

GENERAL HYDRAULIC NOTES

- CONTRACTOR MUST VERIFY ALL DIMENSIONS AND EXISTING LEVELS, SERVICES AND STRUCTURES ON SITE PRIOR TO COMMENCEMENT OF WORK.
- CONTRACTOR SHALL ARRANGE FOR ALL SURVEY SETOUT TO BE CARRIED OUT BY A REGISTERED SURVEYOR.
- ON COMPLETION OF PROPOSED WORKS ALL DISTURBED AREAS MUST BE RESTORED TO ORIGINAL, INCLUDING KREBS, FOOTPATHS, CONCRETE AREAS, GRAVEL AND GRASSED AREAS AND ROAD PAVEMENTS UNLESS NOTED OTHERWISE.
- MAKE SMOOTH TRANSITION TO EXISTING SERVICES AND MAKE GOOD WHERE REQUIRED.
- WHERE NEW WORKS ABUT EXISTING THE SUB CONTRACTOR SHALL ENSURE THAT A SMOOTH EVEN PROFILE, FREE FROM ABRUPT CHANGES IS OBTAINED.
- CARE IS TO BE TAKEN WHEN EXCAVATING NEAR EXISTING SERVICES. NO MECHANICAL EXCAVATIONS ARE TO BE UNDERTAKEN OVER OR IN CLOSE PROXIMITY TO THESE SERVICES. HAND EXCAVATE IN THESE AREAS.
- THESE PLANS SHALL BE READ IN CONJUNCTION WITH APPROVED ARCHITECTURAL, CIVIL, STRUCTURAL, MECHANICAL, ELECTRICAL AND COMMUNICATION/SECURITY DRAWINGS AND SPECIFICATIONS.
- CONTRACTOR TO SUPPLY AND INSTALL ALL FITTINGS AND SPECIALS INCLUDING VARIOUS PIPE ADAPTORS TO ENSURE PROPER NON CORROSIVE CONNECTION BETWEEN DISSIMILAR PIPEWORK.
- ALL ELEVATED SERVICES PIPEWORK SHALL BE CLEARLY LABELED IN ACCORDANCE WITH REQUIREMENTS OF AS3500 AND AS1345.
- ALL ELEVATED SERVICES SHALL BE CHARGED AND TESTED PRIOR TO CONCEALMENT.
- ALL SERVICE CONDUITS SHOWN ARE INDICATIVE ONLY AND FINAL PIPE AND CONDUIT DETAILS AND LOCATIONS ARE TO BE OBTAINED BY THE SUB CONTRACTOR COORDINATING WITH AND GAINING CONFIRMATION FROM THE RELEVANT SERVICES.
- ELECTRICAL CONDUITS FOR HYDRAULIC SERVICES PLANT AND EQUIPMENT SHALL BE ORANGE HEAVY DUTY RIGID TYPE IN ACCORDANCE WITH CATEGORY 'A' OF AS3000 AND AS DESCRIBED IN THE ELECTRICAL SPECIFICATION AND DOCUMENTATION.
- ON COMPLETION, ALL PIPEWORK SHALL BE SUBJECT TO A PRESSURE TEST REQUIRED BY THE HYDRAULIC SERVICES CONSULTANT. ANY DEFECTS FOUND IN THE SYSTEM SHALL BE REMEDIED AND THE TEST RE-APPLIED.
- TRENCHES THROUGH EXISTING ROAD AND CONCRETE AREAS SHALL BE SAWCUT TO FULL DEPTH OF CONCRETE AND A MINIMUM OF 50mm IN BITUMINOUS PAVING. REINSTATE WITH ADDITIONAL REINFORCEMENT AND DOWELING AS REQUIRED BY STRUCTURAL ENGINEERS.
- CONTRACTOR SHALL PROVIDE ALL TIMBERING, SHORING AND SHUTTERING AS NECESSARY TO CONSTRUCT PIPEWORK INCLUDING THE REMOVAL OF SAME UPON COMPLETION OF PIPEWORK.
- CONTRACTOR SHALL OBTAIN ALL AUTHORITY APPROVALS AND PAY ALL FEES.
- ALL WORK TO BE IN ACCORDANCE WITH THE RELEVANT WATER AUTHORITY, FIRE AND RESCUE NSW, AS3500, AS2444, AS2419 AND RELATED STANDARDS AS APPROPRIATE.
- CONTRACTOR TO PROVIDE 'AS BUILT' DOCUMENTATION UPON PRACTICAL COMPLETION OF THE PROJECT AND SHALL BE IN CAD FORMAT (AUTOCAD) AND REVIT 3D MODELING.
- ORIGIN OF LEVELS: AUSTRALIAN HEIGHT DATUM.
- ALL TRENCH BACKFILL MATERIAL SHALL BE COMPACTED TO THE SAME DENSITY AS THE ADJACENT MATERIAL.
- ALL SERVICE TRENCHES UNDER VEHICULAR PAVEMENTS SHALL BE BACKFILLED WITH SAND OR AN APPROVED GRANULAR MATERIAL AND COMPACTED TO 98% STANDARD MAXIMUM DRY DENSITY IN ACCORDANCE WITH AS1289 E1.1.
- ALL SERVICES THAT CROSS FOOTINGS ETC. SHALL BE BACKFILLED WITH GRANULAR MATERIAL TO SUBGRADE LEVEL AND COMPACTED TO 95% M.M.D.D.
- FOR INTERNAL LAYOUTS OF THE BUILDING FOR THE CORE AMENITIES - REFER TO THE PATTERN BOOK SUITE OF DOCUMENTATION (SOURCED VIA SINSW).

