

WAREHOUSE DEVELOPMENT

NO.39 CERES DRIVE

THURGOONA, NSW 2640

CIVIL WORKS

CIVIL GENERAL NOTES

- THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL ARCHITECTURAL & OTHER CONSULTANTS' DRAWINGS & SPECIFICATIONS & SUCH OTHER 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.
- MATERIALS & WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE RELEVANT AUSTRALIAN STANDARDS.
- BUILDER TO CONFIRM THE LOCATION OF ALL EXISTING SERVICES PRIOR TO COMMENCING ANY WORK ON SITE AND ALLOW FOR RELOCATION IF REQUIRED, INCLUDING INVERT LEVELS AT THE LEGAL POINT OF DISCHARGE. SERVICE INFORMATION SHOWN IS BASED ON PLANS SUPPLIED BY AUTHORITIES & IS APPROXIMATE ONLY. THE BUILDER IS TO COMPLY WITH ALL OF THE REQUIREMENTS OF THOSE SERVICES AUTHORITIES.
- THE CONTRACTOR SHALL COMPLY WITH ALL REGULATIONS OF AUTHORITIES HAVING JURISDICTION OVER THE WORKS.
- PRIOR TO THE COMMENCEMENT OF ANY WORKS THE CONTRACTOR MUST VERIFY THAT THE DRAWINGS HAVE BEEN APPROVED BY THE RELEVANT AUTHORITIES.
- THESE DRAWINGS MUST NOT BE SCALED AND FOR SITE SET OUT DIMENSIONS REFER TO ARCHITECT'S DRAWINGS.
- ALL DIMENSIONS & REDUCED LEVELS MUST BE VERIFIED ON SITE BEFORE THE COMMENCEMENT OF ANY WORK.
- ANY PROPRIETARY PRODUCTS THAT ARE SPECIFIED ON THESE DRAWINGS (OR APPROVED BY THIS OFFICE) ARE TO BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURES DETAILS AND SPECIFICATIONS.
- SUBSTITUTIONS MUST BE APPROVED BY THE ENGINEER.
- ANY DEFECT OR DEVIATION FROM THE CONTRACT DOCUMENTS THAT REQUIRES ASSESSMENT AND DETERMINATION OF CORRECTIVE MEASURES BY THE ENGINEER SHALL BE UNDERTAKEN AT THE CONTRACTOR'S EXPENSE.
- A MINIMUM OF 48 HOURS NOTICE SHALL BE GIVEN FOR ALL WORKS REQUIRING ATTENDANCE ON SITE BY THE ENGINEER. CONTRACTOR TO ENSURE THAT SUBJECT WORKS ARE COMPLETE PRIOR TO INSPECTION.
- ALL LEVELS SHOWN ARE TO AUSTRALIAN HEIGHT DATUM BASED ON THE INFORMATION PROVIDED ARCHITECTURAL DRAWINGS. CONTRACTOR TO VERIFY LEVELS AND TBM PRIOR TO COMMENCEMENT OF WORKS.
- THE CONTRACTOR SHALL ARRANGE FOR THE WORKS TO BE SET OUT BY A LICENSED SURVEYOR.
- EXISTING SURFACE CONTOURS, WHERE SHOWN, ARE INTERPOLATED & MAY NOT BE ACCURATE.
- CONTRACTOR IS TO ARRANGE WITH THE RELEVANT STATUTORY AUTHORITIES FOR ALL NECESSARY INSPECTIONS AND APPROVALS. ALL WORK WITHIN ROAD RESERVES ETC. TO BE CARRIED OUT TO THE SATISFACTION OF THE RELEVANT AUTHORITIES.
- AS FAR AS REASONABLY PRACTICABLE, THE WORKS SHALL BE MAINTAINED IN A NORMALLY DRY CONDITION WHILE THEY ARE IN PROGRESS, AND PARTICULAR CARE SHALL BE TAKEN TO PREVENT DUSTING, FLOODING, PONDING, SEEPAGE AND EROSION.
- ANY STRUCTURES, PAVEMENTS OR SURFACES DAMAGED, DIRTIED OR MADE UNSERVICEABLE DUE TO CONSTRUCTION WORK SHALL BE REMEDIATED TO THE SATISFACTION OF THE ENGINEER, CLIENT AND THE RELEVANT AUTHORITY.
- THE CONTRACTOR TO PROVIDE AS BUILT DRAWINGS OF ALL THEIR WORKS IN BOTH DIGITAL AND HARDCOPIES FOR REVIEW.
- ALL NEW WORKS SHALL MAKE A SMOOTH JUNCTION WITH EXISTING.
- THE CONTRACTOR SHALL INSTALL AND MAINTAIN SOIL EROSION AND SEDIMENT CONTROL MEASURES GENERALLY IN ACCORDANCE WITH THE GUIDELINES OF THE EPA, AND AS NECESSARY TO PREVENT RUN-OFF FROM THE SITE OF SEDIMENT RESULTING FROM HIS WORKS. SUCH MEASURES SHALL ALSO COMPLY WITH REQUIREMENTS OF THE RELEVANT AUTHORITY.
- THESE DRAWINGS SHALL NOT BE USED FOR CONSTRUCTION UNTIL THE DRAWING REVISION IS NOTED AS "APPROVED FOR CONSTRUCTION".
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR AND AT ALL TIMES PROVIDE A SAFE WORKING ENVIRONMENT IN THE VICINITY OF WORKS IN ACCORDANCE WITH ALL OCCUPATIONAL HEALTH AND SAFETY REGULATIONS.
- PRIOR TO COMMENCEMENT OF WORKS THE CONTRACTOR MUST VERIFY THE FEASIBILITY OF THE OUTFALL DRAINAGE TO THE LEGAL POINT OF DISCHARGE AS DOCUMENTED BY:
  - VERIFICATION OF THE INVERT LEVEL OF THE DRAIN COMPRISING THE LEGAL POINT OF DISCHARGE.
  - VERIFICATION THAT THE ROUTE OF THE DRAINAGE IS CLEAR OF ALL OBSTRUCTIONS AND EXISTING SERVICES.IF EITHER OF THE ABOVE CANNOT BE ACHIEVED THE CONTRACTOR IS TO NOTIFY LAKER GROUP PRIOR TO PROCEEDING WITH WORKS.

