



GoldCoastWater

Product Appraisal for ACO Polycrete

600 DIA Class D Access Cover

Michael Carter

Service Delivery - Asset Specifications

9 October 2003



Table of Contents

1	ACO Polycrete 600 Diameter Class D Access Cover	3
1.1	Location of the Class D Access Cover.....	3
2	Discussion	3
2.1	Inspection of ACO Polycrete 600 Diameter Class D Access Cover.....	3
3	Maintenance	4
4	Conclusion	4

ACO Polycrete 600 Diameter Class D Access Cover

1 ACO Polycrete 600 Diameter Class D Access Cover

This brief report evaluates the use of the ACO Polycrete 600 Diameter Class D Access Cover.

1.1 Location of the Class D Access Cover

The Access Cover was located in a shopping centre car park, which received light and heavy vehicle traffic.

2 Discussion

2.1 Inspection of ACO Polycrete 600 Diameter Class D Access Cover

The ductile iron circular Class D (210kN) cover was installed in a Humes converter slab (factory installed). The cover showed no signs of wear and the installation was flat and level with the surrounding topography. The seal was in good order with no odours evident.



The removing of the cover was easily completed with no exertion required. After close inspection of the cover and frame there were no signs of degradation. The cover had no signs of deflection.

The product and lettering was in accordance with AS 3996-1992 Metal access covers, road grates and frames.



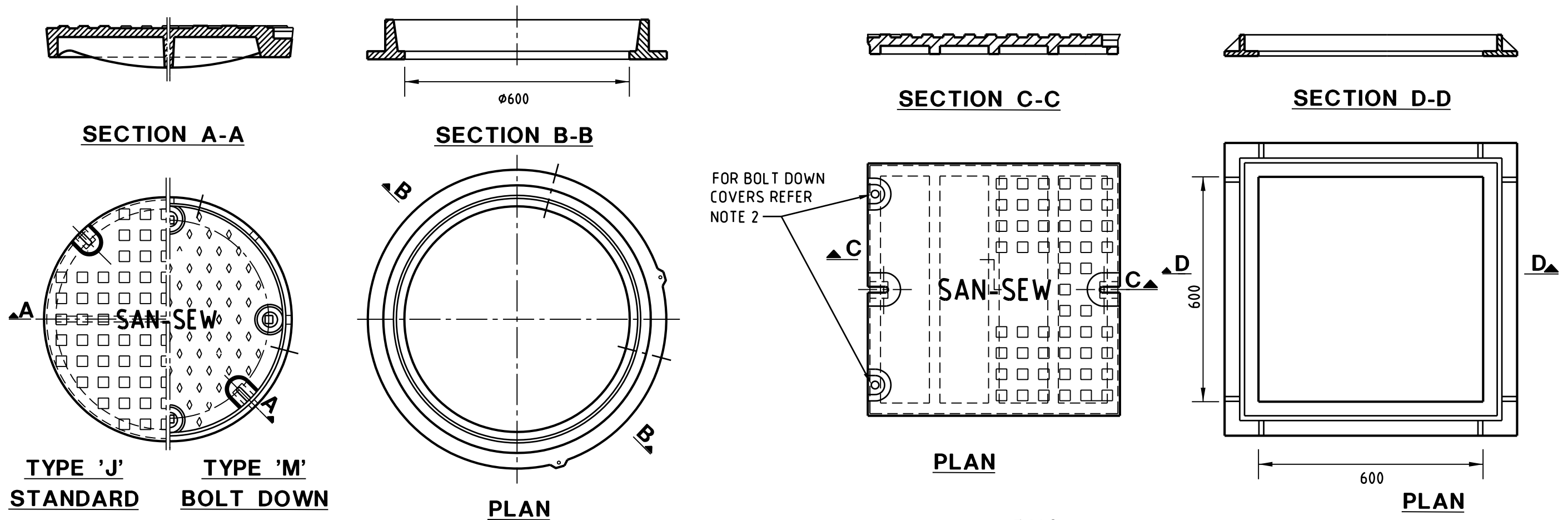
3 Maintenance

Council may have concerns with the interaction of a different product within the sewer system as it was identified, if a ACO cover was required to be replaced, the same manufactured product would be required. This was identified to be a problem as Council currently purchase Havestock Manhole covers and frames which don't allow for the interaction of a Havestock cover replacing a ACO cover (Non store item), as the frames are different. This would be in a rare occurrence as the converter slab would fail before the frame and cover, therefore not an issue.

