

NEW WAREHOUSE

40 PLATINUM COURT THRUGOONA NSW 2640

HYDRAULIC SERVICES



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Building Services Engineers

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HYDRAULIC SERVICES

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40 PLATINUM COURT
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DRAWING SCHEDULE:

NUMBER	TITLE
H000	COVERSHEET, LEGENDS, NOTES AND DRAWING LIST
H001	HYDRAULIC SPECIFICATIONS
H002	SITE SERVICES
H100	GROUND FLOOR PLAN SANITARY DRAINAGE LAYOUT
H101	MEZZANINE FLOOR PLAN SANITARY DRAINAGE LAYOUT
H102	ROOF PLAN SANITARY DRAINAGE LAYOUT
H200	GROUND FLOOR PLAN WATER AND GAS LAYOUT
H300	DETAILS

PIPEWORK

	SANITARY DRAINAGE
	STORMWATER
	SEWER RISING MAIN
	CHAMBER VENT
	VENT
	PIPEWORK CAST IN SLAB
	COLD WATER
	HOT WATER
	HOT WATER RETURN
	GAS
	GAS FLUE
	FIRE HYDRANT
	FIRE SERVICE
	PUMP OUT
	RAINWATER

EXISTING PIPEWORK

	EXISTING AUTHORITIES WATER MAIN
	EXISTING AUTHORITIES SEWER MAIN
	EXISTING AUTHORITIES GAS MAIN
	EXISTING AUTHORITIES STORMWATER MAIN

ABBREVIATIONS

AAV	AIR ADMITTANCE VALVE	LI	LITRE
AFFL	ABOVE FINISHED FLOOR LEVEL	NTS	NOT TO SCALE
AD	AERIAL DRAINAGE	NPCW	NON POTABLE COLD WATER
B	BASIN	OFG	OVERFLOW GULLY
BTH	BATH	OSD	ONSITE DETENTION
BT	BOUNDARY TRAP	PD	PLANTER DRAIN
CICL	CAST IRON CEMENT LINED	PG	PLANTER GRATE
CO	CLEAROUT	RPZD	REDUCED PRESSURE ZONE DEVICE
CVP	CHAMBER VENT PIPE	RV	RELIEF VENT
CW	COLD WATER	RWT	RAINWATER TANK
DB	DISABLED BASIN	RWO	RAINWATER OUTLET
DWC	DISABLED WATER CLOSET	S	STACK SYSTEM
DDCV	DOUBLE DETECTOR CHECK VALVE	SK	KITCHEN SINK
DP	DOWNPIPE	SHR	SHOWER
FE	FIRE EXTINGUISHER	SRM	SEWER RISING MAIN
FH	FIRE HYDRANT	SST	SOIL STACK
FHR	FIRE HOSE REEL	STW	STORMWATER
FW	FLOOR WASTE	TMV	THERMOSTATIC MIXING VALVE
GAVP	GREASE ARRESTOR VENT PIPE	TV	TEMPERING VALVE
H/L	HIGH LEVEL	TD	TUNDISH
HT	HOSE TAP	TTD	TRAP TUNDISH
HR	HYDRAULIC RISER	TW	TRADE WASTE
HWF	HOT WATER FLOW	TWV	TRADEWASTE VENT
HWR	HOT WATER RETURN	UR	URINAL
HW	HOT WATER	VP	VENT PIPE
HWU	HOT WATER UNIT	WC	WATER CLOSET
IPMF	IN-PIPE MICAFLAP	WM	WASHING MACHINE
LT	LAUNDRY TUB	WM	WATER METER
		WP	WATER POINTS

DRAINAGE

TD	TUNDISH
RV	REFLUX VALVE IN PIT
RV	REFLUX VALVE
AAV	AIR ADMITTANCE VALVE
BT	BOUNDARY TRAP
CO	CLEAR OUT
CPC	CHROME PLATED CLEAROUT COVER
FW	FLOOR WASTE
BTFW	BASKET TRAP FLOOR WASTE
SMH	SEWER MANHOLE
ORG	OVERFLOW RELIEF GULLY
IPMF	INDUCT PIPE MICA FLAP
SIP	SEWER INSPECTION PIT (SEALED)
CP	CONTROL PANEL
DTU	DRAINAGE TURN UP
OIF	OVERFLOW

MISCELLANEOUS

	DRAWING CONTINUATION
	SERVICES IDENTIFIER - NON-DIRECTIONAL
	SERVICES IDENTIFIER - DOWNWARD FLOW
	SERVICES IDENTIFIER - UPWARD FLOW
	SERVICE TYPE
	SERVICE SIZE
	DETAIL TAG
	REVISION TAG

COLD & HOT WATER SERVICE

	STOP VALVE
	PATH VALVE
	SOLENOID VALVE
	CHECK VALVE
	REFLUX VALVE IN PATH BOX
	FILTER
	PRESSURE SWITCH
	STRAINER
	PUMP
	BUTTERFLY VALVE
	FLOAT VALVE
	PRESSURE LIMITING VALVE
	PRESSURE REDUCTION VALVE
	BACKFLOW PREVENTION
	BALANCING VALVE
	THERMOSTATIC MIXING VALVE
	HOSE TAP
	WATER METER
	COLD WATER POINT
	HOT AND COLD WATER POINTS
	REDUCED PRESSURE ZONE DEVICE

MISCELLANEOUS

	PIPE RISER
	PIPE DROPPER
	PIPE TEE
	PIPEWORK CONTINUATION
	FLOW DIRECTION
	NEW TEE IN EXISTING PIPEWORK
	NEW CONNECTION TO EXISTING PIPEWORK
	FIRE HOSE REEL
	FIRE HYDRANT
	FIRE EXTINGUISHER
	NODE POINT
	PENETRATION
	PIPE END SECTION

GAS SERVICE

	GAS REGULATOR
	GAS GUARD
	GAS STOP VALVE
	GAS BALL VALVE
	GAS BAYONET
	GAS METER
	FILTER

DBYD CLAUSE

CONTRACTOR IS RESPONSIBLE TO DETERMINE EXACT LOCATION OF THE SERVICE MAINS & TAKE EXTRA CARE DURING EXCAVATION TO ENSURE THE PREVENTION OF DAMAGE TO ANY UNDERGROUND ELECTRICAL COMMUNICATION, WATER, GAS MAIN & DRAINAGE MAINS. REVIEW AND FOLLOW ALL DBYD PLANS.

