# PENRITH CITY PARK

# 114-146 HENRY STREET, 42-50 STATION STREET AND ALLEN PLACE CARPARK CIVIL ENGINEERING PACKAGE





LOCALITY PLAN

### CIVII DRAWING SCHEDIII F

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DWG No.	DRAWING TITLE
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DAC11.02	TURNING PATH PLAN - SHEET 02
DAC12.01	CATCHMENT PLAN
DAC13.01	DEMOLITION PLAN

# NOT FOR CONSTRUCTION

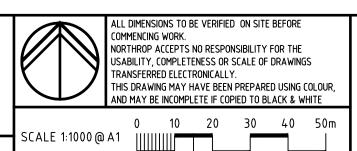
DESCRIPTION 02 ISSUED FOR INFORMATION SN 08.01.21 03 ISSUED FOR DEVELOPMENT APPLICATION AS SN 13.01.21 ISSUED FOR INFORMATION AS SN 23.04.21 AS SN 18.05.21 ISSUED FOR INFORMATION 06 ISSUED FOR INFORMATION SN 10.08.21 07 ISSUED FOR DEVELOPMENT APPLICATION SN 16.08.21

PENRITH CITY COUNCIL

VERIFICATION SIGNATURE HAS BEEN ADDED

JMD design

NORTHROP CONSULTING ENGINEERS PTY LTD





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PENRITH CITY PARK **114-146 HENRY STREET, 42-50 STATION STREET AND ALLEN PLACE CARPARK** 

CIVIL ENGINEERING PACKAGE

**COVER SHEET** 

192968 DRAWING NUMBER

### STORMWATER DRAINAGE

- 1. ALL PVC PIPES SHALL BE CLASS SN8 UNLESS OTHERWISE SPECIFIED 2. ALL PIPES IN THE ROAD RESERVE MUST BE RCP CLASS 4. 3. ALL DRAINAGE LINES LESS THAN Ø225 SHALL BE LAID AT 1% MIN.
- FALL, PIPES Ø225 OR GREATER TO BE 0.5% MIN FALL, UNO. 4. ALL LEVELS ARE AUSTRALIAN HEIGHT DATUM (AHD).
- 5. ALL DOWNPIPES GUTTERS TO BE DESIGNED IN ACCORDANCE WITH AS/NZS 3500.3.2 - 2003 'STORMWATER' DRAINAGE. 6. THE STORMWATER DRAINAGE DESIGN HAS BEEN CARRIED OUT IN ACCORDANCE WITH AS/NZS 3500.3.2-2003 'STORMWATER'
- DRAINAGE. ANY VARIATIONS TO THE NOMINATED LEVELS SHALL BE REFERRED
- TO ENGINEER IMMEDIATELY. 8. SUBSOIL DRAINAGE SHALL BE PROVIDED TO ALL RETAINING WALLS & EMBANKMENTS, WITH THE LINES FEEDING INTO THE STORMWATER
- DRAINAGE SYSTEM. 9. ALL GRATES TO BE GALVANISED STEEL WITH HINGES AND CHILD
- PROOF LOCK. 10. ALL GRATES TO BE HEEL SAFE WITHIN AGED CARE DEVELOPMENTS. 11. THE STORMWATER DRAINAGE IS DESIGNED IN ACCORDANCE WITH COUNCILS STORMWATER CODE.

### RAINWATER RE-USE

- PROVIDE RAINWATER RE-USE SYSTEM TO SUPPLY WATER FOR
- TOILET FLUSHING. GUTTER GUARD TO BE INSTALLED ON ALL EAVES GUTTERS. A PERMANENT SIGN IS TO BE LOCATED IN THE VICINITY OF THE TANK STATING THE WATER IS "NON POTABLE WATER" WITH APPROPRIATE
- HAZARD IDENTIFICATION. 4. PIPEWORK USED FOR RAINWATER SERVICES SHALL BE COLOURED
- LILAC IN ACCORDANCE WITH AS1345. 5. ALL VALVES AND APERTURES SHALL BE CLEARLY AND PERMANENTLY LABELLED WITH SAFETY SIGNS TO COMPLY WITH
- AS1319. 6. RAINWATER TANK RETICULATION SYSTEM AND MAINS WATER BYPASS ARRANGEMENT TO BE INSTALLED IN ACCORDANCE WITH AS/NZS 3500.1.2-2003 AND THE NSW CODE OF PRACTICE: PLUMBING AND DRAINING.
- 7. A FIRST FLUSH FILTRATION DEVICE IS TO BE PROVIDED AT RAINWATER TANK.
- 8. FOR PUMPING AND TREATMENT SYSTEM, REFER TO HYDRAULIC ENGINEER'S SPECIFICATION

### GENERAL NOTES

THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH OTHER CONSULTANTS' DRAWINGS AND SPECIFICATIONS AND WITH OTHER SUCH WRITTEN INSTRUCTIONS AS MAY BE ISSUED DURING THE COURSE OF THE CONTRACT. ANY DISCREPANCY SHALL BE REFERRED TO THE ENGINEER BEFORE PROCEEDING WITH THE WORK.

ALL DIMENSIONS ARE IN MILLIMETRES & ALL LEVELS ARE IN METRES, UNO (UNLESS NOTED OTHERWISE).

NO DIMENSION SHALL BE OBTAINED BY SCALING THE DRAWINGS.

ALL LEVELS AND SETTING OUT DIMENSIONS SHOWN ON THE DRAWINGS SHALL BE CHECKED ON SITE PRIOR TO THE COMMENCEMENT OF THE WORK.

DETAIL SURVEY DATA WAS SUPPLIED BY PENRITH CITY COUNCIL. HEADING: DETAIL SURVEY OVER FOLIO IDENTIFIES 1/526304, E/163176, 3/1200790, 2/556075, 10/553665, 11/553665, 1/164798 & 1/252457 & CARPARK LOCATED WITHIN ALLEN PLACE PENRITH DRAWING DATED: 10.12.2019 REV: 00

JOB REFERENCE: 004 MGA: 2020 DATE OF SURVEY: 02.12.2019

EXISTING SERVICES WHERE SHOWN HAVE BEEN PLOTTED FROM SUPPLIED DATA AND SUCH THEIR ACCURACY CAN NOT BE GUARANTEED. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ESTABLISH THE LEVEL OF ALL EXISTING SERVICES PRIOR TO THE COMMENCEMENT OF WORK.

ON COMPLETION OF STORMWATER INSTALLATION, ALL DISTURBED AREAS MUST BE RESTORED TO ORIGINAL CONDITION, INCLUDING KERBS, FOOTPATHS, CONCRETE AREAS, GRAVEL AND GRASSED AREAS AND ROAD PAVEMENTS, UNLESS DIRECTED OTHERWISE.

ALL STORMWATER MANAGEMENT MEASURES SHOWN ON THIS DRAWING HAVE BEEN PREPARED FOR DEVELOPMENT APPLICATION PURPOSES TO DEMONSTRATE FEASIBILITY. ALL MEASURES WILL BE SUBJECT TO DETAIL DESIGN AT THE CONSTRUCTION CERTIFICATE STAGE AND MAY BE SUBJECT TO VARIATION PROVIDED THAT THE DESIGN INTENT IS MAINTAINED.

### DESIGN SUMMARY

COUNCIL: PENRITH CITY COUNCIL

<u>CATCHMENT CALCULATIONS:</u>

	PRE-DEVELOPMENT	NT POST-DEVELOPMENT		
TOTAL AREA*	7394m²	7394m² 7394m²		
IMPERVIOUS AREA	7000m² (94.4%)	1220m² TO PASSIVE IRRIGATION	43.3%	
IMPERVIOUS AREA	7000m (94.4%)	1981m² UNTREATED	43.376	
PERVIOUS AREA	394m² (5.6%)	2731m <sup>2</sup> TO PASSIVE IRRIGATION	56.7%	
PERVIOUS AREA	394M (5.6%)	1459m² UNTREATED	30.1%	

\* AREAS IN TABLE PERTAIN TO THE PARK AREA ONLY (EXCLUDING SURROUNDING CATCHMENTS AND ROADS). REFER TO SHEET DAC12.01 FOR CATCHMENT PLAN, INCLUDING ROAD AREAS AND EXTERNAL CATCHMENTS WHICH HAVE BEEN MODELLED TO ASSESS DRAINAGE NETWORK CAPACITY.

#### WATER QUALITY TREATMENT MEASURES:

• TWO AREAS OF PASSIVE IRRIGATION TOTALING 521m<sup>2</sup>, TREATING AND INFILTRATING RUNOFF FROM OVER HALF OF

### WATER QUALITY OUTCOMES:

	PRE-DEVELOPMENT	POST-DEVELOPMENT	%REDUCTION PRE TO POST
TOTAL SUSPENDED SOLIDS (TSS) (kg/yr)	779	238	↓ 69.4
TOTAL NITROGEN (TN) (kg/yr)	9.11	3.7	↓ 59.4
TOTAL PHOSPHORUS (TP) (kg/yr)	1.24	0.55	↓ 55.6
GROSS POLLUTANTS (GP) (kg/yr)	116	33.1	↓ 71.5

DRAWING TITLE

PENRITH CITY PARK

**114-146 HENRY STREET.** 

**42-50 STATION STREET AND** 

ALLEN PLACE CARPARK

192968 DRAWING NUMBER REVISION

NOT FOR CONSTRUCTION

CIVIL ENGINEERING PACKAGE
SPECIFICATION NOTES

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	DRAWING SHEET SIZ	'E = A1

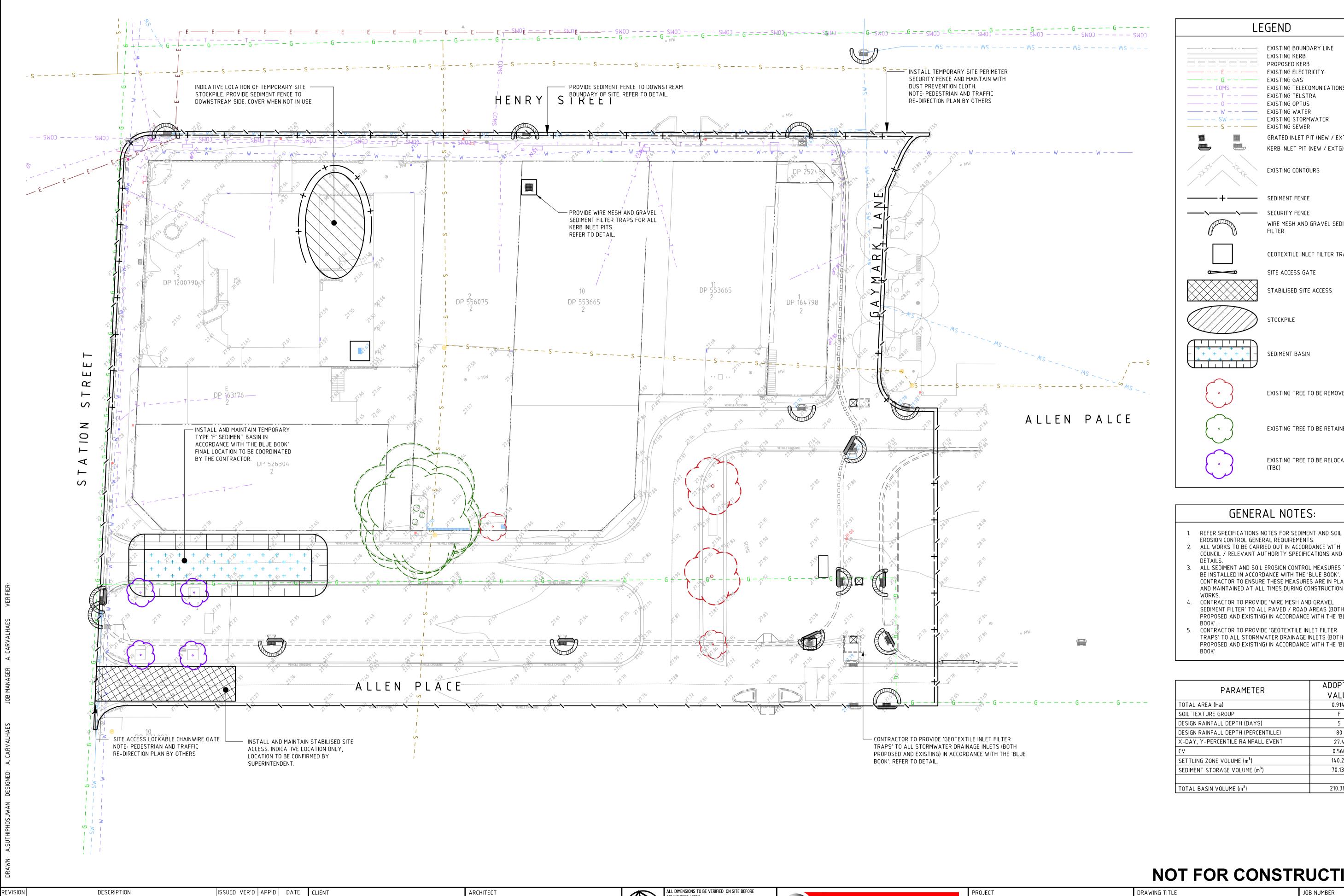
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05	ISSUED FOR INFORMATION	AS		SN	21.05.21
06	ISSUED FOR INFORMATION	VC		SN	10.08.21
07	ISSUED FOR DEVELOPMENT APPLICATION	۷C		SN	16.08.21