EARTHWORKS

24. ALL EARTHWORKS ARE TO BE PERFORMED IN ACCORDANCE WITH AS 3798. REFER TO THE RELEVANT GEOTECHNICAL REPORT PRIOR TO COMMENCEMENT OF WORKS.

25. UNLESS OTHERWISE NOTED, ALL VEGETATION AND ORGANIC MATERIAL SHALL BE STRIPPED TO A MINIMUM OF 150mm OR AS SPECIFIED IN THE GEOTECHNICAL REPORT TO THE GREATER VALUE UNDER ALL PROPOSED PAVEMENTS AND BUILDING AREAS. STOCKPILE TOPSOIL IN DESIGNATED AREAS FOR REUSE IN LANDSCAPING WORKS OTHERWISE REMOVE OFFSITE.

| Rev. | Revision Description | Date     |
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| P1   | PRELIMINARY ISSUE    | 04/11/24 |

It is the responsibility of the Engineer to ensure that the information on this drawing is accurate and that it is used in accordance with the relevant standards and specifications. The Engineer shall be liable for any errors or omissions on this drawing.

- THE EXPOSED AREA IS TO BE PROOF ROLLED AS SPECIFIED IN THE GEOTECHNICAL ENGINEERS REPORT. ANY SOFT SPOTS ARE TO BE IDENTIFIED AND MEASURED WITH THE SUPERINTENDENT. THE SOFT SPOTS ARE TO BE REMOVED AND BACKFILLED WITH APPROVED FILL MATERIAL AS SPECIFIED IN THE GEOTECHNICAL ENGINEERS REPORT. PLACED AND COMPACTED IN 150mm LAYERS TO A DENSITY NO LESS THAN THAT OF THE SURROUNDING SOIL.
- PRIOR TO PLACING FILL MATERIAL THE SURFACE OF THE ENTIRE SITE IS TO BE COMPACTED TO 100% STANDARD DENSITY AND TESTED AT A RATE OF ONE TEST PER 300m<sup>2</sup> OF THE SITE.
- ALL FILL MATERIALS UNDER THE ROAD PAVEMENT, PATHS AND BUILDING ARE TO BE IN ACCORDANCE WITH THE GEOTECHNICAL ENGINEERS REPORT OTHERWISE CLASS 2 FOR TO VICROADS SPECIFICATION.
- ALL FILL AND PAVEMENT MATERIALS SHALL BE COMPACTED IN 150mm MAXIMUM LOOSE THICKNESS LAYERS TO THE DENSITIES SPECIFIED BELOW OR IN ACCORDANCE WITH THE GEOTECHNICAL ENGINEERS REPORT TO THE GREATER PERCENTAGE.