GENERAL REQUIREMENTS

- THE HYDRAULIC CONTRACTOR SHALL ALLOW FOR ALL SITE INVESTIGATIONS AND INSTALLATION OF COMPLETE AND COMPLIANT HYDRAULIC SERVICES SYSTEMS.
- THE WORKS SHALL COMPRISE THE SITE INVESTIGATIONS, DESIGN, INSTALLATION, CONSTRUCTION, DETAILING AND DOCUMENTATION, CO-ORDINATION, SUPPLY DELIVERY, PUTTING INTO SERVICES, PREPARATION OF SHOP DRAWINGS, SITE PAINTING, IDENTIFICATION, LABELLING, TESTING, COMMISSIONING, CERTIFICATIONS, DEFECTS LIABILITY, WARRANTIES, MAINTENANCE AND AS BUILT DRAWINGS FOR THE HYDRAULIC SERVICES.
- THE WORKS UNDER THE CONTRACT SHALL INCLUDE ALL THOSE MINOR WORKS NOT EXPLICITLY SPECIFIED AND WHICH ARE REASONABLY OBVIOUSLY NECESSARY AS PART OF THE WORKS.
- PRIOR TO SUBMITTING TENDER THE CONTRACTOR SHALL INSPECT THE SITE TAKING INTO ACCOUNT ANY CONDITION LIKELY TO AFFECT THIS CONTRACT. CONTRACTOR SHALL INCLUDE PROVISIONS OF ANY ALTERATIONS / ADJUSTMENTS TO THE HYDRAULIC SERVICES AS REQUIRED TO SUIT THE BASE BUILDING SYSTEM INCLUSIVE OF EXISTING STRUCTURAL PENETRATIONS (IF ANY) AND OTHER TENANCY WORKS. FORMING PART OF THE TENDER SUBMISSION, CONTRACTOR SHALL ADVISE IN WRITING ANY ALTERATIONS / ADJUSTMENTS REQUIRED TO THE HYDRAULIC SERVICES INSTALLATIONS.
- INCORPORATE ALL COSTS AND ALLOWANCE FOR THE WORKS, ANY CUTTING IN, CONNECTIONS, ALTERATIONS TO THE EXISTING HYDRAULIC SERVICES SYSTEMS INCLUSIVE OF TESTING AND COMMISSIONING WHICH MAY BE REQUIRED TO BE UNDERTAKEN OUTSIDE NORMAL WORKING HOURS OR ON WEEKENDS.
- UNDERTAKE ALL REQUIRED SITE INDUCTIONS AS PER BUILDING MANAGEMENT REQUIREMENTS. LIAISE WITH THE BUILDING MANAGEMENT PRIOR TO COMMENCEMENT OF WORK.
- PRIOR TO ISOLATING ANY SYSTEMS, NOTIFY THE BUILDING MANAGEMENT AND OBTAIN THE RELEVANT PERMIT TO COMPLETE THE ISOLATION. THE SYSTEM SHALL BE RETURNED TO NORMAL OPERATIONAL STATUS ON COMPLETION. BUILDING MANAGEMENT MUST BE INFORMED IN ADVANCE AND ANY CONDITIONS IMPOSED BY THE BUILDING MANAGEMENT SHALL BE MET BY THE CONTRACTOR AT THEIR EXPENSE.
- NO WORK THAT INVOLVES THE ISOLATION OR DISRUPTION OF THE HYDRAULIC SERVICES MAY TAKE PLACE UNTIL THE BUILDING MANAGEMENT HAS GIVEN WRITTEN APPROVAL.
- ALL SYSTEMS AND EQUIPMENT SHALL BE FULLY TESTED IN ACCORDANCE WITH THE RELEVANT STANDARDS, CODES AND THE REQUIREMENTS OF THE LOCAL SUPPLY AUTHORITY. ANY OTHER TESTS DEEMED NECESSARY SHALL BE CARRIED OUT.
- AFTER COMPLETION OF ALL THE TESTS AND CHECKS, PROVIDE STANDARD CERTIFICATES OF COMPLIANCE FOR BUILDING SAFETY SERVICES AS REQUIRED BY THE PRINCIPAL CERTIFYING AUTHORITY FOR THE PROVISION OF CERTIFICATES OF OCCUPANCY.
- TENDERER SHALL TAKE SPECIAL NOTICES OF THE LOCATION OF THE PROPOSED WORKS WITH THE DELIVERY AND ACCESS FOR DELIVERIES.
- VARIATION SUBMISSIONS RESULTING FROM THE FAILURE TO ADEQUATELY ASSESS THE EXISTING INSTALLATION DURING THE TIME OF TENDER SHALL BE REJECTED.

Project Number:
24071

Drawing Number:
H000

Revision:
P1

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**100%
ISSUE**

HYDRAULIC SERVICES

Project North



Client: Architect: VINCENT JARVIS

Project Number: 24071
Drawing Number: H001
Revision: P1

Drawn by: IB
Designed by: IB
Approved by: JA
Scale: NTS

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HYDRAULIC SPECIFICATIONS



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GENERAL NOTES:

- THESE DRAWINGS ARE A GUIDE ONLY FOR THE LOCATION AND LAYOUT OF THE SERVICE PIPES. CONTRACTOR TO EXAMINE SITE CONDITIONS AND ROUTE PIPEWORK TO MOST APPROPRIATE LOCATION ON SITE.
- THESE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH ALL OTHER CONTRACT DOCUMENTS, SPECIFICATIONS AND DRAWINGS. FOR THE FINAL LOCATION OF FIXTURES AND FITTINGS REFER TO ARCHITECTURAL SCHEDULE AND DRAWING PACKAGE.
- THE HYDRAULIC SERVICES WORK SHALL BE CARRIED OUT UNDER THE DIRECT SUPERVISION OF A LICENSED PLUMBER, DRAINER AND GAS FITTER IN STRICT ACCORDANCE WITH THE NSW CODES OF PRACTICE PLUMBING AND DRAINAGE, NATIONAL CONSTRUCTION CODE, RELEVANT AUSTRALIAN STANDARDS, COUNCIL REGULATIONS, FIRE ENGINEERING REPORT WHERE APPLICABLE AND TO THE SATISFACTION OF THE CONTROLLING AUTHORITIES.
- THIS SET OF DRAWINGS IS DIAGRAMMATIC ONLY. THE CONTRACTOR SHALL CO-ORDINATE WITH OTHER TRADES AND SET OUT ALL WORKS TO SUIT ACTUAL ON-SITE CONDITIONS.
- THIS SET OF DRAWINGS IS ISSUED FOR TENDER STATUS FOR THE WORKS WHICH DOES NOT CONSTITUTE AS THE INSTALLATION DRAWINGS. THE CONTRACTOR SHALL DEVELOP THE INFORMATION CONTAINED ON THIS SET OF DRAWINGS INTO A COMPLETE SET OF FULLY DETAILED INSTALLATION DRAWINGS FOR CONSTRUCTION.
- CONFIRM LOCATION, SIZES AND DEPTHS OF STRUCTURAL BEAMS, ALL OTHER SERVICES, CEILING VOID AND CEILING HEIGHT PRIOR TO INSTALLATION. DETERMINE EXACT SIZES AND LOCATIONS OF STRUCTURAL PENETRATIONS ON SITE IN ACCORDANCE WITH THE STRUCTURAL REQUIREMENTS. OBTAIN APPROVAL FROM STRUCTURAL ENGINEER PRIOR TO DRILLING ANY CORE HOLES AND PENETRATING STRUCTURE.
- DISTURBED AREAS ARE TO BE REINSTATED TO THE ORIGINAL CONDITION. TRENCHES THROUGH EXISTING ROAD AND CONCRETE SHALL BE FILLED AND COMPACTED AS PER STRUCTURAL ENGINEER'S REQUIREMENTS.
- OBTAIN APPROVALS, PERMITS AND FINAL CERTIFICATES FROM CONTROLLING AUTHORITIES PRIOR TO THE COMPLETION OF WORKS.
- PAY ALL APPLICABLE FEES AND CHARGES INCLUDING AREA CONTRIBUTION IN ACCORDANCE WITH CONTROLLING AUTHORITIES CURRENT FEE SCALES. SUBMIT DETAILED HYDRAULIC CALCULATIONS WITH ISOMETRIC DIAGRAMS FOR THE HYDRAULIC SERVICES SYSTEMS FOR REVIEW PRIOR TO INSTALLATION.
- TECHNICAL SUBMISSION INCLUDING SHOP DRAWINGS, MATERIAL / EQUIPMENT SCHEDULES WITH TECHNICAL INFORMATION, HYDRAULIC CALCULATIONS, BMS SCHEDULES AND SAMPLES SHALL BE SUBMITTED TO CENTRIC FOR REVIEW PRIOR TO INSTALLATION.
- ALL HYDRAULIC SERVICES PIPEWORK SHALL BE LOCATED IN CEILINGS, WALLS, DUCTS OR UNDER BENCHES. PIPEWORK INSTALLED OTHER THAN NOTED SHALL BE APPROVED BY THE SUPERINTENDENT BEFORE WORK IS INSTALLED.

LEVELS:

- VERIFY THAT ALL INVERT LEVELS, SURFACE LEVELS AND CLEARANCES ARE CORRECT AND OBTAINABLE PRIOR TO COMMENCING WORKS.
- ALL LEVELS ARE SHOWN IN METRES AHD, UNLESS NOTED OTHERWISE.