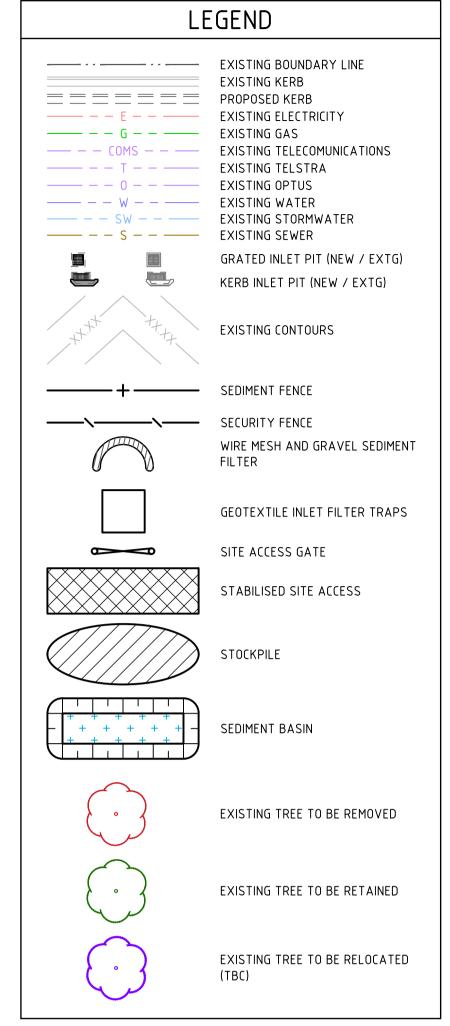
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# GENERAL NOTES:

- 1. REFER SPECIFICATIONS NOTES FOR SEDIMENT AND SOIL EROSION CONTROL GENERAL REQUIREMENTS. 2. ALL WORKS TO BE CARRIED OUT IN ACCORDANCE WITH
- 3. ALL SEDIMENT AND SOIL EROSION CONTROL MEASURES TO BE INSTALLED IN ACCORDANCE WITH THE 'BLUE BOOK'. CONTRACTOR TO ENSURE THESE MEASURES ARE IN PLACE AND MAINTAINED AT ALL TIMES DURING CONSTRUCTION
- 4. CONTRACTOR TO PROVIDE 'WIRE MESH AND GRAVEL SEDIMENT FILTER' TO ALL PAVED / ROAD AREAS (BOTH PROPOSED AND EXISTING) IN ACCORDANCE WITH THE 'BLUE
- 5. CONTRACTOR TO PROVIDE 'GEOTEXTILE INLET FILTER TRAPS' TO ALL STORMWATER DRAINAGE INLETS (BOTH PROPOSED AND EXISTING) IN ACCORDANCE WITH THE 'BLUE

	ADOPTED
PARAMETER	
	VALUE
TOTAL AREA (Ha)	0.9141
SOIL TEXTURE GROUP	F
DESIGN RAINFALL DEPTH (DAYS)	5
DESIGN RAINFALL DEPTH (PERCENTILLE)	80
X-DAY, Y-PERCENTILE RAINFALL EVENT	27.4
CV	0.560
SETTLING ZONE VOLUME (m³)	140.26
SEDIMENT STORAGE VOLUME (m³)	70.130
TOTAL BASIN VOLUME (m³)	210.389

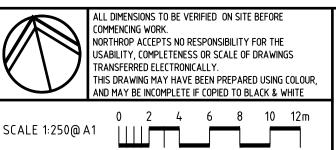
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04	RE-ISSUED FOR DEVELOPMENT APPLICATION	AS		SN	18.01.21	CITY COUNCIL
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07	ISSUED FOR DEVELOPMENT APPLICATION	VC		SN	16.08.21	VERIFICATION SIGNATURE HAS BEEN ADDED

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PENRITH CITY PARK 114-146 HENRY STREET, **42-50 STATION STREET AND ALLEN PLACE CARPARK** 

DRAWING TITLE CIVIL ENGINEERING PACKAGE

> CONCEPT SEDIMENT AND **EROSION CONTROL PLAN**

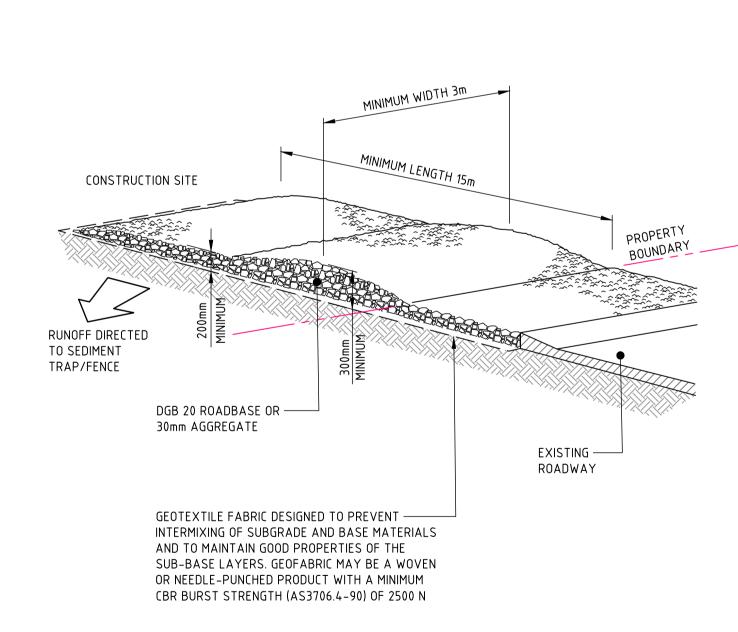
192968

DRAWING NUMBER REVISION DRAWING SHEET SIZE = A1

#### 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

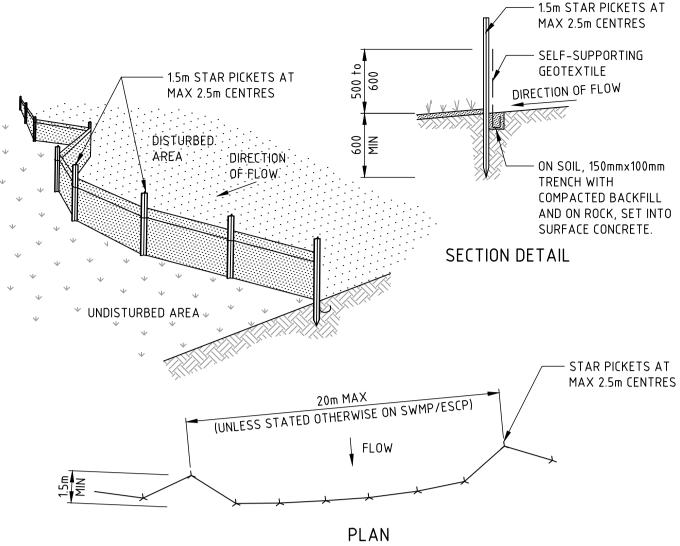
### STOCKPILES



### 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
- WHERE A SEDIMENT FENCE JOINS ONTO THE STABILISED ACCESS, CONSTRUCT A HUMP IN THE STABILISED ACCESS TO DIVERT WATER TO THE SEDIMENT FENCE.

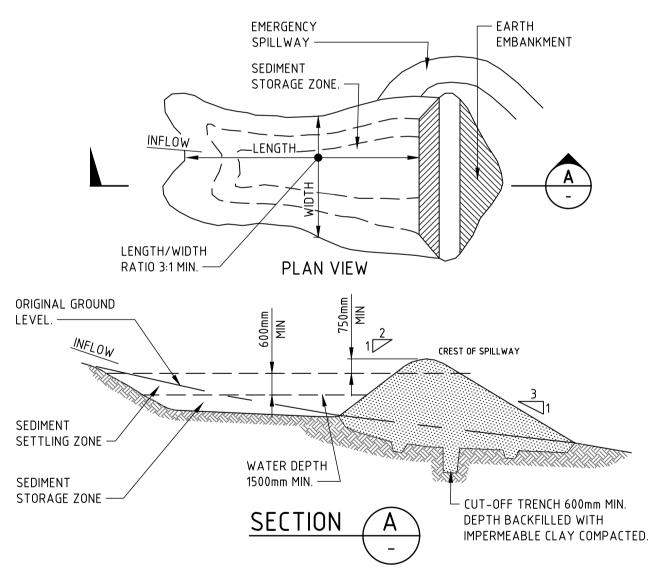
# STABILISED SITE ACCESS



### 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 1.5 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

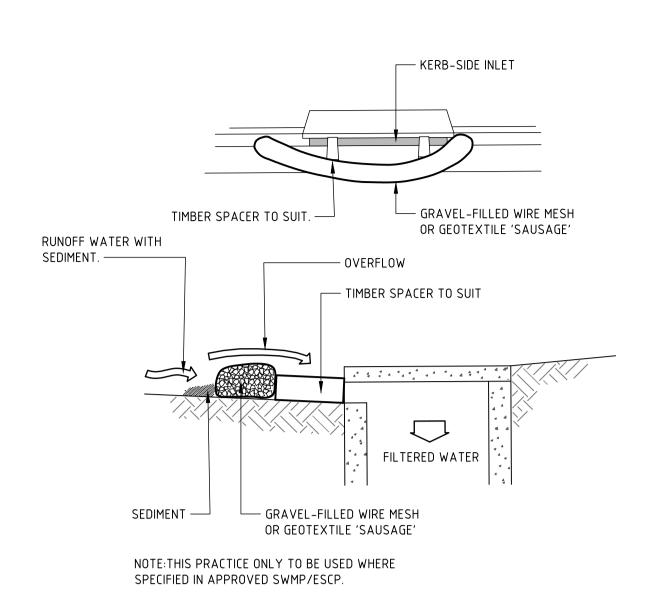


### **CONSTRUCTION NOTES**

- REMOVE ALL VEGETATION AND TOPSOIL FROM UNDER THE DAM WALL AND FROM WITHIN THE STORAGE AREA.
- 2. CONSTRUCT A CUT-OFF TRENCH 500mm DEEP AND 1200mm WIDE ALONG THE CENTRELINE OF THE EMBANKMENT EXTENDING TO A POINT ON THE GULLY WALL LEVEL WITH THE RISER CREST.
- 3. MAINTAIN THE TRENCH FREE OF WATER AND RECOMPACT THE MATERIALS WITH EQUIPMENT AS SPECIFIED IN THE
- SWMP TO 95 PER CENT STANDARD PROCTOR DENSITY. 4. SELECT FILL FOLLOWING THE SWMP THAT IS FREE OF ROOTS, WOOD, ROCK, LARGE STONE OR FOREIGN MATERIAL
- 5. PREPARE THE SITE UNDER THE EMBANKMENT BY RIPPING TO AT LEAST 100mm TO HELP BOND COMPACTED FILL TO THE EXISTING SUBSTRATE.
- 6. SPREAD THE FILL IN 100mm TO 150mm LAYERS AND COMPACT IT AT OPTIMUM MOISTURE CONTENT FOLLOWING THE SWMP.
- CONSTRUCT THE EMERGENCY SPILLWAY.
- 8. REHABILITATE THE STRUCTURE FOLLOWING THE SWMP.

