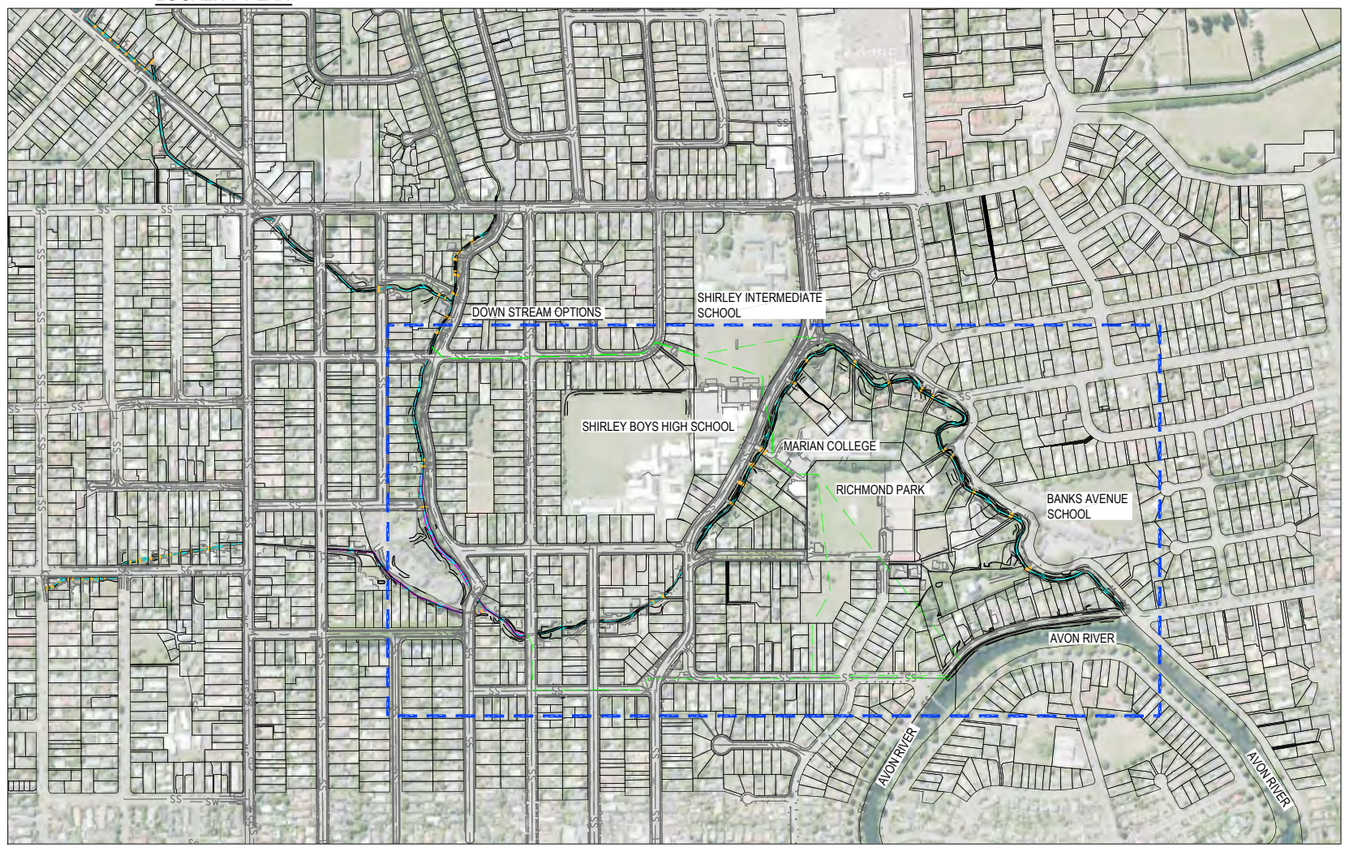
DRAWING LIST

DRAWING NO.	REV	DRAWING TITLE
3384543-CE-001	A	DOWNSTREAM OPTIONS PLAN
3384543-CE-002	A	OPTION A - A1 (GRAVITY) AND A2 (PUMPED)
3384543-CE-003	A	OPTION A1 LONG SECTION (GRAVITY) SHEET 1 OF 2
3384543-CE-004	A	OPTION A1 LONG SECTION (GRAVITY) SHEET 2 OF 2
3384543-CE-005	A	OPTION A2 LONG SECTION (PUMPED) SHEET 1 OF 2
3384543-CE-006	A	OPTION A2 LONG SECTION (PUMPED) SHEET 2 OF 2
3384543-CE-007	A	OPTION A NORTH PARADE CROSSING
3384543-CE-010	A	OPTION A BANKS AVENUE PLAN
3384543-CE-011	A	OPTION A BANKS AVENUE CROSS SECTIONS SHEET 1 OF 2
3384543-CE-012	A	OPTION A BANKS AVENUE CROSS SECTIONS SHEET 2 OF 2
3384543-CE-020	A	OPTION B - B1, B3 (GRAVITY) AND B2, B4 (PUMPED)
3384543-CE-021	A	OPTION B1 LONG SECTION (GRAVITY) SHEET 1 OF 2
3384543-CE-022	A	OPTION B1 LONG SECTION (GRAVITY) SHEET 2 OF 2
3384543-CE-023	A	OPTION B2 LONG SECTION (PUMPED) SHEET 1 OF 2
3384543-CE-024	A	OPTION B2 LONG SECTION (PUMPED) SHEET 2 OF 2
3384543-CE-026	A	OPTION B - DUDLEY CREEK CROSSING PLAN

3384543-CE-031	A	OPTION B3 LONG SECTION (GRAVITY) SHEET 1 OF 3
3384543-CE-032	A	OPTION B3 LONG SECTION (GRAVITY) SHEET 2 OF 3
3384543-CE-033	A	OPTION B3 LONG SECTION (GRAVITY) SHEET 3 OF 3
3384543-CE-034	A	OPTION B4 LONG SECTION (PUMPED) SHEET 1 OF 3
3384543-CE-035	A	OPTION B4 LONG SECTION (PUMPED) SHEET 2 OF 3
3384543-CE-036	A	OPTION B4 LONG SECTION (PUMPED) SHEET 3 OF 3
3384543-CE-040	A	OPTION C - C1 (GRAVITY) AND C2 (PUMPED)
3384543-CE-041	A	OPTION C1 LONG SECTION (GRAVITY) SHEET 1 OF 2
3384543-CE-042	A	OPTION C1 LONG SECTION (GRAVITY) SHEET 2 OF 2
3384543-CE-045	A	OPTION C2 LONG SECTION (PUMPED) SHEET 1 OF 2
3384543-CE-046	A	OPTION C2 LONG SECTION (PUMPED) SHEET 2 OF 2
3384543-CE-050	A	OPTION C STAPLETONS ROAD PLAN
3384543-CE-051	A	OPTION C STAPLETONS ROAD CROSS SECTIONS SHEET 1 OF 3
3384543-CE-052	A	OPTION C STAPLETONS ROAD CROSS SECTIONS SHEET 2 OF 3
3384543-CE-053	A	OPTION C STAPLETONS ROAD CROSS SECTIONS SHEET 3 OF 3
3384543-CE-060	A	PIPE AND BOX CULVERT DETAILS

LOCALITY PLAN



- CIVIL

BECA REF: 3384543
OPUS REF: 3C1262.00

DUDLEY CREEK FLOOD REMEDIATION

DOWNSTREAM OPTIONS CONCEPT DESIGN DRAWINGS

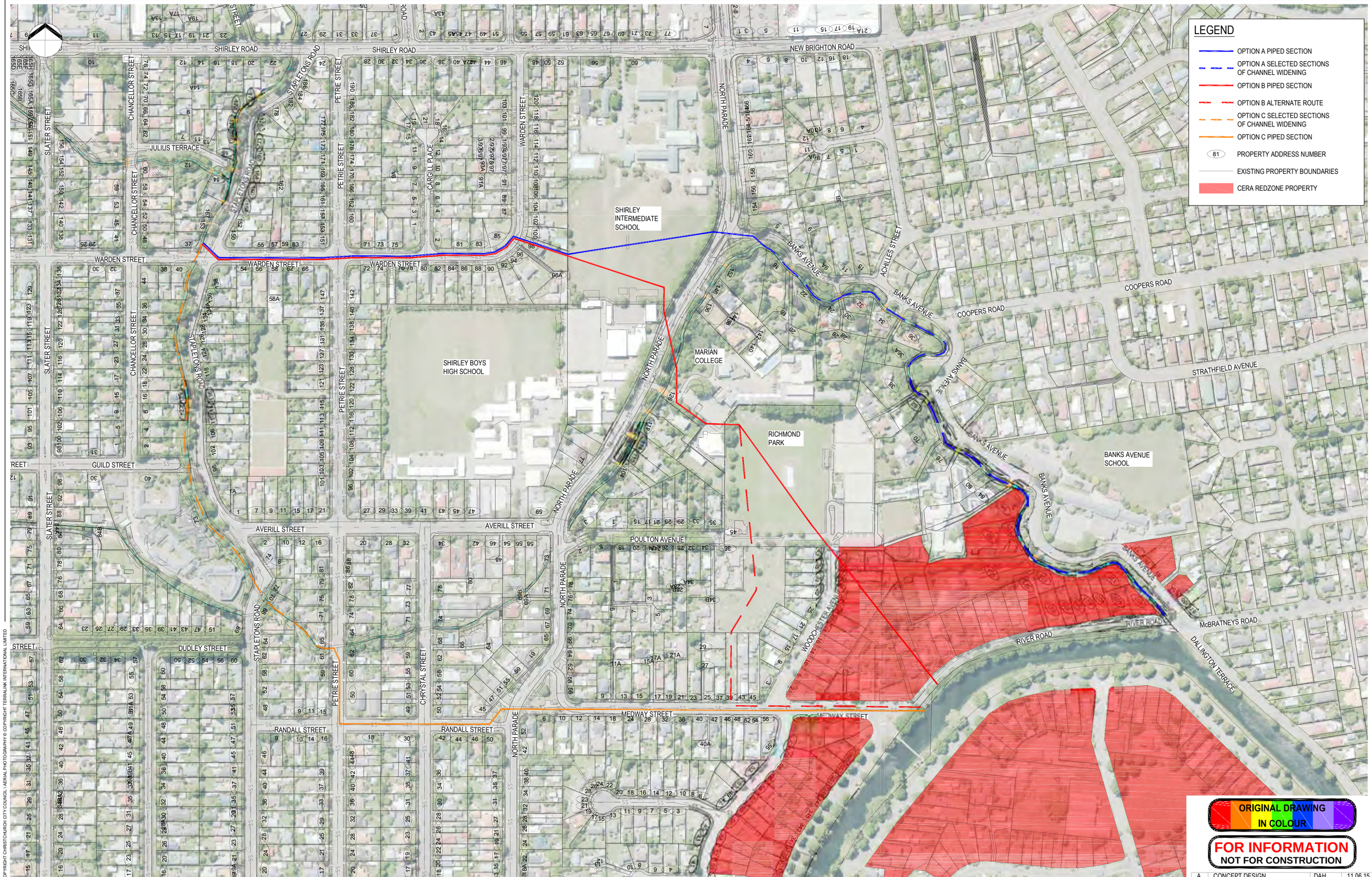
Prepared for

Christchurch City Council
CAPITAL PROGRAMME GROUP

By
Beca and Opus

Drawing No. 3384543-CE-000 | Rev. A

Document No. 3384543-CE-000.DWG



ISSUE	AMENDMENTS	SIGNED	DATE
A	CONCEPT DESIGN	DAH	11.06.15

© COPYRIGHT CHRISTCHURCH CITY COUNCIL | AERIAL PHOTOGRAPHY © COPYRIGHT TERRALINK INTERNATIONAL LIMITED

Christchurch City Council
CAPITAL PROGRAMME GROUP

		NAME	SIGNED	DATE
DATUM				
BENCH MK.				
RL				
SURVEY	DESIGNED	DJG	DJG	06.2015
SURVEY LB	DES. REVIEW	DAH	DAH	06.2015
	DRAWN	DLM	DLM	06.2015
	DRW. CHECK	DJG	DJG	06.2015
	FILE LOCATION	S:\300 Drawings\CAD\		
DRAIN. REF.	3384543-CE-001.dwg			
SAP WBS	PRINTED ON 11-Jun-15 BY DLM1			

APPROVED

FOR TENDER	DATE	SIGNED
FOR CONSTRUCTION	DATE	SIGNED

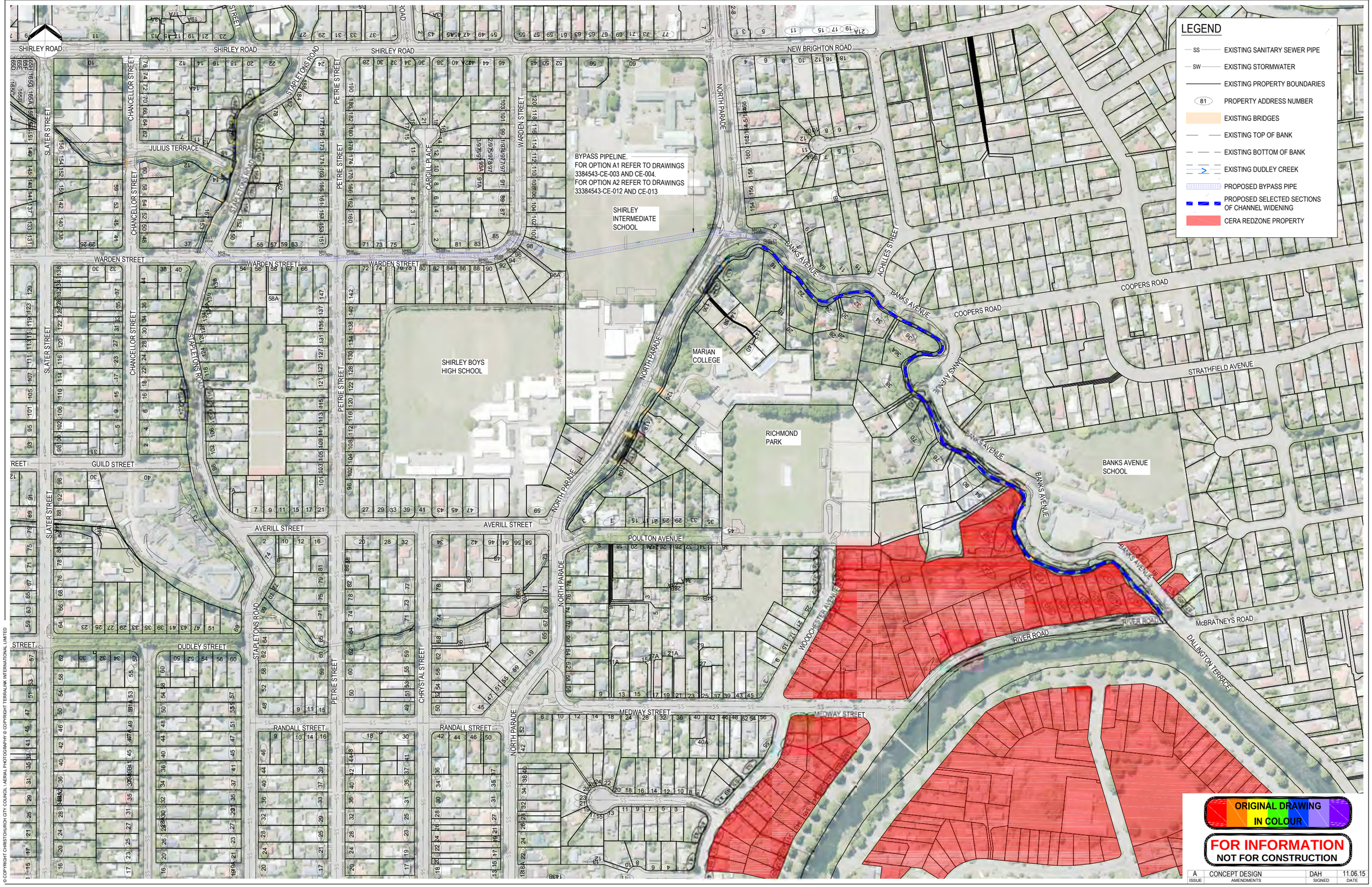
CONSULTANT: Beca OPUS

CONSULTANT PROJECT REF.	CONSULTANT FILE REF.
3384543 / 3C1262.00	S:\300 Drawings\CAD

PROJECT TITLE
DUDLEY CREEK FLOOD REMEDIATION

DRAWING TITLE
DOWNSTREAM OPTIONS PLAN

CONTRACT NUMBER	ORIGINAL SHEET SIZE	SCALES
14/15-192	A1	1:2000 @ A1
CAD DRAWING FILE REF. 3384543-CE-001		
CPG PROJECT FILE NUMBER CP502630	SHEET 1 OF 1	



ISSUE	AMENDMENTS	SIGNED	DATE
A	CONCEPT DESIGN	DAH	11.06.15

© COPYRIGHT CHRISTCHURCH CITY COUNCIL | AERIAL PHOTOGRAPHY © COPYRIGHT TERRALINK INTERNATIONAL LIMITED

Christchurch City Council
CAPITAL PROGRAMME GROUP

		NAME	SIGNED	DATE
DATUM				
BENCH MK.		DESIGNED	DJG	DJG 06.2015
RL		DES. REVIEW	DAH	DAH 06.2015
SURVEY		DRAWN	DLM	DLM 06.2015
SURVEY LB		DRW. CHECK	DJG	DJG 06.2015
		FILE LOCATION	S:\300 Drawings\CAD\	
DRAIN. REF.		3384543-CE-002.dwg		
SAP WBS		PRINTED ON 11-Jun-15 BY DLM1		

