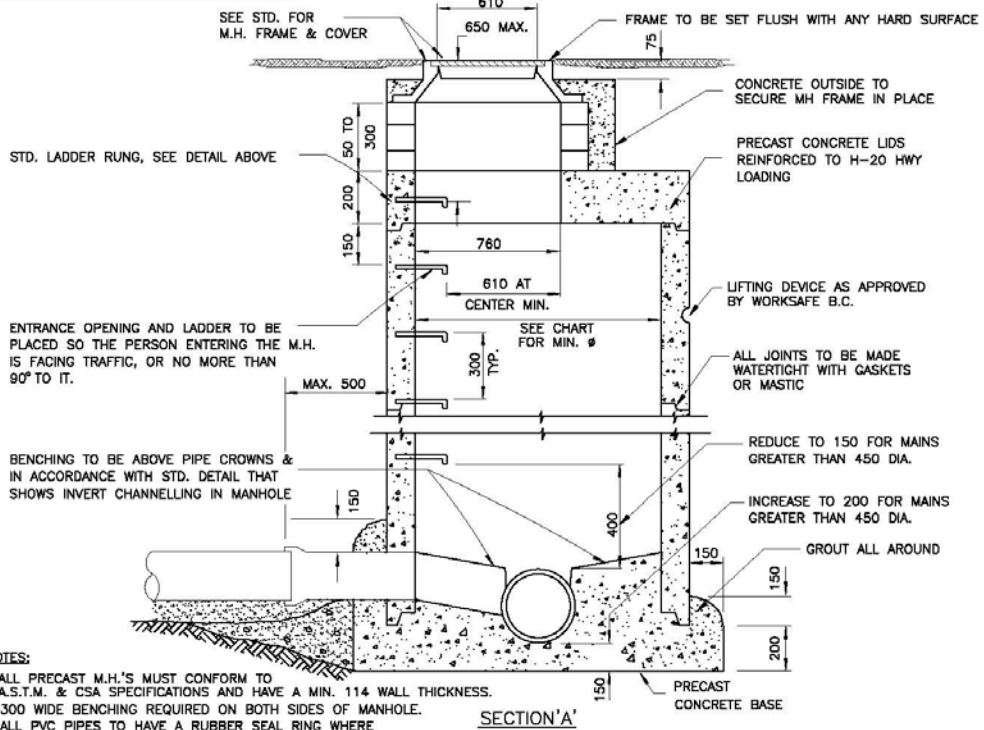
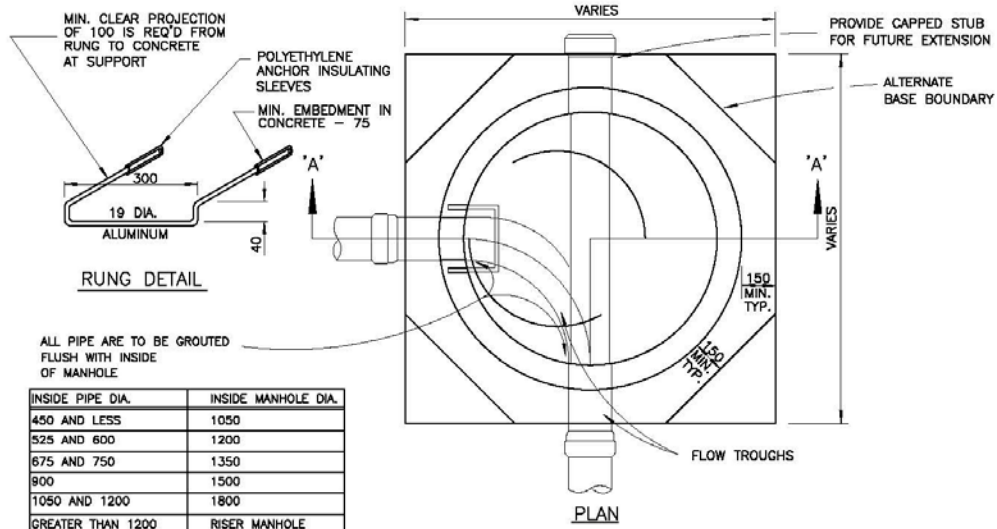