|   |          |
|---|----------|
| LANDSCAPED AREAS                                      | 90% STD. |
| FILL UNDER FOOTINGS & FLOOR SLABS FOR ANY STRUCTURE:- | 98% STD. |
| FILL UNDER ROAD PAVEMENTS:-                           | 98% MOD. |
| ROAD PAVEMENT MATERIALS:-                             | 98% MOD. |
- THE CONTRACTOR IS TO INCLUDE FOR PROJECT CONTROL. TESTING OF ALL LAYERS OF FILLING AS THE WORKS PROCEED AT A RATE SPECIFIED IN AS3789 OF SITE AREA PER LAYER OF FILLING. THESE TESTS SHALL BE CARRIED OUT TO AS1289 AND BY AN NATA REGISTERED GEOTECHNICAL ENGINEER. THE RESULTS SHALL BE MADE AVAILABLE AT THE SITE DURING THE CURRENCY OF THE WORKS. LAYER BY LAYER UP TO THE FINISHED PLATFORM RL. THESE WORKS ARE TO BE PROTECTED FROM THE INGRESS OF WATER BOTH DURING AND AFTER CONSTRUCTION UNTIL SLAB AND PAVEMENTS ARE CONSTRUCTED.
- THE CONTRACTOR IS TO ENGAGE AN NATA REGISTERED GEOTECHNICAL ENGINEER TO PROVIDE ADVICE AND TO CARRY OUT LEVEL 2 SUPERVISION TESTING AND SUPERVISION DURING THE CONSTRUCTION STAGE IN ACCORDANCE TO AS3798 AND AS1289.
- EACH LAYER OF THE FILL IS TO BE PROOFED ROLLED UNDER THE SUPERVISION OF THE GEOTECHNICAL ENGINEER.
- GRADE EVENLY BETWEEN FINISHED SURFACE SPOT LEVELS. (FINISHED SURFACE CONTOURS ARE NOT SHOWN FOR CLARITY). WHERE ADJACENT SURFACES OR STRUCTURES.
- ALL SURPLUS EXCAVATED MATERIAL SHALL BE REMOVED OFF SITE.

DRAINAGE

- STORMWATER TO BE IN ACCORDANCE WITH AS3500 – NATIONAL PLUMBING AND DRAINAGE CODE (ALL PARTS).
- CONTRACTOR TO MAINTAINANCE CLEAN ALL NEW AND EXISTING STORMWATER DRAINAGE PRIOR TO LEAVING THE SITE.
- 10 CAPS MUST HAVE A LOAD CAPACITY FOR AREA OF USE, I.E. SOREWED PLASTIC IN LANDSCAPED AREAS & CAST IRON IN PAVEMENT.
- UNLESS OTHERWISE NOTED, ALL DOWNPIPES SHALL BE CONNECTED TO PIPS OR MAIN STORMWATER DRAINS WITH 100# UPVC PIPES UNLESS NOTED OTHERWISE AND Laid AT A MINIMUM GRADE OF 1 IN 100.
- ALL IN-GROUND DRAINS ARE TO BE 100# MINIMUM UNLESS OTHERWISE NOTED ON THE DRAWINGS.
- ALL MAIN STORMWATER DRAINS SHALL BE CONSTRUCTED USING ONE OF THE FOLLOWING TYPES OF PIPES WITH RUBBER RING JOINTS:
  - RCP IN ACCORDANCE WITH A.S.4058.
  - UPVC IS TO BE SEWER GRADE AND IN ACCORDANCE WITH A.S.1260
  - RFC IN ACCORDANCE WITH A.S.4139.
  - HDPE IN ACCORDANCE WITH A.S.5065.
  - ANY OTHER TYPES OF PIPE MUST BE REFERRED TO ENGINEER FOR APPROVAL PRIOR TO WORK.
- INSPECTION OPENINGS FOR THE MAINTENANCE OF SITE STORMWATER DRAINS SHALL BE EXTENDED TO & CAPPED AT THE FINISHED SURFACE LEVEL & BE INSTALLED AT:
  - EACH POINT OF CONNECTION
  - SPACINGS NOT MORE THAN 30m
  - ANY CHANGE OF DIRECTION GREATER THAN 45°
  - AS ADDITIONALLY INDICATED ON THE DRAWINGS
- GENERALLY FOR TRENCHING WORKS THE CONTRACTOR MUST:
  - COMPLY WITH THE GENERAL PROVISIONS OF SECTION 21 OF THE "OCCUPATIONAL HEALTH & SAFETY ACT".
  - COMPLY WITH THE "OCCUPATIONAL HEALTH & SAFETY CODE OF PRACTICE FOR SAFETY PRECAUTIONS IN TRENCHING OPERATIONS".