FIRE HYDRANT NOTES

- EXTERNAL HYDRANTS SHALL BE POSITIONED NOT LESS THAN 10m FROM THE BUILDING IT IS PROTECTING, UNLESS PROTECTED BY A CONSTRUCTION HAVING A FIRE RESISTANCE LEVEL OF NOT LESS THAN 90/90/90 EXTENDING AT LEAST 2m EITHER SIDE OF THE HYDRANT OUTLET AND 3m FROM THE GROUND LEVEL ADJACENT TO THE HYDRANT, OR THE HEIGHT OF THE BUILDING, WHICHEVER IS THE LESSER.
- ALL HYDRANTS SHALL BE INSTALLED SO THAT THE VALVE OUTLET IS AT RIGHT ANGLES TO THE FACE OF THE WALL BEHIND (IF ANY) AND THE VALVE OUTLET IS HORIZONTAL OR SLOPING NOT MORE THAN 35 DEGREES BELOW THE HORIZONTAL.
- ALL HYDRANTS SHALL BE INSTALLED TO PROVIDE A MINIMUM OF 100mm CLEARANCE AROUND THE HANDWHEEL IN ALL DIRECTIONS.
- ALL HYDRANT PIPEWORK SHALL BE SUPPORTED IN ACCORDANCE WITH AS2419.
- ALL HYDRANT PIPEWORK SHALL BE IDENTIFIED IN ACCORDANCE WITH AS1345.

