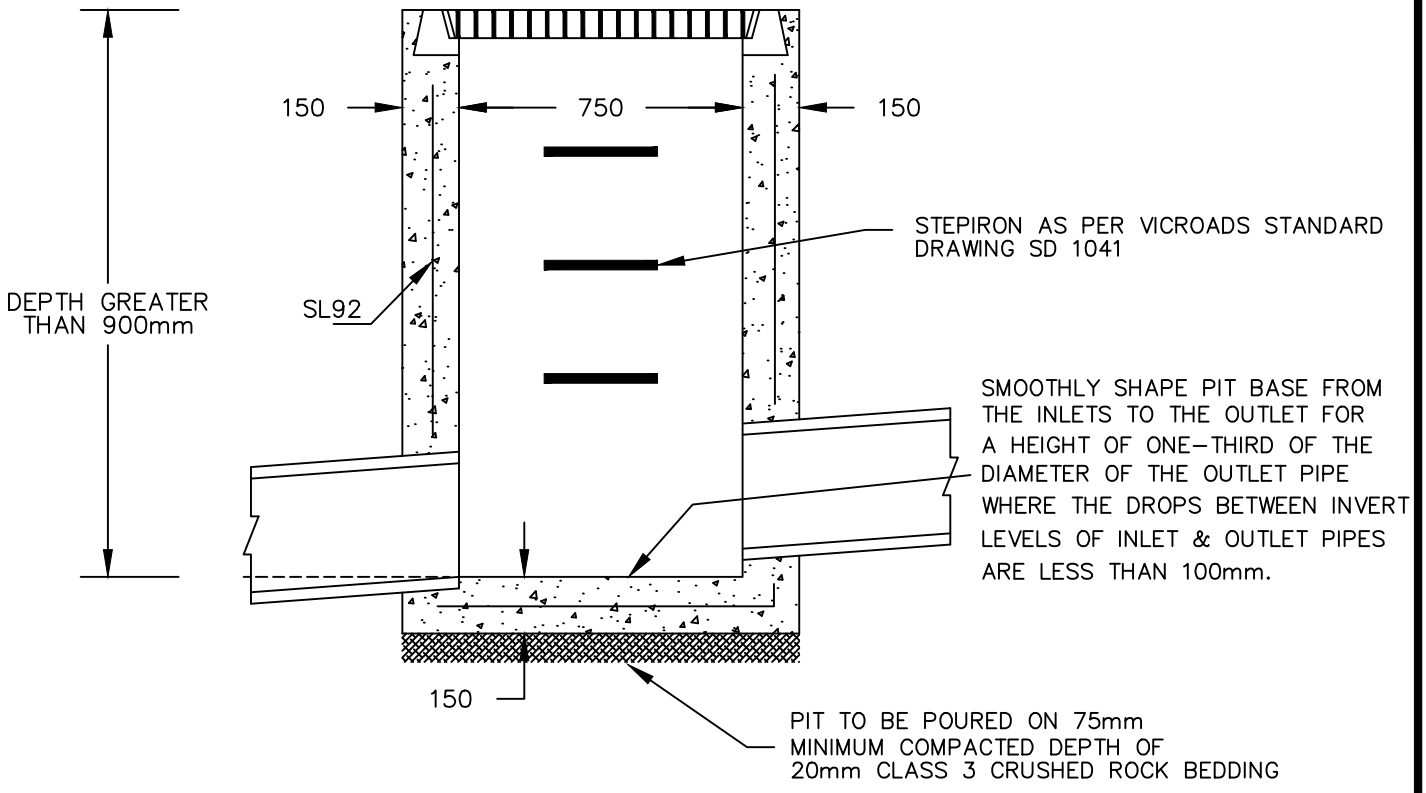
– USE SL 92 REINFORCEMENT WITH 300mm MINIMUM LAP LENGTH AND CLEAR COVER OF 65mm. CORNER RETURN REINFORCEMENT MAY BE FABRIC OR EQUIVALENT BARS

– PIT DEPTHS GREATER THAN 2.0m DEPTH TO BE CONSTRUCTED AS PER VIC ROADS STANDARD DRAWINGS SD 1011, SD 1021 AND SD 1131.

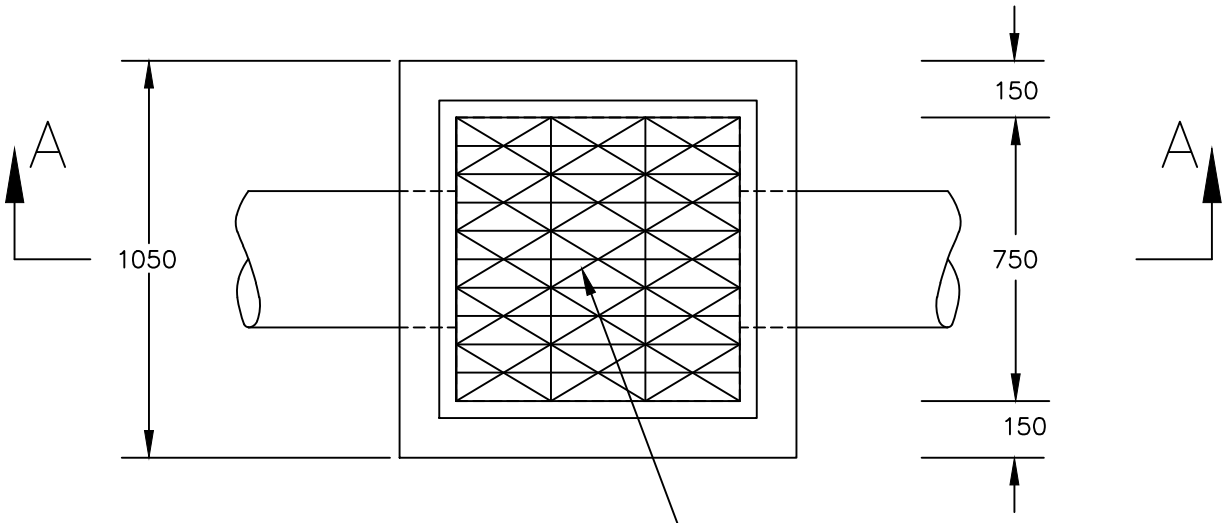
LARGE JUNCTION PIT (750 x 750 INTERNAL DIMENSIONS)

INFRASTRUCTURE SERVICES
Maribyrnong CITY COUNCIL

DRAWN: I .VANIKIOTIS		DRAWING No.	Rev.
APPROVED : T.LAM		S.D. D5	D
DATE : DECEMBER 2014			



SECTION A–A



NOTES

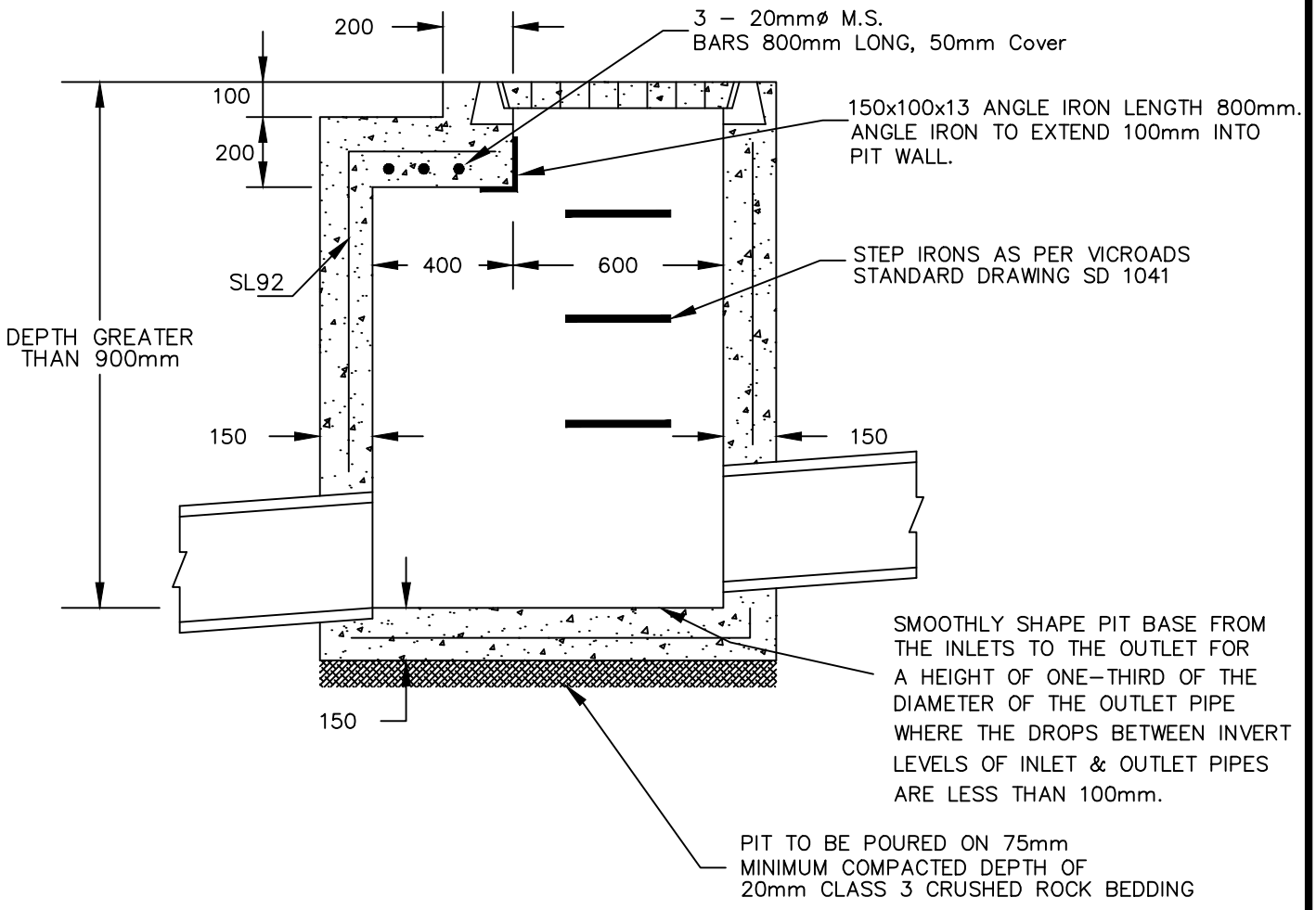
– PIT TO BE 32 MPa CONCRETE
– USE SL 92 REINFORCEMENT WITH 300mm MINIMUM LAP LENGTH AND CLEAR COVER OF 65mm. CORNER RETURN REINFORCEMENT MAY BE FABRIC OR EQUIVALENT BARS
–PIT DEPTHS GREATER THAN 2.0m DEPTH TO BE CONSTRUCTED AS PER VIC ROADS STANDARD DRAWINGS SD 1011, SD 1021 AND SD 1431.

Scale 1:20

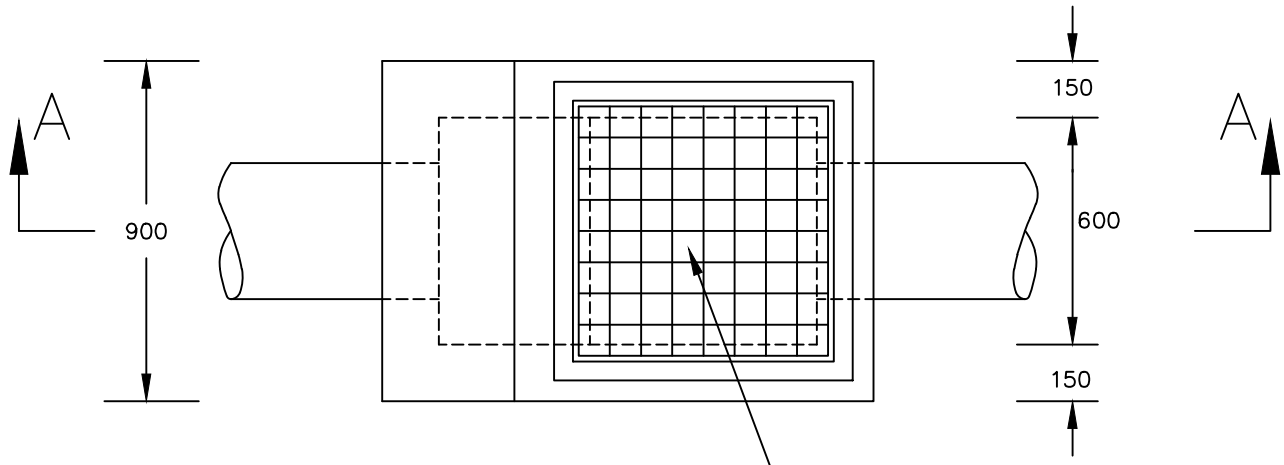
LARGE GRATED PIT (750 x 750 INTERNAL DIMENSIONS)

INFRASTRUCTURE SERVICES
Maribyrnong CITY COUNCIL

DRAWN:	I .VANIKIOTIS	DRAWING No.	Rev.
APPROVED :	T.LAM	S.D. D6	D
DATE :	DECEMBER 2014		



SECTION A–A



NOTES

– PIT TO BE 32 MPa CONCRETE

– USE SL 92 REINFORCEMENT WITH 300mm MINIMUM LAP LENGTH AND CLEAR COVER OF 65mm. CORNER RETURN REINFORCEMENT MAY BE FABRIC OR EQUIVALENT BARS

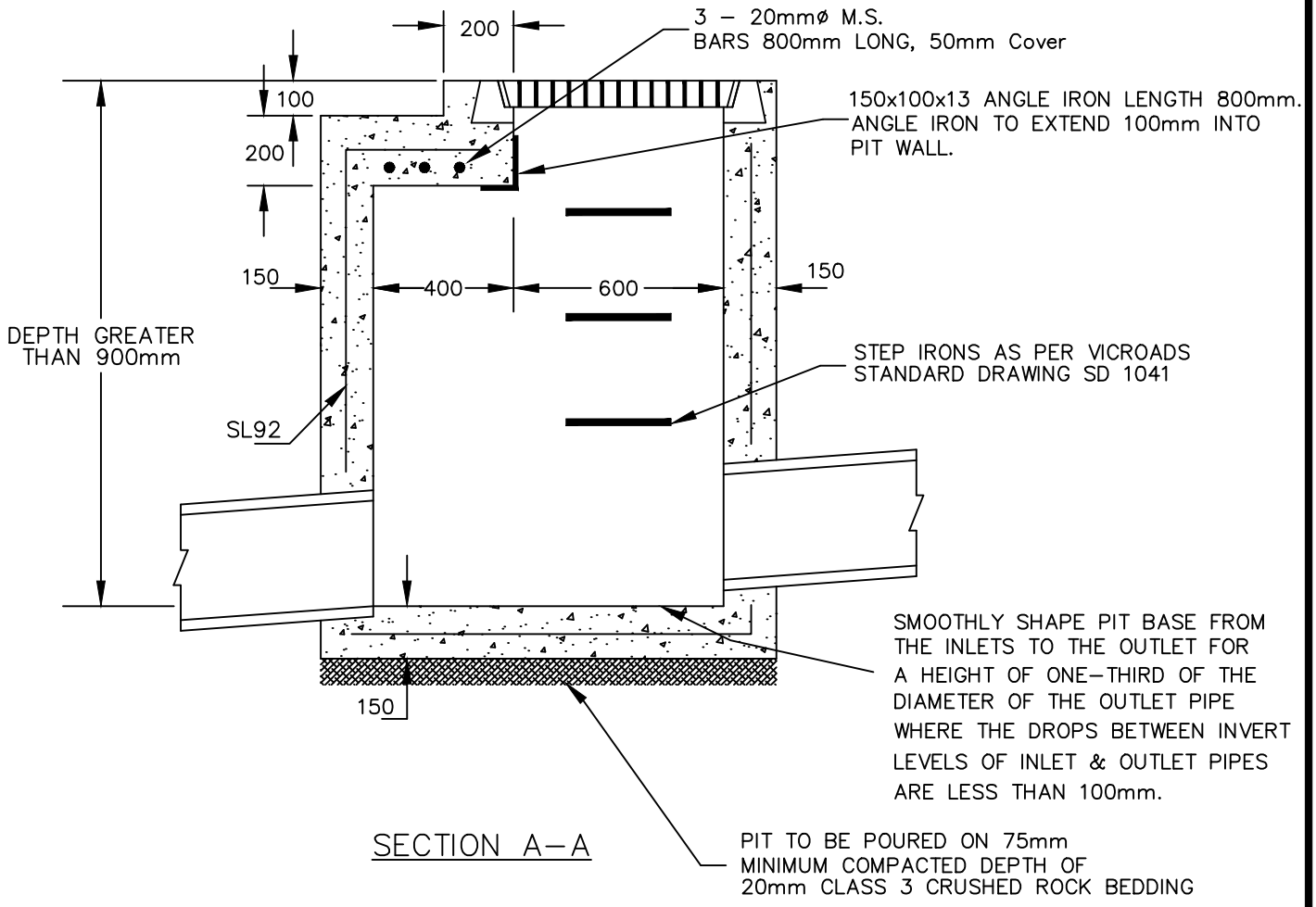
–PIT DEPTHS GREATER THAN 2.0m DEPTH OR CONTAINING PIPE DIAMETER >450mm TO BE CONSTRUCTED AS PER VIC ROADS STANDARD DRAWING SD 1021.

Scale 1:20

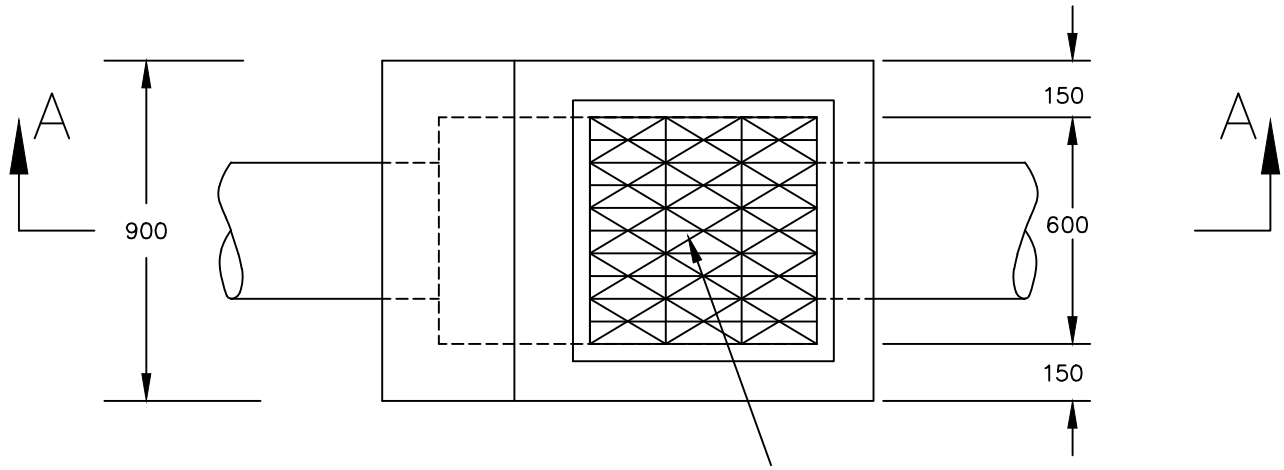
CORBELLED JUNCTION PIT (1000 x 600 INTERNAL DIMENSIONS)

INFRASTRUCTURE SERVICES
Maribyrnong CITY COUNCIL

DRAWN: I .VANIKIOTIS		DRAWING No.	Rev.
APPROVED : T.LAM		S.D. D7	E
DATE : DECEMBER 2014			



SECTION A–A



NOTES

– PIT TO BE 32 MPa CONCRETE

– USE SL 92 REINFORCEMENT WITH 300mm MINIMUM LAP LENGTH AND CLEAR COVER OF 65mm. CORNER RETURN REINFORCEMENT MAY BE FABRIC OR EQUIVALENT BARS

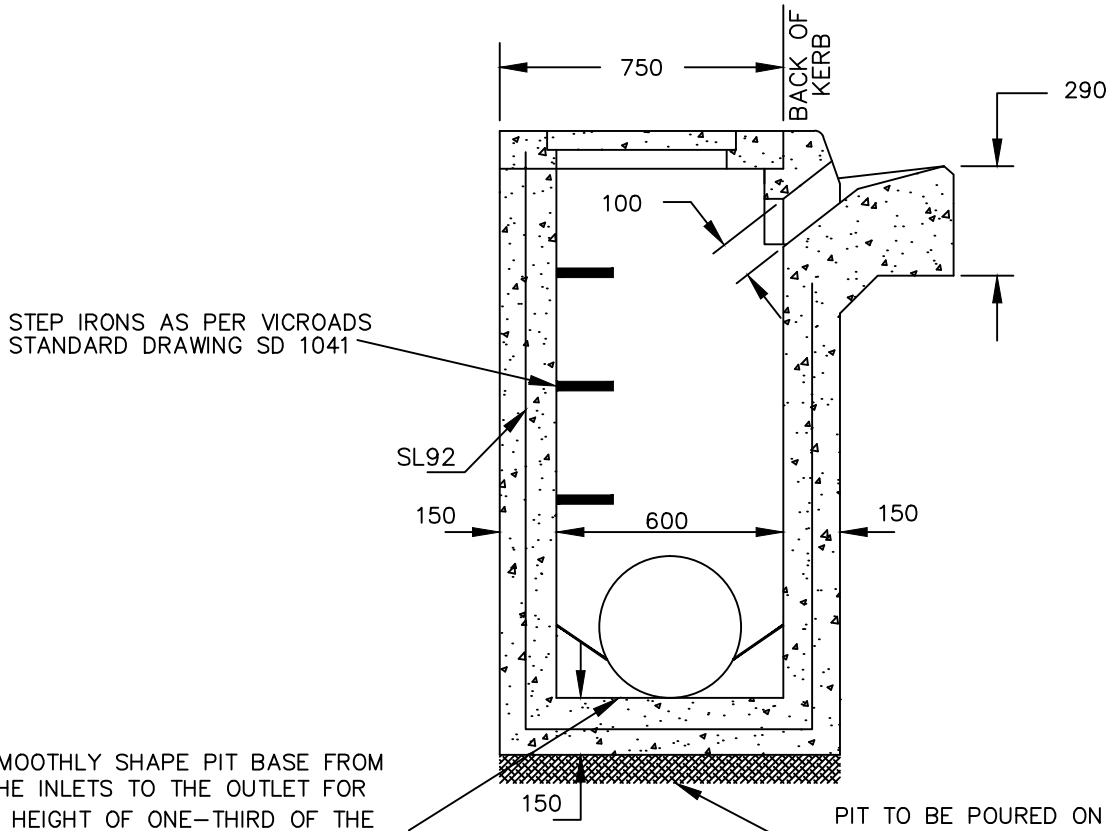
–PIT DEPTHS GREATER THAN 2.0m DEPTH OR CONTAINING PIPE DIAMETER > 450mm TO BE CONSTRUCTED AS PER VIC ROADS STANDARD DRAWING SD 1021.

Scale 1:20

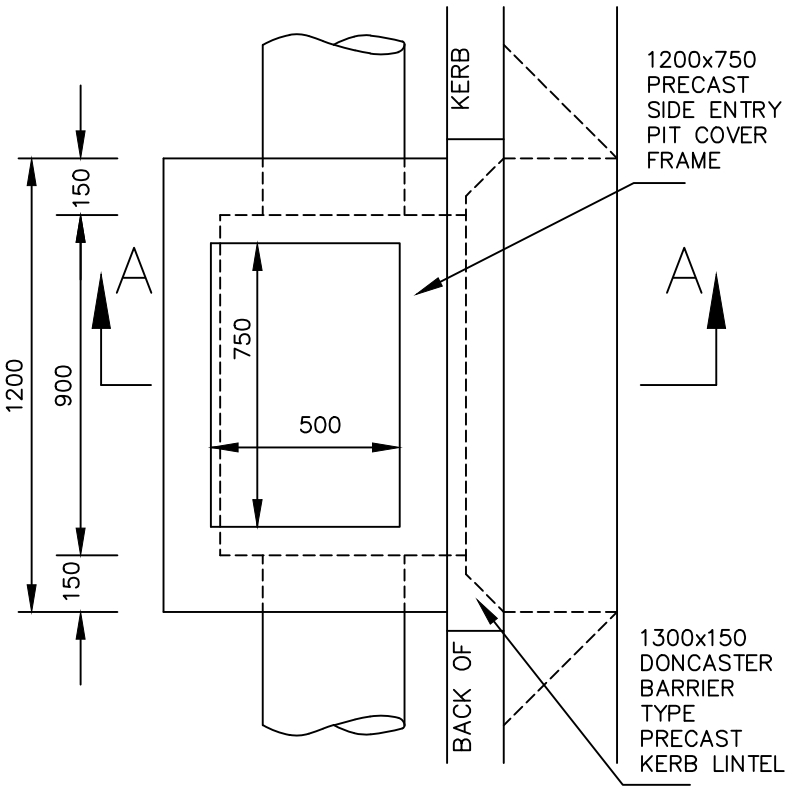
CORBELLED GRATED PIT (1000 x 600 INTERNAL DIMENSIONS)

INFRASTRUCTURE SERVICES
Maribyrnong CITY COUNCIL

DRAWN: I .VANIKIOTIS		DRAWING No.	Rev.
APPROVED : T.LAM		S.D. D8	F
DATE : DECEMBER 2014			



SECTION A–A



Scale 1:20

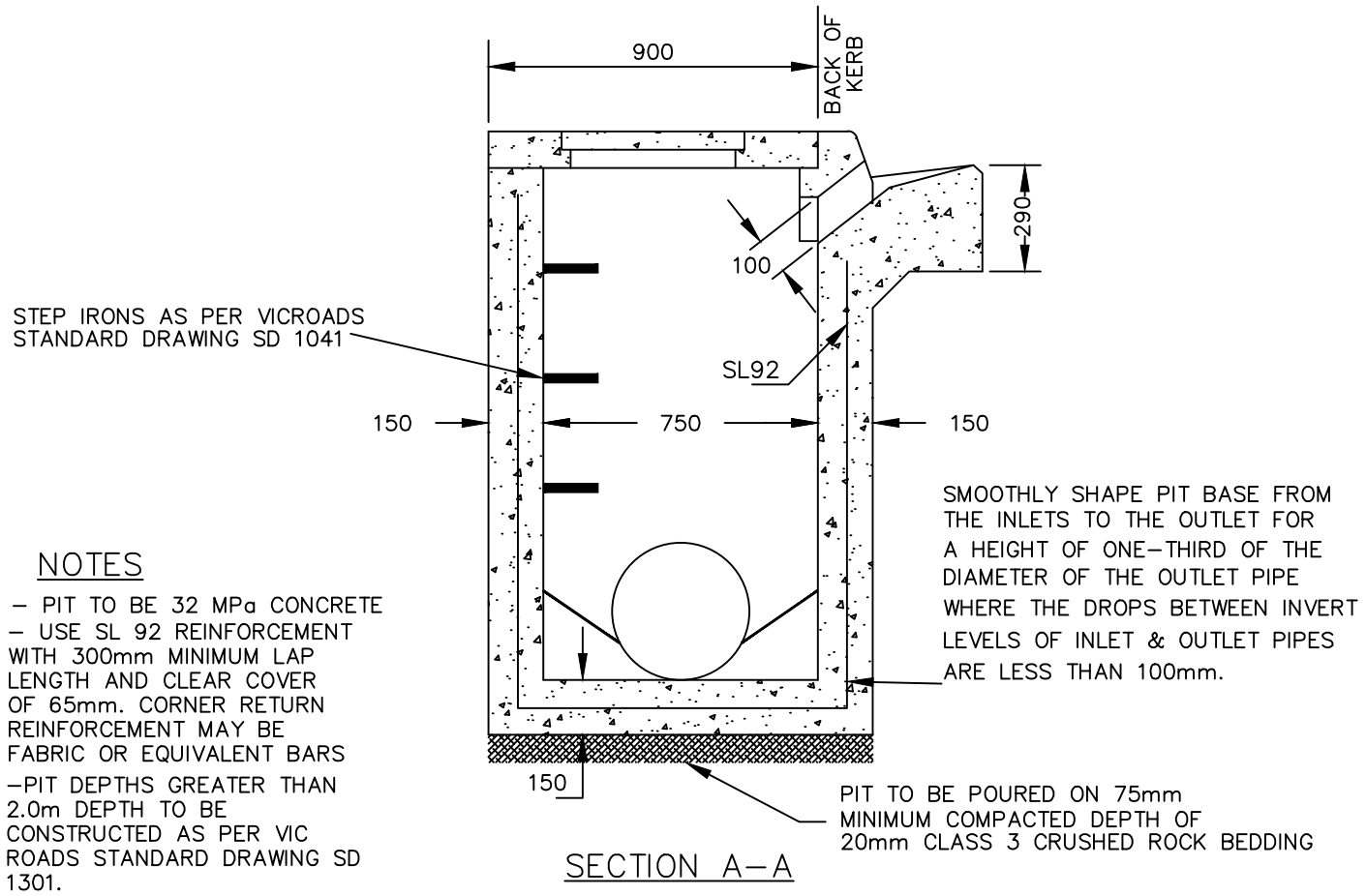
NOTES

- PIT TO BE 32 MPa CONCRETE
- USE SL 92 REINFORCEMENT WITH 300mm MINIMUM LAP LENGTH AND CLEAR COVER OF 65mm. CORNER RETURN REINFORCEMENT MAY BE FABRIC OR EQUIVALENT BARS
- PIT DEPTHS GREATER THAN 2.0m DEPTH TO BE CONSTRUCTED AS PER VIC ROADS STANDARD DRAWING SD 1301.