APPROVED
FOR TENDER — DATE | SIGNED
FOR CONSTRUCTION — DATE | SIGNED

CONSULTANT: Beca OPUS
CONSULTANT PROJECT REF.: 3384543 / 3C1262.00
CONSULTANT FILE REF.: S:\300 Drawings\CAD

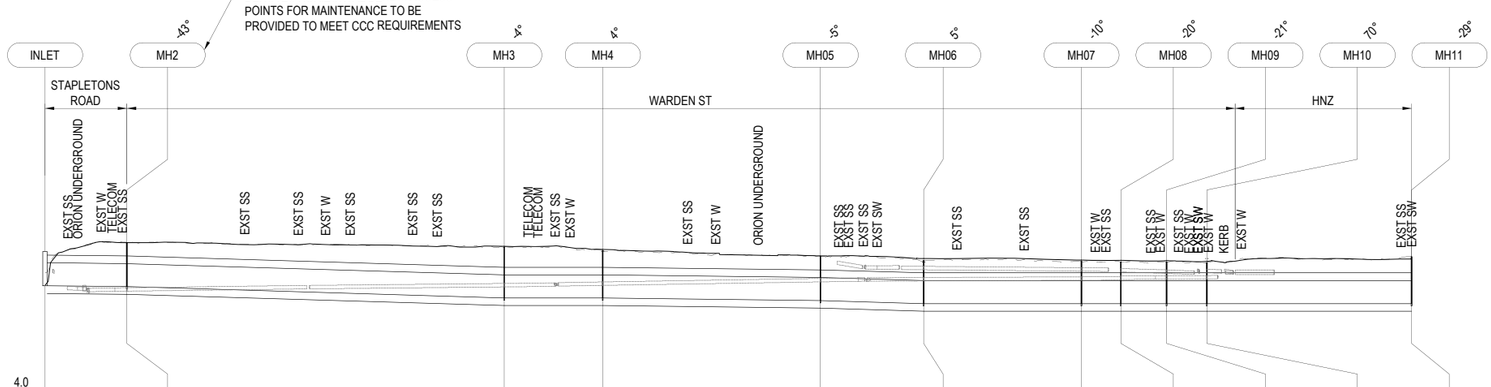
PROJECT TITLE
DUDLEY CREEK FLOOD REMEDIATION

DRAWING TITLE
OPTION A - A1 (GRAVITY) AND A2 (PUMPED)

CONTRACT NUMBER: 14/15-192
CAD DRAWING FILE REF.: 3384543-CE-002
ORIGINAL SHEET SIZE: A1
SCALES: 1:2000 @ A1
CPG PROJECT FILE NUMBER: CP502630
SHEET: 1 OF 1

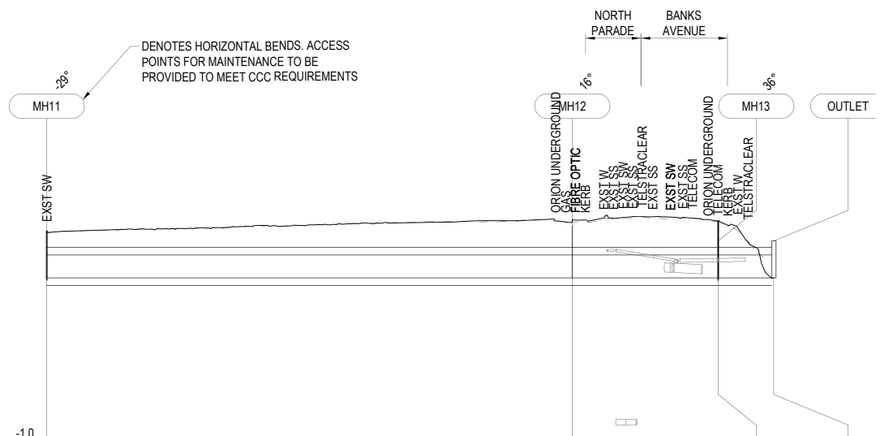
ISSUE


CHANCELLOR STREET
STAPLETONS ROAD
PETRIE STREET
CARGILL PLACE
WARDEN STREET
INLET CH0m
MH2 CH27m
MH3 CH150m
MH4 CH182m
MH05 CH253m
MH06 CH287m
MH07 CH338m
MH08 CH351m
MH09 CH396m
MH10 CH379m
MH11 CH446m
MH12 CH617m
MH13 CH665m
OUTLET CH683m
HNZ PROPERTY
SHIRLEY INTERMEDIATE SCHOOL
SHIRLEY BOYS HIGH SCHOOL
NORTH PARADE
BANKS AVENUE


DENOTES HORIZONTAL BENDS. ACCESS POINTS FOR MAINTENANCE TO BE PROVIDED TO MEET CCC REQUIREMENTS
INLET
MH2
MH3
MH4
MH05
MH06
MH07
MH08
MH09
MH10
MH11
-43°
-4°
4°
-5°
-5°
-10°
-20°
-21°
-70°
-20°
STAPLETONS ROAD
WARDEN ST
HNZ
EXST SS
ORION UNDERGROUND
EXST W
TELECOM
EXST SW
KERB

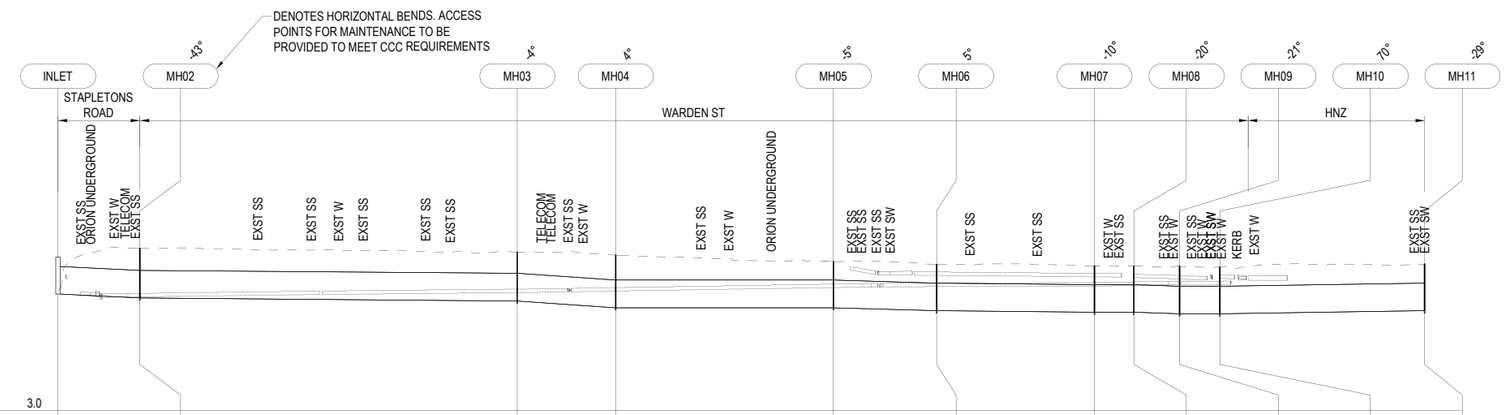
| | | |


CHANCELLOR STREET
STAPLETONS ROAD
PETRIE STREET
CARGILL PLACE
WARDEN STREET
INLET CH0m
MH2 CH27m
MH3 CH150m
MH4 CH182m
MH5 CH253m
MH06 CH287m
MH07 CH338m
MH08 CH351m
MH09 CH386m
MH10 CH379m
MH11 CH446m
MH12 CH617m
MH13 CH665m
OUTLET CH683m
HNZ PROPERTY
SHIRLEY INTERMEDIATE SCHOOL
SHIRLEY BOYS HIGH SCHOOL
NORTH PARADE
BANKS AVENUE


DENOTES HORIZONTAL BENDS. ACCESS POINTS FOR MAINTENANCE TO BE PROVIDED TO MEET CCC REQUIREMENTS
29°
16°
36°
MH11
MH12
MH13
OUTLET
EXST SW
ORION UNDERGROUND
FIBRE OPTIC
KERB
EXST W
EXST SS
TELSTRACLEAR
EXST SW
EXST SS
TELECOM
ORION UNDERGROUND
FIBRE
TELECOM
EXST W
TELSTRACLEAR

| | | |





DATUM R.L. (m)	3.0																					
LID LEVEL	13.00		13.57				13.33		13.14			12.71		12.53		12.43		12.42		12.40		12.35		12.55
INVERT LEVEL	10.59		10.33	10.33			10.14	10.14	9.70	9.70		9.70	9.70	9.50	9.50	9.40	9.40	9.40	9.40	9.30	9.30	9.30	9.30	9.50
DEPTH TO INVERT	2.41		3.24				3.19		3.44			3.01		3.03		3.03		3.02		3.10		3.05		3.05
PIPE SIZE	1800mm		1800mm				1800mm		1800mm			1800mm		1800mm		1800mm		1800mm		1800mm		1800mm		
GRADE	0.97%		0.16%				1.36%		-0.01%			0.59%		0.19%		-0.01%		0.67%		-0.01%		-0.3%		
CHAINAGE	0.0	26.72m	26.7		123.09m		149.8	32.13m	181.9		71.02m	252.9	33.65m	286.6	51.49m	338.1	12.84m	350.9	14.93m	365.9	13.10m	379.0	66.84m	445.8

SW LINE OPTION A2

LEGEND

- EXISTING PROPERTY BOUNDARIES
- SW — EXISTING STORMWATER PIPE
- SS — EXISTING SANITARY SEWER PIPE
- EXISTING STORMWATER OR SANITARY SEWER (LONG SECTION)
- 81 — PROPERTY ADDRESS NUMBER
- EXISTING BRIDGES
- EXISTING DUDLEY CREEK
- EXISTING TREE
- EXISTING TOP OF BANK
- EXISTING BOTTOM OF BANK
- PROPOSED BYPASS PIPE

NOTES

1. PIPE TYPE REFERS TO A DN1800 PE100 PN 6.3 AS PER DETAIL B ON DRAWING 3384543-CE-060.
2. PUMP STATION LOCATED IN WARDEN STREET.

ORIGINAL DRAWING IN COLOUR

FOR INFORMATION
NOT FOR CONSTRUCTION

ISSUE	AMENDMENTS	SIGNED	DATE
A	CONCEPT DESIGN	DAH	11.06.15

© COPYRIGHT CHRISTCHURCH CITY COUNCIL \ AERIAL PHOTOGRAPHY © COPYRIGHT TERRALINK INTERNATIONAL LIMITED

Christchurch City Council
CAPITAL PROGRAMME GROUP

		NAME	SIGNED	DATE
DATUM				
BENCH MK.	DESIGNED	DJG	DJG	06.2015
RL	DES. REVIEW	DAH	DAH	06.2015
SURVEY	DRAWN	DLM	DLM	06.2015
SURVEY LB	DRW. CHECK	DJG	DJG	06.2015
	FILE LOCATION	S:\300 Drawings\CAD\		
DRAIN. REF.	3384543-CE-005.dwg			
SAP WBS	PRINTED ON 11-Jun-15 BY DLM1			

APPROVED
FOR TENDER — DATE — SIGNED
FOR CONSTRUCTION — DATE — SIGNED

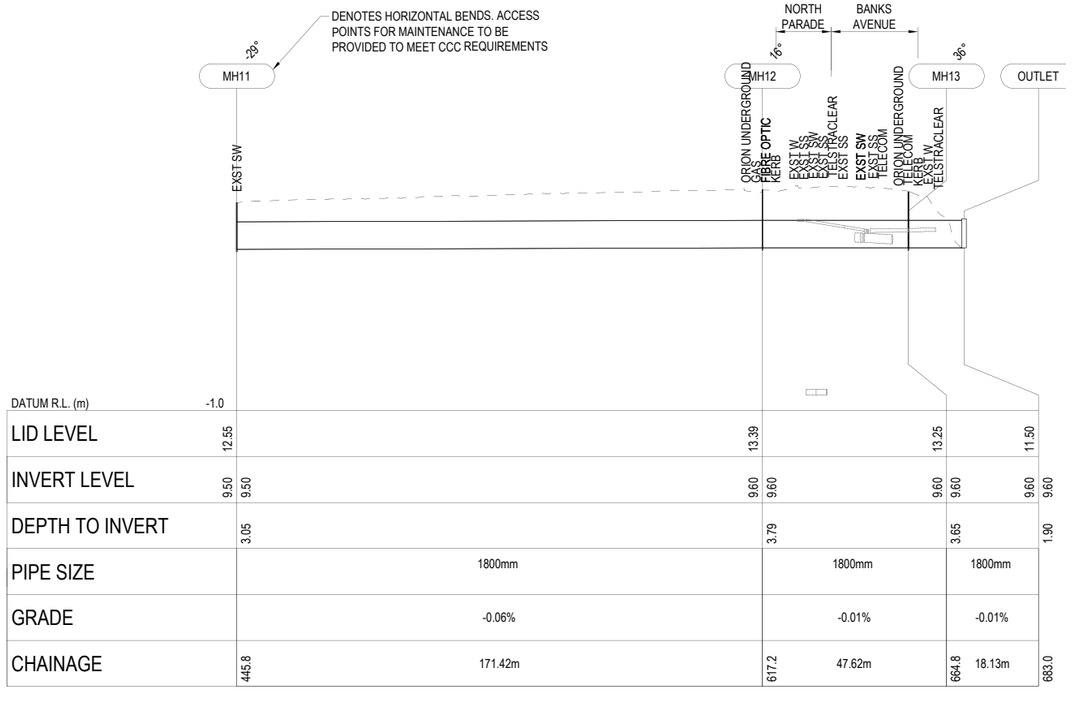
CONSULTANT: Beca OPUS
CONSULTANT PROJECT REF.: 3384543 / 3C1262.00
CONSULTANT FILE REF.: S:\300 Drawings\CAD

PROJECT TITLE: **DUDLEY CREEK FLOOD REMEDIATION**

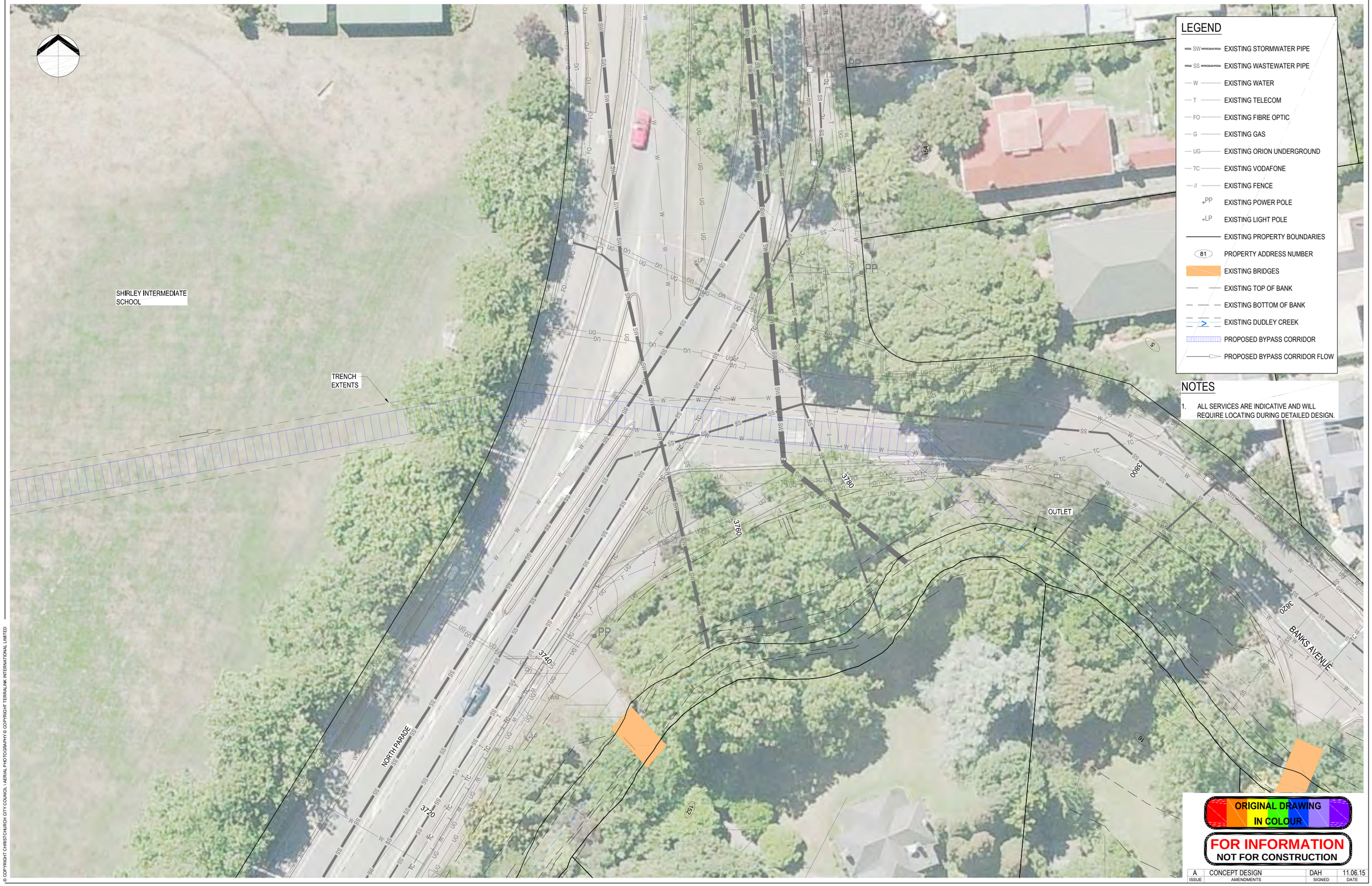
DRAWING TITLE: **OPTION A2 LONG SECTION (PUMPED)**

CONTRACT NUMBER: 14/15-192
CAD DRAWING FILE REF.: 3384543-CE-005
CPG PROJECT FILE NUMBER: CP502630
ORIGINAL SHEET SIZE: A1
SCALES: 1:1000 @ A1
SHEET: 1 OF 2


CHANCELLOR STREET
STAPLETONS ROAD
PETRIE STREET
CARGILL PLACE
WARDEN STREET
INLET CH0m
MH2 CH27m
MH3 CH150m
MH4 CH182m
MH05 CH253m
MH06 CH287m
MH07 CH338m
MH08 CH351m
MH09 CH386m
MH10 CH379m
MH11 CH446m
MH12 CH617m
MH13 CH665m
OUTLET CH683m
HNZ PROPERTY
SHIRLEY INTERMEDIATE SCHOOL
SHIRLEY BOYS HIGH SCHOOL
NORTH PARADE
BANKS AVENUE