SANITARY DRAINAGE AND STORMWATER NOTES

- CONTRACTOR TO PROVIDE ANY ADDITIONAL EXCAVATION (INCLUDING IN ROCK), BACKFILL OF PIPES, FITTINGS AND ALL JUMP-UPS TO LOCAL AUTHORITY REQUIREMENTS INCLUDING THOSE TO BRANCH DRAINS.
- ALL MANHOLES GREATER THAN 1.2m DEEP SHALL BE CONSTRUCTED WITH STEP IRONS TO LOCAL WATER AUTHORITY REQUIREMENTS.
- DRAINS TO BE SUPPORTED ON OR FROM SOLID GROUND. LOCATION AND DEPTH/INVERT LEVEL OF BRANCH SHALL BE VERIFIED ON SITE PRIOR TO COMMENCEMENT OF WORK.
- DRAINS UNDER BUILDINGS SHALL BE RETESTED WHERE DIRECTED BY MANAGING CONTRACTOR.
- PROVIDE 80mm COMPRESSIBLE EXPANDED FOAM MATERIAL OVER PIPEWORK WHERE CLEARANCE TO UNDERSIDE OF FOOTING IS LESS THAN 150mm, UNLESS NOTED OTHERWISE.
- SANITARY DRAINAGE LINES SHALL BE CONSTRUCTED OUTSIDE ZONE OF INFLUENCE OF STRUCTURAL BEAMS AND PIPES.
- ALL BUILDING SANITARY DRAINAGE PIPEWORK SHALL BE UPVC-DWV UNLESS NOTED OTHERWISE.
- ALL PIPE JUNCTIONS, BENDS AND TAPERS SHALL BE VIA PURPOSE MADE FITTINGS. MITRE FITTINGS WILL NOT BE ACCEPTED IN ANY CIRCUMSTANCE.
- ALL CONNECTIONS TO DRAINAGE PITS AND MANHOLES SHALL BE MADE IN A TRADESMAN-LIKE MANNER AND THE INTERNAL WALL OF THE PIT AT THE POINT OF ENTRY SHALL BE CEMENT RENDERED TO ENSURE A SMOOTH FINISH AND MADE WATERTIGHT.
- PIPE BEDDING AND BACKFILL SHALL BE IN ACCORDANCE WITH AS3500 AND ALSO IN ACCORDANCE WITH THE HYDRAULIC SERVICES SPECIFICATION.
- WHERE STORMWATER LINES PASS UNDER FLOOR SLABS SEWER GRADE RUBBER RING JOINTS ARE TO BE USED.

SANITARY PLUMBING NOTES

- ALL BRANCH LINES SHALL BE GRADED AND/OR LOWERED TO AVOID PENETRATING STEEL BEAMS. THE SUB CONTRACTOR SHALL PROVIDE ANY ADDITIONAL PIPE LENGTHS AND WORK, INCLUDING CONSTRUCTION OF ADDITIONAL INSPECTION OPENINGS, AS REQUIRED BY THE LOCAL AUTHORITY.
- COORDINATE WITH STRUCTURAL DRAWINGS. NO STEEL REINFORCING BARS TO BE CUT WITHOUT PRIOR WRITTEN APPROVAL FROM STRUCTURAL ENGINEER.
- ALL ROOF PENETRATIONS TO DETAIL AND PAINTED (COLOUR TO BE ADVISED). ALL VENTS SHALL BE OFFSET IN ROOF SPACE MINIMUM 600mm FROM EAVES AND AS SHOWN ON ARCHITECTURAL DRAWINGS AND COMPLY WITH THE BUSH FIRE CODE REQUIREMENTS.
- EXPOSED PIPEWORK WITHIN WET AREAS SHALL BE CHROME PLATED COPPER PIPE.
- ALL SANITARY PLUMBING PIPEWORK SHALL BE UPVC-DWV UNLESS NOTIFIED OTHERWISE.
- ALL PIPE PENETRATIONS AT WALLS SHALL BE FITTED WITH A PUDDLE FLANGE AND MADE GOOD AND WATERTIGHT.
- ALL SUSPENDED SLAB PENETRATIONS SHALL BE FORMED BY PATENT "SLABSEAL" OR OTHER APPROVED FIRE-ISOLATING, CAST-IN PENETRATION AND APPROVED (IN WRITING) BY THE MANAGING CONTRACTOR. THIS SHALL NOT RELIEVE THE SUB CONTRACTOR OF THE RESPONSIBILITY FOR THEIR LOCATION AND SIZE.
- ALL SUSPENDED SLAB PENETRATIONS SHALL BE FORMED CLEAR OF ALL EXISTING STEEL SLAB SUPPORT BEAMS, BEFORE CORING THROUGH SUSPENDED SLAB. JACK HAMMERS SHALL NOT BE USED TO MAKE SUSPENDED SLAB PENETRATIONS.
- PRIOR TO COMMENCEMENT OF CORING, ALL CORE HOLE LOCATIONS SHALL BE APPROVED BY THE MANAGING CONTRACTOR.