STANDARD SIDE ENTRY PIT WITH LINTEL & COVER (900 x 600 INTERNAL DIMENSIONS)

INFRASTRUCTURE SERVICES
Maribyrnong CITY COUNCIL

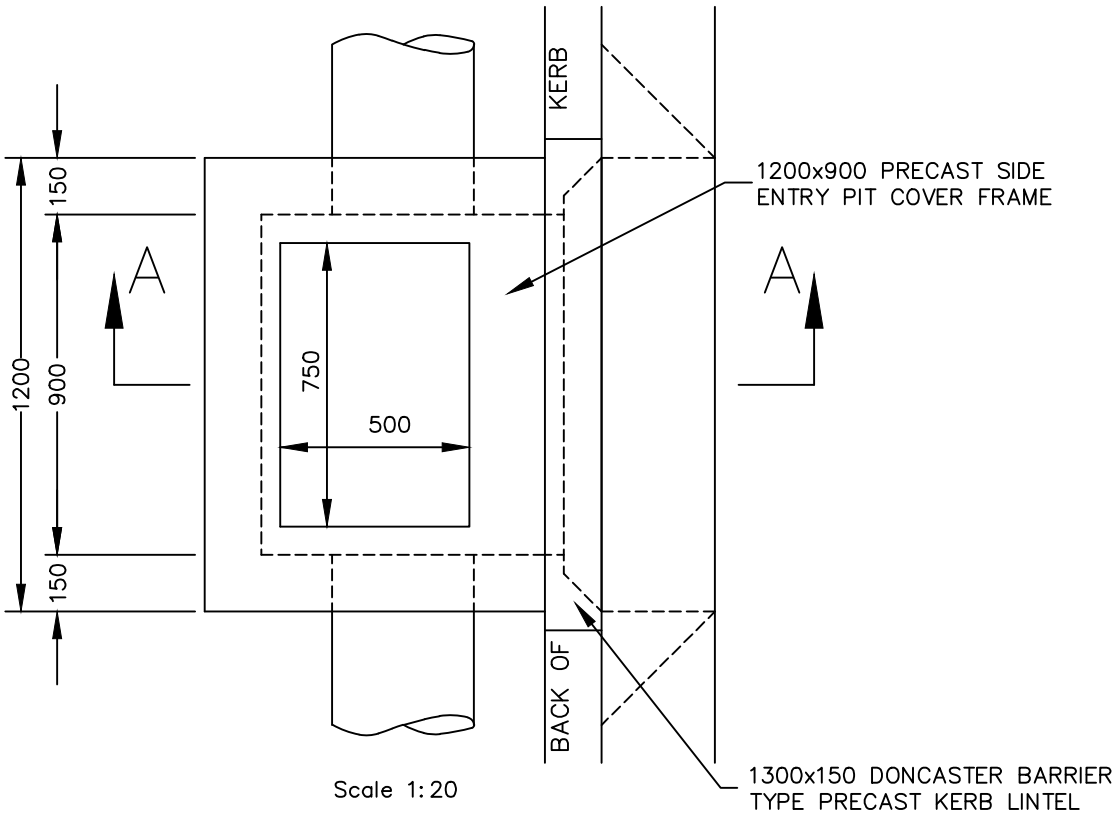
DRAWN:	I .VANIKIOTIS	DRAWING No.	Rev.
APPROVED :	T.LAM	S.D. D9	D
DATE :	DECEMBER 2014		



SECTION A–A

NOTES

– PIT TO BE 32 MPa CONCRETE
– USE SL 92 REINFORCEMENT WITH 300mm MINIMUM LAP LENGTH AND CLEAR COVER OF 65mm. CORNER RETURN REINFORCEMENT MAY BE FABRIC OR EQUIVALENT BARS
–PIT DEPTHS GREATER THAN 2.0m DEPTH TO BE CONSTRUCTED AS PER VIC ROADS STANDARD DRAWING SD 1301.

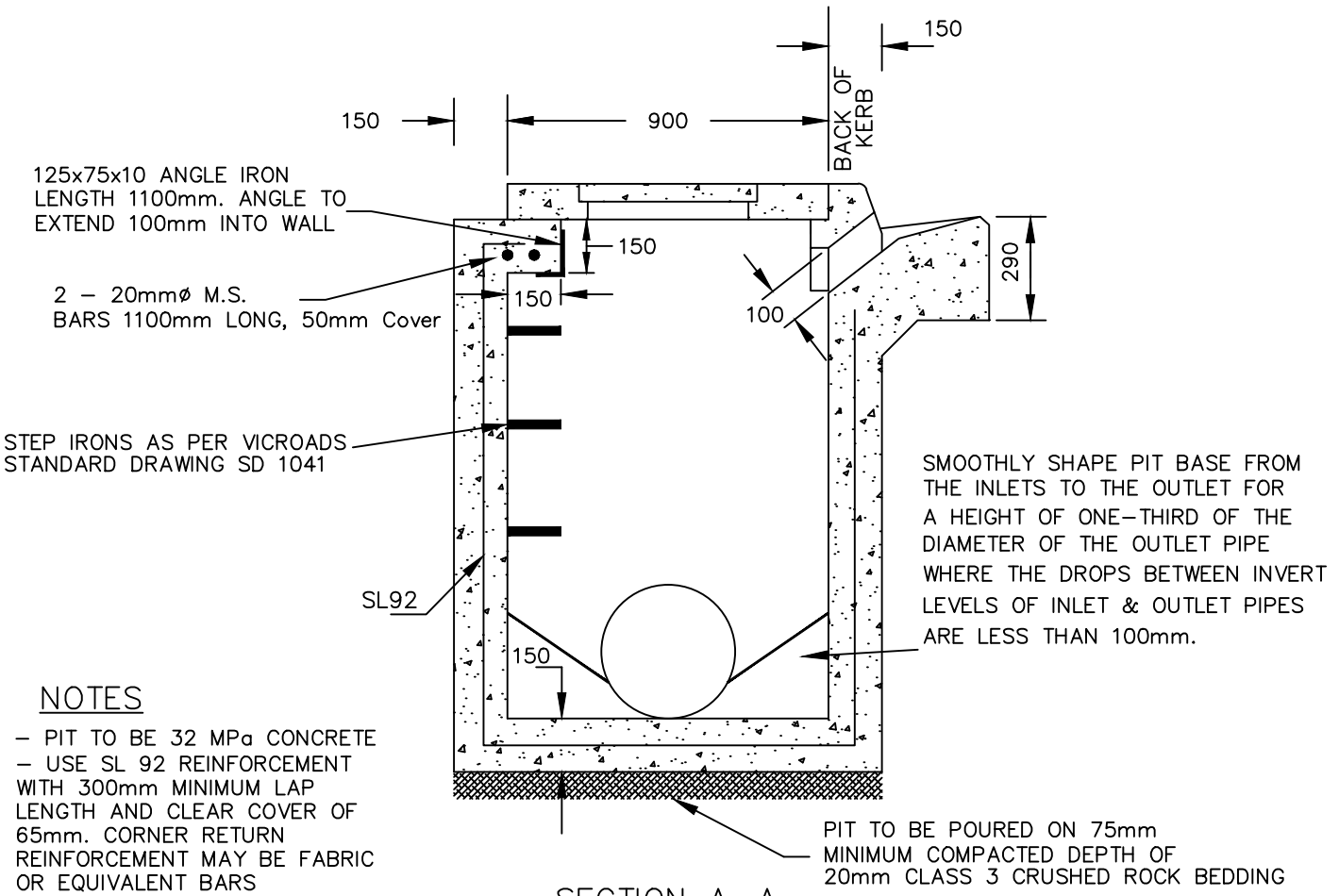


Scale 1:20

LARGE SIDE ENTRY PIT WITH LINTEL & COVER (900 x 750 INTERNAL DIMENSIONS)

INFRASTRUCTURE SERVICES
Maribyrnong CITY COUNCIL

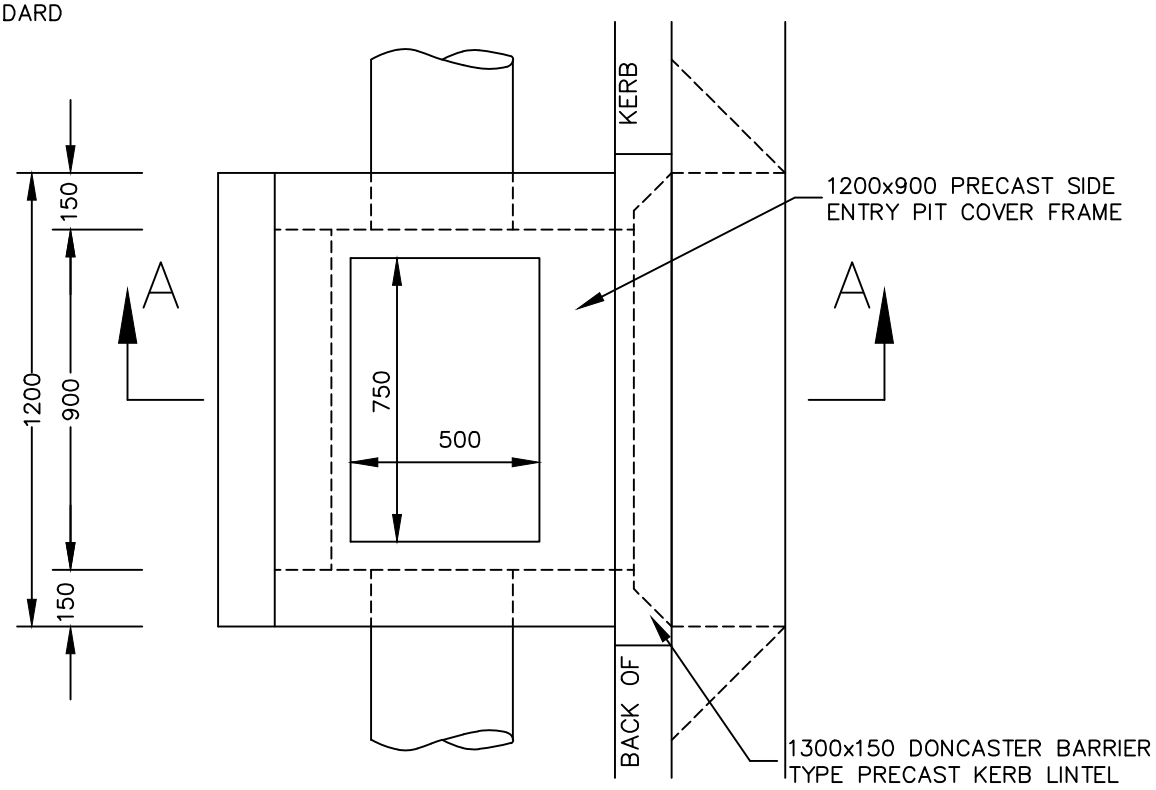
DRAWN:	I .VANIKIOTIS	DRAWING No.	Rev.
APPROVED :	T.LAM	S.D. D10	D
DATE :	DECEMBER 2014		



NOTES

– PIT TO BE 32 MPa CONCRETE
– USE SL 92 REINFORCEMENT WITH 300mm MINIMUM LAP LENGTH AND CLEAR COVER OF 65mm. CORNER RETURN REINFORCEMENT MAY BE FABRIC OR EQUIVALENT BARS
–PIT DEPTHS GREATER THAN 2.0m DEPTH TO BE CONSTRUCTED AS PER VIC ROADS STANDARD DRAWING SD 1301.

SECTION A–A

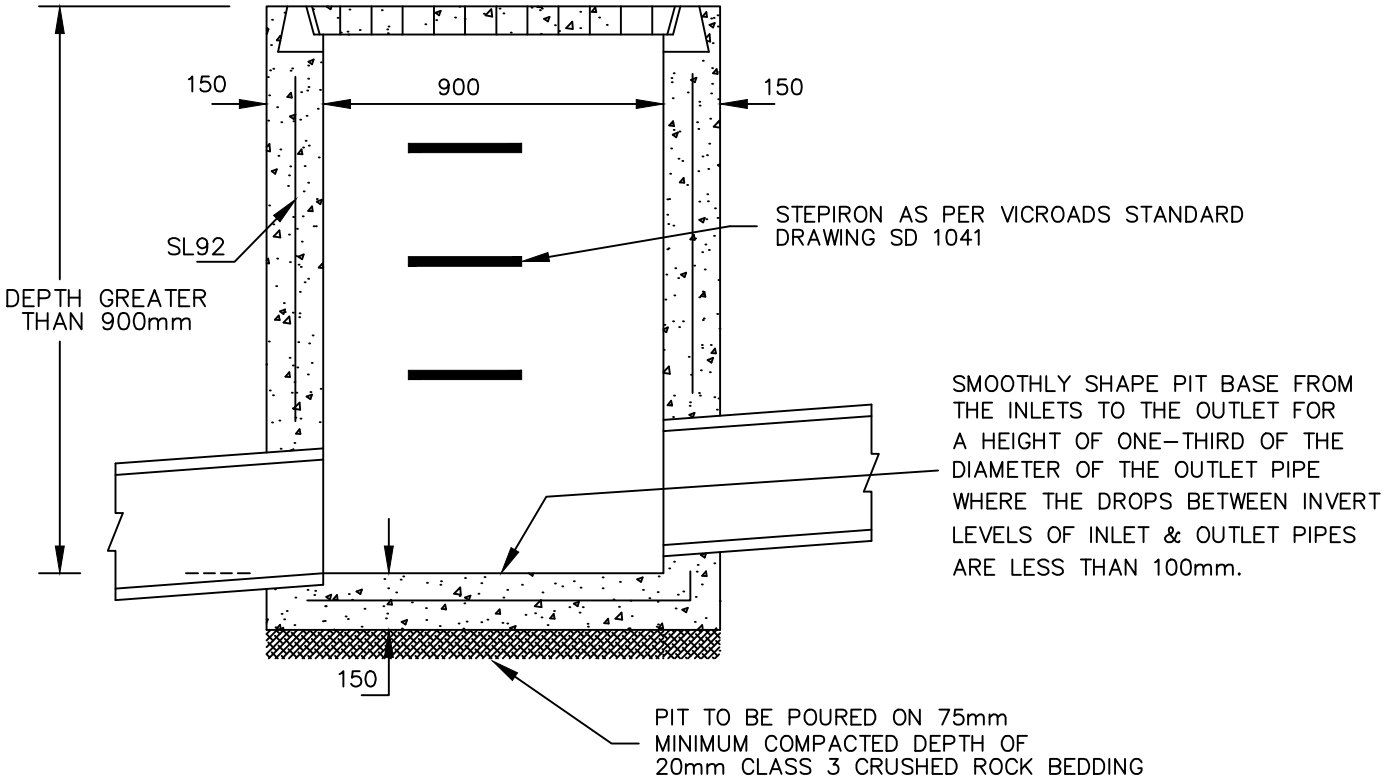


Scale 1:20

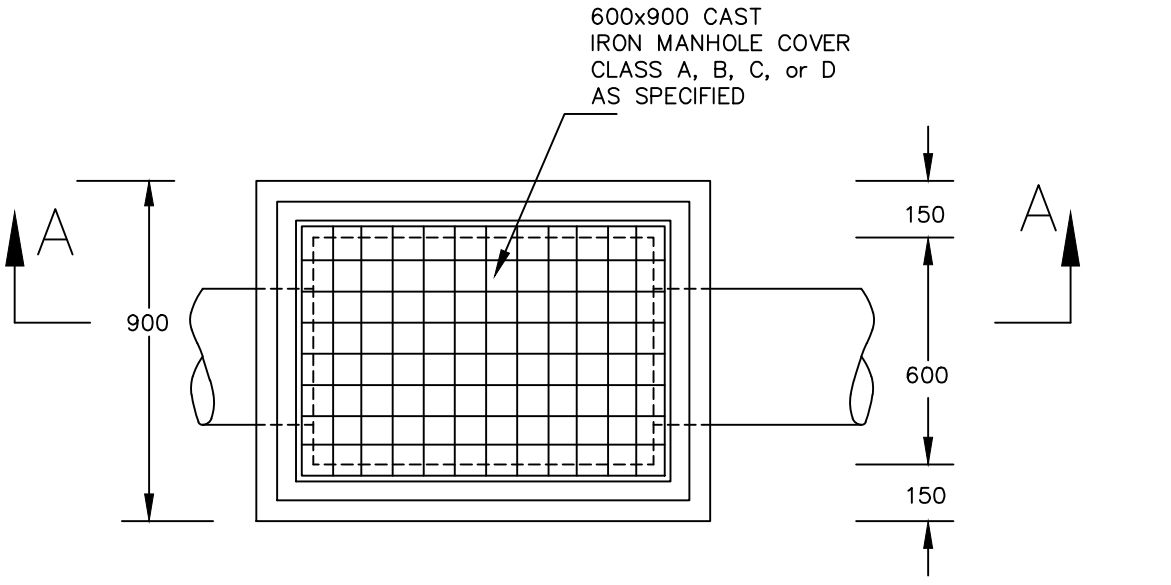
CORBELLED SIDE ENTRY PIT WITH LINTEL & COVER (900 x 900 INTERNAL DIMENSIONS)

INFRASTRUCTURE SERVICES
Maribyrnong CITY COUNCIL

DRAWN:	I .VANIKIOTIS	DRAWING No.	Rev.
APPROVED :	T.LAM	S.D. D11	D
DATE :	DECEMBER 2014		



SECTION A–A



Scale 1:20

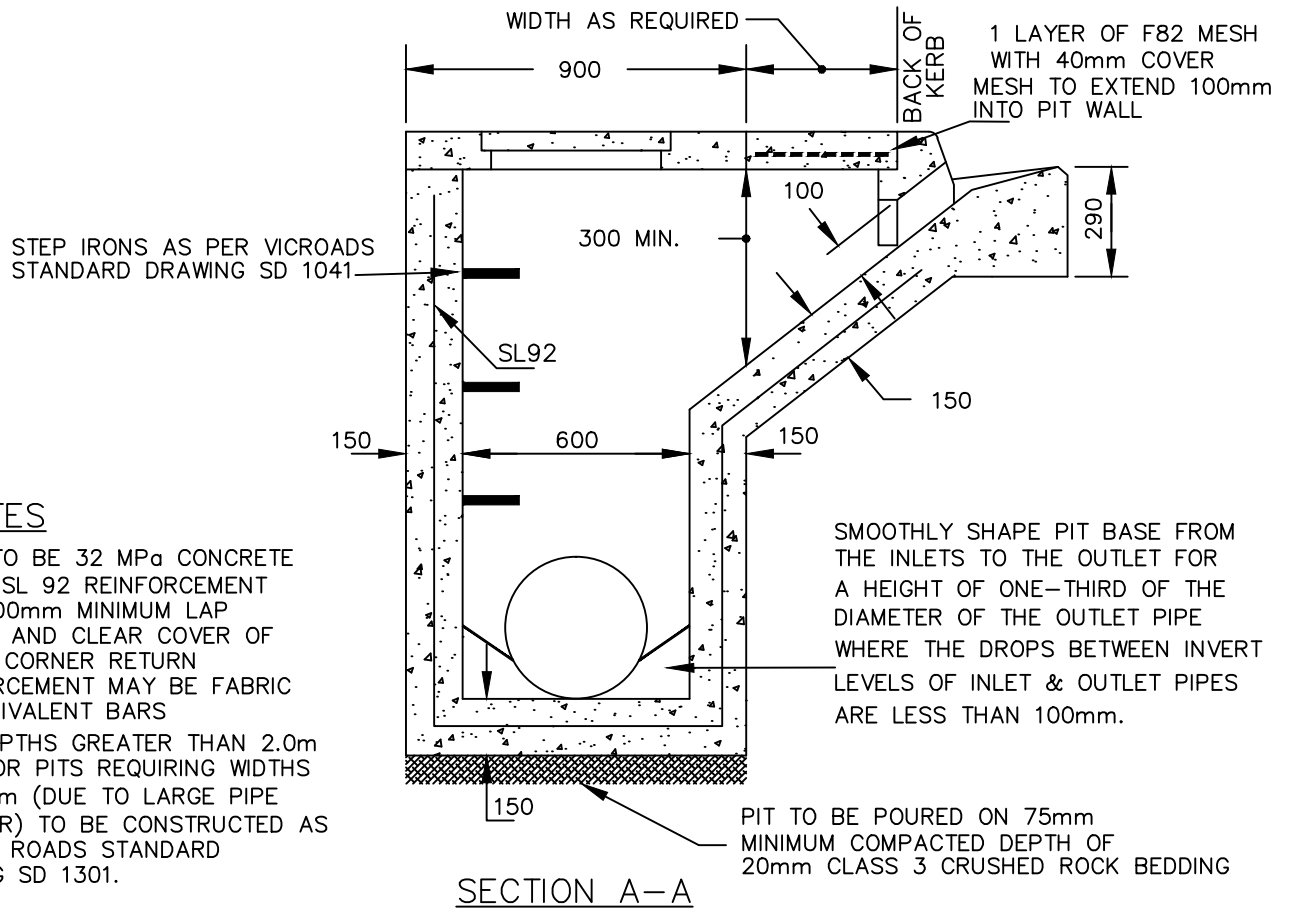
NOTES

– PIT TO BE 32 MPa CONCRETE
– USE SL 92 REINFORCEMENT WITH 300mm MINIMUM LAP LENGTH AND CLEAR COVER OF 65mm. CORNER RETURN REINFORCEMENT MAY BE FABRIC OR EQUIVALENT BARS

LARGE JUNCTION PIT (600 x 900 INTERNAL DIMENSIONS)

INFRASTRUCTURE SERVICES
Maribyrnong CITY COUNCIL

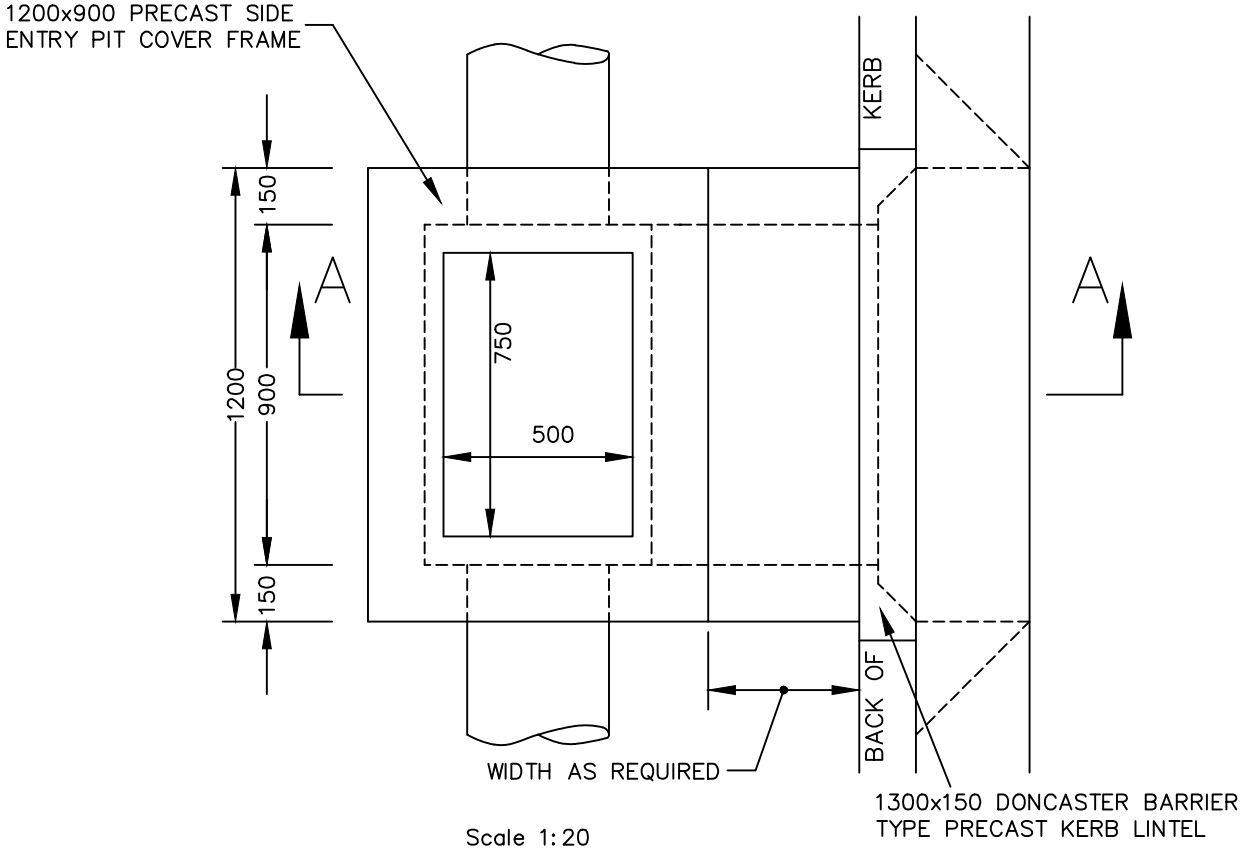
DRAWN: I .VANIKIOTIS		DRAWING No.	Rev.
APPROVED : T.LAM		S.D. D12	·
DATE : MAY 2015			



NOTES

- PIT TO BE 32 MPa CONCRETE
- USE SL 92 REINFORCEMENT WITH 300mm MINIMUM LAP LENGTH AND CLEAR COVER OF 65mm. CORNER RETURN REINFORCEMENT MAY BE FABRIC OR EQUIVALENT BARS
- PIT DEPTHS GREATER THAN 2.0m DEPTH OR PITS REQUIRING WIDTHS > 600mm (DUE TO LARGE PIPE DIAMETER) TO BE CONSTRUCTED AS PER VIC ROADS STANDARD DRAWING SD 1301.