ARCHITECT

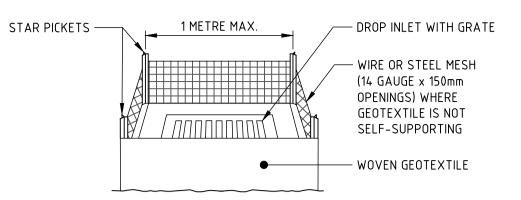
(APPLIES TO 'TYPE D' AND 'TYPE F' SOILS ONLY) EARTH BASIN - WET

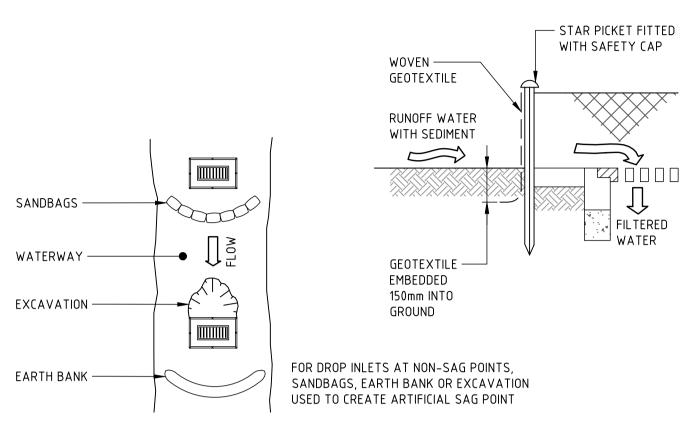


### CONSTRUCTION NOTES

- 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





### 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 GEOFABRIC. 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
- 4. DO NOT COVER THE INLET WITH GEOTEXTILE UNLESS THE DESIGN IS ADEQUATE TO ALLOW FOR ALL WATERS

GEOTEXTILE INLET FILTER TRAPS

# NOT FOR CONSTRUCTION

DESCRIPTION ISSUED VER'D APP'D DATE 01 ISSUED FOR DRAFT DEVELOPMENT APPLICATION AC 25.09.20 02 | ISSUED FOR DEVELOPMENT APPLICATION AS SN 13.01.21 ISSUED FOR INFORMATION AS SN 23.04.21 ISSUED FOR INFORMATION ۷C SN 10.08.2 05 ISSUED FOR DEVELOPMENT APPLICATION SN 16.08.21

CITY COUNCIL

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CLIENT

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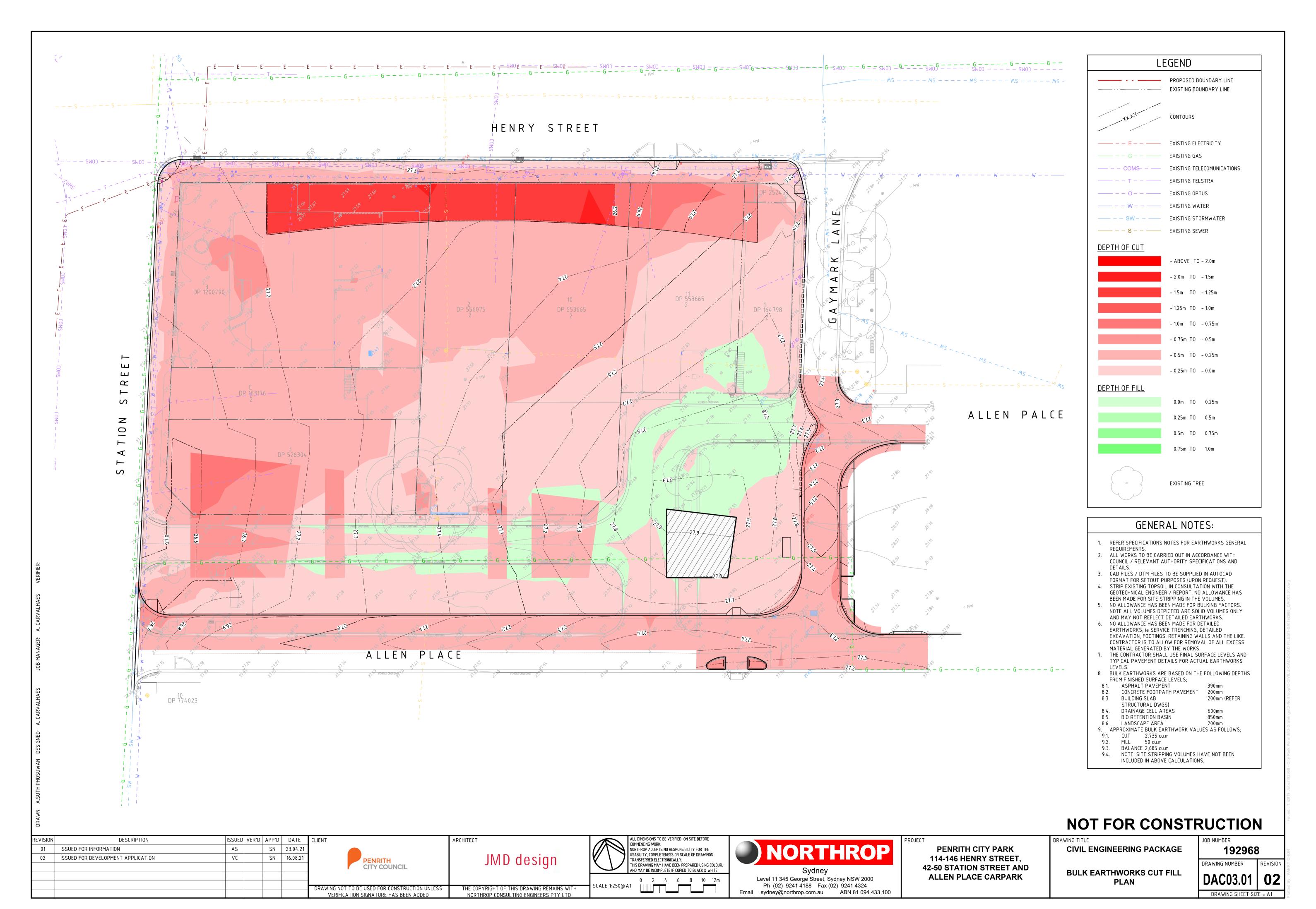
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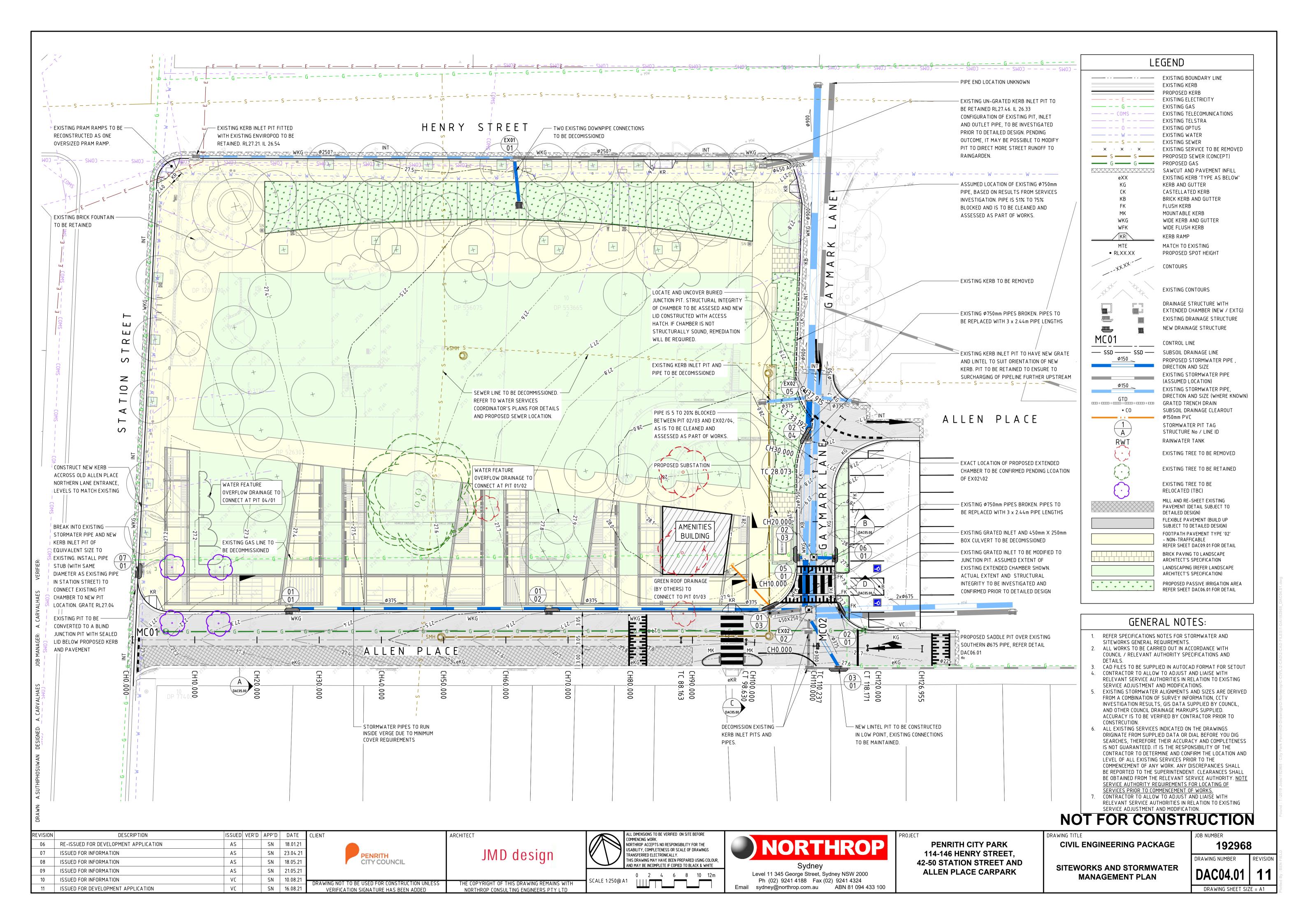
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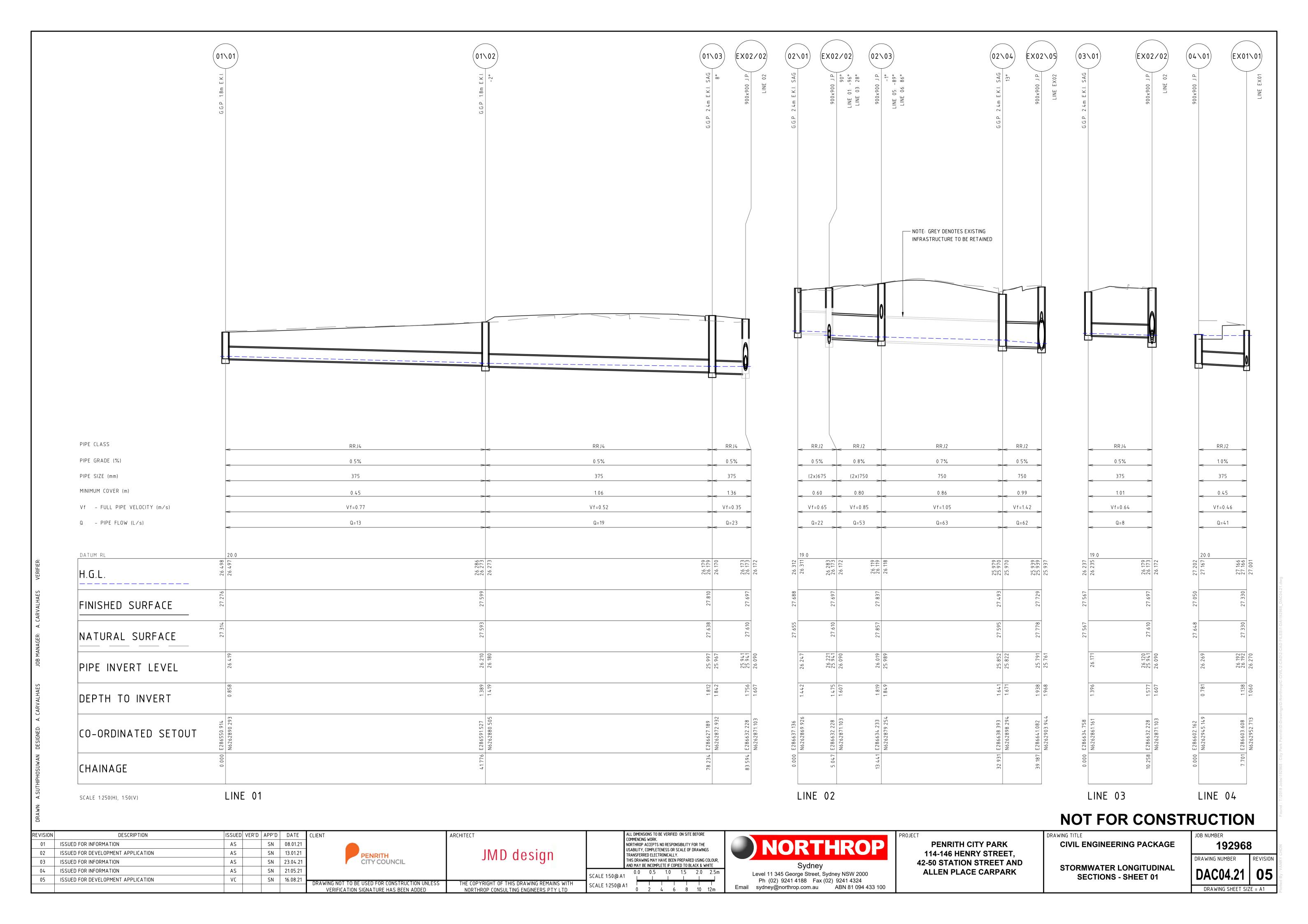
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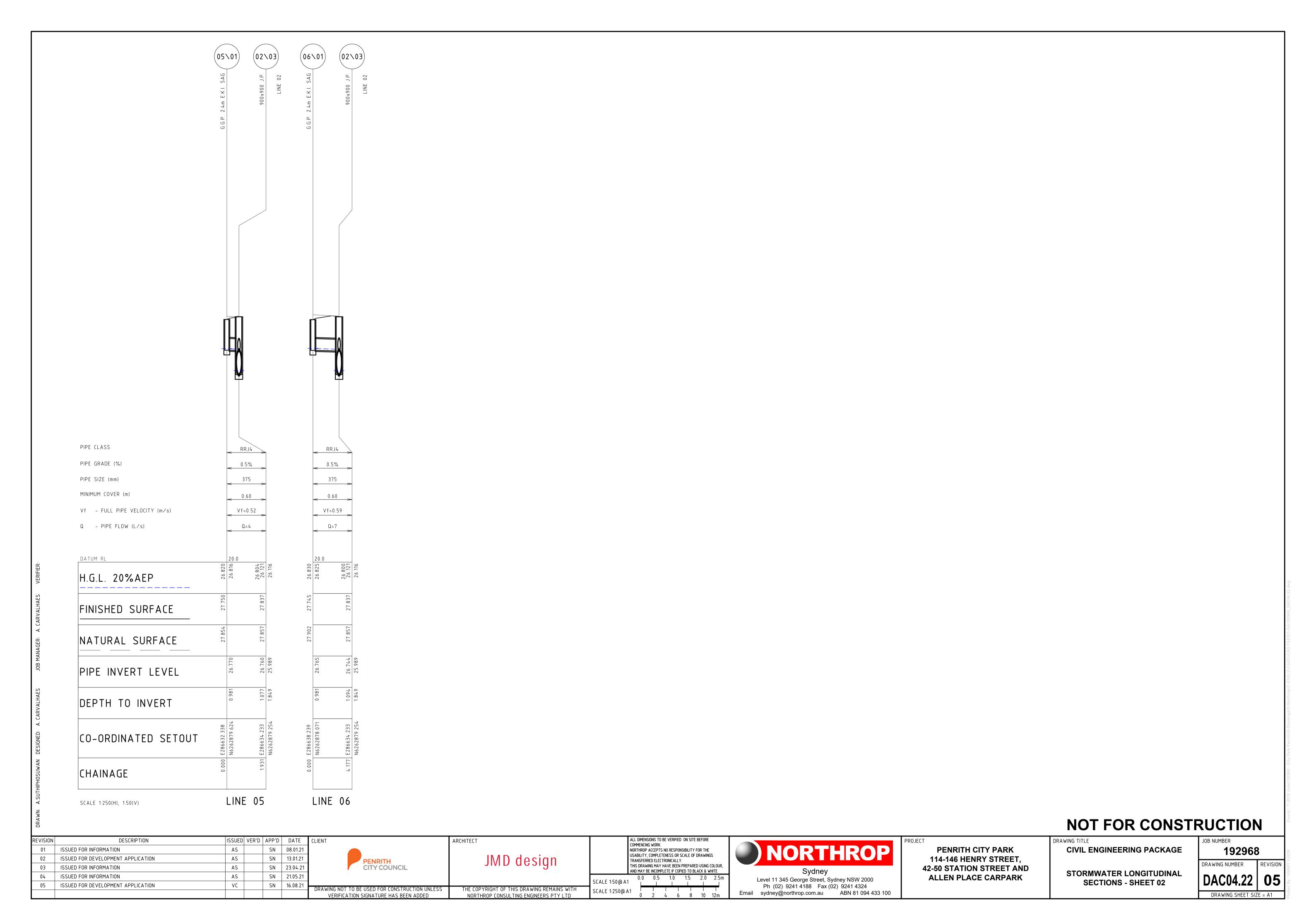
SEDIMENT AND EROSION **CONTROL DETAILS** 

