

RIVERWOOD NORTH RESIDENTIAL RENEWAL PROJECT

CONCEPT PLAN APPLICATION

CIVIL WORKS & UTILITY SERVICES

LEGEND

CIVIL DRAINAGE SYMBOLS

	STORMWATER DRAINAGE PIPE
	STORMWATER RISING MAIN
	STORMWATER DRAINAGE CHANNEL
	RAINWATER
	SUB SOIL DRAINAGE WITH CLEAN OUT
	SUB SOIL RISING MAIN
	EARTH BANK LOW FLOW
	EARTH BANK HIGH FLOW
	EXCAVATED MATERIAL
	FLUME
	DIVERSION DRAIN
	DIVERSION DRAIN
	OVERFLOW PATH
	OVERFLOW DRAIN
	CONCRETE LINED DRAIN
	ROCK LINED DRAIN
	TABLE DRAIN
	V DRAIN (L)
	V DRAIN (R)
	SWALE or SPEED HUMP
	OVERLAND FLOW DIRECTIONAL ARROW
	OVERLAND FLOW PATH
	DOWN PIPE
	PAVED AREA DRAIN
	DROP TO OR RISE FROM
	RISE TO OR DROP FROM
	TEE DROP
	TEE RISE
	VERTICAL RISER IN DRAINAGE
	FLOW DIRECTIONAL ARROWS ON ALL PIPING SERVICES
	PIPELINE TERMINATED WITH BLANK FLANGE
	PIPELINE PLUGGED OFF
	CLEAROUT
	FLUSHING POINT
	NEW PIPE
	RISER SERVICE SIZE DROPPER
	NON-RETURN FLAP VALVE ON INSIDE FACE OF PIT AT ALL DOWN PIPES & SUB SOIL DRAINAGE LINES TO OSD SYSTEM

CIVIL ABBREVIATIONS

BWL	DRAINAGE LEVELS
IL	BOTTOM WATER LEVEL
OL	INVERT LEVEL
SL	OBVERT LEVEL
TWL	SURFACE LEVEL
	TOP WATER LEVEL
LD	GRATES & COVERS
MD	LIGHT DUTY CLASS 'B'
HD	MEDIUM DUTY CLASS 'C'
EHD	HEAVY DUTY CLASS 'D'
MP	EXTRA HEAVY DUTY CLASS 'E'
	MULTI PART COVER OR GRATE
CDS	PITS
DCP	CDS TECHNOLOGIES,
DGGP	STORMWATER TRAPS
GPT	DISCHARGE CONTROL PIT
JP	DOUBLE GRATED GULLY PIT
KEP	(CAST IRON)
KEU	GROSS POLLUTANT TRAP
MPC	JUNCTION PIT
MPG	KERB ENTRY PIT
RR	KERB ENTRY UNIT
SGGP	MULTI PART COVER
	MULTI PART GRATE
	RAINWATER REUSE
	SINGLE GRATED GULLY PIT (GMS)
	STORMWATER PIT
RW	DRAINAGE LINES
SS	RAIN WATER (REUSE)
STRM	SUBSOIL DRAINAGE
STW	STORMWATER RISING MAIN
GD	STORMWATER DRAIN
OLD	OPEN LINED DRAIN
OUT	OPEN UNLINED DRAIN
CO	FEATURES
DP	CLEAROUT
FP	ONSITE DETENTION
IO	PERMISSIBLE SITE DISCHARGE
OF	OVERFLOW PATH
RO	STORM WATER MANAGEMENT PLAN
DTU	EROSION & SEDIMENT CONTROL PLAN
OSD	OSD
PSD	ONSITE DETENTION
OPF	PERMISSIBLE SITE DISCHARGE
SWMP	OVERFLOW PATH
ESCP	STORM WATER MANAGEMENT PLAN
	EROSION & SEDIMENT CONTROL PLAN

	OSD ABOVE GROUND
	KEP - KERB ENTRY PIT
	DOUBLE GRATED GULLY PIT
	JUNCTION PIT WITH COVER
	SURFACE INLET PIT (FLUSH/RAISED)
	SURFACE INLET PIT (DEPRESSED)
	GRATED TRENCH DRAIN

EROSION & SEDIMENTATION SYMBOLS

	FENCES
	BARRIER FENCE
	SEDIMENT FENCE
	SILT FENCE ON LEVEL
	SILT FENCE ON GRADE
	WIND FENCE
	BANKS
	DIVERSION CHANNEL/BANK
	LEVEL SPREADER
	EARTH BANK
	EARTH BANK LOW FLOW
	EARTH BANK HIGH FLOW
	EXCAVATED MATERIAL
	TRAPS
	GEOTEXTILE SEDIMENT TRAP
	CHECK DAMS (STRAW BALE OR ROCK)
	CONCRETE ENERGY DISSIPATOR
	STABILISED CONSTRUCTION SITE VEHICLE ENTRY/EXIT GRID
	SEDIMENT TRAP
	GEOTEXTILE FILTER BAGS OR SOCK