DENOTES HORIZONTAL BENDS. ACCESS POINTS FOR MAINTENANCE TO BE PROVIDED TO MEET CCC REQUIREMENTS
-28°
16°
-36°
MH11
MH12
MH13
OUTLET
NORTH PARADE
BANKS AVENUE
EXST SW
ORION UNDERGROUND CABLE OPTIC KERE
EXST W EXST SS EXST SW TELSTRACLEAR EXST SS
EXST SW EXST SS TELECOM
ORION UNDERGROUND KERE COM EXST W TELSTRACLEAR

| | | |



NOTES

1. ALL SERVICES ARE INDICATIVE AND WILL REQUIRE LOCATING DURING DETAILED DESIGN.

ORIGINAL DRAWING IN COLOUR

FOR INFORMATION
NOT FOR CONSTRUCTION

ISSUE	AMENDMENTS	SIGNED	DATE
A	CONCEPT DESIGN	DAH	11.06.15

© COPYRIGHT CHRISTCHURCH CITY COUNCIL | AERIAL PHOTOGRAPHY © COPYRIGHT TERRALINK INTERNATIONAL LIMITED

Christchurch City Council
CAPITAL PROGRAMME GROUP

		NAME	SIGNED	DATE
DATUM				
BENCH MK.				
RL	DESIGNED	DJG	DJG	06.2015
SURVEY	DES. REVIEW	DAH	DAH	06.2015
SURVEY LB	DRAWN	DLM	DLM	06.2015
	DRW. CHECK	DJG	DJG	06.2015
DRAIN. REF.	FILE LOCATION	S:\300 Drawings\CAD\		
SAP WBS		3384543-CE-007.dwg		
	PRINTED ON 11-Jun-15 BY DLM1			

APPROVED

FOR TENDER DATE	FOR TENDER SIGNED

FOR CONSTRUCTION DATE	FOR CONSTRUCTION SIGNED

CONSULTANT: Beca OPUS

CONSULTANT PROJECT REF.: 3384543 / 3C1262.00

CONSULTANT FILE REF.: S:\300 Drawings\CAD

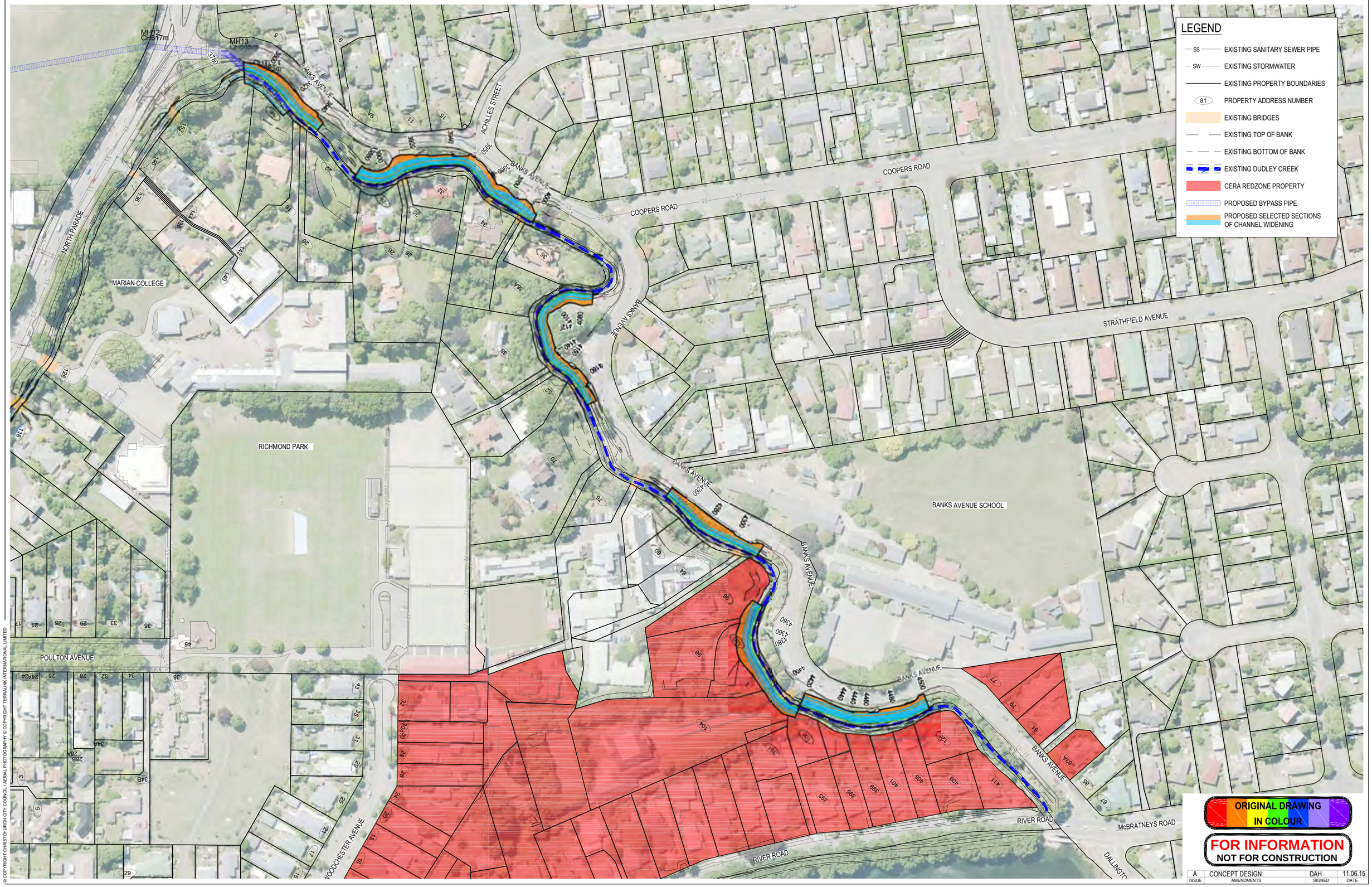
PROJECT TITLE

DUDLEY CREEK FLOOD REMEDIATION

DRAWING TITLE

OPTION A
NORTH PARADE CROSSING

CONTRACT NUMBER	14/15-192
CAD DRAWING FILE REF.	3384543-CE-007
ORIGINAL SHEET SIZE	A1
SCALES	1:200 @ A1
CPG PROJECT FILE NUMBER	CP502630
SHEET	1 OF 1



ISSUE	AMENDMENTS	SIGNED	DATE
A	CONCEPT DESIGN	DAH	11.06.15

© COPYRIGHT CHRISTCHURCH CITY COUNCIL \ AERIAL PHOTOGRAPHY © COPYRIGHT TERRALINK INTERNATIONAL LIMITED

Christchurch City Council
CAPITAL PROGRAMME GROUP

		NAME	SIGNED	DATE
DATUM				
BENCH MK.				
RL				
SURVEY				
SURVEY LB				
		DESIGNED	DJG	06.2015
		DES. REVIEW	DAH	06.2015
		DRAWN	DLM	06.2015
		DRW. CHECK	DJG	06.2015
		FILE LOCATION	S:\300 Drawings\CAD\	
DRAIN. REF.		3384543-CE-010.dwg		
SAP WBS		PRINTED ON 11-Jun-15 BY DLM1		

APPROVED

FOR TENDER DATE	SIGNED

FOR CONSTRUCTION DATE	SIGNED

CONSULTANT: Beca OPUS

CONSULTANT PROJECT REF.: 3384543 / 3C1262.00

CONSULTANT FILE REF.: S:\300 Drawings\CAD

PROJECT TITLE: **DUDLEY CREEK FLOOD REMEDIATION**

DRAWING TITLE: **OPTION A - BANKS AVENUE PLAN**

CONTRACT NUMBER: 14/15-192

CAD DRAWING FILE REF.: 3384543-CE-010

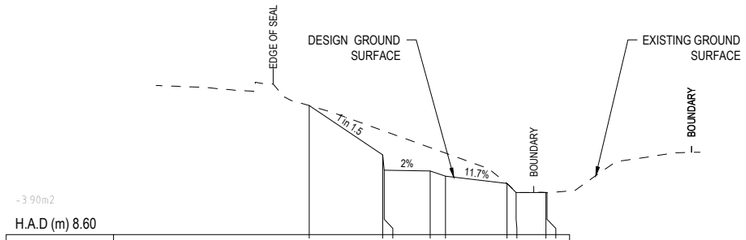
ORIGINAL SHEET SIZE: A1

SCALES: 1:1000 @ A1

CPG PROJECT FILE NUMBER: CP502630

SHEET: 1 OF 1

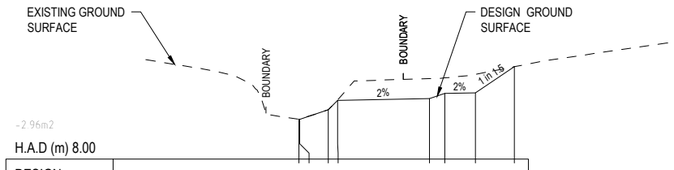
ISSUE



~3.90m2

H.A.D (m) 8.60

| | | |

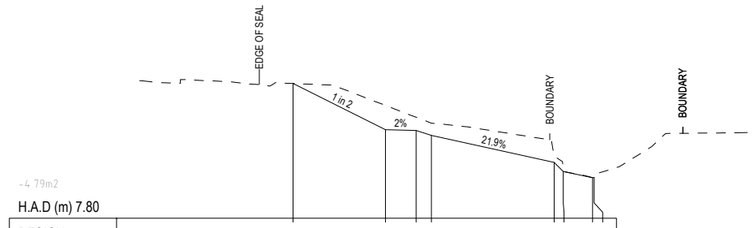


~2.96m2

H.A.D (m) 8.00

DESIGN LEVELS	9.30	9.30	9.61	9.91			9.97	10.14	10.16	11.01				
EXISTING LEVELS	9.30	9.31	9.61	9.93			10.62	10.65	10.76	11.01				
OFFSET (m)	-0.02	0.00	0.93	1.23			4.23	4.73	5.73	7.00				

4350.00

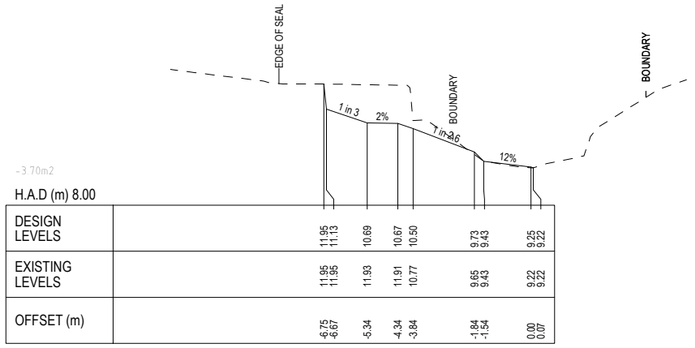


~4.79m2

H.A.D (m) 7.80

DESIGN LEVELS	12.20		10.69	10.67	10.50			9.62	9.32	9.13	9.13			
EXISTING LEVELS	12.20		11.48	11.10	10.90			9.83	9.32	9.13	9.16			
OFFSET (m)	-9.82		-6.80	-5.80	-5.30			-1.30	-1.00	-0.04	0.00			

4500.00

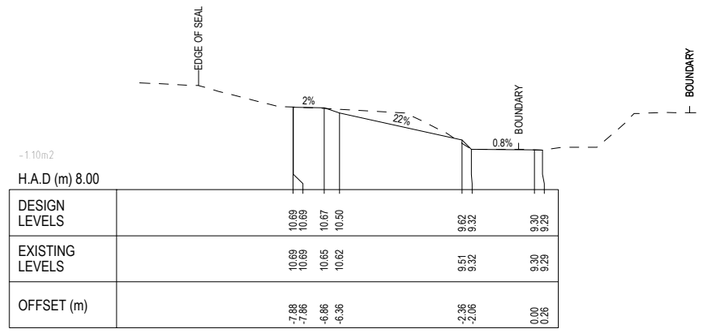


~3.70m2

H.A.D (m) 8.00

DESIGN LEVELS	11.95	11.13	10.69	10.67	10.50			9.73	9.43	9.25	9.22			
EXISTING LEVELS	11.95	11.95	11.93	11.91	10.77			9.65	9.43	9.22	9.22			
OFFSET (m)	-6.75	-6.67	-5.34	-4.34	-3.84			-1.84	-1.54	0.00	0.07			

4300.00

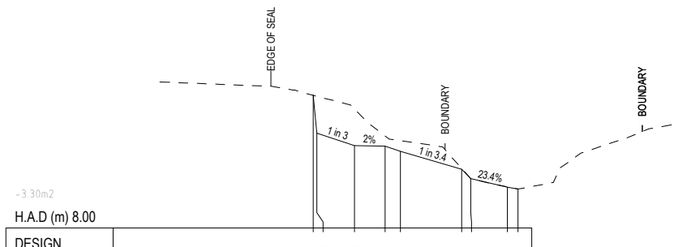


~1.10m2

H.A.D (m) 8.00

DESIGN LEVELS	10.69	10.69	10.67	10.50				9.62	9.32		9.30	9.29		
EXISTING LEVELS	10.69	10.69	10.65	10.62				9.51	9.32		9.30	9.29		
OFFSET (m)	-7.88	-7.86	-6.66	-6.36				-2.36	-2.06		0.00	0.26		

4450.00

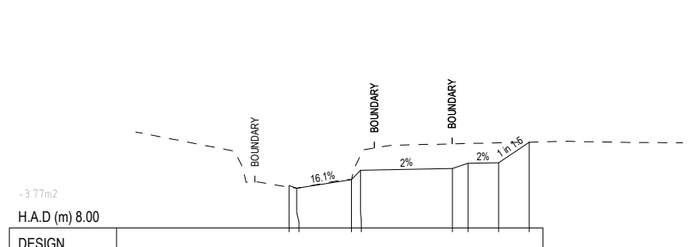


~3.30m2

H.A.D (m) 8.00

DESIGN LEVELS	12.33	11.09	10.69	10.67	10.50			9.61	9.61	9.34	9.27			
EXISTING LEVELS	12.33	12.30	11.89	11.01	10.85			9.95	9.61	9.35	9.27			
OFFSET (m)	-6.33	-6.21	-4.99	-3.99	-3.49			-1.49	-1.19	0.00	0.35			

4250.00



~3.77m2

H.A.D (m) 8.00

DESIGN LEVELS	9.38	9.30	9.58	9.88			9.94	10.11	10.13	10.80				
EXISTING LEVELS	9.33	9.30	9.58	10.38			10.74	10.76	10.78	10.80				
OFFSET (m)	0.00	0.24	2.03	2.33			5.33	5.83	6.83	7.83				

4400.00

© COPYRIGHT CHRISTCHURCH CITY COUNCIL \ AERIAL PHOTOGRAPHY © COPYRIGHT TERRALINK INTERNATIONAL LIMITED

ORIGINAL DRAWING IN COLOUR

FOR INFORMATION
NOT FOR CONSTRUCTION

ISSUE	AMENDMENTS	SIGNED	DATE
A	CONCEPT DESIGN	DAH	11.06.15

Christchurch City Council
CAPITAL PROGRAMME GROUP

		NAME	SIGNED	DATE
DATUM				
BENCH MK.	DESIGNED	DJG	DJG	06.2015
RL	DES. REVIEW	DAH	DAH	06.2015
SURVEY	DRAWN	DLM	DLM	06.2015
SURVEY LB	DRW. CHECK	DJG	DJG	06.2015
	FILE LOCATION	S:\300 Drawings\CAD\		
DRAIN. REF.	3384543-CE-012.dwg			
SAP WBS	PRINTED ON 11-Jun-15 BY DLM1			

APPROVED

FOR TENDER DATE	SIGNED

FOR CONSTRUCTION DATE	SIGNED

CONSULTANT: Beca OPUS

CONSULTANT PROJECT REF.: 3384543 / 3C1262.00

CONSULTANT FILE REF.: S:\300 Drawings\CAD

PROJECT TITLE: **DUDLEY CREEK FLOOD REMEDIATION**

DRAWING TITLE: **OPTION A - BANKS AVENUE CROSS SECTIONS**

CONTRACT NUMBER: 14/15-192

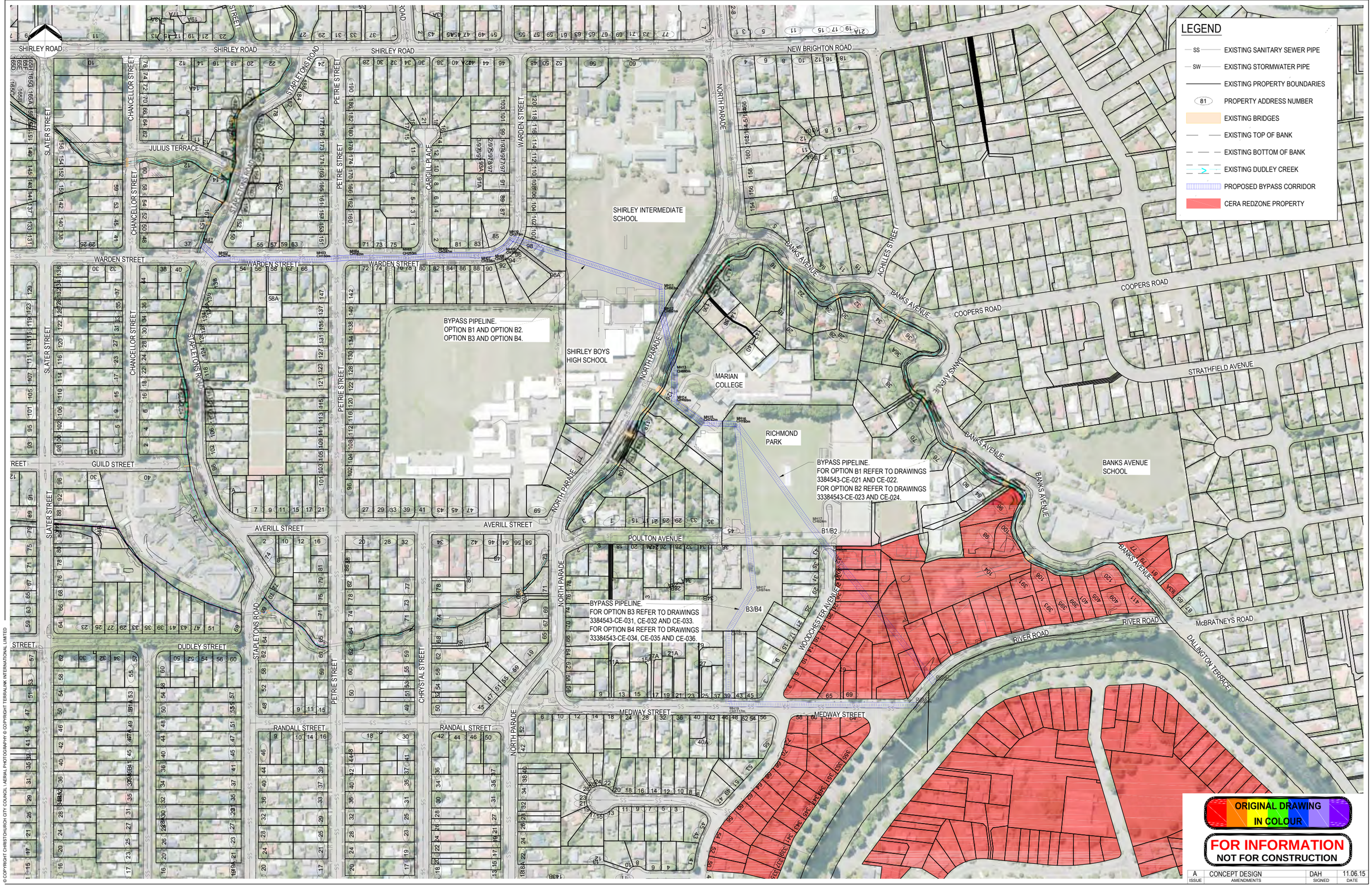
CAD DRAWING FILE REF.: 3384543-CE-012

ORIGINAL SHEET SIZE: A1

SCALES: 1:100 H @ A1, 1:1 V @ A1

CPG PROJECT FILE NUMBER: CP502630

SHEET: 2 OF 2



© COPYRIGHT CHRISTCHURCH CITY COUNCIL \ AERIAL PHOTOGRAPHY © COPYRIGHT TERRALINK INTERNATIONAL LIMITED

ORIGINAL DRAWING IN COLOUR

FOR INFORMATION
NOT FOR CONSTRUCTION

ISSUE	AMENDMENTS	SIGNED	DATE
A	CONCEPT DESIGN	DAH	11.06.15

Christchurch City Council
CAPITAL PROGRAMME GROUP

		NAME	SIGNED	DATE
DATUM				
BENCH MK.	DESIGNED	DJG	DJG	06.2015
RL	DES. REVIEW	DAH	DAH	06.2015
SURVEY	DRAWN	DLM	DLM	06.2015
SURVEY LB	DRW. CHECK	DJG	DJG	06.2015
	FILE LOCATION	S:\300 Drawings\CAD\		
DRAIN. REF.	3384543-CE-020.dwg			
SAP WBS	PRINTED ON 11-Jun-15 BY DLM1			