WATER SERVICES NOTES

- DOMESTIC WATER PIPEWORK SHALL BE TYPE 'B' COPPER TUBE FOR ALL MAINS RUNS INCLUDING SUPPLY TO FIRE HOSE REELS. SEE ALSO HYDRAULIC SERVICES' SPECIFICATION.
- SUPPLY AND INSTALL HOT AND COLD WATER RETICULATION TO ALL NEW FIXTURES AND FITTINGS. ALL PIPEWORK TO BE CONCEALED IN WALL CAVITIES AND CEILING SPACES. NO PIPEWORK TO BE SURFACE-MOUNTED OF MADE VISIBLE. PIPEWORK TO FIXTURES WHERE VISIBLE IN CUPBOARD SPACES SHALL BE CHROMIUM PLATED.
- ALL HOT WATER PIPEWORK TO BE FULLY INSULATED TO AS3500. ALL COLD WATER PIPING WITHIN WALL CHASES TO BE INSULATED WITH KEMLAG OR EQUAL.
- ALL HOT WATER PIPEWORK SHALL BE INSULATED WITH THERMOTECH4-ZERO OR APPROVED EQUAL.
- ALL COLD WATER PIPEWORK SHALL BE Ø20mm MINIMUM, EXCEPT THE LAST 3000mm OF RUN OUT TO ANY SINGLE FIXTURE, WHICH MAY BE Ø15mm, UNLESS NOTED OR SHOWN OTHERWISE.
- ALL INTERNAL HOSE TAPS SHALL BE 15mm, UNLESS NOTED OR SHOWN OTHERWISE. ALL EXTERNAL OR PLANT ROOM HOSE TAPS SHALL BE Ø20mm, UNLESS NOTED OTHERWISE.
- UNLESS NOTED OTHERWISE, ALL BRANCHES FROM MAIN LINES SHALL BE FITTED WITH APPROVED BACKFLOW PREVENTION VACUUM BREAKERS AND INDIVIDUAL STOP TAPS.

PIPEWORK LEGEND

FIRE

FH FIRE HYDRANT

WATER

AWM AUTHORITY WATER MAIN  
CW COLD WATER  
HW HOT WATER

DRAINAGE

ASM AUTHORITY SEWER MAIN  
S SEWER  
V VENT

FIRE (EXISTING)

eFH EXISTING FIRE HYDRANT

WATER (EXISTING)

eAWM EXISTING AUTHORITY WATER MAIN  
eCW EXISTING COLD WATER

DRAINAGE (EXISTING)

