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NOTES:
1. FOR TYPICAL FOOTPATH VERGE ALLOCATIONS FOR PUBLIC UTILITIES REFER TO D.P.E.A. STD. DWG. P-0101
2. FOR MINIMUM DROPS THROUGH MANHOLES REFER TO R.C.C. STD. DWG. No. 5797.
3. ALL SEWER ROAD CROSSINGS INCLUDING HOUSE CONNECTION BRANCHES SHALL CONNECT INTO MANHOLES.
4. ROAD CROSSING HOUSE CONNECTION BRANCHES SHALL BE PVC CLASS SN8.
5. PRIOR TO COMMENCING WORK ON SITE THE CONTRACTOR SHALL DETERMINE THE LOCATION OF ALL EXISTING PUBLIC UTILITIES.
6. THE CONTRACTOR SHALL ENSURE THAT THE WORKS ARE CARRIED OUT IN ACCORDANCE WITH THE REQUIREMENTS OF ALL CURRENT ACTS, REGULATIONS AND LOCAL LAWS.
7. FOR CONSTRUCTION TOLERANCES REFER COUNCIL'S STANDARD SPECIFICATION 223.
8. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS SHOWN OTHERWISE.

TYPICAL LAYOUT PLAN

SEWER LOCATION IN FOOTPATH
**TYPE 1 CONSTRUCTION**

1. 150 min. for sand backfill
2. 300 min. for other than sand backfill
3. 100 min. for other than rock trench

**TYPE 2 CONSTRUCTION**

- Refer Note 3
- Bedding Zone 3
- Bedding Zone 2
- Bedding Zone 1
- Additional Bedding

**TYPE 3 CONSTRUCTION**

- Refer Note 3
- Geotextile wrapping
- Bedding Zone 3
- Bedding Zone 2
- Bedding Zone 1
- Additional Bedding

**TYPE 4 CONSTRUCTION**

- Refer Notes 4 and 5
- Geotextile wrapping
- Bedding Zone 3
- Bedding Zone 2
- Bedding Zone 1
- Additional Bedding

**NOTES:**

1. For excavation, bedding and backfill requirements refer Council's standard specification S5.1
2. Concrete bulkheads shall be spaced at 450 mm intervals for 0.02 to 0.03 pipe with grades between 15% and 29%.
3. For grades exceeding 29%, the spacing in metres shall be calculated by dividing 100 by the grade (%) x 1.2.
4. Concrete in bulkheads is to be grade N20.
5. Where backfill is classified as sand by the Superintendent, a geotextile barrier shall be provided at the interface of bedding Zone 3 and backfill.
6. The pipe shall be wrapped with bando tape or similar or PIV sleeved and taped for the extent of concrete surround.
7. A short pipe 500 mm long shall be installed immediately upstream and downstream of the encased section of pipeline.
8. Dimensions are in millimetres unless shown otherwise.
SECTION A-A

SECTION B-B

SECTION C-C

SECTION D-D

DIVERSION DRAIN TO STORMWATER OUTLET

NOTES
1. DIVERSION PIPES AND FITTINGS TO BE #50 SLOTTED POLYETHYLENE CLASS 400 TO A.S.1249.
2. FOR BEDDING MATERIAL REQUIREMENTS (GRADE V/7) REFER COUNCIL'S STANDARD SPECIFICATION SS.1.
3. DIVERSION DRAINS ARE TO BE FITTED WITH A FILTER SLEEVE/SOFT AS DIRECTED BY THE SUPERINTENDENT.
4. DIVERSION TRENCH TO BE LAYED UNDER THE LIMITS OF THE MANHOLE.
5. LOCATE THE DIVERSION PIPE CENTRALLY IN TRENCH 50 ABOVE TRENCH FLOOR. PROVIDE END CAPS AT ALL PIPE ENDS.
6. DIMENSIONS ARE IN MILLimetres UNLESS SHOWN OTHERWISE.
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- INDICATES BLOCK LENGTH OF 600