192968 DRAWING NUMBER





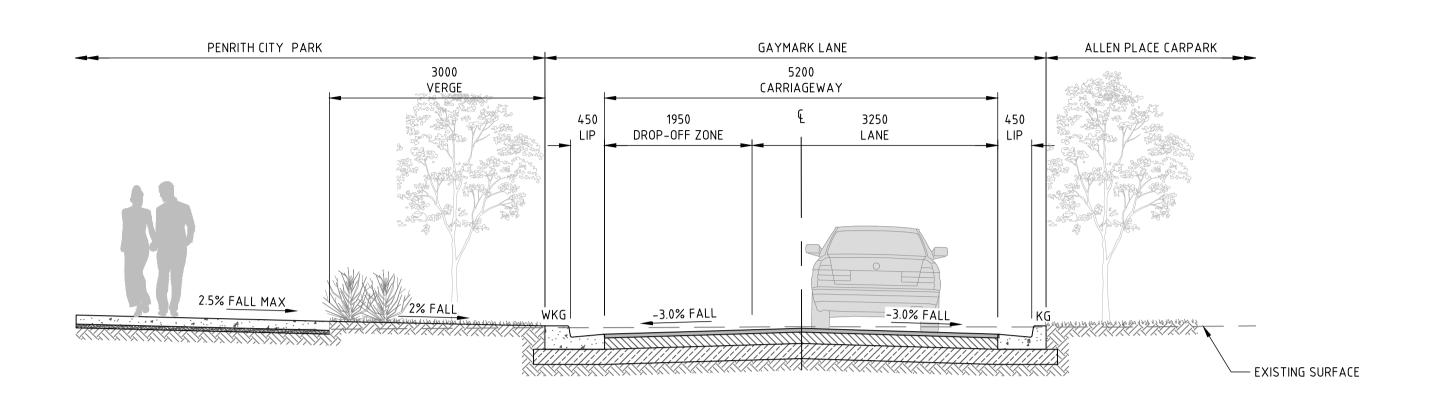




TYPICAL ROAD CROSS SECTION - MC01

SECTION A

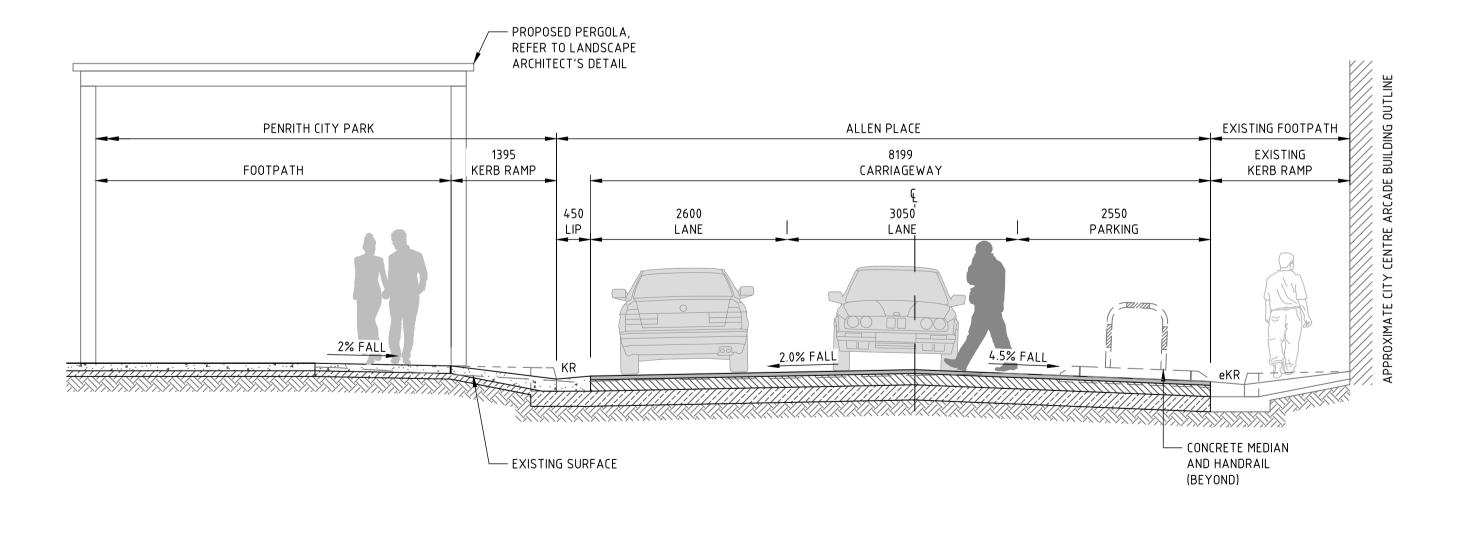


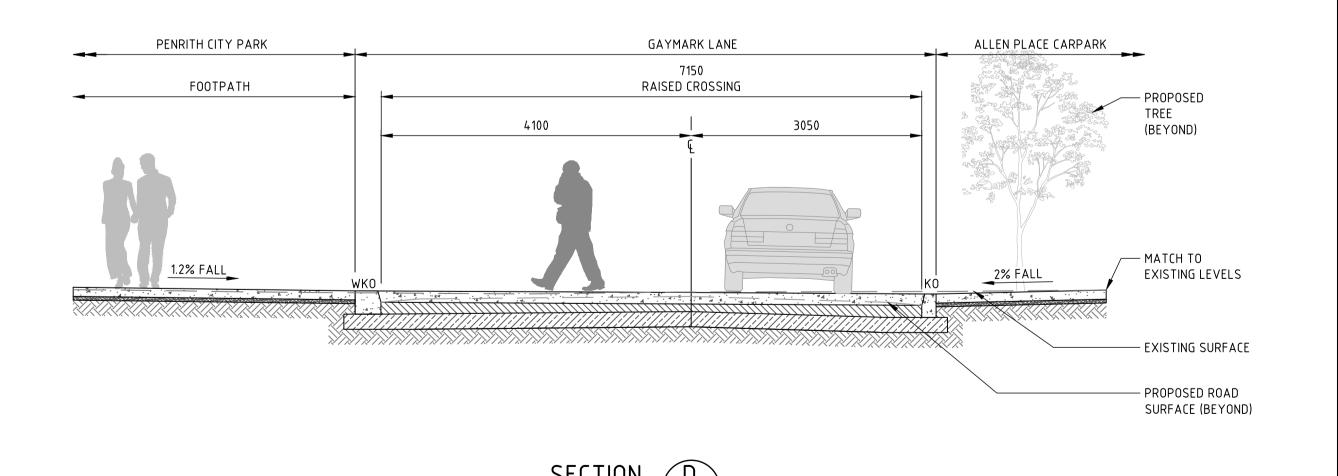


TYPICAL ROAD CROSS SECTION - MC02

SECTION







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05	ISSUED FOR INFORMATION	AS		SN	23.04.21	
06	ISSUED FOR INFORMATION	VC		SN	10.08.21	DRAWIN
07	ISSUED FOR DEVELOPMENT APPLICATION	VC		SN	16.08.21	UKAWIN



