

CHARLES STREET SQUARE

DESIGN DEVELOPMENT ISSUED FOR QS REVIEW
CIVIL ENGINEERING WORKS PACKAGE



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DRAWING SCHEDULE	
DRG No.	DRAWING TITLE
C1.01	COVERSHEET, DRAWING SCHEDULE AND LOCALITY PLAN
C2.01	CONCEPT SEDIMENT AND EROSION CONTROL PLAN
C2.11	SEDIMENT AND EROSION CONTROL DETAILS
C3.01	BULK EARTHWORKS PLAN
C4.01	SITWORKS AND STORMWATER MANAGEMENT PLAN
C5.01	UTILITY SERVICES IMPACT PLAN
C5.11	UTILITY SERVICES SECTION - SHEET 1
C5.12	UTILITY SERVICES SECTION - SHEET 2
C5.13	UTILITY SERVICES SECTION - SHEET 3

VERIFIER:

JOB MANAGER: T.HOWE

DESIGNED: T.HOWE

DRAWN: J.PHILLIPS

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
1	DESIGN DEVELOPMENT ISSUED FOR QS REVIEW	J.P.		T.H.	24.04.20
2	ISSUED FOR REF	D.T.		T.H.	22.05.20

CLIENT




Welcome to
City of Parramatta

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ARCHITECT


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MOSSOP
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PROJECT

CHARLES STREET SQUARE

DRAWING TITLE

COVERSHEET, DRAWING SCHEDULE AND LOCALITY PLAN

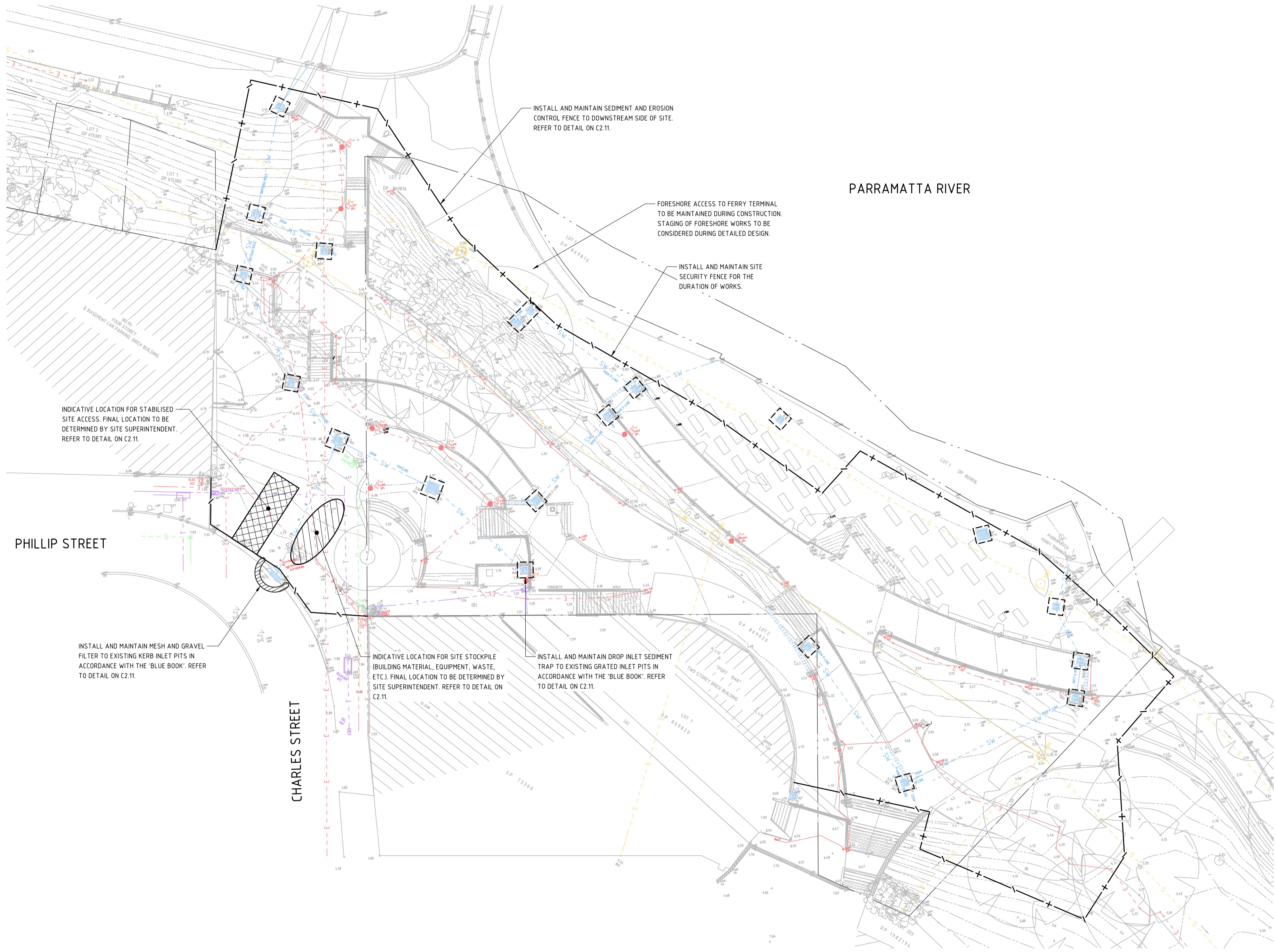
JOB NUMBER

182116

DRAWING NUMBER	REVISION
C1.01	2

DRAWING SHEET SIZE = A1

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LEGEND	
	EXISTING BOUNDARY LINE
	EXISTING ELECTRICITY
	EXISTING STORMWATER
	EXISTING GAS
	EXISTING SEWER
	EXISTING TELSTRA
	EXISTING CONTOURS
	SEDIMENT BARRIER ON SECURITY FENCE
	SECURITY FENCE
	WIRE MESH AND GRAVEL SEDIMENT FILTER
	DROP INLET SEDIMENT TRAP
	STABILISED SITE ACCESS
	STOCKPILE

DRAWN: JPHILLIPS DESIGNED: THOWE JOB MANAGER: THOWE VERIFIER:

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SCALE 1:200@A1

PROJECT

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DRAWING TITLE

CONCEPT SEDIMENT AND EROSION CONTROL PLAN

JOB NUMBER

182116

DRAWING NUMBER

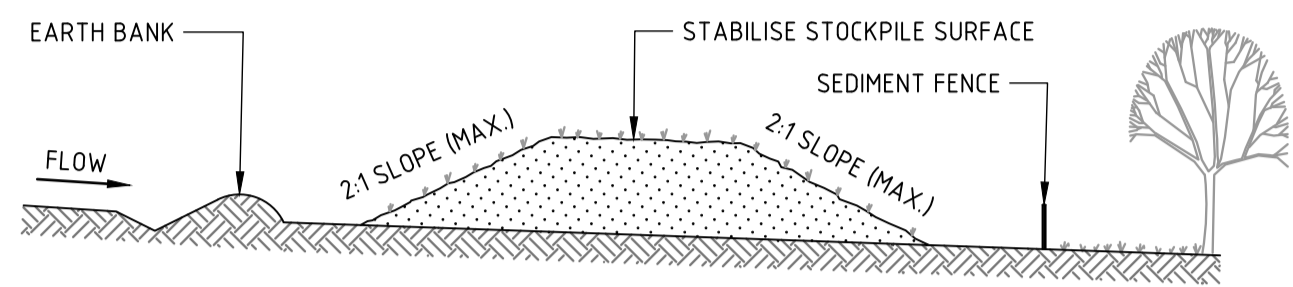
C2.01

REVISION

2

DRAWING SHEET SIZE = A1

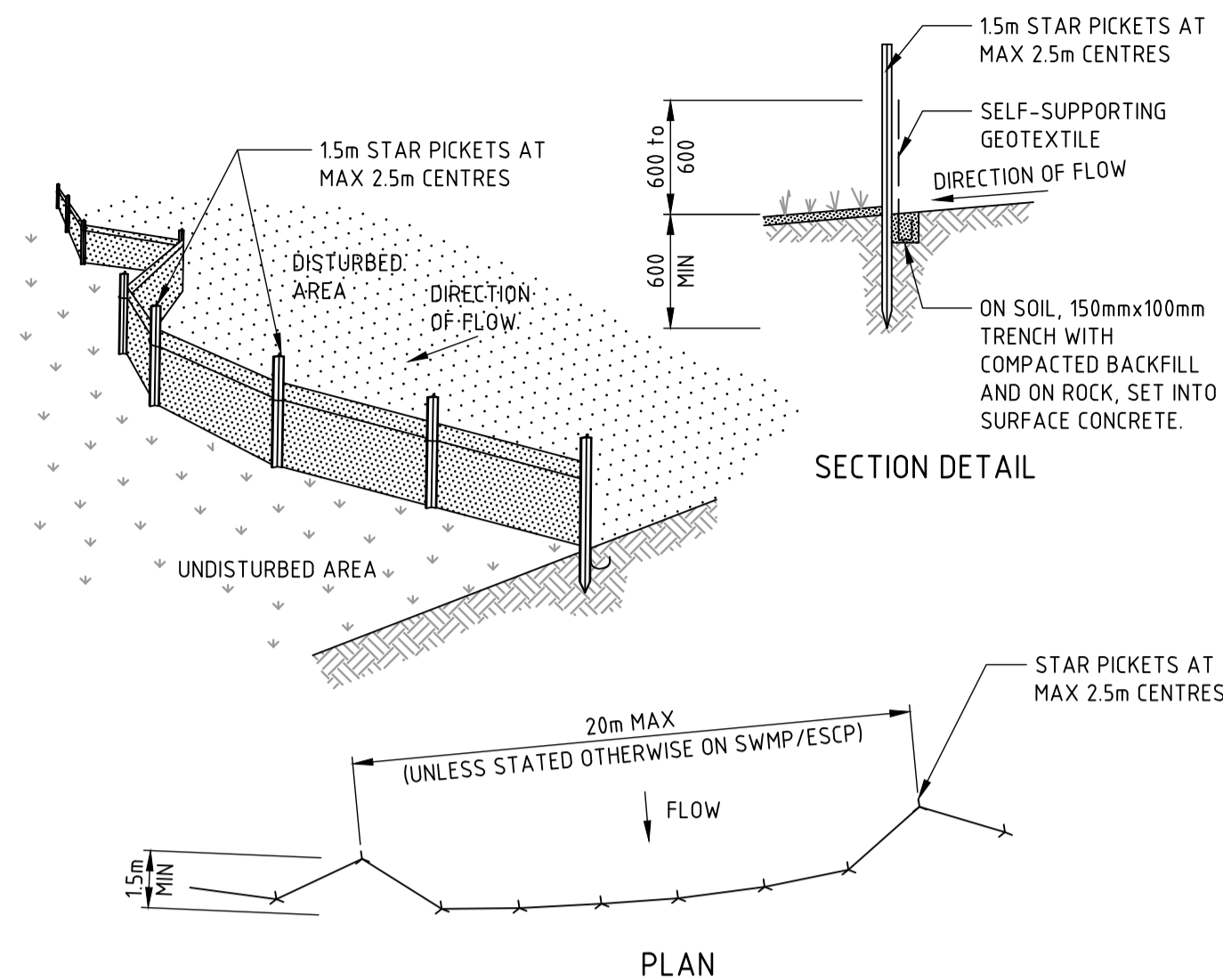
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 Plotted By: dfruhare Date: 22-5-20 11:18am



CONSTRUCTION NOTES

1. PLACE STOCKPILES MORE THAN 2m (PREFERABLY 5m) FROM EXISTING VEGETATION, CONCENTRATED WATER FLOW, ROADS AND HAZARD AREAS.
2. CONSTRUCT ON THE CONTOUR AS LOW, FLAT, ELONGATED MOUNDS.
3. WHERE THERE IS SUFFICIENT AREA, TOPSOIL STOCKPILES SHALL BE LESS THAN 2m IN HEIGHT.
4. WHERE THEY ARE TO BE IN PLACE FOR MORE THAN 10 DAYS, STABILISE FOLLOWING THE APPROVED ESCP OR SWMP TO REDUCE THE C-FACTOR TO LESS THAN 0.10.
5. CONSTRUCT EARTH BANKS (STANDARD DRAWING 5-5) ON THE UPSLOPE SIDE TO DIVERT WATER AROUND STOCKPILES AND SEDIMENT FENCES (STANDARD DRAWING 6-8) 1 TO 2m DOWNSLOPE.