STANDARD DETAIL DRAWINGS

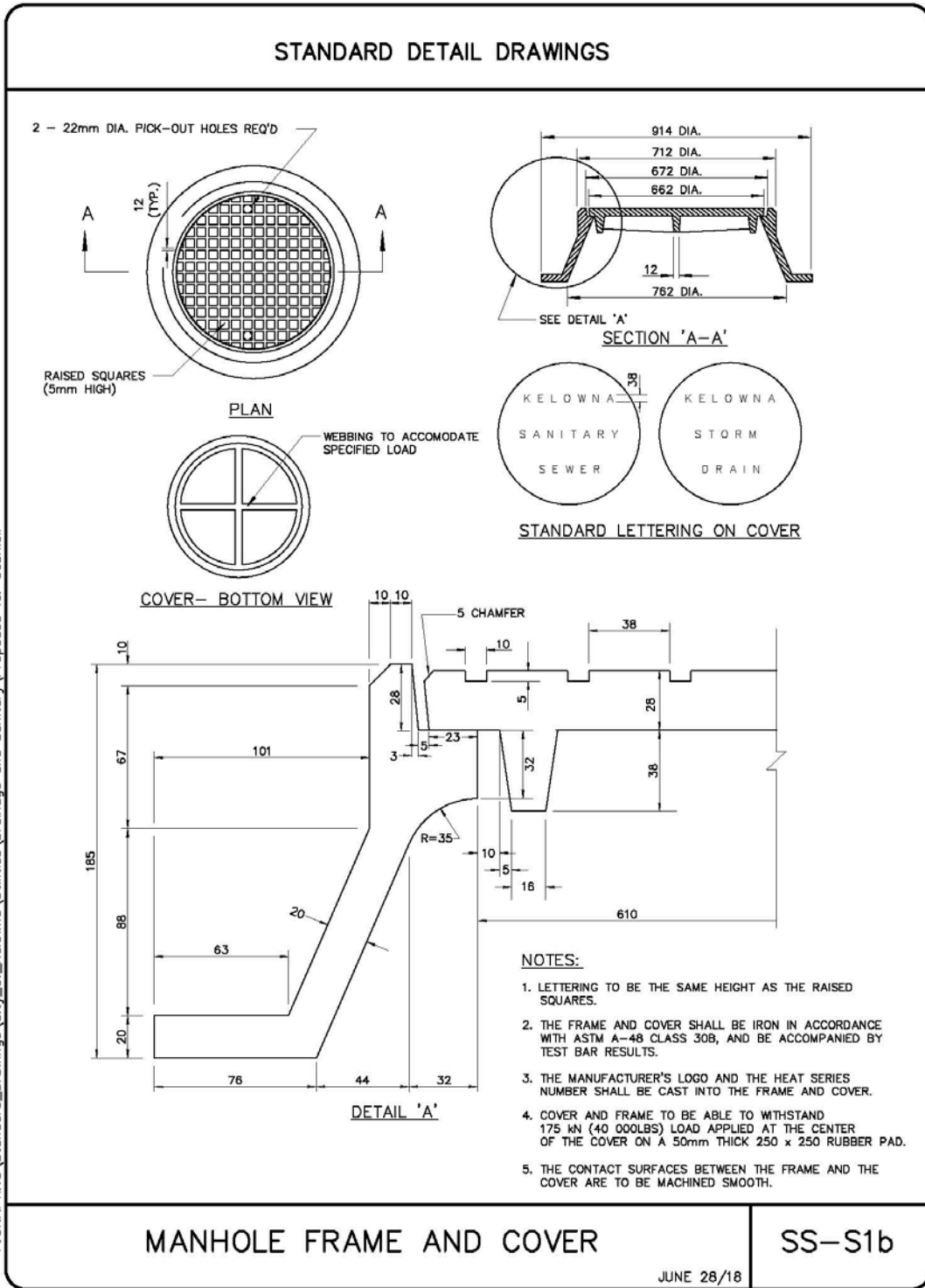


MANHOLES

SS-S1a

JULY 25/18

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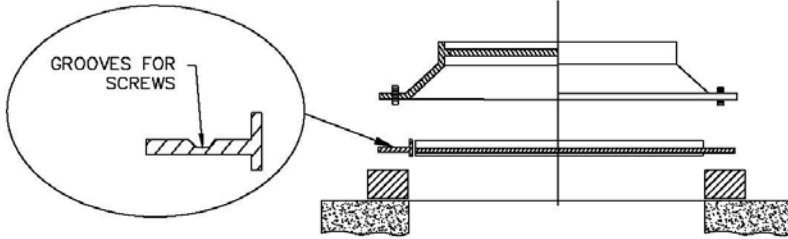
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MANHOLE FRAME AND COVER

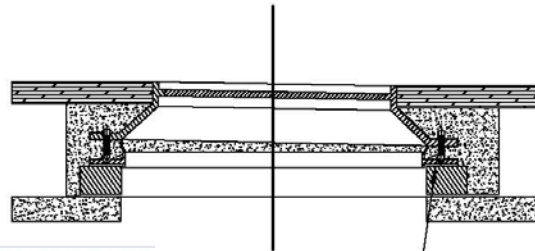
SS-S1b

JUNE 28/18

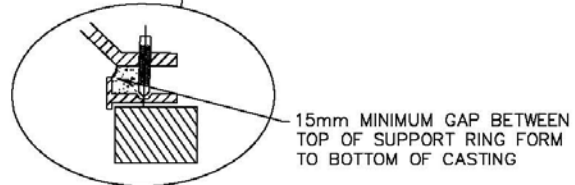
STANDARD DETAIL DRAWINGS



NOTES:
FOR GRADES >4% USE
LONGER SET SCREWS OR
USE SLOPE GRADE RINGS
AS RECOMMENDED BELOW.