APPROVED
FOR TENDER — DATE — SIGNED
FOR CONSTRUCTION — DATE — SIGNED

CONSULTANT: Beca, OPUS
CONSULTANT PROJECT REF.: 3384543 / 3C1262.00
CONSULTANT FILE REF.: S:\300 Drawings\CAD

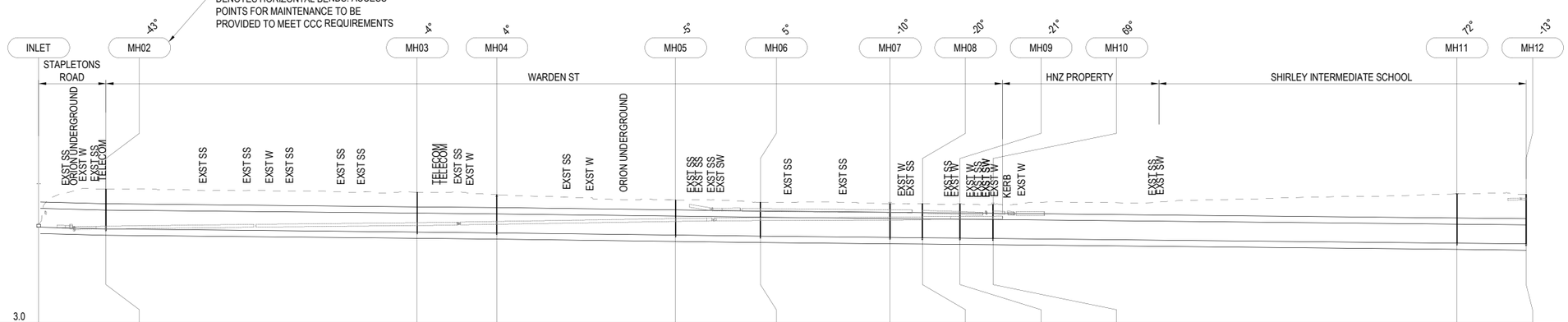
PROJECT TITLE
DUDLEY CREEK FLOOD REMEDIATION

DRAWING TITLE
OPITON B - B1 AND B3 (GRAVITY) AND B2 AND B4 (PUMPED)

CONTRACT NUMBER	14/15-192
CAD DRAWING FILE REF.	3384543-CE-020
CPG PROJECT FILE NUMBER	CP502630
ORIGINAL SHEET SIZE	A1
SCALES	1:2000 @ A1
SHEET	1 OF 1

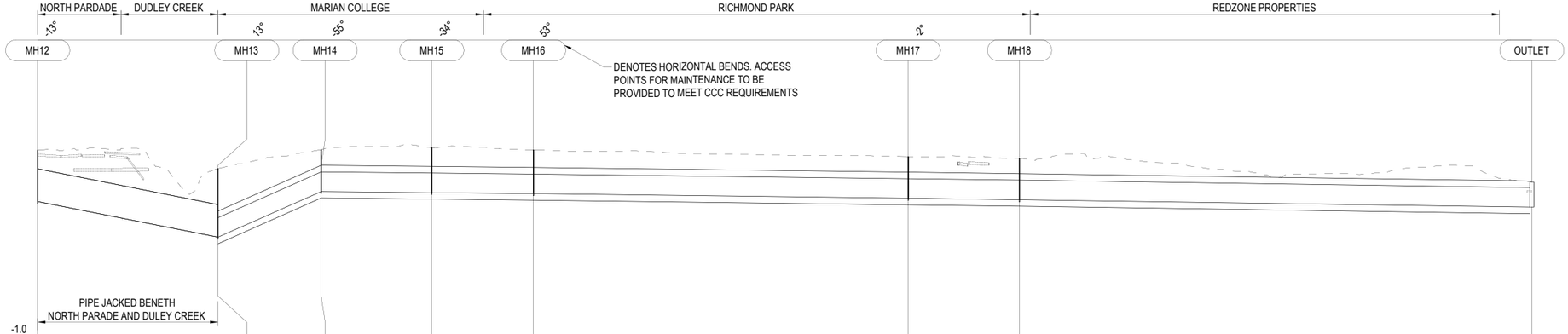
ISSUE


CHANCELLOR STREET
STAPLETONS ROAD
PETRIE STREET
CARGILL PLACE
WARDEN STREET
HNZ PROPERTY
SHIRLEY INTERMEDIATE SCHOOL
SHIRLEY BOYS HIGH SCHOOL
NORTH PARADE
BANKS AVENUE
INLET CH0m
MH02 CH27m
MH03 CH150m
MH04 CH182m
MH05 CH253m
MH06 CH287m
MH07 CH338m
MH08 CH351m
MH09 CH366m
MH10 CH379m
MH11 CH563m
MH12 CH591m


DENOTES HORIZONTAL BENDS. ACCESS POINTS FOR MAINTENANCE TO BE PROVIDED TO MEET CCC REQUIREMENTS
INLET
MH02
MH03
MH04
MH05
MH06
MH07
MH08
MH09
MH10
MH11
MH12
43°
4°
4°
5°
5°
10°
20°
21°
69°
72°
13°
STAPLETONS ROAD
WARDEN ST
HNZ PROPERTY
SHIRLEY INTERMEDIATE SCHOOL
EXST SS
ORION UNDERGROUND
EXST W
TELECOM
EXST SW
KERB

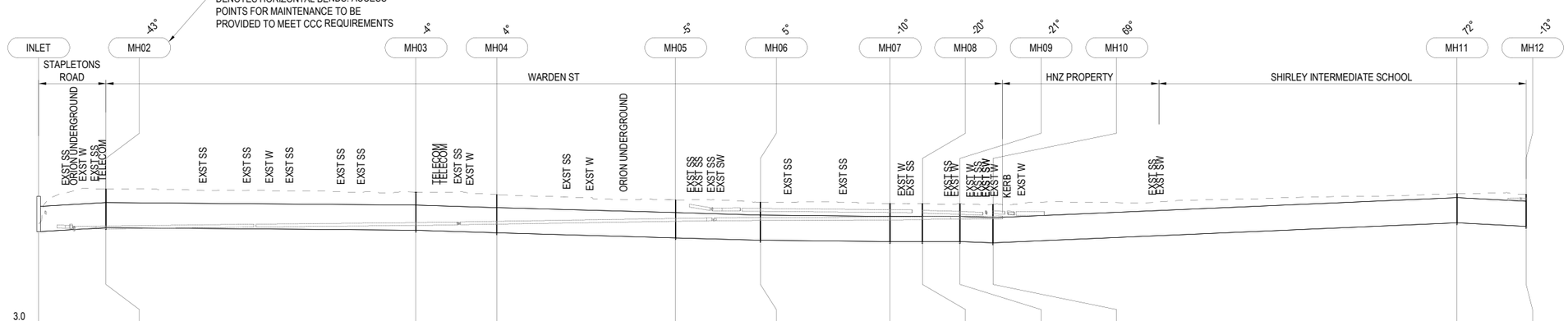
| | | |


MAIAN COLLEGE
RICHMOND PARK
NORTH PARADE
WOODCHESTER AVENUE
RIVER RD
MH12 CH351m
MH13 CH680m
MH14 CH699m
MH15 CH732m
MH16 CH780m
MH17 CH924m
OUTLET CH1162m
146
144
142
140
138
136
118
110
108
96
94
92
90
88
86
84
82
80
78
76
74
72
70
68
66
64
62
60
58
56
54
52
50
48
46
44
43
41
39
37
35
33
32
30
29
28
27
26
25
24
23
22
21
20
19
18
17
16
15
14
13
12
10
9
8
7
6
5


NORTH PARDADE
DUDLEY CREEK
MARIAN COLLEGE
RICHMOND PARK
REDZONE PROPERTIES
-13°
13°
-55°
-34°
53°
-2°
MH12
MH13
MH14
MH15
MH16
MH17
MH18
OUTLET
DENOTES HORIZONTAL BENDS. ACCESS POINTS FOR MAINTENANCE TO BE PROVIDED TO MEET CCC REQUIREMENTS
PIPE JACKED BENETH NORTH PARADE AND DULEY CREEK

| DATUM R.L. (m) | -1.0 | | |





	INLET	MH02		MH03	MH04		MH05	MH06	MH07	MH08	MH09	MH10		MH11	MH12
DATUM R.L. (m)	3.0														
LID LEVEL	13.00	13.57		13.33	13.14		12.71	12.53	12.43	12.42	12.40	12.35		13.20	13.16
INVERT LEVEL	10.20	10.50	10.50	10.30	10.30	10.10	10.10	9.70	9.70	9.50	9.50	9.40	9.40	9.40	9.40	9.40	9.40	9.30	9.30	10.90	10.90	10.60
DEPTH TO INVERT	2.80	3.07		3.03	3.04		3.01	3.03	3.03	3.02	3.00	3.05		2.30	2.56
PIPE SIZE	2000mm	2000mm		2000mm	2000mm		2000mm	2000mm	2000mm	2000mm	2000mm	2000mm		2000mm	
GRADE	-1.12%	0.16%		0.62%	0.56%		0.59%	0.19%	-0.01%	-0.01%	0.76%	-0.87%		1.09%	
CHAINAGE	0.0	26.72m	26.7	123.09m	149.8	32.13m	181.9	71.02m	252.9	33.65m	286.6	51.49m	338.1	12.84m	350.9	14.93m	365.9	13.10m	379.0	184.28m	563.2	27.48m	590.7

SW LINE OPTION B2

LEGEND

- EXISTING PROPERTY BOUNDARIES
- EXISTING STORMWATER PIPE
- EXISTING SANITARY SEWER PIPE
- EXISTING STORMWATER OR SANITARY SEWER (LONG SECTION)
- PROPERTY ADDRESS NUMBER
- EXISTING BRIDGES
- EXISTING DUDLEY CREEK
- EXISTING TREE
- EXISTING TOP OF BANK
- EXISTING BOTTOM OF BANK
- PROPOSED BYPASS PIPE

NOTES

1. PIPE TYPE REFERS TO A DN2000 PE100 PN 6.3 AS PER DETAIL B ON DRAWING 3384543-CE-060.
2. PUMP STATION LOCATED IN WARDEN STREET.

ORIGINAL DRAWING IN COLOUR

FOR INFORMATION
NOT FOR CONSTRUCTION

ISSUE	AMENDMENTS	SIGNED	DATE
A	CONCEPT DESIGN	DAH	11.06.15

© COPYRIGHT CHRISTCHURCH CITY COUNCIL \ AERIAL PHOTOGRAPHY © COPYRIGHT TERRALINK INTERNATIONAL LIMITED

Christchurch City Council
CAPITAL PROGRAMME GROUP

	NAME	SIGNED	DATE
DATUM			
BENCH MK.			
RL			
SURVEY			
SURVEY LB			
DESIGNED	DJG	DJG	06.2015
DES. REVIEW	DAH	DAH	06.2015
DRAWN	DLM	DLM	06.2015
DRW. CHECK	DJG	DJG	06.2015
FILE LOCATION	S:\300 Drawings\CAD\		
DRAIN. REF.	3384543-CE-023.dwg		
SAP WBS	PRINTED ON 11-Jun-15 BY DLM1		

APPROVED
FOR TENDER — DATE — SIGNED
FOR CONSTRUCTION — DATE — SIGNED

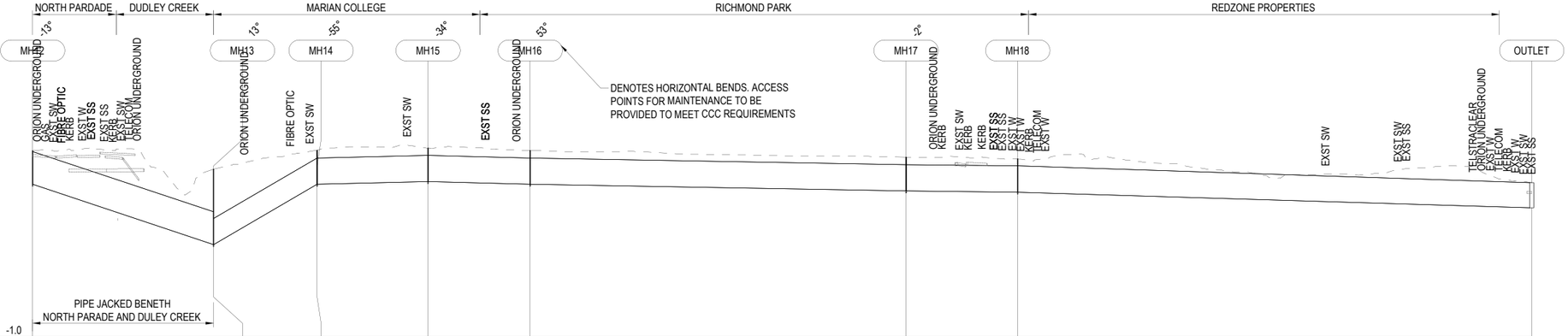
CONSULTANT: Beca OPUS
CONSULTANT PROJECT REF.: 3384543 / 3C1262.00
CONSULTANT FILE REF.: S:\300 Drawings\CAD

PROJECT TITLE: **DUDLEY CREEK FLOOD REMEDIATION**

DRAWING TITLE: **OPTION B2 LONG SECTION (PUMPED)**

CONTRACT NUMBER	14/15-192
CAD DRAWING FILE REF.	3384543-CE-023
ORIGINAL SHEET SIZE	A1
SCALES	1:1000 @ A1
CPG PROJECT FILE NUMBER	CP502630
SHEET	1 OF 2





DATUM R.L. (m)	-1.0																					
LID LEVEL	13.16		11.75		13.19		13.35		13.17			12.67		12.53				10.72				
INVERT LEVEL	10.60	10.60	6.00	6.00	10.60	10.60	10.80	10.80	10.60	10.60		10.10	10.10	10.00	10.00			8.80	8.80			
DEPTH TO INVERT		2.56		5.75		2.59		2.55		2.57			2.57		2.53				1.92			
PIPE SIZE		2500mm		2000mm		2000mm		2000mm		2000mm			2000mm		2000mm							
GRADE		6.67%		-11.66%		-0.47%		0.51%		0.35%			0.24%		0.61%							
CHAINAGE	590.7	69.00m	659.7	39.46m	699.2	42.33m	741.5	38.91m	780.4	143.37m		923.8	42.54m	966.3	196.03m			1162.4				

SW LINE OPTION B2

LEGEND

- EXISTING PROPERTY BOUNDARIES
- SW — EXISTING STORMWATER PIPE
- SS — EXISTING SANITARY SEWER PIPE
- EXISTING STORMWATER OR SANITARY SEWER (LONG SECTION)
- 81 PROPERTY ADDRESS NUMBER
- EXISTING BRIDGES
- EXISTING DUDLEY CREEK
- EXISTING TREE
- EXISTING TOP OF BANK
- EXISTING BOTTOM OF BANK
- CERA REDZONE PROPERTY
- PROPOSED BYPASS PIPE

NOTES

1. PIPE TYPE REFERS TO A DN2000 PE100 PN 6.3 AS PER DETAIL B ON DRAWING 3384543-CE-060.

ORIGINAL DRAWING IN COLOUR

FOR INFORMATION
NOT FOR CONSTRUCTION

ISSUE	AMENDMENTS	SIGNED	DATE
A	CONCEPT DESIGN	DAH	11.06.15

© COPYRIGHT CHRISTCHURCH CITY COUNCIL \AERIAL PHOTOGRAPHY© COPYRIGHT TERRALINK INTERNATIONAL LIMITED

Christchurch City Council
CAPITAL PROGRAMME GROUP

		NAME	SIGNED	DATE
DATUM				
BENCH MK.				
RL				
SURVEY				
SURVEY LB				
DRAIN. REF.				
SAP WBS				
DESIGNED		DJG	DJG	06.2015
DES. REVIEW		DAH	DAH	06.2015
DRAWN		DLM	DLM	06.2015
DRW. CHECK		DJG	DJG	06.2015
FILE LOCATION	S:\300 Drawings\CAD\			
	3384543-CE-024.dwg			
PRINTED ON	11-Jun-15 BY DLM1			