SECTION A–A

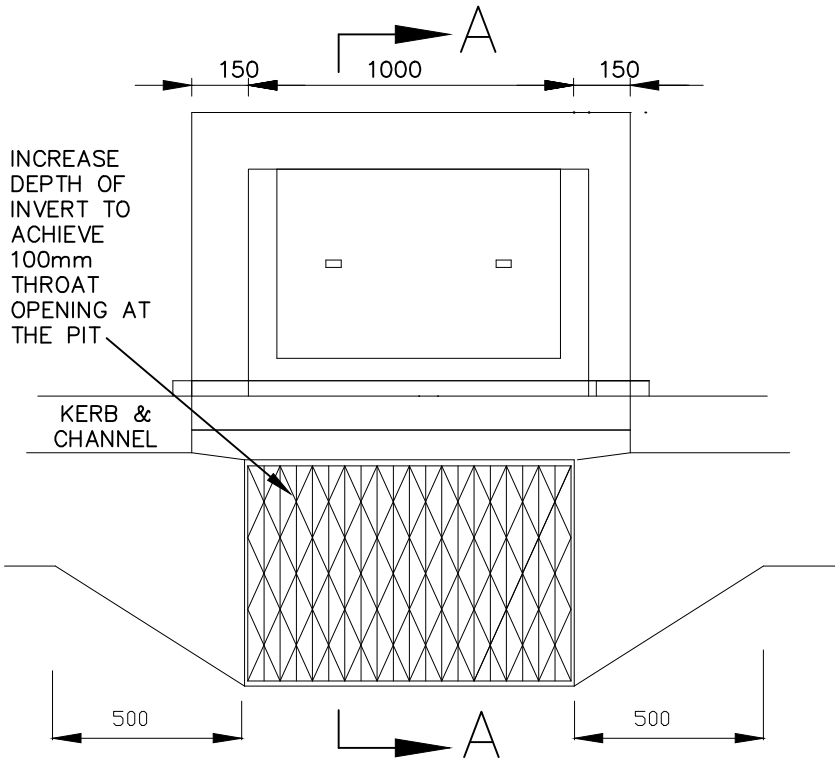


Scale 1:20

EXTENDED CHUTE SIDE ENTRY PIT WITH LINTEL & COVER (900 x 600)

INFRASTRUCTURE SERVICES
Maribyrnong CITY COUNCIL

DRAWN: I .VANIKIOTIS		DRAWING No.	Rev.
APPROVED : T.LAM		S.D. D13	E
DATE : DECEMBER 2014			



PLAN WIDE GRATED PIT UNDER CHANNEL

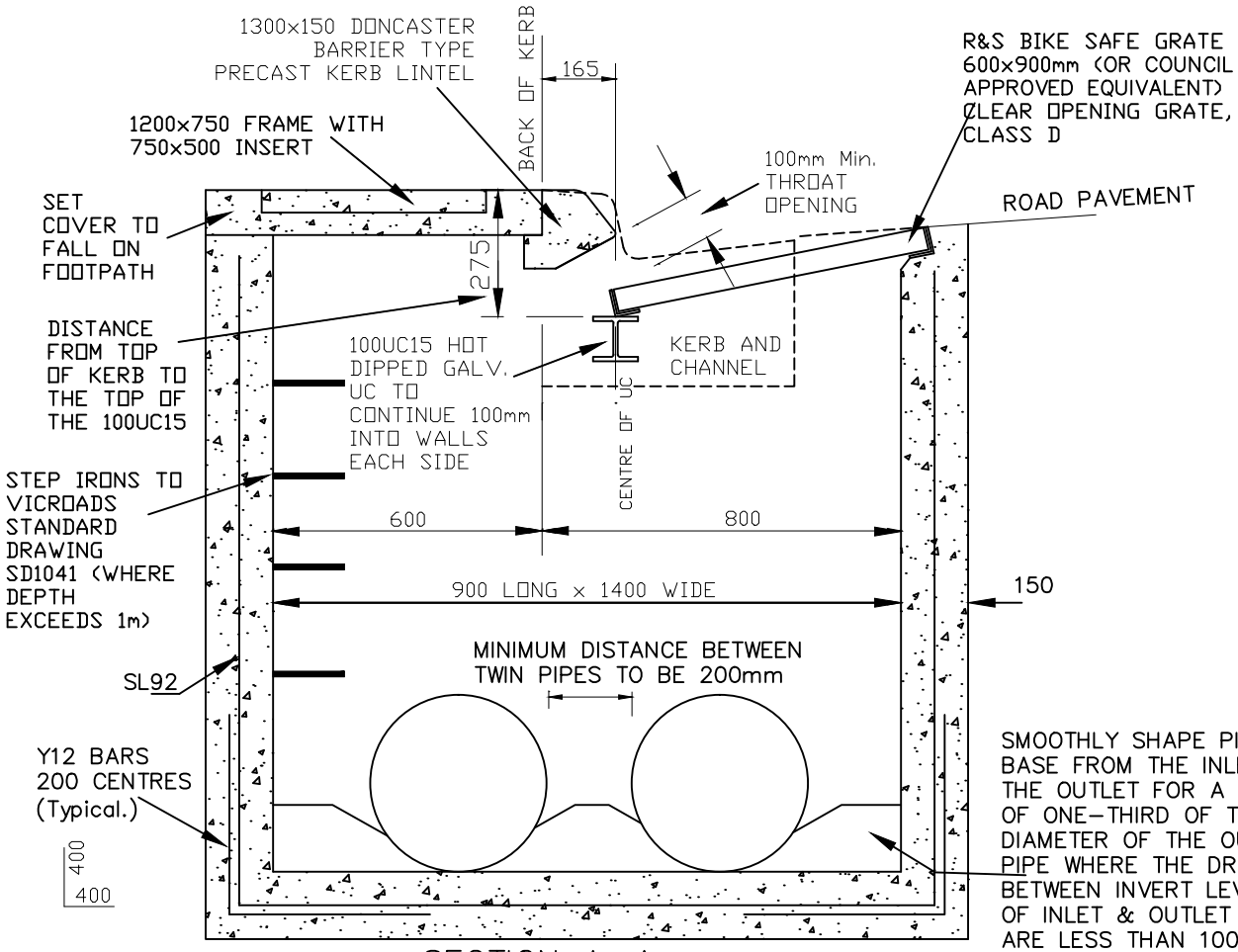
NOTES
1. ALL CONCRETE TO BE 32MPa.

2. ALL DIMENSIONS ARE IN mm's.

3. GRATE TO BE BIKE SAFE GRATE CLASS D, DIMENSIONS OF THE GRATE ARE FOR THE CLEAR OPENING. SUPPLIER AND GRATE TO BE APPROVED BY SUPERINTENDANT'S REPRESENTATIVE PRIOR TO COMMENCEMENT OF WORKS.
EXISTING APPROVED SUPPLIER; R&S GRATING, BIKE SAFE GRATES 13 HEALY ROAD DANDENONG SOUTH.Ph. 9238 5888 www.grating.com.au

4. THE FRONT WALL IS TO BE CORBELED FOR PIPES LARGER THAN 750mm Dia. RUNNING PARALLEL WITH THE KERB AND CHANNEL.

5. USE SL 92 REINFORCEMENT WITH 300mm MINIMUM LAP LENGTH AND CLEAR COVER OF 65mm. CORNER RETURN REINFORCEMENT MAY BE FABRIC OR EQUIVALENT BARS

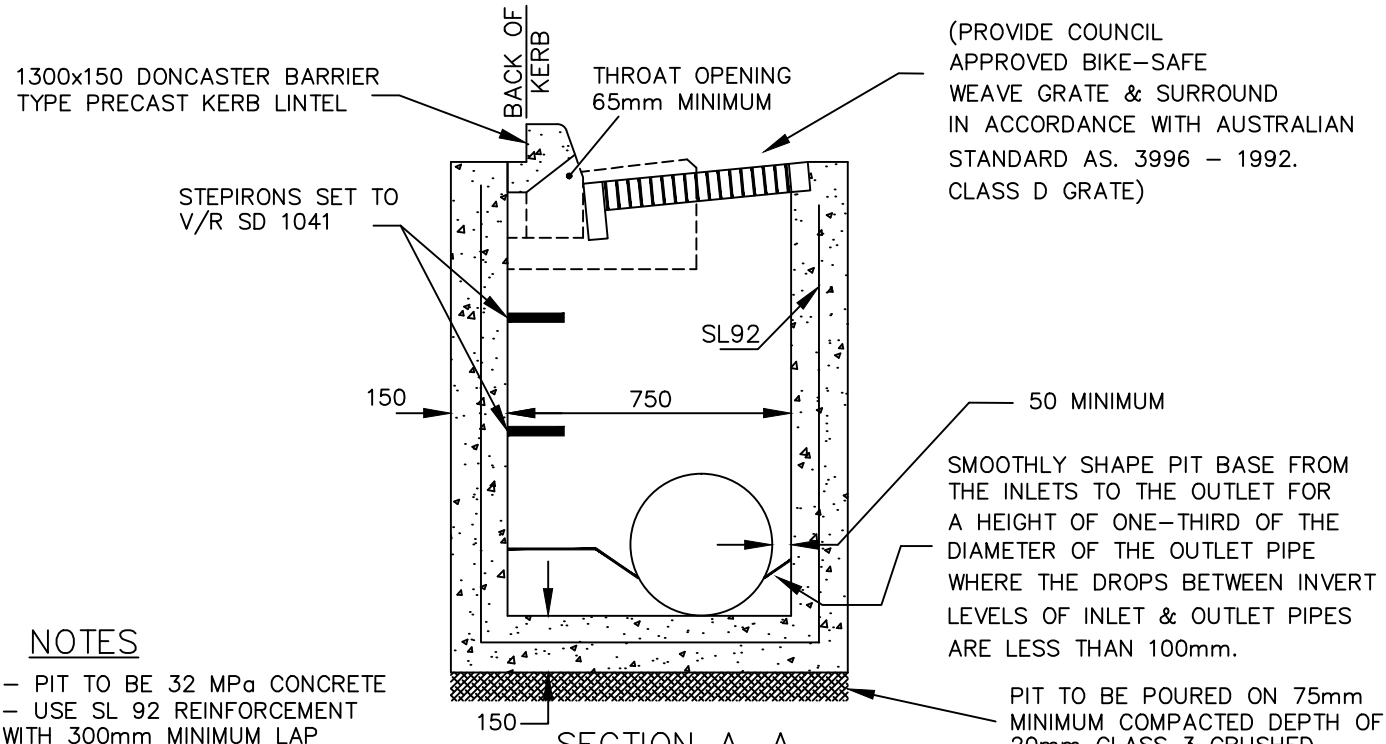


SECTION A-A Scale 1:20

WIDE GRATED PIT UNDER CHANNEL.

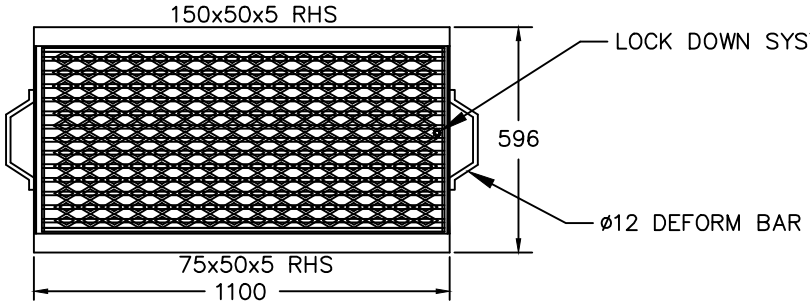
INFRASTRUCTURE SERVICES
Maribyrnong CITY COUNCIL

DRAWN:	I .VANIKIOTIS	DRAWING No.	Rev.
APPROVED :	T.LAM	S.D. D14	·
DATE :	MAY 2015		



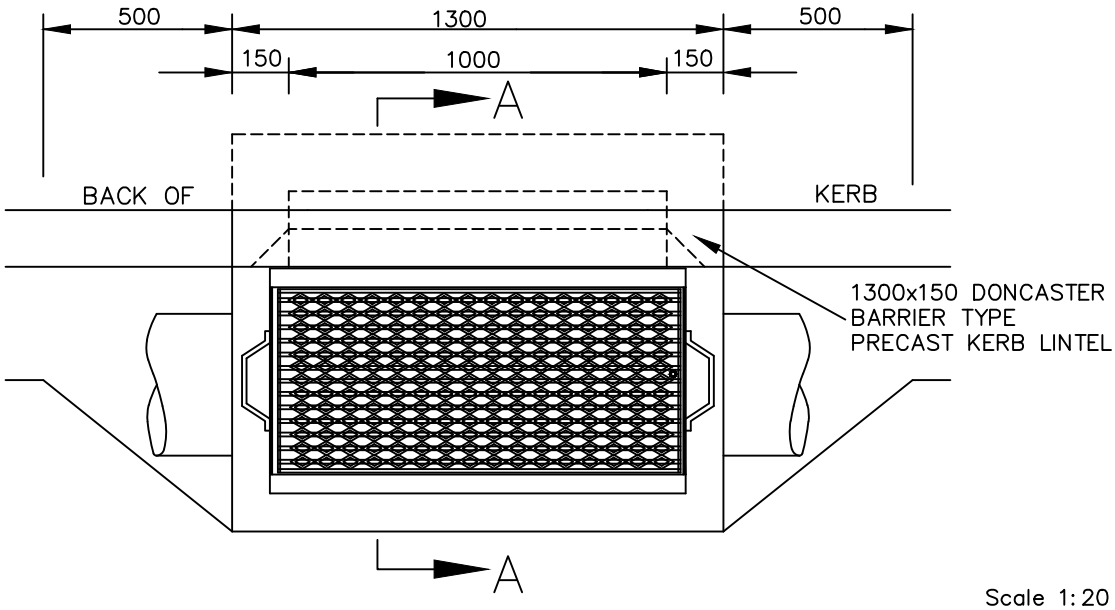
NOTES

- PIT TO BE 32 MPa CONCRETE
- USE SL 92 REINFORCEMENT WITH 300mm MINIMUM LAP LENGTH AND CLEAR COVER OF 65mm. CORNER RETURN REINFORCEMENT MAY BE FABRIC OR EQUIVALENT BARS
- PIT DEPTHS GREATER THAN 2.0m DEPTH TO BE CONSTRUCTED AS PER VIC ROADS STANDARD DRAWING SD 1322



WEAVE GRATE

"BIKE SAFE" HOT DIP GALVANISED CLASS D GRATING AND FRAME TO SUIT B2 KERB

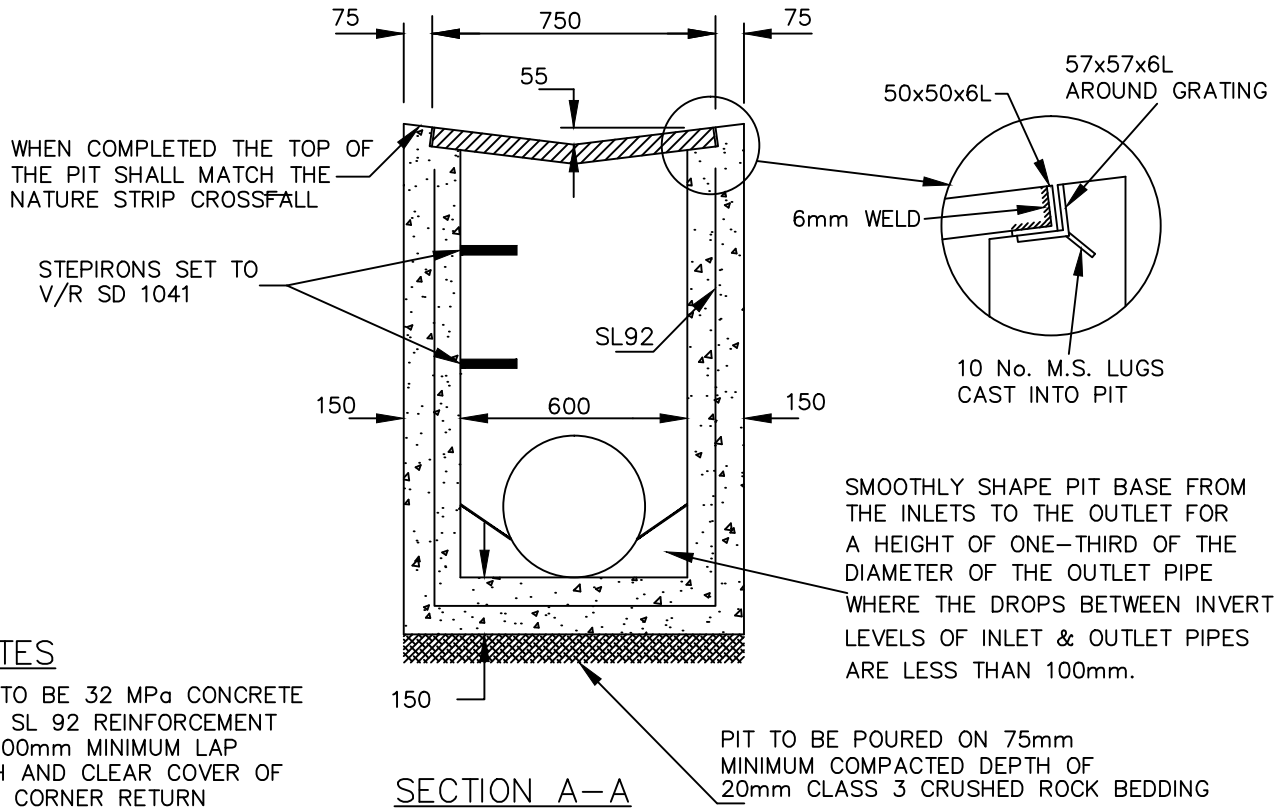


Scale 1:20

CLASS D HOT DIPPED GALVANISED GRATED SIDE ENTRY PIT WITH LINTEL

INFRASTRUCTURE SERVICES
Maribyrnong CITY COUNCIL

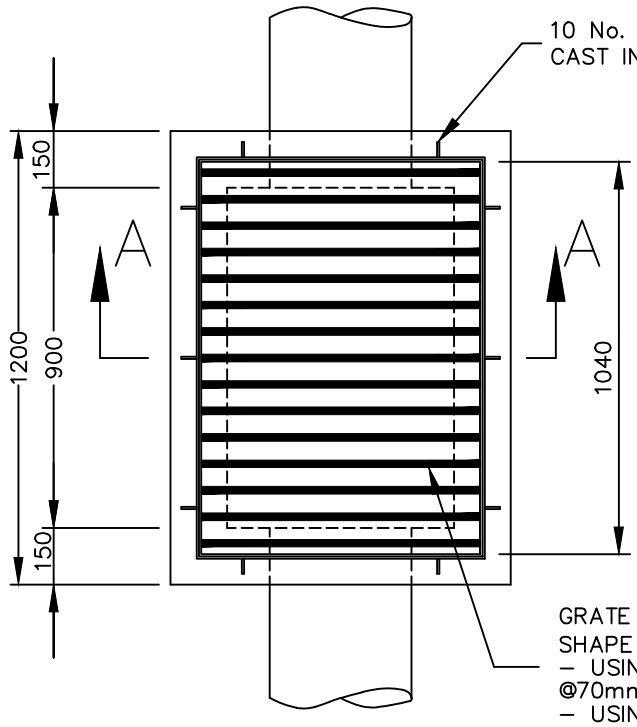
DRAWN: I .VANIKIOTIS		DRAWING No.	Rev.
APPROVED : T.LAM		S.D. D15	E
DATE : DECEMBER 2014			



SECTION A–A

NOTES

– PIT TO BE 32 MPa CONCRETE
– USE SL 92 REINFORCEMENT WITH 300mm MINIMUM LAP LENGTH AND CLEAR COVER OF 65mm. CORNER RETURN REINFORCEMENT MAY BE FABRIC OR EQUIVALENT BARS
–PIT DEPTHS GREATER THAN 2.0m DEPTH TO BE CONSTRUCTED AS PER VIC ROADS STANDARD DRAWING SD 1301.



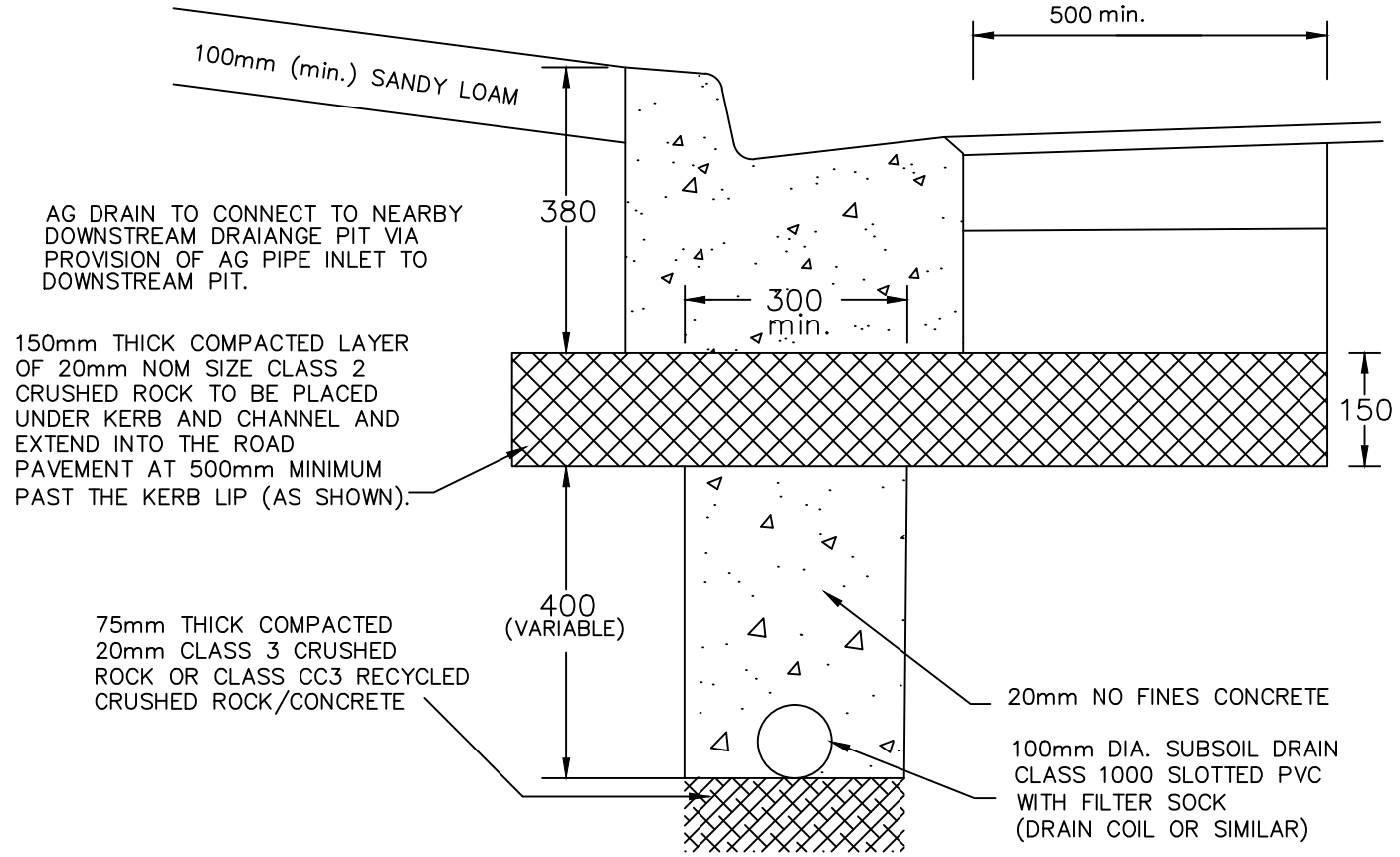
Scale 1:20

(WHERE REQUIRED COUNCIL APPROVED BIKE–SAFE WEAVE GRATE & SURROUND IN ACCORDANCE WITH AUSTRALIAN STANDARD AS. 3996 – 1992 CLASS C GRATE OR AS SPECIFIED)