ROAD LANE MARKING SYMBOLS

	C1 CONTINUITY LINE 1m, 3m, w0.200
	E1 EDGE LINE 35m, 1m, w0.120
	L1 LANE LINE 3m, 9m, w0.080
	S1 SEPARATION LINE 3m, 9m, w0.100
	S2 SEPARATION LINE 6m, 6m, w0.100
	S3 SEPARATION LINE 3m, 3m, w0.100
	T1 TURN LINE 0.6m, 0.6m, w0.100
	TB GIVEWAY LINE 0.6m, 0.6m, w0.200
	PAVEMENT MARKERS SQ, 1m CTS

LEGEND

SURVEY & MAPPING SYMBOLS

	PROPERTY BOUNDARY
	EASEMENT
	FENCE OFF BOUNDARY
	FENCE ALONG BOUNDARY
	FENCE ON BOUNDARY
	STATE BOUNDARY
	COUNTY BOUNDARY
	PARISH BOUNDARY
	SHIRE/MUNICIPALITY BOUNDARY
	NATIONAL PARK BOUNDARY
	STATE RECREATION BOUNDARY
	STATE FOREST BOUNDARY
	TELSTRA EXCHANGE BOUNDARY

GENERAL ABBREVIATIONS

CTS	CENTERS
CL	CENTRE LINE
DIA	DIAMETER
DMR	DEPARTMENT OF MAIN ROADS
DWG	DRAWING
EX.	EXISTING
GALV	GALVANIZED
HD GALV	HOT DIPED GALVANIZED
ID	INTERNAL DIAMETER
L.O.C.	LIMIT OF CONTRACT
MAX	MAXIMUM
MIN	MINIMUM
NB	NOMINAL BORE
N.I.C.	NOT IN CONTRACT
NOM	NOMINAL
NTS	NOT TO SCALE
OD	OUTSIDE DIAMETER
REV	REVISION
RTA	ROADS AND TRAFFIC AUTHORITY
SQ	SQUARE
SRA	STATE RAIL AUTHORITY
STD	STANDARD
UNO	UNLESS NOTED OTHERWISE
VERT	VERTICAL

LEVELS ABBREVIATIONS

CL	CEILING LEVEL
FFL	FINISHED FLOOR LEVEL
FGL	FINISHED GROUND LEVEL
GL	EXISTING GROUND LEVEL
HL	HIGH LEVEL
HP	HIGH POINT
LL	LOW LEVEL
ML	MID LEVEL
NS	NATURAL SURFACE LEVEL
PL	PLATFORM LEVEL
RL	REDUCED LEVEL
US	UNDER SIDE
USFL	UNDERSIDE FLOOR

ROAD PAVEMENT ABBREVIATIONS

AC	ASPHALTIC CONCRETE
CBR	CALIFORNIA BEARING RATIO
DOB	DENSELY GRADED BASE COURSE
DGS	DENSELY GRADED SUB BASE
DSL	DESIGN SUBGRADE LEVEL
F.C.R.	FINE CRUSHED ROCK
OT.R.	OTHER THEN ROCK
RC	REINFORCED CONCRETE
SF	STRIP FOOTING
?	RECYCLED CONCRETE JOINTS
BJ	BUTT JOINT
CJ	CRACK INDUCED JOINT
CJ	CONSTRUCTION JOINT
CJ	CONTRACTION JOINT
CJ	CONTROL JOINT
DJ	DOWELLED JOINT
DKJ	DOWELLED KEY JOINT
EJ	EXPANSION JOINT
IJ	ISOLATION JOINT
KJ	KEYED JOINT
SC	SAW CUT
TJ	TOOL JOINT
TKJ	TOBY KEYED JOINT
JK	FEATURES
LP	NEW JERSEY KERB BARRIER
NKL	LIGHT POLE
PP	NOMINAL KERB LINE
SL	POWER POLE
TL	STREET LIGHT
TL	TRAFFIC LIGHT

SURVEY ABBREVIATIONS

AHD	AUSTRALIAN HEIGHT DATUM
BK	BOTTOM OF KERB
BM	BENCH MARK
CL	CENTRE LINE
D.E.	DRAINAGE EASEMENT
DH&W	DRILL HOLE & WING
FD	FOUND
INV	INVERT
K & G	KERB & GUTTER
R.O.W.	RIGHT OF CARRIAGEWAY
SSM	STATE SURVEY MARK
TK	TOP OF KERB