**STAINLESS STEEL STRAP WITH 3mm THICK INSERTION RUBBER BETWEEN STRAP AND BEND**

**CONCRETE TO EXTEND 150 MM INTO EACH TRENCH WALL**

**VERTICAL BENDS**

**DIA GR SER 36" 3/4" SS STRAP**

**PLAN**

**NOTES:**
1. ALL CONCRETE TO BE GRADE NO.
2. THRUST BLOCKS SHALL BE CAST AGAINST THE UNDISTURBED SIDE OF THE TRENCH. KEEP CONCRETE CLEAR OF Sockets, Flanges, AND BOLTS.
3. THE TABLE OF DIMENSIONS ASSUME A TEST PRESSURE OF 900 KPA (90 mm HEAD). VARIATION FROM THE DIMENSIONS SHOWN WILL BE SUBJECT TO JUSTIFICATION BY CALCULATIONS.
4. POLYETHYLENE SLEETING SHALL COMPLY WITH THE REQUIREMENTS OF COUNCIL'S STANDARD SPECIFICATION SS1.
5. DIMENSIONS ARE IN MILLIMETRES UNLESS SHOWN OTHERWISE.
NOTES:
1. ALL HOUSE CONNECTION BRANCHES SHALL HAVE A MINIMUM GRADE OF 1 in 60 for Ø100 and 1 in 80 for Ø150.
2. LAYOUT OF WORK - ALL HOUSE CONNECTION BRANCHES SHALL FINISH WITH AN INSPECTION TEE WITH THE END AND INSPECTION OPENING SCREW CAPPED TO THE INVERT LEVEL SHOWN ON THE DRAWINGS.
3. ALL HOUSE CONNECTION BRANCHES CROSSING ROADS SHALL CONNECT INTO MANHOLES.
4. SHOULD A TYPE 'C' HOUSE CONNECTION BE AT A DEPTH GREATER THAN 2000 (SURFACE LEVEL TO INVERT LEVEL) THE OUTLET JUNCTION AND ADJOINING BENDS SHALL BE EITHER DURITE IRON WITH A FUSION BONDED EPOXY COATING OR GRP DROP SEWER JUNCTION JOINT COMMITTEE APPROVED OR FACTORY ASSEMBLED FITTING APPROVED BY COUNCIL.
5. BEDDING MATERIAL SHALL COMPLY WITH THE REQUIREMENTS OF COUNCIL'S STANDARD SPECIFICATION SS1.
6. PROVIDE CONCRETE CRADLE IN LOCATIONS OTHER THAN SAND. BEDDING ZONE MATERIAL SHALL BE USED IN SAND LOCATIONS AS DIRECTED BY THE SUPERINTENDENT.
7. CONCRETE SURROUNDS AND CRADLES SHALL BE CONCRETE GRADE N20 FIRMLY PACKED TO SUPPORT OUTLET JUNCTION AND PIPES. THE SURFACES SHALL EXTEND FROM THE TRENCH WALLS AND FLOOR TO A MINIMUM 150 ABOVE PIPWORK OR AS SHOWN.
8. ALL PIPE JOINTS SHALL CONFORM TO COUNCIL'S STANDARD SPECIFICATION SS1 AND THE MANUFACTURERS RECOMMENDATIONS.
9. DIMENSIONS ARE IN MILLIMETRES UNLESS SHOWN OTHERWISE.
CIRCULAR CONVERTOR SLABS

CONVERTOR SLAB REINFORCEMENT FOR CIRCULAR MANHOLE DETAIL

WHERE CONVERTOR SLAB IS BELOW FLOOD LEVEL
COVER IN PLACE

CONVERTOR SLAB & SURROUND FIXING DETAILS

NORMAL CONDITIONS
COVER OMITTED

SURROUND REINFORCEMENT
AND ATTACHMENT DETAIL

NOTES:
1. THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH R.C.C.
STD. DWG.59727, 59780, 59711 & 59794.
2. ALL IN SITU CONCRETE SHALL BE GRADE N32.
3. REINFORCING BARS TO BE AS/NZS 4671/2001
WITH 50 MM COVER BOTTOM FACE.
4. SQUARE CONVERTOR SLABS SHALL BE CONSTRUCTED WHERE
DEPTH OF MANHOLE IS LESS THAN 1200.
5. ALL JOINT FACES SHALL BE WELL SCALED AND MADE WATERTIGHT.
6. HOLDING DOWN BOLTS SHALL BE 4 X M16 BOLTS 550 LONG
HEXAGONAL HEAD AND NUT, SHANKS TO PROJECT 50 ABOVE
CONVERTOR SLAB.
7. DIMENSIONS ARE IN MILLIMETRES UNLESS SHOWN OTHERWISE.
NOTES:

1. All precast sewer manhole components shall be proprietary products approved by council and manufactured to A.S. 4798.
2. The cover, frame and concrete surround shall be finished to the details shown on P.E.C. Std. Dwg. No. 59706.
3. Jointing components (rubber ring & mastic seal) shall be installed in accordance with the manufacturers recommendations.
4. Precast surrounds shall be fixed to the converter slab in accordance with the manufacturers recommendations. Cast-in-situ surrounds shall be in accordance with P.E.C. Std. Dwg. No. 59708 with 65mm dia. dowel bars placed 75mm long drilled 75mm into the converter slab and epoxy glued in place.
5. Precast base units are not approved for use.
6. Precast manholes shall not be constructed in areas subject to inundation as directed by the Superintendent.
7. Inlet sewer entries shall be drilled as specified and shall not be located at shaft section joints. Holes made by impact methods shall be rejected.
8. Internal drops are not permitted where the sewer grade exceeds 1 in 10 (10%).
9. Where more than one type 'X' drop is required the manhole shall be 1200 diameter.
10. External drops are not approved for use with precast manholes.
11. Bolt down legs shall not be used with precast manholes.
12. Manhole drops type 'X' shall not be used in 9000 sewers.
13. Dimensions are in millimetres unless shown otherwise.

TYPICAL SECTIONAL ELEVATION
DUCTILE IRON COVER & FRAME
TYPES 'J' AND 'M'

BOLT DOWN COVER NOTES:
1. FOR TYPE 'M' COVERS PROVIDE A MINIMUM OF 2 x M10 (MINIMUM 36 STAINLESS STEEL M10 x 350MM) BOLTS WITH NYLON WASHERS.
2. FOR TYPE 'L' COVERS PROVIDE A MINIMUM OF 4 x M10 (MINIMUM 36 STAINLESS STEEL M10 x 350MM) BOLTS WITH NYLON WASHERS.
3. FOR TYPE 'M' COVERS PROVIDE 4 REGISTERS IN COVERS AND FRAMES AS DETAILED IN CLAUSE 14.2.7. OF AS3996.

COVER USAGE

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DUCTILE IRON COVER & FRAME TYPE 'L'

GENERAL NOTES:
1. ALL COVERS AND FRAMES SHALL BE PROPRIETARY PRODUCTS APPROVED BY COUNCIL AND CONFORMING WITH AS 3996.
2. ALL COVERS SHALL HAVE:
   - SAN-SEW OR SEWER CAST ON THE TOP FACE IN 3 HIGH LETTERING (50 HIGH AND 40 WIDE)
   - THE CLASS, TYPE AND WEIGHT CAST ON THE TOP FACE IN LEGIBLE 3 HIGH LETTERING
3. COVER TYPE 'M' SHALL BE USED IN ALL SITUATIONS WHERE THE TOP OF THE MANHOLE IS BELOW FLOOD LEVEL.
4. ALL DUCTILE IRON COMPONENTS SHALL COMPLY WITH AS 1831 GRADE 600/3
5. SURFACE FINISH SHALL BE SQUARED OR DIAMOND PATTERNED.
6. DIMENSIONS ARE IN MILLIMETRES UNLESS SHOWN OTHERWISE.
NOTES:
1. ALL SMALL RADIUS SHALL BE 5.
2. ALL FITTINGS FOR USE WITH P.I.E.D. PIPE SHALL BE RUBBER RING JOINED TO IN-COMING SEWER.
3. ALL FITTINGS FOR USE WITH PVC, ADAPTOR PIPE SHALL BE RUBBER RING JOINED TO IN-COMING SEWER.
4. ALL FITTINGS SHALL BE CAST SPHERICAL GRANITE IRON GRD. 300/032/0/0 TO COMPLY WITH AS 1550.
5. SLIP COVERS SHALL BE 5 TENTH PVC SLEEVE WITH STAINLESS STEEL BAND TO SUIT.
6. DIMENSIONS ARE IN MILLIMETRES UNLESS SHOWN OTHERWISE.
NOTES:
1. PROVIDE A Ø150 OVERFLOW PIPE AND FLAP VALVE TO SEWERAGE MAINS. REFER R.C.C. STD. DWG. NO. 59722. GRADE OVERFLOW DOWN TO MAINS.
2. THE DUCTILE IRON PIPE SHALL BE EXTENDED THROUGH THE CORED HOLE INTO MAINS. APPLY APPROVED EPOXY MORTAR TO HOLE.
3. THE ARRANGEMENT SHOWN IS FOR Ø100 AND Ø150 MAINS WITH SSH TEES. MAINS Ø225 TO Ø300 DO NOT REQUIRE A TAPER FOR Ø100 SCOUR OUTLET.
4. CONCRETE SURROUND, BOX & MM COVER SHALL BE PAINTED WITH APPROVED DULUX MULBERRY PAINT.
5. FOR PAVEMENT AND KERBS & CHANNEL MARKING DETAILS REFER R.C.C. STD. DWG. NO. 59727.
6. FOR CONCRETE SURROUND, SUPPORT AND VALVE BOX DETAILS REFER R.C.C. STD. DWG. NO. 59610
7. DIMENSIONS ARE IN MILLIMETRES UNLESS SHOWN OTHERWISE.
NOTE:

1. DETAILS SHOWN ARE FOR A BURIED 1000 SEWERAGE PRESSURE MAIN.
2. FOR LARGER THAN 1000 SEWERAGE PRESSURE MAINS & LARGER SEWERAGE MAINHOLE MAY BE REQUIRED.
3. FOR LARGER THAN 1000 SEWERAGE PRESSURE MAINS PROVIDE A 1000 FLANGED BRANCH HYDRANT TEE.
4. CARE SHALL BE TAKEN TO ENSURE THAT ALL CONCRETE IS KEPT CLEAR OF THE FLEXIBLE AND FLANGED JOINTS.
5. FOR PAVEMENT AND KERB & CHANNEL MARKING DETAILS REFER R.C.C. STD. DWG. 59727.
6. DIMENSIONS ARE IN MILLIMETRES UNLESS SHOWN OTHERWISE.
TYPICAL LAYOUT FOR PUMP STATION SITES NOT ACCESSIBLE FROM ADJACENT ROADWAY

TYPICAL FENCED AREA PLAN

NOTES: GENERAL

1. THE DETAIL SHOWN ON THIS DRAWING IS TYPICAL ONLY. THE LOCATION OF ALL ITEMS WILL BE AS SHOWN ON THE APPROVED DRAWINGS.

2. THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH R.C.C. Std. Drawings 5977G and 59724.

3. DRIVEWAY ACCESS TO ALL PUMP AND LIFT STATIONS SHALL BE PROVIDED AS FOLLOWS:
   (a) LONGITUDINAL GRADE TO BE MAXIMUM 10%
   (b) LOCATED SO VEHICULAR TRAFFIC WILL NOT TRAVEL OVER THE COVER.
   (c) HEAVY VEHICLE ACCESS DRIVEWAYS AS PER R.W.E.A. Std. Drawings No. R.0051 & R.0052 and Approved Engineering Details.

4. THE PUMP AND LIFT STATION SITES WITHIN THE FENCED AREA SHALL BE A MINIMUM OF 5 METERS IN DIAMETER, THE SURROUNDING WILL BE LANDSCAPED AND GRASSED IN ACCORDANCE WITH THE APPROVED SITE PLAN.

5. PUMP STATION PLATFORM SHALL BE PROPLOYED TO SUIT 1% SLOPE AWAY FROM REINFORCEMENT AND CONTROL CURVE. PUMP AND THEN BATTER AT 1:6 (1:6.3) TO NATURAL SURFACE. BATTER TO COMMENCE 100 BEYOND THE FENCE ALIGNMENT.

6. WHERE REQUIRED PROVIDE A 1.8M HIGH MANPROOF FENCE AND 1.2M HIGH DOUBLE LEAF ENTRANCE GATE AS DETAILED ON THE APPROVED DRAWINGS.