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CIVIL ENGINEERING PACKAGE

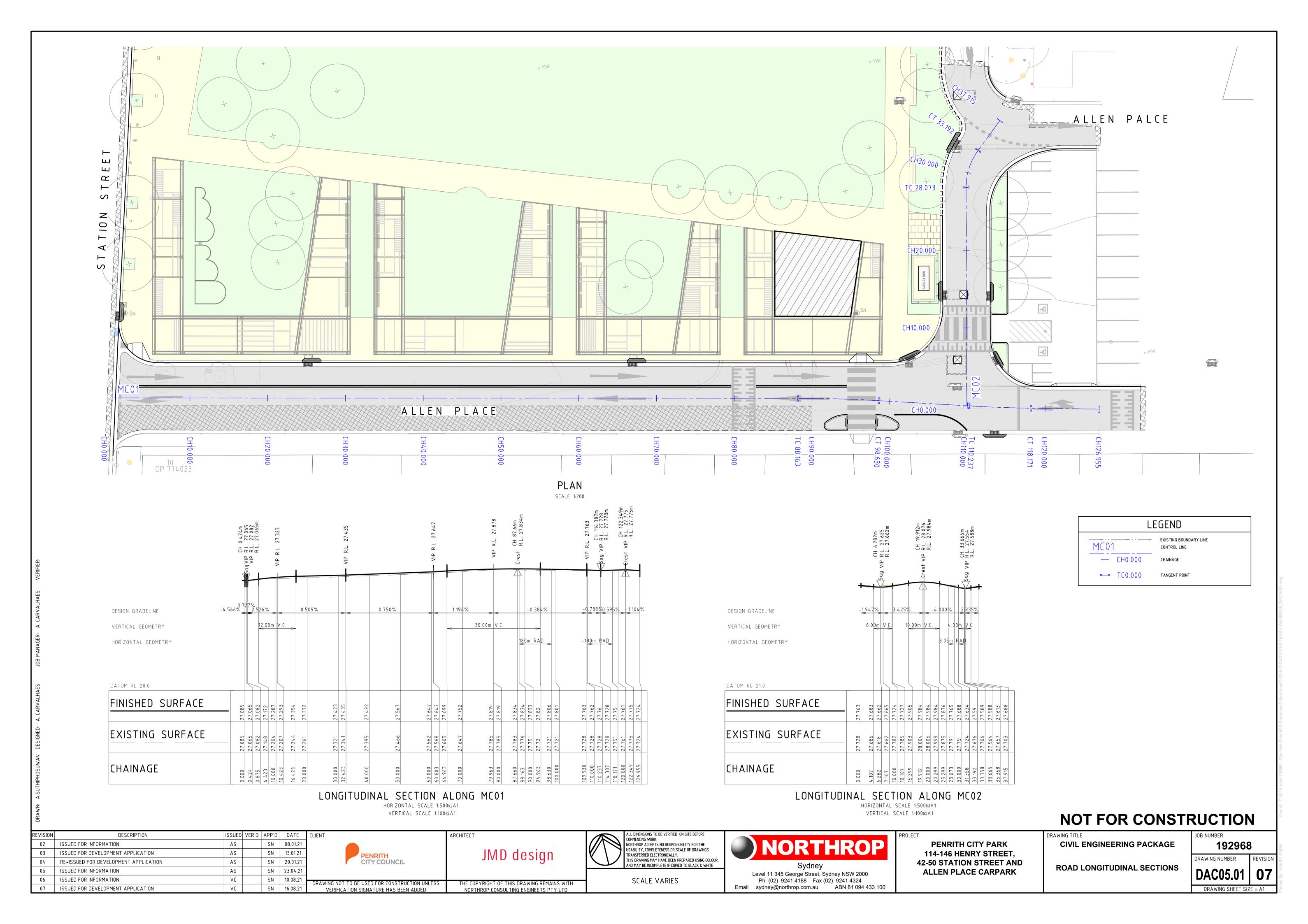
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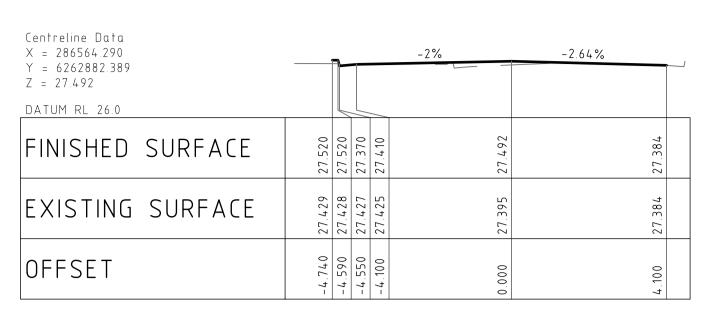
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TYPICAL ROAD CROSS SECTIONS







# MC01 - CHAINAGE 40.000

Centreline Data X = 286554.569 Y = 6262884.732 Z = 27.423 DATUM RL 26.0				_		-2.38%	
FINISHED SURFAC	27.451	27.451	27.301	27.341	27.423	27.325	
EXISTING SURFAC	E 27.337	27.335	27.334	27.328	27.321	27.325	
OFFSET	-4.740	-4.590	-4.550	-4.100	000.0	4.100	

# MC01 - CHAINAGE 30.000

Centreline Data X = 286544.847 Y = 6262887.075 Z = 27.372 DATUM RL 26.0					-2%	-2.81%	7
FINISHED SURFACE	27.400	27.400	27.250	27.290	27.372	27.257	
EXISTING SURFACE	27.282	7.28	27.283	27.286	27.261	27.257	
OFFSET	047.4-	-4.590	-4.550	-4.100	0.00.0	4.100	

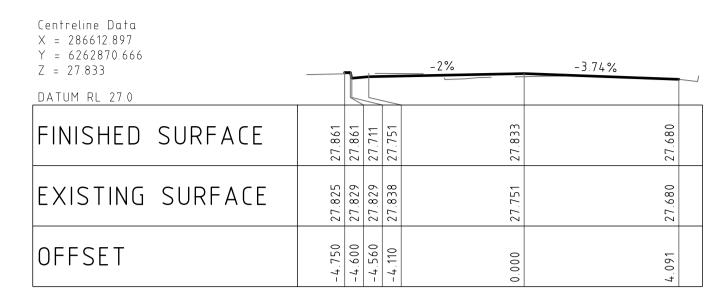
# MC01 - CHAINAGE 20.000

Centreline Data X = 286535.125 Y = 6262889.418 Z = 27.287			1		-2%	-2.58%	
DATUM RL 26.0		Ļ					
FINISHED SURFACE	27.315	27.315	27.165	27.205	27.287	27.181	
EXISTING SURFACE	27.284	27.284	27.284	27.281	27.204	27.184	
OFFSET	071.4-	-4.590	-4.550	-4.100	000.0	4.100	

### MC01 - CHAINAGE 10.000

Centreline Data X = 286528.907 Y = 6262890.916 Z = 27.151		-0.14%
DATUM RL 26.0		
FINISHED SURFACE	27.151	27.145
EXISTING SURFACE	27.147	27.145
OFFSET	0.000	4.100

MC01 - CHAINAGE 3.603



Centreline Data X = 286603.177			MC01 - C	HAINAGE	90.00
Y = 6262873.018 Z = 27.819			-2%	-1.29%	
DATUM RL 27.0					
FINISHED SURFACE	27.847	27.697	27.819		27.766
EXISTING SURFACE	27.770	27.771	27.785		27.766
OFFSET	-4.740	10101	000.0		4.100

Centreline Data X = 286593.455 Y = 6262875.361 Z = 27.752 DATUM RL 27.0			MC01 - C	HAINAGE -1.44%	80.000
FINISHED SURFACE	27.780 27.780 27.630	7.6	27.752		27.693
EXISTING SURFACE	27.645 27.645 27.645	7.64	27.647		27.693
OFFSET	-4.740 -4.590 -4.550	-4.100	0.00.0		4.100

### MC01 - CHAINAGE 70.000

Centreline Data X = 286583.734 Y = 6262877.703 Z = 27.642 DATUM RL 26.0				-2%	-1.45%	
FINISHED SURFACE	27.670	27.670	27.560	27.642	27.583	
EXISTING SURFACE		27.550	-	27.562	27.583	
OFFSET		-4.590		0.000	4.100	

### MC01 - CHAINAGE 60.000

Centreline Data K = 286574.012 Y = 6262880.046 Z = 27.567 DATUM RL 26.0					-2%	-2.35%	
FINISHED SURFACE	27.595	7.59	7.44	27.485	27.567		27.471
EXISTING SURFACE	27.469	<u>  -</u>	<u>  </u>	27.458	27.466		27.471
DFFSET	07.7-	-4.590	-4.550	-4.100	0.00.0		4.100

MC01 - CHAINAGE 50.000

Centreline Data X = 286648.469 Y = 6262860.674 Z = 27.724	1.33% -1.34%
DATUM RL 27.0	
FINISHED SURFACE	27.867 27.867 27.717 27.757 27.754 27.724
EXISTING SURFACE	27.862 27.879 27.745 27.757 27.724 27.688
OFFSET	-3.108 -2.958 -2.918 -2.468 0.000

Centreline Data X = 286641.731	MC0	1	-	(	CHAIN	NAGE	126.	95
Y = 6262862.399 Z = 27.761		<del>-</del> 1		-1.	75%	-4.84%	<u>,</u>	
DATUM RL 27.0		L	L					_
FINISHED SURFACE	27.830	27.830	27.680	27.720	27.761		27.625	
EXISTING SURFACE	27.739	27.737	27.720	27.719	27.761		27.625	
OFFSET	-2.994	-2.844	-2.804	-2.354	0.000		2.809	

Centreline Data X = 286632.092	MC01 - CHAIN	NAGE 120.000
Y = 6262865.057 Z = 27.762		-5.71%
DATUM RL 27.0		
FINISHED SURFACE	27.762	27.583
EXISTING SURFACE	27.728	27.583
OFFSET	0000	3.140

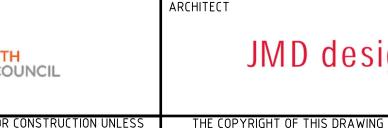
MC01 - CHAII	NAGE 110.000
	-4.52%_
27.801	27.633
27.721	27.633
0.00.0	3.722
	.000 27.721 27.801

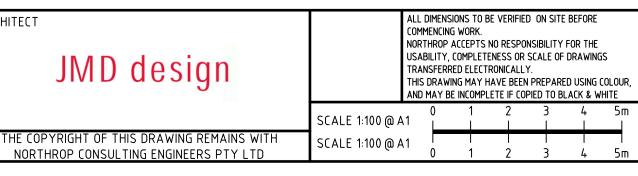
MC01 - CHAINAGE 100.000

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01	ISSUED FOR DRAFT DEVELOPMENT APPLICATION	СР		AC	25.09.2
02	ISSUED FOR INFORMATION	AS		SN	08.01.2
03	ISSUED FOR DEVELOPMENT APPLICATION	AS		SN	13.01.2
04	ISSUED FOR INFORMATION	AS		SN	23.04.
05	ISSUED FOR DEVELOPMENT APPLICATION	۷C		SN	16.08.2