ROAD GRADE	GRADE RING	ADJUSTABLE FRAME
8-12%	8%	AFSR
4-8%	4%	AFSR
0-4%		AFSR ONLY



MIN. ASPHALT THICKNESS TO BE
50mm AROUND FRAME

FILL VOID
WITH CONCRETE

RAKE FINISH SURFACE OF CONCRETE
MAINTAIN MINIMUM 50mm ASPHALT
THICKNESS OVER CONCRETE

MATCH CONTOUR OF ROAD
SURFACE.

SET SCREW TO HAVE BONDED
THREAD PROTECTION AND
GRAPHITE. THREADED HOLES
IN FRAME

DO NOT EXCAVATE
BEYOND GRADE RINGS
100mm, RECOMMEND
HYDRO EXCAVATION

PLACE CONCRETE BETWEEN FRAME
AND SUPPORTING RING, IN A SINGLE
HOMOGENEOUS MANNER.
EXPOSED CONCRETE INSIDE CHIMNEY
TO BE HAND FINISHED SMOOTH

NOTE: PROTECT SET SCREW
THREADS FROM CONCRETE
USING PLASTIC THREAD CAPS
OR OTHER APPROVED EQUAL.
(SEE MANUFACTURERS
RECOMMENDATIONS.)
THICKNESS OF CONCRETE TO
BE 100mm
-CONCRETE 30 MPA
-10mm AGREGATE REDUCE
SHRINKAGE BY USE OF
PLASTISIZER

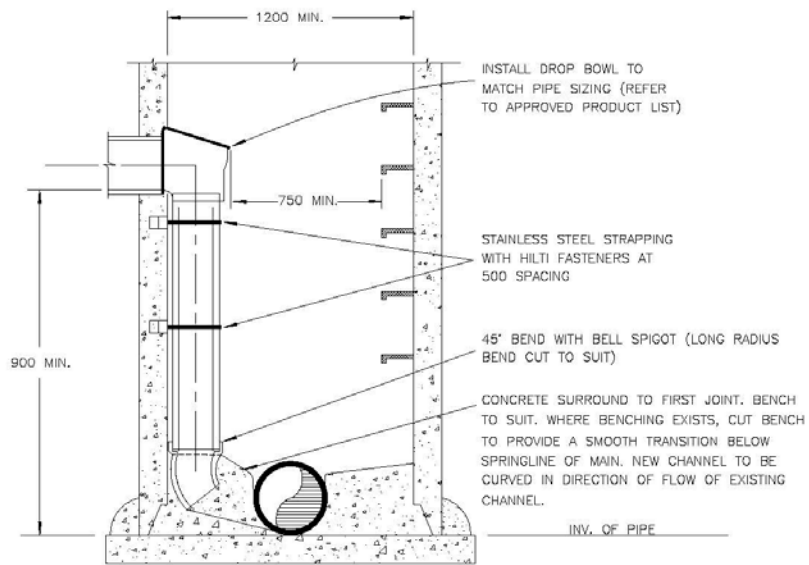
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ADJUSTABLE MANHOLE FRAME AND COVER

SS-S1c

JUNE 28/2014

STANDARD DETAIL DRAWINGS



INSIDE DROP TYPE

- NOTE:**
1. INSIDE DROP TO BE USED WHERE SPECIFIED BY ENGINEER.
 2. ALL INSIDE PIPE AND FITTINGS PVC DR 28/35.
 3. THIS DRAWING SHOWS INSIDE DROP ONLY. SEE DRAWING SS-S1A FOR ALL OTHER DETAILS PERTAINING TO MANHOLE REQUIREMENTS.
 4. REFER TO CONTRACT DRAWINGS, SECTION 33 44 01 FOR DETAILED SPECIFICATIONS.