7. DIMENSIONS ARE IN MILLIMETRES UNLESS SHOWN OTHERWISE

WATER METER

1. COUNCIL SHALL INSTALL A 25 WATER METER AFTER AN APPLICATION STATING THE NUMBER AND NAME OF THE STATION AND THE PRESCRIBED FEES HAVE BEEN PAID. THE APPLICATION SHALL BE IN THE NAME OF COUNCIL.

RCC STANDARD DRAWINGS - SEWERAGE

PUMPING AND LIFTING STATION TYPICAL LAYOUT

S-0016
NOTES:

GENERAL
1. The drawing should be read in conjunction with RCC.
2. STC. Doc. No. 5976, 5977, 5978 and 5979 and STC. standard specifications 550 and 551.
3. The location of the pump station shall be as detailed in the approved drawings.
4. Dimensions are in millimeters unless shown otherwise.
5. For RCC device circuits refer to RCC. Std. Doc. No. 5976.
6. All pump stations shall be fitted with an approved well washer system installed in accordance with the drawings.

SIZE
1. The pump station has been designed for use with pumps of 600 and 900 series. Horsepower sizes and the valve sizes have been determined accordingly.

LEVELS
1. Unless otherwise approved by council, the finished level of the access covers and control cable shall be at least 300 mm above the finished floor level where the pump station is situated. The location of the pump shall be the lowest in the building and the 6 ft extension to natural.

COVERS & OPENINGS
1. Pump station openings shall generally be 1150 x 950 mm for a 6 ft x 9 ft opening. Covers as per RCC. Std. Doc. No. 5972 unless otherwise approved by the superintendent.
2. Where the valve dimensions of the pump do not allow for the opening, the access to the valve shall be as detailed in the approved drawings.
3. Valve sleeves shall be directly accessible from the access ports. Either valve can be removed from the valve without removing the cover.

ELECTRICAL CONDUITS
1. Conduits to be minimum 40 mm diameter for each pump and minimum 50 mm diameter for control cables. The conduits shall terminate in the terminal box of the pump.
2. Conduits shall be connected at the pump by a minimum 30 mm coupler or short length of conduit. Conduits shall be securely fastened with couplers.
3. Conduits shall be installed in accordance with AS 3000.
4. Conduits shall be installed in accordance with AS 3003.

PIPEWORK
1. All unprotected fireproof fittings in the pump well shall be stated. Refer to RCC. standard specifications 551 for details.
2. All pipe shall be stainless steel to 4473.03 grade 316.

COMPONENTS
1. All pump stations, associated components and protection shall comply with RCC. standard specifications 551.
NOTES
1. THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH THE TYPICAL CONSTRUCTION DETAILS ON R.C.C. STD. DWG NO 59717.
2. D50N12 DOWEL BARS SHALL BE SET 100 INTO WALL AND FLOOR OF PUMP WELL TO PROVIDE FOR CONSTRUCTION OF DIVING WALL AND PILE STRUCTURE.
3. WELL FLOOR AND WALLS SHALL BE WELL SCAFFOLDED TO PROVIDE SATISFACTORY JOINTING.
4. DIVING WALL & PILE STRUCTURES SHALL BE COATED WITH AN APPROVED PROTECTIVE COATING SYSTEM IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS.
5. ONE ONLY INCOMING SEWER IS ALLOWED TO ANY PUMP WELL.
6. DIMENSIONS ARE IN MILLIMETRES UNLESS SHOWN OTHERWISE.