eASM EXISTING AUTHORITY SEWER MAIN  
eS EXISTING SEWER

SYMBOLS

GENERAL

FLANGED JOINT  
CAPPED PIPE  
CONTINUATION OF PIPE  
CONNECT TO EXISTING  
DRAWING CONTINUATION ARROW

DRAINAGE

CLEAROUT

WATER

DUAL CHECK VALVE  
TESTABLE DOUBLE CHECK VALVE  
WATER METER  
ISOLATION VALVE IN PATH BOX  
ISOLATION VALVE

FIRE HYDRANTS

EXTERNAL DUAL PILLAR FIRE HYDRANT  
FIRE HYDRANT  
FIRE HOSE REEL (PLAN)  
BOOSTER  
FIRE BRIGADE BOOSTER ASSEMBLY

ABBREVIATIONS

B BASIN  
CO CLEAROUT  
CW COLD WATER  
CS CLEANER SINK  
DCV TESTABLE DOUBLE CHECK VALVE (MEDIUM HAZARD)  
DFH DUAL FIRE HYDRANT  
DP DOWNPIPE  
DRG DRAWING  
DUCV DUAL CHECK VALVE (LOW HAZARD)  
DT DRINKING TROUGH  
e/EXIST. EXISTING  
FFL FINISHED FLOOR LEVEL  
FHBV FIRE HYDRANT BOOSTER VALVE  
FH FIRE HYDRANT  
FHR FIRE HOSE REEL  
FW FLOOR WASTE  
G CUTTER  
GM GAS METER  
HL HIGH LEVEL  
HT HOSE TAP  
HW HOT WATER  
HWU HOT WATER UNIT  
IO INSPECTION OPENING  
I/G IN GROUND  
OSD ON-SITE DETENTION  
PE POLYETHYLENE  
RL REDUCED LEVEL  
RWT RAINWATER TANK  
S SEWER  
SHR SHOWER  
SK SINK  
SIL SEWER INVERT LEVEL  
SINSW SCHOOL INFRASTRUCTURE NSW  
SMH SEWER MANHOLE  
S/S STAINLESS STEEL  
TR TROUGH  
TD/MECH TUNDISH/MECHANICAL  
V VENT  
WC WATER CLOSET  
WM WATER METER

Issue	Description	Date	Drawn	Approved
E	ISSUE FOR TENDER (AS CLOUDED)	25.03.25	GB	RE
D	ISSUE FOR TENDER	21.02.25	MS	RE
C	100% SCHEME DESIGN (PHASE 3)	13.02.25	GB	RE
B	80% SCHEME DESIGN (PHASE 3)	13.12.24	GB	RE
A	50% SCHEME DESIGN (PHASE 3)	28.11.24	GB	RE

North	Scale	Client
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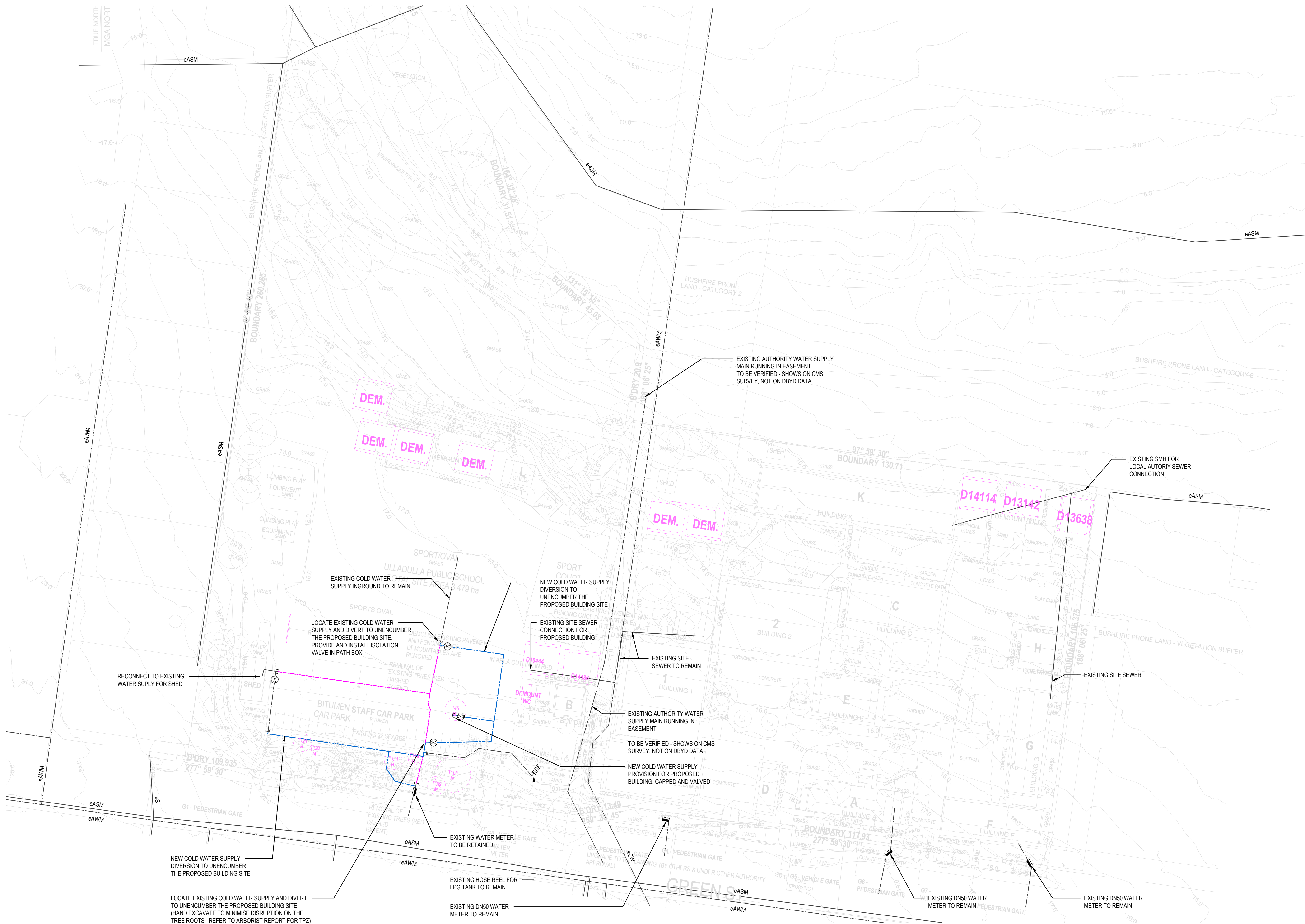
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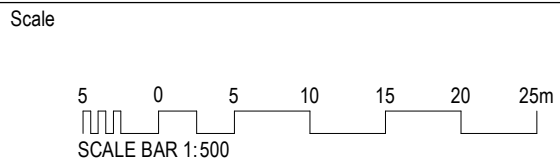
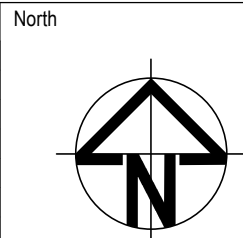
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TENDER ISSUE NOT FOR CONSTRUCTION			

