1. Refer 4005-20002-01 to 4005-20002-03 for general notes.
2. Refer 4005-20004-03 for typical sewer connection details.
3. During compaction of the concrete block, the cover & frame shall be removed. The contractor shall ensure the block does not move to impede access to the threaded cap.
4. All fittings identified by shading shall be reinforced fitting. Refer to 2.2.11.
5. All dimensions in millimetres.
1. Refer 4005-20002-01 to 4005-20002-03 for general notes.
2. Application of precast sections joint sealant:
   - Inspect components to ensure there is no damage to joining surfaces.
   - Attach sealant strip to each sloping face.
   - Top increment lowered into place.
   - Sealing compound is squeezed into joint.
3. Wall repair of cored hole
   - Core hole in wall.
   - Clean edges of cut hole around internal/external walls.
   - Insert pipe & fill gap with EPDM 633, FerroFibre or approved equivalent.
   - For thick in situ walls, mortar is permitted for external portion 500G.
   - Following manufacturers drying time reapply filler to internal wall to seal any potential gaps.
4. Concrete poured in situ shall be grade N40 in accordance with AS 1379.
5. All dimensions in millimetres.
JUNCTION BETWEEN SEWERS OF EQUAL DIAMETER (BRANCH DEFLECTION <45° AND ≤90°)

JUNCTION BETWEEN SEWERS OF EQUAL DIAMETER (BRANCH DEFLECTION >90°)

JUNCTION BETWEEN SEWERS OF DIFFERENT DIAMETER DN300 OR LARGER

NOTES:
1. REFER 4005-20002-01 TO 4005-20002-03 FOR GENERAL NOTES.
2. RADIUS OF CURVATURE TO THE INSIDE WALL OF THE CHANNEL SHALL BE EQUAL TO THE PIPE DIAMETER FOR THAT PARTICULAR BEND/BRANCH.
3. ‘JUMP-UPS’ AND ADDITIONAL FALL AROUND BENDS ARE APPLICABLE UP TO DN225 SEWERS ONLY.
4. FOR SEWERS DN300 & DN375 THE JUNCTION WITH BRANCH SEWERS SHALL BE DESIGNED TOP TO TOP.
5. BENCH FALL FROM WALL TO CHANNEL = 25 - 30 mm.
6. ALL DIMENSIONS IN MILLIMETRES.
1. Refer 4005-20002-01 to 4005-20002-03 for general notes.
2. Radius of curvature (R) to the inside wall of the bend shall be equal to the pipe diameter for that particular bend / branch.
3. Maintenance hole may be offset from the intersection point to ensure maximum length of open channel or for the temporary end option maintain the minimum 200 length of the shaft section.
4. All tangent points of bends and branches shall be contained within maintenance hole.
5. All dimensions in millimetres.

Legend:
- R: Radius - Refer Note 2
- TP: Tangent Point
- Centre of access chamber intersection point

90° Bend
Branch Left and Right
Obtuse Branch
Branch into Larger Main
(M/H Offset Refer Note 3)
Acute Branch

Elevation
Maintenance Hole with Temporary End

Future Sewer

Notes:

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Drawn: 25/03/16
Signature: TG

Design Panel

SA Water Standard Drawings
Sewer Construction Manual
Maintenance Hole
Channel Configurations
And Temporary End

Prefix: 4005
Number: 20005
Sheet: 07
IF JUMP UP LARGER THAN 900, FIX PIPE TO WALL WITH GRADE 316 STAINLESS STEEL STRAPS AND STAINLESS STEEL ANCHORS AT TOP AND BOTTOM AND AT MAX OF 750 INTERVALS.

ELEVATION
NEW MAINTENANCE HOLE
INTERNAL JUMP UP OPTION (PREFERRED)

LOWER HALF OF PIPE FIX WITH CONCRETE.
FORMED CONCRETE CHANNEL AT 10% MN GRADE

ELEVATION
EXISTING MAINTENANCE HOLE
INTERNAL JUMP UP OPTION

NOTES:
1. REFER 4005-20005-01 TO 4005-20005-03 FOR GENERAL NOTES.
2. THE INTERNAL JUMP UP OPTION SHALL BE PREFERRED METHOD. THE EXTERNAL JUMP UP OPTION IS SUBJECT TO APPROVAL BY SA WATER REPRESENTATIVE.
3. DISCHARGE PIPE TO BE TURNED TO DIRECT SEWAGE IN DIRECTION OF MAIN FLOW.
4. REFER TO 4005-20005-03 FOR MAINTENANCE HOLE TYPICAL PRECAST STRUCTURE ASSEMBLY DETAILS AND INSTALLATION OF THE PIPE THROUGH THE WALL.
5. EXTERNAL JUMP UP FOR STEEP SEWER GRADIENTS, USE ADDITIONAL BEND(S) TO ENSURE "JUMP UP" REMAINS VERTICAL.
6. MAXIMUM OF 2 INTERNAL JUMP-UPS PER MAINTENANCE HOLE IS PERMITTED.
7. ALL FITTINGS IDENTIFIED BY SHADING SHALL BE A "REINFORCED" FITTING. REFER TS 9502, 3.2.11.
8. ALL DIMENSIONS ARE IN MILLIMETRES.
1. REFER 4005-20002-01 TO 4005-20002-03 FOR GENERAL NOTES.
2. FOR PROPERTY CONNECTIONS INTO 'DROP JUNCTIONS' INCLUDING APPROVED NUMBERS REFER 4005-20006-08.
3. ADJUST MS TO PIPE GRADE BY TILTING CHAMBER, MAX DEVIATION FROM VERTICAL OF THE RISER TO BE ±1° OR A MAXIMUM OF 300 AT SURFACE, USE KICKER BEND IF REQUIRED TO ADJUST RISER TO VERTICAL.
4. MAINTENANCE SHAFT & COMPONENTS (BASE, SHAFT, JUNCTIONS ETC.) SHALL BE OBTAINED FROM ONE MANUFACTURER & SHALL NOT BE MIXED.
5. LID & COVER TO BE STREET BOX, LID TO BE MARKED SEWER, REFER TS 0562 FOR MANUFACTURER DETAILS.
6. INSTALLATION TOLERANCE SHALL BE IN ACCORDANCE WITH 4005-20005-04.
7. MANUFACTURERS OF MAINTENANCE SHAFTS CONFIRM A MAXIMUM DEPTH TO INVERT VARYING FROM 3000 TO 5000.
8. THE DESIGNED DEPTH OF THE MS SHALL BE UTILISED FOR THE SELECTION OF THE DRAIN OR MS.
9. FOR THE AYMROD CAMS MS THE SHOWN DIMENSION IS NOT APPLICABLE. AYMROD SHALL BE CONTACTED FOR CONFIRMATION OF HEIGHT BASED UPON USE OF THE CAMS TYPE MS.
10. ALL DIMENSIONS IN METRES.