REGULATIONS:

- ALL WORKS TO BE CONSTRUCTED IN ACCORDANCE WITH NSW CODES OF PRACTICE, NATIONAL CONSTRUCTION CODE, RELEVANT AUSTRALIAN STANDARDS, COUNCIL REGULATIONS, AND WHERE APPLICABLE AND TO THE SATISFACTION OF THE CONTROLLING AUTHORITIES.
- WORKS SHALL BE CONSTRUCTED & INSTALLED BY SUITABLY QUALIFIED, LICENSED, AND COMPETENT TRADES PERSONNEL.
- ALL WORKS RELATING TO NSW EDUCATION SHALL BE IN ACCORDANCE WITH THE EFSG GUIDELINES.

TESTING AND INSPECTION

- THE CONTRACTOR SHALL PAY ALL COSTS FOR TESTING OF HYDRAULIC SERVICES. ALL TESTING PROCEDURES TO BE UNDERTAKEN AS PER THE RELEVANT AUSTRALIAN STANDARD AND OR AUTHORITY REQUIREMENTS.
- THE CONTRACTOR SHALL ARRANGE INSPECTIONS WITH THE APPROPRIATE AUTHORITIES PRIOR TO SEALING OF SERVICES AT EACH STAGE WHERE REQUIRED.

EXISTING SERVICES

- ALL EXISTING SERVICES MADE REDUNDANT FROM THESE WORKS AND EXISTING REDUNDANT SERVICES SHALL BE REMOVED OR SEALED OFF IN ACCORDANCE WITH THESE DRAWINGS, CONTRACT DOCUMENTS AND TO THE SATISFACTION OF THE LOCAL AUTHORITY.

PIPE DIAMETERS

- ALL PIPE DIAMETERS DETAILED ON THESE DRAWINGS ARE SHOWN AS NOMINAL DIAMETERS(DN).
- WHERE PE, PEX, PPR, PB AND COMPOSITE PLASTIC PIPEWORK MATERIALS ARE NOMINATED, THE NOMINAL DIAMETER SHALL BE TAKEN AS THE INTERNAL DIAMETER OF THE PIPEWORK AND NOT THE OUTSIDE DIAMETER. FOR NOMINAL DIAMETERS UP TO DN50, REFER TO AS/NZS3500.1.

FIRE RATED PENETRATIONS

- PROVIDE FIRE RATED PENETRATIONS FOR SERVICES PASSING THROUGH EACH FIRE RATED ELEMENT. FIRE RATED PENETRATIONS SHALL ACHIEVE THE SAME RATING AS THE BUILDING ELEMENT PENETRATED. SEAL PENETRATIONS WITH A SYSTEM CONFORMING TO AS4072.1. PASSIVE FIRE ENGINEER AND NCC.
- WHEREVER OR WHENEVER THE PROPOSED WORKS REQUIRE THE PENETRATION OF AN ELEMENT HAVING A FIRE RESISTANCE RATING, THE CONTRACTOR SHALL ENSURE THAT ANY PERSON RESPONSIBLE FOR THE INSTALLATION OF ANY SYSTEM USED TO PROTECT/REINSTATE THE FRL OF THE PENETRATION;
 - HOLDS AN APPROPRIATE LICENSE
 - PROVIDES AN INSTALLATION STATEMENT IN THE FORMAT PRESCRIBED BY AS4072.1 TO DESCRIBE THE PENETRATION, ITS LOCATION AND METHOD OF TREATMENT.
 - THE CONTRACTOR SHALL FURNISH A COPY OF THE INSTALLATION STATEMENT AS PROVIDED IN ABOVE TO THE INSPECTING OFFICER PRIOR TO REQUESTING AN INSPECTION FOR 'SUBSTANTIAL COMPLETION'.
- PROVIDE ACCESS TO PASSIVE FIRE PROTECTION DEVICES FOR INSPECTION IN ACCORDANCE WITH AS1851.
- CONTRACTOR TO ENSURE THAT A QUALIFIED PASSIVE FIRE PROTECTION COMPANY IS ENGAGED TO CERTIFY THE FINAL INSTALLATION OF ANY INSTALLED PASSIVE FIRE PROTECTION MEASURES THAT ARE PART OF THIS SCOPE OF WORKS.

THERMAL INSULATION OF PIPEWORK

- THERMAL INSULATION SHALL COMPLY IN ALL RESPECTS WITH AS/NZS3500.4.
- FOR INSULATED PIPING, COMPLETELY COVER THE PIPE WITH INSULATION FITTED TIGHTLY TO THE PIPE SURFACE AND SECURED AS PER MANUFACTURES REQUIREMENTS. INSTALL INSULATION SO THAT IT IS READILY REMOVABLE AT UNIONS AND COUPLERS.
- PROVIDE METAL SHEATHING TO INSULATION WHERE PIPEWORK IS IN PLANT ROOMS AND, EXTERNAL LOCATIONS. METAL SHEATHING INSTALLED TO MANUFACTURES REQUIREMENTS.
- PROVIDE THERMAL INSULATION TO ALL DOMESTIC WATER PIPEWORK, INCLUDING COLD WATER. ENSURE COLD WATER PIPEWORK IS CONTINUOUSLY VAPOUR PROOFED INSULATED.

ACOUSTIC TREATMENT OF PIPEWORK

- ACOUSTIC REDUCTION TREATMENT SHALL BE PROVIDED IN AREAS REQUIRED BY THE NCC. ALL HYDRAULIC PIPES SHALL BE ACOUSTICALLY TREATED WHERE REQUIRED.

O AND M MANUALS/COMMISSIONING:

- PRIOR TO PRACTICAL COMPLETION PROVIDE FULLY COMPREHENSIVE SET OF OPERATING AND MAINTENANCE MANUALS. THE CONTENT OF THE MANUALS SHALL MINIMALLY COMPRISE THE FOLLOWING:
 - LOCAL AUTHORITIES CERTIFICATE OF FINAL INSPECTION & APPROVAL.
 - OPERATING INSTRUCTIONS FOR SPECIFIC PLANT THAT REQUIRES DAY TO DAY OPERATIONS BY PERSONNEL.
 - MAINTENANCE INSTRUCTION AS RECOMMENDED BY THE EQUIPMENT SUPPLIER FOR EQUIPMENT AND PLANT THAT IS LIABLE TO FAILURE WITHOUT SUCH MAINTENANCE.
 - MANUFACTURES BROCHURES, PROVIDING VISUAL RECOGNITION OF EACH COMPONENT OF ASSEMBLY AS WELL AS NAME OF MANUFACTURER AND ADDRESS FOR PROCUREMENT.
 - MANUALS ARE TO BE FULLY BOUND IN BOOK FORM COMPRISING OF A4 SHEETS OR A3 SHEETS SUITABLY FOLDED. LARGER SHEETS OR DRAWINGS ARE TO BE ENCLOSED IN CLEAR VINYL SLEEVES. SHEETS AND SLEEVES ARE TO BE PUNCHED AND CONTAINED IN QUALITY VINYL FOLDERS LABELLED ON THE OUTSIDE FRONT COVER AND ON THE SPINE TO INDICATE THE NAME OF THE PROJECT, CLIENT AND THE SERVICES DESCRIBED THEREIN.
 - COPIES OF WARRANTY REGISTRATION CERTIFICATES FOR EACH ITEM OF EQUIPMENT.
 - LOG SHEET FOR RECORDING, THE TESTING OF BACK FLOW PREVENTION DEVICES, TEMPERING VALVES AND THERMOSTATIC MIXING VALVES, THE LOG SHEET DETAIL, AND THE TEST PROCEDURES AND MAINTENANCE OF ALL VALVES, THE LOG SHEET DETAIL, AND THE TEST PROCEDURES AND MAINTENANCE OF ALL VALVES, ALONG WITH LIST OF FUTURE TEST DATES.
 - ORIENTATE AND ADJUST HYDRAULIC SERVICES TO SUIT FINAL LAYOUTS OF THE AMENITIES, TENANCY PLANS AND PLANTS.
- ALL EQUIPMENT AND APPLIANCES SHALL BE INSTALLED TO THE MANUFACTURERS REQUIREMENTS.