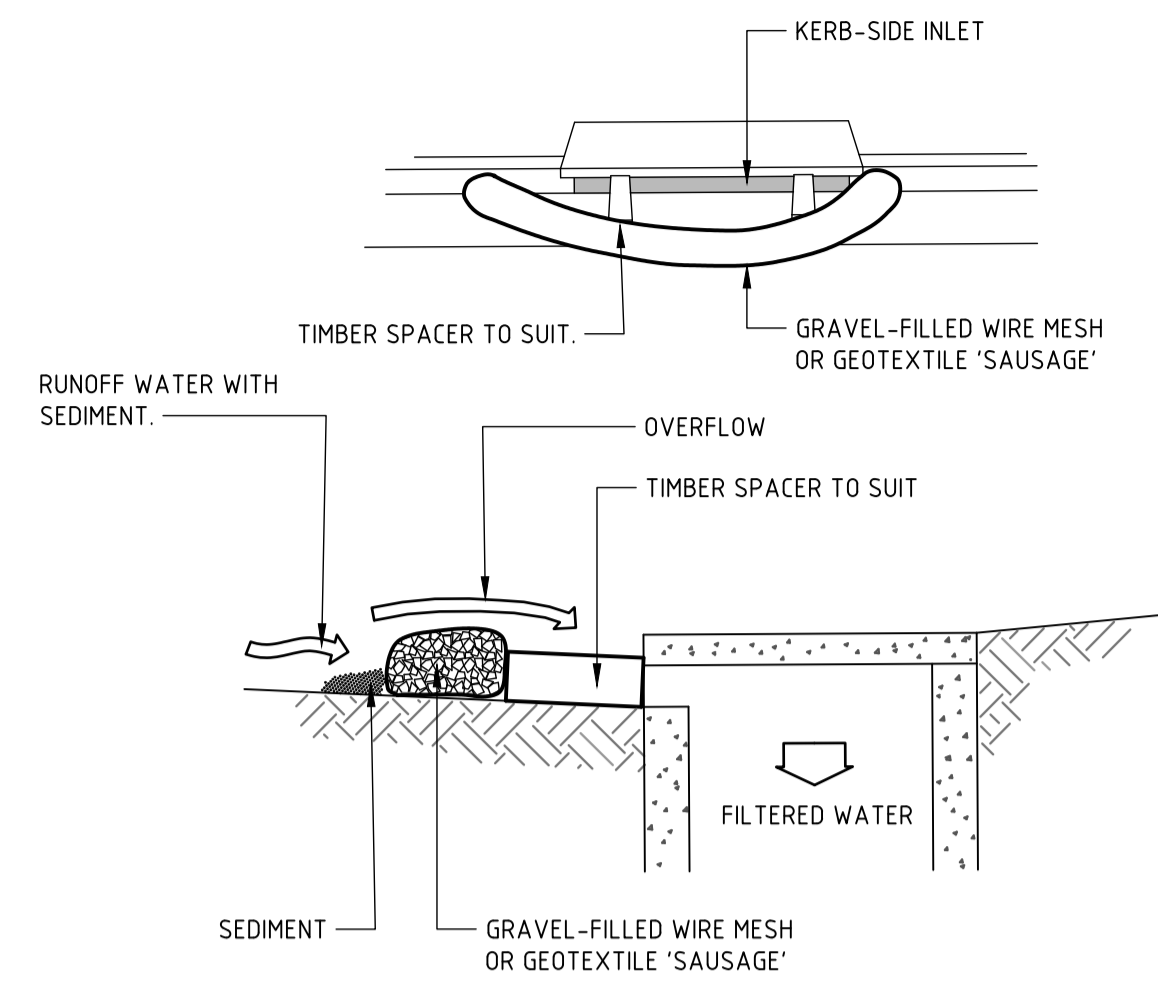
**STOCKPILE
SD4.1**



CONSTRUCTION NOTES

1. CONSTRUCT SEDIMENT FENCES AS CLOSE AS POSSIBLE TO BEING PARALLEL TO THE CONTOURS OF THE SITE, BUT WITH SMALL RETURNS AS SHOWN IN THE DRAWING TO LIMIT THE CATCHMENT AREA OF ANY ONE SECTION. THE CATCHMENT AREA SHOULD BE SMALL ENOUGH TO LIMIT WATER FLOW IF CONCENTRATED AT ONE POINT TO 50 LITRES PER SECOND IN THE DESIGN STORM EVENT, USUALLY THE 10-YEAR EVENT.
2. CUT A 150mm DEEP TRENCH ALONG THE UPSLOPE LINE OF THE FENCE FOR THE BOTTOM OF THE FABRIC TO BE ENTRENCHED.
3. DRIVE 15 METRE LONG STAR PICKETS INTO GROUND AT 2.5 METRE INTERVALS (MAX) AT THE DOWNSLOPE EDGE OF THE TRENCH. ENSURE ANY STAR PICKETS ARE FITTED WITH SAFETY CAPS.
4. FIX SELF-SUPPORTING GEOTEXTILE TO THE UPSLOPE SIDE OF THE POSTS ENSURING IT GOES TO THE BASE OF THE TRENCH. FIX THE GEOTEXTILE WITH WIRE TIES OR AS RECOMMENDED BY THE MANUFACTURER. ONLY USE GEOTEXTILE SPECIFICALLY PRODUCED FOR SEDIMENT FENCING. THE USE OF SHADE CLOTH FOR THIS PURPOSE IS NOT SATISFACTORY.
5. JOIN SECTIONS OF FABRIC AT A SUPPORT POST WITH A 150mm OVERLAP.
6. BACKFILL THE TRENCH OVER THE BASE OF THE FABRIC AND COMPACT IT THOROUGHLY OVER THE GEOTEXTILE.

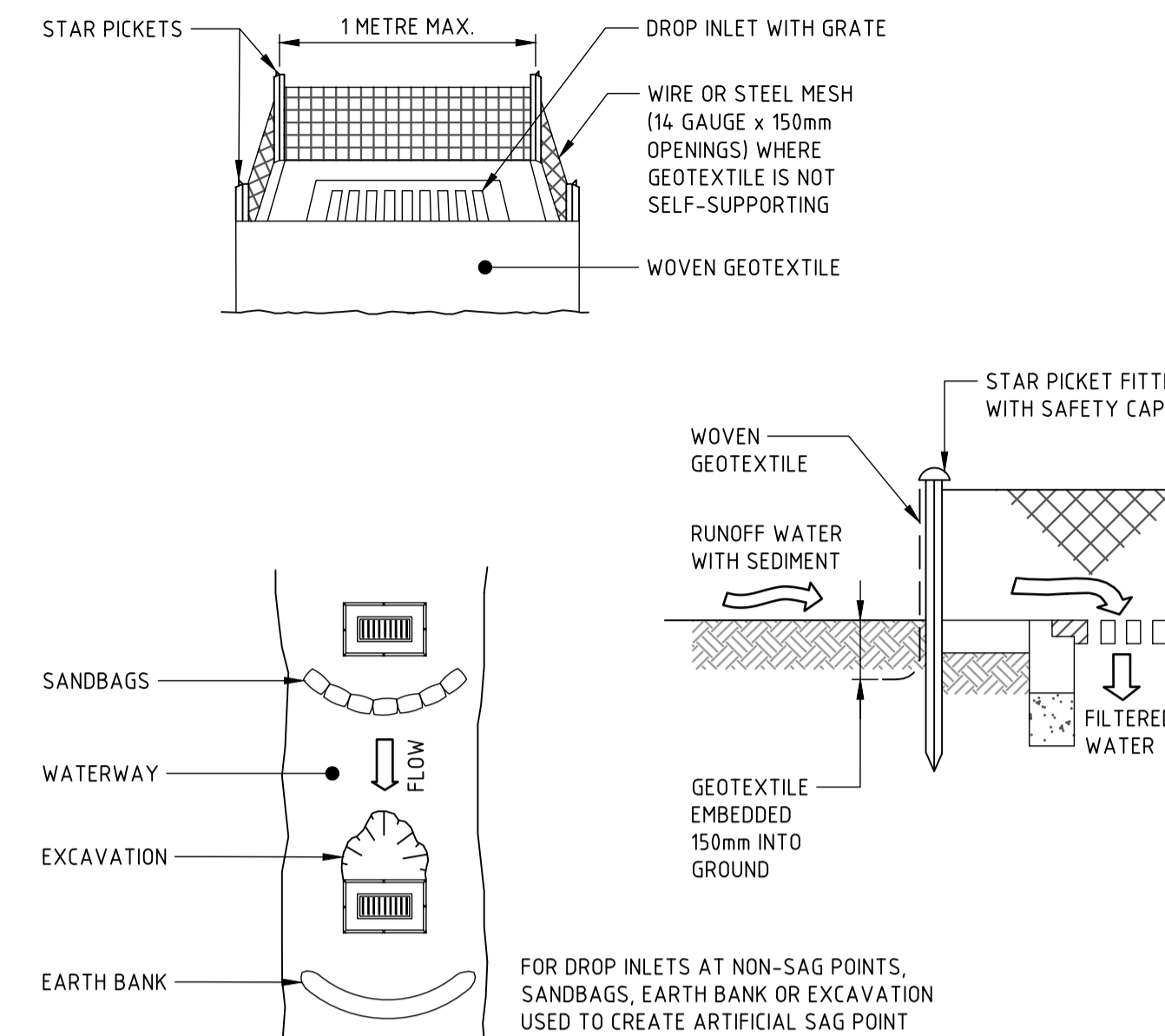
**SEDIMENT FENCE - LANDSCAPED AREAS
SD6.8**



CONSTRUCTION NOTES

1. INSTALL FILTERS TO KERB INLETS ONLY AT SAG POINTS.
2. FABRICATE A SLEEVE MADE FROM GEOTEXTILE OR WIRE MESH LONGER THAN THE LENGTH OF THE INLET PIT AND FILL IT WITH 25mm TO 50mm GRAVEL.
3. FORM AN ELLIPTICAL CROSS-SECTION ABOUT 150mm HIGH x 400mm WIDE.
4. PLACE THE FILTER AT THE OPENING LEAVING AT LEAST A 100mm SPACE BETWEEN IT AND THE KERB INLET. MAINTAIN THE OPENING WITH SPACER BLOCKS.
5. FORM A SEAL WITH THE KERB TO PREVENT SEDIMENT BYPASSING THE FILTER.
6. SANDBAGS FILLED WITH GRAVEL CAN SUBSTITUTE FOR THE MESH OR GEOTEXTILE PROVIDING THEY ARE PLACED SO THAT THEY FIRMLY ABUT EACH OTHER AND SEDIMENT-LADEN WATERS CANNOT PASS BETWEEN.