SECTION A-A

SECTION B-B

INCOMING SEWER

VALVE

CHAMBER

PUMP STIP LEVEL

DS08SL102 MESH CENTRALLY PLACED

DS08SL102 MESH CENTRALLY PLACED

#300 HOLE OPPOSITE VOLUME OF PUMPS

#300 CORED HOLE

#300 CORED HOLE

DS08N12 DOWEL BARS AT 200 CBS

DS08N12 DOWEL BARS AT 200 CBS

PROVIDE CONCRETE BENCHING

#150 OR R.C.C. CLASS SHEET METAL

GRADE 316 STAINLESS STEEL BRACKET AT 1000 CMS FIXED TO WALL WITH 2 X M10 STAINLESS STEEL MASONRY ANCHORS

REFER NOTE 6 ON R.C.C. DWG 59717
NOTE:
1. FOR TYPICAL CONSTRUCTION DETAILS REFER R.C.C. STD. DWG NO. 59717.
2. THE SUPPLY AND INSTALLATION OF PUMPS, RISER PIPES, BENDS AND ALL ASSOCIATED FITTINGS SHALL COMPLY WITH COUNCIL'S STANDARD SPECIFICATION SST.
3. THE RISER PIPE SHALL BE 303 CEMENT MORTAR LINED DUCTILE IRON CLASS K12 UNLESS OTHERWISE APPROVED BY COUNCIL.
4. THE WET WELL DIAMETER AND LD DIMENSIONS HAVE BEEN DETERMINED ON THE BASIS OF TYPE, SIZE AND VOLUME DIAMETER OF PUMPS AS FOLLOWS:.................................
5. THE HIGHEST RECORDED Flo0D LEVEL AS SUPPLIED BY COUNCIL IS 3 R.L..........................
6. THE PROTECTIVE COATING SYSTEM SHALL BE..............................................................
7. THE LEVEL AT WHICH THE CONTRIBUTING SEWERAGE SYSTEM OF THIS SEWERAGE PUMPING STATION WEL OVERFLOWS IS.................................

THIS DRAWING IS TO BE COMPLETED BY THE CONSULTANT AND SHALL FORM PART OF THE ENGINEERING DRAWINGS SUBMITTED TO COUNCIL FOR APPROVAL.
NOTES:

1. FOR OVERFLOW SCREEN DETAIL REFER
   P.C.C. STD. DWG. NO. 59724.

2. THE OVERFLOW LEVEL SHALL BE:
   (a) AT LEAST 300 BELOW UNDERSIDE OF PUMP
       WELL ROOF SLAB.
   (b) THE SURFACE LEVEL OF THE LOWEST MANHOLE
       IN THE SYSTEM.
   (c) THE LOWEST FLOOR SLAB OR REFL. GULFY
       TRAP (WHICHEVER IS THE LOWER).
   (d) MARKED BY A BRASS PLATE ENGRAVED WITH THE
       DEPT TO OVERFLOW AND ATTACHED TO TOPSIDE
       OF PUMP WELL ROOF SLAB, AND
   (e) SUBJECT TO THE LEVEL, VISIBLE MARKED BY EITHER
       A SIMILAR ORANGE COLOURED PLASTIC CONDUIT,
       SPLIT AND ATTACHED TO THE PUMP RISER ON
       316 SS CLAMPS, ATTACHED AT 500 CM BS BY A ON 100
       ORANGE COLOURED PLASTIC CONDUIT ATTACHED TO THE
       WALL OF THE WET WELL IN A VISIBLE LOCATION, WITH
       THE BASE OF EITHER CONDUIT AT OVERFLOW LEVEL.

3. FLAP VALVE SHALL BE ALUMINIUM ALLOY 6061-T6,
   FIBREGLASS OR EQUIVALENT.

4. DIMENSIONS ARE IN MILLIMETRES UNLESS SHOWN
   OTHERWISE.
NOTES:
1. OVERFLOW SCREEN SHALL BE HOT DIPPED GALVANIZED AFTER FABRICATION.
2. DIMENSIONS ARE IN MILLIMETRES UNLESS SHOWN OTHERWISE.
SECTION A-A TYPICAL CONDUIT DETAIL

NOTES

GENERAL
1. THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH RCC STD. DWG. NO. 59716, 59717, 59719 & 59722.
   THE LOCATION OF THE LIFT STATION SHALL BE AS SHOWN ON THE APPROVED DRAWINGS.
2. DIMENSIONS ARE IN MILLIMETRES UNLESS SHOWN OTHERWISE.

ELECTRICAL CONDUITS
1. CONDUITS TO BE MINIMUM 50MM NOMINAL DIAMETER FOR EACH PUMP AND MINIMUM 50MM NOMINAL DIAMETER FOR CONTROL CABLES OR TWICE THE OUTSIDE DIAMETER OF THE INSTALLED CABLE WHEREVER THE GREATER.
2. PUMP CONDUITS AND CONTROL CONDUIT SHALL BE SEPARATED BY A MINIMUM 500MM. PUMP CONDUITS SHALL BE SEPARATED BY 300MM.
3. CONDUITS SHALL BE INSTALLED IN ACCORDANCE WITH AS 3000.
4. CONDUITS SHALL BE IN ACCORDANCE WITH AS 2059.