OCCUPATIONAL HEALTH AND SAFETY:

- FOR RESIDUAL RISKS IDENTIFIED FROM THE DESIGN PROCESS, REFER TO THE PROJECT RISK REGISTER.
- CHANGES TO HYDRAULIC SERVICES DESIGN SHALL BE REVIEWED AGAINST THE PROJECT RISK REGISTER AND MAY REQUIRE FURTHER RISK ASSESSMENT.

PLUMBING AND DRAINAGE:

- SUPPLY, INSTALL, TEST AND COMMISSION ALL SEWER DRAINAGE FROM SOIL AND WASTES AND FIXTURES TO THE SEWER CONNECTION. PROVIDE ALL NECESSARY PIPES, JUNCTIONS, BENDS, PITS, FLOOR WASTES, EXCAVATION, SUPPORTS, BACKFILLING, TESTING, AND SUNDRY EQUIPMENT REQUIRED FOR THE INSTALLATION. PIPELINE POSITIONS SHALL BE DETERMINED ON SITE IN CONJUNCTION WITH ALL OTHER DISCIPLINES TO ENSURE ADEQUATE COORDINATION OF ALL SERVICES AND ELEMENTS. COORDINATION SHALL BE CARRIED OUT PRIOR TO ANY SETTING OUT, EXCAVATION AND PIPE INSTALLATION TAKING PLACE.

- PROVIDE IDENTIFICATION TO ALL SERVICE PIPES AND CONDUITS EXPOSED TO VIEW OR IN ACCESSIBLE LOCATIONS SUCH AS DUCTS AND CEILING SPACES AND ALL EQUIPMENT.
- ALL PIPES SHALL BE ADEQUATELY SUPPORTED AND SECURELY FIXED IN ACCORDANCE WITH THE DRAWINGS AND TO THE SATISFACTION OF THE SI. SUCH SUPPORTING AND FIXING TO BE CARRIED OUT WITHOUT CAUSING ANY DISTORTION, DAMAGE OR STRESS ON THE PIPES OR PIPE JOINTS. PIPES SHALL BE SUPPORTED SPECIFIED IN 'PRELIMINARIES' SECTION.
- FIXTURE TRAPS:
 - SINKS - 50mm TWO-PART UNIVERSAL PATTERN.
 - BASIN - 40mm CP COPPER TWO-PART S OR P TRAP WITH 40mmCP EXTENSION RISER.
- TERMINATE ALL VENTS THROUGH ROOF WITH A VENT COWL. FINISH VENTS 300mm ABOVE NON-TRAFFICABLE ROOFS AND 3m ABOVE TRAFFICABLE ROOFS, 6 METRES CLEAR OF OPENINGS AND FRESH AIR INTAKES AS REQUIRED BY THE LOCAL AUTHORITY AND AS INDICATED ON THE DRAWINGS.
- INSTALL INSPECTION OPENINGS IN ACCESSIBLE LOCATIONS SO THAT EACH SECTION OF PIPEWORK CAN BE CLEANED. INSPECTION OPENING SIZES SHALL BE IN ACCORDANCE WITH AUTHORITIES REQUIREMENTS. INSTALL INSPECTION OPENINGS AS PER AS3500.2.
- SUPPLY AND INSTALL UPVC TUNDISHES IN AREAS REQUIRED FOR MECHANICAL DRAINAGE. TUNDISHES TO BE CHROME PLATED WHERE EXPOSED AND TO COMPLY TO 'MATERIALS' SECTION.
- SUPPORTING AND FIXING TO BE CARRIED OUT WITHOUT CAUSING ANY DISTORTION, DAMAGE OR STRESS ON THE PIPES OR PIPE JOINTS.

COLD WATER SERVICE:

- SUPPLY, INSTALL, TEST AND COMMISSION ALL DOMESTIC COLD WATER PIPES FROM THE AUTHORITY'S MAIN TO ALL FIXTURES, FITTINGS AND FAUCETS REQUIRING DOMESTIC COLD WATER. INCLUDE FOR ALL PIPEWORK, BENDS, OFFSETS, BRACKETS, PUMPS, TAPS AND FAUCETS AND SUNDRY EQUIPMENT REQUIRED FOR THE INSTALLATION. REFER TO 'MATERIALS' SECTION FOR PIPING SCHEDULE.
- APPLY TO WATER AUTHORITY FOR THE SUPPLY OF ALL METERS, TAKE DELIVERY FROM AUTHORITY'S STORE AND INSTALL ON SITE, COMPLETE WITH ALL VALVES AND FITTINGS REQUIRED.
- EXCAVATE, LOCATE, AND CONNECT TO THE EXISTING AUTHORITIES WATER MAINS FOR THE SERVICES AS REQUIRED AND EXTEND TO THE RETICULATION. CONTRACTOR TO APPLY, MAKE ALL RELEVANT APPLICATIONS AND PAY ALL ASSOCIATED FEES.
- PROVIDE A WATER PRESSURE TEST OF 1500 KPA FOR A PERIOD OF TWO HOURS. DISCONNECT ANY EQUIPMENT CONNECT TO THE SERVICE NOT RATED TO THE TEST PRESSURE BEFORE TESTING COMMENCES.
- HYDRAULICS SHALL FLUSH OUT, REMOVE ALL FOREIGN MATTER, AND CLEAN ALL THE SYSTEMS. WATER SYSTEMS SHALL BE FLUSHED OUT WITH CLEAN WATER.
- PROVIDE AND INSTALL HOSE TAPS WITH ANTI-VANDAL HEADS. (WHERE REQUIRED)
- ALL PIPES SHALL BE ADEQUATELY SUPPORTED AND SECURELY FIXED IN ACCORDANCE WITH AS3500.1

HEATED WATER SERVICE:

- SUPPLY, INSTALL, TEST AND COMMISSION THE DOMESTIC HOT WATER SERVICE AND WARM WATER SERVICE FROM THE HOT WATER HEATERS TO THE FIXTURES AND APPLIANCES. INCLUDE FOR ALL PIPING, FITTINGS, SUPPORTS, INSULATION, HOT WATER HEATERS, VALVES, CIRCULATING PUMPS AND OTHER SUNDRY ITEMS OF EQUIPMENT REQUIRED FOR THE INSTALLATION.
- PROVIDE A WATER PRESSURE TEST OF 1500 KPA FOR A PERIOD OF TWO HOURS. DISCONNECT ANY EQUIPMENT CONNECTED TO THE SERVICE NOT RATED TO THE TEST PRESSURE BEFORE TESTING COMMENCES.
- MAKE ADEQUATE PROVISION FOR EXPANSION AND CONTRACTION BY THE PROVISION OF CLIPS/BRACKETS WITH WOODEN EXPANSION BLOCKS SO THAT UNDER ALL WORKING CONDITIONS NO STRAIN IS IMPOSED ON PIPEWORK OR FITTINGS.
- PROVIDE AIR RELIEF VALVES WITH TO PIPELINES AT THE TOP OF CIRCULATION LOOPS (FLOW AND RETURN) THAT DO NOT HAVE AN OUTLET AT THE HIGHEST POINT IN THE LOOP. EXTEND A 15MM DRAIN PIPELINE FROM THE VALVE TO A DRAINAGE POINT OR TUNDISH.
- SUPPLY AND INSTALL AN ADJUSTABLE TEMPERING VALVE SET AT 50°C TO ALL BASINS AND SHOWERS OR AREAS OF ABOLITION.
- SUPPLY AND INSTALL THERMOSTATIC MIXING VALVES TO ALL ACCESSIBLE TOILETS AND ALL SANITARY FIXTURES, AS INDICATED ON THE DRAWINGS SET AT 45°C.
- SUPPLY, INSTALL AND FIX HOT WATER HEATERS IN THE LOCATIONS INDICATED ON THE DRAWINGS. INSTALLATION OF HOT WATER HEATERS AS PER AS3500.4. TEMPERATURE PRESSURE RELIEF VALVE TO BE DIRECTED TO TUNDISH.
- SUPPLY AND INSTALL BOILING WATER UNITS AS PER ARCHITECTURAL DOCUMENTATION.