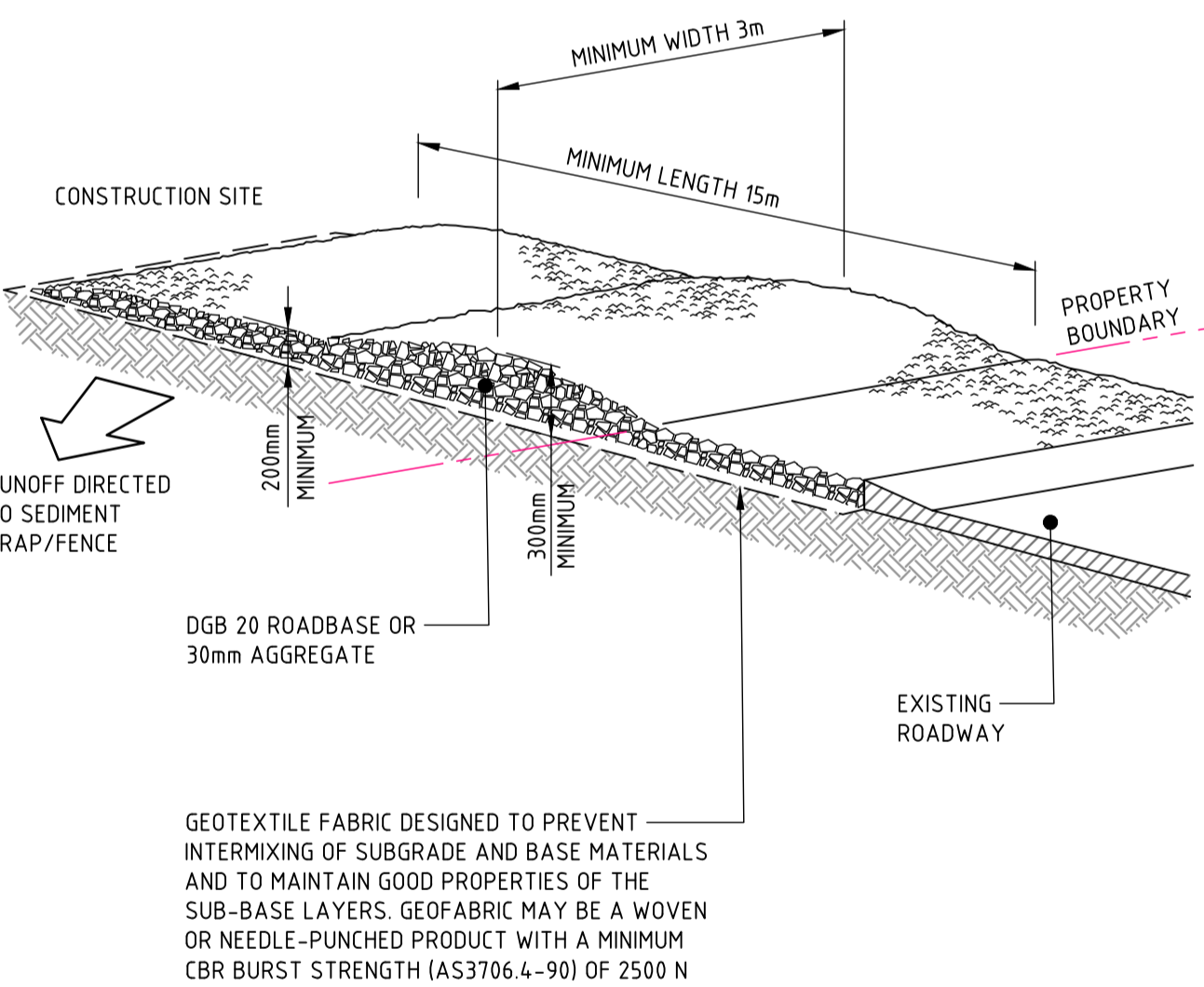
**WIRE MESH AND GRAVEL SEDIMENT FILTER
SD6.11**



CONSTRUCTION NOTES

1. FABRICATE A SEDIMENT BARRIER MADE FROM GEOTEXTILE OR STRAW BALES.
2. FOLLOW STANDARD DRAWING 6-7 AND STANDARD DRAWING 6-8 FOR INSTALLATION PROCEDURES FOR THE STRAW BALES OR GEOTEXTILE. REDUCE THE PICKET SPACING TO 1 METRE CENTRES.
3. IN WATERWAYS, ARTIFICIAL SAG POINTS CAN BE CREATED WITH SANDBAGS OR EARTH BANKS AS SHOWN IN THE DRAWING.
4. DO NOT COVER THE INLET WITH GEOTEXTILE UNLESS THE DESIGN IS ADEQUATE TO ALLOW FOR ALL WATERS TO BYPASS IT.

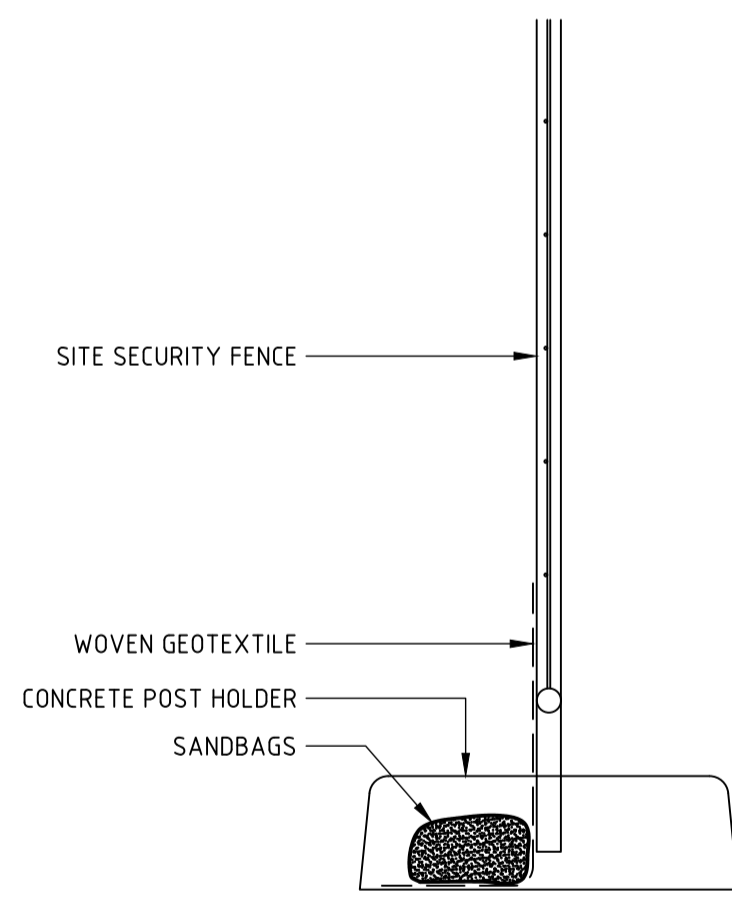
**GEOTEXTILE INLET FILTER TRAPS
SD6.12**



CONSTRUCTION NOTES

1. STRIP THE TOPSOIL, LEVEL THE SITE AND COMPACT THE SUBGRADE.
2. COVER THE AREA WITH NEEDLE-PUNCHED GEOTEXTILE.
3. CONSTRUCT A 200mm THICK PAD OVER THE GEOTEXTILE USING ROAD BASE OR 30mm AGGREGATE.
4. ENSURE THE STRUCTURE IS AT LEAST 15 METRES LONG OR TO BUILDING ALIGNMENT AND AT LEAST 3 METRES WIDE.
5. WHERE A SEDIMENT FENCE JOINS ONTO THE STABILISED ACCESS, CONSTRUCT A HUMP IN THE STABILISED ACCESS TO DIVERT WATER TO THE SEDIMENT FENCE.

**STABILISED SITE ACCESS
SD6.14**



CONSTRUCTION NOTES

1. PLACE SANDBAGS ALONG BASE OF FENCE ON TOP OF GEOTEXTILE.
2. FIX SELF-SUPPORTING GEOTEXTILE TO THE UPSLOPE SIDE OF THE SECURITY FENCE. FIX THE GEOTEXTILE WITH WIRE TIES OR AS RECOMMENDED BY THE MANUFACTURER. ONLY USE GEOTEXTILE SPECIFICALLY PRODUCED FOR SEDIMENT FENCING. THE USE OF SHADE CLOTH FOR THIS PURPOSE IS NOT SATISFACTORY.
3. JOIN SECTIONS OF FABRIC AT A SUPPORT POST WITH A 150mm OVERLAP.

