

# PROPOSED MIXED USE DEVELOPMENT

## 157 REDFERN STREET, REDFERN

### STORMWATER CONCEPT PLAN

#### NOTES

##### GENERAL

- THE DRAWINGS SHALL BE READ AS REQUIRED IN CONJUNCTION WITH ARCHITECTURAL DRAWINGS
- ALL DIMENSIONS ARE IN mm UNO. DO NOT SCALE DRAWINGS, USE FIGURED DIMENSIONS
- THE PROPOSED WORKS DETAILED SHALL BE CONSTRUCTED TO THE REQUIREMENTS OF COUNCIL, GENERALLY AS DETAILED HEREUNDER
- ALL EXISTING SERVICES SHALL BE VERIFIED FOR DEPTH AND HORIZONTAL POSITION BY PHYSICAL MEANS PRIOR TO EXCAVATION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE SUPERINTENDENTS ATTENTION

##### STORMWATER DRAINAGE MATERIALS

- SELECT FILL SHALL BE MATERIAL OBTAINED FROM EXCAVATION OF THE PIPE TRENCH OR IMPORTED WITH A PARTICLE SIZE FOR ROCK NOT GREATER THAN 75mm OR FOR OTHER THAN ROCK NOT GREATER THAN 150mm
- IMPORTED FILL SHALL BE EITHER, & GENERALLY CONSIST OF SINGLE SIZED AGGREGATE WITH PARTICLE SIZE NOT GREATER THAN 5mm WRAPPED ALL AROUND WITH GEOTEXTILE FILTER FABRIC OR APPROVED HIGH COMPACTION SAND OR APPROVED CRUSHED ROAD GRAVEL CONFORMING TO RTA FORM 3051 OR SIMILAR
- CONCRETE SHALL HAVE A SLUM OF 80mm. A MAXIMUM AGGREGATE SIZE OF 20mm & STRENGTH GRADE OF 25mPa (KERBS, EDGE STRIPS & CONCRETE ENCASEMENT) & 32mPa ELSEWHERE
- ALL PIPES & FITTINGS FOR STORMWATER DRAINAGE SHALL BE AS FOLLOWS UNO ON THE DRAWINGS:
  - UNPLASTISIZED POLYVINYL CHLORIDE (UPVC) WITH SOLVENT WELDED JOINTS FOR DRAINAGE UP TO 300mm
  - FIBRE REINFORCED CEMENT WITH RUBBER RINGS FOR PIPE DIAMETERS GREATER THAN 300mm UNO
  - REINFORCED CONCRETE WHERE REQUIRED BY AS3500 FOR EXCESSIVE DEPTH
  - INSTALL IN ACCORDANCE WITH AUSTRALIAN STANDARD AS3500 EXCEPT WHERE VARIED BY THE CONTRACT DOCUMENTS
- ALL INGROUND DRAINAGE PIPEWORK SERVING DOWNPIPES SHALL BE MINIMUM 100mm DIAMETER UNO
- ALL GRATED DRAINS SHALL BE 225mm UNO WIDTH IN TRAFFICABLE AREAS
- ALL GUTTERS TO BE SIZED AT CONSTRUCTION CERTIFICATION STAGE

##### EARTHWORKS AND RESTORATION

- EXCAVATE TRENCHES & STOCKPILE ALL MATERIAL FOR INSPECTION WITH REGARD TO RE-USE
- BEDDING MATERIAL SHALL CONSIST OF IMPORTED FILL ONLY. THICKNESS OF BEDDING LAYER SHALL BE 75mm IN O.T.R. & 200mm IN ROCK
- EMBED ALL PIPES WITH IMPORTED FILL. PROVIDE 200mm SIDE SUPPORT & 150mm OVERLAY ABOVE PIPE CROWN
- TRENCH FILL ABOVE THE EMBEDMENT ZONE TO THE UNDERSIDE OF THE ROAD PAVEMENT OR FOOTWAY FILL MATERIAL SHALL BE AS FOLLOWS:

##### UNDER ROADWAY:

TRENCH FILL MATERIAL SHALL CONSIST OF IMPORTED FILL AS SPECIFIED OR EITHER HIGH GRADE COMPACTION SAND OR APPROVED CRUSHED ROAD GRAVEL CONFORMING TO RTA FORM 3051 OR SIMILAR

##### OTHER THAN ROADWAY:

TRENCH FILL MATERIAL EXCAVATED SHALL CONSIST OF SELECT FILL AS SPECIFIED & SHALL NOT CONTAIN MORE THAN 20% OF STONES OF SIZE BETWEEN 25mm & 150mm AND NONE LARGER THAN 150mm. PRIOR TO USE OF THE EXCAVATED MATERIAL IT SHALL BE INSPECTED & APPROVED BY THE CONSULTANT

- COMPACT BEDDING, EMBEDMENT & TRENCH FILL MATERIALS AS FOLLOWS:

##### EMBEDMENT:

FOR GRANULAR FILL MATERIAL (NON-COHESIVE SOILS) EG: COARSE AGGREGATE FILL, HIGH GRADE COMPACTION SAND, THE DENSITY INDEX (ID) SHALL BE NOT LESS THAN 65%

##### TRENCH FILL:

FOR GRANULAR MATERIAL (NON-COHESIVE SOILS) THE DENSITY INDEX (ID) SHALL BE NOT LESS THAN 85%

FOR NON-GRANULAR FILL MATERIAL (COHESIVE SOILS) THE DRY DENSITY RATIO (RD) SHALL BE NOT LESS THAN 95%

- RESTORE ALL TRAFFIC AREAS PER STRUCTURAL ENGINEERS DETAILS OR OTHERWISE AS REQUIRED BY COUNCIL

- FOR ALL SURFACES OTHER THAN IN TRAFFIC AREAS RESTORE DISTURBED SURFACES TO PRE-EXISTING CONDITIONS UNO ON ARCHITECTURAL OR LANDSCAPE ARCHITECTS DRAWINGS & COMPACT AS SPECIFIED

##### INSTALLATION OF PIPE SYSTEM

- MINIMUM GRADES FOR GRAVITY STORMWATER DRAINAGE SHALL CONFORM TO AS3500 PART 3 AS FOLLOWS, UNO:

1% FOR 100 DIAMETER  
0.5% FOR 150 & 225 DIAMETER  
0.4% FOR 300mm DIAMETER  
0.35% FOR 375mm DIAMETER

- PIPES SHALL BE TRUE TO GRADES SHOWN & ALIGNED SO THAT THE CENTRES OF THE INLET PIPES INTERSECT WITH THE CENTRE OF THE OUTLET PIPE AT THE DOWNSTREAM FACE OF THE PIT

- MINIMUM DEPTH OF COVER SHALL BE:  
300mm FOR NON-TRAFFICABLE AREAS  
450mm FOR TRAFFICABLE AREAS  
600mm FOR HEAVY VEHICLE TRAFFIC AREAS







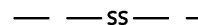
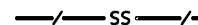
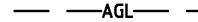

















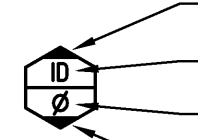
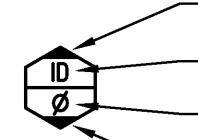
- BED ALL PIPES FIRMLY & EVENLY ONTO IMPORTED BEDDING FILL MATERIAL

- LOCATIONS & FIXING OF PIPEWORK SHALL BE SUBJECT TO CO-ORDINATION WITH OTHER DESIGN DISCIPLINES EG: PENETRATIONS THROUGH CONCRETE ELEMENTS