PENRITH CITY PARK 114-146 HENRY STREET, 42-50 STATION STREET AND ALLEN PLACE CARPARK

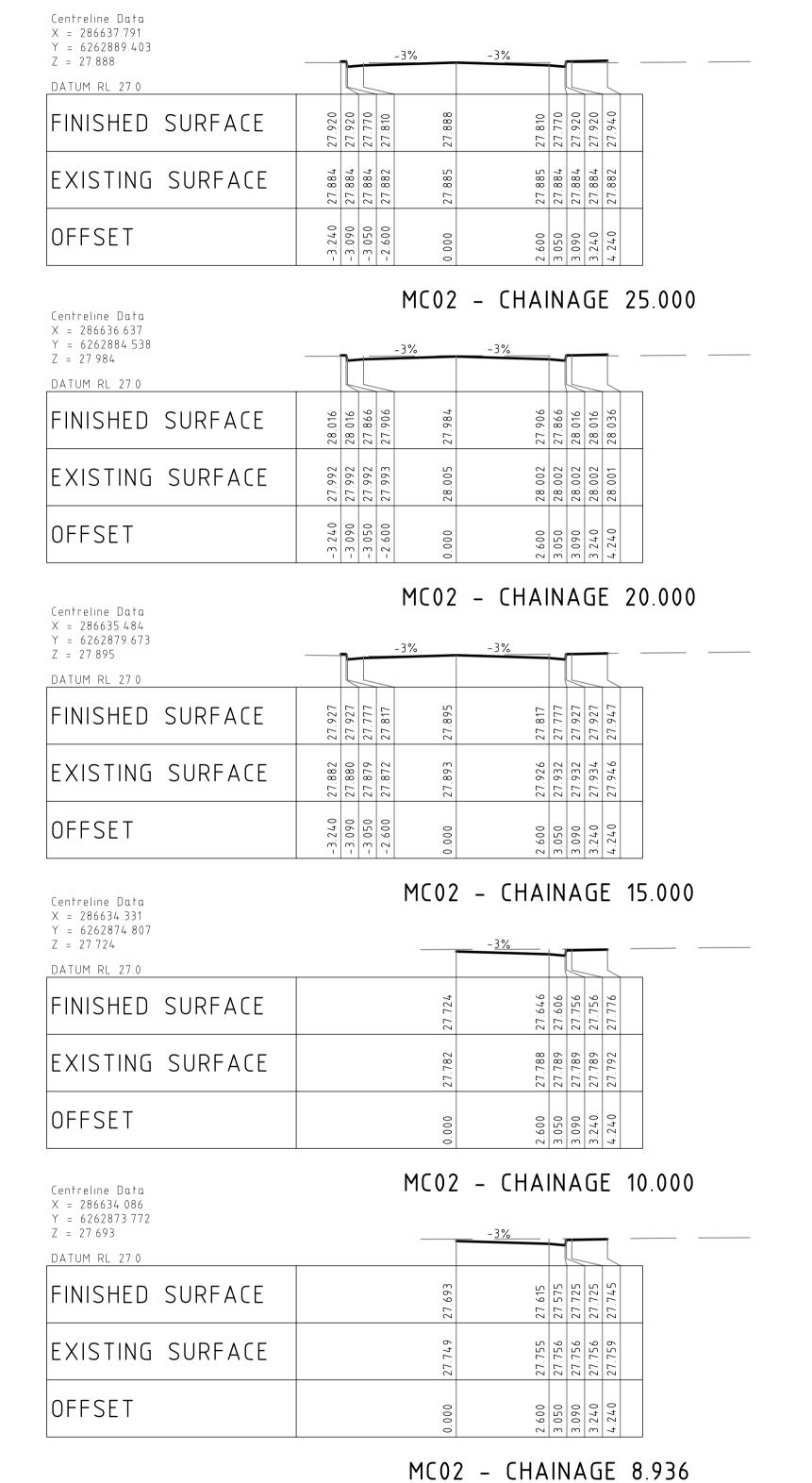
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**ROAD CROSS SECTIONS - SHEET 01** 

192968

DRAWING NUMBER REVISION DAC05.11 05 DRAWING SHEET SIZE = A1





FINISHED SURFACE EXISTING SURFACE OFFSET MC02 - CHAINAGE 33.192 Centreline Data X = 286639.163 Y = 6262894.197Z = 27.688DATUM RL 27.0 FINISHED SURFACE EXISTING SURFACE OFFSET

Centreline Data

DATUM RL 26.0

X = 286641.133Y = 6262896.682Z = 27.590

MC02 - CHAINAGE 30.000

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01	ISSUED FOR DRAFT DEVELOPMENT APPLICATION	СР		AC	25.09.20				NORTHROP ACCEPTS NO RESPONSIBILITY FOR THE	
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04	ISSUED FOR INFORMATION	AS		SN	23.04.21				0 1 2 3 4	5m
05	ISSUED FOR DEVELOPMENT APPLICATION	VC		SN	16.08.21	DDAVING NOT TO BE USED FOR CONSTRUCTION UNITES	THE CODYDICHT OF THIS DDAY INC DEMAINS VIITH	SCALE 1:100 @ A		_
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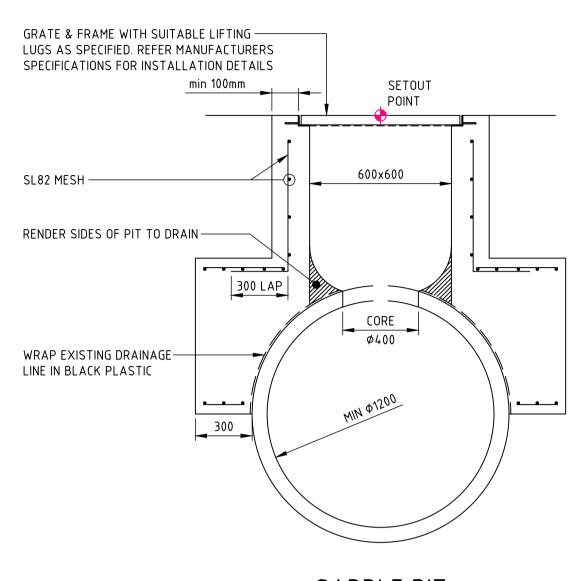
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**ROAD CROSS SECTIONS - SHEET 02** 

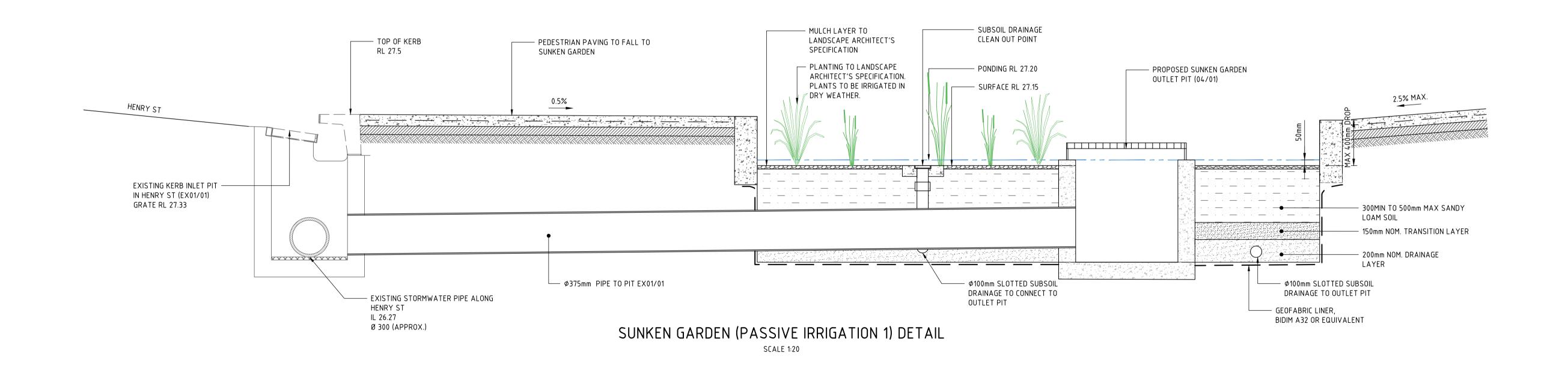
192968 DRAWING NUMBER

DAC05.12 05 DRAWING SHEET SIZE = A1

LINTEL PIT CONVERSION TO SOLID COVER DETAIL



SADDLE PIT
PIT STRUCTURE TO BE 200mm THICK UNLESS SHOWN OTHERWISE



REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
03	RE-ISSUED FOR DEVELOPMENT APPLICATION	AS		SN	18.01.21
04	ISSUED FOR INFORMATION	AS		SN	23.04.21
05	ISSUED FOR INFORMATION	AS		SN	18.05.21
06	ISSUED FOR INFORMATION	AS		SN	21.05.21
07	ISSUED FOR INFORMATION	VC		SN	10.08.21
08	ISSUED FOR DEVELOPMENT APPLICATION	VC		SN	16.08.21

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STORMWATER DETAILS

JOB NUMBER

192968

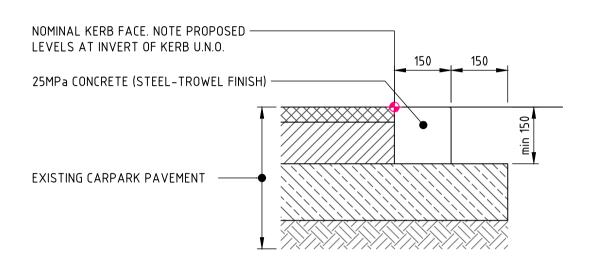
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DAC06.01 08

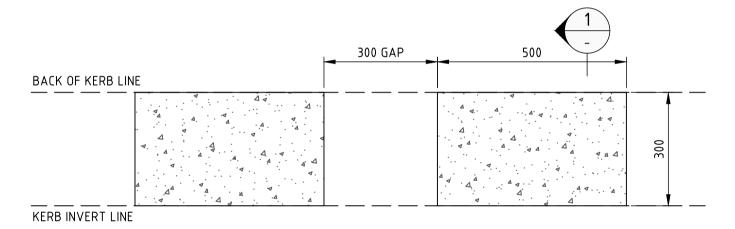
DRAWING SHEET SIZE = A1

### KERB & GUTTER 'KG'

EXPANSION JOINTS @ MAX 12m CTRS / TOOL JOINTS @ MAX 3m CTRS ALL RADII TO BE 20mm U.N.O.