4 Conclusion

Gold Coast Water findings showed that the ductile iron circular Class D (210kN) cover and frame was a well manufactured product for its design usage.

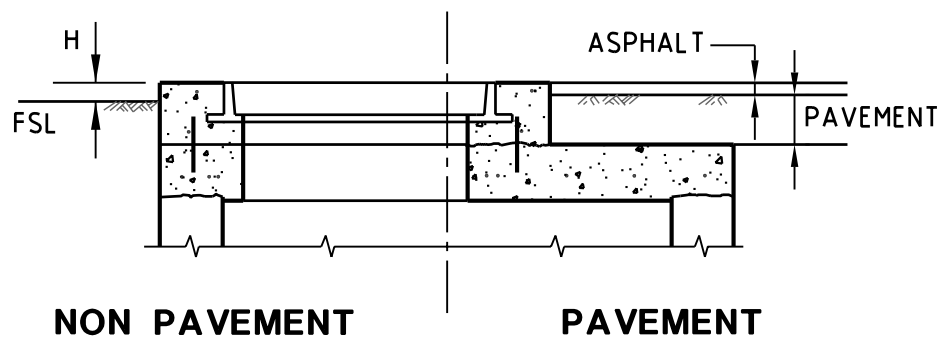
Council recommends the use of the Class D cover and Frame within the Reticulated Sewerage System, in accordance with Councils Standard Drawing 03-07 205.



**DUCTILE IRON COVER & FRAME
TYPES 'J' AND 'M'**

BOLT DOWN COVER NOTES:

- FOR TYPE 'M' COVERS PROVIDE A MINIMUM OF 2 x M10 (MINIMUM) 316 STAINLESS STEEL HOLD DOWN BOLTS WITH NYLON WASHERS.
- FOR TYPE 'L' COVERS PROVIDE A MINIMUM OF 4 x M10 (MINIMUM) 316 STAINLESS STEEL HOLD DOWN BOLTS WITH NYLON WASHERS.
- FOR TYPE 'M' COVERS PROVIDE 4 REGISTERS IN COVERS AND FRAMES AS DETAILED IN CLAUSE 1.4.2.7. OF AS3996.



TYPICAL SURROUND FINISH DETAILS

COVER USAGE

COVER & FRAME	LOCATION
CLASS B COVER	PRIVATE PROPERTY PUBLIC RESERVES FOOTPATH & VERGE
CLASS D COVER	STREET & ROAD CARRAGWAYS INDUSTRIAL/COMMERCIAL DRIVEWAYS
BOLT DOWN COVER (CAST INSITU MANHOLES)	LOCATIONS SUBJECT TO FLOODING.

MANHOLE LOCATION	'H'
PAVEMENTS & FOOTPATHS	FLUSH
UNDEVELOPED AREAS	300
NEW SUBDIVISIONS	50
EXISTING DEVELOPED AREAS	25

SURROUND AND COVER FINISHED LEVELS

DUCTILE IRON COVER & FRAME TYPE 'L'

GENERAL NOTES:

- ALL COVERS AND FRAMES SHALL BE PROPRIETARY PRODUCTS APPROVED BY COUNCIL AND CONFORMING WITH AS 3996.
- ALL COVERS SHALL HAVE:-
 - 'SAN-SEW' OR 'SEWER' CAST ON THE TOP FACE IN 3 HIGH LETTERING (65 HIGH AND 40 WIDE)
 - THE CLASS, TYPE AND WEIGHT CAST ON THE TOP FACE IN LEGIBLE 3 HIGH LETTERING.
- COVER TYPE 'M' SHALL BE USED IN ALL SITUATIONS WHERE THE TOP OF THE MANHOLE IS BELOW FLOOD LEVEL.
- ALL DUCTILE IRON COMPONENTS SHALL COMPLY WITH AS.1831 GRADE 600/3
- SURFACE FINISH SHALL BE SQUARED OR DIAMOND PATTERNED.
- DIMENSIONS ARE IN MILLIMETRES UNLESS SHOWN OTHERWISE.



THIS DRAWING IS NOT TO BE AMENDED WITHOUT REFERENCE TO STANDARDS COMMITTEE				CONTROLLED DOCUMENT	DO NOT SCALE TAKE FIGURED DIMENSIONS ONLY
No.	AMENDMENT	APPROVED	DATE	ISSUED	DRAWN BY //
					PASSED //
					APPROVED //

STANDARD DRAWING

**SEWERAGE MANHOLE
COVERS AND FRAMES**

MICROFILMED

STANDARD DRAWING No.
03-07-205

ISSUE
2003 EDITION