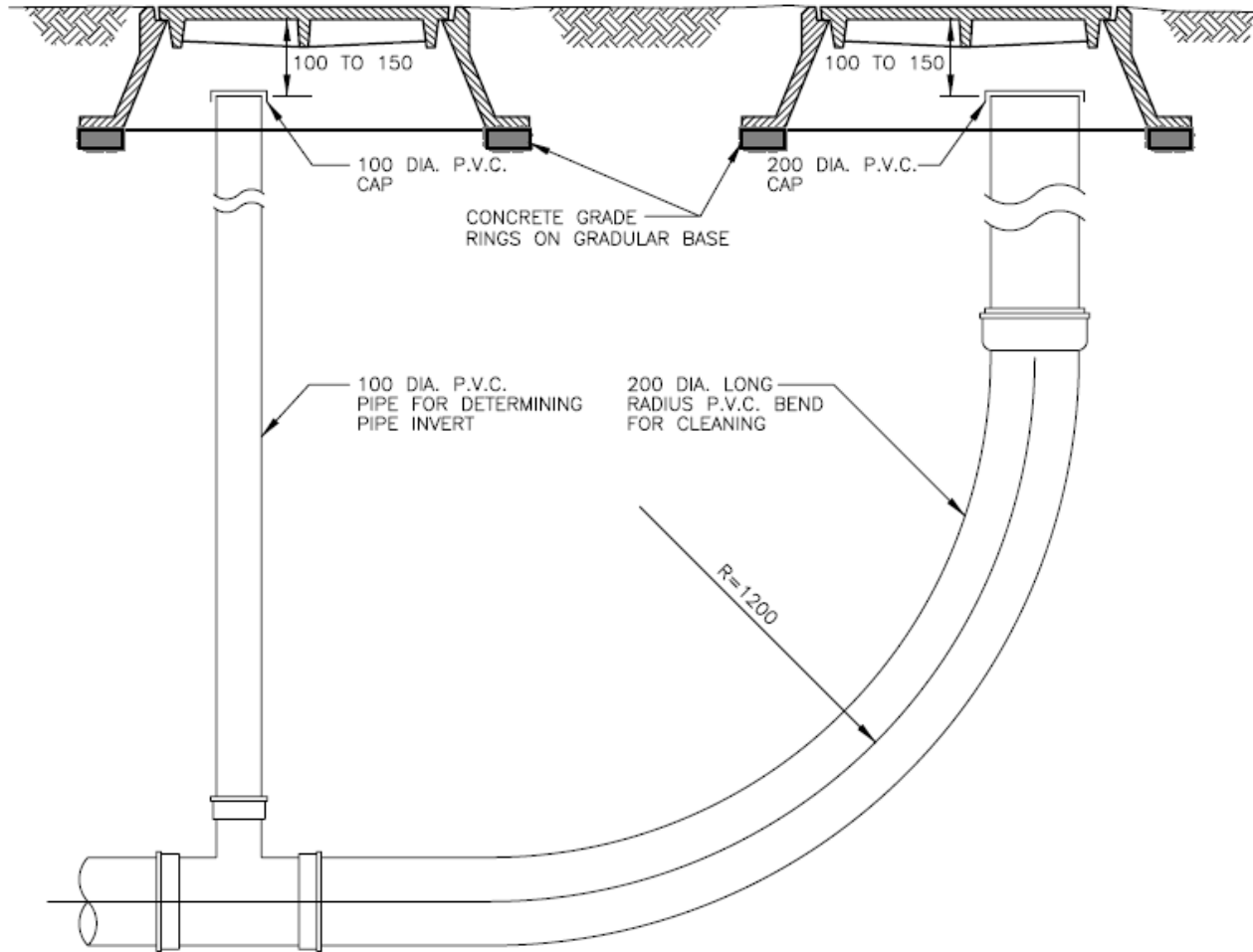
NOT TO SCALE

INSIDE DROP MANHOLE

SS-S4

JULY 4/18

STANDARD DETAIL DRAWINGS

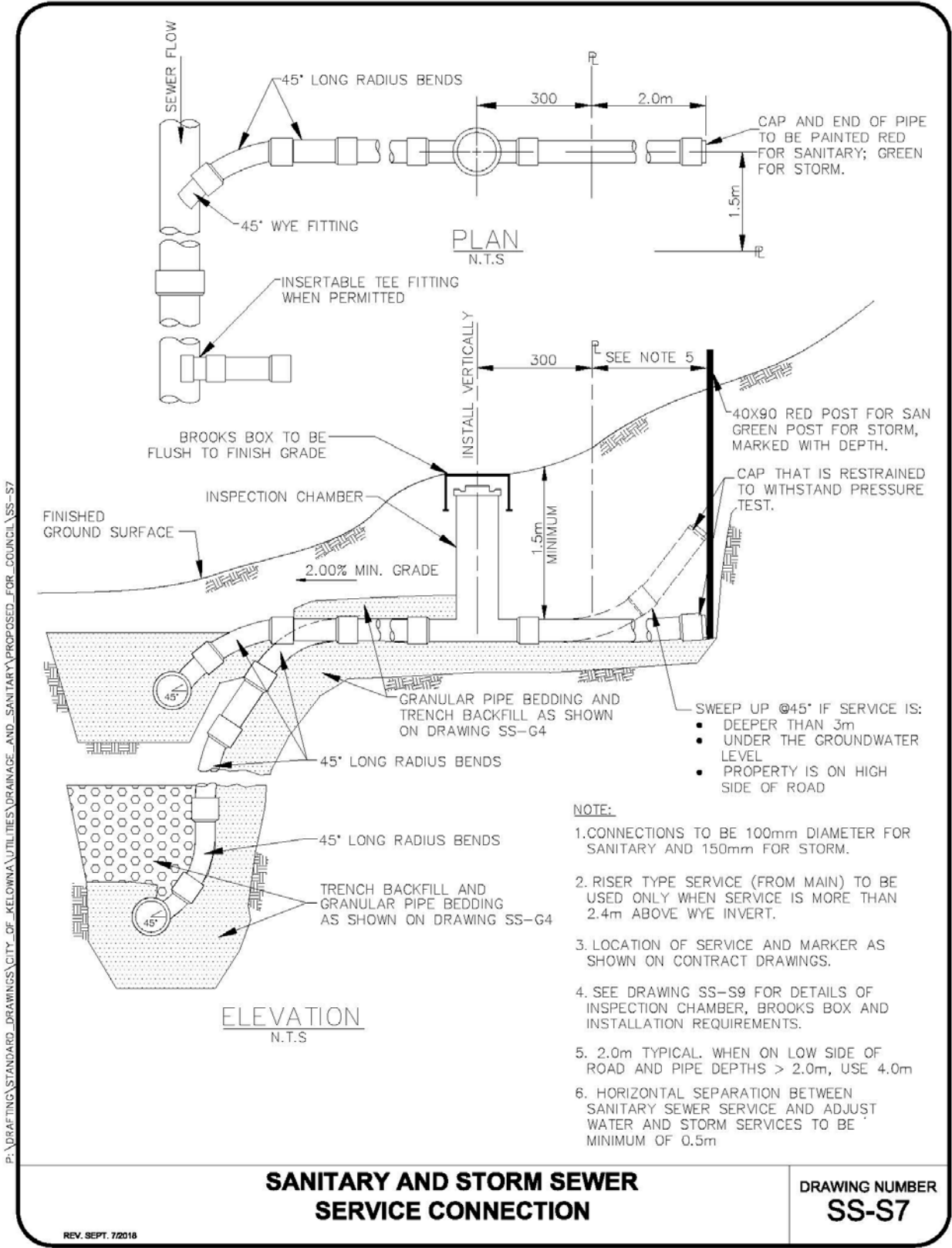


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CLEANOUT