# 11 LEE STREET, CONDELL PARK STORMWATER PLAN

#### GENERAL

G1. THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL ARCHITECTURAL & OTHER WORKING DRAWINGS, SPECIFICATIONS & WITH SUCH WRITTEN INSTRUCTIONS AS MAY BE ISSUED DURING THE COURSE OF THE CONTRACT

G2. ALL WORKMANSHIP & MATERIALS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CURRENT EDITION OF THE RELEVANT AUSTRALIAN STANDARDS, THE BUILDING CODE OF AUSTRALIA AND ANY OTHER APPLICABLE AUTHORITY REQUIREMENTS.

G3. ANY CONFLICT BETWEEN THESE NOTES, THE SPECIFICATION, THE DRAWINGS OR ANY OTHER RELEVANT DOCUMENTS SHALL BE REFERRED TO ASCO ENGINEERING FOR DECISION PRIOR TO PROCEEDING WITH THE WORK

G4. DIMENSIONS SHALL NOT BE OBTAINED BY SCALING THE DRAWINGS. FOR SETTING OUT DIMENSIONS & LEVELS REFER TO ARCHITECTURAL DRAWINGS.

THE BUILDER SHALL BE RESPONSIBLE FOR THE PROVISION OF ALL SHORING G5 TO MAINTAIN THE STABILITY & INTEGRITY OF EXCAVATIONS & ADJACENT STRUCTURES.

G6. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE ALL SERVICES PRIOR TO COMMENCEMENT OF ANY EARTHWORKS.

G7. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS NOTED OTHERWISE.

STORMWATER

W1. ALL LEVELS ARE TO A.H.D. UNO.

W2 THE STORMWATER SYSTEM IS DESIGNED TO COMPLY WITH COUNCIL'S DESIGN CRITERIA AND TO APPROXIMATELY MAINTAIN EXISTING FLOW PATTERNS.

W3. OVERLAND FLOW PATHS ARE PRESERVED.

W4 EXISTING DRAINAGE AND LEVELS ARE BASED ON SURVEY PROVIDED & SHOULD BE ASSUMED TO BE APPROXIMATE. ALLOW TO CONFIRM ALL RELEVANT DETAILS BEFORE PROCEEDING WITH AFFECTED AREAS.

W5. ALL WORK TO COMPLY WITH AS3500.3.

W6. ALL PITS TO BE PRECAST CONCRETE OR F.R.C. UNO.

DOWNPIPE LOCATIONS SHOULD BE CONFIRMED WITH ARCHITECT'S PLAN UNO W7.

GRADE LOCAL SURFACES INTO PITS TO ENSURE COLLECTION OF WATER & W8 THAT THERE ARE NO AREAS OF PONDING, TYPICAL

W9. GRATED TRENCHES AND SILT ARRESTOR PITS TO BE INSPECTED AND CLEANED AFTER PERIODS OF HEAVY RAINFALL.

W10 TREE ROOTS TO BE AVOIDED DURING PLACEMENT OF DRAINAGE SYSTEM

W11. ALL PIPES TO BE Ø100 UPVC UNO.

W12. ALL PIPES TO HAVE 100 MIN. COVER IN LANDSCAPED AREAS AND 600 MIN. COVER IN TRAFFICABLE AREAS.

W13. ALL INLET AND OUTLET PIPES FROM PITS TO BE CONNECTED AT THE HIGHEST POSSIBLE INVERT LEVEL WHILST KEEPING 1% MIN. GRADE UNLESS NOTED OTHERWISE

W14. FINISHED SURFACES TO BE GRADED AWAY FROM THE DWELLING AND TOWARD THE PITS.

W15. GRATED TRENCHES TO BE 1% MIN. GRADE THROUGHOUT TO OUTLET PIPE.

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STAKE-

NOTE: DO NOT SCALE OFF DRAWINGS. REFER TO ARCHITECTURAL PLANS. VERIFY DIMENSIONS ON SITE





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| STREET, CONDELL PARK | DRAFTED BY:<br>TH  | DATE:<br>17.02.2025 |                |
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| ORMWATER NOTES       | DESIGNED BY:<br>TH | SCALE:<br>AS SHOWN  | $\mathbb{N}$   |
|                      |                    |                     |                |



## **BASEMENT PLAN**

1:100

ALL RETAINING WALLS TO HAVE 100mm DIA AG LINES INSTALLED AT THE BOTTOM OF RETAINED SOIL AND CONNECTED TO NEAREST DRAINAGE PIT

