LIMIT OF CONTRACT & SEQUENCE OF WORKS

WORKS BY CONSTRUCTOR

1. CONSTRUCT THE RETICULATION SEWER AS SHOWN. CONTRACTOR SHALL COMMENCE SEWER WORKS AT 'A' AND WORK UPSTREAM.

2. PROVIDE THE LINK-UP AT 'A' (EXISTING M.H. WITH STUB)
   - INSTALL PLUNGER* IN EXISTING STUB TO ISOLATE IT FROM LIVE SEWER.
   - EXCAVATE UP TO EXISTING M.H., EXPOSE STUB, REMOVE CAP, CONNECT, AND LAY AWAY WITH NEW SEWER.
   - REMOVE PLUNGER* AFTER TESTING AND BEFORE C.P.C. ISSUE.

3. CONSTRUCT SEWER 'A'-'B'
   - SEWER TO BE TESTED AND PASSED BEFORE PROCEEDING.

4. PROVIDE THE LINK-UP AT 'B' (EXISTING M.H. WITH STUB)
   - INSTALL PLUNGER* IN EXISTING STUB TO ISOLATE IT FROM LIVE SEWER.
   - EXCAVATE UP TO EXISTING M.H., EXPOSE STUB, REMOVE CAP, CONNECT, AND LAY AWAY WITH NEW SEWER.
   - REMOVE PLUNGER* AFTER TESTING AND BEFORE C.P.C. ISSUE.

5. ABANDON EXISTING 150Ø SEWER 'B'-'C'
   MINIMUM SA WATER REQUIREMENTS:-
   - SEAL BRANCH* OF ABANDONED SEWER FROM WITHIN M.H AT 'B' AND I.O AT 'C',
   - EXCAVATE AND EXPOSE ABANDONED SEWER MAIN ADJACENT M.H AT 'B' & I.O. AT 'C' AND REMOVE ENTIRE LENGTH OF PIPE 'B'-'C'.
   - REMOVE ALL CASTINGS AND UPPER ONE METRE OF I.O. AT 'C' AND FILL TO EXISTING SURFACE LEVEL WITH CLEAN SAND, COMPACTED IN ACCORDANCE WITH S.C.M. SECTION G.

   NOTE:- SA WATER ACCEPTS NO RESPONSIBILITY FOR THE ABANDONED SEWER OR THE TRENCH COMPACTION.

* CONSTRUCTOR SHALL BE ACCREDITED BY SA WATER.

NOTES

GENERAL NOTES

'A' DENOTES LINK-UP POINT.

1. ALL SEWER NOT PEGGED.
2. MAINTENANCE SHAFT OFFSETS MAY DIFFER BETWEEN PROPRIETY BRANDS.
3. CHAINAGES AND TIES AT SEWER JUNCTIONS AND BENDS ARE SHOWN TO THEORETICAL INTERSECTION POINTS.
4. THIS DRAWING TO BE READ IN CONJUNCTION WITH S.A. WATER CONSTRUCTION MANUAL / DOCUMENTATION - LATEST EDITION.
5. CONTRACTOR TO ENSURE THAT ANY CONNECTIONS UNDER / OVER STORMWATER DRAINAGE MEET SA WATER REQUIREMENTS WITH REGARDS TO CLEARANCES.
6. WHERE COVER DURING CONSTRUCTION IS LESS THAN 600mm, PIPE TO BE PROTECTED WITH CONCRETE ENCASEMENT OR OTHER APPROVED METHOD.
7. LAYING SEWERS IN PROPOSED EARTH FILL: THE PROPOSED LAND FILL IN WHICH THE NEW SEWER IS TO BE LAID IS TO BE 'ENGINEERED FILL' COMPACTED TO NOT LESS THAN 95% OF IT'S STANDARD MAXIMUM DRY DENSITY (AS 1285.5.1.1)

EXISTING SERVICES

1. CONSTRUCTOR SHALL VERIFY LOCATION AND INVERT OF EXISTING SEWER AT 'A' & 'B' PRIOR TO COMMENCING CONSTRUCTION WORKS AND NOTIFY ENGINEER OF ANY DISCREPANCIES.
2. PRIOR TO COMMENCING ANY CONSTRUCTION WORKS, THE CONSTRUCTOR SHALL LOCATE AND DEPTH ALL OTHER EXISTING UNDERGROUND SERVICES IN VICINITY OF WORKS. ANY DISCREPANCIES OF DEPTH OR LOCATION FROM THAT INDICATED ON THESE DRAWINGS SHALL BE REPORTED TO THE ENGINEER.
3. IT SHALL BE NOTED THAT THERE MAY BE OTHER EXISTING UNDERGROUND SERVICES IN THE VICINITY OF WORKS OTHER THAN THOSE SHOWN ON THESE DRAWINGS.
4. IT SHALL BE THE CONSTRUCTOR'S RESPONSIBILITY TO DETERMINE IF OTHER UNDERGROUND SERVICES ARE PRESENT AND HAVE ALL SERVICES LOCATED AND DEPTHED PRIOR TO COMMENCING WORKS.

PROPERTY BOUNDARIES

1. THE CONTRACTOR TO CONFIRM WITH THE PROJECT SURVEYOR THAT BOUNDARY PEGS IN THE FIELD AGREE WITH LATEST PEGGING PLAN. ANY DIFFERENCES BETWEEN BOUNDARY PEGS AND DESIGN DRAWINGS TO BE BROUGHT TO THE ATTENTION OF THE SUPERINTENDENT.