DETAIL (TEMPORARY)

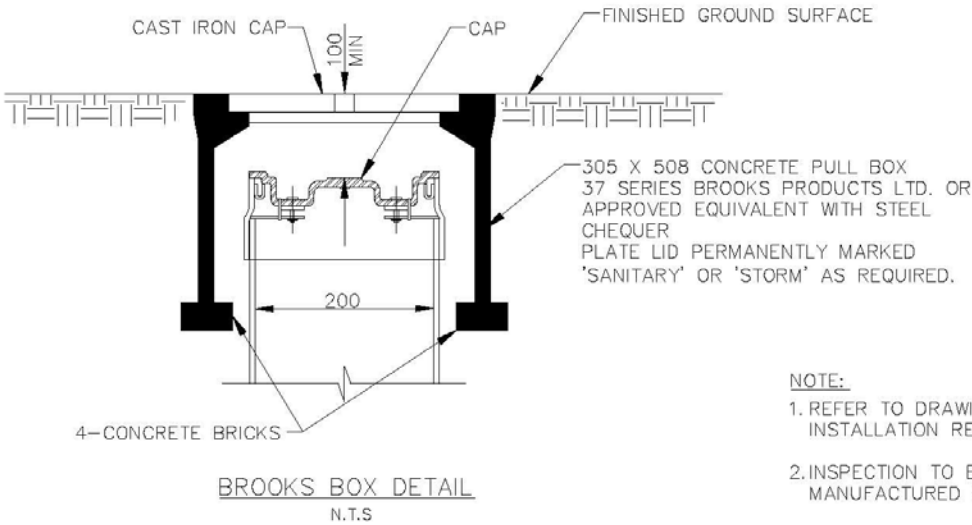
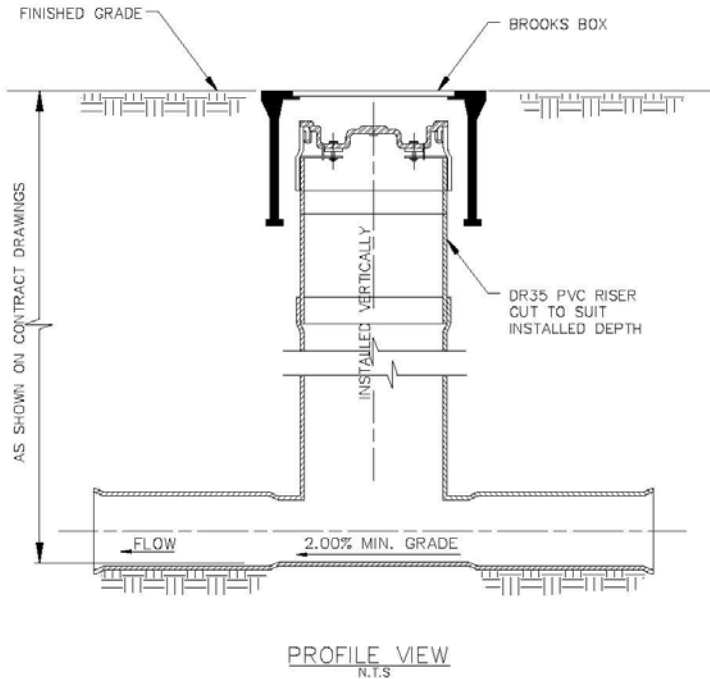
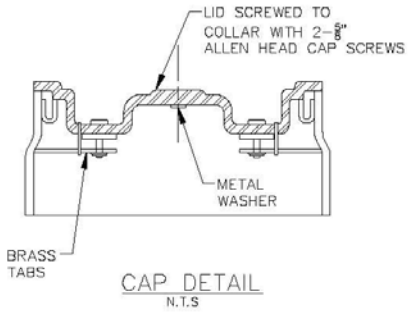
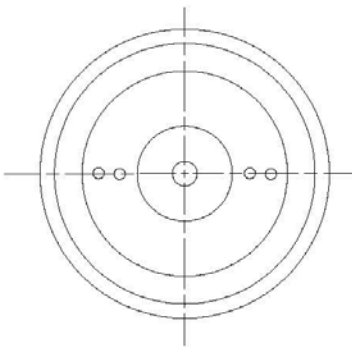
SS-S6