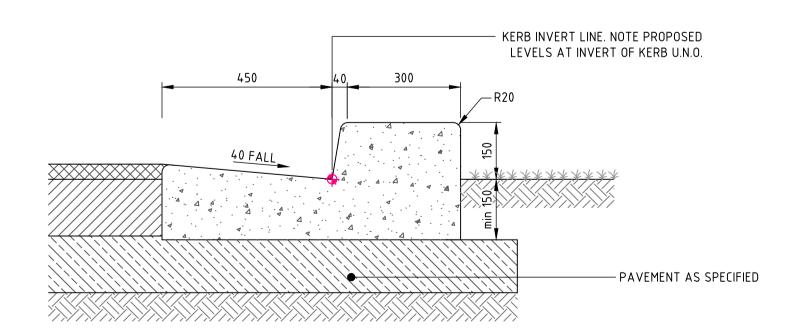


### FLUSH KERB 'FK' EXPANSION JOINTS @ MAX 12m CTRS / TOOL JOINTS @ MAX 3m CTRS ALL RADII TO BE 5mm U.N.O.

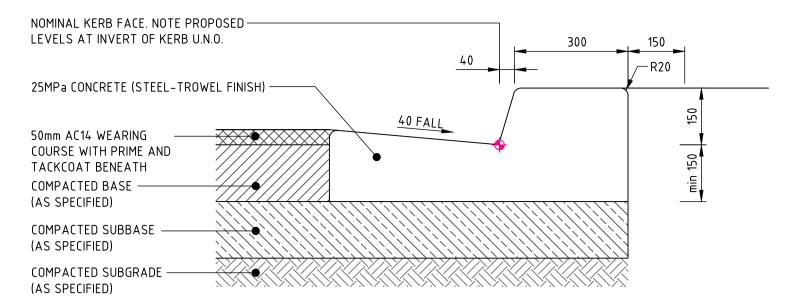


GUTTER LIP LINE PLAN

### CASTELLATED KERB 'CK' EXPANSION JOINTS @ MAX 12m CTRS / TOOL JOINTS @ MAX 3m CTRS ALL RADII TO BE 20mm U.N.O.

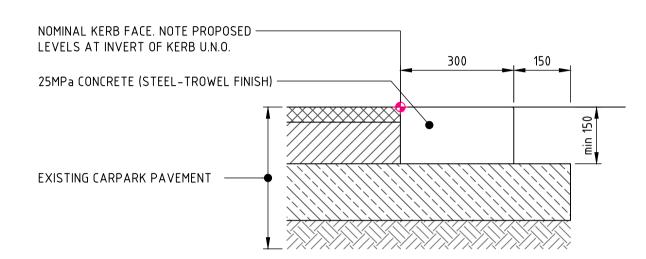


SECTION

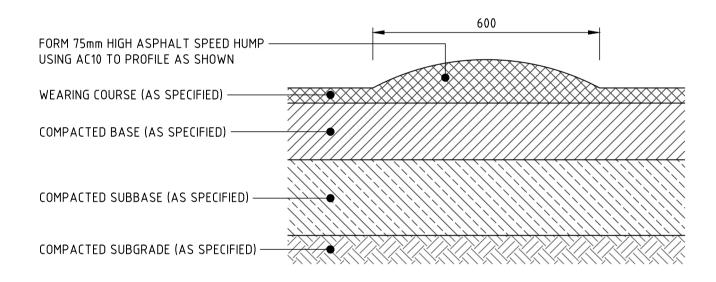


### WIDE KERB AND GUTTER 'WKG'

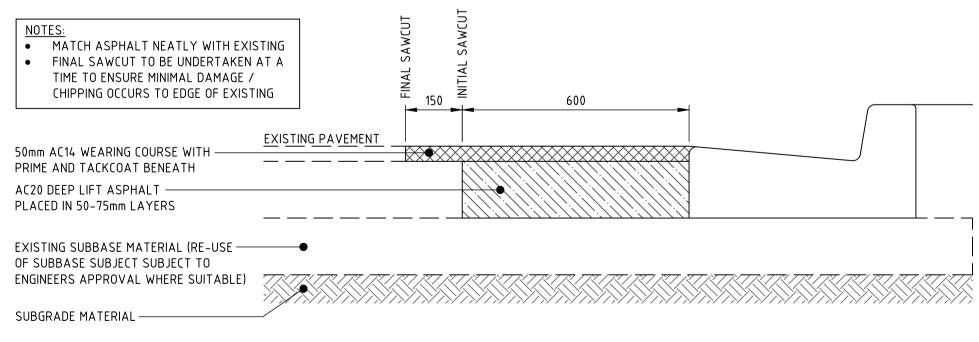
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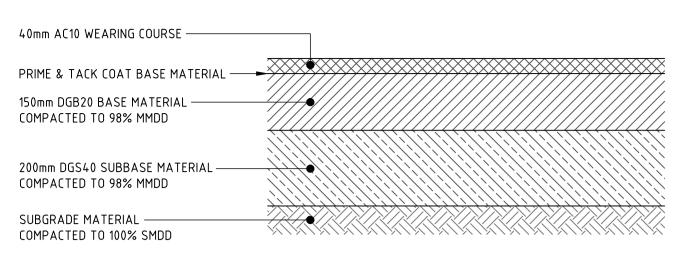
#### WIDE FLUSH KERB 'WFK' EXPANSION JOINTS @ MAX 12m CTRS / TOOL JOINTS @ MAX 3m CTRS ALL RADII TO BE 5mm U.N.O.



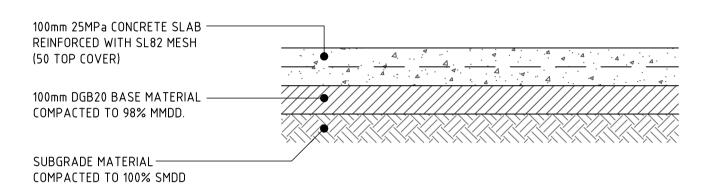
#### SPEED HUMP 'SH' ENSURE PLACEMENT OF SPEED HUMPS DO NOT DISRUPT SURFACE FLOWS PROVIDE SIGNAGE AND/OR PAINTED MARKINGS PROVIDING COLOUR CONTRAST TO ENSURE NO VISIBILITY ISSUES



SAW CUT AND PAVEMENT INFILL DETAIL 'INT'



#### FLEXIBLE PAVEMENT DETAIL PAVEMENT BUILD UP SHOWN IS INDICATIVE AND SUBJECT TO DETAILED DESIGN



FOOTPATH PAVEMENT TPE '02' - NON-TRAFFICABLE PAVEMENT BUILD UP SHOWN IS INDICATIVE AND SUBJECT TO DETAILED DESIGN

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DESCRIPTION |ISSUED| VER'D | APP'D | DATE 01 ISSUED FOR INFORMATION SN 08.01.21 02 ISSUED FOR DEVELOPMENT APPLICATION AS SN 13.01.21 03 RE-ISSUED FOR DEVELOPMENT APPLICATION AS SN 18.01.21 AS ISSUED FOR INFORMATION SN 23.04.2 05 ISSUED FOR INFORMATION SN 10.08.21 06 ISSUED FOR DEVELOPMENT APPLICATION SN 16.08.21

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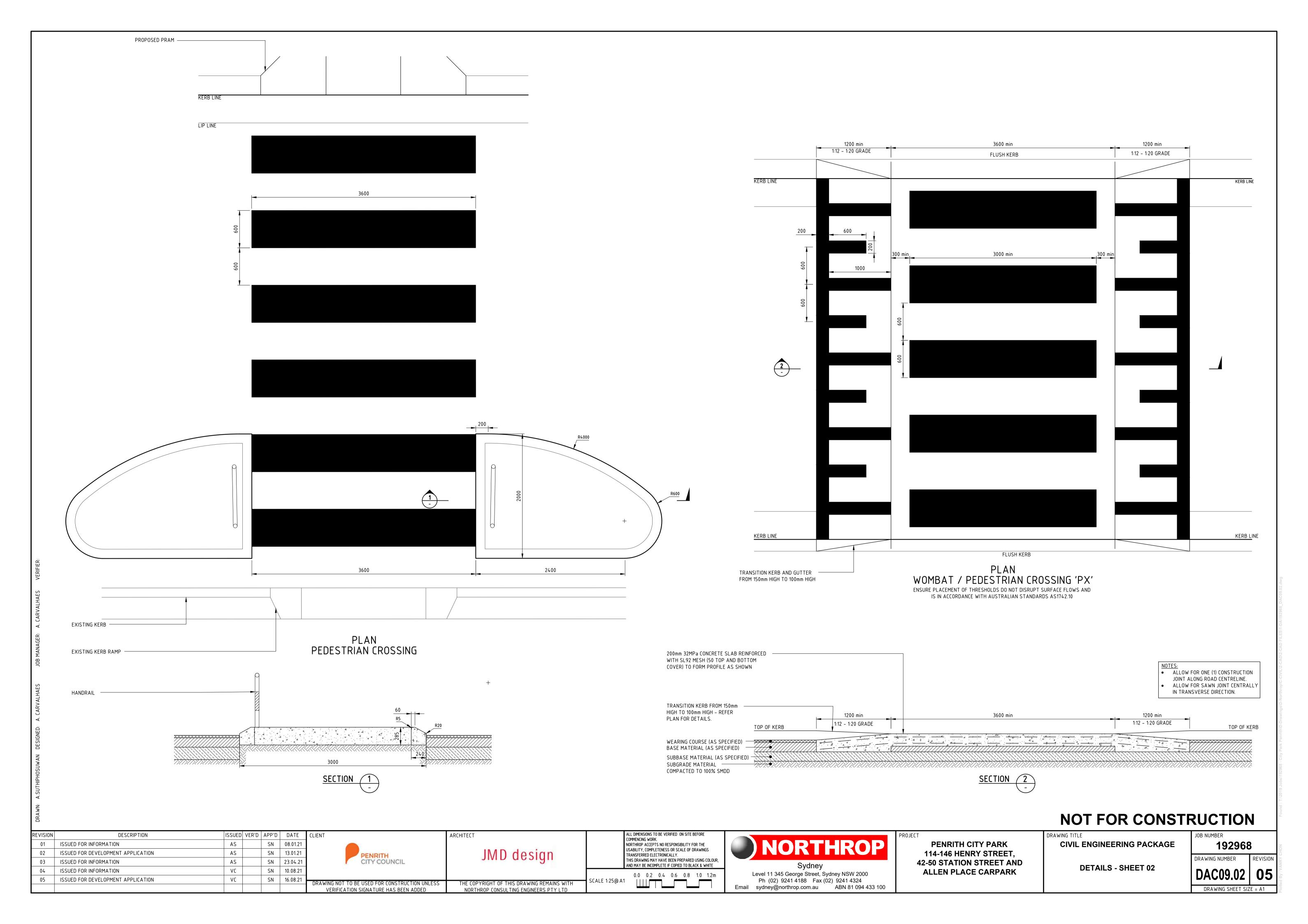
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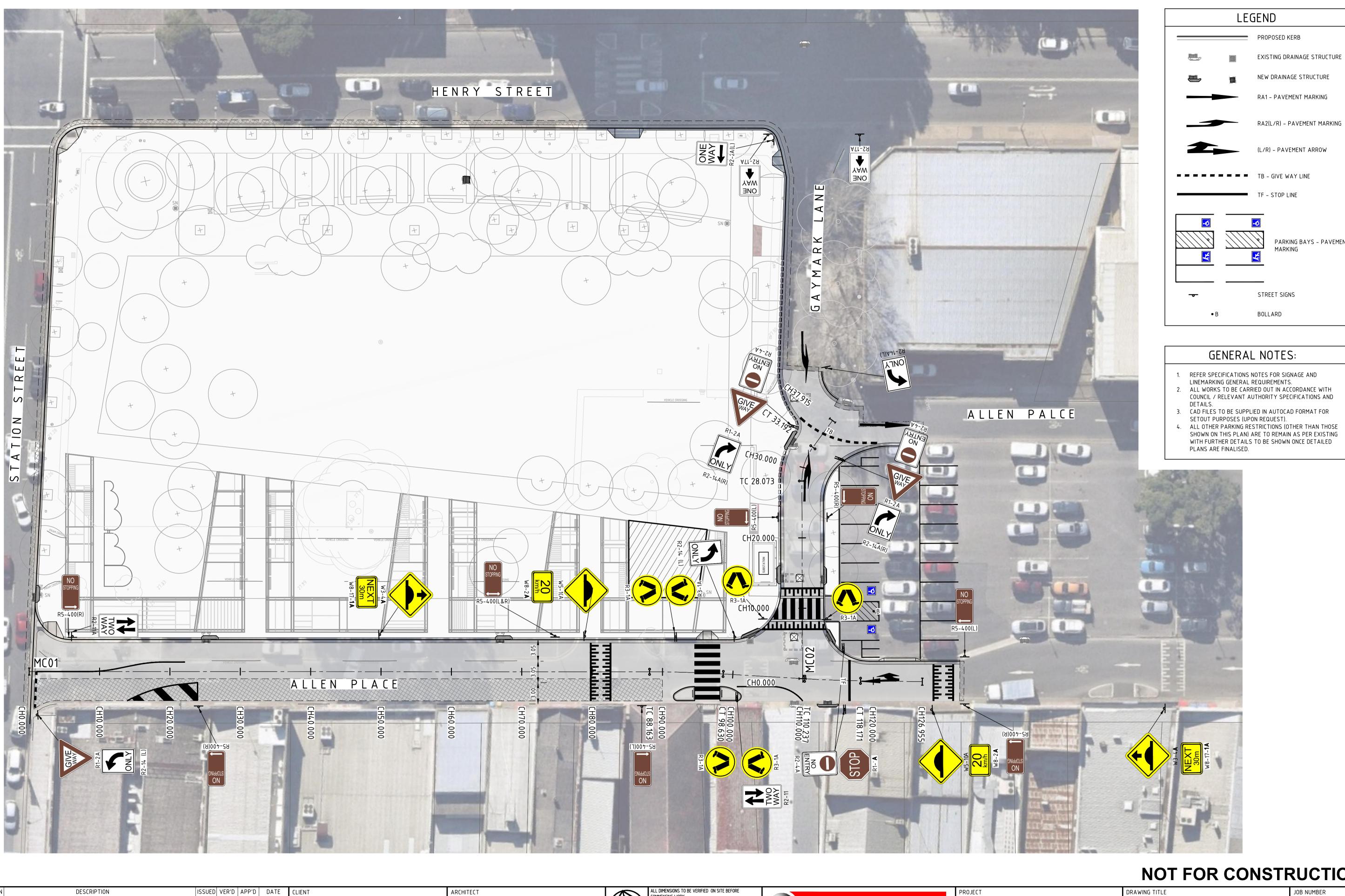
42-50 STATION STREET AND