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- TANK WATER TAPS SHALL BE MARKED " RAINWATER NOT TO HUMAN CONSUMPTION".
- RAINWATER TANKS SHALL BE CONNECTED TO MAINS WATER SUPPLY AS BACK UP.
- THE PUMP ARE TO BE INSULATED IN ACCORDANCE WITH
- EACH TANK TOP BE CONNECTED TO INTERNAL REUSE IN
- TOILET FLUSHING, LAUNDRY COLD WATER, AND TO
- RAINWATER TANK TO BE CLEANED OUT EVERY 6 MONTHS.
- WATER TANK AND ASSOCIATED STRUCTURE TO BE THE
- SAME COLOR, OR A COLOR COMPLEMENTARY TO THE
- TOP TANK TO BE BELOW TO OF NEAREST FENCE, OR 1.8M METERS WHICHEVER IS LESS.
- THE WATER TANK SHOULD BE LOCATED AT LEAST 900mm FROM ANY PROPERTY BOUNDARY.
- 10. PLUMBING FROM THE WATER TANK IS TO BE KEPT SEPARATED FROM THE RETICULATED WATER SUPPLY
- 11. TANK TO BE BUILT ON SELF-SUPPORTING BASE.
- 12. PROVIDE BACK-FLOW PREVENTING DEVICE AT MAINS
- ROOF DRAINING TO TANK MUST NOT CONTAIN LEAD, TAR BASED PAINTS OR ASBESTOS.
- 14. WATER TO BE DRAWN FROM ANAEROBIC ZONE OF TANK.

PROVIDE SMOOTH JOIN WITH INSIDE OF MAIN PIPE INFLOW PIPE TYP. 100mmØ OR FILL WITH MASS CONCRETE MAIN PIPE SECTION A PERMANENT BIDIM A24 GEOTEXTILE FABRIC WITH 10mm AGGREGATE

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#### WARNING PUMP OUT SYSTEM FAILURE IN BASEMENT WHEN LIGHT IS FLASHING AND SIREN SOUNDING

### BASEMENT PUMP OUT FAILURE

WARNING SIGN NOTE

NUTE: 1- SIGN SHALL BE PLACED IN A CLEAR AND VISIBLE LOCATION WHERE VEHICLES ENTER THE BASEMENT.

COLOURS:

"WARNING" - RED BORDER AND OTHER LETTERING - BLACK

# PUMP\_SPECIFICATIONS STANDARD\_PUMP-OUT\_NOTES

THE PUMP-OUT SYSTEM IS DESIGNED TO WORK IN THE FOLLOWING MANNER -

- 1. THE PUMPS SHALL BE PROGRAMMED TO WORK ALTERNATELY SO AS TO ALLOW

- THE PUMPS SHALL BE PROGRAMMED TO WORK ALTERNATELY SO AS TO ALLOW BOTH PUMPS TO HAVE EQUAL OPERATION LOAD & PUMP LIFE.
  A LOW LEVEL FLOAT SHALL BE PROVIDED TO ENSURE THAT THE MINIMUM REQUIRED WATER LEVEL IS MAINTAINED WITHIN THE SUMP AREA OF THE BELOW GROUND TANK. IN THIS REGARD THIS FLOAT WILL FUNCTION AS AN OFF SWITCH FOR THE PUMPS.
  A SECOND FLOAT SHALL BE PROVIDED AT A HIGHER LEVEL, APPROXIMATELY 300mm ABOVE THE MINIMUM WATER LEVEL, WHEREBY ONE OF THE PUMPS WILL OPERATE & DRAIN THE TANK TO THE LEVEL WHEREBY ONE OF THE PUMPS WILL OPERATE & DRAIN THE TANK TO THE LEVEL OF THE LOW LEVEL FLOAT.
  A THIRD FLOAT SHALL BE PROVIDED AT A HIGH LEVEL, WHICH IS APPROXIMATELY THE ROOF LEVEL OF THE BELOW GROUND TANK. THIS FLOAT SHOULD START THE OTHER PUMP THAT IS NOT OPERATING & ACTIVATE THE ALARM.
  AN ALARM SYSTEM SHALL BE PROVIDED WITH A FLASHING STROBE LIGHT & A PUMP FAILURE WARNING SIGN WHICH ARE TO BE LOCATED AT THE DRIVEWAY ENTRANCE TO THE RASEMENT LEVEL THE ALARM SYSTEM SHALL BE PROVIDED WITH A FLASHING STROBE LIGHT & A PUMP TO THE BASEMENT LEVEL. THE ALARM SYSTEM SHALL BE PROVIDED WITH A BATTERY BACK-UP IN CASE OF POWER FAILURE.