SECURITY AND SEDIMENT FENCE - HARDSTAND AREAS

NOT FOR CONSTRUCTION

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SCALE 1:10 @ A1

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PROJECT
CHARLES STREET SQUARE

DRAWING TITLE
SEDIMENT AND EROSION CONTROL DETAILS

JOB NUMBER
182116

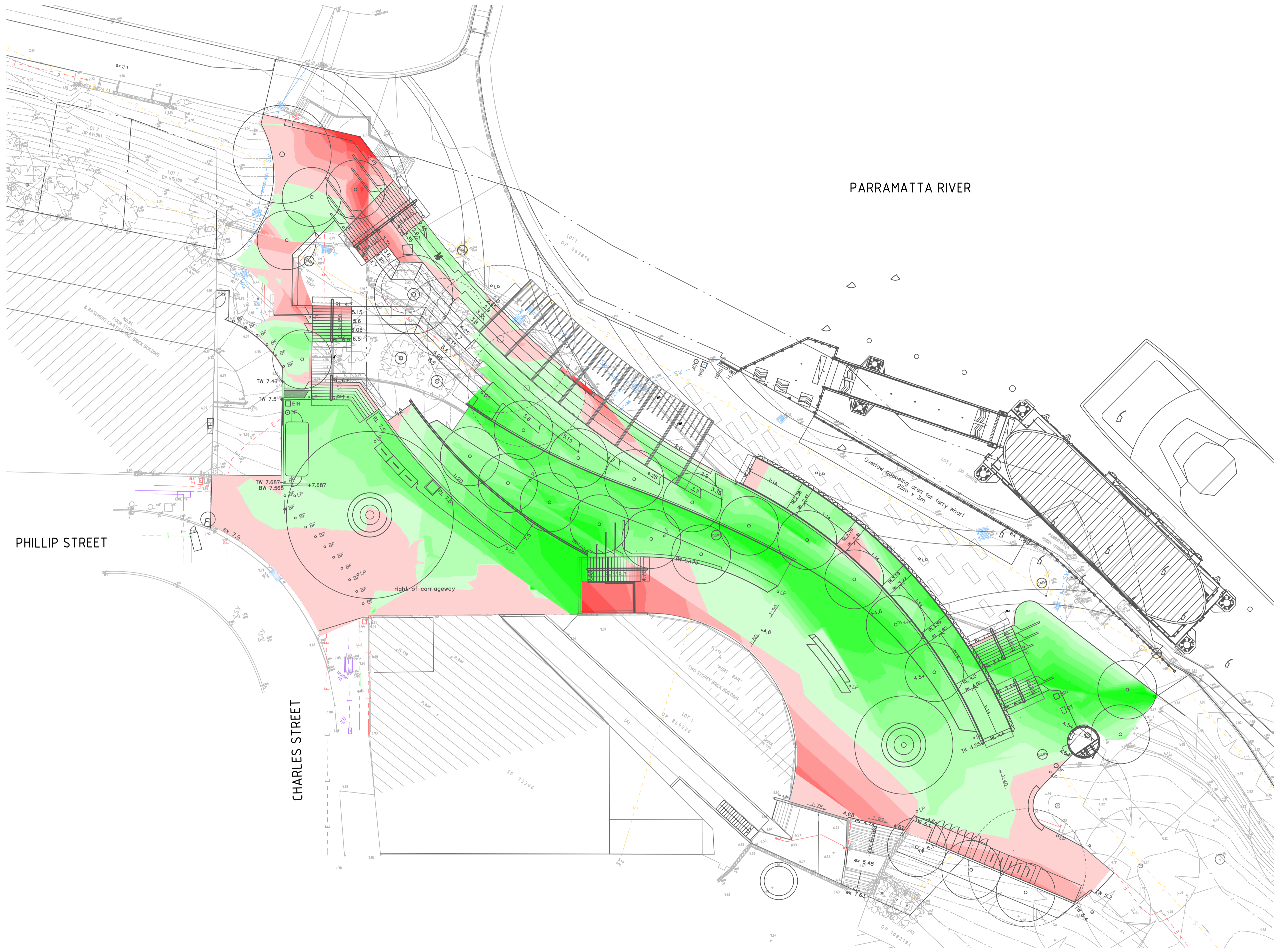
DRAWING NUMBER
C2.11

REVISION
2

DRAWING SHEET SIZE = A1

DRAWN: J.PHILLIPS
DESIGNED: T.HOWE
JOB MANAGER: T.HOWE
VERIFIER:

Date: 22-5-20 11:58am Plotted By: dfruhare Found: W:\p\1818\182116 - Charles Street Square\Drawings\0-Northrop\Civil\C-CURRENT CAD FILES\N216_C2.11_SEDIMENT AND EROSION CONTROL DETAILS.dwg



LEGEND	
	BOUNDARY LINE
DEPTH OF CUT	
	-1.5m TO -1.25m
	-1.25m TO -1.0m
	-1.0m TO -0.75m
	-0.75m TO -0.5m
	-0.5m TO -0.25m
	-0.25m TO -0.0m
DEPTH OF FILL	
	0.0m TO 0.25m
	0.25m TO 0.5m
	0.5m TO 0.75m
	0.75m TO 1.0m
	1.0m TO 1.25m
	1.25m TO 1.5m
	1.5m TO 2.0m

- GENERAL NOTES:**
- REFER SPECIFICATIONS NOTES FOR EARTHWORKS GENERAL REQUIREMENTS.
 - ALL WORKS TO BE CARRIED OUT IN ACCORDANCE WITH COUNCIL / RELEVANT AUTHORITY SPECIFICATIONS AND DETAILS.
 - CAD FILES / DTM FILES TO BE SUPPLIED IN AUTOCAD FORMAT FOR SETOUT PURPOSES (UPON REQUEST).
 - NO ALLOWANCE HAS BEEN MADE FOR BULKING FACTORS. NOTE ALL VOLUMES DEPICTED ARE SOLID VOLUMES ONLY AND MAY NOT REFLECT DETAILED EARTHWORKS.
 - NO ALLOWANCE HAS BEEN MADE FOR DETAILED EARTHWORKS; ie SERVICE TRENCHING, DETAILED EXCAVATION, FOOTINGS, RETAINING WALLS AND THE LIKE. CONTRACTOR IS TO ALLOW FOR REMOVAL OF ALL EXCESS MATERIAL GENERATED BY THE WORKS.
 - THE CONTRACTOR SHALL USE FINAL SURFACE LEVELS AND TYPICAL PAVEMENT DETAILS FOR ACTUAL EARTHWORKS LEVELS.
 - BULK EARTHWORKS ARE BASED ON THE FOLLOWING DEPTHS FROM FINISHED SURFACE LEVELS:
 - CONCRETE / FOOTPATH / UNIT PAVERS 310mm
 - LANDSCAPE AREAS 200mm
 - APPROXIMATE BULK EARTHWORK VALUES AS FOLLOWS:
 - HARDSTAND REMOVAL (ASSUMED 200mm ACROSS SITE) 174 cu.m
 - EXPORT MATERIAL (AFTER HARDSTAND REMOVAL) 172 cu.m
 - IMPORT MATERIAL (TO BULK LEVEL) 992 cu.m

DRAWN: JPHILLIPS DESIGNED: THOWE JOB MANAGER: THOWE VERIFIER:

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SCALE 1:200@A1

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PROJECT

CHARLES STREET SQUARE

DRAWING TITLE

BULK EARTHWORKS PLAN

JOB NUMBER

182116

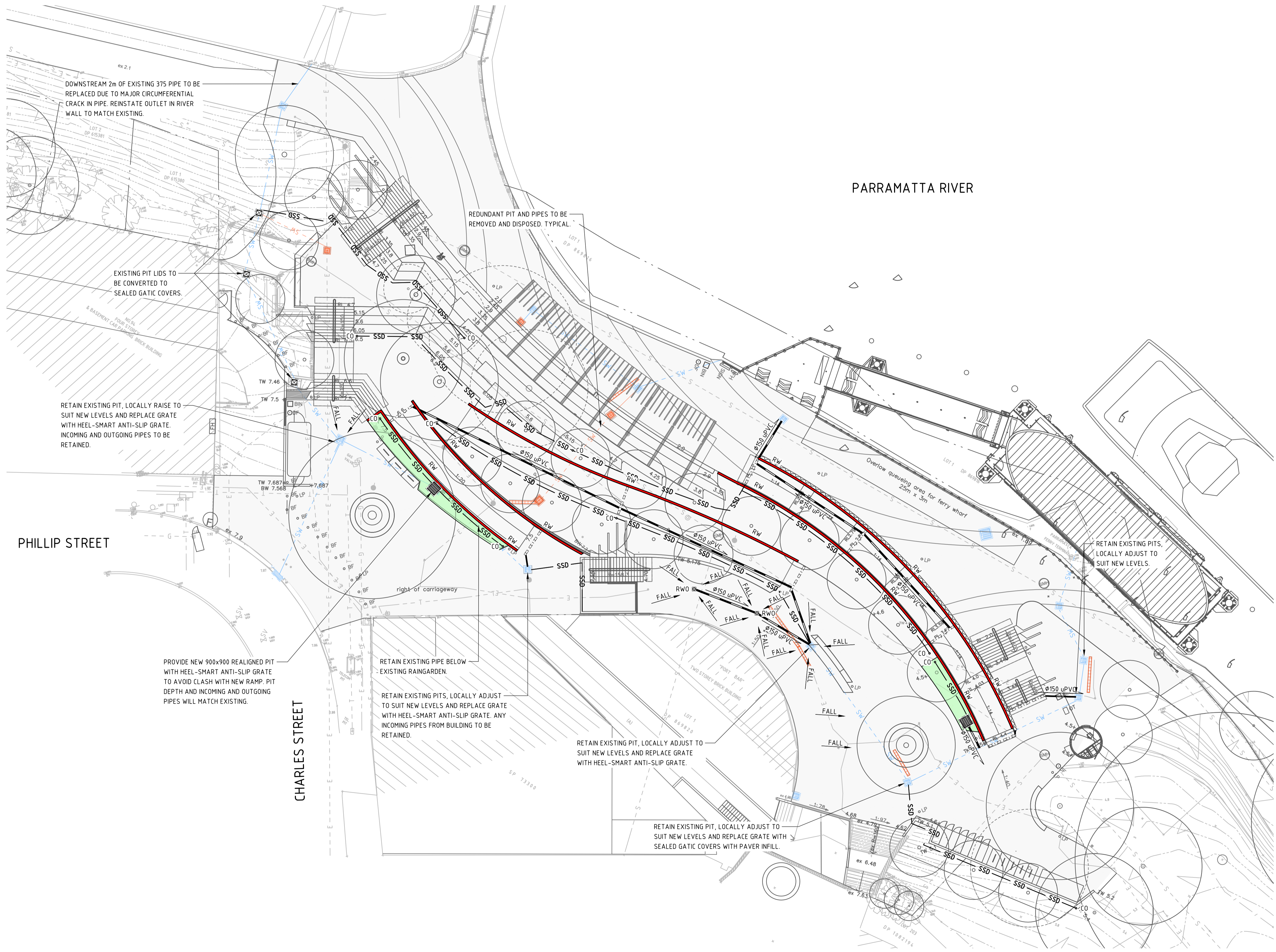
DRAWING NUMBER REVISION

C3.01 2

DRAWING SHEET SIZE = A1

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LEGEND	
	BOUNDARY LINE
	EXISTING CONTOURS
	EXISTING STORMWATER PIPE
	EXISTING GRATED TRENCH DRAIN
	EXISTING STORMWATER PIT
	PROPOSED STORMWATER PIPE
	REDUNDANT STORMWATER PIPE
	PROPOSED GRATED INLET PIT
	REDUNDANT STORMWATER PIT
	PROPOSED GRATED TRENCH DRAIN
	REDUNDANT GRATED TRENCH DRAIN
	RAINWATER OUTLET
	SUBSOIL DRAINAGE LINE
	SUBSOIL DRAINAGE CLEAROUT
	RETAINING WALL
	PROPOSED RAINGARDEN

DRAWN: J.PHILLIPS DESIGNED: T.HOWE JOB MANAGER: T.HOWE VERIFIER:

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SCALE 1:200@A1

PROJECT

CHARLES STREET SQUARE

DRAWING TITLE

**SITWORKS AND STORMWATER
MANAGEMENT PLAN**

JOB NUMBER

182116

DRAWING NUMBER

C4.01

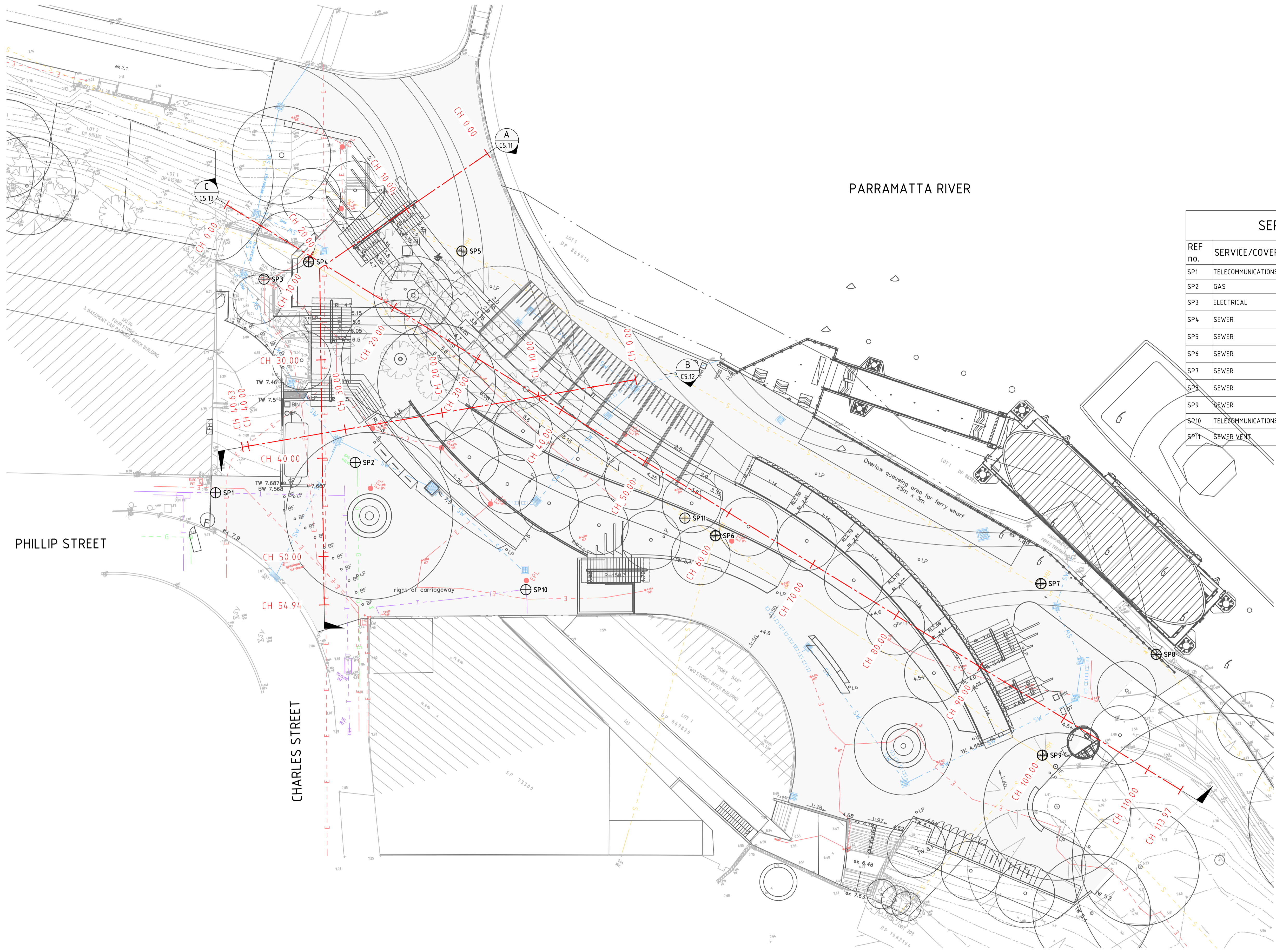
REVISION

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DRAWING SHEET SIZE = A1

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LEGEND	
	BOUNDARY LINE
	EXISTING CONTOURS
	EXISTING ELECTRICITY
	EXISTING GAS
	EXISTING TELSTRA
	EXISTING STORMWATER
	EXISTING SEWER
	CONTROL LINE
	CHAINAGE
	SERVICE PIT TAG

SERVICES ADJUSTMENT SCHEDULE					
REF no.	SERVICE/COVER	EXISTING RL	PROPOSED RL	COVER ADJUST	COMMENTS
SP1	TELECOMMUNICATIONS	7.893	7.910	0.017	
SP2	GAS	7.070	7.580	0.510	
SP3	ELECTRICAL	5.440	5.330	-0.110	REDUNDANT PIT TO BE REMOVED - REFER ELECTRICAL DRAWINGS
SP4	SEWER	5.212	4.700	-0.512	TO BE COORDINATED BY WATER SERVICE COORDINATOR
SP5	SEWER	2.360	1.977	-0.383	TO BE COORDINATED BY WATER SERVICE COORDINATOR
SP6	SEWER	4.235	5.100	0.865	TO BE COORDINATED BY WATER SERVICE COORDINATOR
SP7	SEWER	1.945	-	-	ADJUSTMENT BY OTHERS
SP8	SEWER	1.977	-	-	ADJUSTMENT BY OTHERS
SP9	SEWER	4.350	4.510	0.160	TO BE COORDINATED BY WATER SERVICE COORDINATOR
SP10	TELECOMMUNICATIONS	7.030	7.570	0.540	
SP11	SEWER VENT	3.897	-	-	VENT TO BE RELOCATED

- GENERAL NOTES**
- SERVICE ADJUSTMENT PLAN AND SCHEDULE HAS BEEN PROVIDED FOR DESIGN TEAM COORDINATION ONLY.
 - PROPOSED RL'S ARE BASED ON PREFERRED LANDSCAPE CONCEPT BY SMM DATED 16.04.20
 - SOME SERVICES MAY BE BEYOND PROJECT SCOPE/EXTENT AND/OR ARE SUBJECT TO CHANGE BY OTHERS.
 - SERVICES SURFACE AND EXISTING UNDERGROUND LEVELS ARE BASED ON SURVEY INFORMATION PROVIDED BY YSCO GEOMATICS LAND RESOURCE CONSULTANTS.