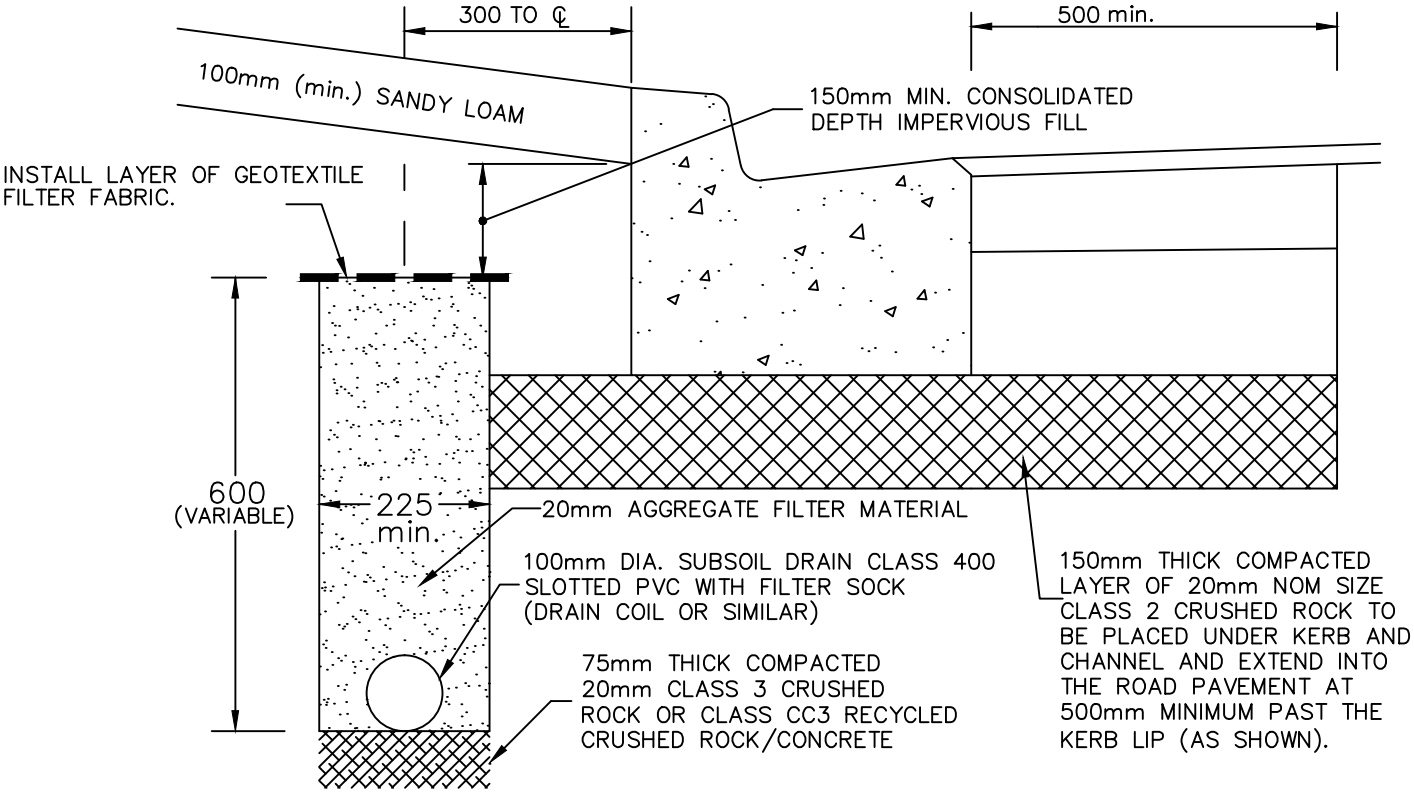
CLASS C HOT DIPPED GALVANISED SPOON DRAIN GRATED PIT

INFRASTRUCTURE SERVICES
Maribyrnong CITY COUNCIL

DRAWN:	I .VANIKIOTIS	DRAWING No.	Rev.
APPROVED :	T.LAM	S.D. D16	D
DATE :	DECEMBER 2014		



AGRICULTRAL DRAINAGE DETAIL TYPE 1



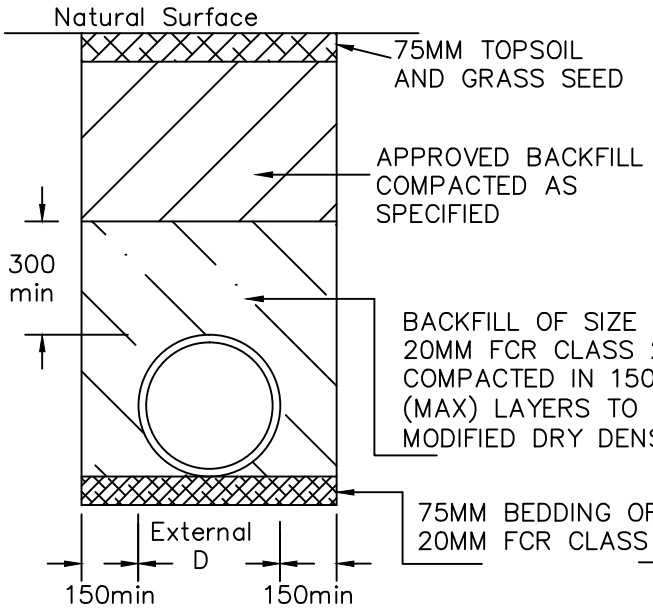
AGRICULTRAL DRAINAGE DETAIL TYPE 2

Scale 1:10

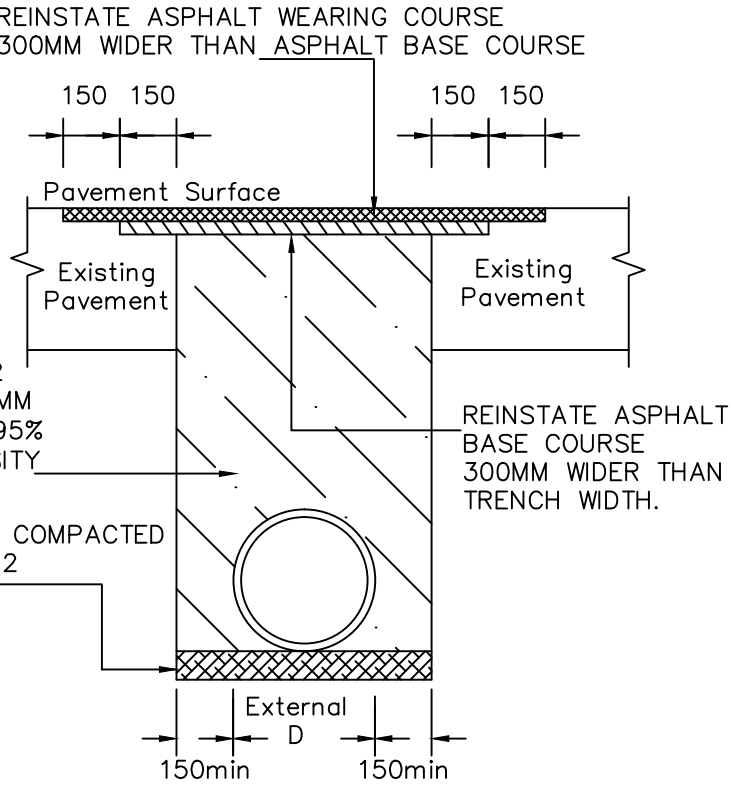
AGRICULTURAL DRAINAGE DETAILS

INFRASTRUCTURE SERVICES
Maribyrnong CITY COUNCIL

DRAWN : I. VANIKIOTIS		DRAWING No.	Rev.
APPROVED : T.LAM		S.D. D17	D
DATE : DECEMBER 2014			

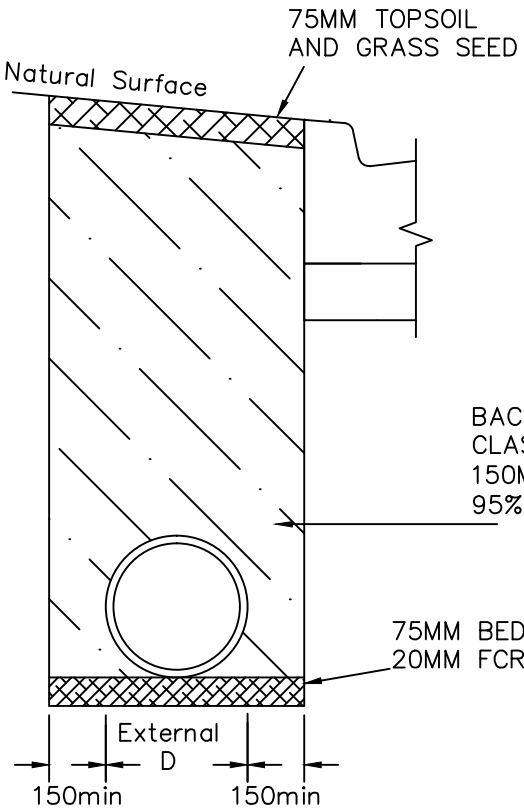


TYPE 1: TRENCH IN NATURE STRIP

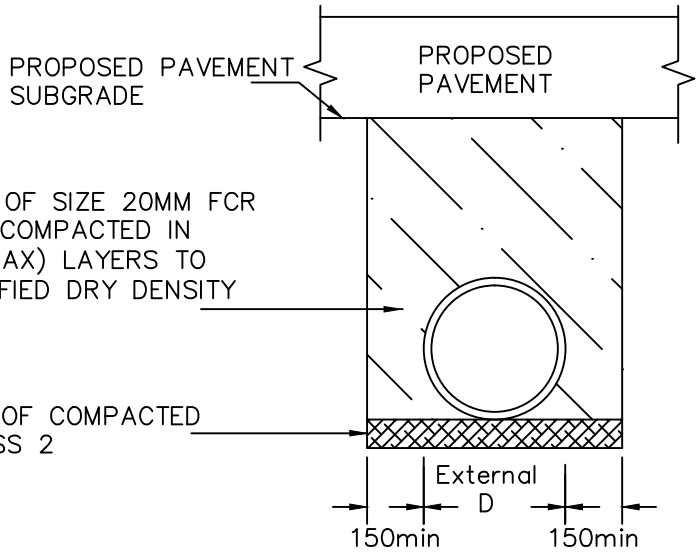


TYPE 2: TRENCH UNDER EXISTING PAVEMENT

NOTE: TOTAL ASPHALT DEPTH TO MATCH EXISTING OR 50mm MINIMUM (WHICHEVER IS GREATER)



TYPE 3: TRENCH BEHIND KERB AND CHANNEL



TYPE 4: TRENCH UNDER PAVEMENT AND / OR KERB AND CHANNEL

NOTES:

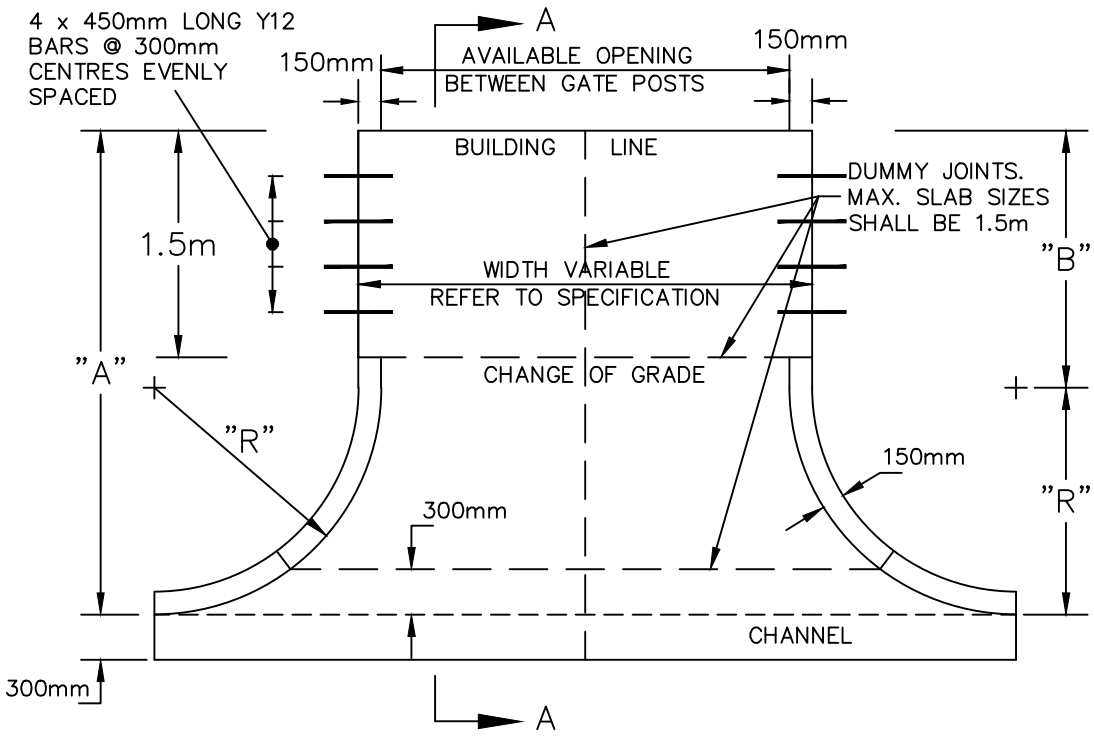
* DIMENSIONS SHOWN IN MILLIMETERS
* IMPORTED BACKFILL TO MEET EPA 'FILL MATERIAL' SPECIFICATION, COUNCIL SPECIFICATION & REQUIREMENTS AND APPROVED BY COUNCIL'S SUPERINTENDENT.
* TOP SOIL BACKFILL TO BE TOP SOIL PREVIOUSLY STRIPPED FROM THE CONSTRUCTION SITE, IF APPROVED TO BE SUITABLE, OTHERWISE IMPORTED TOPSOIL AS PER COUNCIL SPECIFICATION AND REQUIREMENTS.

Scale 1:20

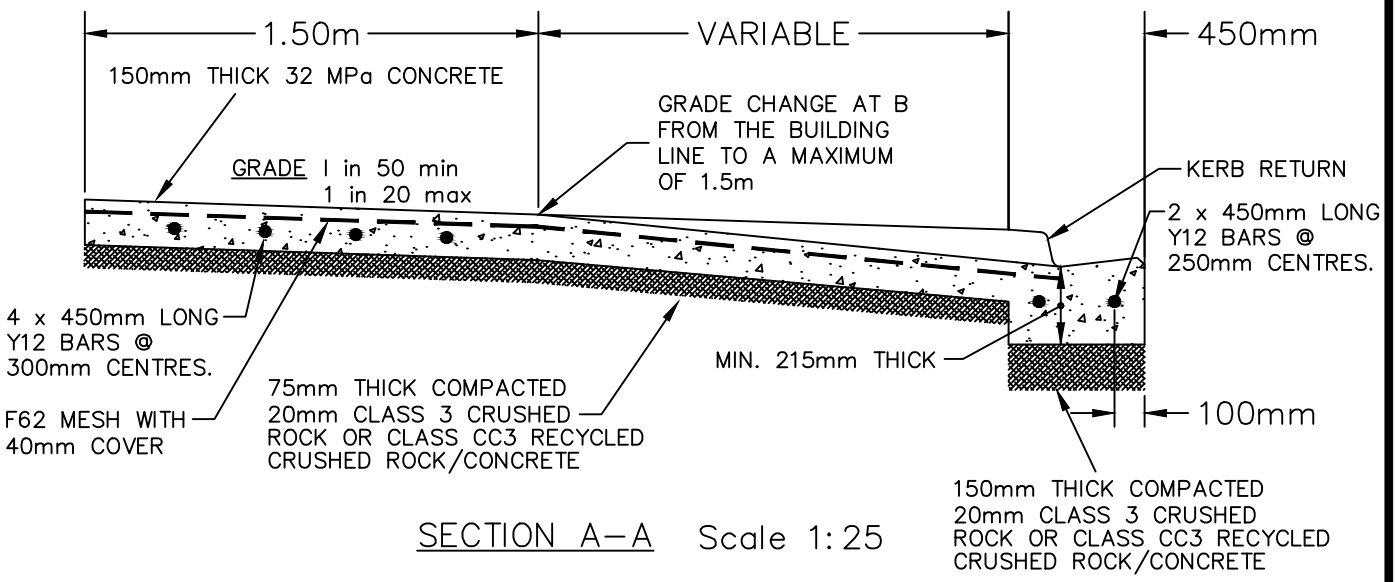
DRAINAGE BACKFILL DETAILS

INFRASTRUCTURE SERVICES
Maribyrnong CITY COUNCIL

DRAWN:	A.TURKER	DRAWING No.	Rev.
APPROVED :	T.LAM	S.D. D18	B
DATE :	FEBRUARY 2014		



PLAN Scale 1:50



SECTION A–A Scale 1:25

BULL NOSE PERMITTED IF AGREED BY COUNCIL

TABLE OF VARIABLES "B" AND "R" GIVEN VARIABLE "A"

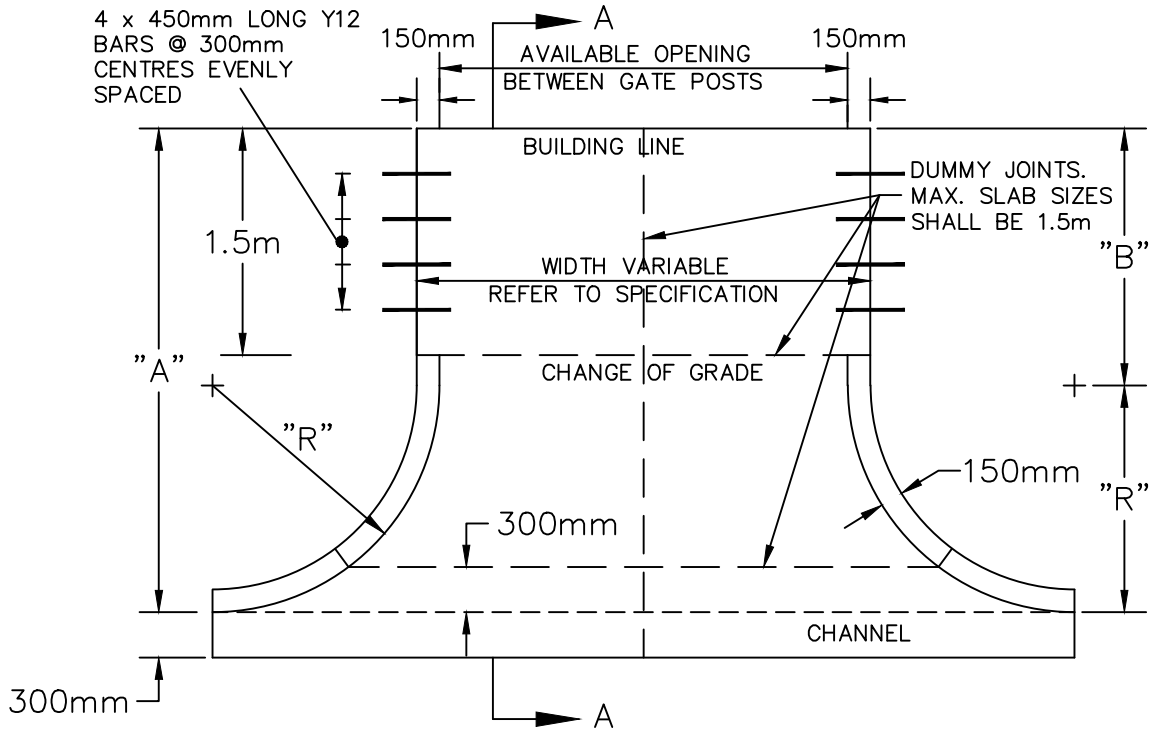
"A" LESS THAN 2.25m	B = 2/3A	R = 1/3A
"A" BETWEEN 2.25m AND 3.00m	B = 1.50m	R = A–1.50m
"A" GREATER THAN 3.00m	B = A–1.50m	R = 1.50m

UNLESS NOTED OTHERWISE, CHARCOAL COLOURED CONCRETE IN HERITAGE AREAS TO CONSIST OF EITHER:
* 1 X 25 KG BAG OF BAYER BLACK POWDER PER CUBIC METRE OF CONCRETE , OR
* 1 X 25 KG BAG OF ABILOX BLACK CAF–X2 (4.15%) PER 2 CUBIC METRES OF CONCRETE.

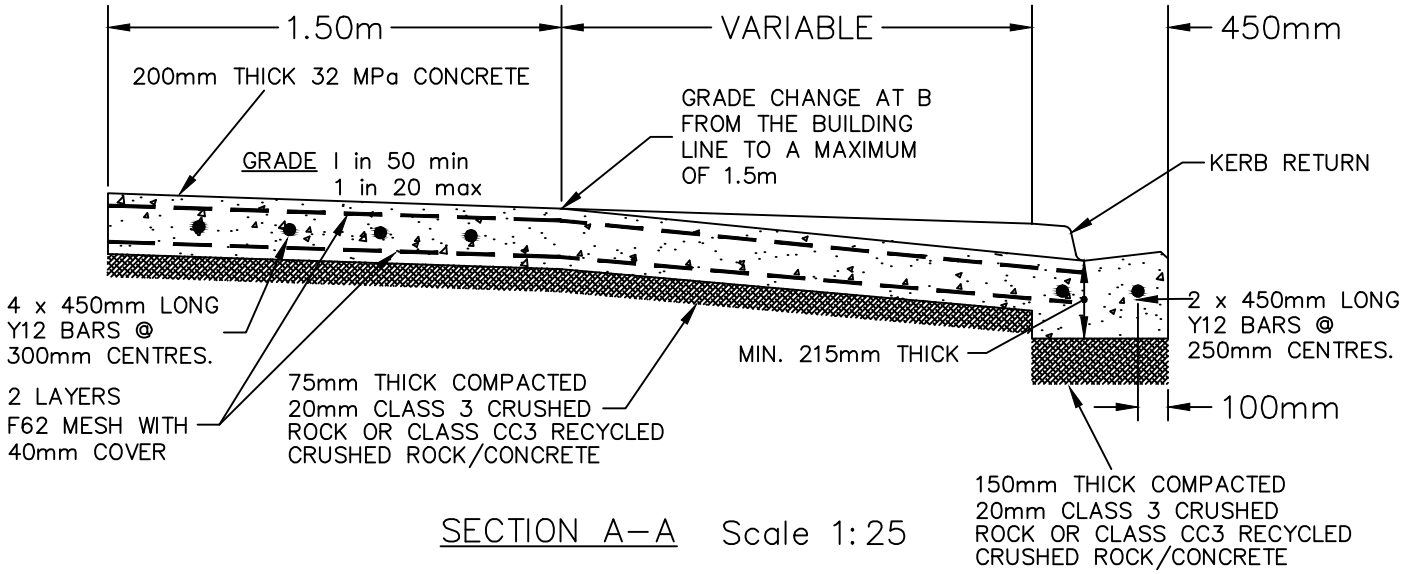
RESIDENTIAL VEHICULAR CROSSING (WITH RADIALS)

INFRASTRUCTURE SERVICES
Maribyrnong CITY COUNCIL

DRAWN :	I. VANIKIOTIS	DRAWING No.	Rev.
APPROVED :	T. LAM	S.D. X1	D
DATE :	MAY 2015		



PLAN Scale 1:50



SECTION A–A Scale 1:25

BULL NOSE PERMITTED IF AGREED BY COUNCIL

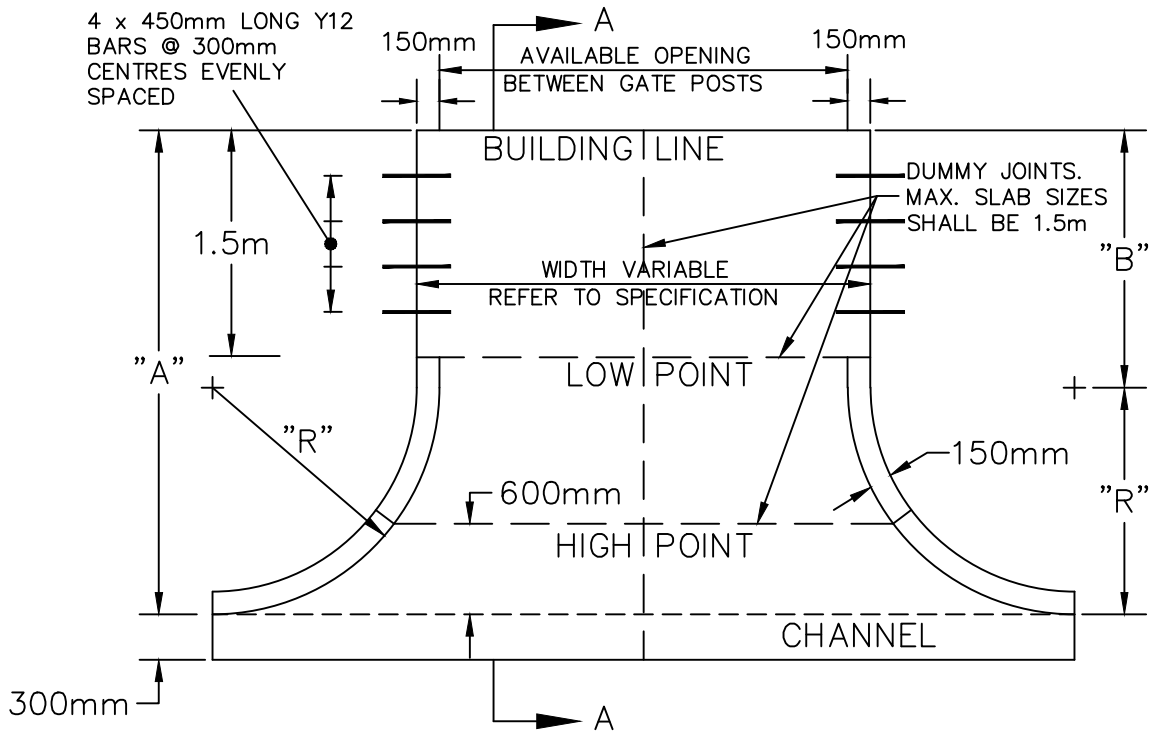
TABLE OF VARIABLES "B" AND "R" GIVEN VARIABLE "A"

"A" LESS THAN 2.25m	B = 2/3A	R = 1/3A
"A" BETWEEN 2.25m AND 3.00m	B = 1.50m	R = A–1.50m
"A" GREATER THAN 3.00m	B = A–1.50m	R = 1.50m

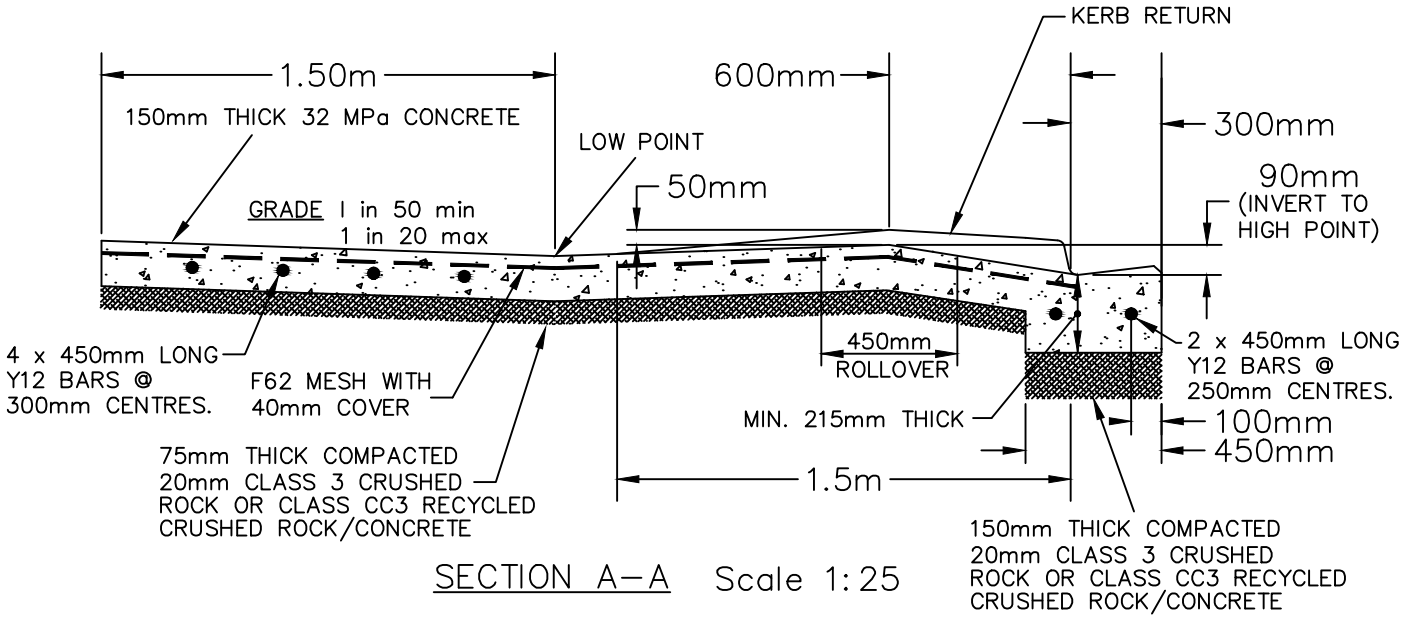
INDUSTRIAL VEHICULAR CROSSING

INFRASTRUCTURE SERVICES
Maribyrnong CITY COUNCIL

DRAWN : I. VANIKIOTIS		DRAWING No.	Rev.
APPROVED : T. LAM		S.D. X2	C
DATE : MAY 2015			



PLAN Scale 1:50



SECTION A–A Scale 1:25

TABLE OF VARIABLES "B" AND "R" GIVEN VARIABLE "A"

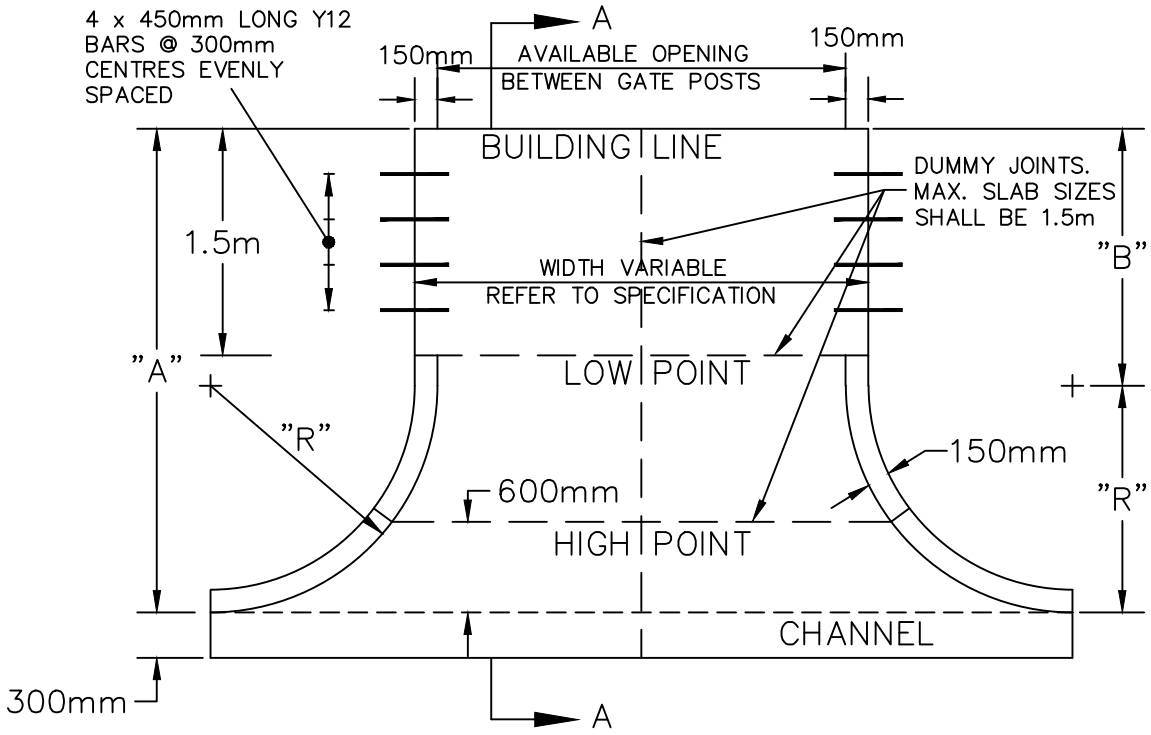
"A" LESS THAN 2.25m	B = 2/3A	R = 1/3A
"A" BETWEEN 2.25m AND 3.00m	B = 1.50m	R = A–1.50m
"A" GREATER THAN 3.00m	B = A–1.50m	R = 1.50m

UNLESS NOTED OTHERWISE, CHARCOAL COLOURED CONCRETE IN HERITAGE AREAS TO CONSIST OF EITHER:
* 1 X 25 KG BAG OF BAYER BLACK POWDER PER CUBIC METRE OF CONCRETE , OR
* 1 X 25 KG BAG OF ABILOX BLACK CAF–X2 (4.15%) PER 2 CUBIC METRES OF CONCRETE.