##### APPROVALS

- THE AS CONSTRUCTED WORKS SHALL BE INSPECTED BY COUNCIL BUILDING INSPECTOR OR DESIGN CONSULTANT. MINIMUM 48 HOURS NOTICE SHALL APPLY TO ALL INSPECTIONS
- COUNCIL ENGINEER TO BE GIVEN 48 HOURS NOTICE OF INTENTION TO COMMENCE CONNECTION TO EXISTING COUNCIL MAIN
- SUBMIT WORK AS EXECUTED DRAWINGS IN HARD COPY FORMAT. VERIFY ALL CONSTRUCTION WORKS SHOWN
- CERTIFY THAT THE AS CONSTRUCTED SYSTEM HAS BEEN BUILT IN ACCORDANCE WITH THE APPROVED PLANS ISSUED FOR CONSTRUCTION

#### LEGEND

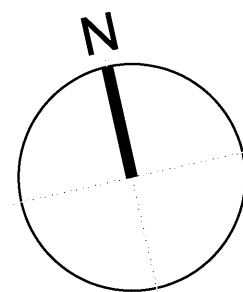
EXISTING	PROPOSED	
		STORMWATER MAIN
		SEWER DRAINS OR WASTES
		WASTE LINE
		SUB-SURFACE DRAINS
		AGL GAS MAIN
		NON RETURN VALVE
		BUCKET TRAP
		SILT TRAP
		TRENCH GRATE
		FLOOR WASTE
		EXPANSION JOINT
		CLEAR OUT POINT
		INSPECTION OPENING
		SERVICE ID SIZE t/a t/b

#### ABBREVIATIONS

eFH	EXISTING FIRE HYDRANT.	MH	MANHOLE.
EX	EXISTING	VR	VERTICAL RISER.
IO	INSPECTION OPENING	JU	JUMP UP.
UPVC	UNPLASTICIZED POLYVINYL CHLORIDE.	AP	ALTERING PIPE.
KO	KERB OUTLET	CO	CLEAR OUT.
FP	FLUSHING POINT	RWT	RAINWATER TANK
RWO	RAIN WATER OUTLET	OSD	ONSITE DETENTION
TG	TRENCH GRATE	SWP	STORMWATER PIT
HP	HIGH PONT		
RWH	RAINWATER HARVEST		
DP	DOWNPIPE		

#### DRAWING LIST

		SCALE
SC01	COVER SHEET & LEGEND	N.T.S.
SC02	BASEMENT 5 PLAN - STORMWATER CONCEPT	1:100
SC03	BASEMENT 4 - STORMWATER CONCEPT	1:100
SC04	BASEMENT 3 - STORMWATER CONCEPT	1:100
SC05	BASEMENT 2 - STORMWATER CONCEPT	1:100
SC06	BASEMENT 1 - STORMWATER CONCEPT	1:100
SC07	LEVEL 1 (GROUND) - STORMWATER CONCEPT	1:100
SC08	LEVEL 2 (RSL) - STORMWATER CONCEPT	1:100
SC09	LEVEL 3 (OFFICE) - STORMWATER CONCEPT	1:100
SC10	LEVEL 4 (OFFICE) - STORMWATER CONCEPT	1:100
SC11	LEVEL 5 (RESIDENTIAL) - STORMWATER CONCEPT	1:100
SC12	LEVELS 6 to 12 (RESIDENTIAL) - STORMWATER CONCEPT	1:100
SC13	LEVELS 13 - 16 (RESIDENTIAL) - STORMWATER CONCEPT	1:100
SC14	LEVEL 17 (RESIDENTIAL) - STORMWATER CONCEPT	1:100
SC15	LEVEL 18 (RESIDENTIAL) - STORMWATER CONCEPT	1:100
SC16	LEVEL 19 (ROOF TERRACE) - STORMWATER CONCEPT	1:100
SC17	EXTERNAL WORKS - STORMWATER CONCEPT	1:100



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A	DEVELOPMENT APPLICATION ISSUE			22.06.09	NL	NL							
No.	REVISION/ISSUE			DATE	BY	CHECKED							