Drawing Title HYDRAULIC SERVICES LEGEND & GENERAL NOTES				
Drawn GB	Designed RE	Q.A. Check RE	Q.A. Date 20.03.25	Scale @ A1 N.T.S
Project No. NA232021	Drawing No. UPS-ACOR-00-00-DR-H-0001	Issue E		





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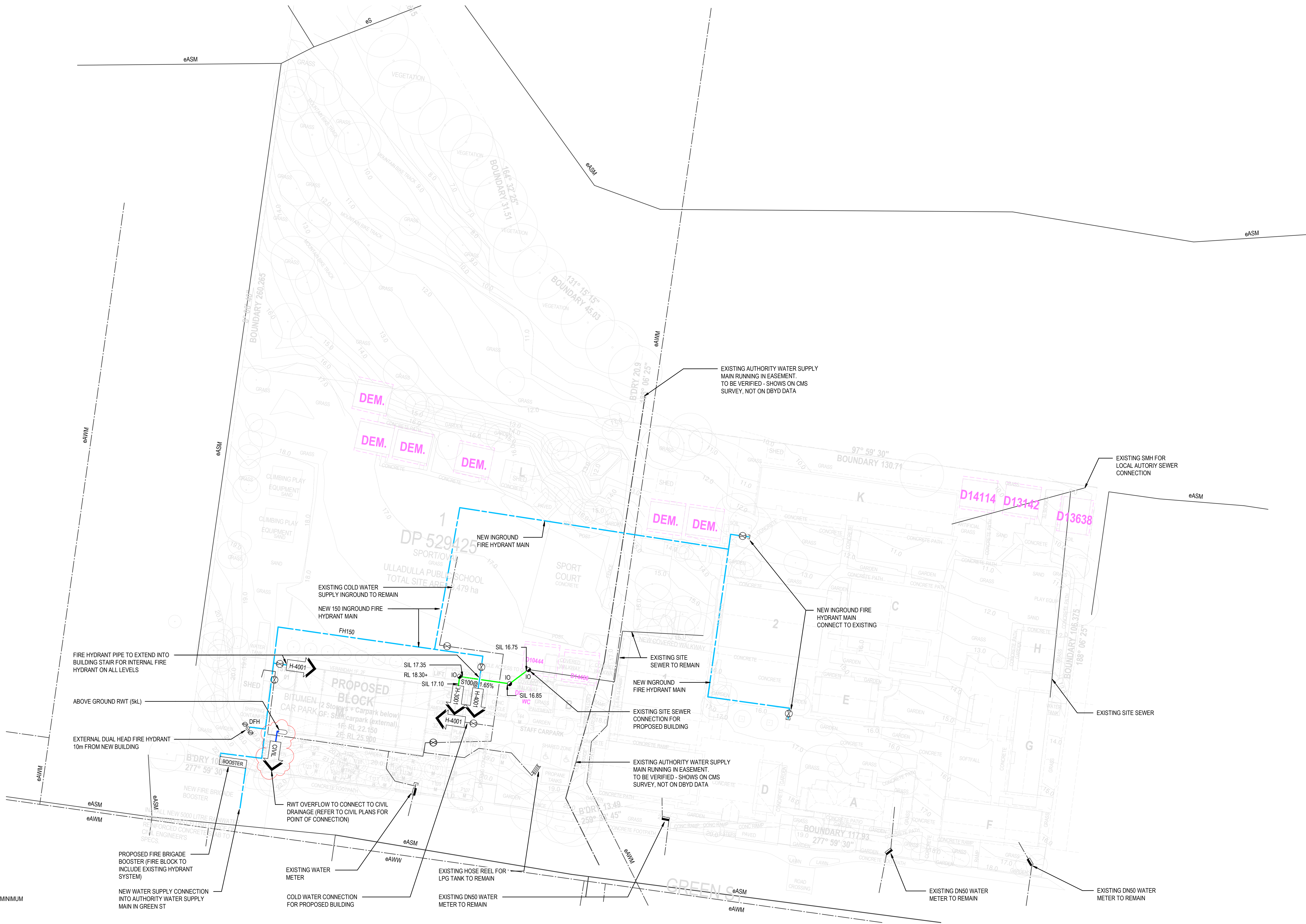
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Drawing Title  
HYDRAULIC SERVICES  
EXISTING SITE PLAN & DEMOLITION