DRAWN: JPHILLIPS DESIGNED: THOWE JOB MANAGER: THOWE VERIFIER:

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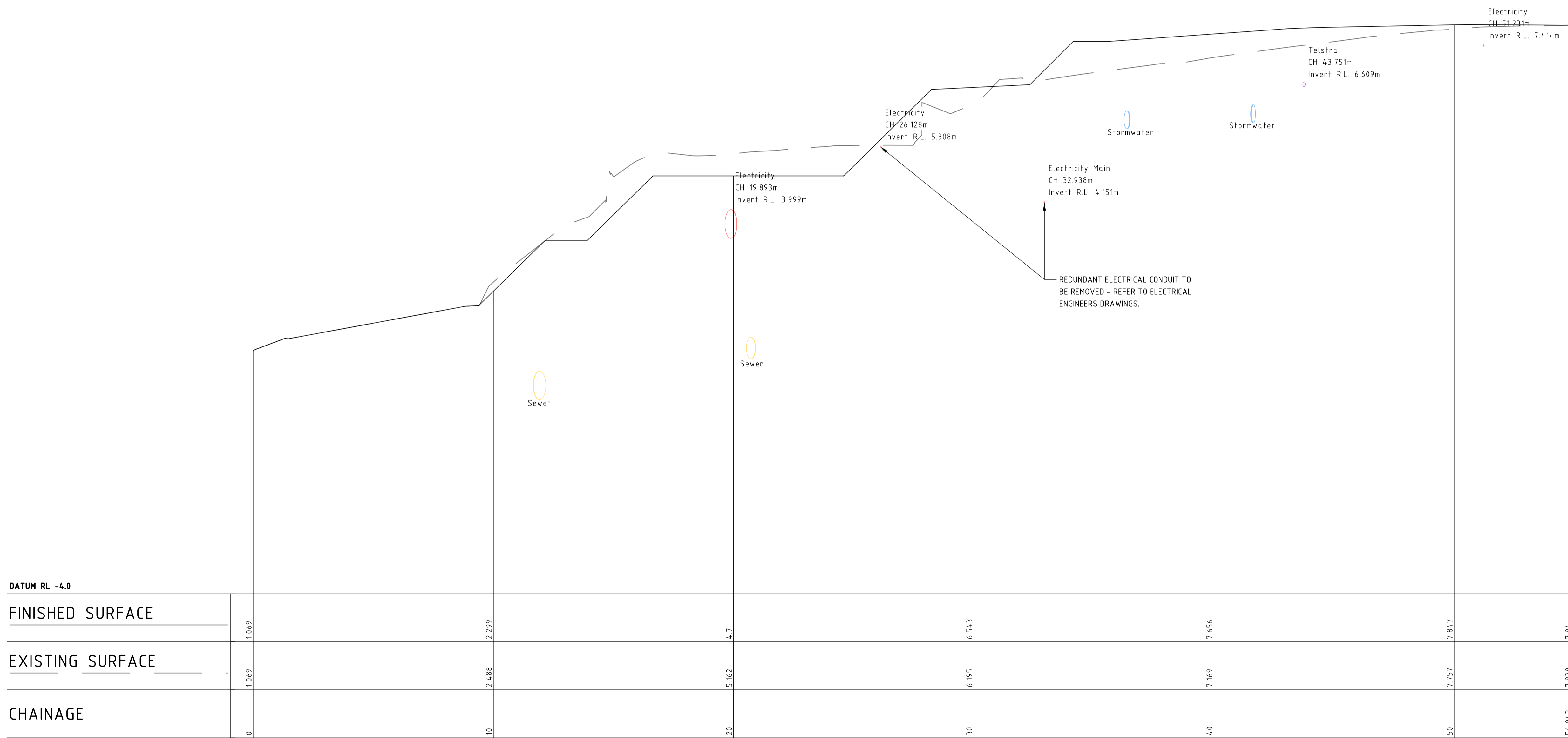
DRAWING TITLE
UTILITY SERVICES IMPACT PLAN

JOB NUMBER	182116
DRAWING NUMBER	C5.01
REVISION	2
DRAWING SHEET SIZE	A1

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Found: W:\pos\1081\182116 - Charles Street Square\Drawings\0-Northrop\0-CIVIL\C-CURRENT\CAD FILES\182116_CS_01_UTILITY SERVICES IMPACT PLAN.dwg Plotted By: dfruhare Date: 22-5-20 11:58am

DRAWN: J.PHILLIPS DESIGNED: T.HOWE JOB MANAGER: T.HOWE VERIFIER:




LONGITUDINAL SECTION ALONG SECTION A

HORIZONTAL SCALE 1:100@A1
VERTICAL SCALE 1:50@A1

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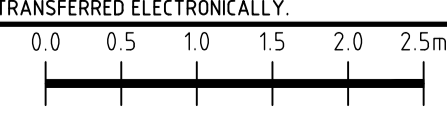
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SCALE 1:100 @ A1




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PROJECT

CHARLES STREET SQUARE

DRAWING TITLE

UTILITY SERVICES SECTION - SHEET 1

JOB NUMBER

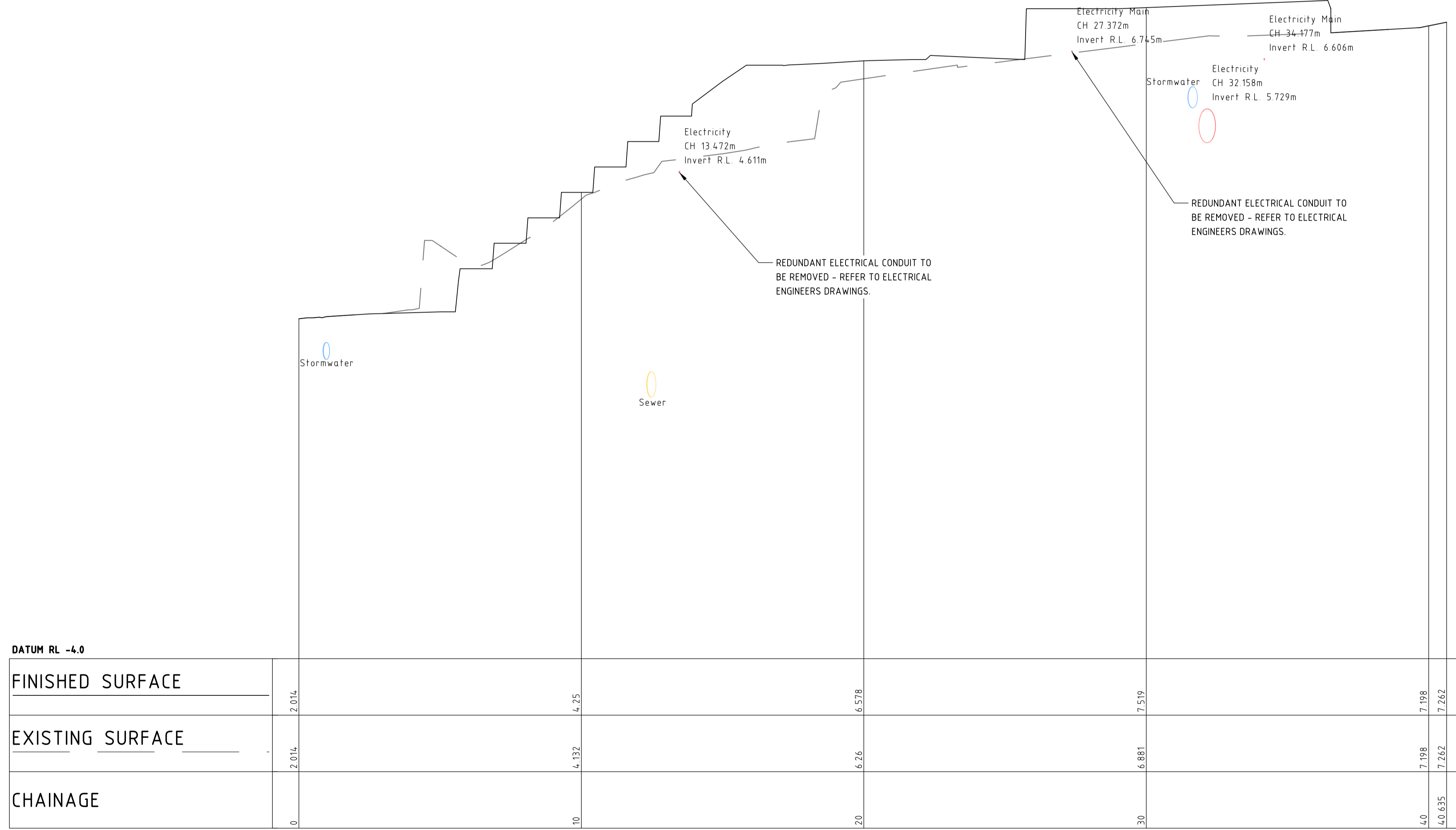
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C5.11	2