| DRAWING INDEX |   |
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| C01           | COVER SHEET, GENERAL NOTES AND DRAWING REGISTER |
| C02           | GROUND FLOOR DRAINAGE PLAN                      |
| C03           | CIVIL DETAILS SHEET 1 OF 2                      |
| C03           | CIVIL DETAILS SHEET 2 OF 2                      |



**WARNING**  
BEWARE OF UNDERGROUND SERVICES  
THE LOCATIONS OF UNDERGROUND SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT SIZE, DEPTH AND LOCATION MUST BE PROVIDED ON SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN.

WAREHOUSE DEVELOPMENT

39 CERES DRIVE

THURGOONA, NSW 2640

COVER SHEET,

GENERAL NOTES AND

DRAWING REGISTER

|             |          |             |
|-------------|----------|-------------|
| Scale:      | AS SHOWN | A1/A1       |
| Designed:   | J.B.     | Drawn: J.B. |
| Date:       | NOV 2024 |             |
| Project No. |          | Drawing No. |
| JB-109      | C01      | P1          |

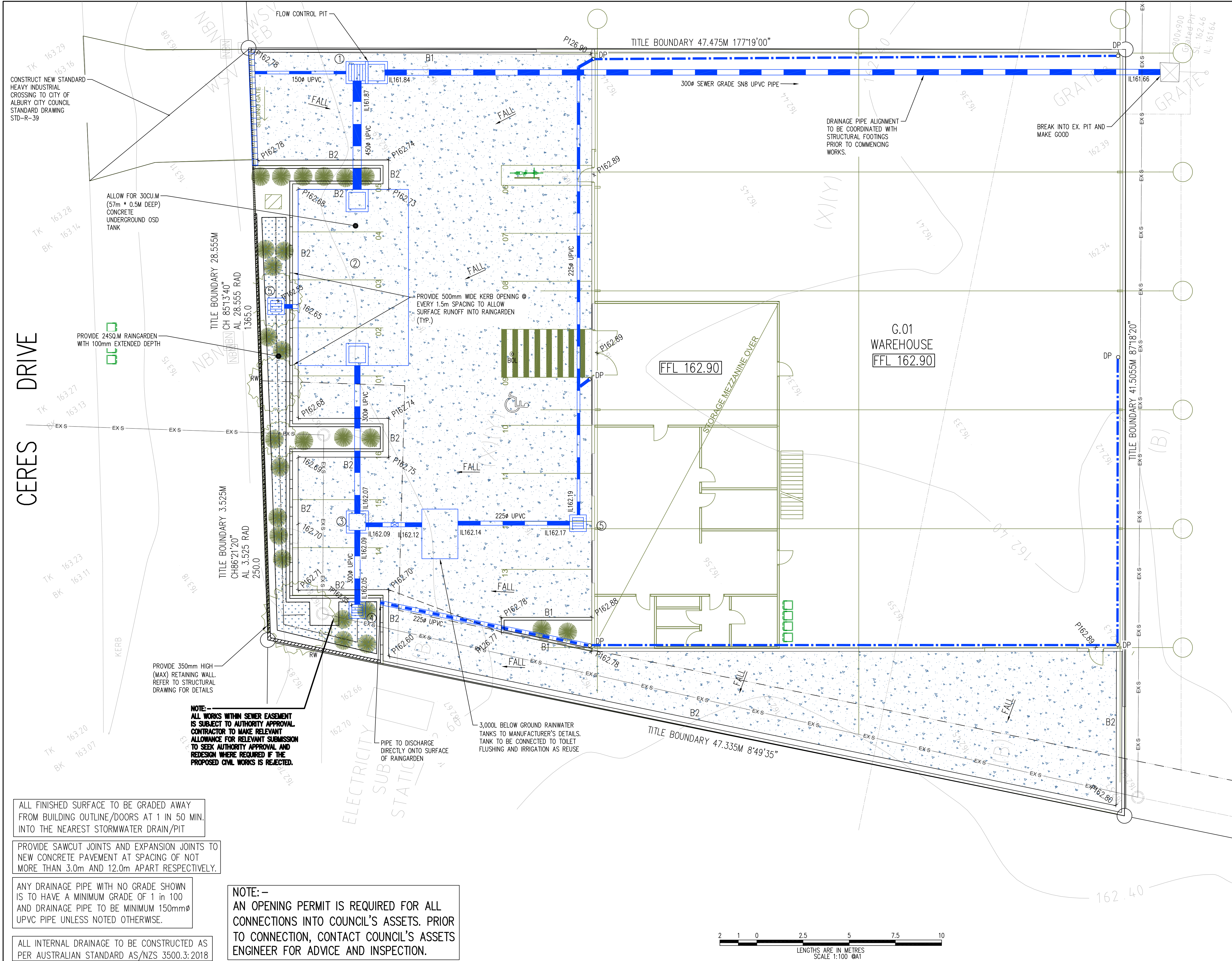
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**LEGEND**