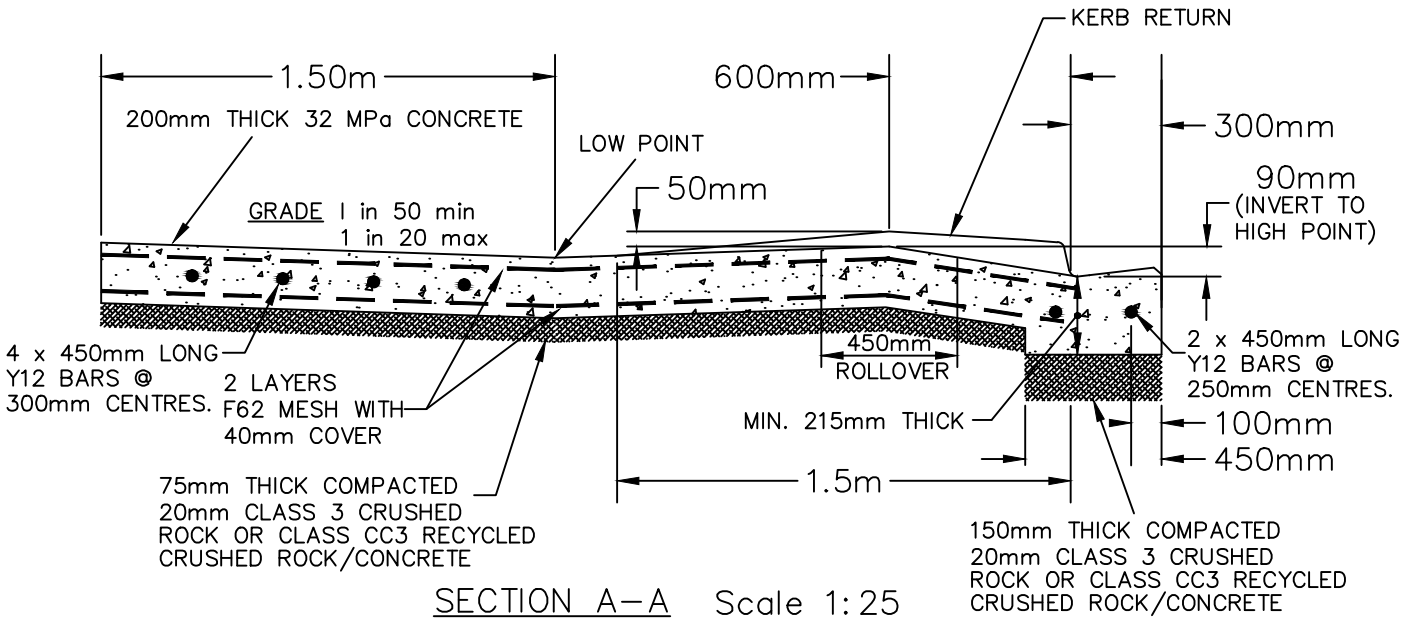
REVERSE FALL RESIDENTIAL VEHICULAR CROSSING

INFRASTRUCTURE SERVICES
Maribyrnong CITY COUNCIL

DRAWN :	I. VANIKIOTIS	DRAWING No.	Rev.
APPROVED :	T. LAM	S.D. X3	D
DATE :	MAY 2015		



PLAN Scale 1:50



SECTION A–A Scale 1:25

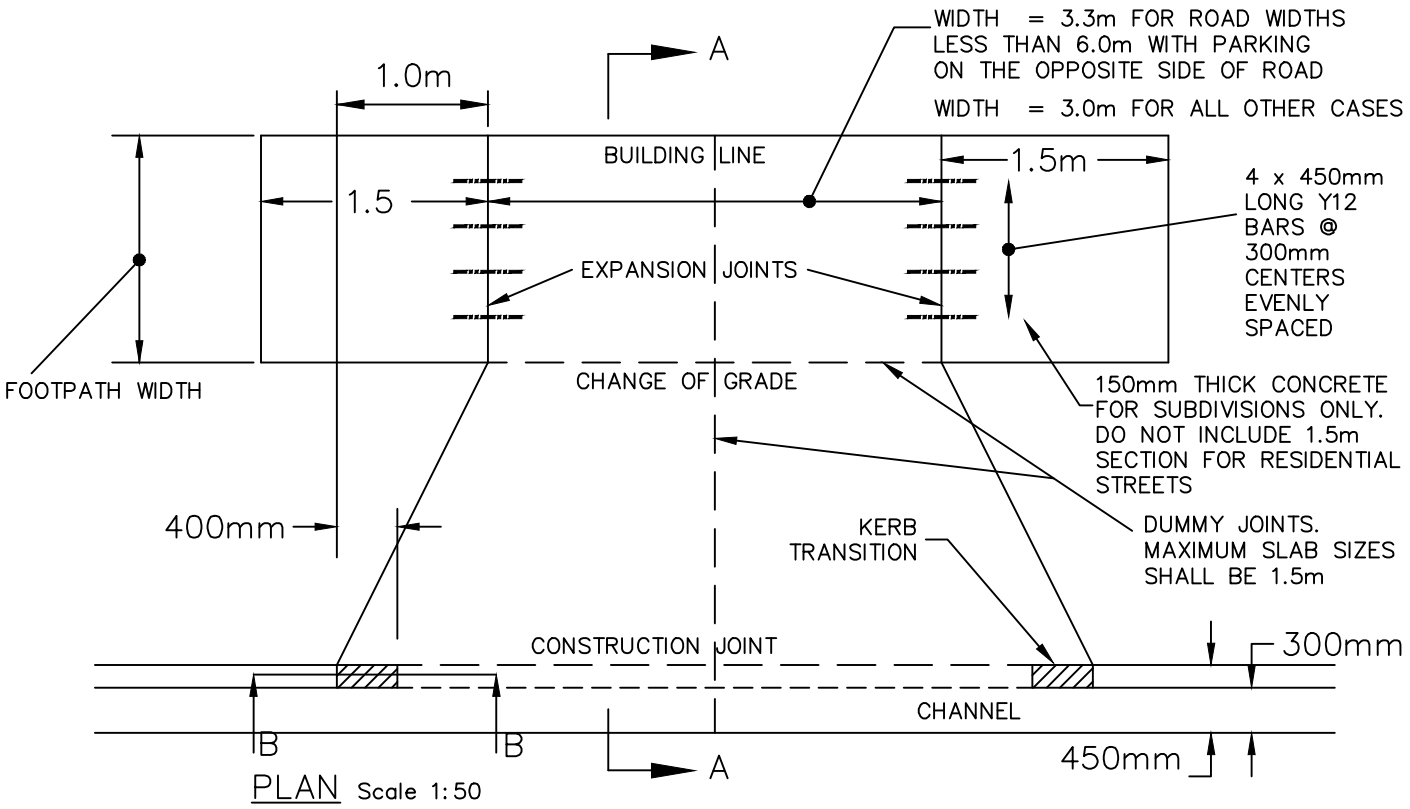
TABLE OF VARIABLES "B" AND "R" GIVEN VARIABLE "A"

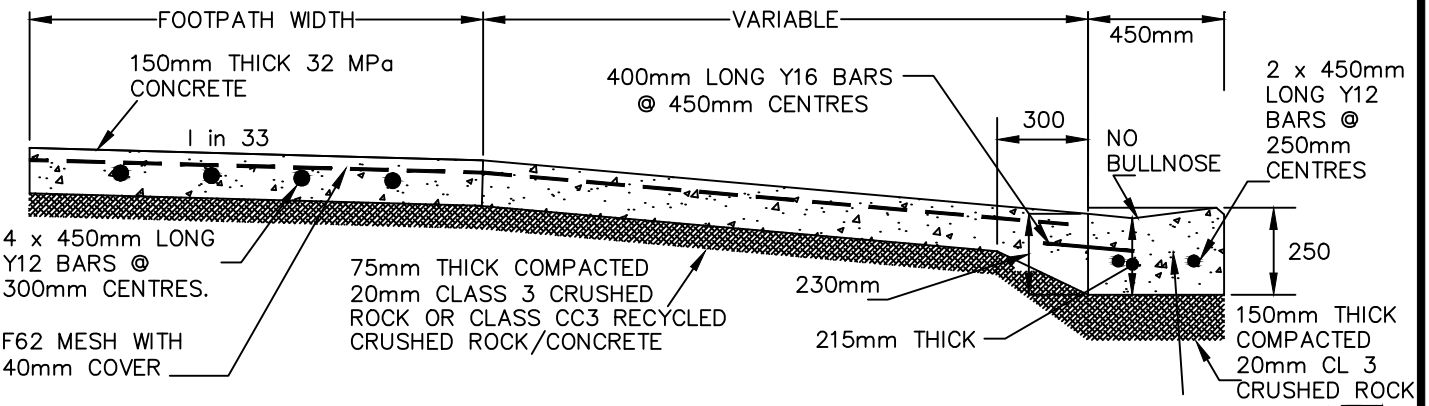
"A" LESS THAN 2.25m	B = 2/3A	R = 1/3A
"A" BETWEEN 2.25m AND 3.00m	B = 1.50m	R = A–1.50m
"A" GREATER THAN 3.00m	B = A–1.50m	R = 1.50m

REVERSE FALL INDUSTRIAL VEHICULAR CROSSING (WITH RADIALS)

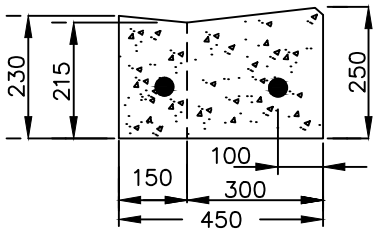
INFRASTRUCTURE SERVICES
Maribyrnong CITY COUNCIL

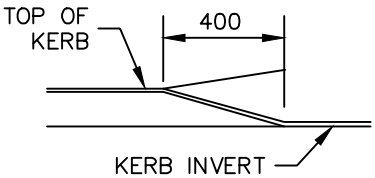
DRAWN :	I .VANIKIOTIS	DRAWING No.	Rev.
APPROVED :	T. LAM	S.D. X4	D
DATE :	MAY 2015		





SECTION A–A Scale 1:25





SECTION B–B

NOTES

1) ALL SERVICE TRENCHES TO BE BACKFILLED UNDER VEHICLE CROSSINGS WITH CRUSHED ROCK AND COMPACTED IN 150mm LAYERS

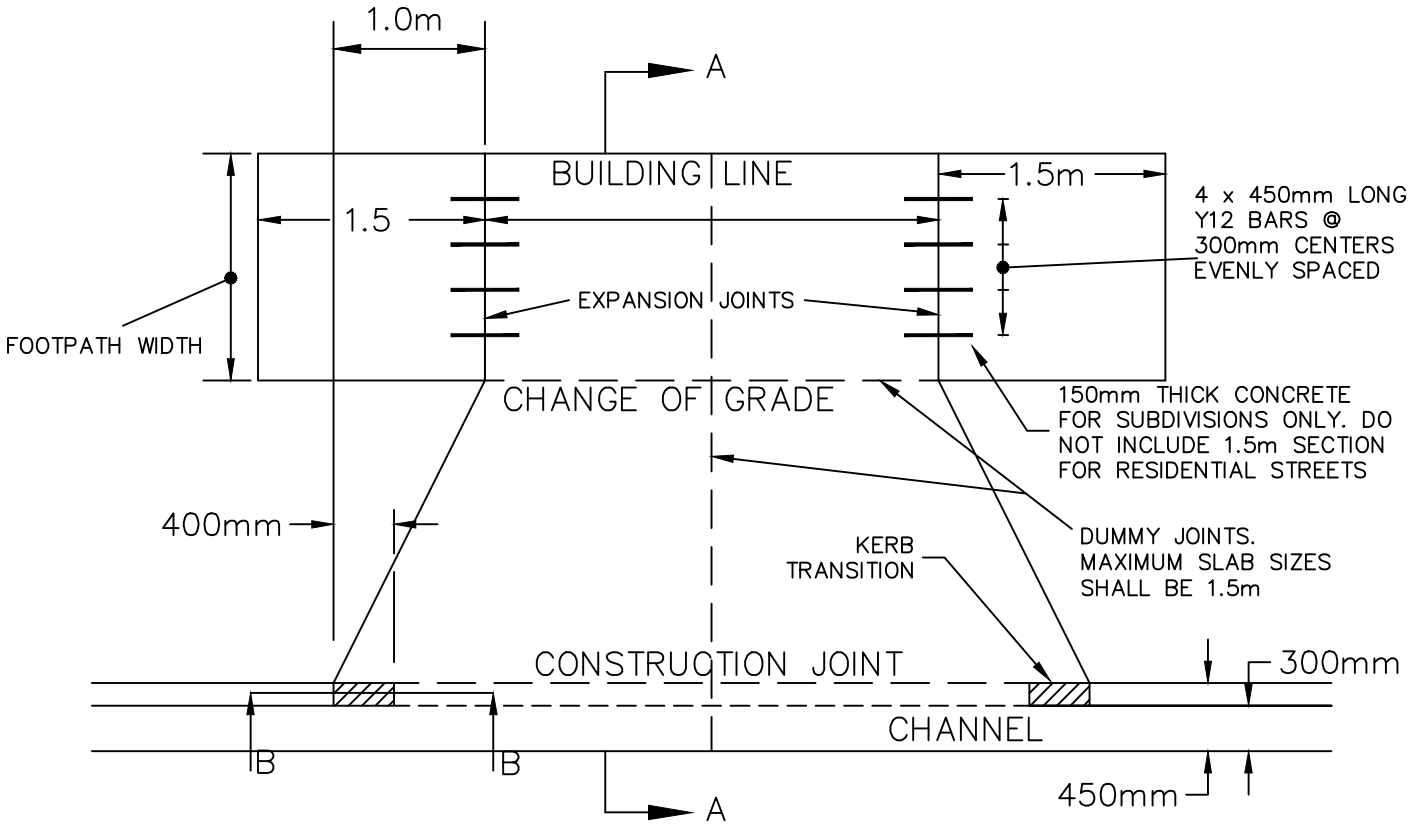
2) IF LENGTH BETWEEN EDGE OF LAYBACK AND BUILDING LINE IS LESS THAN 2.7m REFER TO COUNCIL FOR DIRECTION ON LAYOUT OF VEHICLE CROSSING

3) UNLESS NOTED OTHERWISE, CHARCOAL COLOURED CONCRETE IN HERITAGE AREAS TO CONSIST OF EITHER:
* 1 X 25 KG BAG OF BAYER BLACK POWDER PER CUBIC METRE OF CONCRETE , OR
* 1 X 25 KG BAG OF ABILOX BLACK CAF–X2 (4.15%) PER 2 CUBIC METRES OF CONCRETE.

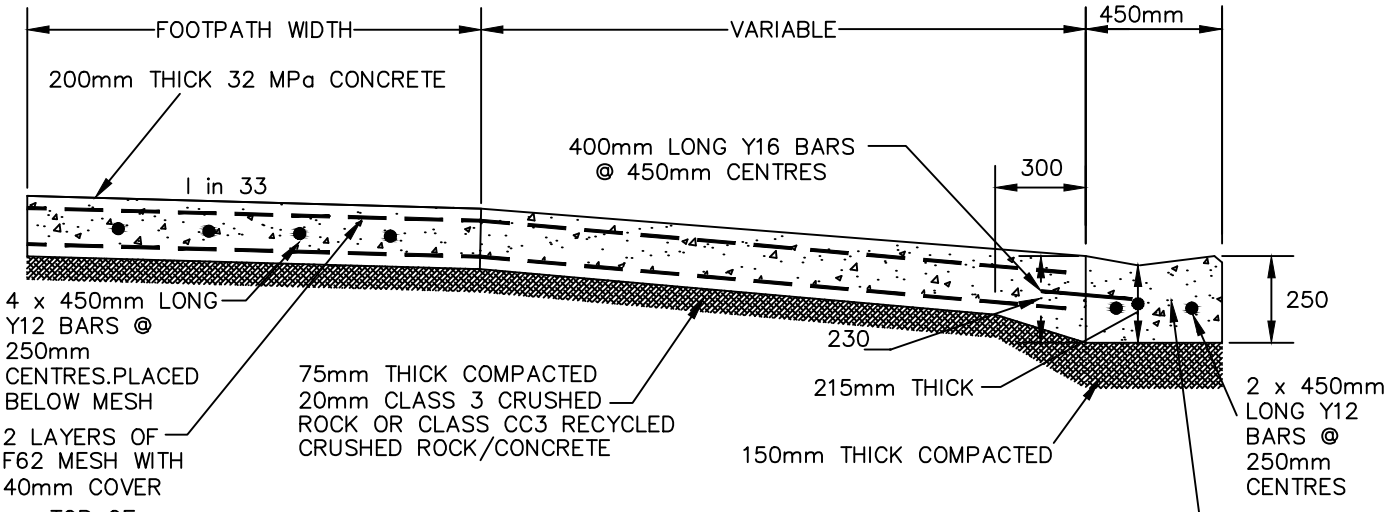
RESIDENTAL VEHICULAR CROSSING (WITH SPLAYS)

INFRASTRUCTURE SERVICES
Maribyrnong CITY COUNCIL

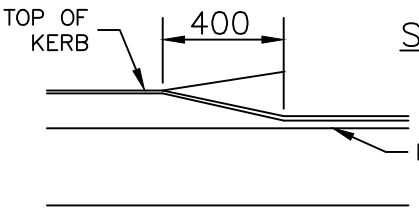
DRAWN :	I. VANIKIOTIS	DRAWING No.	Rev.
APPROVED :	T. LAM	S.D. X5	E
DATE :	MAY 2015		



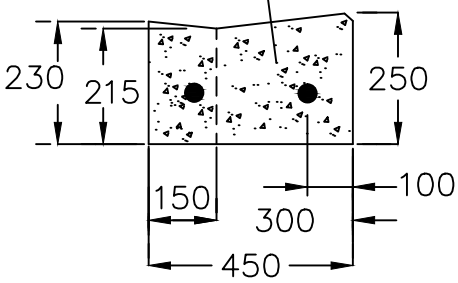
PLAN Scale 1:50



SECTION A–A Scale 1:25



SECTION B–B



NOTE:

ALL SERVICE TRENCHES TO BE BACKFILLED UNDER VEHICLE CROSSINGS WITH CRUSHED ROCK AND COMPACTED IN 150mm LAYERS

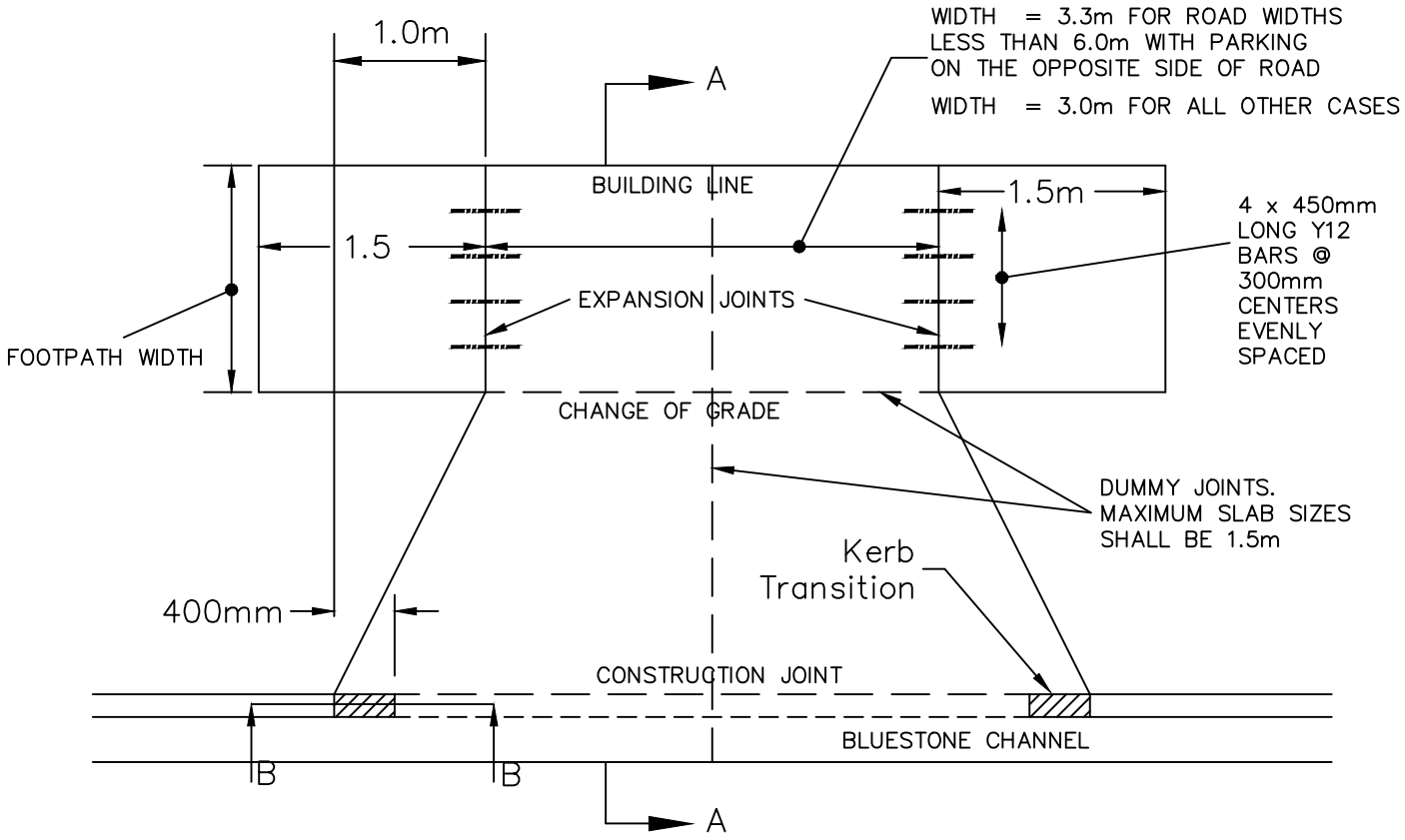
IF LENGTH BETWEEN EDGE OF LAYBACK AND BUILDING LINE IS LESS THAN 2.7m REFER TO COUNCIL FOR DIRECTION ON LAYOUT OF VEHICLE CROSSING

20mm CLASS 3 CRUSHED ROCK OR CLASS CC3 RECYCLED CRUSHED ROCK/CONCRETE OR APPROVED PAVEMENT BASE

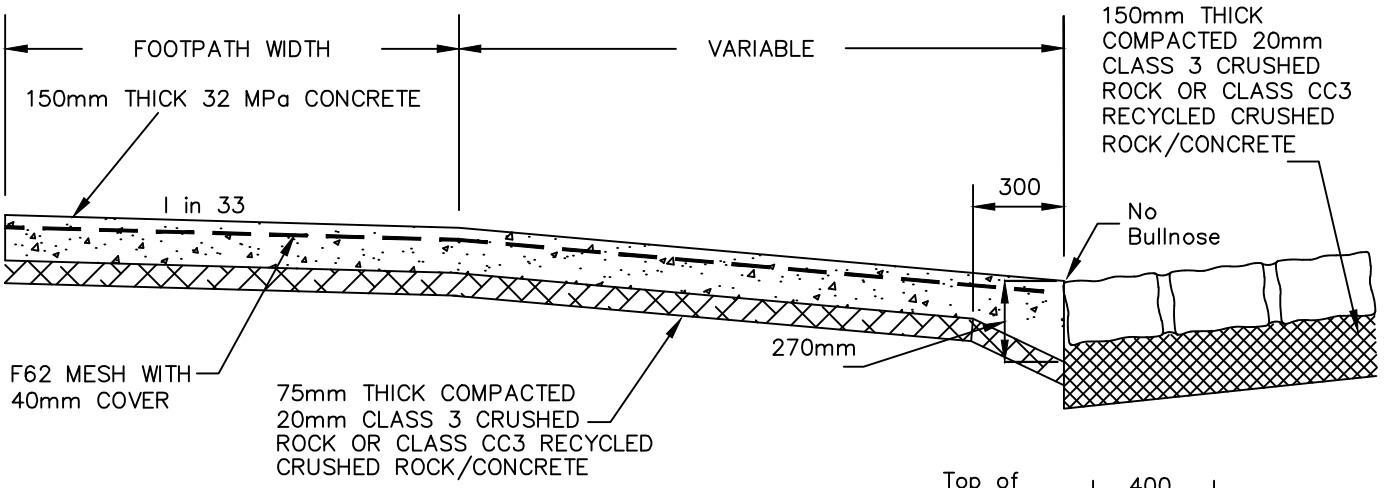
INDUSTRIAL VEHICULAR CROSSING (WITH SPLAYS)

INFRASTRUCTURE SERVICES
Maribyrnong CITY COUNCIL

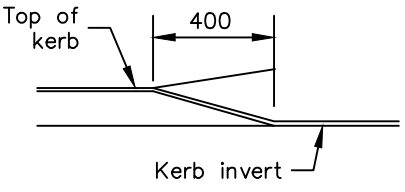
DRAWN :	I .VANIKIOTIS	DRAWING No.	Rev.
APPROVED :	T. LAM	S.D. X6	E
DATE :	MAY 2015		



PLAN Scale 1:50



SECTION A–A
Scale 1:25



SECTION B–B

NOTES

1) UNLESS NOTED OTHERWISE, CHARCOAL COLOURED CONCRETE IN HERITAGE AREAS TO CONSIST OF EITHER:
* 1 X 25 KG BAG OF BAYER BLACK POWDER PER CUBIC METRE OF CONCRETE , OR
* 1 X 25 KG BAG OF ABILOX BLACK CAF–X2 (4.15%) PER 2 CUBIC METRES OF CONCRETE.