APPROVED

FOR TENDER	
DATE	SIGNED

FOR CONSTRUCTION	
DATE	SIGNED

CONSULTANT: Beca OPUS

CONSULTANT PROJECT REF.: 3384543 / 3C1262.00

CONSULTANT FILE REF.: S:\300 Drawings\CAD

PROJECT TITLE: **DUDLEY CREEK FLOOD REMEDIATION**

DRAWING TITLE: **OPTION B2 LONG SECTION (PUMPED)**

CONTRACT NUMBER: 14/15-192

CAD DRAWING FILE REF.: 3384543-CE-024

ORIGINAL SHEET SIZE: A1

SCALES: 1:1000 @ A1

CPG PROJECT FILE NUMBER: CP502630

SHEET: 2 OF 2



ORIGINAL DRAWING IN COLOUR

FOR INFORMATION
NOT FOR CONSTRUCTION

ISSUE	AMENDMENTS	SIGNED	DATE
A	CONCEPT DESIGN	DAH	11.06.15

© COPYRIGHT CHRISTCHURCH CITY COUNCIL. AERIAL PHOTOGRAPHY © COPYRIGHT TERRALINK INTERNATIONAL LIMITED

Christchurch City Council
CAPITAL PROGRAMME GROUP

		NAME	SIGNED	DATE
DATUM				
BENCH MK.		DESIGNED	DJG	DJG	06.2015
RL		DES. REVIEW	DAH	DAH	06.2015
SURVEY		DRAWN	DLM	DLM	06.2015
SURVEY LB		DRW. CHECK	DJG	DJG	06.2015
		FILE LOCATION	S:\300 Drawings\CAD\		
DRAIN. REF.		3384543-CE-026.dwg			
SAP WBS		PRINTED ON 11-Jun-15 BY DLM1			

APPROVED

FOR TENDER	
DATE	SIGNED
FOR CONSTRUCTION	
DATE	SIGNED

CONSULTANT: Beca OPUS

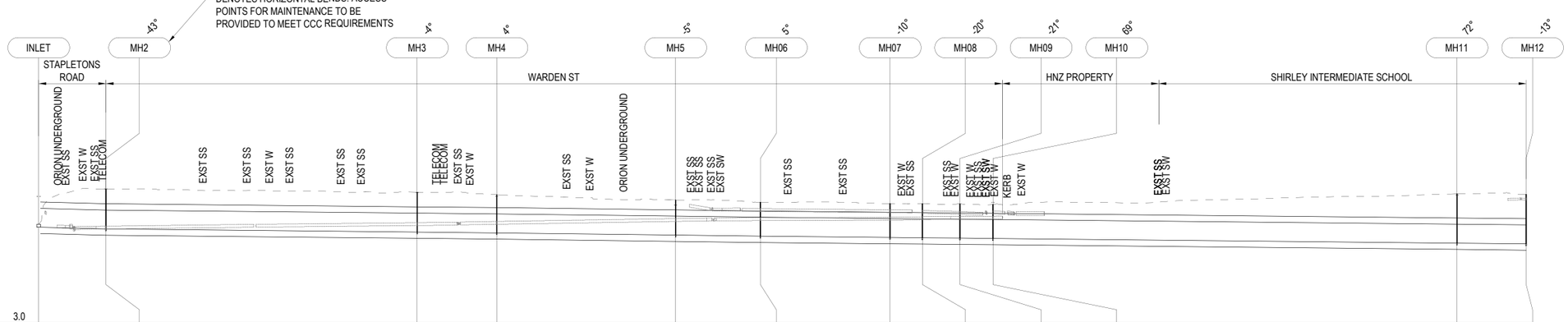
CONSULTANT PROJECT REF.	CONSULTANT FILE REF.
3384543 / 3C1262.00	S:\300 Drawings\CAD

PROJECT TITLE
DUDLEY CREEK FLOOD REMEDIATION

DRAWING TITLE
OPTION B
DUDLEY CREEK CROSSING

CONTRACT NUMBER	14/15-192
CAD DRAWING FILE REF.	3384543-CE-026
ORIGINAL SHEET SIZE	A1
CPG PROJECT FILE NUMBER	CP502630
SCALES	1:500 @ A1
SHEET	1 OF 1





DATUM R.L. (m)	3.0																						
LID LEVEL	10.79		13.57				13.33		13.14			12.71		12.53		12.43		12.42		12.40		12.35			13.20		13.16
INVERT LEVEL		10.55		10.42	10.42			10.17	10.17	10.11	10.11		9.93	9.93	9.84	9.84	9.74	9.74	9.72	9.72	9.69	9.69	9.66	9.66		9.29	9.29	9.23
DEPTH TO INVERT		0.24		3.15				3.16		3.03			2.78		2.69		2.69		2.70		2.71		2.69			3.91		3.93
PIPE SIZE		3000x1500mm			3000x1500mm			3000x1500mm		3000x1500mm			3000x1500mm		3000x1500mm		3000x1500mm		3000x1500mm		3000x1500mm		3000x1500mm			3000x1500mm		
GRADE		0.5%			0.2%			0.2%		0.25%			0.25%		0.2%		0.2%		0.2%		0.2%		0.2%			0.2%		
CHAINAGE	0.0		26.72m		26.7	123.61m		150.3	31.60m	181.9	71.02m		252.9	33.65m	286.6	51.49m	338.1	12.84m	350.9	14.93m	365.9	13.10m	379.0	184.28m		563.2	27.48m		590.7

SW LINE OPTION B3

LEGEND

- EXISTING PROPERTY BOUNDARIES
- SW EXISTING STORMWATER PIPE
- SS EXISTING SANITARY SEWER PIPE
- EXISTING STORMWATER OR SANITARY SEWER (LONG SECTION)
- 81 PROPERTY ADDRESS NUMBER
- EXISTING BRIDGES
- EXISTING DUDLEY CREEK
- EXISTING TREE
- EXISTING TOP OF BANK
- EXISTING BOTTOM OF BANK
- PROPOSED BYPASS PIPE

NOTES

1. PIPE TYPE REFERS TO A 3.0m WIDE x 1.5m HIGH BOX CULVERT AS PER DETAIL A ON DRAWING 3384543-CE-050.

ORIGINAL DRAWING IN COLOUR

FOR INFORMATION
NOT FOR CONSTRUCTION

ISSUE	AMENDMENTS	SIGNED	DATE
A	CONCEPT DESIGN	DAH	11.06.15

© COPYRIGHT CHRISTCHURCH CITY COUNCIL \ AERIAL PHOTOGRAPHY © COPYRIGHT TERRALINK INTERNATIONAL LIMITED

Christchurch City Council
CAPITAL PROGRAMME GROUP

		NAME	SIGNED	DATE
DATUM				
BENCH MK.				
RL				
SURVEY				
SURVEY LB				
DESIGNED		DJG	DJG	06.2015
DES. REVIEW		DAH	DAH	06.2015
DRAWN		DLM	DLM	06.2015
DRW. CHECK		DJG	DJG	06.2015
FILE LOCATION	S:\300 Drawings\CAD\			
DRAIN. REF.	3384543-CE-031.dwg			
SAP WBS	PRINTED ON 11-Jun-15 BY DLM1			

APPROVED
FOR TENDER — DATE — SIGNED
FOR CONSTRUCTION — DATE — SIGNED

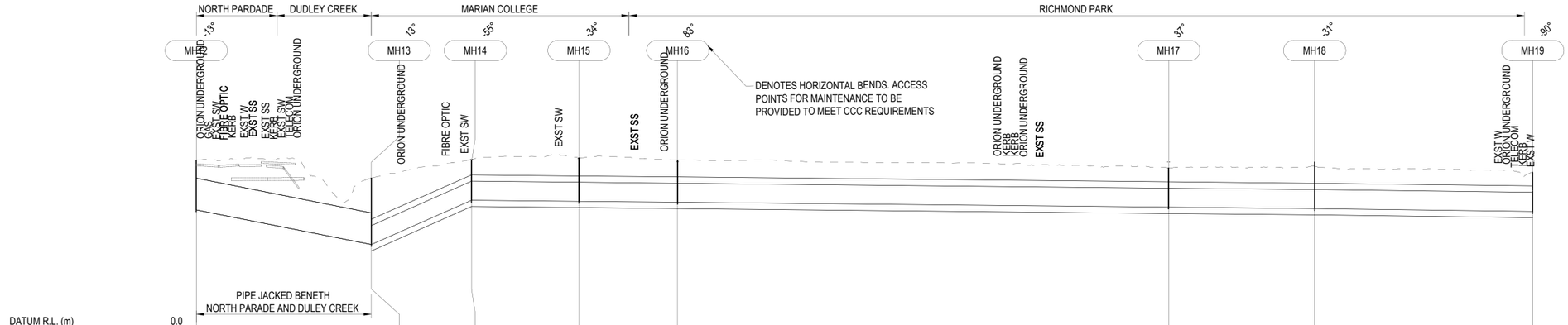
CONSULTANT: Beca OPUS
CONSULTANT PROJECT REF.: 3384543 / 3C1262.00
CONSULTANT FILE REF.: S:\300 Drawings\CAD

PROJECT TITLE: **DUDLEY CREEK FLOOD REMEDIATION**

DRAWING TITLE: **OPTION B3 LONG SECTION (GRAVITY)**

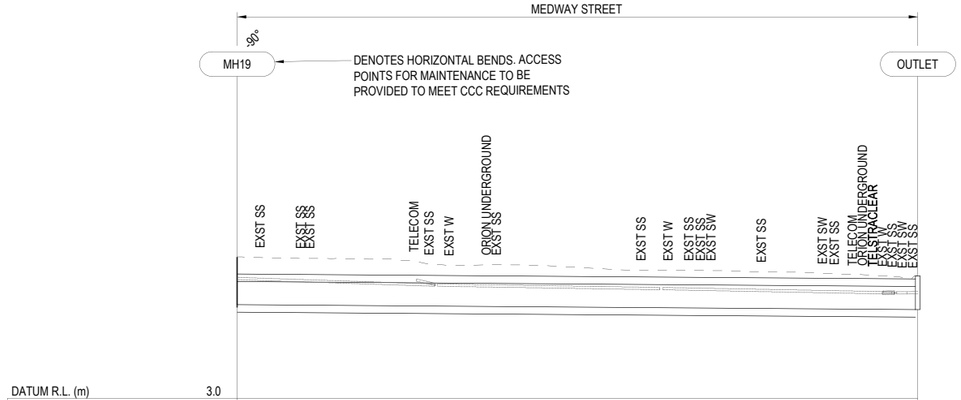
CONTRACT NUMBER: 14/15-192
CAD DRAWING FILE REF.: 3384543-CE-031
ORIGINAL SHEET SIZE: A1
SCALES: 1:1000 @ A1
CPG PROJECT FILE NUMBER: CP502630
SHEET: 1 OF 3


RICHMOND PARK
MARIAN COLLEGE
SHIRLEY INTERMEDIATE SCHOOL
SHIRLEY BOYS HIGH SCHOOL
NORTH PARADE
POULTON AVENUE
MEDWAY STREET
WOODCHESTER AVE
MH11 CH563m
MH12 CH591m
MH13 CH660m
MH14 CH699m
MH15 CH742m
MH16 CH780m
MH17 CH974m
MH18 CH1031m
MH19 CH1117m


NORTH PARDADE
DUDLEY CREEK
MARIAN COLLEGE
RICHMOND PARK
MH12
MH13
MH14
MH15
MH16
MH17
MH18
MH19
ORION UNDERGROUND
EXST SW
FIBRE OPTIC
KERB
EXST W
EXST SS
EXST SW
KERB
EXST SW
ORION UNDERGROUND
ORION UNDERGROUND
FIBRE OPTIC
EXST SW
EXST SW
EXST SS
ORION UNDERGROUND
DENOTES HORIZONTAL BENDS. ACCESS POINTS FOR MAINTENANCE TO BE PROVIDED TO MEET CCC REQUIREMENTS
ORION UNDERGROUND
KERB
ORION UNDERGROUND
EXST SS
EXST W
TELECOM
KERB
EXST W
PIPE JACKED BENETH NORTH PARADE AND DULEY CREEK

| | | |





DATUM R.L. (m)	3.0		
LID LEVEL	12.20		11.00
INVERT LEVEL	9.12 9.10	9.12	8.80 8.80
DEPTH TO INVERT	3.10	3.08	2.20
PIPE SIZE		3000x1500mm	
GRADE		0.14%	
CHAINAGE		1117.3 222.02m	1339.4

SW LINE OPTION B3

LEGEND

- EXISTING PROPERTY BOUNDARIES
- SW — EXISTING STORMWATER PIPE
- SS — EXISTING SANITARY SEWER PIPE
- EXISTING STORMWATER OR SANITARY SEWER (LONG SECTION)
- 81 — PROPERTY ADDRESS NUMBER
- EXISTING BRIDGES
- EXISTING DUDLEY CREEK
- EXISTING TREE
- EXISTING TOP OF BANK
- EXISTING BOTTOM OF BANK
- CERA REDZONE PROPERTY
- PROPOSED BYPASS PIPE

NOTES

1. PIPE TYPE REFERS TO A 3.0m WIDE x 1.5m HIGH BOX CULVERT AS PER DETAIL A ON DRAWING 3384543-CE-050.

ORIGINAL DRAWING IN COLOUR

FOR INFORMATION
NOT FOR CONSTRUCTION

ISSUE	AMENDMENTS	SIGNED	DATE
A	CONCEPT DESIGN	DAH	11.06.15

© COPYRIGHT CHRISTCHURCH CITY COUNCIL \ AERIAL PHOTOGRAPHY © COPYRIGHT TERRALINK INTERNATIONAL LIMITED

Christchurch City Council
CAPITAL PROGRAMME GROUP

		NAME	SIGNED	DATE
DATUM				
BENCH MK.	DESIGNED	DJG	DJG	06.2015
RL	DES. REVIEW	DAH	DAH	06.2015
SURVEY	DRAWN	DLM	DLM	06.2015
SURVEY LB	DRW. CHECK	DJG	DJG	06.2015
	FILE LOCATION	S:\300 Drawings\CAD\		
DRAIN. REF.	3384543-CE-033.dwg			
SAP WBS	PRINTED ON 11-Jun-15 BY DLM1			

APPROVED
FOR TENDER — DATE — SIGNED
FOR CONSTRUCTION — DATE — SIGNED

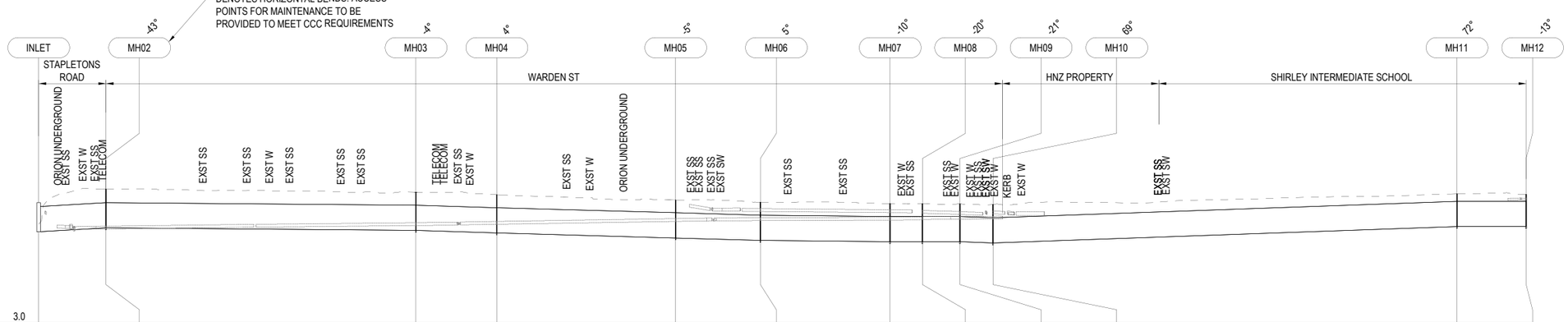
CONSULTANT: Beca OPUS
CONSULTANT PROJECT REF.: 3384543 / 3C1262.00
CONSULTANT FILE REF.: S:\300 Drawings\CAD

PROJECT TITLE: **DUDLEY CREEK FLOOD REMEDIATION**

DRAWING TITLE: **OPTION B3 LONG SECTION (GRAVITY)**

CONTRACT NUMBER: 14/15-192
CAD DRAWING FILE REF.: 3384543-CE-033
ORIGINAL SHEET SIZE: A1
CPG PROJECT FILE NUMBER: CP502630
SCALES: 1:1000 @ A1
SHEET: 3 OF 3





DATUM R.L. (m)	3.0																						
LID LEVEL	12.50		13.57			13.33		13.14		12.71		12.53		12.43		12.42		12.40		12.35			13.20		13.16
INVERT LEVEL		10.20		10.50	10.50		10.30	10.30	10.10	10.10	9.70	9.70	9.50	9.50	9.40	9.40	9.40	9.40	9.40	9.40	9.30	9.30	10.60	10.60	10.60
DEPTH TO INVERT		2.30		3.07			3.03		3.04		3.01		3.03		3.03		3.02		3.00		3.05		2.60		2.56
PIPE SIZE		2000mm		2000mm			2000mm		2000mm		2000mm		2000mm		2000mm		2000mm		2000mm		2000mm		2000mm		
GRADE		-1.12%		0.16%			0.62%		0.56%		0.59%		0.19%		-0.01%		-0.01%		0.76%		-0.71%		-0.01%		
CHAINAGE	0.0	26.72m		26.7	123.09m		149.8	32.13m	181.9	71.02m	252.9	33.65m	286.6	51.49m	338.1	12.84m	350.9	14.93m	365.9	13.10m	379.0	184.28m	563.2	27.48m	590.7

SW LINE OPTION B4

LEGEND

- EXISTING PROPERTY BOUNDARIES
- SW EXISTING STORMWATER PIPE
- SS EXISTING SANITARY SEWER PIPE
- EXISTING STORMWATER OR SANITARY SEWER (LONG SECTION)
- 81 PROPERTY ADDRESS NUMBER
- EXISTING BRIDGES
- EXISTING DUDLEY CREEK
- EXISTING TREE
- EXISTING TOP OF BANK
- EXISTING BOTTOM OF BANK
- PROPOSED BYPASS PIPE

NOTES

1. PIPE TYPE REFERS TO A DN2000 PE100 PN 6.3 AS PER DETAIL B ON DRAWING 3384543-CE-060.
2. PUMP STATION LOCATED IN WARDEN STREET.