|   |  |
|---|--|
| TP  | TOP OF PIT                                       |
| INV   | INVERT   |
| K   | CONCRETE KERB                                    |
| K&C   | CONCRETE KERB AND CHANNEL                        |
| FO  | FLUSH OUT RISER                                  |
| AG  | 100mm AGRICULTURAL/SUBSOIL DRAIN                 |
| 150mm SUSPENDED UPVC PIPE GRADED @ 1:100MIN. UNLESS NOTED OTHERWISE             |  |
| 150mm IN-GROUND DRAINAGE PIPE GRADED @ 1:100MIN. UNLESS NOTED OTHERWISE         |  |
| 150mm IN-GROUND CHARGED DRAINAGE PIPE GRADED @ 1:100MIN. UNLESS NOTED OTHERWISE |  |
| x P55.55  | PROPOSED PAVEMENT LEVEL                          |
| x EX55.55   | EXISTING PAVEMENT LEVEL                          |
| —   | FINISHED SURFACE FALL DIRECTION 1:100 MIN. U.N.O |
| SC  | SAWCUT JOINT @ EVERY 3m SPACING MAX              |
| EL  | EXPANSION JOINT @ EVERY 12m SPACING MAX          |
| FW (D)  | 150mm FLOOR WASTE                                |
| B1  | CONCRETE KERB                                    |
| B2  | CONCRETE KERB AND CHANNEL                        |
| DP  | 150mm DOWNPIPE                                   |
| I.O.  | INSPECTION OPENING                               |
| BOL   | PROPOSED BOLLARD                                 |
| RW  | RETAINING WALL TO ARCH/STRUCTURAL DETAILS        |

INDICATIVE EXTENT SHOWN THUS ON PLAN. REFER TO LANDSCAPE/ARCHITECT DRAWING FOR EXACT LOCATION AND EXTENT. PROVIDE SJ @ 3m MAX AND EJ @ 12m MAX.

**CONCRETE DRIVEWAY PAVEMENT**

REFER TO DRAWING C03 FOR DETAILS

INDICATIVE EXTENT SHOWN THUS ON PLAN. REFER TO LANDSCAPE/ARCHITECT DRAWING FOR EXACT LOCATION AND EXTENT.

**PROPOSED RAINGARDEN**

REFER TO DRAWING C03 FOR DETAILS

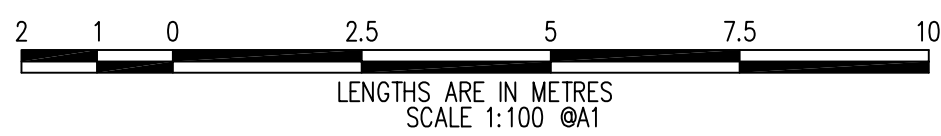
ALL FINISHED SURFACE TO BE GRADED AWAY FROM BUILDING OUTLINE/DOORS AT 1 IN 50 MIN. INTO THE NEAREST STORMWATER DRAIN/PIT

PROVIDE SAWCUT JOINTS AND EXPANSION JOINTS TO NEW CONCRETE PAVEMENT AT SPACING OF NOT MORE THAN 3.0m AND 12.0m APART RESPECTIVELY.