APRIL 15/08



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BL10640 added and BL11692 replaced SS-S9 :



- NOTE:**
1. REFER TO DRAWING SS-S7 FOR INSTALLATION REQUIREMENTS.
 2. INSPECTION TO BE APPROVED MANUFACTURED FITTING.
 3. REFER TO CONTRACT DRAWINGS FOR SITE SPECIFIC DIMENSIONS AND SECTION Q2731 FOR DETAILED SPECIFICATIONS.
 4. RED CAP FOR SANITARY AND GREEN CAP FOR STORM CONNECTIONS.

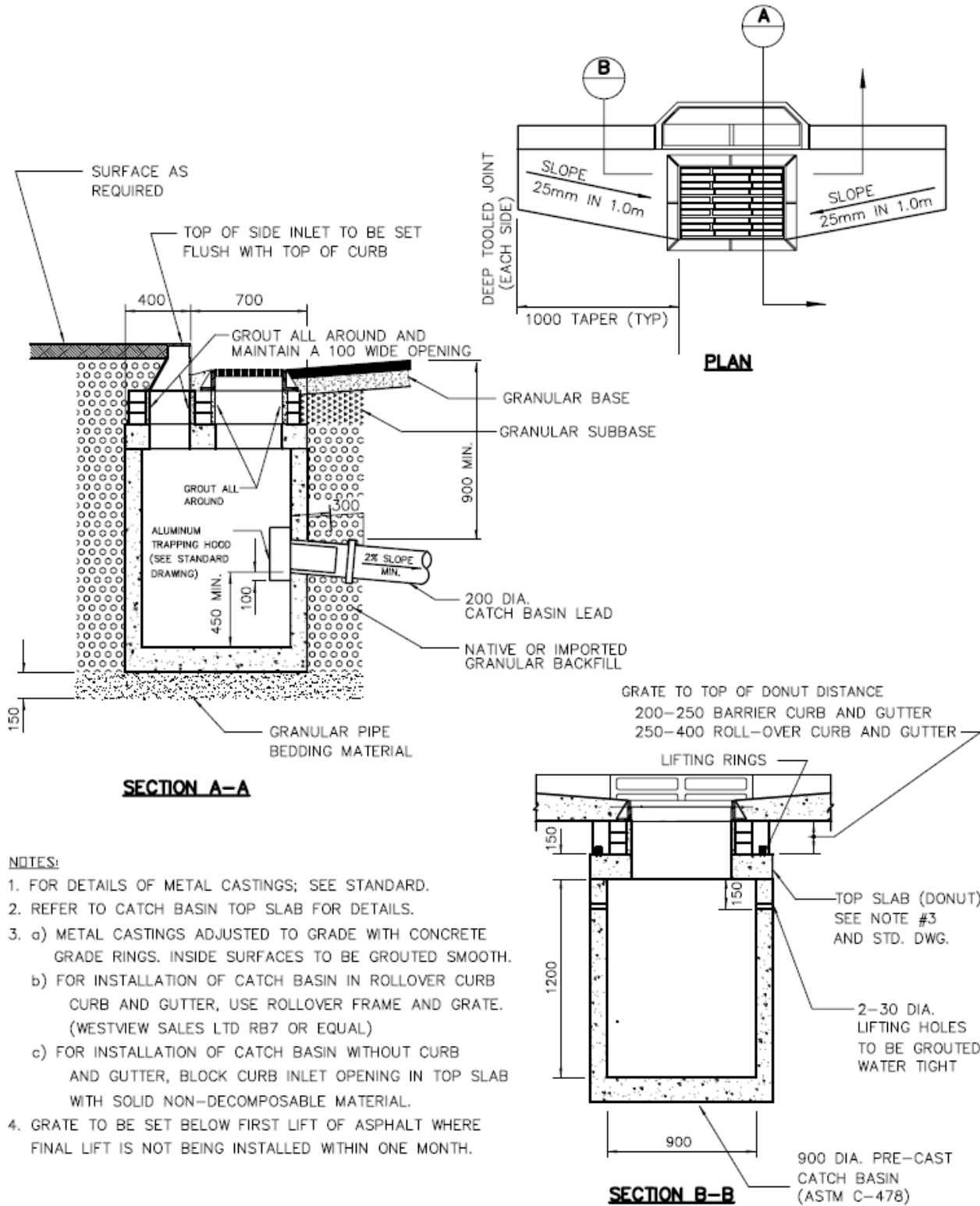
**INSPECTION CHAMBER FOR 100 TO 200
SANITARY SEWER OR STORM DRAIN CONNECTION**

**DRAWING NUMBER
SS-S9**

REV. JUNE 28/16

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STANDARD DETAIL DRAWINGS



NOTES:

1. FOR DETAILS OF METAL CASTINGS; SEE STANDARD.
2. REFER TO CATCH BASIN TOP SLAB FOR DETAILS.
3. a) METAL CASTINGS ADJUSTED TO GRADE WITH CONCRETE GRADE RINGS. INSIDE SURFACES TO BE GROUTED SMOOTH.
 b) FOR INSTALLATION OF CATCH BASIN IN ROLLOVER CURB CURB AND GUTTER, USE ROLLOVER FRAME AND GRATE. (WESTVIEW SALES LTD RB7 OR EQUAL)
 c) FOR INSTALLATION OF CATCH BASIN WITHOUT CURB AND GUTTER, BLOCK CURB INLET OPENING IN TOP SLAB WITH SOLID NON-DECOMPOSABLE MATERIAL.
4. GRATE TO BE SET BELOW FIRST LIFT OF ASPHALT WHERE FINAL LIFT IS NOT BEING INSTALLED WITHIN ONE MONTH.

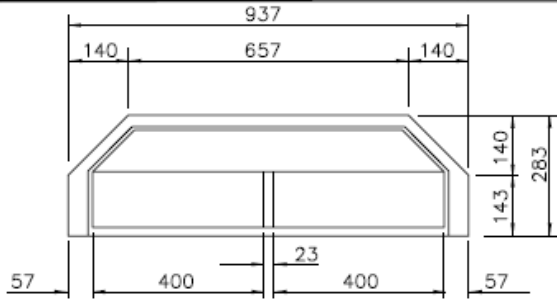
CATCH BASIN (900mm DIA.)

SS-S11a

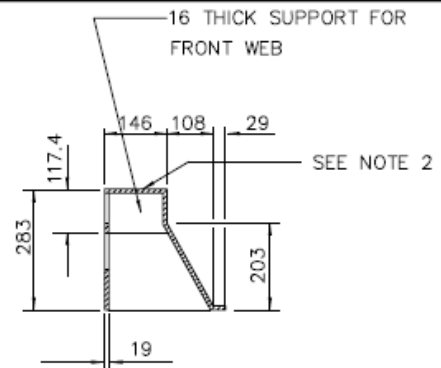
APRIL 15/08

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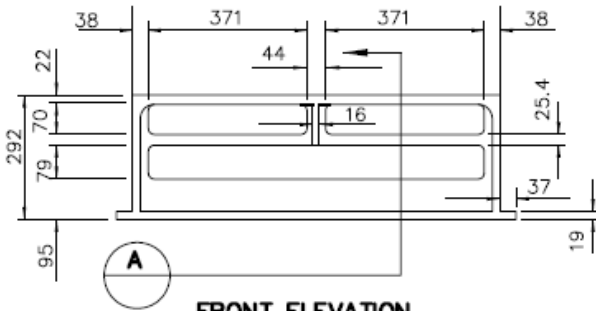
STANDARD DETAIL DRAWINGS



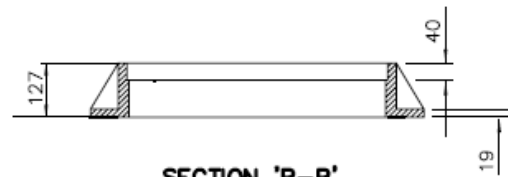
BOTTOM VIEW
(BARRIER CURB ONLY)



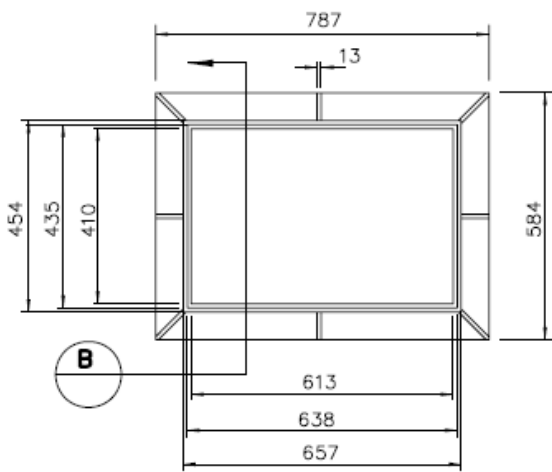
SECTION 'A-A'



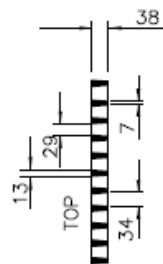
FRONT ELEVATION
(BARRIER CURB ONLY)