FITTINGS SCHEDULE

Line No / Distance.	Def. Angle	Fitting Item
HORIZONTAL		
1/11.66	13°56' Lt.	H. Bend 150x30°xR3000 Lt.
1/41.68	84°31' Rt.	M.S.J. 150 Rt. + H. Bend 150x40°xR635 Rt.
1/45.08	5°28' Lt.	H. Bend 150x5°xR3000 Lt.
1/83.82	90°00' Rt.	M.S.J. 150 Rt. (Capped Ahead) + H. Bend 150x45°xR635 Rt.
1/93.16	90°00' Lt. 45°00' Rt.	M.H.
1/205.17	42°39' Rt.	M.S. 150 + H. Bend 150x43°xR635 Rt.
1/216.94	42°39' Rt.	M.S. 150 + H. Bend 150x43°xR635 Rt.
1/264.62	8°53' Lt.	H. Bend 150x9°xR3000 Lt.
1/292.63	60°00' Lt.	M.H.
1/311.33	12°03' Rt.	H. Bend 150x12°xR3000 Rt.
1/331.18	12°03' Rt.	H. Bend 150x12°xR3000 Rt.
1/403.87	3°37' Lt.	H. Bend 150x4°xR3000 Lt.
1/412.97	90°00' Lt.	M.S.J. 150 Lt. + H. Bend 150x45°xR635 Lt.
1/446.02	-	I.O. End
2/7.68	45°00' Lt.	M.S.J. 150 Lt. (Capped Ahead)
2/42.41	90°00' Lt.	M.S.J. 150 Lt. (Capped Ahead) + H. Bend 150x45°xR635 Lt.
2/126.08	77°20' Rt.	M.H.
2/197.82	15°01' Rt.	H. Bend 150x15°xR3000 Rt.
2/198.91	90°00' Lt.	M.S.J. 150 Lt. + H. Bend 150x45°xR635 Lt. + 150/100 Reducer
2/217.00	6°29' Rt.	H. Bend 150x6°xR3000 Rt.
2/272.24	90°00' Lt.	M.S.J. 150 Lt. + H. Bend 150x45°xR635 Lt. + 150/100 Reducer
2/342.15	-	M.S. 150 + 150/100 Reducer
3/6.18	24°45' Rt.	H. Bend 150x25°xR3000 Rt.
3/20.50	73°43' Lt.	M.S.J. 150 Lt. (Capped Ahead) + H. Bend 150x29°xR635 Lt.
3/118.11	9°17' Rt.	M.S. 150 + H. Bend 150x9°xR635 Rt.
4/4.65	30°00' Lt.	H. Bend 150x30°xR3000 Lt.
4/10.09	13°18' Lt.	M.S. 150 + H. Bend 150x13°xR635 Lt. (Capped)
VERTICAL		
1/46.08	2°32'	V. Bend 150x3°xR3000
1/107.08	2°52'	V. Bend 150x3°xR3000
1/206.17	2°44'	V. Bend 150x3°xR3000
1/344.50	2°00'	V. Bend 150x2°xR3000
2/41.41	2°00'	V. Bend 150x2°xR3000
2/53.13	18°04'	V. Bend 150x18°xR3000
2/57.25	15°36'	V. Bend 150x16°xR3000
2/196.82	2°00'	V. Bend 150x2°xR3000
2/213.36	2°00'	V. Bend 150x2°xR3000
2/255.13	2°58'	V. Bend 150x3°xR3000
3/4.18	16°56'	V. Bend 150x17°xR3000
3/8.18	10°43'	V. Bend 150x11°xR3000
3/19.50	4°21'	V. Bend 150x4°xR3000
3/70.95	4°10'	V. Bend 150x4°xR3000
3/158.34	2°11'	V. Bend 150x2°xR3000

LEGEND

H.Bend = Horizontal Vario-bend
V.Bend = Vertical Vario-bend
M.S.J. = Maintenance Shaft Junction
M.S.T. = Maintenance Shaft Terminal
M.S. = Maintenance Shaft
M.H. = Maintenance Hole
I.O. = Inspection Opening

LOCALITY PLAN

0 25 50 100 150 m.

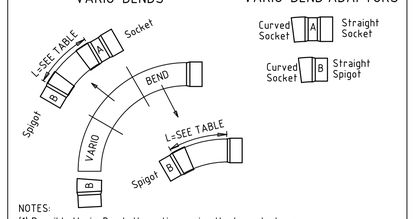
F.B. PG.

VARIO-BEND CUTTING TABLE

DEFLECTION		L (mm) MEASURED ALONG OUTSIDE CURVED FACE OF VARIO BEND	
DEGREES (°)	%	HORIZ. BEND IMMEDIATELY U/STREAM OF M.S. R=635mm L=12.5mm Per 1°	HORIZ/VERT BEND R=3000mm L=53.8mm Per 1°
2	3.49	n/a	min. 110
3	5.24	n/a	160
4	6.99	n/a	215
5	8.75	n/a	270
6	10.51	n/a	325
7	12.28	n/a	375
8	14.05	min. 100	430
9	15.84	110	485
10	17.63	125	540
11	19.44	135	590
12	21.26	150	645
13	23.09	160	700
14	24.93	175	755
15	26.79	185	805
16	28.67	200	860
17	30.57	210	915
18	32.49	225	970
19	34.43	235	1020
20	36.40	250	1075
21	38.39	260	1130
22	40.40	275	1185
23	42.45	285	1235
24	44.52	300	1290
25	46.63	310	1345
26	48.77	325	1400
27	50.95	335	1450
28	53.17	350	1505
29	55.43	360	1560
30	57.74	375	max. 1615
31	60.09	390	n/a
32	62.49	400	n/a
33	64.94	415	n/a
34	67.45	425	n/a
35	70.02	440	n/a
36	72.65	450	n/a
37	75.36	465	n/a
38	78.13	475	n/a
39	80.98	490	n/a
40	83.91	500	n/a
41	86.93	515	n/a
42	90.04	525	n/a
43	93.25	540	n/a
44	96.57	550	n/a
45	100.00	max. 565	n/a

NOTES:
(1) THE LARGER R=3000mm BEND SHALL BE USED FOR ALL BENDS EXCEPT WHERE USED IN CONJUNCTION WITH A MAINTENANCE SHAFT.
(2) R=635mm AND R=3000mm ARE CENTRELINE RADII.

VARIO-BENDS / VARIO-BEND ADAPTORS



NOTES:
(1) Possible Vario-Bend alternatives using the two adaptors:-
- Socket/Spigot Bend
- Socket/Socket Bend
- Spigot/Spigot Bend (min L=180mm)

(2) Bend Configuration:
Pipes shall be laid from the downstream end of the system, with socket ends facing 'upgrade'. Where possible, bends configurations shall be consistent with this approach.