ANY DRAINAGE PIPE WITH NO GRADE SHOWN IS TO HAVE A MINIMUM GRADE OF 1 IN 100 AND DRAINAGE PIPE TO BE MINIMUM 150mmØ UPVC PIPE UNLESS NOTED OTHERWISE.

ALL INTERNAL DRAINAGE TO BE CONSTRUCTED AS PER AUSTRALIAN STANDARD AS/NZS 3500.3:2018

**NOTE:—**  
AN OPENING PERMIT IS REQUIRED FOR ALL CONNECTIONS INTO COUNCIL'S ASSETS. PRIOR TO CONNECTION, CONTACT COUNCIL'S ASSETS ENGINEER FOR ADVICE AND INSPECTION.



**WARNING**  
**BWARE OF UNDERGROUND SERVICES**  
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| Rev. | Revision Description | Date     |
|------|----------------------|----------|
| P1   | PRELIMINARY ISSUE    | 06.11.24 |

**LEGEND**

|                                       |                                  |           |                          |
|---------------------------------------|----------------------------------|-----------|--------------------------|
| TP                                    | TOP OF PIT                       | EX E.O.H. | EX. ELECTRICITY OVERHEAD |
| INV                                   | INVERT LEVEL                     | EX W.M.   | EX. WATER MAIN           |
| FW                                    | FINISHED FLOOR LEVEL             | EX T.     | EX. TELECOMMUNICATION    |
| DP                                    | DOWNPIPE                         | SC        | SAWCUT JOINT             |
| I.O.                                  | INSPECTION OPENING               | EJ        | EXPANSION JOINT          |
| AG                                    | 100mm AGRICULTURAL/SUBSOIL DRAIN | EL        | EXPANSION JOINT          |
| 150mm SUSPENDED UPVC PIPE             |                                  | EX S.W.D. | EX. STORMWATER DRAIN     |
| 150mm IN-GROUND DRAINAGE PIPE         |                                  | EX S.W.M. | EX. SEWER MAIN           |
| 150mm IN-GROUND CHARGED DRAINAGE PIPE |                                  | EX S.W.P. | EX. STORMWATER PUMP      |
| P55.55                                | PROPOSED PAVEMENT LEVEL          | EX S.W.P. | EX. STORMWATER PUMP      |
| EX55.55                               | EXISTING PAVEMENT LEVEL          |           |                          |

All drawings shall be read in conjunction with the Specification and Instructions to Tenderers. All dimensions and levels are to be verified on site by the Laker Group surveyors.