ORIGINAL DRAWING IN COLOUR

FOR INFORMATION
NOT FOR CONSTRUCTION

ISSUE	AMENDMENTS	SIGNED	DATE
A	CONCEPT DESIGN	DAH	11.06.15

© COPYRIGHT CHRISTCHURCH CITY COUNCIL \ AERIAL PHOTOGRAPHY © COPYRIGHT TERRALINK INTERNATIONAL LIMITED

Christchurch City Council
CAPITAL PROGRAMME GROUP

		NAME	SIGNED	DATE
DATUM				
BENCH MK.				
RL				
SURVEY				
SURVEY LB				
DESIGNED		DJG	DJG	06.2015
DES. REVIEW		DAH	DAH	06.2015
DRAWN		DLM	DLM	06.2015
DRW. CHECK		DJG	DJG	06.2015
FILE LOCATION	S:\300 Drawings\CAD\			
DRAIN. REF.	3384543-CE-034.dwg			
SAP WBS	PRINTED ON 11-Jun-15 BY DLM1			

APPROVED
FOR TENDER — DATE — SIGNED
FOR CONSTRUCTION — DATE — SIGNED

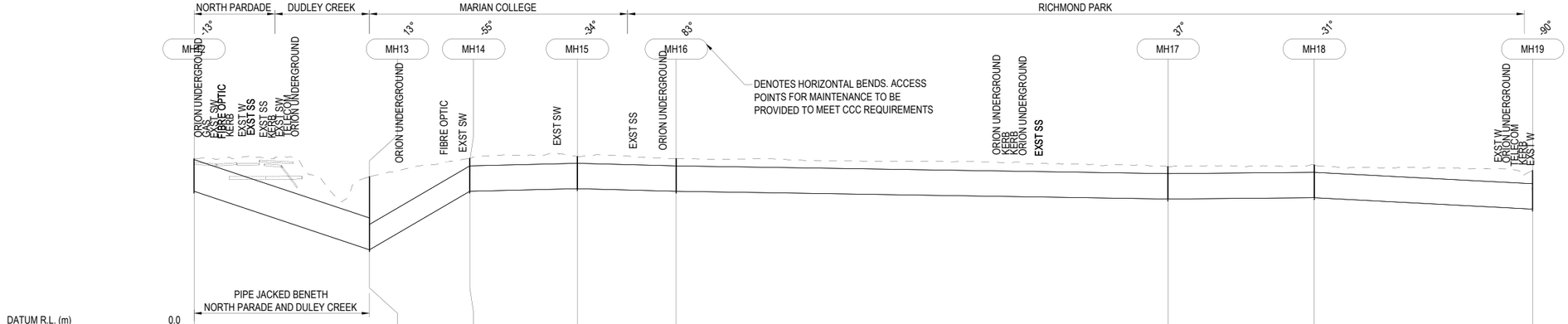
CONSULTANT: Beca OPUS
CONSULTANT PROJECT REF.: 3384543 / 3C1262.00
CONSULTANT FILE REF.: S:\300 Drawings\CAD

PROJECT TITLE: **DUDLEY CREEK FLOOD REMEDIATION**

DRAWING TITLE: **OPTION B4 LONG SECTION (PUMPED)**

CONTRACT NUMBER: 14/15-192
CAD DRAWING FILE REF.: 3384543-CE-034
ORIGINAL SHEET SIZE: A1
SCALES: 1:1000 @ A1
CPG PROJECT FILE NUMBER: CP502630
SHEET: 1 OF 3





DATUM R.L. (m)	0.0																					
LID LEVEL	13.16			11.75		13.19		13.35		13.17			12.54		12.67			12.24				
INVERT LEVEL	10.60	10.60		6.00	6.00	10.60	10.60	10.80	10.80	10.60	10.60		10.00	10.00	10.10	10.10		9.20				
DEPTH TO INVERT	2.56			5.75		2.59		2.55		2.57			2.54		2.57			3.04				
PIPE SIZE	2500mm			2000mm		2000mm		2000mm		2000mm			2000mm		2000mm							
GRADE	6.67%			-11.66%		-0.47%		0.51%		0.31%			-0.17%		1.05%							
CHAINAGE	590.7	69.00m		659.7	39.46m	699.2	42.33m	741.5	38.91m	780.4	193.45m		973.9	57.54m	1031.4	85.92m		1117.3				

SW LINE OPTION B4

LEGEND

- EXISTING PROPERTY BOUNDARIES
- SW — EXISTING STORMWATER PIPE
- SS — EXISTING SANITARY SEWER PIPE
- EXISTING STORMWATER OR SANITARY SEWER (LONG SECTION)
- 81 — PROPERTY ADDRESS NUMBER
- EXISTING BRIDGES
- EXISTING DUDLEY CREEK
- EXISTING TREE
- EXISTING TOP OF BANK
- EXISTING BOTTOM OF BANK
- PROPOSED BYPASS PIPE

NOTES

1. PIPE TYPE REFERS TO A DN2000 PE100 PN 6.3 AS PER DETAIL B ON DRAWING 3384543-CE-060.

ORIGINAL DRAWING IN COLOUR

FOR INFORMATION NOT FOR CONSTRUCTION

ISSUE	AMENDMENTS	SIGNED	DATE
A	CONCEPT DESIGN	DAH	11.06.15

© COPYRIGHT CHRISTCHURCH CITY COUNCIL - AERIAL PHOTOGRAPHY © COPYRIGHT TERRALINK INTERNATIONAL LIMITED

Christchurch City Council
CAPITAL PROGRAMME GROUP

		NAME	SIGNED	DATE
DATUM				
BENCH MK.				
RL				
SURVEY				
SURVEY LB				
DESIGNED		DJG	DJG	06.2015
DES. REVIEW		DAH	DAH	06.2015
DRAWN		DLM	DLM	06.2015
DRW. CHECK		DJG	DJG	06.2015
FILE LOCATION	S:\300 Drawings\CAD\			
DRAIN. REF.	3384543-CE-035.dwg			
SAP WBS	PRINTED ON 11-Jun-15 BY DLM1			

APPROVED
FOR TENDER — DATE — SIGNED
FOR CONSTRUCTION — DATE — SIGNED

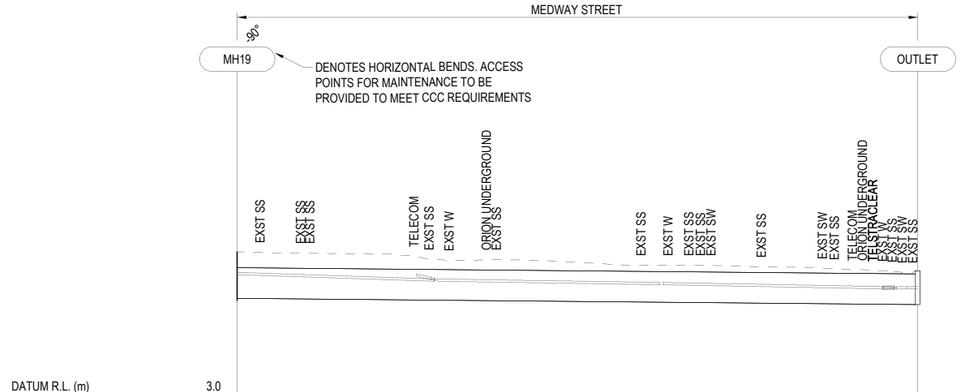
CONSULTANT: Beca OPUS
CONSULTANT PROJECT REF.: 3384543 / 3C1262.00
CONSULTANT FILE REF.: S:\300 Drawings\CAD

PROJECT TITLE: **DUDLEY CREEK FLOOD REMEDIATION**

DRAWING TITLE: **OPTION B4 LONG SECTION (PUMPED)**

CONTRACT NUMBER: 14/15-192
CAD DRAWING FILE REF.: 3384543-CE-035
ORIGINAL SHEET SIZE: A1
SCALES: 1:1000 @ A1
CPG PROJECT FILE NUMBER: CP502630
SHEET: 2 OF 3





DATUM R.L. (m)	3.0	
LID LEVEL	12.24	11.00
INVERT LEVEL	9.20 / 9.20	8.80 / 8.80
DEPTH TO INVERT	3.04	2.20
PIPE SIZE	2000mm	
GRADE	0.18%	
CHAINAGE	1117.3	1339.4

SW LINE OPTION B4

LEGEND

- EXISTING PROPERTY BOUNDARIES
- SW — EXISTING STORMWATER PIPE
- SS — EXISTING SANITARY SEWER PIPE
- EXISTING STORMWATER OR SANITARY SEWER (LONG SECTION)
- 81 — PROPERTY ADDRESS NUMBER
- EXISTING BRIDGES
- EXISTING DUDLEY CREEK
- EXISTING TREE
- EXISTING TOP OF BANK
- EXISTING BOTTOM OF BANK
- CERA REDZONE PROPERTY
- PROPOSED BYPASS PIPE

NOTES

1. PIPE TYPE REFERS TO A DN2000 PE100 PN 6.3 AS PER DETAIL B ON DRAWING 3384543-CE-060.

ORIGINAL DRAWING IN COLOUR

FOR INFORMATION
NOT FOR CONSTRUCTION

ISSUE	AMENDMENTS	SIGNED	DATE
A	CONCEPT DESIGN	DAH	11.06.15

© COPYRIGHT CHRISTCHURCH CITY COUNCIL \ AERIAL PHOTOGRAPHY © COPYRIGHT TERRALINK INTERNATIONAL LIMITED

Christchurch City Council
CAPITAL PROGRAMME GROUP

		NAME	SIGNED	DATE
DATUM				
BENCH MK.	DESIGNED	DJG	DJG	06.2015
RL	DES. REVIEW	DAH	DAH	06.2015
SURVEY	DRAWN	DLM	DLM	06.2015
SURVEY LB	DRW. CHECK	DJG	DJG	06.2015
	FILE LOCATION	S:\300 Drawings\CAD\		
DRAIN. REF.	3384543-CE-036.dwg			
SAP WBS	PRINTED ON 11-Jun-15 BY DLM1			

APPROVED

FOR TENDER	
DATE	SIGNED

FOR CONSTRUCTION	
DATE	SIGNED

CONSULTANT: Beca OPUS

CONSULTANT PROJECT REF.: 3384543 / 3C1262.00

CONSULTANT FILE REF.: S:\300 Drawings\CAD

PROJECT TITLE: **DUDLEY CREEK FLOOD REMEDIATION**

DRAWING TITLE: **OPTION B4 LONG SECTION (PUMPED)**

CONTRACT NUMBER: 14/15-192

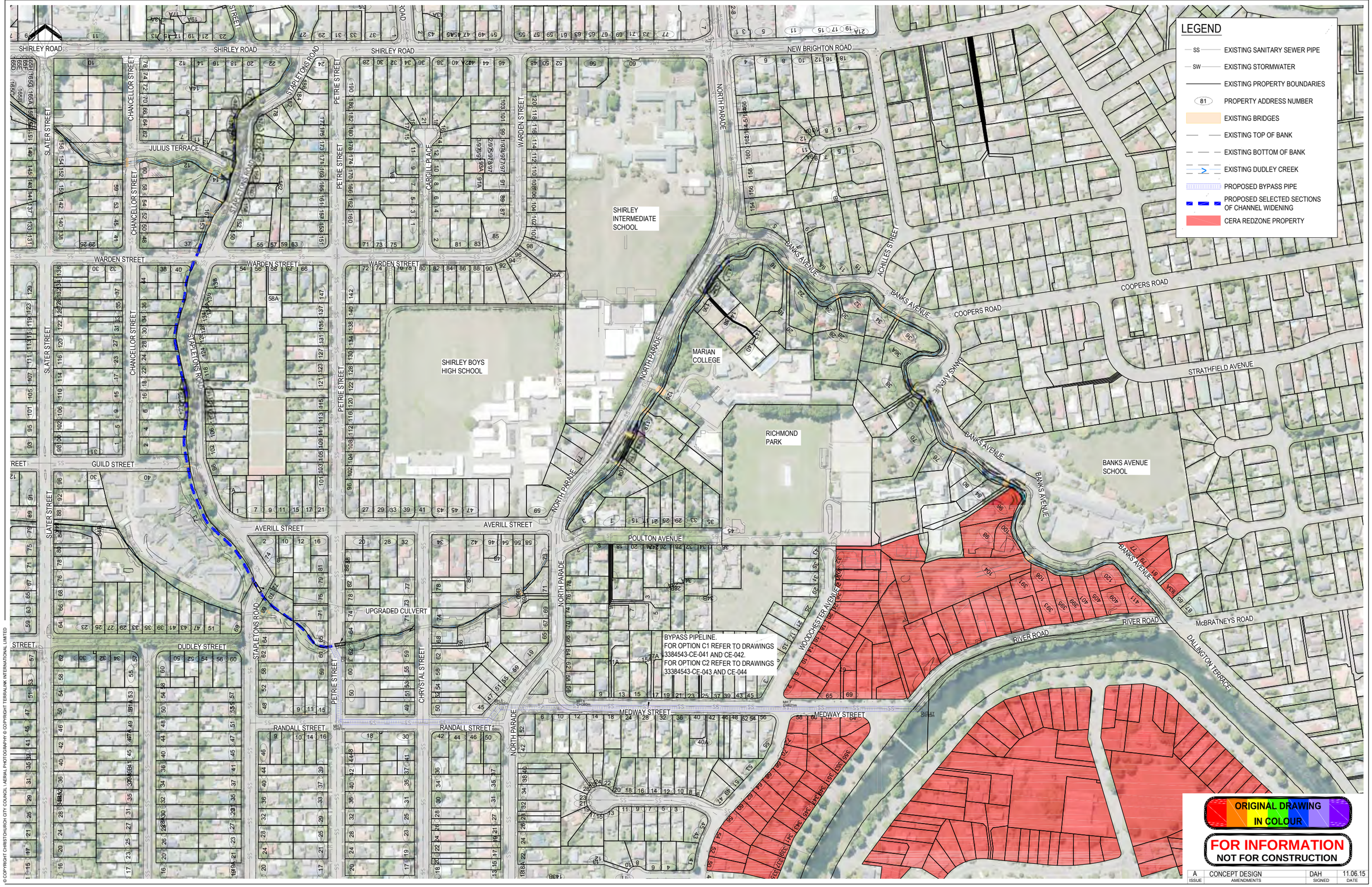
CAD DRAWING FILE REF.: 3384543-CE-036

ORIGINAL SHEET SIZE: A1

SCALES: 1:1000 @ A1

CPG PROJECT FILE NUMBER: CP502630

SHEET: 3 OF 3



© COPYRIGHT CHRISTCHURCH CITY COUNCIL LAERIAL PHOTOGRAPHY © COPYRIGHT TERRALINK INTERNATIONAL LIMITED

ISSUE	AMENDMENTS	SIGNED	DATE
A	CONCEPT DESIGN	DAH	11.06.15

Christchurch City Council
CAPITAL PROGRAMME GROUP

		NAME	SIGNED	DATE
DATUM				
BENCH MK.				
RL				
SURVEY				
SURVEY LB				
		DESIGNED	DJG	06.2015
		DES. REVIEW	DAH	06.2015
		DRAWN	DLM	06.2015
		DRW. CHECK	DJG	06.2015
		FILE LOCATION	S:\300 Drawings\CAD\	
DRAIN. REF.		3384543-CE-040.dwg		
SAP WBS		PRINTED ON 11-Jun-15	BY DLM1	

APPROVED

FOR TENDER	
DATE	SIGNED

FOR CONSTRUCTION	
DATE	SIGNED

CONSULTANT: Beca OPUS

CONSULTANT PROJECT REF.	CONSULTANT FILE REF.
3384543 / 3C1262.00	S:\300 Drawings\CAD

PROJECT TITLE

DUDLEY CREEK FLOOD REMEDIATION

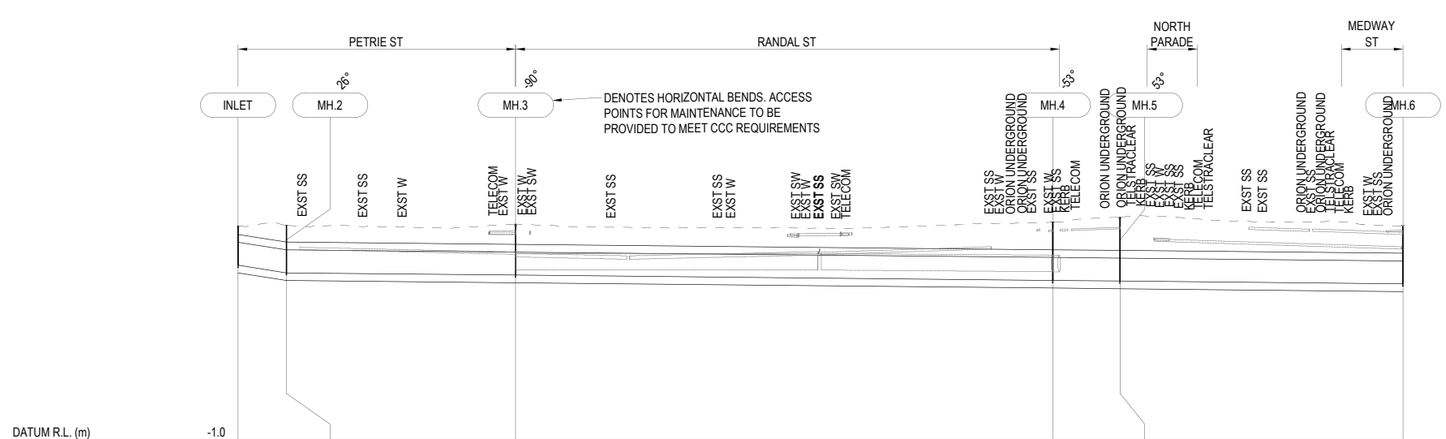
DRAWING TITLE

OPTION C - C1 (GRAVITY) AND C2 (PUMPED)

CONTRACT NUMBER	ORIGINAL SHEET SIZE	SCALES
14/15-192	A1	1:2000 @ A1
CAD DRAWING FILE REF. 3384543-CE-040		
CPG PROJECT FILE NUMBER CP502630	SHEET 1 OF 1	