2) ALL SERVICE TRENCHES TO BE BACKFILLED UNDER VEHICLE CROSSINGS WITH CRUSHED ROCK AND COMPACTED IN 150mm LAYERS

3) IF LENGTH BETWEEN EDGE OF LAYBACK AND BUILDING LINE IS LESS THAN 2.7m REFER TO COUNCIL FOR DIRECTION ON LAYOUT OF VEHICLE CROSSING

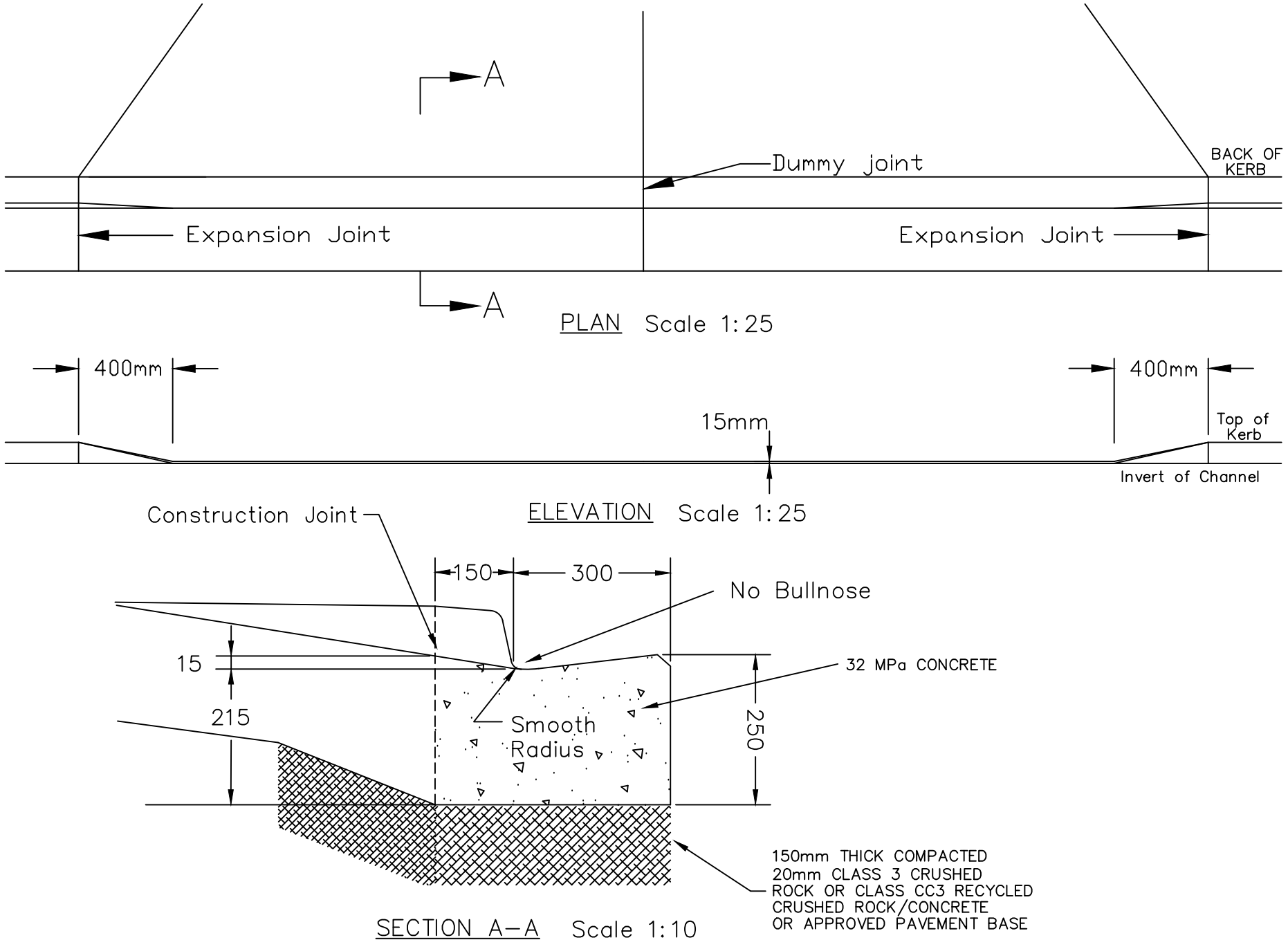
RESIDENTAL VEHICULAR CROSSING FOR BLUESTONE CHANNEL

INFRASTRUCTURE SERVICES
Maribyrnong CITY COUNCIL

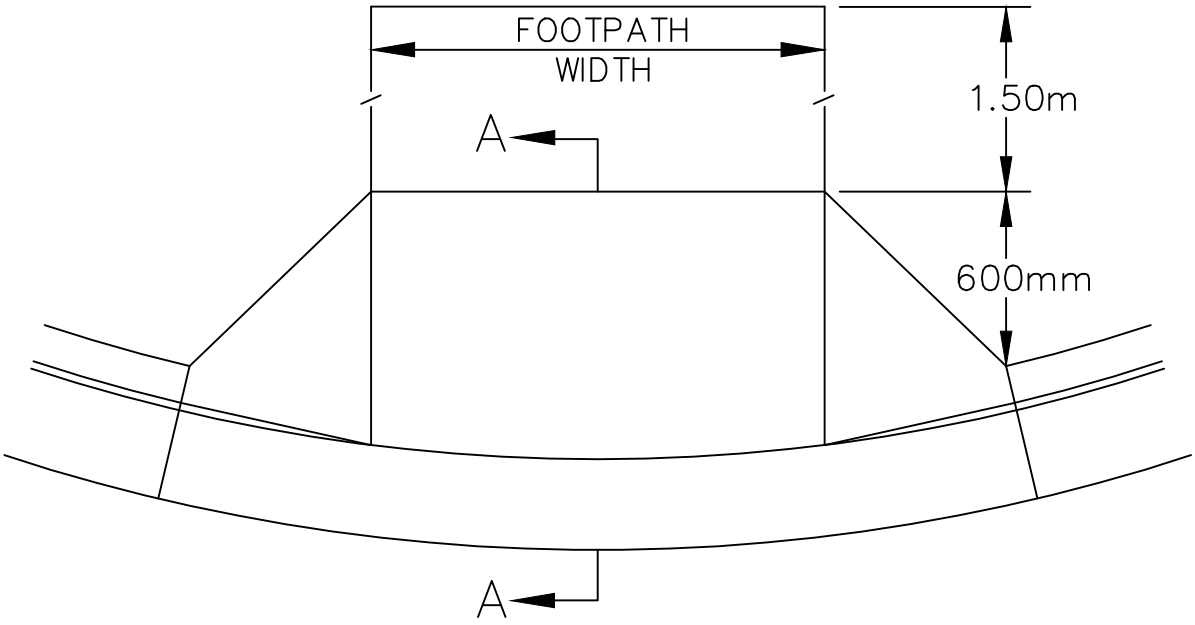
DRAWN :	I. VANIKIOTIS	DRAWING No.	Rev.
APPROVED :	T. LAM	S.D. X7	·
DATE :	MAY 2015		

Maribyrnong CITY COUNCIL
INFRASTRUCTURE SERVICES

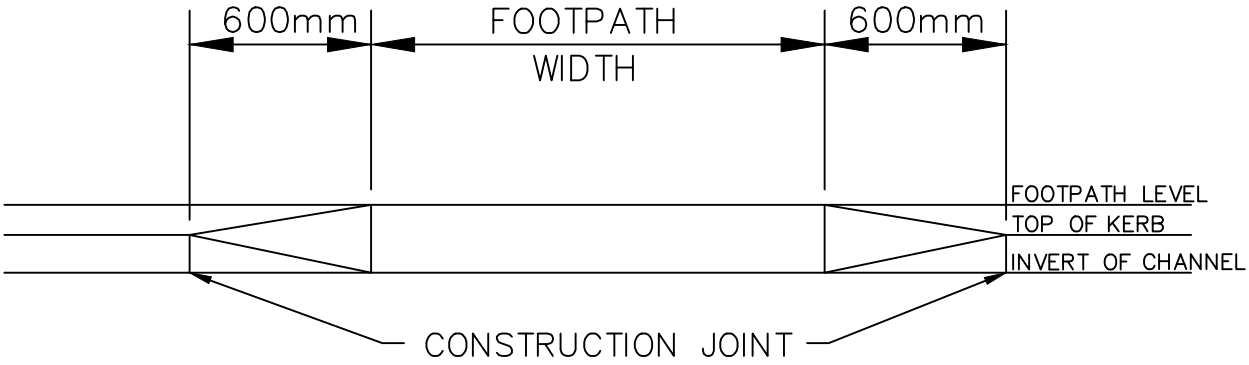
STANDARD CONCRETE LAYBACK



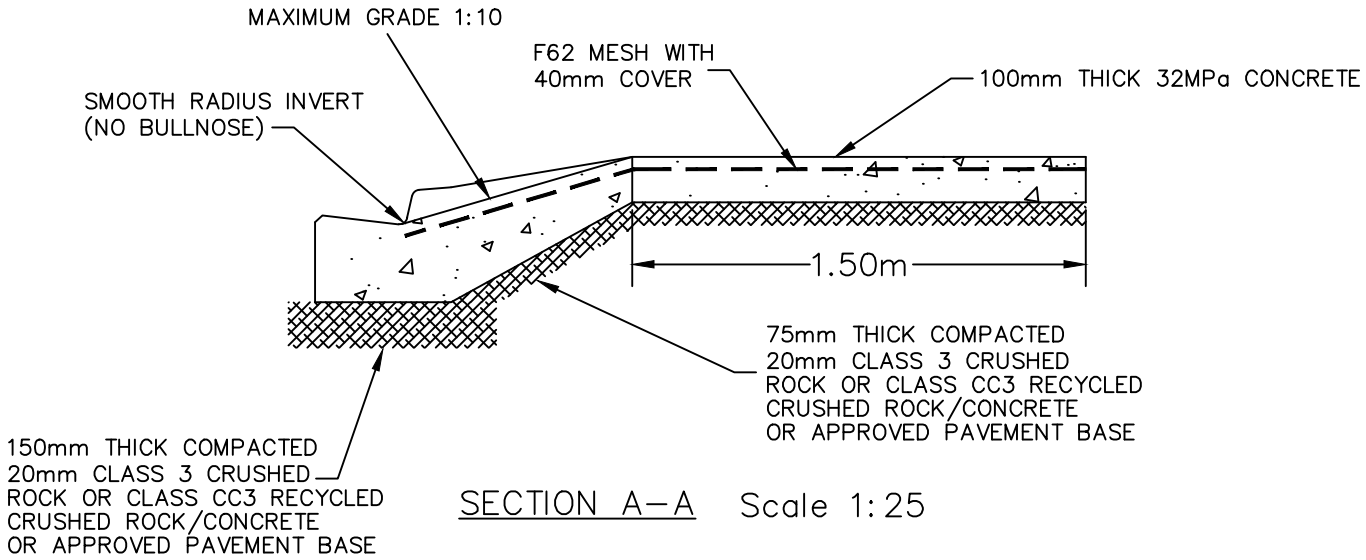
DRAWN : I. VANIKIOTIS	DRAWING No. S.D. X8
APPROVED : T. LAM	Rev. .
DATE : MAY 2015	



PLAN Scale 1:25



ELEVATION Scale 1:25

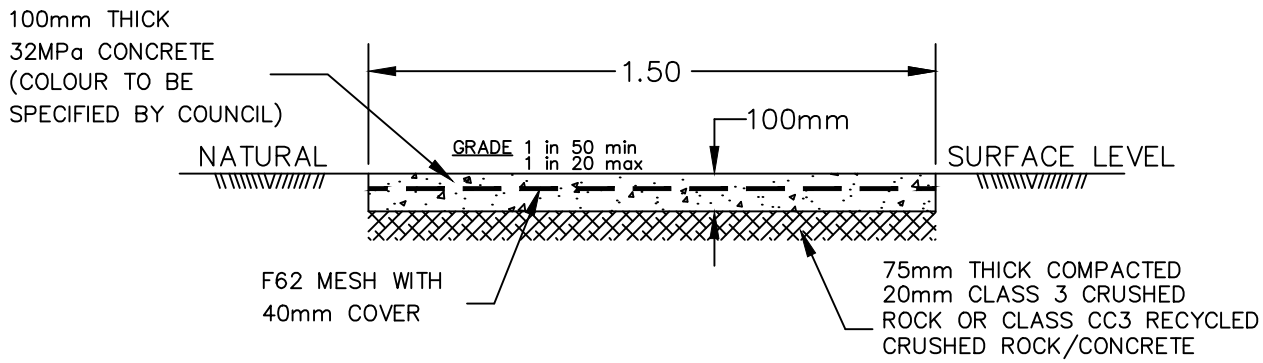


SECTION A–A Scale 1:25

PRAM CROSSING

INFRASTRUCTURE SERVICES
Maribyrnong CITY COUNCIL

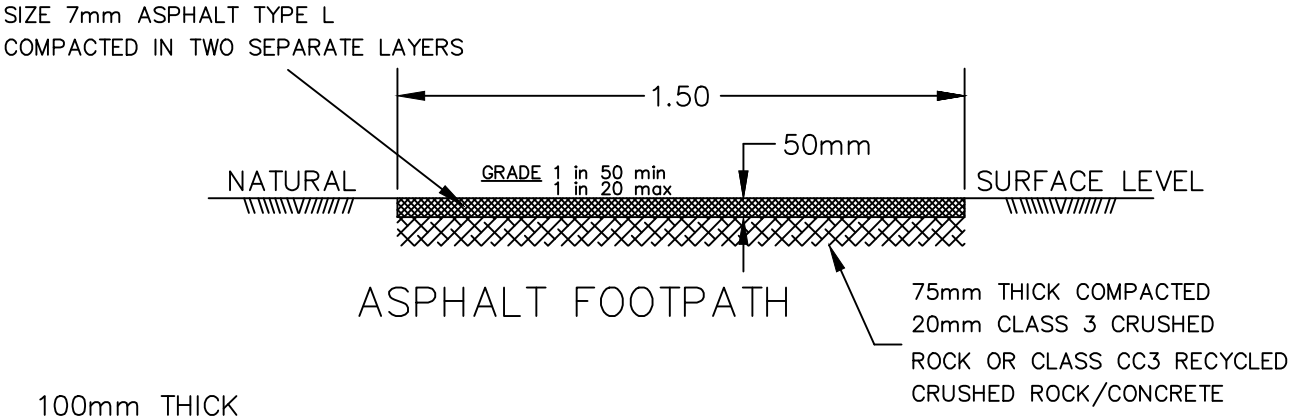
DRAWN :	I. VANIKIOTIS	DRAWING No.	Rev.
APPROVED :	T. LAM	S.D. X9	A
DATE :	MAY 2015		



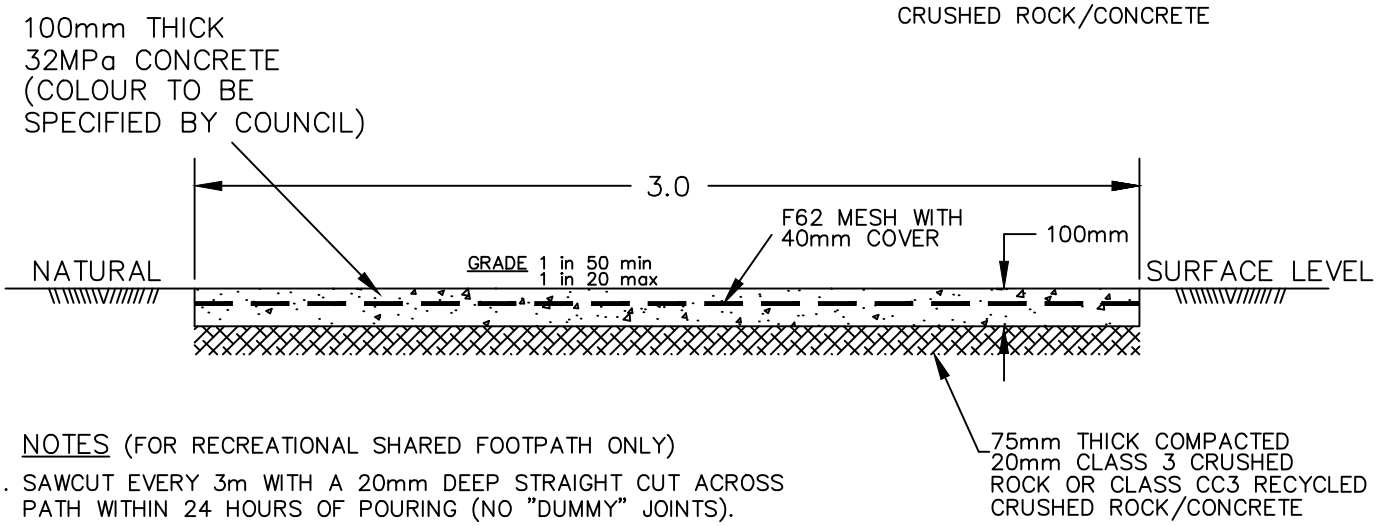
REINFORCED CONCRETE FOOTPATH

UNLESS NOTED OTHERWISE, CHARCOAL COLOURED CONCRETE IN HERITAGE AREAS TO CONSIST OF EITHER:

* 1 X 25 KG BAG OF BAYER BLACK POWDER PER CUBIC METRE OF CONCRETE , OR
* 1 X 25 KG BAG OF ABILOX BLACK CAF–X2 (4.15%) PER 2 CUBIC METRES OF CONCRETE.



ASPHALT FOOTPATH



NOTES (FOR RECREATIONAL SHARED FOOTPATH ONLY)

1. SAWCUT EVERY 3m WITH A 20mm DEEP STRAIGHT CUT ACROSS PATH WITHIN 24 HOURS OF POURING (NO "DUMMY" JOINTS).
2. EXPANSION JOINT–EVERY 12m TO CONSIST OF 4xR12 PLAIN STEEL BARS (BOND BREAKER ON ONE SIDE OF JOINT). THIS JOINT WILL INCLUDE BITUMEN IMPREGNATED FIBRE OR APPROVED EQUIVALENT.

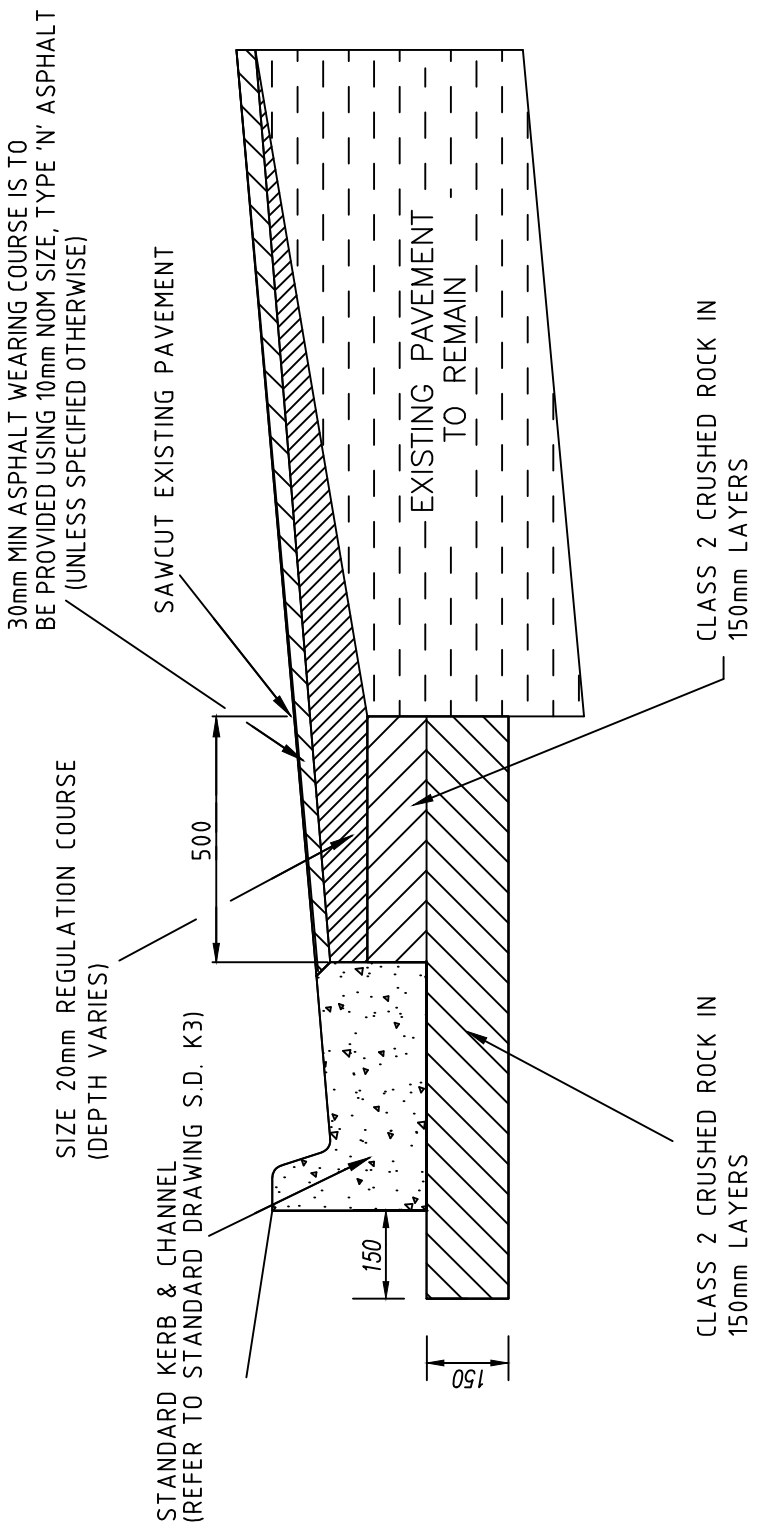
SHARED CONCRETE FOOTPATH

Scale 1:20

DETAILS OF VARIOUS FOOTPATHS

INFRASTRUCTURE SERVICES
Maribyrnong CITY COUNCIL

DRAWN : I. VANIKIOTIS		DRAWING No.	Rev.
APPROVED : T. LAM		S.D. X10	D
DATE : MAY 2015			

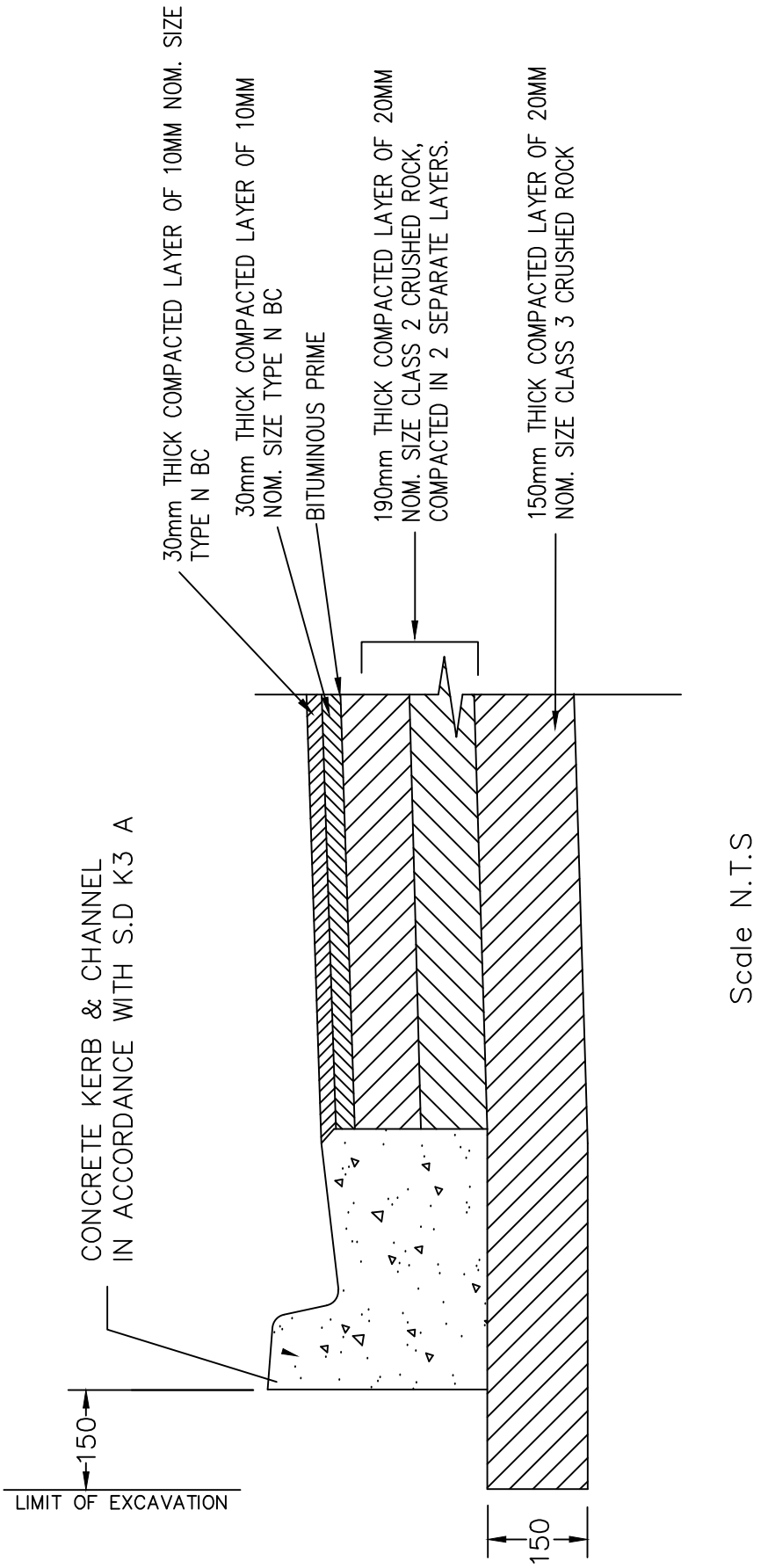


Scale NTS

PAVEMENT REHABILITATION DETAIL

INFRASTRUCTURE SERVICES
Maribyrnong CITY COUNCIL

DRAWN : I. VANIKIOTIS		DRAWING No.	Rev.
APPROVED : T. LAM		S.D. K1	A
DATE : DECEMBER 2014			



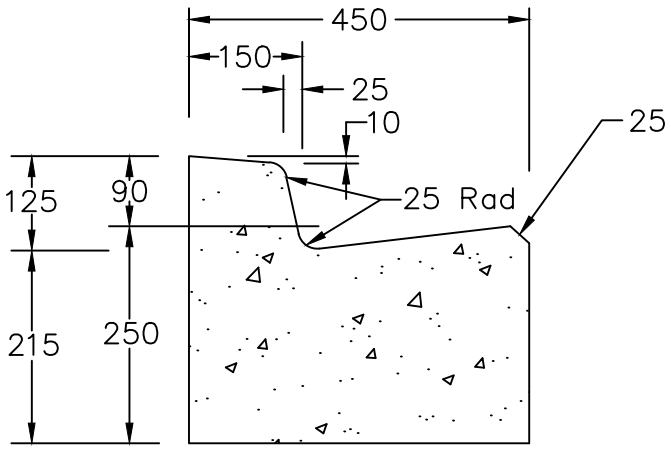
PAVEMENT RECONSTRUCTION DETAIL

INFRASTRUCTURE SERVICES
Maribyrnong CITY COUNCIL

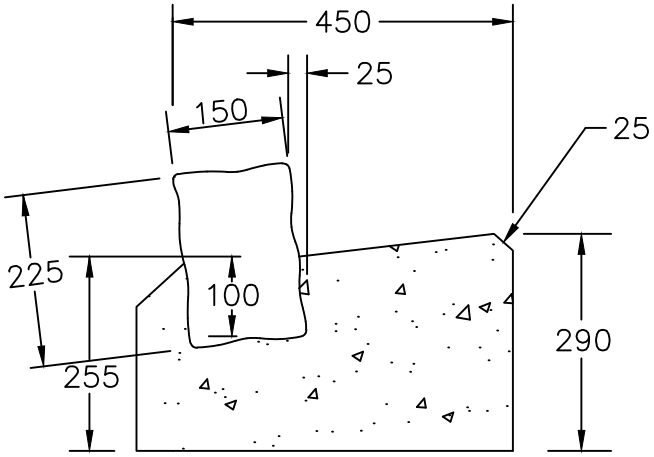
DRAWN : I. VANIKIOTIS		DRAWING No.	Rev.
APPROVED : T. LAM		S.D. K2	A
DATE : MAY 2015			

NOTES:

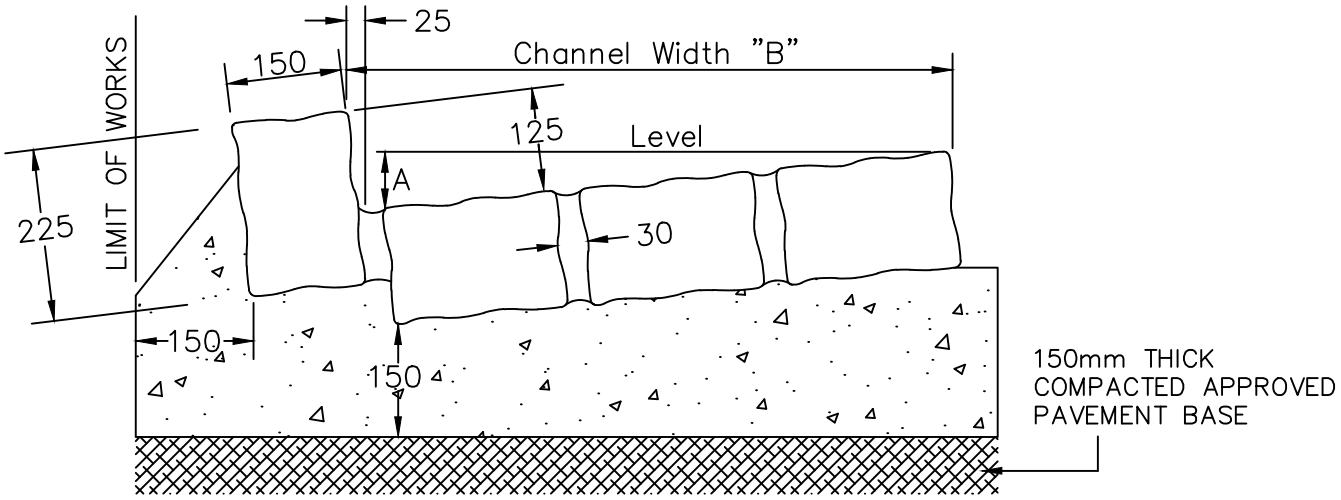
1. All concrete to be 32 MPa.
2. All concrete kerbs & channels to be constructed on a 150mm thick layer of 20mm Class 2 FCR, unless otherwise indicated on design drawings or as directed by Council's Infrastructure Planning and Construction representatives.
3. All grouted joints to be average 30mm wide by depth of pitcher. Flush joint finish only.
4. Grouting shall be pointed up with charcoal coloured cement mortar.
5. Cement mortar shall consist of: 1 part Bayern powder, 5 parts cement, 15 parts sand or approved grit, 15 parts stone dust.