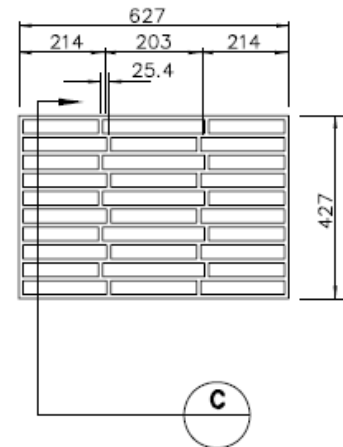
SECTION 'B-B'



PLAN VIEW
(CATCH BASIN FRAME CASTING)



SECTION C-C



PLAN VIEW
(CATCH BASIN GRATE)

NOTE:

1. CURB INLET CASTING GRATE AND FRAME CASTING TO BE DUCTILE IRON (DESIGNED FOR H-20 LOADING)
2. FISH DESIGN CAN BE ADDED TO TOP OF SIDE INLET BUT MUST BE APPROVED BY THE CITY ENGINEER PRIOR TO CONSTRUCTION.
3. FOR ROLL CURB USE ROLLOVER FRAME & GRATE (WESTVIEW SALES LTD RB7 OR EQUAL)

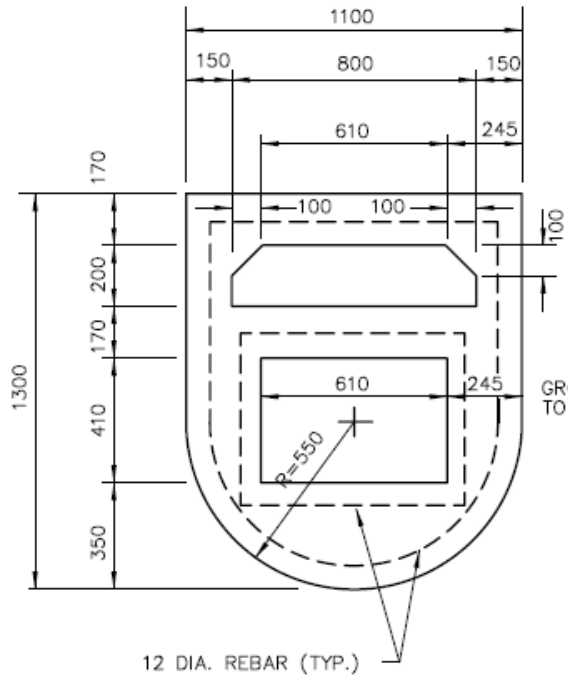
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CATCH BASIN CASTINGS
COMBINED SIDE & GUTTER INLET

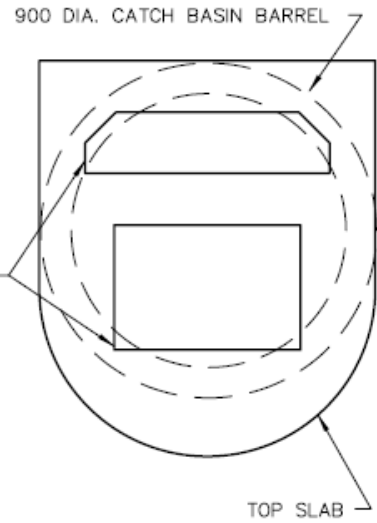
APRIL 15/08

SS-S11b

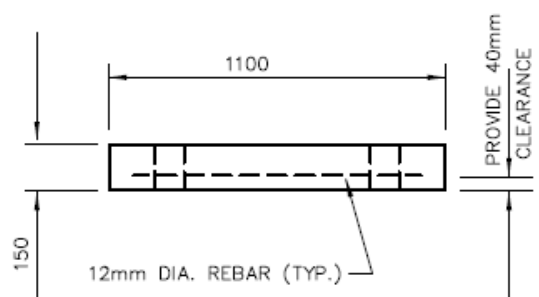
STANDARD DETAIL DRAWINGS



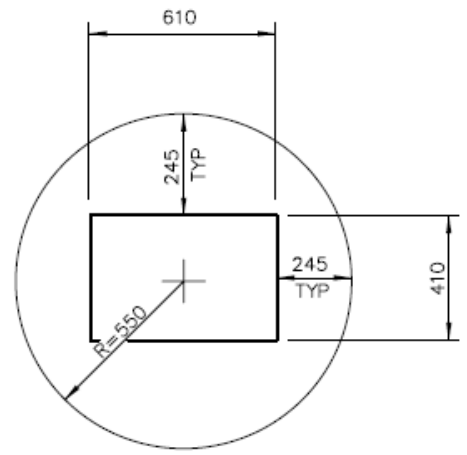
PLAN TOP SLAB



POSITION OF TOP SLAB ON 900mm DIA. CATCH BASIN



FRONT ELEVATION



TOP SLAB (WITHOUT CURB INLET OPENING)

- NOTES:**
1. ALL CONCRETE WORK TO BE A MINIMUM OF 30MPa STRENGTH AND DESIGNED FOR H-20 LOADING.
 2. MODIFY OPENINGS FOR ROLLOVER FRAME AND GRATE.

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