ISSUE





DATUM R.L. (m)	-1.0																							
LID LEVEL	12.92			12.97				13.04						13.17				13.48					12.89	
INVERT LEVEL	10.36		9.87	9.87			9.72	9.72					9.37	9.37			9.33	9.33				9.14		
DEPTH TO INVERT	2.56			3.10				3.32						3.80				4.16					3.75	
PIPE SIZE	4000x1500mm			4000x1500mm				4000x1500mm						4000x1500mm				4000x1500mm						
GRADE	3.13%			0.2%				0.2%						0.19%				0.2%						
CHAINAGE	0.0	15.80m		15.8	74.74m			90.5	175.25m					265.8	21.90m			287.7	92.33m				380.0	

SW LINE OPTION D1

LEGEND

- EXISTING PROPERTY BOUNDARIES
- SW EXISTING STORMWATER PIPE
- SS EXISTING SANITARY SEWER PIPE
- EXISTING STORMWATER OR SANITARY SEWER (LONG SECTION)
- 81 PROPERTY ADDRESS NUMBER
- EXISTING BRIDGES
- EXISTING DUDLEY CREEK
- EXISTING TREE
- EXISTING TOP OF BANK
- EXISTING BOTTOM OF BANK
- CERA REDZONE PROPERTY
- PROPOSED BYPASS PIPE

NOTES

1. PIPE TYPE REFERS TO A 4.0m WIDE x 1.5m HIGH BOX CULVERT AS PER DETAIL A ON DRAWING 3384543-CE-050.

ORIGINAL DRAWING IN COLOUR

FOR INFORMATION
NOT FOR CONSTRUCTION

ISSUE	AMENDMENTS	SIGNED	DATE
A	CONCEPT DESIGN		11.06.15

© COPYRIGHT CHRISTCHURCH CITY COUNCIL | AERIAL PHOTOGRAPHY © COPYRIGHT TERRALINK INTERNATIONAL LIMITED

Christchurch City Council
CAPITAL PROGRAMME GROUP

		NAME	SIGNED	DATE
DATUM				
BENCH MK.	DESIGNED	DJG	DJG	06.2015
RL	DES. REVIEW	DAH	DAH	06.2015
SURVEY	DRAWN	DLM	DLM	06.2015
SURVEY LB	DRW. CHECK	DJG	DJG	06.2015
DRAIN. REF.	FILE LOCATION	S:\300 Drawings\CAD\		
SAP WBS	3384543-CE-041.dwg			
	PRINTED ON 11-Jun-15 BY DLM1			

APPROVED

FOR TENDER	
DATE	SIGNED

FOR CONSTRUCTION	
DATE	SIGNED

CONSULTANT: Beca OPUS

CONSULTANT PROJECT REF.: 3384543 / 3C1262.00

CONSULTANT FILE REF.: S:\300 Drawings\CAD

PROJECT TITLE: **DUDLEY CREEK FLOOD REMEDIATION**

DRAWING TITLE: **OPTION C1 LONG SECTION (GRAVITY)**

CONTRACT NUMBER: 14/15-192

CAD DRAWING FILE REF.: 3384543-CE-041

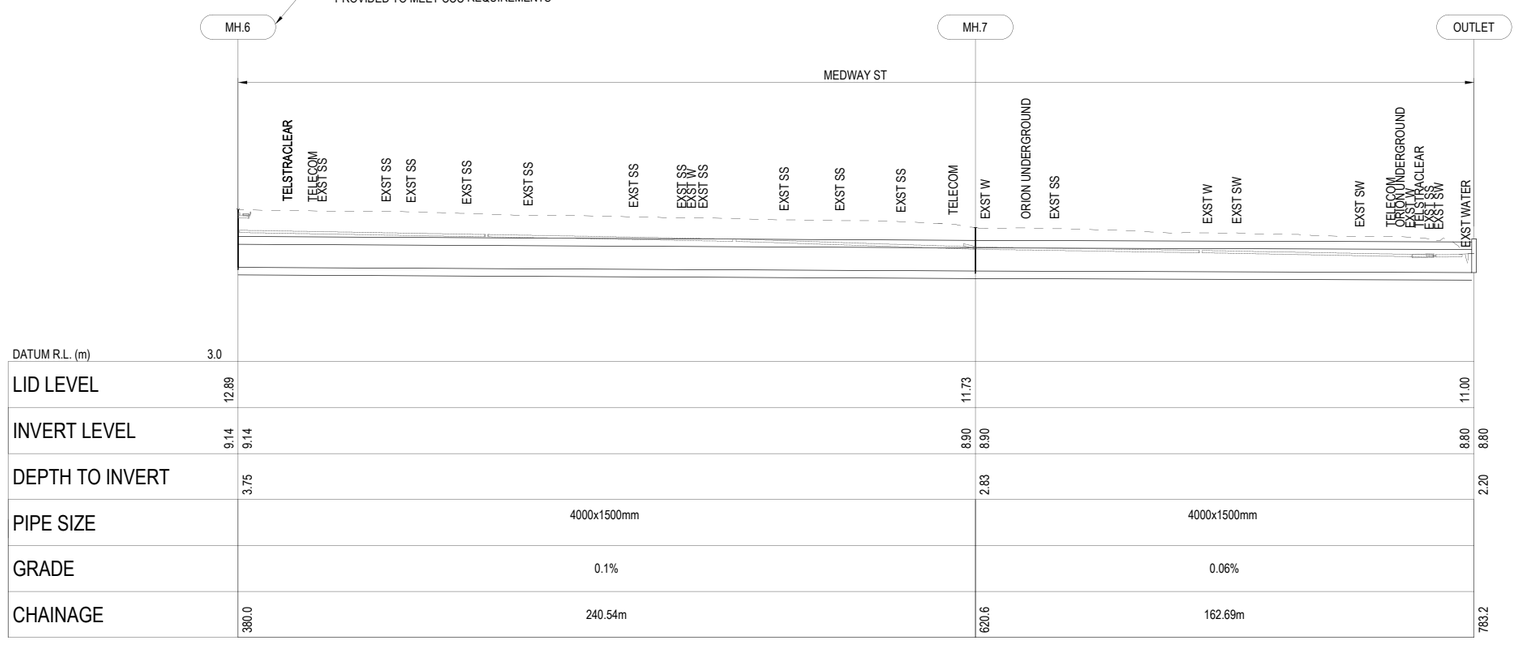
ORIGINAL SHEET SIZE: A1

SCALES: 1:1000 @ A1

CPG PROJECT FILE NUMBER: CP502630

SHEET: 1 OF 2





DATUM R.L. (m)	3.0		
LID LEVEL	12.89	11.73	11.00
INVERT LEVEL	9.14 / 9.14	8.90 / 8.90	8.80 / 8.80
DEPTH TO INVERT	3.75	2.83	2.20
PIPE SIZE	4000x1500mm	4000x1500mm	
GRADE	0.1%	0.06%	
CHAINAGE	380.0	620.6	783.2
	240.54m	162.69m	

SW LINE OPTION D1

LEGEND

- EXISTING PROPERTY BOUNDARIES
- SW — EXISTING STORMWATER PIPE
- SS — EXISTING SANITARY SEWER PIPE
- EXISTING STORMWATER OR SANITARY SEWER (LONG SECTION)
- 81 — PROPERTY ADDRESS NUMBER
- EXISTING BRIDGES
- EXISTING DUDLEY CREEK
- EXISTING TREE
- EXISTING TOP OF BANK
- EXISTING BOTTOM OF BANK
- CERA REDZONE PROPERTY
- PROPOSED BYPASS PIPE

NOTES

1. PIPE TYPE REFERS TO A 4.0m WIDE x 1.5m HIGH BOX CULVERT AS PER DETAIL A ON DRAWING 3384543-CE-050.

ORIGINAL DRAWING IN COLOUR

FOR INFORMATION NOT FOR CONSTRUCTION

ISSUE	AMENDMENTS	SIGNED	DATE
A	CONCEPT DESIGN	DAH	11.06.15

© COPYRIGHT CHRISTCHURCH CITY COUNCIL \ AERIAL PHOTOGRAPHY © COPYRIGHT TERRALINK INTERNATIONAL LIMITED

Christchurch City Council
CAPITAL PROGRAMME GROUP

		NAME	SIGNED	DATE
DATUM				
BENCH MK.				
RL		DESIGNED	DJG	DJG	06.2015
SURVEY		DES. REVIEW	DAH	DAH	06.2015
SURVEY LB		DRAWN	DLM	DLM	06.2015
		DRW. CHECK	DJG	DJG	06.2015
		FILE LOCATION	S:\300 Drawings\CAD\		
DRAIN. REF.		3384543-CE-042.dwg			
SAP WBS		PRINTED ON 11-Jun-15 BY DLM1			

APPROVED

FOR TENDER	
DATE	SIGNED

FOR CONSTRUCTION	
DATE	SIGNED

CONSULTANT: Beca OPUS

CONSULTANT PROJECT REF.: 3384543 / 3C1262.00

CONSULTANT FILE REF.: S:\300 Drawings\CAD

PROJECT TITLE: **DUDLEY CREEK FLOOD REMEDIATION**

DRAWING TITLE: **OPTION C1 LONG SECTION (GRAVITY)**

CONTRACT NUMBER: 14/15-192

CAD DRAWING FILE REF.: 3384543-CE-042

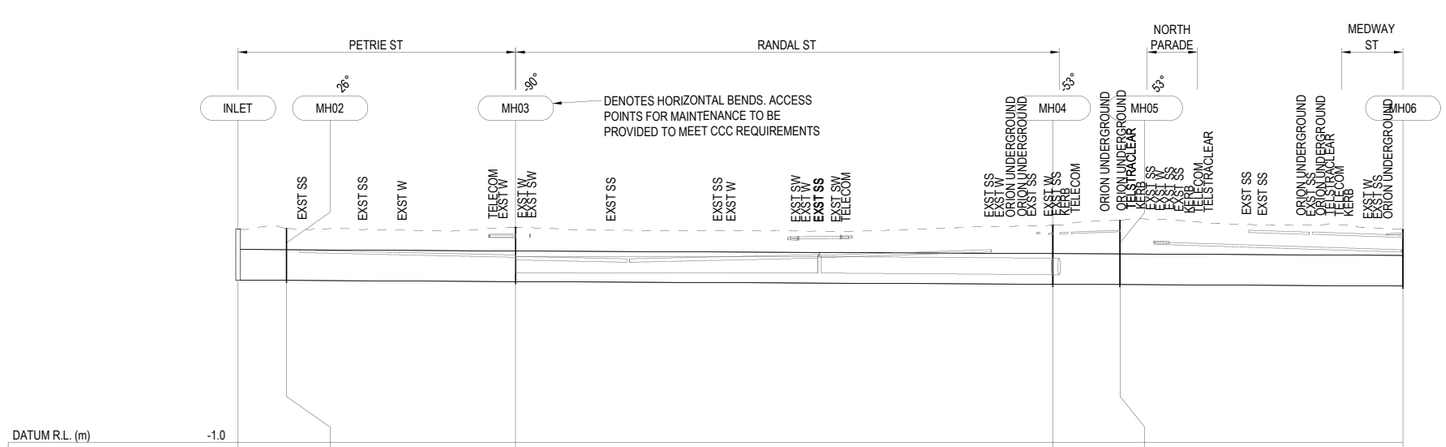
ORIGINAL SHEET SIZE: A1

SCALES: 1:1000 @ A1

CPG PROJECT FILE NUMBER: CP502630

SHEET: 2 OF 2





DATUM R.L. (m)	-1.0																	
LID LEVEL	12.91		12.95			13.04					13.17		13.48			12.89		
INVERT LEVEL	9.58		9.56		9.56		9.49	9.49			9.32	9.32	9.29	9.29		9.20		
DEPTH TO INVERT	3.33		3.39				3.55					3.85		4.19				3.69
PIPE SIZE	2000mm		2000mm				2000mm					2000mm		2000mm				
GRADE	0.1%		0.1%				0.1%					0.1%		0.1%				
CHAINAGE	0.0	15.80m	15.8		74.74m		90.5			175.25m		265.8	21.90m	287.7		92.33m		380.0

SW LINE OPTION D2

LEGEND

- EXISTING PROPERTY BOUNDARIES
- SW EXISTING STORMWATER PIPE
- SS EXISTING SANITARY SEWER PIPE
- EXISTING STORMWATER OR SANITARY SEWER (LONG SECTION)
- 81 PROPERTY ADDRESS NUMBER
- EXISTING BRIDGES
- EXISTING DUDLEY CREEK
- EXISTING TREE
- EXISTING TOP OF BANK
- EXISTING BOTTOM OF BANK
- CERA REDZONE PROPERTY
- PROPOSED BYPASS PIPE

NOTES

1. PIPE TYPE REFERS TO A DN2000 PE100 PN 6.3 AS PER DETAIL B ON DRAWING 3384543-CE-060.

ORIGINAL DRAWING IN COLOUR

FOR INFORMATION
NOT FOR CONSTRUCTION

ISSUE	AMENDMENTS	SIGNED	DATE
A	CONCEPT DESIGN	DAH	11.06.15

© COPYRIGHT CHRISTCHURCH CITY COUNCIL \ AERIAL PHOTOGRAPHY © COPYRIGHT TERRALINK INTERNATIONAL LIMITED

Christchurch City Council
CAPITAL PROGRAMME GROUP

		NAME	SIGNED	DATE
DATUM				
BENCH MK.	DESIGNED	DJG	DJG	06.2015
RL	DES. REVIEW	DAH	DAH	06.2015
SURVEY	DRAWN	DLM	DLM	06.2015
SURVEY LB	DRW. CHECK	DJG	DJG	06.2015
DRAIN. REF.	FILE LOCATION	S:\300 Drawings\CAD\		
SAP WBS	3384543-CE-043.dwg			
	PRINTED ON 11-Jun-15 BY DLM1			

APPROVED

FOR TENDER	
DATE	SIGNED

FOR CONSTRUCTION	
DATE	SIGNED

CONSULTANT: Beca OPUS

CONSULTANT PROJECT REF.: 3384543 / 3C1262.00

CONSULTANT FILE REF.: S:\300 Drawings\CAD

PROJECT TITLE: **DUDLEY CREEK FLOOD REMEDIATION**

DRAWING TITLE: **OPTION C2 LONG SECTION (PUMPED)**

CONTRACT NUMBER: 14/15-192

CAD DRAWING FILE REF.: 3384543-CE-043

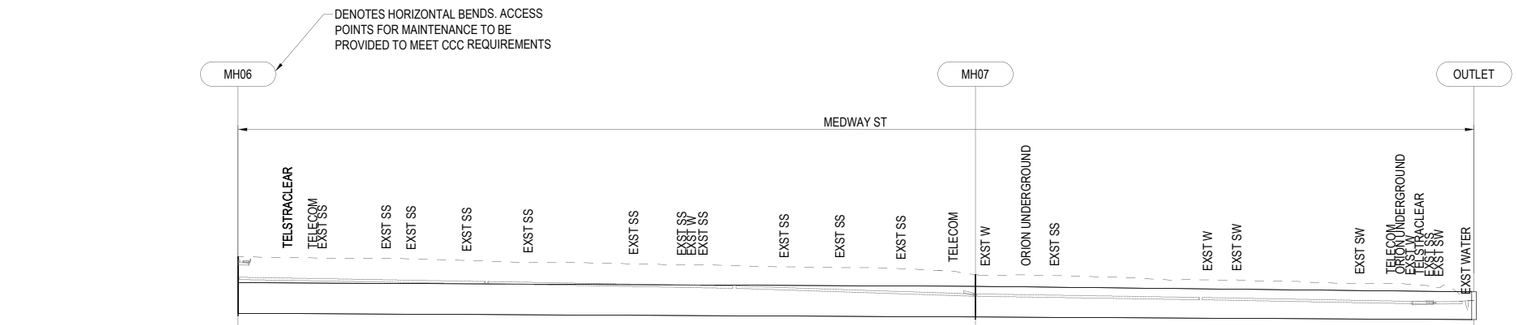
ORIGINAL SHEET SIZE: A1

SCALES: 1:1000 @ A1

CPG PROJECT FILE NUMBER: CP502630

SHEET: 1 OF 2





DATUM R.L. (m)	3.0				
LID LEVEL	12.89		11.73		10.60
INVERT LEVEL	9.20	9.20	8.96	8.96	8.80	8.80
DEPTH TO INVERT		3.69		2.77		1.80
PIPE SIZE		2000mm		2000mm		
GRADE		0.1%		0.1%		
CHAINAGE	380.0	240.54m	620.6	162.69m	783.2	

SW LINE OPTION D2

LEGEND

- EXISTING PROPERTY BOUNDARIES
- SW — EXISTING STORMWATER PIPE
- SS — EXISTING SANITARY SEWER PIPE
- EXISTING STORMWATER OR SANITARY SEWER (LONG SECTION)
- 81 — PROPERTY ADDRESS NUMBER
- EXISTING BRIDGES
- EXISTING DUDLEY CREEK
- EXISTING TREE
- EXISTING TOP OF BANK
- EXISTING BOTTOM OF BANK
- CERA REDZONE PROPERTY
- PROPOSED BYPASS PIPE

NOTES

1. PIPE TYPE REFERS TO A DN2000 PE100 PN 6.3 AS PER DETAIL B ON DRAWING 3384543-CE-060.

ORIGINAL DRAWING IN COLOUR

FOR INFORMATION
NOT FOR CONSTRUCTION

ISSUE	AMENDMENTS	SIGNED	DATE
A	CONCEPT DESIGN	DAH	11.06.15

© COPYRIGHT CHRISTCHURCH CITY COUNCIL \ AERIAL PHOTOGRAPHY © COPYRIGHT TERRALINK INTERNATIONAL LIMITED

Christchurch City Council
CAPITAL PROGRAMME GROUP

		NAME	SIGNED	DATE
DATUM				
BENCH MK.				
RL		DESIGNED	DJG	DJG	06.2015
SURVEY		DES. REVIEW	DAH	DAH	06.2015
SURVEY LB		DRAWN	DLM	DLM	06.2015
		DRW. CHECK	DJG	DJG	06.2015
		FILE LOCATION	S:\300 Drawings\CAD\		
DRAIN. REF.		3384543-CE-044.dwg			
SAP WBS		PRINTED ON 11-Jun-15 BY DLM1			