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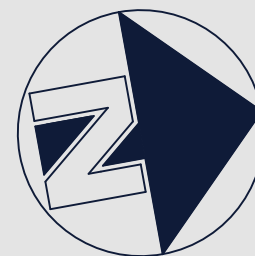
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ISSUE**

**HYDRAULIC
SERVICES**

Project North



Client: VINCENT JARVIS
Architect:
Project Number: 24071
Drawing Number: H002
Revision: P1
Drawn by: IB
Designed by: IB
Approved by: JA
Scale: 1:300 @ A1

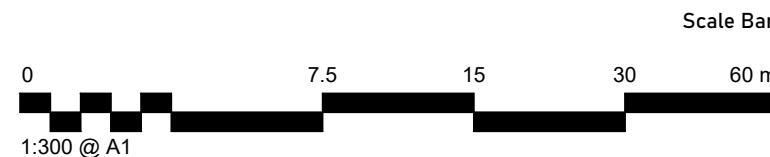
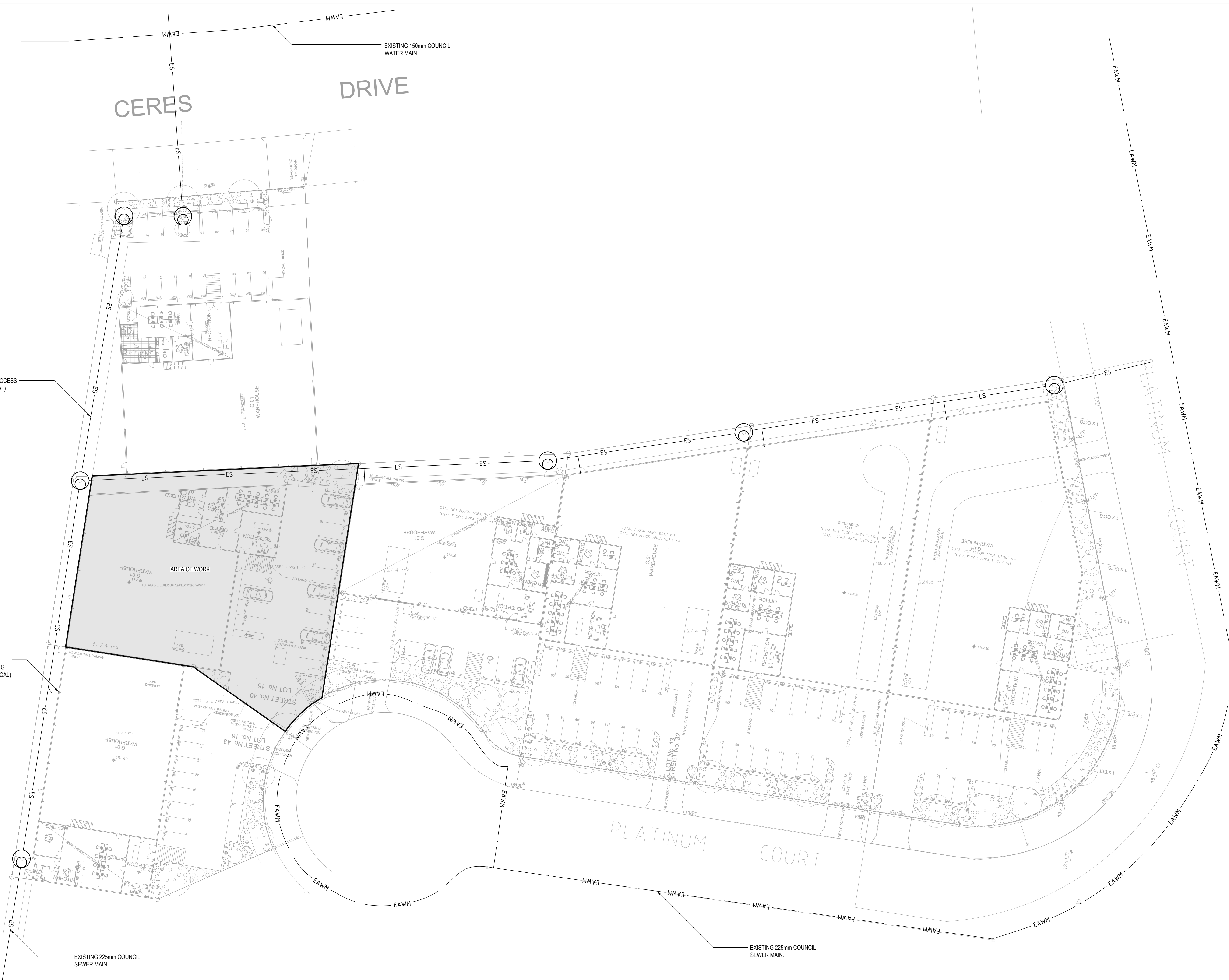
NEW WAREHOUSE, 40 PLATINUM
COURT, THRUGOONA, NSW.2640

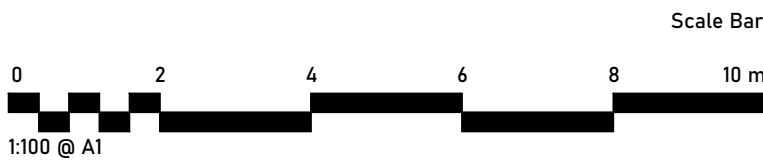
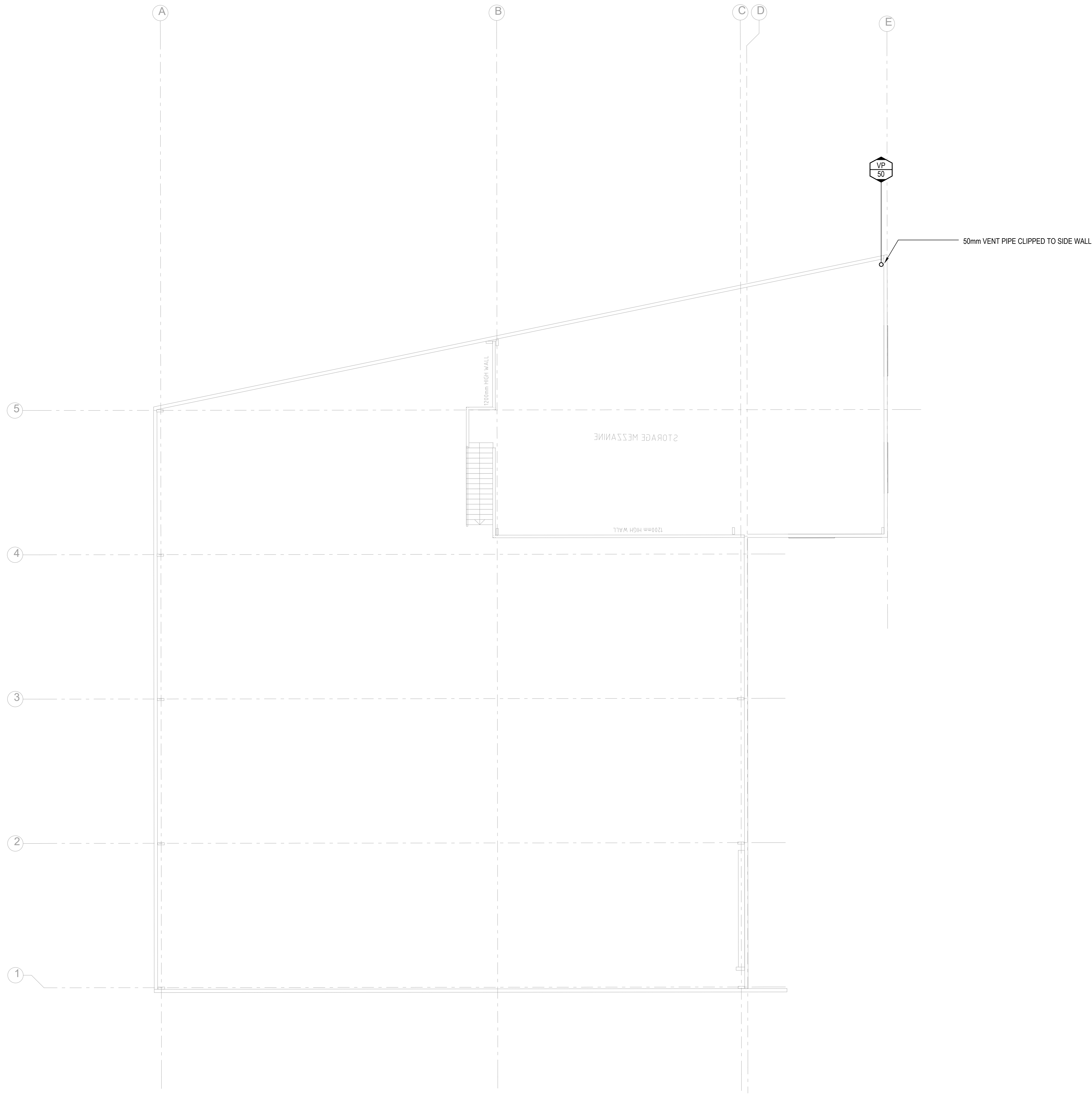
SITE SERVICES