RL 165.40	PROPOSED SURFACE LEVEL
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SERVICES & UTILITIES SYMBOLS

	AIR
	CABLES
	DRAINS
	ELECTRICAL
	LOW VOLTAGE
	HIGH VOLTAGE
	TRANSMISSION POWER LINES
	COMMON EFFLUENT
	EFFLUENT RISING MAIN
	FUEL
	GAS
	GAS HIGH PRESSURE
	GAS MEDIUM PRESSURE
	GAS LOW PRESSURE
	GAS
	NATURAL GAS
	HYDRAULIC POWER
	IRRIGATION
	RTA ROADS & TRAFFIC AUTHORITY
	SRA STATE RAIL SERVICE
	SEWER
	SEWER RISING MAIN
	TELECOMMUNICATIONS TELSTRA
	OPTICAL FIBRE OF
	OPTICAL FIBRE CABLE SMOF
	OPTUS
	OVERHEAD COMMUNICATION CABLE
	WATER
	WATER RISING MAIN
	MISCELLANEOUS SERVICE
	X
	Y
	Z
	DRAINAGE CULVERTS & PIPE SIZES GREATER THAN & INCLUDING 450 DIA TO BE SHOWN IN FULL WIDTH

NOTE:-
"e" ON SERVICE LINE REPRESENTS EXISTING SERVICE OR THE USE OF LOWER CASE LETTER.
"x" ON SERVICE LINE REPRESENTS SERVICE TO BE ABANDONED.

DRAFTING SYMBOLS

	SCALE BARS
	SCALE 1:200
	SCALE 1:200
	SECTION SYMBOL
	SECTION No. C-03
	REFERENCE DRAWING
	PIT No. 22/35
	LINE No.

WATER & SEWER ABBREVIATIONS

AC	ACCESS CHAMBER
BT	BOUNDARY TRAP
GM	GRAVITY MAIN
HYD	HYDRANT
IO	INSPECTION OUTLET
LH	LAMP HOLE
MH	MAN HOLE
PS	PUMP STATION
RM	RISING MAIN
SV	STOP VALVE
SWW	SYDNEY WATER WATERMAIN
WM	WATER METER

WATER & SEWER SYMBOLS

	PROPOSED SYDNEY WATER SEWER
	FUTURE SYDNEY WATER SEWER
	EXISTING SYDNEY WATER SEWER
	EXISTING SYDNEY WATER SEWER
	EXISTING SYDNEY WATER SEWER TO BE DISUSED.

MATERIALS

Br	BRASS
CI	CAST IRON
CICL	CAST IRON CEMENT LINED
CONC	CONCRETE
CP	CHROMIUM PLATED
CU	COPPER
DICL	DUCTILE IRON CEMENT LINED
FRC	FIBRE REINFORCED CEMENT GALVANISED
GMS	MILD STEEL
MS	MILD STEEL
NY	NYLON
PE	POLYETHYLENE
RC	REINFORCED CONCRETE
RCP	REINFORCED CONCRETE PIPE
RHS	RECTANGULAR HOLLOW SECTION
SS	STAINLESS STEEL

CATCHMENT SYMBOLS

	PIT CATCHMENT
	LINE CATCHMENT
	MAJOR CATCHMENT
	SUB CATCHMENT
	LIMIT OF CATCHMENT

CATCHMENT ABBREVIATIONS

P()	PAVED CATCHMENT AREA
R()	ROOFED CATCHMENT AREA
A()	LANDSCAPE CATCHMENT AREA
T()	TERRACE CATCHMENT AREA
ARI	AVERAGE RECURRENCE INTERVAL
CA	CATCHMENT AREA
Ha	HECTARE
L/s	LITRES PER SECOND (VELOCITY)
m/s	METRES PER SECOND (VELOCITY)
CUMECs	CUBIC METRES PER SECOND
Q	QUANTITY OF FLOW

DRAWING LIST

C-01	TITLE, DRAWING LIST, LEGEND, ABBREVIATIONS & NOTES
C-02	SPECIFICATION NOTES
C-03	EXISTING SITE SURVEY PLAN
C-04	STORMWATER DRAINAGE EXISTING CATCHMENT PLAN
C-05	STORMWATER DRAINAGE EXISTING LAYOUT PLAN
C-06	STORMWATER DRAINAGE PROPOSED CATCHMENT PLAN
C-07	STORMWATER DRAINAGE PROPOSED LAYOUT PLAN
C-08	BASEMENT FLOOR LEVELS PLAN
C-09	GROUND FLOOR LEVELS PLAN
C-10	SYDNEY WATER WATERMAIN SERVICING PLAN
C-11	SYDNEY WATER SEWER MAIN SERVICING PLAN
C-12	EROSION SEDIMENTATION CONTROL PLAN
C-13	EROSION SEDIMENTATION CONTROL DETAILS

CLIENT	HOUSING NSW & PAYCE COMMUNITIES P/L
PROJECT MANAGER	M PROJECTS
ARCHITECT	TURNER & ASSOCIATES ARCHITECTS

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CONCEPT PLAN APPLICATION		
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