APPROVED

FOR TENDER	
DATE	SIGNED

FOR CONSTRUCTION	
DATE	SIGNED

CONSULTANT: Beca OPUS

CONSULTANT PROJECT REF.: 3384543 / 3C1262.00

CONSULTANT FILE REF.: S:\300 Drawings\CAD

PROJECT TITLE: **DUDLEY CREEK FLOOD REMEDIATION**

DRAWING TITLE: **OPTION C2 LONG SECTION (PUMPED)**

CONTRACT NUMBER: 14/15-192

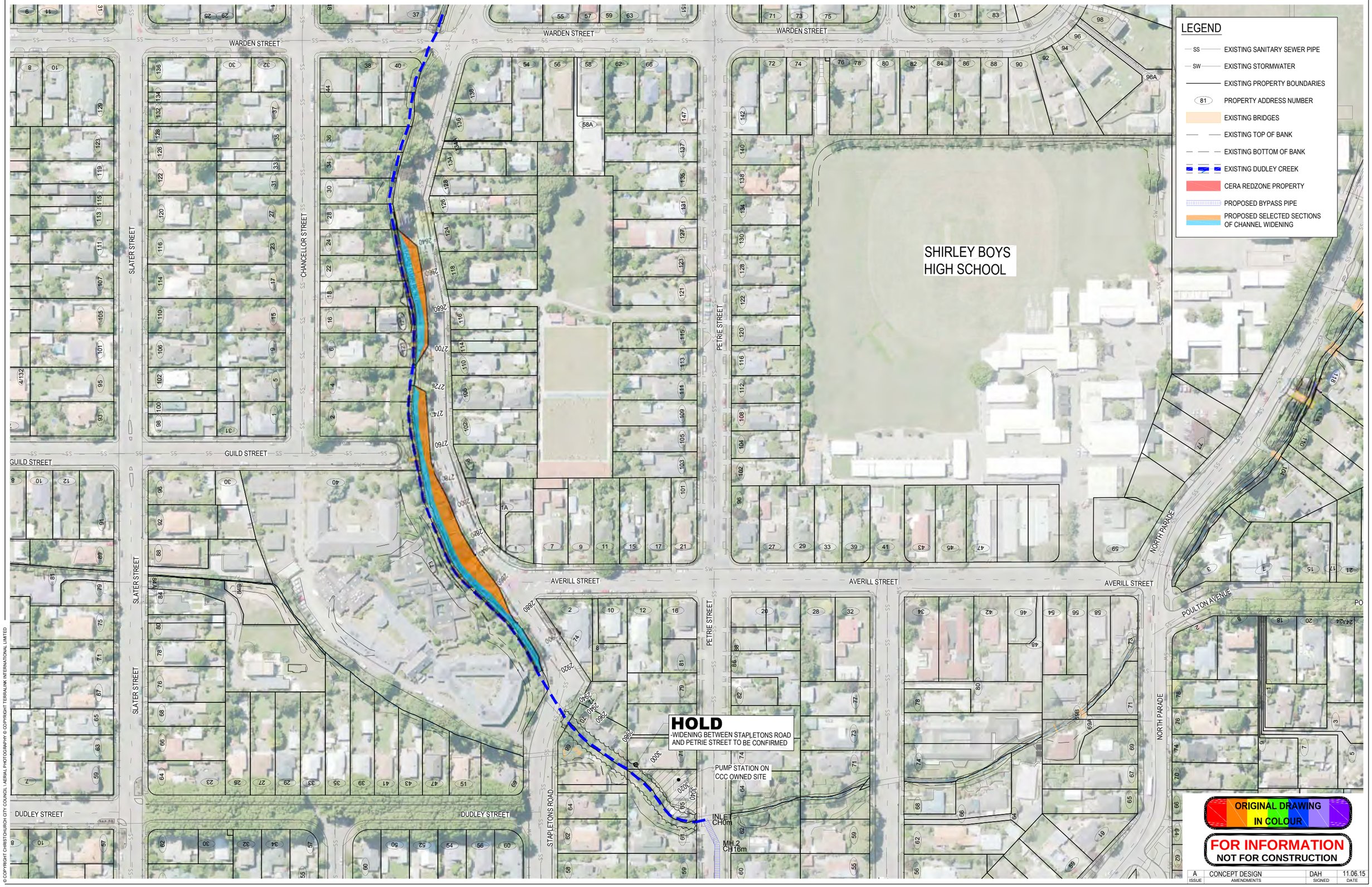
CAD DRAWING FILE REF.: 3384543-CE-044

ORIGINAL SHEET SIZE: A1

SCALES: 1:1000 @ A1

CPG PROJECT FILE NUMBER: CP502630

SHEET: 2 OF 2



ISSUE	AMENDMENTS	SIGNED	DATE
A	CONCEPT DESIGN	DAH	11.06.15

© COPYRIGHT CHRISTCHURCH CITY COUNCIL \ AERIAL PHOTOGRAPHY © COPYRIGHT TERRALINK INTERNATIONAL LIMITED

Christchurch City Council
CAPITAL PROGRAMME GROUP

		NAME	SIGNED	DATE
DATUM				
BENCH MK.				
RL	DESIGNED	DJG	DJG	06.2015
SURVEY	DES. REVIEW	DAH	DAH	06.2015
SURVEY LB	DRAWN	DLM	DLM	06.2015
	DRW. CHECK	DJG	DJG	06.2015
	FILE LOCATION	S:\300 Drawings\CAD\		
DRAIN. REF.	3384543-CE-050.dwg			
SAP WBS	PRINTED ON 11-Jun-15 BY DLM1			

APPROVED

FOR TENDER	
DATE	SIGNED

FOR CONSTRUCTION	
DATE	SIGNED

CONSULTANT: Beca OPUS

CONSULTANT PROJECT REF.: 3384543 / 3C1262.00

CONSULTANT FILE REF.: S:\300 Drawings\CAD

PROJECT TITLE: **DUDLEY CREEK FLOOD REMEDIATION**

DRAWING TITLE: **OPTION C - STAPLETONS ROAD**

CONTRACT NUMBER: 14/15-192

CAD DRAWING FILE REF.: 3384543-CE-050

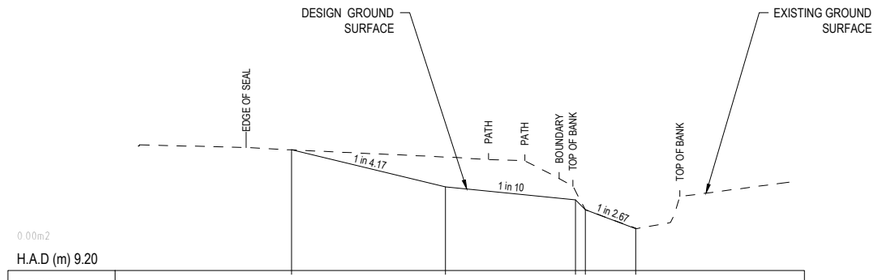
ORIGINAL SHEET SIZE: A1

SCALES: 1:1000 @ A1

CPG PROJECT FILE NUMBER: CP502630

SHEET: 1 OF 1

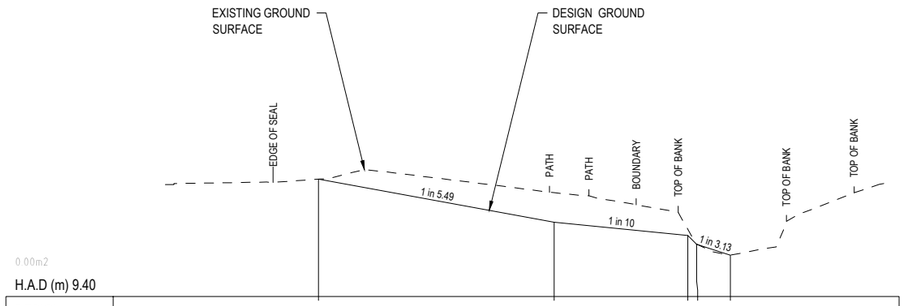
ISSUE



0.00m2

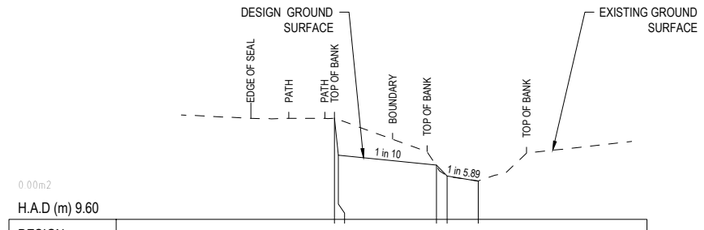
H.A.D (m) 9.20

| | | |


EXISTING GROUND SURFACE
DESIGN GROUND SURFACE
EDGE OF SEAL
PATH
PATH
BOUNDARY
TOP OF BANK
TOP OF BANK
TOP OF BANK
1 in 5.49
1 in 10
1 in 3.13
0.00m2

H.A.D (m) 9.40

| | | |



2900.00

© COPYRIGHT CHRISTCHURCH CITY COUNCIL \AERIAL PHOTOGRAPHY © COPYRIGHT TERRALINK INTERNATIONAL LIMITED

ORIGINAL DRAWING IN COLOUR

FOR INFORMATION
NOT FOR CONSTRUCTION

ISSUE	AMENDMENTS	SIGNED	DATE
A	CONCEPT DESIGN	DAH	11.06.15

Christchurch City Council

CAPITAL PROGRAMME GROUP

		NAME	SIGNED	DATE
DATUM				
BENCH MK.	DESIGNED	DJG	DJG	06.2015
RL	DES. REVIEW	DAH	DAH	06.2015
SURVEY	DRAWN	DLM	DLM	06.2015
SURVEY LB	DRW. CHECK	DJG	DJG	06.2015
	FILE LOCATION	S:\300 Drawings\CAD\		
DRAIN. REF.	3384543-CE-053.dwg			
SAP WBS	PRINTED ON 11-Jun-15 BY DLM1			

APPROVED

FOR TENDER	
DATE	SIGNED

FOR CONSTRUCTION	
DATE	SIGNED

CONSULTANT: Beca OPUS

CONSULTANT PROJECT REF.: 3384543 / 3C1262.00

CONSULTANT FILE REF.: S:\300 Drawings\CAD

PROJECT TITLE: **DUDLEY CREEK FLOOD REMEDIATION**

DRAWING TITLE: **OPTION C - STAPLETONS ROAD CROSS SECTIONS**

CONTRACT NUMBER: 14/15-192

CAD DRAWING FILE REF.: 3384543-CE-053

ORIGINAL SHEET SIZE: A1

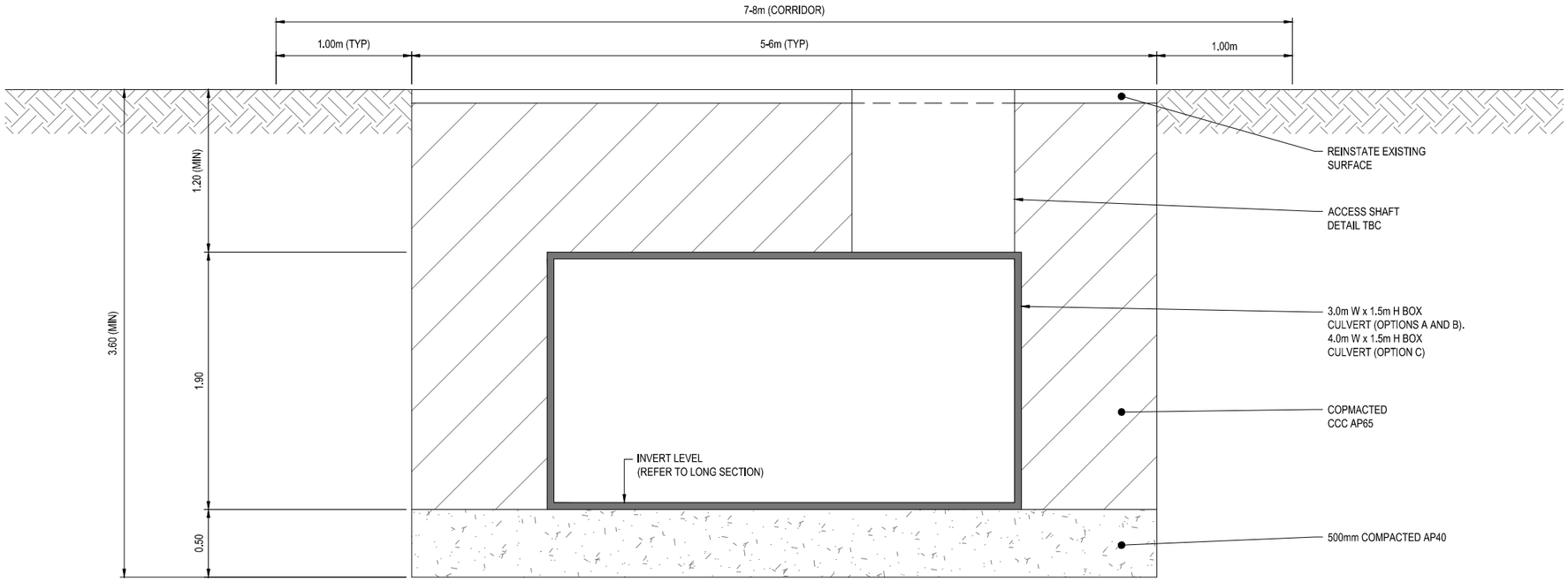
SCALES: 1:100 H @ A1, 1:1 V @ A1

CPG PROJECT FILE NUMBER: CP502630

SHEET: 3 OF 3

NOTES

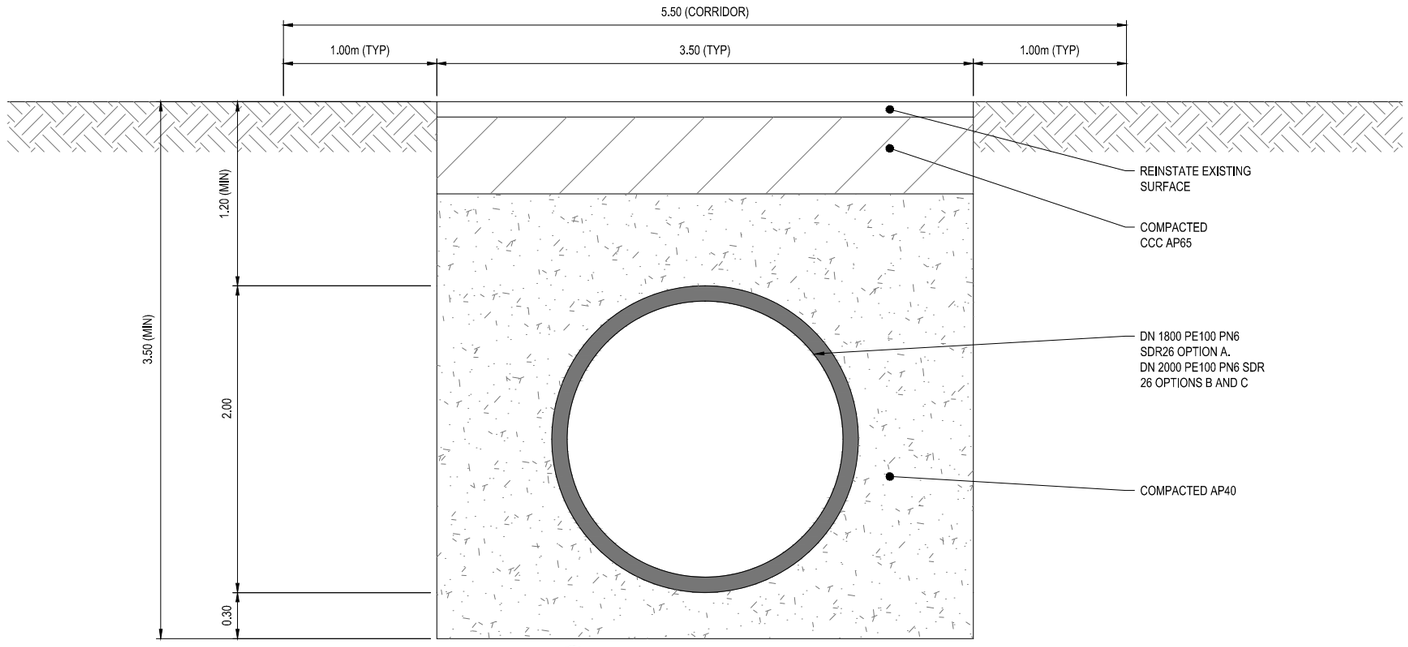
1. THE 1.0m EXTENTS ON EITHER SIDE IS WORKING ROOM TO THE NEAREST SEVICES.



A GRAVITY BYPASS
SCALE: N.T.S

NOTES

1. THE 1.0m EXTENTS ON EITHER SIDE IS WORKING ROOM TO THE NEAREST SEVICES.



B PUMPED BYPASS MAIN
SCALE: N.T.S

ORIGINAL DRAWING IN COLOUR

FOR INFORMATION
NOT FOR CONSTRUCTION

ISSUE	AMENDMENTS	SIGNED	DATE
A	CONCEPT DESIGN	DAH	11.06.15

© COPYRIGHT CHRISTCHURCH CITY COUNCIL \ AERIAL PHOTOGRAPHY © COPYRIGHT TERRALINK INTERNATIONAL LIMITED

Christchurch City Council
CAPITAL PROGRAMME GROUP

		NAME	SIGNED	DATE
DATUM				
BENCH MK.	DESIGNED	DJG	DJG	06.2015
RL	DES. REVIEW	DAH	DAH	06.2015
SURVEY	DRAWN	DLM	DLM	06.2015
SURVEY LB	DRW. CHECK	DJG	DJG	06.2015
	FILE LOCATION	S:\300 Drawings\CAD\		
DRAIN. REF.	3384543-CE-060.dwg			
SAP WBS	PRINTED ON 11-Jun-15 BY DLM1			

APPROVED	
FOR TENDER	
DATE	SIGNED
FOR CONSTRUCTION	
DATE	SIGNED

CONSULTANT: Beca OPUS

CONSULTANT PROJECT REF.: 3384543 / 3C1262.00
CONSULTANT FILE REF.: S:\300 Drawings\CAD

PROJECT TITLE: **DUDLEY CREEK FLOOD REMEDIATION**

DRAWING TITLE: **PIPE AND BOX CULVERT DETAILS**

CONTRACT NUMBER: 14/15-192
ORIGINAL SHEET SIZE: A1
SCALES: AS SHOWN
CAD DRAWING FILE REF.: 3384543-CE-060
CPG PROJECT FILE NUMBER: CP502630
SHEET: 1 OF 1