Sydney: (02) 9052 6460
Newcastle: (02) 9052 6461

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Newcastle: Suite 4, 102 Glebe Road
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ISSUE**

**HYDRAULIC
SERVICES**

Project North



Client:
Architect: VINCENT JARVIS
Project Number: 24071
Drawing Number: H101
Revision: P1
Drawn by: IB
Designed by: IB
Approved by: JA
Scale: 1:100 @ A1

NEW WAREHOUSE, 40 PLATINUM
COURT, THRUGOONA, NSW,2640

LEVEL M FLOOR PLAN SANITARY
DRAINAGE LAYOUT



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HYDRAULIC
SERVICES

Project North



Client: VINCENT JARVIS

Project Number: 24071
Drawing Number: H102
Revision: P1

Drawn by: IB
Designed by: IB
Approved by: JA
Scale: 1:100 @ A1

NEW WAREHOUSE, 40 PLATINUM
COURT, THRUGOONA, NSW,2640

ROOF PLAN SANITARY DRAINAGE
LAYOUT



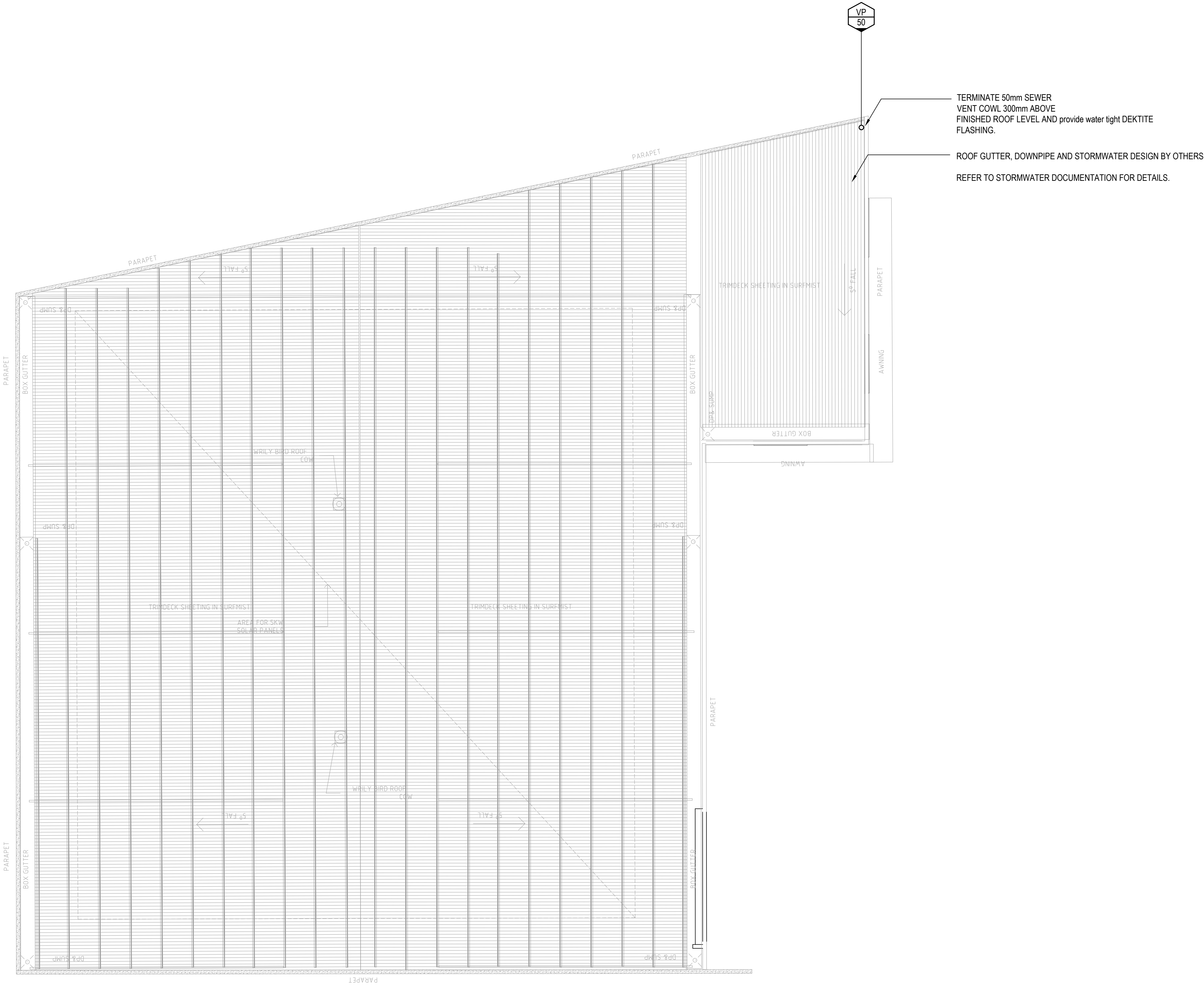
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HYDRAULIC SERVICES