(3) Bend Radii:
- Radius=635mm (to centreline) L=12.5mm Per 1° deflection (min 8°)
- Radius=3000mm (to centreline) L=53.8mm Per 1° deflection (min 2°)

CONNECTION TABLE

SEWER CONNECTION SCHEDULE

SCM DRAWING NO.	TYPE	SEWER CONNECTION DETAIL	ALLOTMENT NO.	TOTAL
4005-20006-03	K3/K4	STANDARD CONNECTION SINGLE & 'Y'	700, 701, 702, 703, 704/705, 754, 755, 756 & 757	10
4005-20006-05	K6	RISER AT BDY-LAID UNDER SWD	Fut. 706, Fut 708, Fut 709, 741, 742, 743, 745, 746, 747, 749, 750, 751, 758, 759, 760, 761, 762, 763, 764 & 765	20
4005-20006-07	K9/K10	CONNECTION FROM MAINTENANCE HOLE	752	1
4005-20006-08	L18	CONNECTION FROM MAINTENANCE SHAFT	740, 744 & 748	3
			TOTAL CONNECTIONS	34

LENGTH TOTALS

SHEET	LENGTH	PROG. TOTAL	PIPE DISCRIPTION
06	195.66	983.83	DN 150 PVC
05	342.15	788.17	DN 150 PVC
04	446.02	446.02	DN 150 PVC

LEGEND

PROPOSED SEWER
PROPOSED MAINTENANCE HOLE
MAINTENANCE SHAFT
MAINTENANCE SHAFT TERMINAL
FUTURE SEWER
EXISTING SEWER, CONNECTION AND MAINTENANCE HOLE
PUMPING MAIN — PM
INSPECTION OPENING
INSPECTION POINT
CONTRACT BOUNDARY
NS. EL. AT I.P. / FINAL EL. AT I.P. / INV. EL. OF I.P. — 24.55 / 23.63 / 22.23
SPOT LEVEL — + 19.33
DESIGN LEVEL — 19.33
LINE NO. — 1
SHEET NO. — 2
AREA NOT SERVED
AREA OF FILL

EASEMENT TO BE TAKEN ON FINAL PLAN OF DIVISION

LAND DETAILS	REFERENCE	CONDITIONS	SIGNATURE & DATE

EASEMENT ACQUISITION PANEL

REVISION PANEL

REV	DATE	DRN	DETAILS	APR'D

CURRENT REVISION CONTRACTOR:

CONSULTANT DETAILS

DESIGN PANEL

DESIGNED	AUTHORISED
DRAWN	SIGNATURE
REVIEWED	CHARTERED ENGINEER
CONTRACTOR:	

STRUCTURES LEGEND

MH = MAINTENANCE HOLE
MS = MAINTENANCE SHAFT
MSJ = MAINTENANCE SHAFT JUNCTION
MSE = MAINTENANCE SHAFT ELBOW
MST = MAINTENANCE SHAFT TERMINAL
IO = INSPECTION OPENING
H.BEND = HORIZONTAL VARIO-BEND
V.BEND = VERTICAL VARIO-BEND

STANDARD NOTES

1. ALL CONNECTIONS TO BE Ø100mm UNO.
2. ALL CONNECTIONS TO BE K3/K4 UNO.
3. FOR VARIO BEND CUTTING TABLE REFER 4005-20005-11.
4. ALL EASEMENTS TO BE 3m WIDE UNO.
5. SEWER TO BE LOCATED CENTRALLY IN EASEMENT UNO.

FREE ASSET

DESIGN DRAWING DETAILS

DESIGN DRAWING ISSUED DATE:

CONTRACT NO: 089/16
L.D. NO: 080/D054/04
COUNCIL: CITY OF MITCHAM
DRAINAGE AREA: ADELAIDE
CADASTRE: 662702R
DP:
G.G. DATE:
FOR AS CONSTRUCTED INFORMATION REFER