STANDARD KERB & CHANNEL



BLUESTONE KERB & CONCRETE CHANNEL



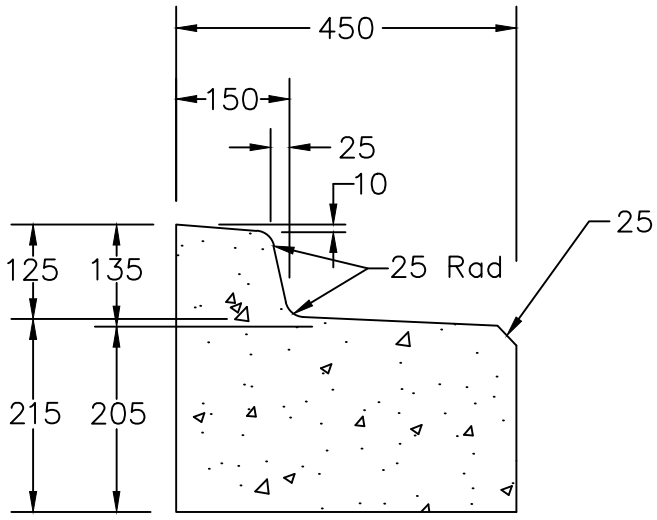
No. of pitchers (tray)	Channnel crossfall "A"	Channel Width "B" (Width to be constant)
1	25mm	255mm
2	50mm	510mm
3	75mm	765mm

BLUESTONE PITCHER KERB & CHANNEL Scale 1:10

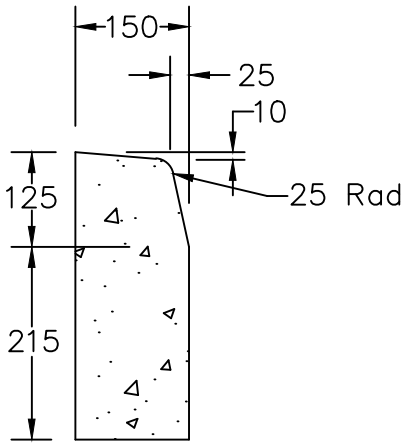
DETAILS OF VARIOUS KERB & CHANNEL

INFRASTRUCTURE SERVICES
Maribyrnong CITY COUNCIL

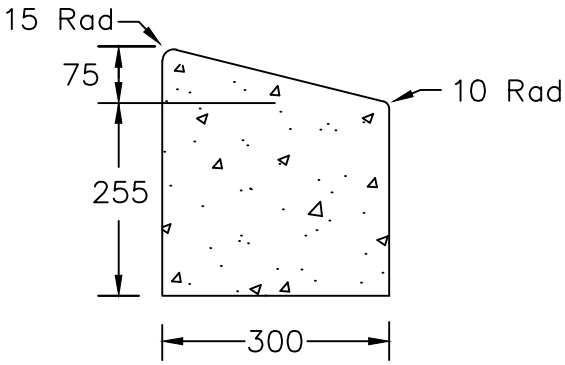
DRAWN :	I. VANIKIOTIS	DRAWING No.	Rev.
APPROVED :	T. LAM	S.D. K3	C
DATE :	DECEMBER 2014		



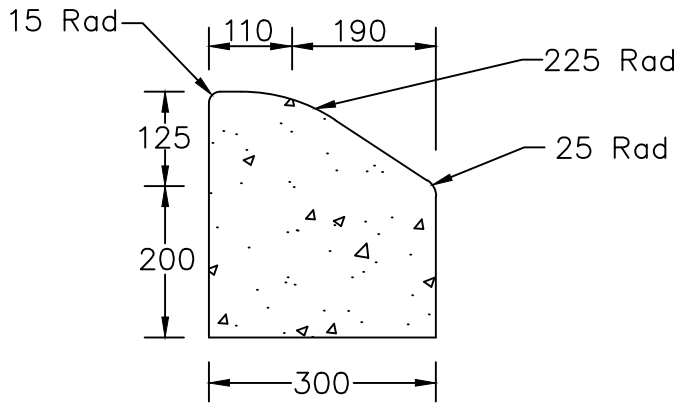
OUTFALL TRAY KERB & CHANNEL



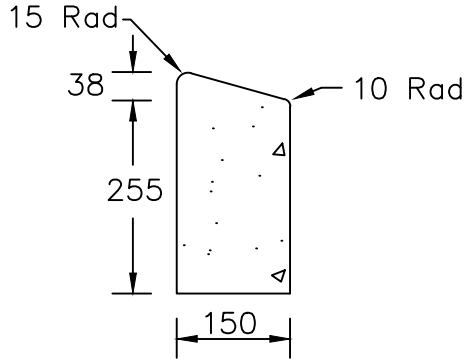
BARRIER KERB



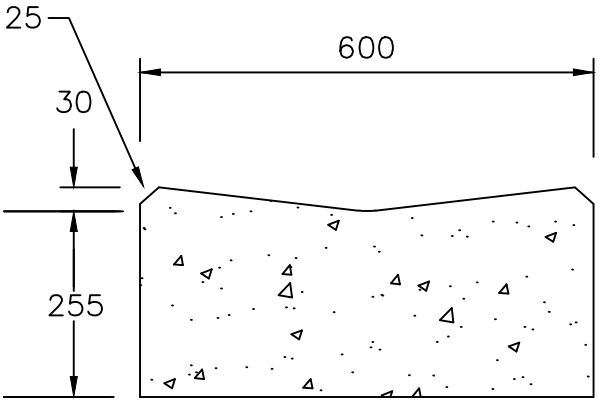
FULLY – MOUNTABLE KERB (TYPE 1)



SEMI–MOUNTABLE KERB



FULLY – MOUNTABLE KERB (TYPE 2)



CONCRETE CHANNEL

Scale 1:10

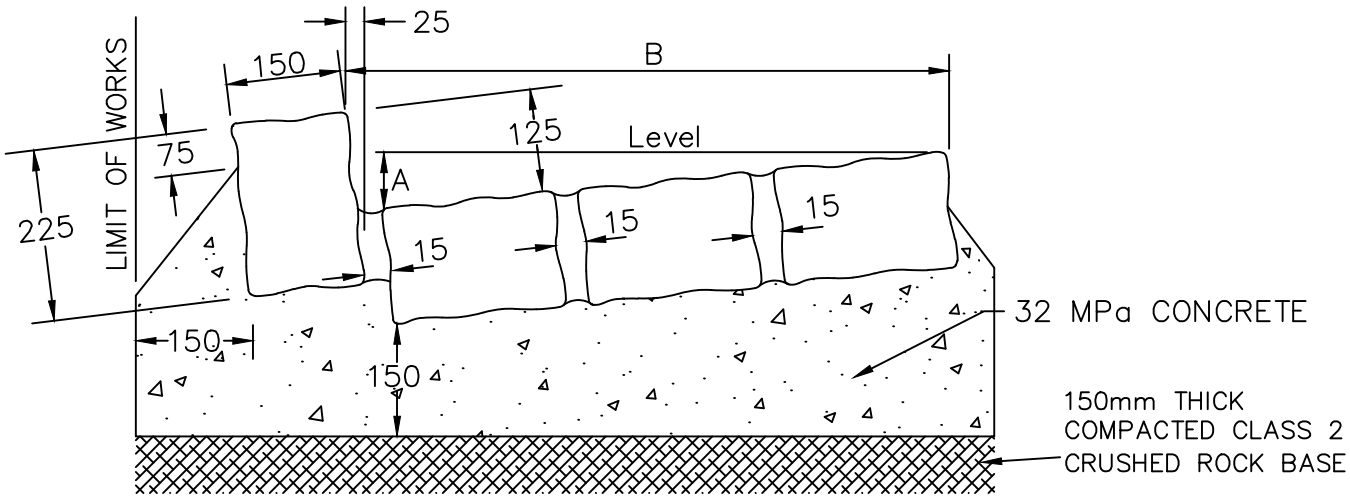
NOTES:

1. All concrete to be 32 MPa.
2. All concrete kerbs & channels to be constructed on a 150mm thick layer of 20mm Class 2 FCR, unless otherwise indicated on design drawings or as directed by Council's Infrastructure Planning and Construction representatives.

DETAILS OF VARIOUS KERB & CHANNEL

INFRASTRUCTURE SERVICES
Maribyrnong CITY COUNCIL

DRAWN :	I .VANIKIOTIS	DRAWING No.	Rev.
APPROVED :	T. LAM	S.D. K4	D
DATE :	DECEMBER 2014		



No. of pitchers (tray)	Channnel crossfall "A"	Approx channel width "B" (Width to be constant)
1	25	240
2	50	480
3	75	720

BLUESTONE PITCHER KERB & CHANNEL

Not to Scale.
All measurements in millimeters

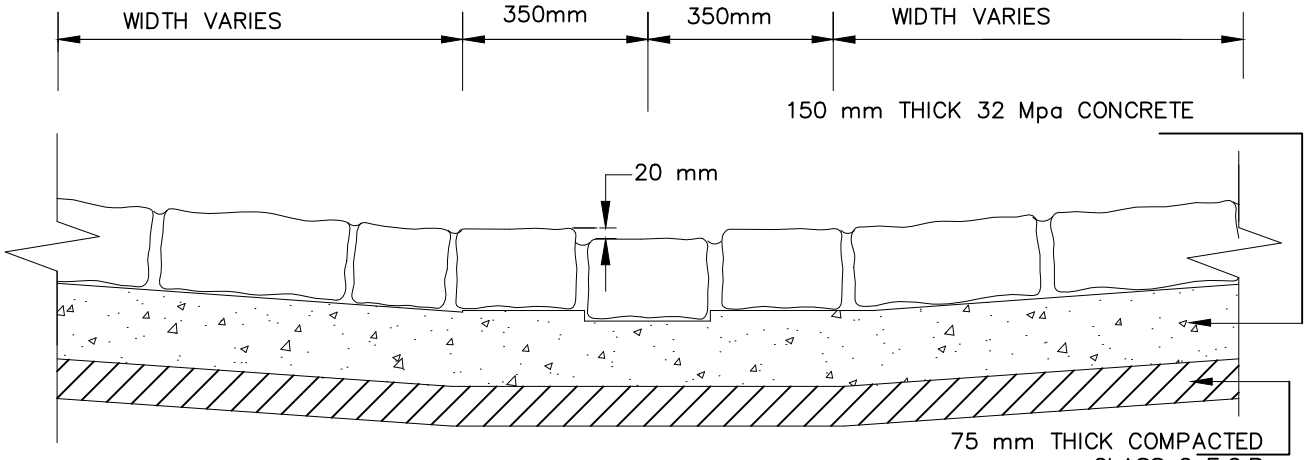
NOTES

1. Pitcher sizes (225 x 150 x 300 length) are an average size only.
2. All grouted mortar joints to be an average 15mm wide by depth of pitcher.
3. Grouting shall be flush joint finish only with charcoal coloured cement mortar, consisting of the following mix:
   * 1 part Bayern powder,
   * 5 parts cement
   * 15 parts sand or approved grit
   * 15 parts stone dust.

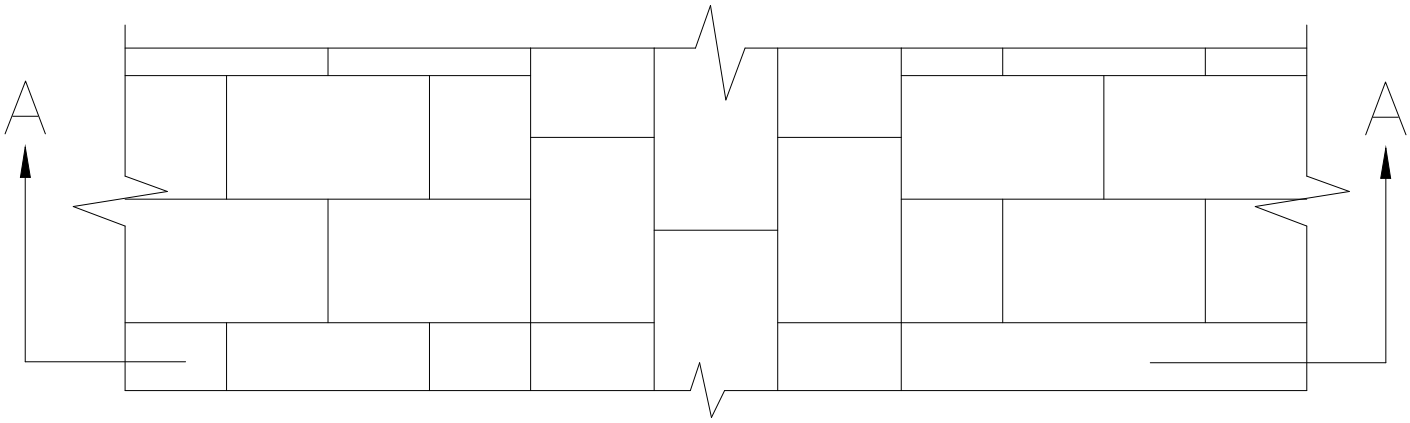
BLUESTONE PITCHER KERB & CHANNEL IN HERITAGE AREAS

INFRASTRUCTURE SERVICES
Maribyrnong CITY COUNCIL

REVISED : I. VANIKIOTIS	DRAWING No.	Rev.
APPROVED : T. LAM	S.D. K5	D
DATE : DECEMBER 2014		



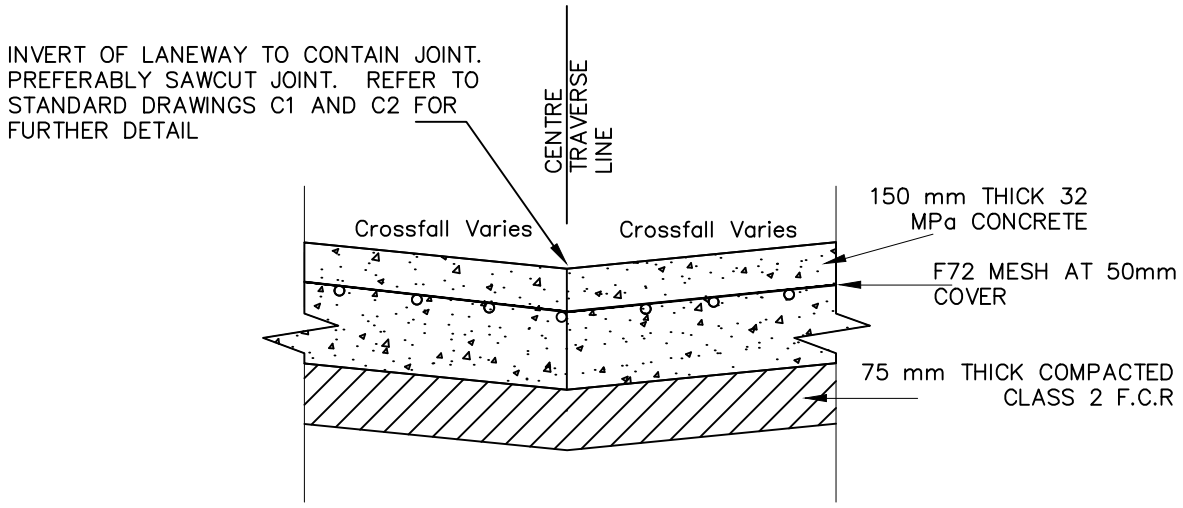
CROSS SECTION OF BLUESTONE LANEWAY AT A–A



TYPICAL BLUESTONE LANEWAY PLAN (NOT TO SCALE)

NOTE: 1. BLUESTONE PITCHERS TO BE LAID IN A STREETCHECK BOND PATTERN WITH 15 mm WIDE (AVERAGE) GROUTED JOINTS.

2. GROUTING SHALL BE FLUSH WITH CHARCOAL COLOURED CEMENT MORTAR.

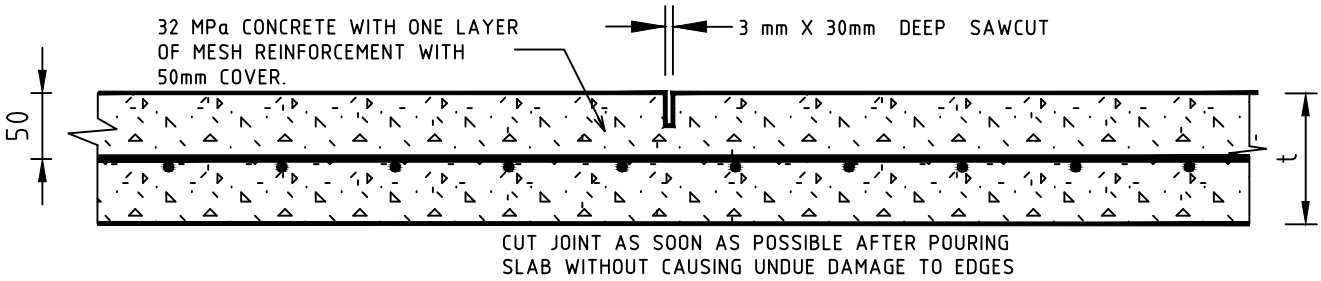


TYPICAL CONCRETE LANEWAY PLAN (NOT TO SCALE)

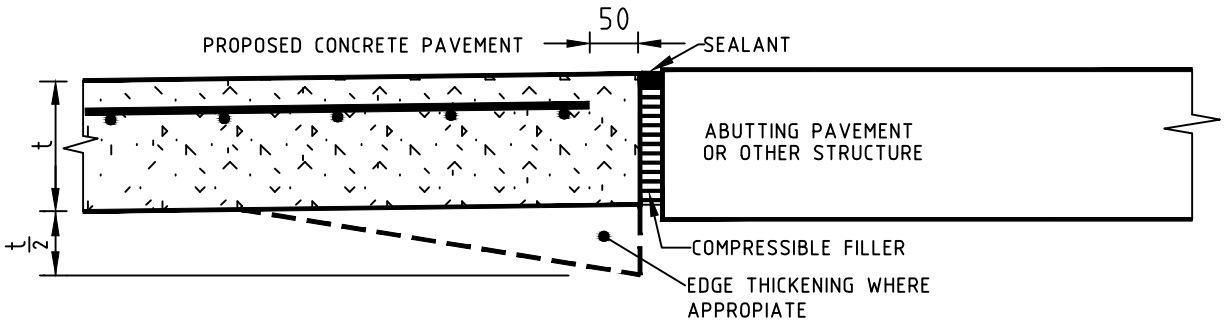
TYPICAL BLUESTONE LANEWAY DETAIL AND CONCRETE LANEWAY DETAIL

INFRASTRUCTURE SERVICES
Maribyrnong CITY COUNCIL

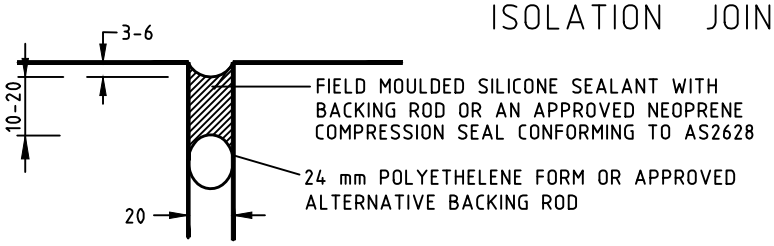
DRAWN : I.VANIKTIOTIS	DRAWING No.	Rev.
APPROVED : T. LAM	S.D. K6	–
DATE : FEBRUARY 2014		



SAWCUT JOINT - SJ

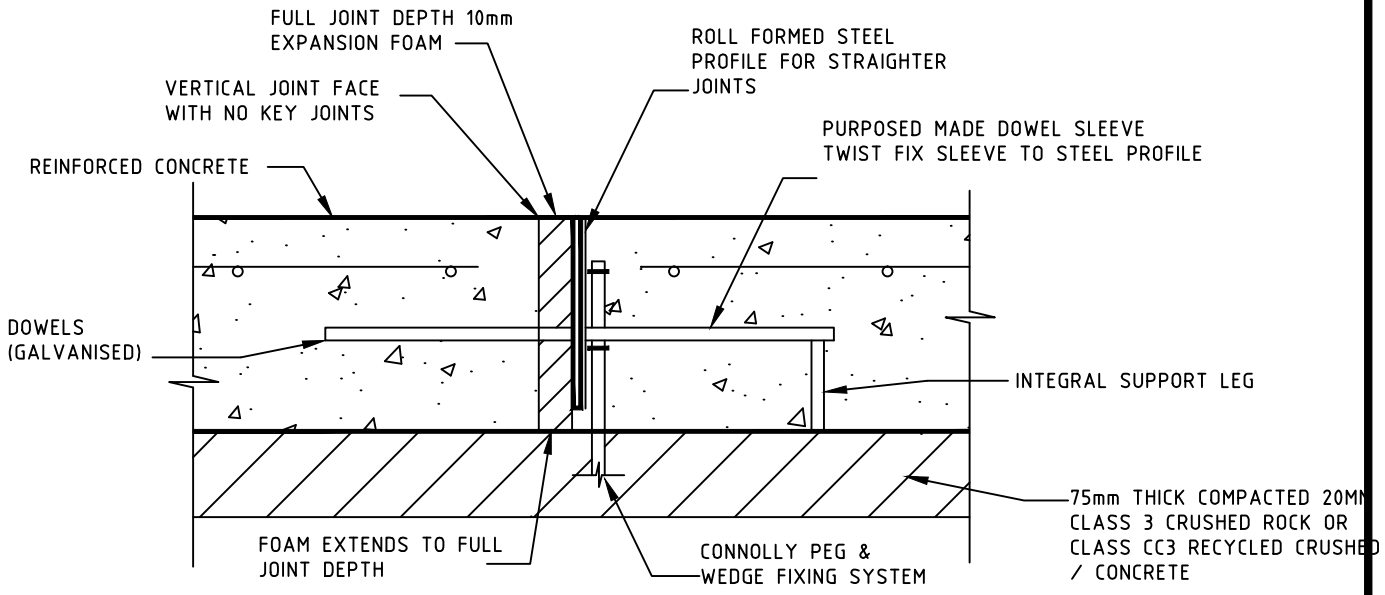


ISOLATION JOINT - IJ



JOINT SEALANT DETAIL

EXPANSION JOINT (CONNOLLY) SPECIFICATIONS			
CONCRETE THICKNESS	DOWEL DETAIL		
	DIAMETER	LENGTH	CENTRES
100 - 124mm	12mm	300mm	335mm
125 - 149mm	16mm	450mm	450mm
150 - 199mm	16mm	450mm	450mm
200mm ->200mm	24mm	450mm	450mm



EXPANSION JOINT (CONNOLLY)

NOTE- EXPANSION JOINTS TO BE PROVIDED EVERY 12m

CONCRETE JOINT DETAILS

(SAWCUT, ISOLATION & EXPANSION JOINT)

INFRASTRUCTURE SERVICES
Maribyrnong CITY COUNCIL

DRAWN:	I. VANIKIOTIS	DRAWING No.	Rev.
APPROVED :	T. LAM	S.D. C1	B
DATE :	FEBRUARY 2014		

REINSTATEMENT OF NATURESTRIP:

THE CONTRACTOR MUST MAKE ALLOWANCES TO ENSURE THAT ALL NATURESTRIPS ADJACENT TO THE WORK ARE PROPERLY REINSTATED, SEEDED AND ROPED OFF.

THE CONTRACTOR WILL USE TOP SOIL WHICH :

A) IS LIGHT FRIABLE LOAM CONSISTING OF 3 PARTS SANDY LOAM, 2 PARTS MOUNTAIN SOIL, 1 PART LIGNA PEAT;

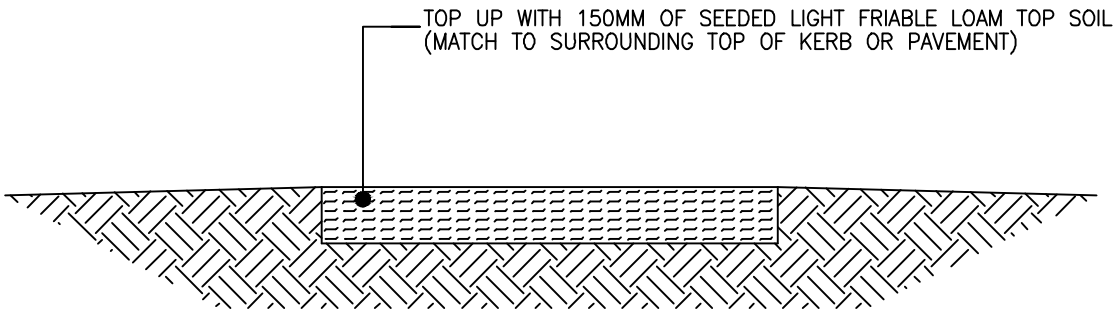
B) IS FREE FROM WEEDS, STONE OR RUBBLE, CLODS OF TOPSOIL AND OTHER EXTRANEOUS MATERIAL.

C) IS NOT DELIVERED WHILE IN A SATURATED CONDITION. TOPSOIL WILL HAVE THE FOLLOWING CHARACTERISTICS:

- TEXTURE – LIGHT TO MEDIUM. IE. CAPABLE OF HANDLING WHEN MOIST, BUT LACKING IN COHESION SO THAT IT WILL FALL APART EASILY;
- ACIDITY – SLIGHTLY ACID TO NEUTRAL. pH 5.5 TO 6.5; AND
- STONE CONTENT – LESS THAN 5% BY DRY WEIGHT WITH STONE SIZE NOT EXCEEDING 25MM.

DISPOSAL OF SURPLUS MATERIAL:

THE CONTRACTOR MUST DISPOSE OF ALL SURPLUS MATERIAL.