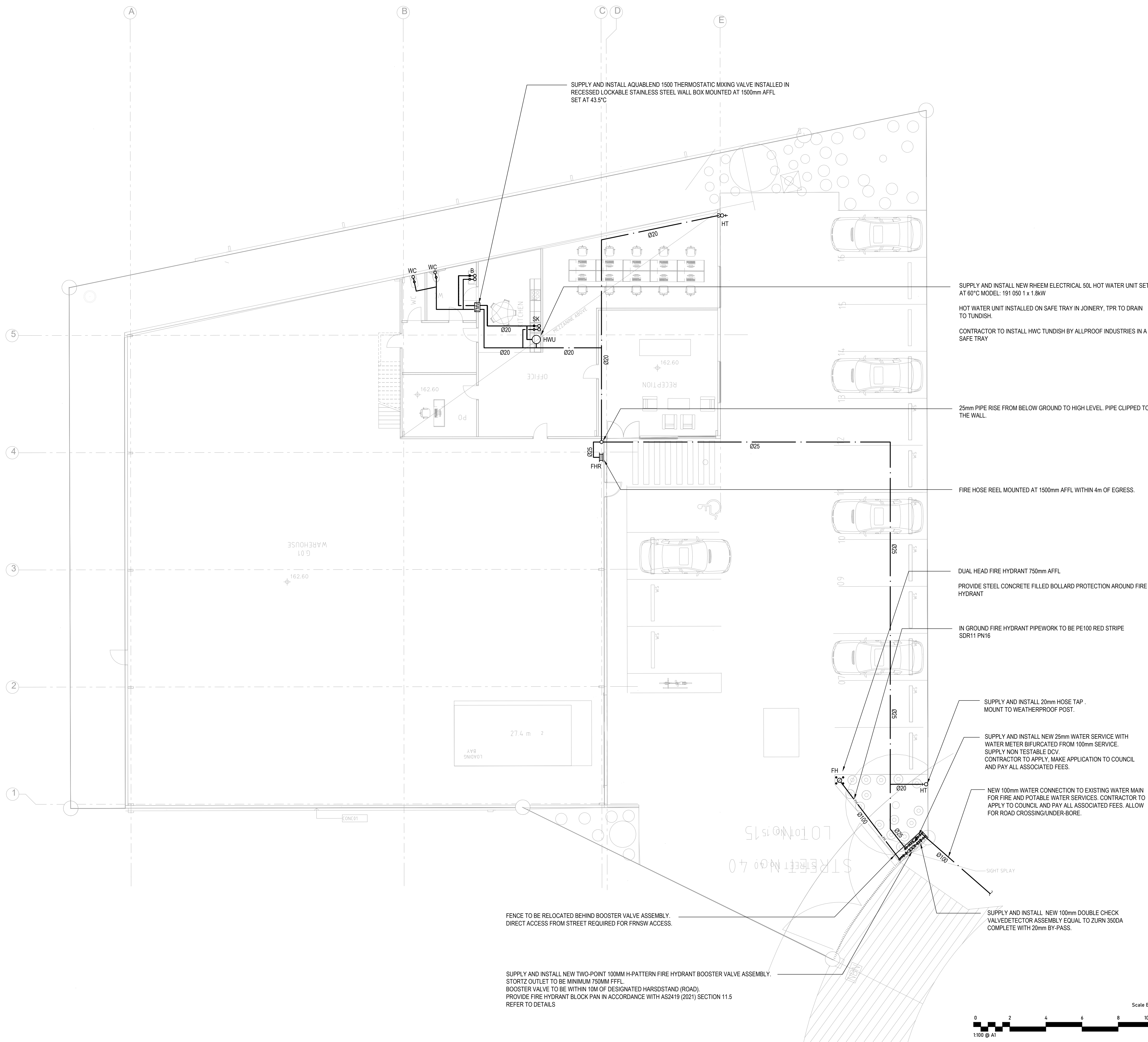
Project North



Client: VINCENT JARVIS
Architect: VINCENT JARVIS
Project Number: 24071
Drawing Number: H200
Revision: P1
Drawn by: IB
Designed by: IB
Approved by: JA
Scale: 1:100 @ A1

NEW WAREHOUSE, 40 PLATINUM
COURT, THRU GOONA, NSW, 2640

GROUND FLOOR PLAN
WATER AND GAS LAYOUT





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P1 30.05.2025 100% FINAL COORDINATION

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ISSUE**

**HYDRAULIC
SERVICES**

Project North



Client: VINCENT JARVIS
Architect:

Project Number: 24071
Drawing Number: H300
Revision: P1

Drawn by: IB
Designed by: IB
Approved by: JA
Scale: NTS @ A1

NEW WAREHOUSE, 40 PLATINUM
COURT, THRUGOONA, NSW,2640

DETAILS



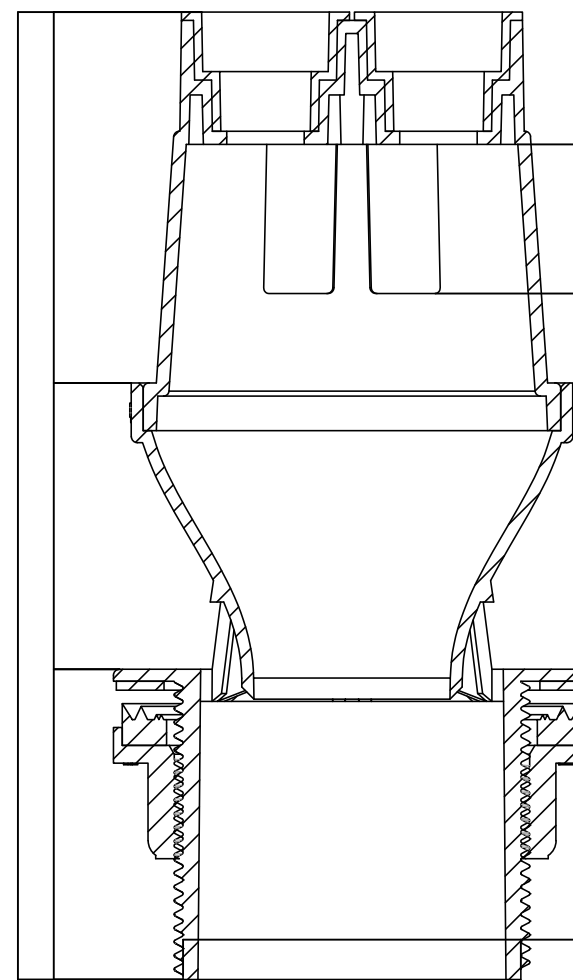
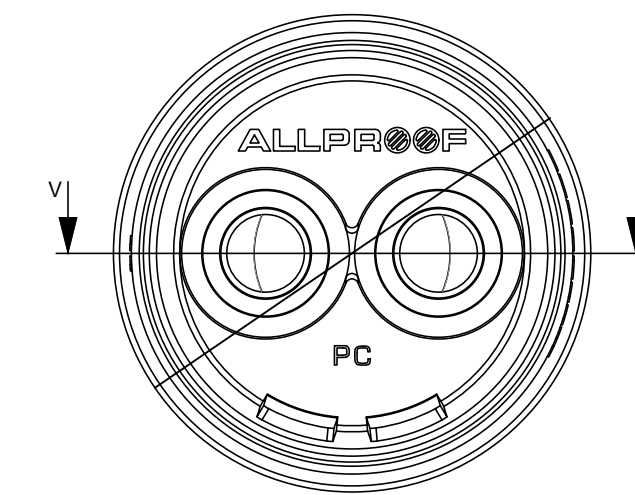
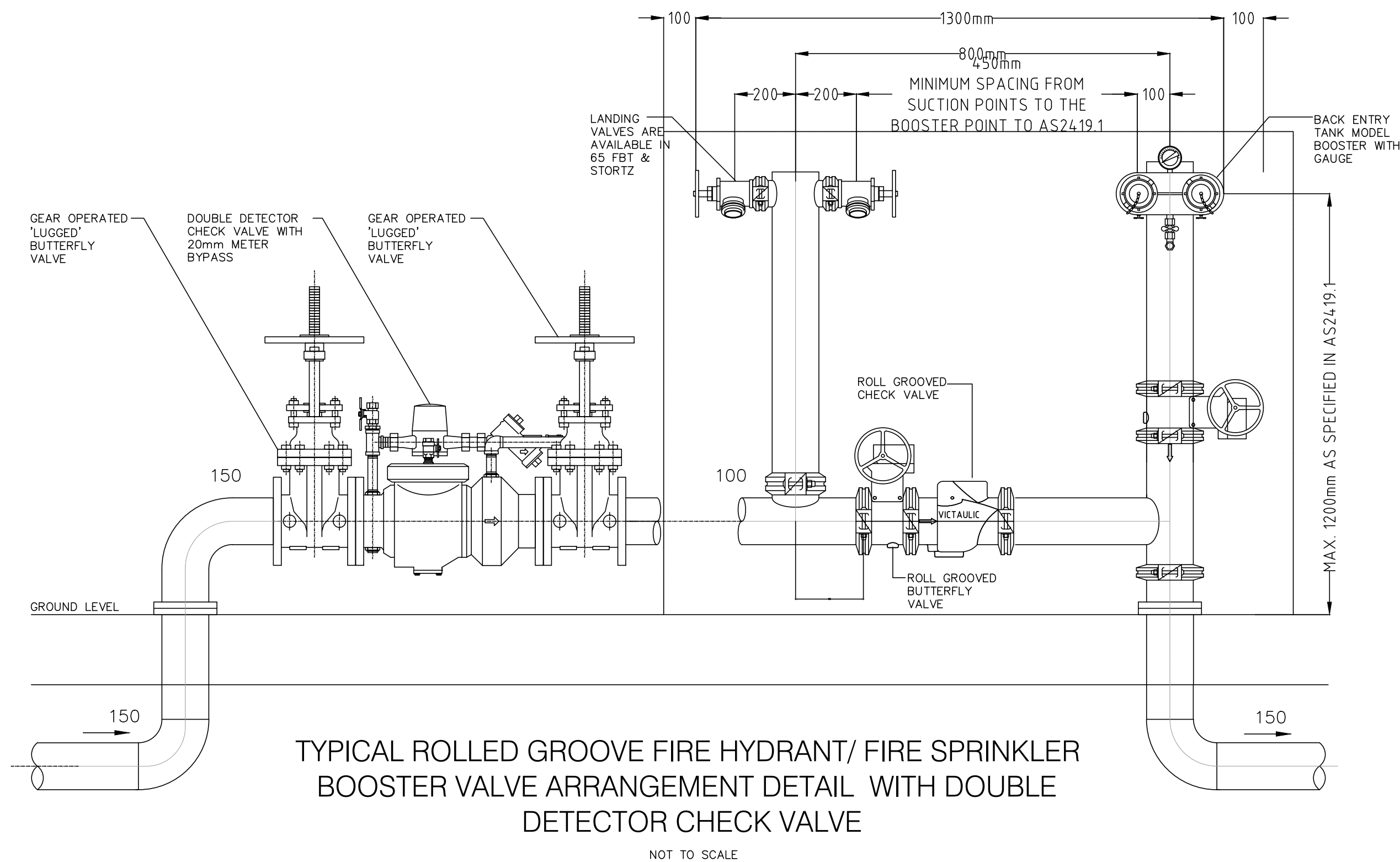
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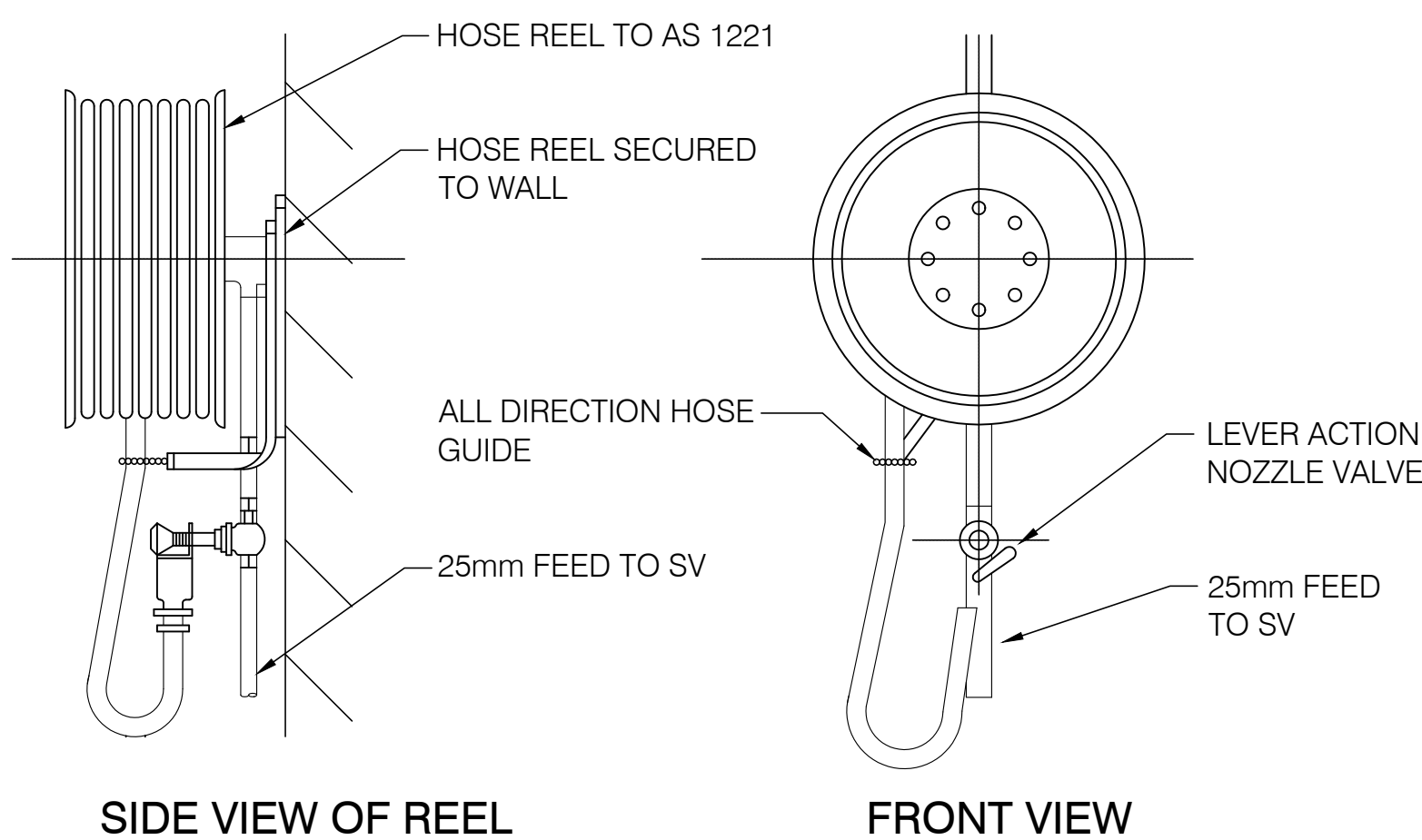
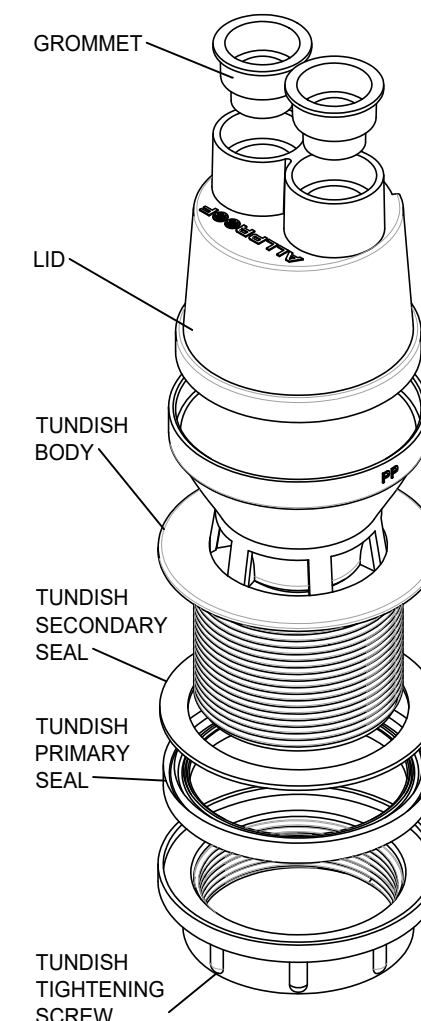


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SECTION V-V
SCALE 1:1

50mm HOT WATER CYLINDER TUNDISH



TYPICAL DETAIL OF WALL MOUNTED FIRE HOSE REEL

NOT TO SCALE

NOTE: EXTERNAL FIRE HOSE REELS TO BE PROVIDED
WITH CABINETS EQUAL TO TRAFALGAR HRCE 5.

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Job Title: NEW WAREHOUSE
Address: 40 PLATINUM COURT THRU GOONA NSW 2640
Job No: 24071
Discipline: Hydraulic

[illegible]