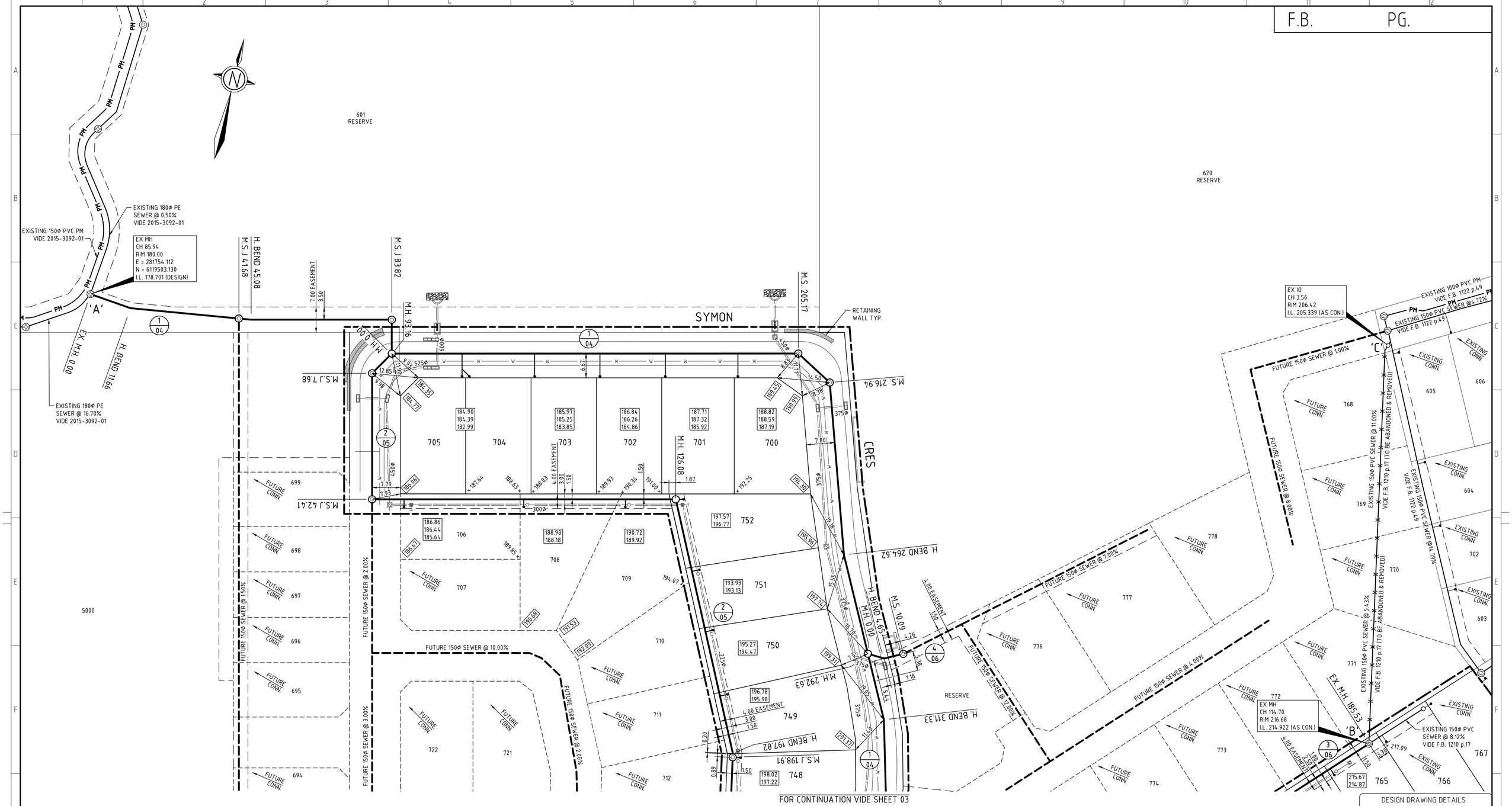
Government of South Australia
SA Water

This drawing is the property of the SOUTH AUSTRALIAN WATER CORPORATION and shall not be copied or modified in part or in whole without authorization.

CRAIGBURN FARM
BLACKWOOD PARK NODE 3 - STAGE 20
SEWER IN SYMON CRESCENT
AND EASEMENTS
LOCALITY PLAN

A1 SHT SIZE
SA WATER DOCKET NO. 90066/16 REVISION
TOTAL SHEETS: 1 OF 6
SUPERSEDES:
DRAWING NUMBER 2016 - 3058 - 01
YEAR NUMBER SHEET

F.B. PG.



LAYOUT PLAN

0 5 10 20 30 m.

SERVICES LEGEND

POTABLE WATER — W —
STORMWATER

LEGEND

PROPOSED SEWER, PROPOSED MAINTENANCE HOLE
MAINTENANCE SHAFT
MAINTENANCE SHAFT TERMINAL
FUTURE SEWER
EXISTING SEWER, CONNECTION AND MAINTENANCE HOLE
PUMPING MAIN — PM —
INSPECTION OPENING
INSPECTION POINT
CONTRACT BOUNDARY

NS. EL. AT I.P. 24.55
FINAL EL. AT I.P. 23.63
INV. EL. OF I.P. 22.23
SPOT LEVEL × 19.33
DESIGN LEVEL 19.33
LINE NO. 1
SHEET NO. 2
AREA NOT SERVED
AREA OF FILL

EASEMENT TO BE TAKEN ON FINAL PLAN OF DIVISION			
LAND DETAILS	REFERENCE	CONDITIONS	SIGNATURE & DATE

EASEMENT ACQUISITION PANEL

REVISION PANEL

REV	DATE	DRN	DETAILS	APR'D

CURRENT REVISION CONTRACTOR:

CONSULTANT DETAILS

DESIGN PANEL

DESIGNED	AUTHORISED
DRAWN	SIGNATURE
REVIEWED	CHARTERED ENGINEER
CONTRACTOR:	

STRUCTURES LEGEND

MH = MAINTENANCE HOLE
MS = MAINTENANCE SHAFT
MSJ = MAINTENANCE SHAFT JUNCTION
MSE = MAINTENANCE SHAFT ELBOW
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IO = INSPECTION OPENING
H.BEND = HORIZONTAL VARIO-BEND
V.BEND = VERTICAL VARIO-BEND

STANDARD NOTES

1. ALL CONNECTIONS TO BE Φ100mm UNO.
2. ALL CONNECTIONS TO BE K3/K4 UNO.
3. FOR VARIO BEND CUTTING TABLE REFER 4005-20005-11.
4. ALL EASEMENTS TO BE 3m WIDE UNO.
5. SEWER TO BE LOCATED CENTRALLY IN EASEMENT UNO.

FREE ASSET

DESIGN DRAWING DETAILS

DESIGN DRAWING ISSUED DATE:	
CONTRACT NO:	089/16
L.D. NO:	080/D054/04
COUNCIL:	CITY OF MITCHAM
DRAINAGE AREA:	ADELAIDE
CADASTRE:	662702R
DP:	
G.G. DATE:	
FOR AS CONSTRUCTED INFORMATION REFER	