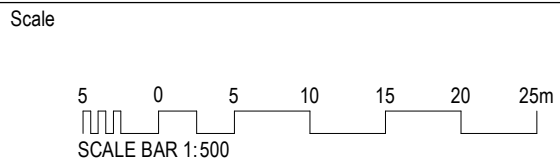
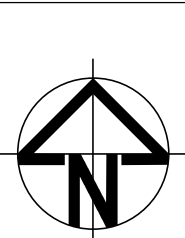
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GB	RE	RE	21.02.25	1:500
Project No.	Drawing No.			Issue
NA232021	UPS-ACOR-00-00-DR-H-1100			E





NOTES:  
1. ALL WATER AND FIRE PIPES TO HAVE MINIMUM 600mm COVER TO TOP OF PIPE.

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D	ISSUE FOR TENDER	21.02.25	MS	RE
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A	50% SCHEME DESIGN (PHASE 3)	29.11.24	GB	RE



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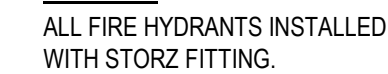
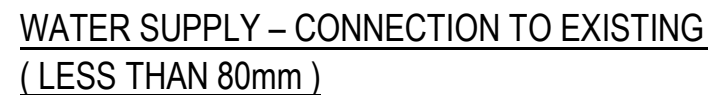
TENDER ISSUE  
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Drawing Title  
HYDRAULIC SERVICES  
PROPOSED SITE PLAN

Drawn	Designed	Q.A. Check	Q.A. Date	Scale @ A1
GB	RE	RE	20.03.25	1:500
Project No.	Drawing No.	Issue		
NA232021	UPS-ACOR-00-00-DR-H-1200	E		



1. ENCLOSURE DIMENSIONS:  
1350mm HIGH x 3500mm WIDE x 450mm DEEP
2. ENTIRE BOOSTER VALVE ARRANGEMENT IS TO BE  
INSTALLED IN ACCORDANCE WITH AS2419.1, AS2419.2 & AS2419.3
3. PROVIDE INSTALLATION DETAILS INCLUDING DIMENSIONS FOR  
APPROVAL PRIOR TO CONSTRUCTION
4. SUPPORTS NOT SHOWN
5. ALL FIRE HYDRANTS INSTALLED WITH STORTZ FITTING.