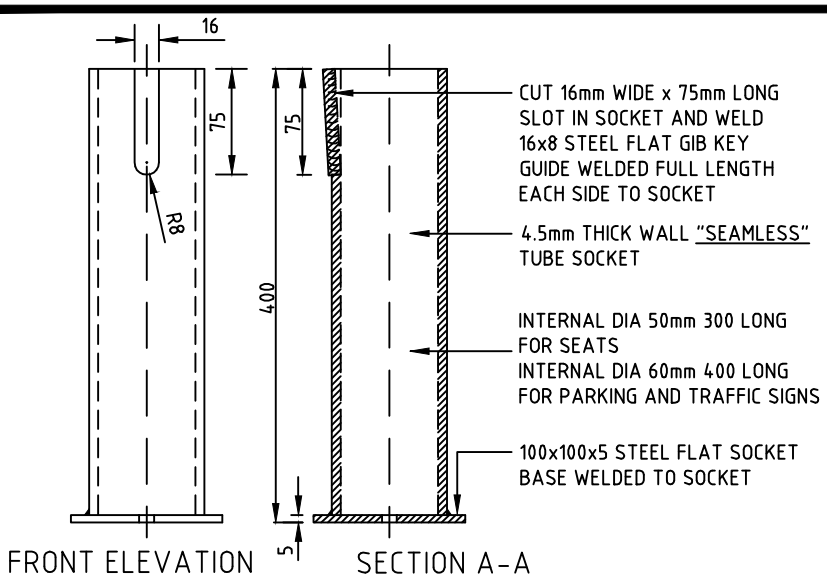
TYPICAL LAWN REINSTATEMENT

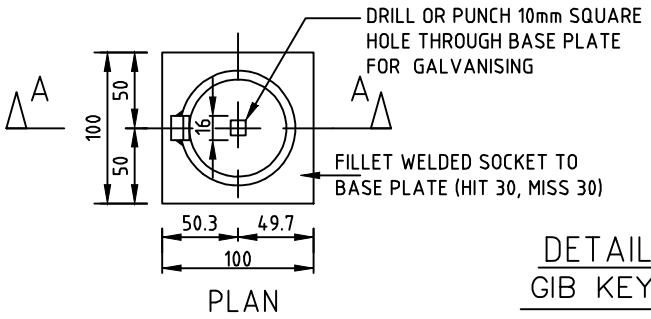
SCALE 1 : 20

LAWN REINSTATEMENT DETAIL

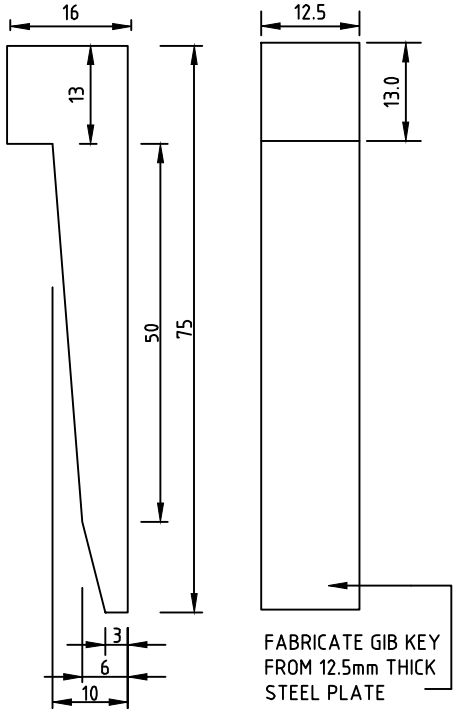
INFRASTRUCTURE SERVICES
Maribyrnong CITY COUNCIL

DRAWN:	I. VANIKIOTIS	DRAWING No.	Rev.
APPROVED :	T. LAM	S.D. L1	
DATE :	MARCH 2014		





DETAIL 1
GIB KEY SOCKET



DETAIL 2 – GIB KEY

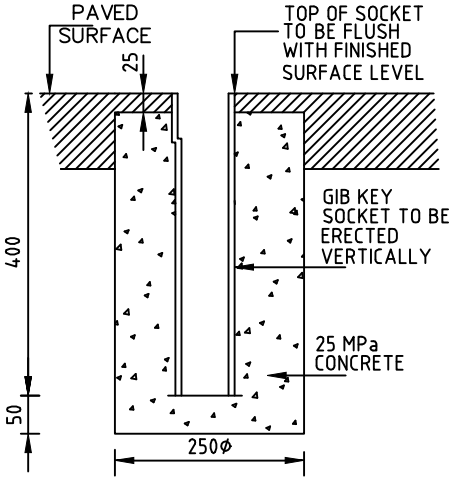
NOTES:

INSTALLATION OF GIB KEY SOCKETS:

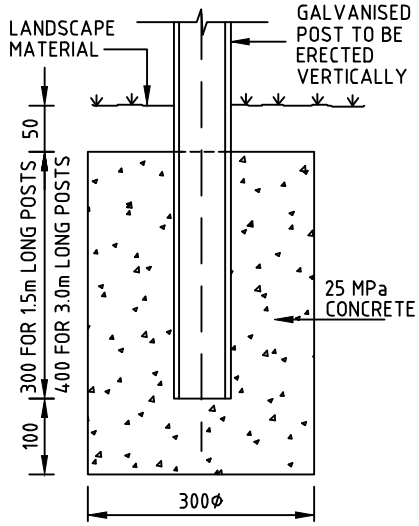
- GIB KEY SOCKETS AND POST SHALL BE ERECTED VERTICALLY
- INTERNAL DIAMETER 60mm, 400 LONG GIB KEY SOCKETS SHALL BE USED FOR PARKING AND TRAFFIC SIGNS IN PAVED SURFACE

FABRICATION OF GIB KEY SOCKETS:

- GIB KEY SHALL BE GALVANISED IN ACCORDANCE WITH AS 1650
- AFTER GALVANISING ONE COAT OF POWDER COAT SHALL BE APPLIED. COLOUR CHARCOAL (75 MICRONS)
- ALL SMALL WELDS SHALL BE 4mm CONTINUOUS WITH E41xx WELDING ELECTRODE TO AS1554 PART 1 & 2 AS APPROPRIATE.
- BARE STEEL & WELDED AREAS SHALL BE CLEANED COATED WITH ZINCILATE 880 OR EQUIVALENT
- ALL WORKMANSHIP & MATERIALS SHALL BE IN ACCORDANCE WITH AS 4100 STEEL STRUCTURES
- ALL BUTT WELDS SHALL BE FULL PENETRATION



DETAIL 3
ARRANGEMENT OF SOCKET IN PAVED AREAS



DETAIL 4
ARRANGEMENT OF STATCON POST IN LANDSCAPED AREA

GIB KEY SOCKET AND POST INSTALLATION/FABRICATION DETAILS.

INFRASTRUCTURE SERVICES
Maribyrnong CITY COUNCIL

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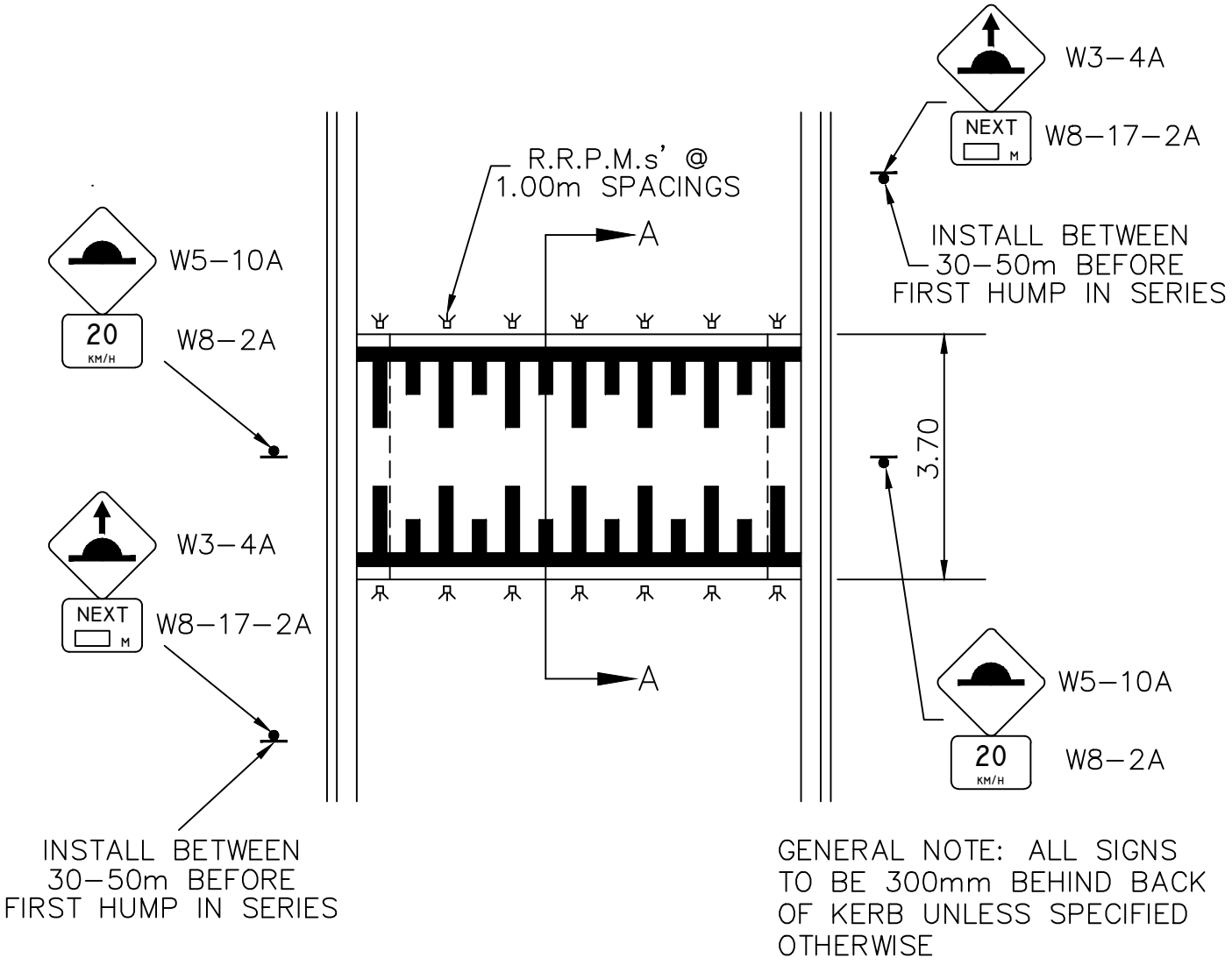
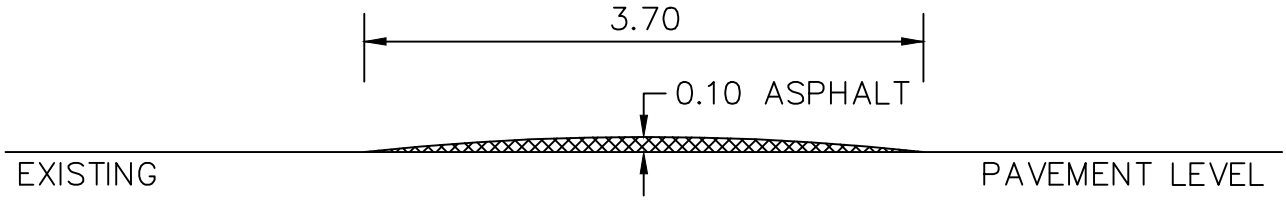
DATE : MAY 2015			



PLAN NTS



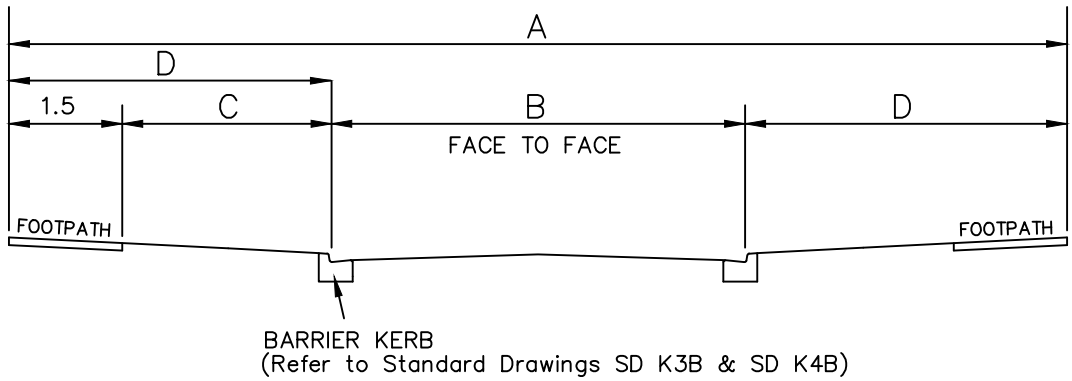
REFER TO AS1742.13 FOR FURTHER WATTS PROFILE DETAIL

SECTION A–A Scale 1:50

STANDARD ASPHALT WATTS PROFILE ROAD HUMP

INFRASTRUCTURE SERVICES
Maribyrnong CITY COUNCIL

DRAWN : I. VANIKIOTIS		DRAWING No.	Rev
APPROVED : T. LAM		S.D. M5	A
DATE : MAY 2015			



TYPICAL CROSS SECTION

(Measurements are in meters)

NOT TO SCALE

ROAD HEIRARCHY	CATEGORY	MAX V.P.D.	A ROAD RESERVE	B CARRIAGEWAY	C NATURESTRIP	D VERGE WIDTH
ACCESS LANE	2	–	6.5	6.5	–	–
ACCESS PLACE	2	300	15.3	7.3	2.5	4.0
ACCESS STREET	3	1000	15.3	7.3	2.5	4.0
COLLECTOR STREET	3	3000	20.6	10.6*	3.5	5.0
TRUNK COLLECTOR	4	3000–6000	26.6	16.6**	3.5	5.0

(Minimum Width Requirements)

NOTES

1. FOOTPATH REQUIRED ON BOTH SIDES, 1.5m MINIMUM WIDTH
2. ROAD RESERVE WIDENING MAY BE REQUIRED FOR THE FOLLOWING :–
   (i) 2.5m SHARED FOOTPATH ON ONE OR BOTH SIDES.
   (ii) 1.5m CYCLE LANE MARKED ON THE CARRIAGEWAY.
   (iii) CENTRAL MEDIAN (2.5m wide) FOR TRUNCK COLLECTOR (CATEGORY 4).
3. MINIMUM ROAD WIDTHS ALLOWS FOR UNRESTRICTED PARKING, (EXCEPT FOR ACCESS LANES).

* ALLOWS FOR A 3.0m wide CLEAR LANE IN EITHER DIRECTION

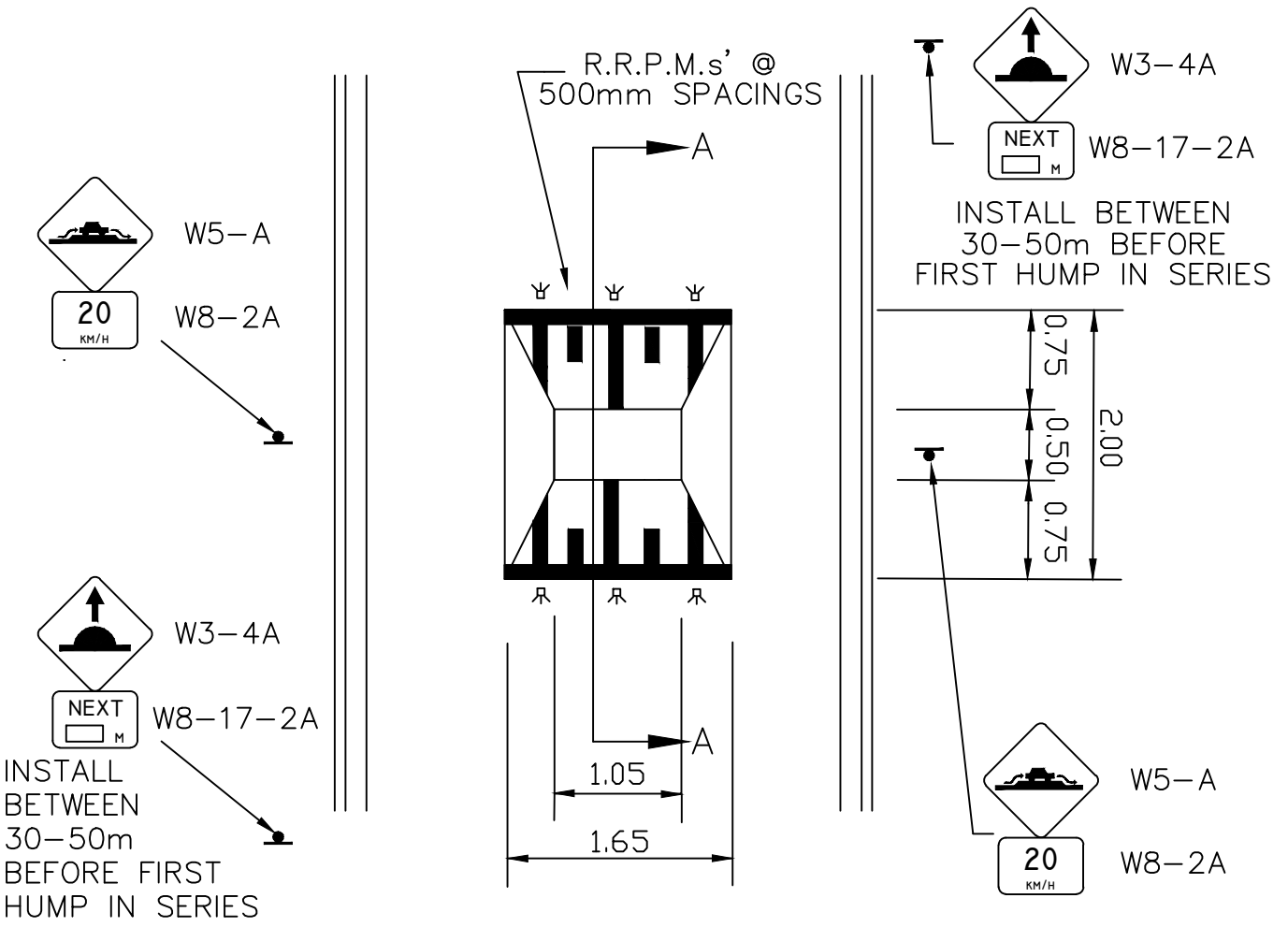
** ALLOWS FOR 2 x 3.0m wide CLEAR LANES IN EITHER DIRECTION

CONSULTANTS ARE TO ARRANGE A PRELIMINARY MEETING WITH INFRASTRUCTURE SERVICES TO DISCUSS THE PROPOSAL AND GAIN AN AGREEMENT IN PRINCIPLE TO THE INFRASTRUCTURE REQUIRED, PRIOR TO SUBMISSION OF DETAILED SUBDIVISIONAL ROAD DESIGN DRAWINGS.

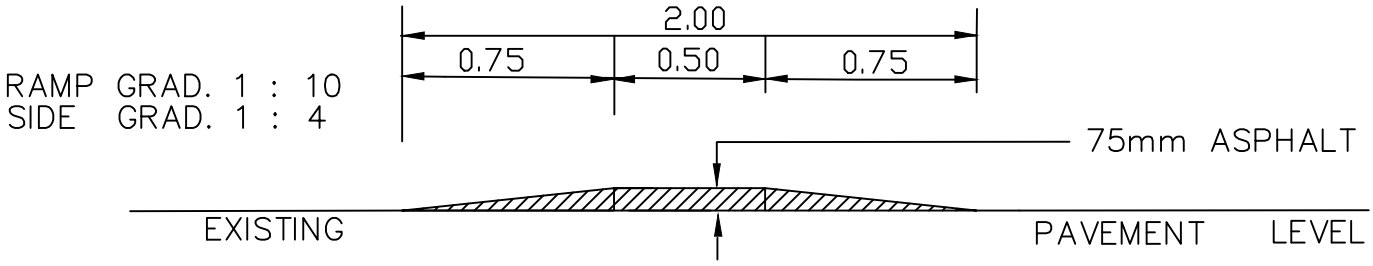
MINIMUM CROSS SECTIONS FOR SUBDIVISIONAL ROADS

INFRASTRUCTURE SERVICES
Maribyrnong CITY COUNCIL

DRAWN :	R. IMREK	DRAWING No.	Rev.
APPROVED :	I.HIRTH	S.D. M6	A
DATE :	MARCH 2006		



PLAN Scale 1:50



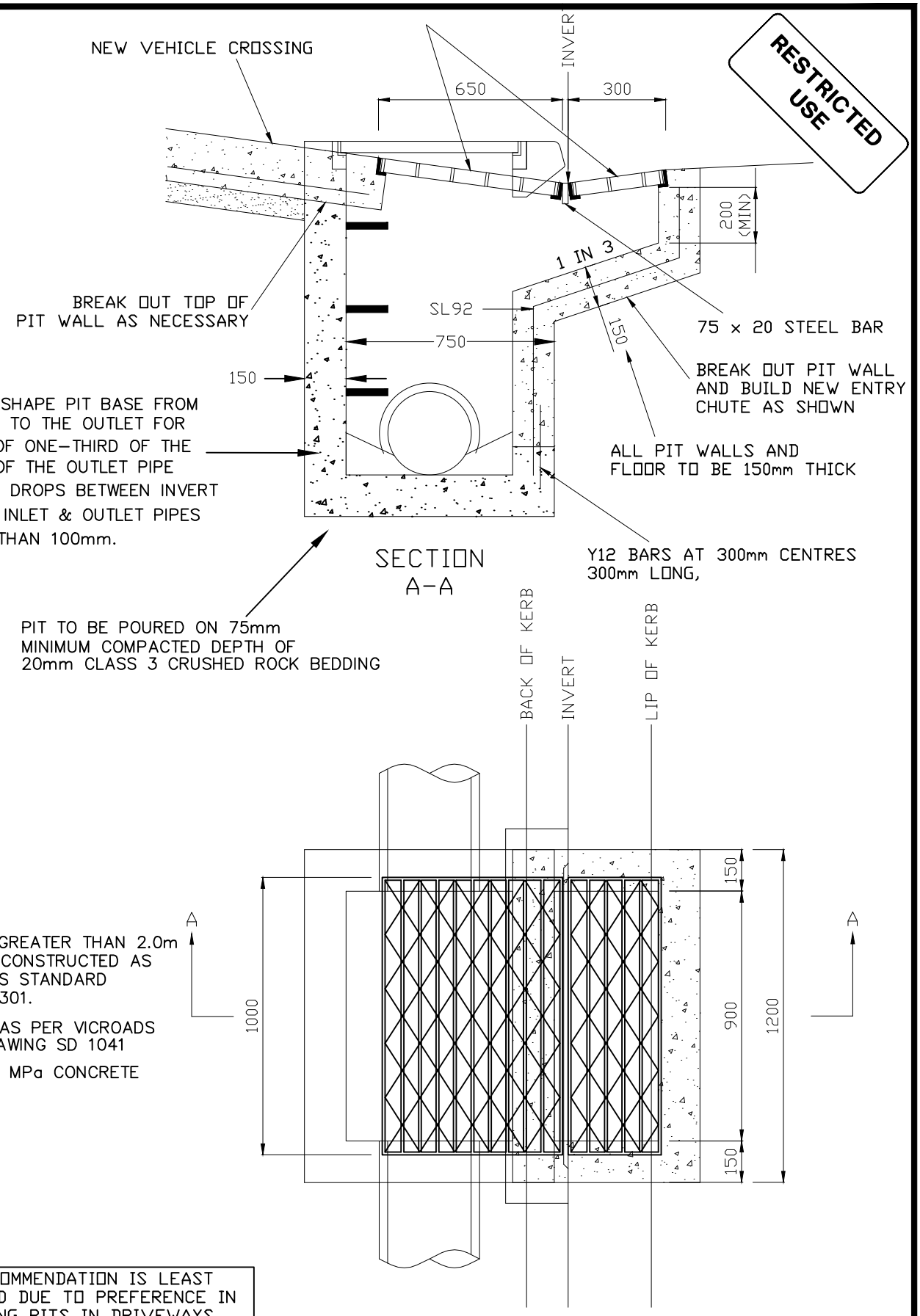
SECTION A–A Scale 1:25

STANDARD ASPHALT ROAD CUSHION

INFRASTRUCTURE SERVICES
Maribyrnong CITY COUNCIL

DRAWN : I. VANIKIOTIS		DRAWING No.	Rev
APPROVED : T. LAM		S.D. M7	A
DATE : FEBRUARY 2014			

RESTRICTED USE



NOTE:

-PIT DEPTHS GREATER THAN 2.0m DEPTH TO BE CONSTRUCTED AS PER VIC ROADS STANDARD DRAWING SD 1301.

-STEP IRONS AS PER VICROADS STANDARD DRAWING SD 1041

-PIT TO BE 32 MPa CONCRETE

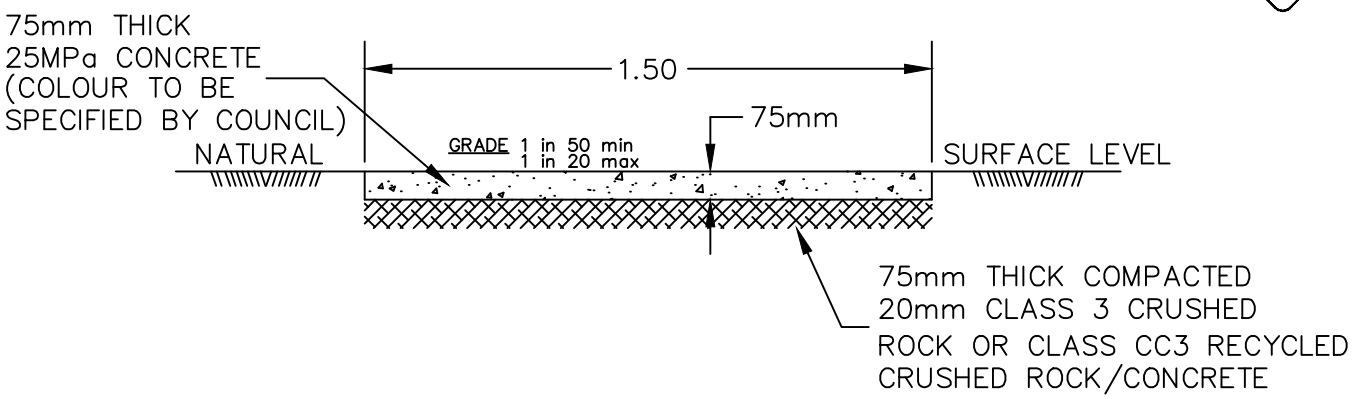
NOTE: RECOMMENDATION IS LEAST PREFERRED DUE TO PREFERENCE IN NOT HAVING PITS IN DRIVEWAYS.

SIDE ENTRY PIT MODIFICATION AT VEHICLE CROSSING

INFRASTRUCTURE SERVICES
Maribyrnong CITY COUNCIL

DRAWN: I.VANIKIOTIS		DRAWING No.	Rev.
APPROVED : T.LAM		S.D. RU 1	-
DATE : FEBRUARY 2014			

RESTRICTED USE



UNREINFORCED CONCRETE FOOTPATH

TO BE USED FOR MAINTENANCE PURPOSES ONLY

NOTES

1. TOOL JOINT EVERY 1.5m WITH A 20mm DEEP STRAIGHT CUT ACROSS PATH
2. EXPANSION JOINT–EVERY 12m TO CONSIST OF 4xR12 PLAIN STEEL BARS (BOND BREAKER ON ONE SIDE OF JOINT). THIS JOINT WILL INCLUDE BITUMEN IMPREGNATED FIBRE OR APPROVED EQUIVALENT.

UNREINFORCED CONCRETE FOOTPATH

INFRASTRUCTURE SERVICES
Maribyrnong CITY COUNCIL

DRAWN: I.VANIKIOTIS		DRAWING No.	Rev.
APPROVED : T.LAM		S.D. RU 2	–
DATE : FEBRUARY 2014			