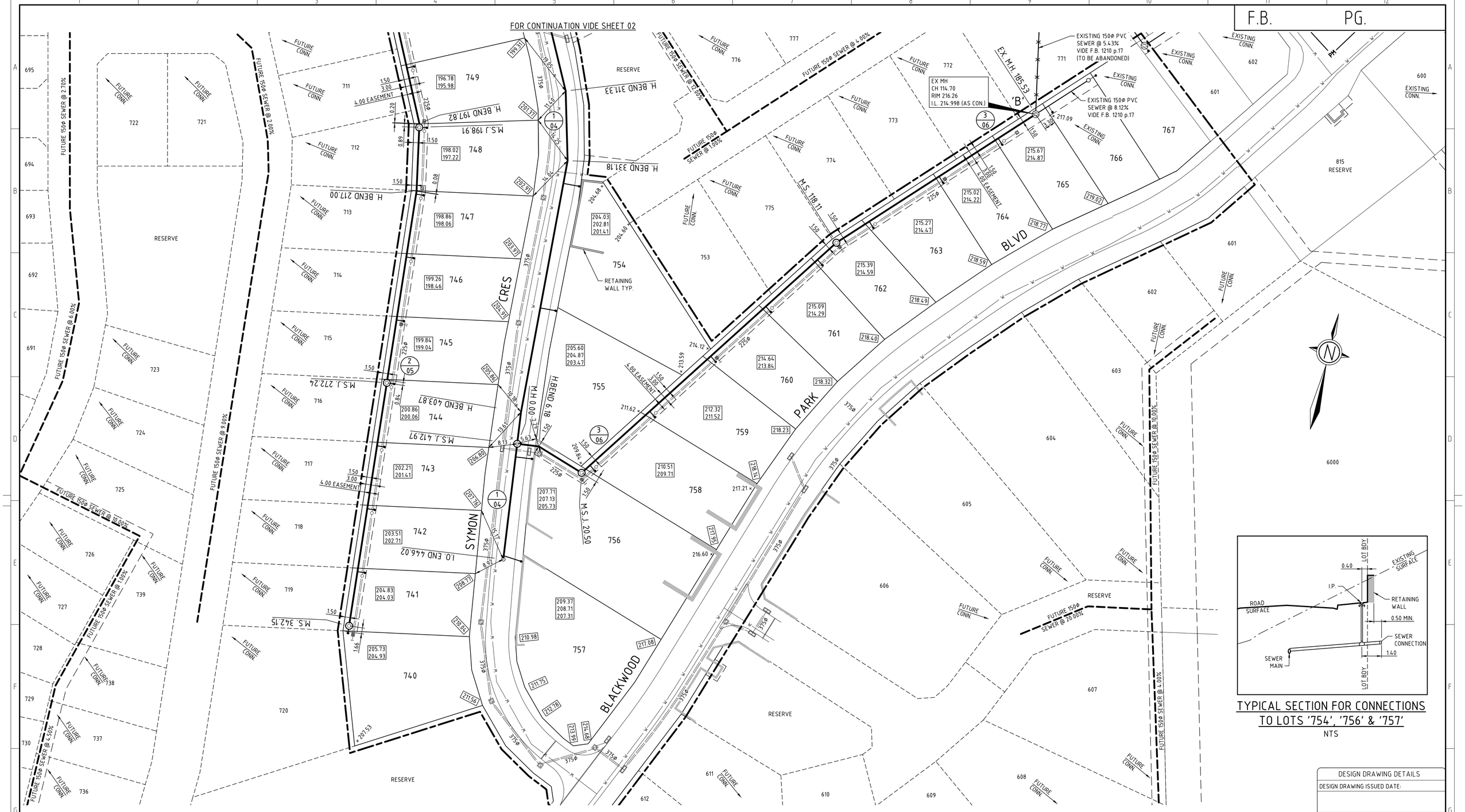
Government of South Australia
SA Water

This drawing is the property of the SOUTH AUSTRALIAN WATER CORPORATION and shall not be copied or modified in part or in whole without authorization.

CRAIGBURN FARM
BLACKWOOD PARK NODE 3 - STAGE 20
SEWER IN SYMON CRESCENT
AND EASEMENTS
LAYOUT PLAN

A1 SHT SIZE
SA WATER DOCKET NO. 90066/16
REVISION
TOTAL SHEETS: 2 OF 6
SUPERSEDES:
DRAWING NUMBER 2016 - 3058 - 02
YEAR NUMBER SHEET

F.B. PG.



TYPICAL SECTION FOR CONNECTIONS TO LOTS '754', '756' & '757'

NTS

LAYOUT PLAN

0 5 10 20 30 m.

SERVICES LEGEND

POTABLE WATER — W —
STORMWATER

LEGEND

PROPOSED SEWER
PROPOSED MAINTENANCE HOLE
MAINTENANCE SHAFT
MAINTENANCE SHAFT TERMINAL
FUTURE SEWER
EXISTING SEWER, CONNECTION AND MAINTENANCE HOLE
PUMPING MAIN — PM —
INSPECTION OPENING
INSPECTION POINT
CONTRACT BOUNDARY

NS. EL. AT I.P. 24.55
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SPOT LEVEL × 19.33
DESIGN LEVEL 19.33
LINE NO. 1
SHEET NO. 2
AREA NOT SERVED
AREA OF FILL

EASEMENT TO BE TAKEN ON FINAL PLAN OF DIVISION

LAND DETAILS	REFERENCE	CONDITIONS	SIGNATURE & DATE

EASEMENT ACQUISITION PANEL

REVISION PANEL

REV	DATE	DRN	DETAILS	APR'D

CURRENT REVISION CONTRACTOR:

CONSULTANT DETAILS

DESIGN PANEL

DESIGNED	AUTHORISED
DRAWN	SIGNATURE
REVIEWED	CHARTERED ENGINEER

CONTRACTOR:

Government of South Australia
SA Water

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STRUCTURES LEGEND

MH = MAINTENANCE HOLE
MS = MAINTENANCE SHAFT
MSJ = MAINTENANCE SHAFT JUNCTION
MSE = MAINTENANCE SHAFT ELBOW
MST = MAINTENANCE SHAFT TERMINAL
IO = INSPECTION OPENING
H.BEND = HORIZONTAL VARIO-BEND
V.BEND = VERTICAL VARIO-BEND

STANDARD NOTES

1. ALL CONNECTIONS TO BE Φ100mm UNO.
2. ALL CONNECTIONS TO BE K3/K4 UNO.
3. FOR VARIO BEND CUTTING TABLE REFER 4005-20005-11.
4. ALL EASEMENTS TO BE 3m WIDE UNO.
5. SEWER TO BE LOCATED CENTRALLY IN EASEMENT UNO.

FREE ASSET

DESIGN DRAWING DETAILS

DESIGN DRAWING ISSUED DATE:

CONTRACT NO: 089/16
L.D. NO: 080/D054/04
COUNCIL: CITY OF MITCHAM
DRAINAGE AREA: ADELAIDE
CADASTRE: 662702R
DP:
G.G. DATE:
FOR AS CONSTRUCTED INFORMATION REFER