DRAWING SHEET SIZE = A1

Date: 22-5-20 11:18am Plotted By: dthomare Found: W:\pjs\1818\182116 - Charles Street Square\Drawings\0-Northrop\0-CIVIL\C-CURRENT CAD FILES\182116_CS_UTILITY SERVICES SECTION - SHEET 1.dwg

DRAWN: J.PHILLIPS DESIGNED: T.HOWE JOB MANAGER: T.HOWE VERIFIER:



LONGITUDINAL SECTION ALONG SECTION B
 HORIZONTAL SCALE 1:100@A1
 VERTICAL SCALE 1:50@A1

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REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
1	DESIGN DEVELOPMENT ISSUED FOR QS REVIEW	J.P.		T.H.	24.04.20
2	ISSUED FOR REF	D.T.		T.H.	22.05.20

CLIENT

Welcome to
City of Parramatta

ARCHITECT

**SPACKMAN
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SCALE 1:50 @ A1
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PROJECT

CHARLES STREET SQUARE

DRAWING TITLE

UTILITY SERVICES SECTION - SHEET 2

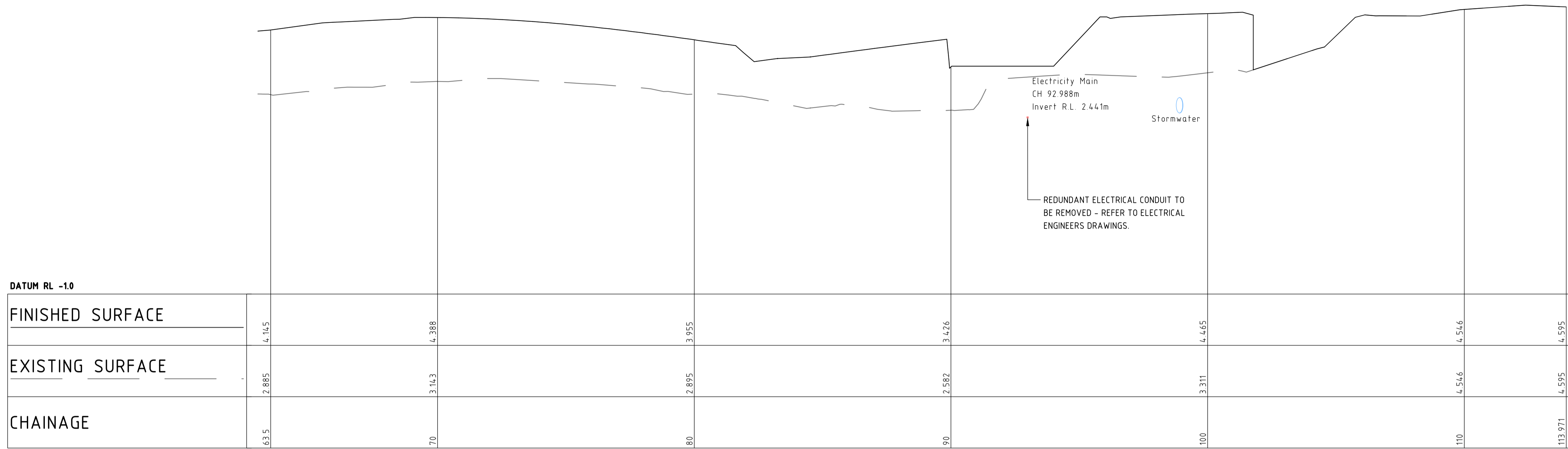
JOB NUMBER

182116

DRAWING NUMBER	REVISION
C5.12	2

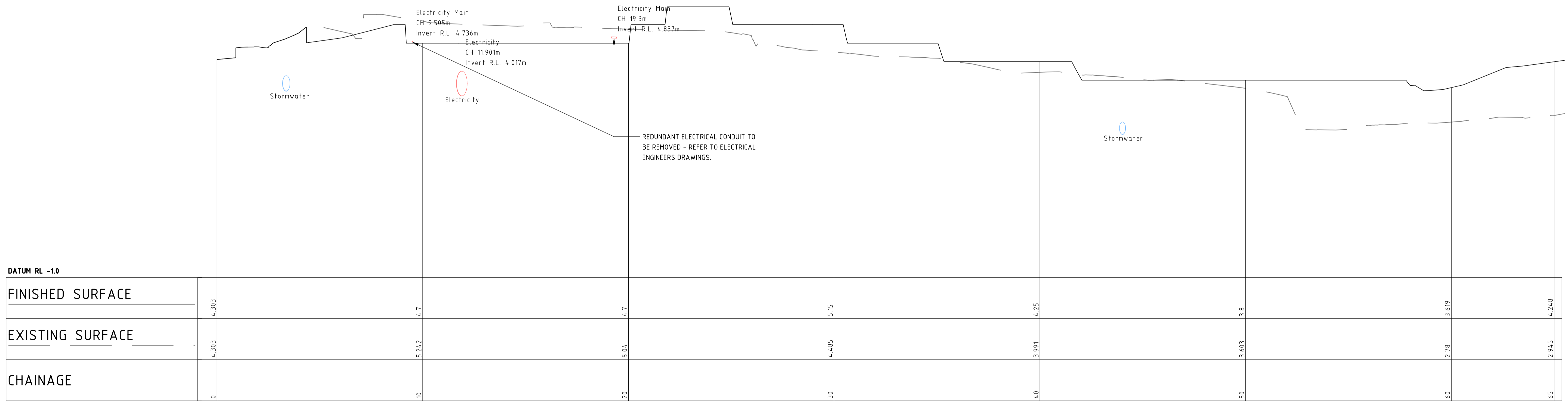
DRAWING SHEET SIZE = A1

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LONGITUDINAL SECTION ALONG SECTION C

HORIZONTAL SCALE 1:100@A1
VERTICAL SCALE 1:50@A1



LONGITUDINAL SECTION ALONG SECTION C

HORIZONTAL SCALE 1:100@A1
VERTICAL SCALE 1:50@A1

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PROJECT

CHARLES STREET SQUARE

DRAWING TITLE

UTILITY SERVICES SECTION - SHEET 3

JOB NUMBER

182116

DRAWING NUMBER

C5.13

REVISION

2

DRAWING SHEET SIZE = A1

DRAWN: J.PHILLIPS
DESIGNED: T.HOWE
JOB MANAGER: T.HOWE
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Date: 22-5-20 11:16am