**PRELIMINARY ISSUE**  
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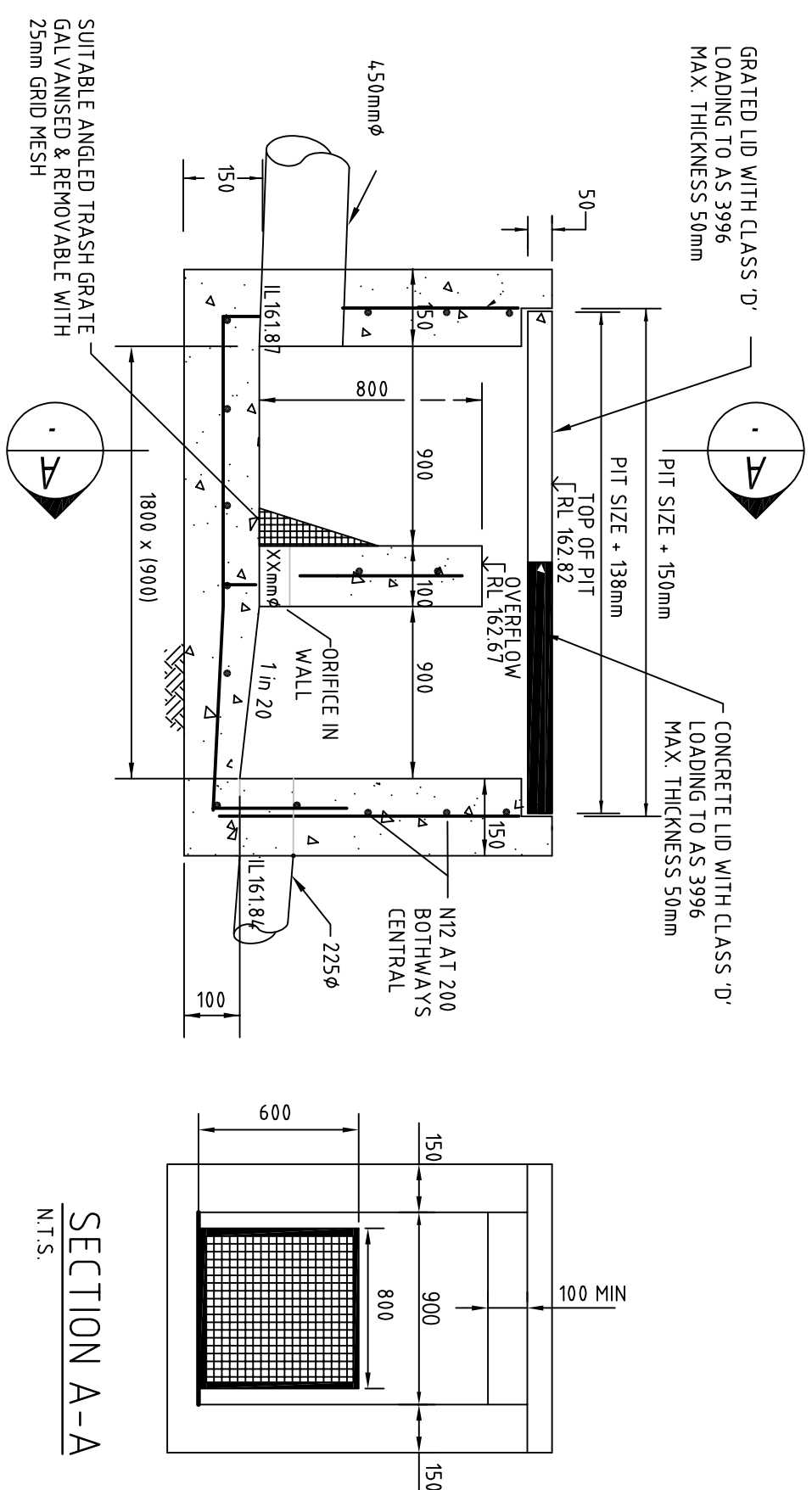
**WAREHOUSE DEVELOPMENT**  
**39 CERES DRIVE**  
**THURGOONA, NSW 2640**

**GROUND FLOOR DRAINAGE PLAN**

|             |             |             |
|-------------|-------------|-------------|
| Scale:      | 1:100       | AT A1       |
| Designed:   | J.B.        | Drawn: J.B. |
| Date:       | NOV 2024    |             |
| Project No. | Drawing No. | Revision    |
| JB109       | C02         | P1          |







ORIFICE PIT No. 1 SECTION DETAIL  
N.T.S.

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|------|--|----------------------|------------|
| Rev. |  | Revision Description | Date       |
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| P1   |  | PRELIMINARY ISSUE    | 06/11/2024 |

THIS DRAWING IS TO BE USED IN CONJUNCTION WITH THE SPECIFICATIONS AND SCHEDULES  
AND IS NOT TO BE USED AS A STAND-ALONE DOCUMENT. ANY CHANGES TO THIS DRAWING  
MUST BE APPROVED BY THE ARCHITECT AND THE ENGINEER. THIS DRAWING IS THE PROPERTY OF  
THE ARCHITECT AND IS NOT TO BE REPRODUCED OR COPIED WITHOUT THE ARCHITECT'S  
WRITTEN PERMISSION.

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**WAREHOUSE DEVELOPMENT**

**39 CERES DRIVE**

**THURGOONA, NSW 2640**

**CIVIL DETAILS**

**SHEET 2 OF 2**

Revision

|                |             |          |
|----------------|-------------|----------|
| Scale:         | A5 SHOWN    | A1 A1    |
| Designed: J.B. | Drawn: J.B. |          |
| Date: NOV 2024 |             |          |
| Project No:    | Drawing No: | Revision |
| JB109          | C04         | P1       |