CRAIGBURN FARM
BLACKWOOD PARK NODE 3 - STAGE 20
SEWER IN SYMON CRESCENT AND EASEMENTS
LAYOUT PLAN

A1 SHT SIZE

SA WATER DOCKET NO. 90066/16 REVISION

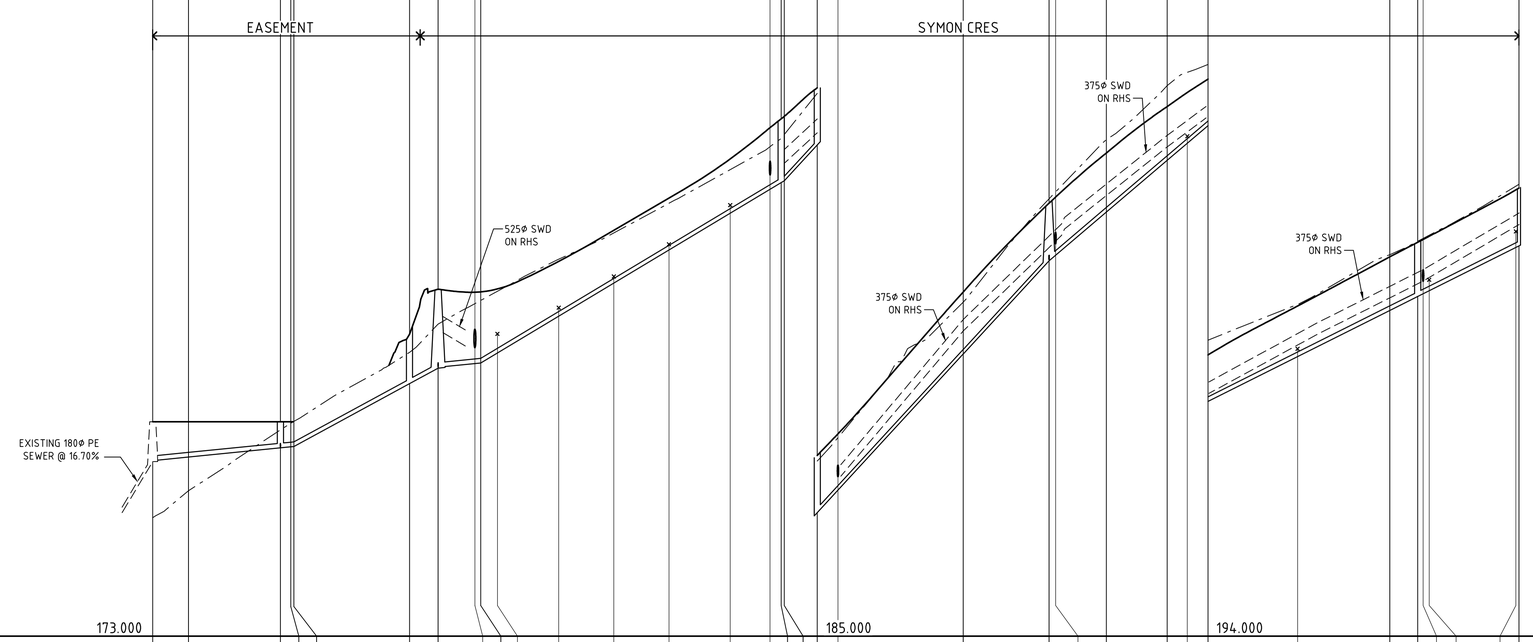
TOTAL SHEETS: 3 OF 6

SUPERSEDES:

DRAWING NUMBER 2016 - 3058 - 03
YEAR NUMBER SHEET

F.B. PG.

REMARKS	'A' EXISTING M.H. CH 85.94 VIDE 2015-3092-04	H. BEND LEFT	M.S.J. BRANCH RIGHT 150Ø STUB (CAPPED)	H. BEND LEFT	V. BEND	M.S.J. BEND RIGHT	M.H. BEND LEFT BRANCH RIGHT LINE 2 - VIDE SHEET 05	Ø600 SW CROSSING IL 182.416	V. BEND	Ø450 SW CROSSING IL 188.052	M.S. BEND RIGHT	V. BEND	M.S. BEND RIGHT	Ø375 SW CROSSING IL 190.207	H. BEND LEFT	M.H. BRANCH LEFT LINE 4 - VIDE SHEET 06	Ø375 SW CROSSING IL 197.808	H. BEND RIGHT	H. BEND RIGHT	V. BEND	H. BEND LEFT	M.S.J. BRANCH LEFT LINE 3 - VIDE SHEET 06	Ø375 SW CROSSING IL 205.583	I.O. END



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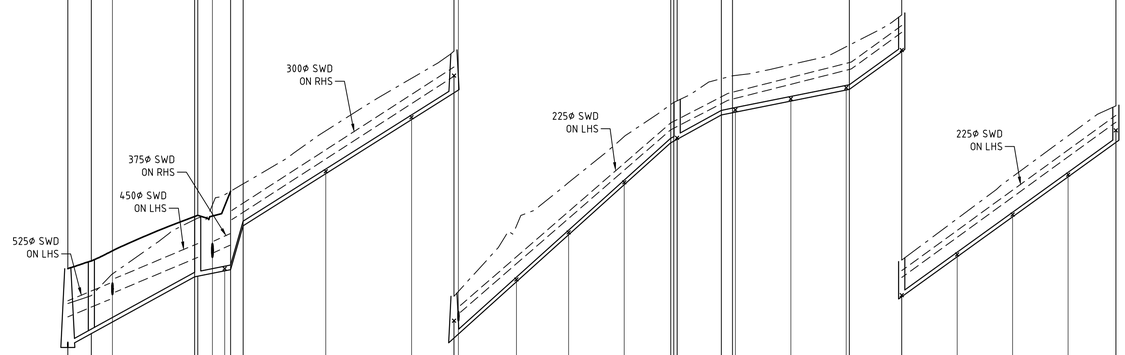
F.B. PG.