#### <u>COMPONENTS</u>

1. TWO(2) PUMPS KWIKFLO SUBMERSIBLE PUMPS (415v DR 240v)

- 2. DIECI) PUMPS KWIK START CONTROL PANEL (CONTROL DESIGN TO ALTERNATE PUMPS ON START ON CONSECUTIVE START OPERATION)
- 3. TWD(2) GATE VALVES (BRDNZE) 4. TWD(2) CHECK VALVES (SWING TYPE) (BRDNZE)
- 5. TVD(2) SETS OF DISCHARGE HOSES VITH KAMLOK QUICK RELEASE COUPLINGS 6. ALL IN TANK PIT/PIPE AND PIPE FITTINGS, BRACKETS/SUPPORTS, HD GAL, CHAINS 7. FDUR(4) KVIK START KENRAHN MERCURY LEVEL FLDAT REGULATORS
- 8. INSTALLATION IN PROVIDED TANK/PIT
- OPTIONS

1. TANK PACKAGE/COVERS/MANHOLE, ALARM BELL, LOW LEVEL ALARM REGULATOR

| MODEL    | DIS. SIZE | MOTOR kw | POVER     | Max Capacity | Max Head  | Wt. kgs | CABLE m  |
|----------|-----------|----------|-----------|--------------|-----------|---------|----------|
| KPSS 250 | 40mm BSP  | 0.25     | 240v      | 220 L/min    | 8 metres  | 17      | 5.2metre |
| KPSS 400 | 50mm BSP  | 0.40     | 240v      | 290 L/min    | 13 metres | 19      | 5.2metre |
| KPSS 750 | 50mm BSP  | 0.75     | 240or415v | 380 L/min    | 16 metres | 20      | 5.2metre |



PUMP STORAGE TANK DETAIL N.T.S

|    |                  |      | PER    | PUMP              |            |    |  |  |  |  |
|----|------------------|------|--------|-------------------|------------|----|--|--|--|--|
| ~  | 16               | /    |        |                   |            |    |  |  |  |  |
| ຶ່ | 14               | /    |        |                   |            |    |  |  |  |  |
| Ľ, | 12               | /    | K      | PSS 7             | <b>Б</b> О |    |  |  |  |  |
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| -  | 4                | KPS  | 5 2,50 |                   |            |    |  |  |  |  |
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|    | (                | 0 10 | 00 2   | òqз               | 00 4       | 00 |  |  |  |  |
|    | CAPACITY (L/min) |      |        |                   |            |    |  |  |  |  |
|    |                  |      |        | · · · · ·         | DOTT       |    |  |  |  |  |

| PUMP WELL DETAILS   |  |
|---|--|
| SUMP SIZE AND PUMP SIZE BASE ON 10<br>INTENSITY IS 242mm/hr, AREA DRAININ<br>ALLOWANCE MADE FOR SUB SOIL DRAIN,<br>Q=CIA/3600 = 1.0x242x42/3600 = 2.82<br>VOLUME REQUIRED IS 2.82x(5x60) = 84<br>STORAGE PROVIDED 1000x1000x1000 =<br>THEREFORE ADEQUATE STORAGE PROVID | 00 YEAR 5MIN STORM<br>G TOWARDS SUMP IS 42m2<br>AGE<br>I L/S<br>6L<br>1000LI<br>ED |
| PUMP OUT RATE BASED ON 100YR 5MIN Q=CIA/3600 = $1.0x242x42/3600$ = $2.8$ USE 2 / KPSS 400 to pump out 2.82L,  | l STORM = 242mm/hr<br>12/s<br>/s at 3m head  |
|   |  |

#### PUMP PERFORMANCE CURVES

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|  | REV DA | TE DESCRIPTION                                 | DESIGNER  |                                  |        |                             |                            | IH                   | AS SHOWN           |                |

BOTH PUMPS ON & ALARM SOUNDS

-Ø 100 mm PVC PIPE PRESSURE RISING MAIN CONNECT TO CONTROL PIT

NON-RETURN FLAP VALVE PUMPS ON

PUMP OFF MINIMUM WATER LEVEL

PUMP TYPE & MODEL NO 2 DF KPSS 400 DR EQUVALENT HEAD REQUIRED = 10m WORK RATE= 7.20L/S