CIVIL ENGINEERING PACKAGE

**DETAILS - SHEET 01** 

192968 DRAWING NUMBER



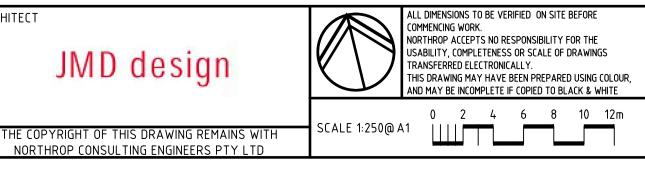


REVISION	DESCRIPTION	IZZOFD	AFK,D	APP'U	DATE
03	ISSUED FOR DEVELOPMENT APPLICATION	AS		SN	13.01.21
04	RE-ISSUED FOR DEVELOPMENT APPLICATION	AS	·	SN	20.01.21
05	ISSUED FOR INFORMATION	AS	·	SN	23.04.21
06	ISSUED FOR INFORMATION	VC		SN	10.08.21
07	ISSUED FOR DEVELOPMENT APPLICATION	VC		SN	16.08.21
08	ISSUED FOR DEVELOPMENT APPLICATION	AS		SN	25.08.21

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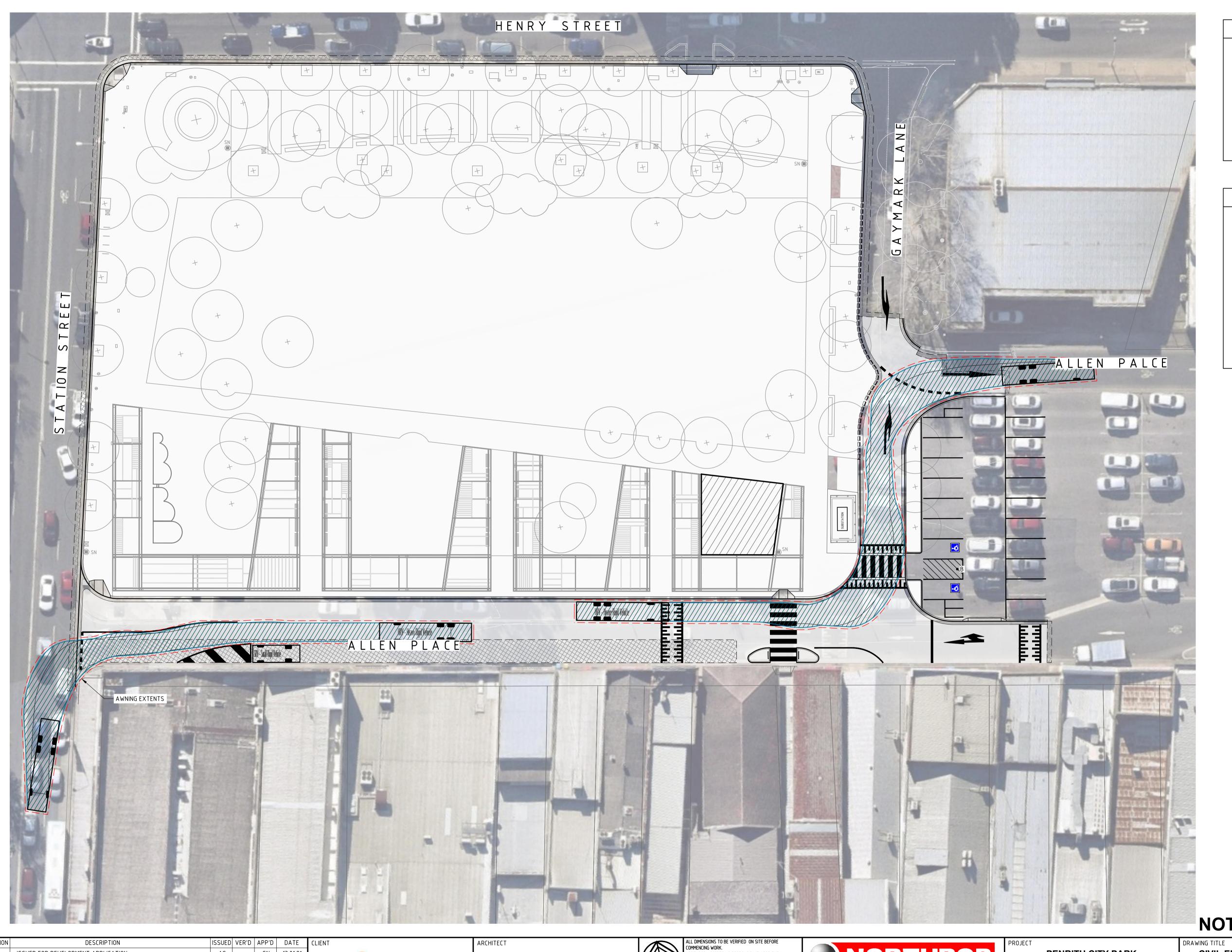
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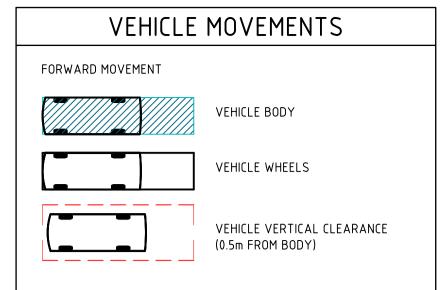
SIGNAGE AND LINEMARKING PLAN

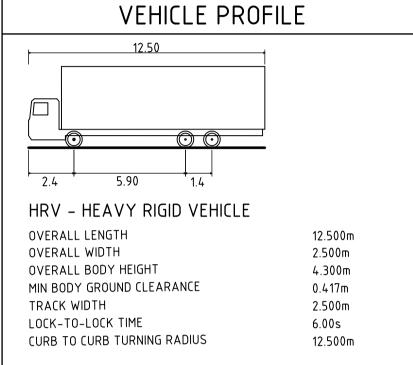
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192968	3
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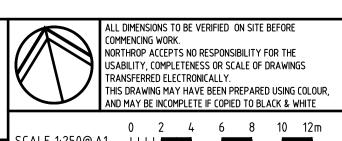
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02	ISSUED FOR DEVELOPMENT APPLICATION	AS		SN	13.01.21
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04	ISSUED FOR INFORMATION	AS		SN	23.04.21
05	ISSUED FOR INFORMATION	AS		SN	18.05.21
06	ISSUED FOR DEVELOPMENT APPLICATION	VC		SN	16.08.21
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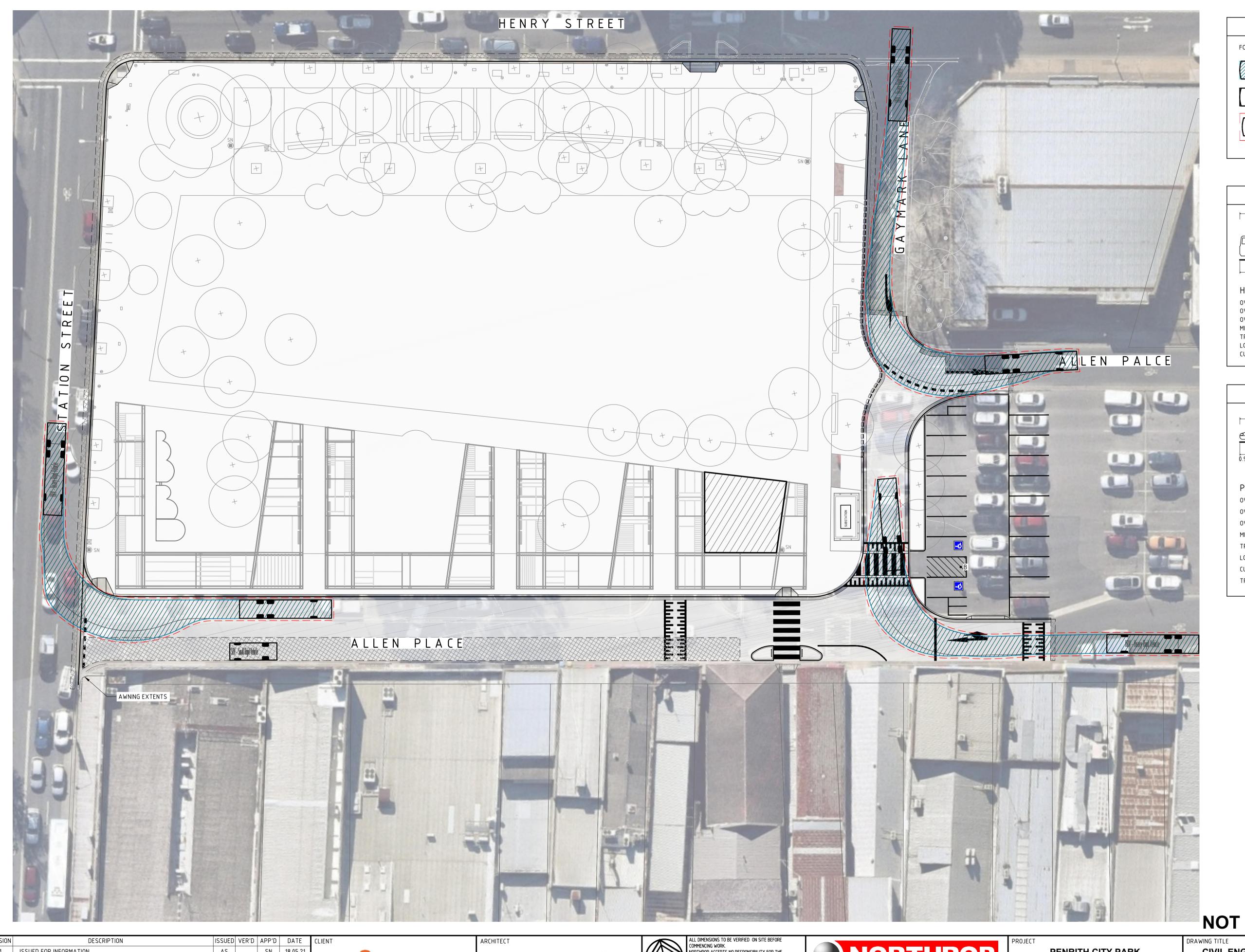
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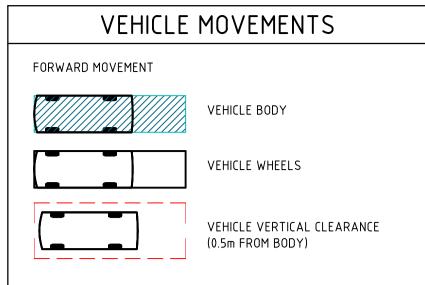
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114-146 HENRY STREET,
42-50 STATION STREET AND
ALLEN PLACE CARPARK

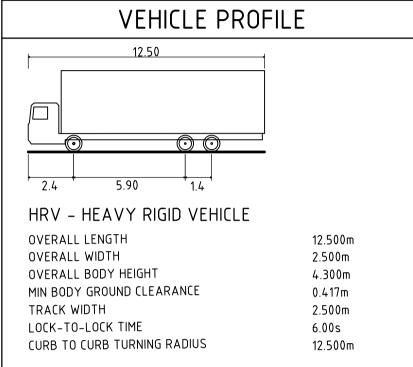
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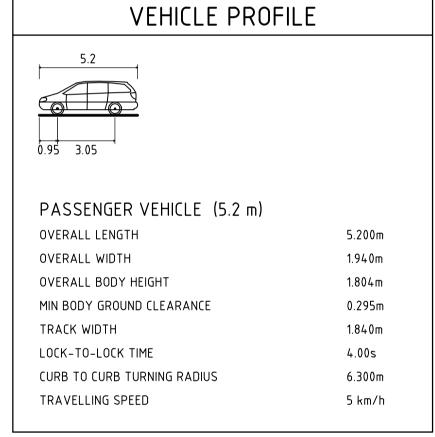
TURNING PATH PLAN - SHEET 01

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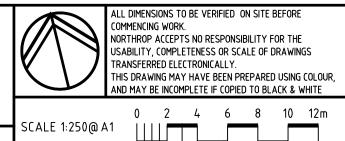
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TURNING PATH PLAN - SHEET 02

JOB NUMBER

192968

DRAWING NUMBER REVISION

DAC11.02 01