REMARKS	M.H. LINE 1, CH 93.16 - VIDE SHEET 04	M.S.J. BEND LEFT	Ø375 SW CROSSING IL 183.477	V. BEND	M.S.J. BEND LEFT	Ø450 SW CROSSING IL 184.692	V. BEND	V. BEND	M.H. BEND RIGHT	Ø300 SW CROSSING IL 190.624	V. BEND	H. BEND RIGHT	M.S.J.	V. BEND	H. BEND RIGHT	V. BEND	M.S.J.	M.S.
DEPTH TO INVERT	2.576 2.547	2.372	2.326	1.969	1.985	1.869	2.114	2.556	1.364	1.396	1.345	1.361	1.390	1.820	1.707	1.571	1.249	1.267	1.258	1.184	1.207	1.199	1.189	1.411	1.443	1.197	1.243	1.311	1.340	1.196
AVAILABILITY	SOUTH SIDE ONLY												EAST SIDE ONLY																	
INVERT E.L.	181.748 181.778	182.201	182.579	184.056	184.076	184.172	184.252	184.290	185.726	187.424	189.188	190.062	190.191	191.895	193.429	195.064	196.429	196.484	196.544	197.338	197.411	197.430	197.792	198.154	198.174	199.405	200.709	202.012	203.316	204.439
DESIGN E.L.	184.325	184.572	184.906	186.025	186.061	186.041	186.366	186.847	187.090	188.819	190.533	191.422	191.581	193.715	195.136	196.635	197.678	197.751	197.802	198.522	198.618	198.629	198.980	199.565	199.616	200.603	201.952	203.323	204.656	205.635
DISTANCE	0.00	7.68	14.57	41.41	42.41	47.22	51.21	53.13	57.25	84.20	112.20	126.08	127.52	146.45	163.49	181.65	196.82	197.82	198.91	213.36	217.00	217.92	236.03	254.13	255.13	272.24	290.34	308.44	326.55	342.15
CONNECTION TYPE						RIGHT (K6)				RIGHT (K6)		RIGHT (K6)	AHEAD (K10)		LEFT (K6)	LEFT (K6)	LEFT (K6)	LEFT (L18)			LEFT (K6)	LEFT (K6)	LEFT (K6)	LEFT (K6)		LEFT (L18)	LEFT (K6)	LEFT (K6)	LEFT (K6)	AHEAD (L18)
LOTS						Fut 706				Fut 708		Fut 709	752		751	750	749	748			747	746	745			744	743	742	741	740



DATUM E.L. 176.000 184.000 192.000

GRADE: 5.50% | 2.00% | 34.84% | 6.30% | 9.00% | 5.50% | 2.00% | 7.20%

SIZE: 150Ø PVC

LINE 2

LONGITUDINAL SECTION

VERTICAL 0 1 2 4 6 m. — HORIZONTAL 0 10 20 40 60

STRUCTURES LEGEND

MH = MAINTENANCE HOLE
MS = MAINTENANCE SHAFT
MSJ = MAINTENANCE SHAFT JUNCTION
MSE = MAINTENANCE SHAFT ELBOW
MST = MAINTENANCE SHAFT TERMINAL
IO = INSPECTION OPENING
H.BEND = HORIZONTAL VARIO-BEND
V.BEND = VERTICAL VARIO-BEND

FREE ASSET

LEGEND

PROPOSED SEWER — MAINTENANCE HOLE
EXISTING SEWER (EXIST SEWER Ø150 AT 12.00%) — MAINTENANCE SHAFT
FUTURE SEWER (FUTURE SEWER Ø150 AT 12.00%) — MAINTENANCE HOLE, JUMP UP
NATURAL SURFACE — INSPECTION OPENING
DESIGN SURFACE

SEWER CONNECTION REFERENCE

SCM DRAWING NO.	CONNECTION TYPE	CONNECTION DETAIL	SCM DRAWING NO.	CONNECTION TYPE	CONNECTION DETAIL
4005-20006-01	K1	CONNECTION STANDARD POSITIONING	4005-20006-07	K9/K10	CONNECTION FROM MAINTENANCE HOLE
4005-20006-02	K2	CONNECTION INSPECTION POINT	4005-20006-08	L18	CONNECTION FROM MAINTENANCE SHAFT
4005-20006-03	K3/K4	STANDARD CONNECTION SINGLE & 'Y'	4005-20006-09	K13/K14	CONNECTION OFF EXISTING SEWER MAIN
4005-20006-04	K5	VERTICAL RISER OFF SEWER MAIN (OB UP)	4005-20005-02	L3	CONNECTION FROM INSPECTION OPENING
4005-20006-05	K6/K7	CONNECTION WITH INTERMEDIATE RISER/S	4005-20007-02	K11	CONNECTION WITH WATER SEAL
4005-20006-06	K8	CONNECTION THROUGH EMBANKMENT	4005-20007-03	K12	CONNECTION OFF TRUNK SEWER ≥ 375mm

DESIGN DRAWING DETAILS
DESIGN DRAWING ISSUED DATE:
CONTRACT NO: 089/16
L.D. NO: 080/D054/04
COUNCIL: CITY OF MITCHAM
DRAINAGE AREA: ADELAIDE
CADASTRE: 662702R
DP:
G.G. DATE:
FOR AS CONSTRUCTED INFORMATION REFER

REVISION PANEL

REV	DATE	DRN	DETAILS	APR'D

CURRENT REVISION CONTRACTOR:

CONSULTANT DETAILS

DESIGN PANEL
DESIGNED — AUTHORISED
DRAWN — SIGNATURE
REVIEWED — CHARTERED ENGINEER
CONTRACTOR:

Government of South Australia — SA Water

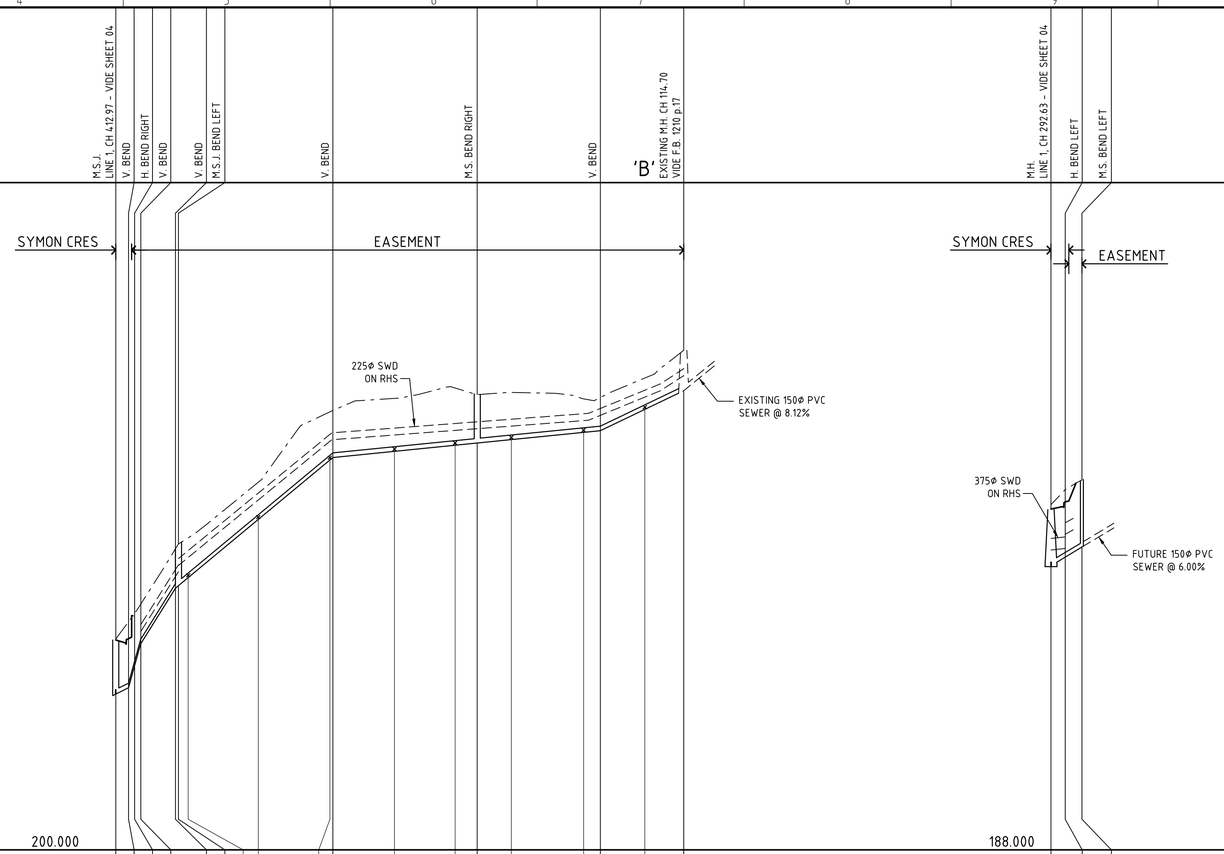
This drawing is the property of the SOUTH AUSTRALIAN WATER CORPORATION and shall not be copied or modified in part or in whole without authorization.

CRAIGBURN FARM
BLACKWOOD PARK NODE 3 - STAGE 20
SEWER IN SYMON CRESCENT
AND EASEMENT
LONGITUDINAL SECTION

A1 SHT SIZE
SA WATER DOCKET NO. 90066/16 REVISION
TOTAL SHEETS: 5 OF 6
SUPERSEDES:
DRAWING NUMBER 2016 - 3058 - 05
YEAR NUMBER SHEET

F.B. PG.

REMARKS	M.S.J. LINE 1, CH 412.97 - VIDE SHEET 04	V. BEND	H. BEND RIGHT	V. BEND	V. BEND	M.S.J. BEND LEFT	V. BEND	M.S. BEND RIGHT	V. BEND	'B' EXISTING M.H. CH 114.70 VIDE F.B. 1210 p.17	M.H. LINE 1, CH 292.63 - VIDE SHEET 04	H. BEND LEFT	M.S. BEND LEFT
DATUM E.L.	200.000										188.000		
DEPTH TO INVERT	1.770	1.605	1.709	1.288	1.286	1.366	1.300	1.214	1.570	1.534	1.728	1.870	1.581
	1.540	1.097	1.086	1.022	1.262								
	1.877	1.847	1.804	2.192									
INVERT E.L.	205.086	205.295	206.015	206.735	208.547	208.630	208.893	210.794	212.734	212.817	213.018	213.216	213.288
	213.400	213.636	213.691	214.388	214.998								
	197.254	197.284	197.563	197.890									
DESIGN E.L.	206.856	206.900	207.724	208.023	209.833	209.995	210.193	212.008	214.304	214.351	214.747	215.087	214.870
	214.940	214.733	214.776	215.411	216.260								
	199.132	199.367	200.081										
DISTANCE	0.00	4.18	6.18	8.18	19.50	20.50	23.68	46.58	69.95	70.95	91.08	110.88	118.11
	129.25	152.87	158.34	172.87	185.57								
	0.00	4.65	10.09										
CONNECTION TYPE						RIGHT (K6)	RIGHT (K6)		RIGHT (K6)		RIGHT (K6)	RIGHT (K6)	
	RIGHT (K6)		RIGHT (K6)	RIGHT (K6)									
LOTS						758	759		760		761	762	
	763		764		765								



	LINE 3	LINE 4
SIZE	150Φ PVC	150Φ PVC
GRADE	5.00%, 36.00%, 8.30%, 16.00%, 1.00%, 4.80%	6.00%
AVAILABILITY	SOUTH SIDE ONLY	SOUTH SIDE ONLY

LONGITUDINAL SECTIONS

VERTICAL 0 1 2 4 6 m.
HORIZONTAL 0 10 20 40 60

STRUCTURES LEGEND

MH = MAINTENANCE HOLE
MS = MAINTENANCE SHAFT
MSJ = MAINTENANCE SHAFT JUNCTION
MSE = MAINTENANCE SHAFT ELBOW
MST = MAINTENANCE SHAFT TERMINAL
IO = INSPECTION OPENING
H.BEND = HORIZONTAL VARIO-BEND
V.BEND = VERTICAL VARIO-BEND

LEGEND

PROPOSED SEWER
EXISTING SEWER — EXIST SEWER Φ150 AT 12.00%
FUTURE SEWER — FUTURE SEWER Φ150 AT 12.00%
NATURAL SURFACE
DESIGN SURFACE
MAINTENANCE HOLE
MAINTENANCE SHAFT
MAINTENANCE HOLE, JUMP UP
INSPECTION OPENING

FREE ASSET

SEWER CONNECTION REFERENCE

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CHARTERED ENGINEER
CONSULTANT DETAILS

Government of South Australia
SA Water

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CRAIGBURN FARM
BLACKWOOD PARK NODE 3 - STAGE 20
SEWER IN SYMON CRESCENT
AND EASEMENTS
LONGITUDINAL SECTIONS

A1 SHT SIZE
SA WATER DOCKET NO. 90066/16 REVISION
TOTAL SHEETS: 6 OF 6
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DRAWING NUMBER 2016 - 3058 - 06
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