COMPONENTS
1. ALL FIRE, Fittings, associated components, and protection systems shall comply with council's standard specification 53/1.

LEVELS
1. THE FINISHED LEVEL OF THE ACCESS COVERS AND CONTROL CIRCLE SHALL BE 0.25 ABOVE THE HIGHEST RECORD FLOOD LEVEL AND 0.1m HORIZONTAL EXTENDED TO NATURAL LEVEL.

PIPEWORK
1. FOR PIPEWORK DETAILS REFER TO NOTES 1, 2 & 3 ON RCC STD. DWG. NO. 59719.
NOTES

1. FOR CONSTRUCTION DETAILS REFER TO R.C.C.
STD. DWG. NOS. 56716, 56722, 56725 & 56726.

2. THE SUPPLY AND INSTALLATION OF PUMPS, RISER
PIES, BENDS AND ALL ASSOCIATED FITTINGS
SHALL COMPLY WITH COUNCIL'S STANDARD
SPECIFICATION SS1.

3. THE RISER PIPE SHALL BE ........ LIGHT CEMENT
LINED DUCTILE IRON CLASS K12 UNLESS
OTHERWISE APPROVED BY COUNCIL.

4. THE LIFT STATION DIAMETER AND LD DIMENSIONS
HAVE BEEN DETERMINED ON THE BASIS OF USE
OF THE FOLLOWING TYPE, SIZE AND VOLUME
DIAMETER OF PUMPS:..............................

5. THE HIGHEST RECORDED FLOOD LEVEL AS SUPPLIED
BY COUNCIL IS R.L..............................

6. THE PROTECTIVE COATING SYSTEM SHALL BE..........

........................................................................

THIS DRAWING IS TO BE COMPLETED BY THE CONSULTANT AND SHALL
FORM PART OF THE ENGINEERING DRAWINGS SUBMITTED TO COUNCIL FOR APPROVAL.
ROAD EDGE HYDRANT AND VALVE DEFLECTOR POST – RURAL ROADS

With Pavement Markings

- Bi-directional Raised Retro-reflective pavement markers located in centre of cul-de-sac or oval box
- Bi-directional Raised Retro-reflective pavement markers located on road centreline opposite valve or hydrant boxes
- Bi-directional Raised Retro-reflective pavement markers located adjacent to median kerb or opposite carriageway to hydrants and valves

Without Pavement Markings

- Un-directional Raised Retro-reflective pavement markers located in centre of cul-de-sac or oval box
- Un-directional Raised Retro-reflective pavement markers located on road centreline opposite valve or hydrant boxes
- Un-directional Raised Retro-reflective pavement markers located adjacent to median kerb or opposite carriageway to hydrants and valves

NOTES

1. RPMs are to be used on roadways where water mains are constructed adjacent the roadway.
2. Where visibility to the hydrant or valve box from the roadway may be obstructed (e.g., by trees or other obstructions), a valve or hydrant marker post shall be installed adjacent to the roadway.
3. For roads with more than 2 lanes of travel in one direction, a revere light or valve marker post shall be installed at the median. Pavement markers are not to be installed. Standard valve or hydrant post plates are to be installed at the median.
4. Where New Jersey barriers are used on roads with more than 2 lanes of travel in one direction, a single sided valve or hydrant marker post is to be mounted on top of the barrier. Pavement markers are not used in this case.
5. Retro-reflective grade pavement markers shall comply with the requirements and specifications of the Queensland Department of Main Roads, and AS 1001.3.
6. Bi-directional raised retro-reflective pavement markers are to be used on roadways where water mains are constructed adjacent the roadway.
7. Raised Pavement Markers for Hydrants and Valves are to be inserted in accordance with the Queensland Department of Main Roads, and AS 1001.3, Sections 1 to 4, and Section 5, Figures 1 to 7.
8. Raised Reflective Pavement Markers are to be fixed to the road surface by a suitable method, such as hot asphalt, which may be used for the purpose.