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## ELECTRICAL SYMBOLS

	CIRCUIT BREAKER
	EARTH LEAKAGE CIRCUIT BREAKER
	REQUIRE CIRCUIT RATING MAXIMUM REQUIRED SETTABLE CIRCUIT RATING
	ON LOAD ISOLATOR
	EMERGENCY LIGHTING TEST FACILITY
	KILOWATT HOUR METER
	SINGLE PHASE CONDUCTOR
	THREE PHASE CONDUCTOR
	SPARE SPACE (SINGLE PHASE)
	SPARE SPACE (THREE PHASE)
	SPARE SPACE (NON)
	SURGE DIVERTER
	CABLE TAKE OFF BOX
	CURRENT TRANSFORMER
	LINK
	TRANSFORMER - GENERIC
	PHOTO ELECTRIC CELL WITH TIMER SHUTOFF

	SWITCHBOARD		ELECTRICAL PIT (SQUARE)
	SWITCHBOARD BY OTHERS		CORE HOLE/S FOR SUBMAIN RETICULATION
	ELECTRICAL EQUIPMENT GENERAL		INVERTER (GENERAL ARRANGEMENT)
	INVERTER		

## COMMUNICATIONS SYMBOLS

	COMMUNICATIONS PIT (SQUARE)
	SECURITY PIT (SQUARE)
	COMMUNICATIONS RACK, 45 RU, ALL METAL CONSTRUCTION, LOCKABLE MESH DOORS, LOCKABLE SIDE PANELS
	OPTICAL FIBRE
	STRUCTURED CABLING
	SLAB PENETRATION FOR STRUCTURED CABLING RETICULATION
	CONDUIT EMBEDDED IN BUILDING FABRIC FOR OPTICAL FIBRE

## PHASING

CONTAINMENT	FIXTURES / FITTINGS
	DENOTES EXISTING ELECTRICAL SERVICES TO REMAIN
	DENOTES EXISTING ELECTRICAL SERVICES TO BE DEMOLISHED OR RELOCATED
	DENOTES EXISTING ELECTRICAL SERVICES RELOCATED POSITION
LINETYPE FOR RELOCATED OR NEW CABLETRAY/CONDUIT DETERMINED BY SYSTEM TYPE.	

## CONDUIT

	1/E	LOW VOLTAGE ELECTRICAL CONDUIT	CONDUIT, SIZE AS INDICATE 1: INDICATES NUMBER OF CONDUITS E: INDICATES ELECTRICAL CONDUIT
	1/C	COMMUNICATIONS CONDUIT	C: INDICATES COMMUNICATIONS CONDUIT
	1/S	SECURITY CONDUIT	S: INDICATES SECURITY CONDUIT

## CABLE TRAY

	300 ECT	POWER CABLE TRAY	EXAMPLE - 300ECT - 300 DENOTES WIDTH - E DENOTES SERVICE E = POWER C = COMMUNICATIONS S = SECURITY B = BMS
	300 CCT	COMMUNICATIONS CABLE TRAY	
		POWER VERTICAL CABLE TRAY	- CT DENOTES CABLE CONTAINMENT TYPE CT = CABLE TRAY CL = CABLE LADDERS CB = CABLE BASKET
		COMMUNICATIONS VERTICAL CABLE TRAY	

## GENERAL NOTES

- ALL DIMENSIONS ARE IN MILLIMETERS.
- ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE SERVICES SPECIFICATIONS.
- DO NOT SCALE FOR SIZING. REFER TO ARCHITECTURAL, MANUFACTURERS DOCUMENTATION AND SPECIFICATION FOR EXACT MEASUREMENTS.
- CONTRACTOR TO CONDUCT FULL SITE SURVEY TO CONFIRM EXACT LOCATIONS OF ALL EXISTING ELECTRICAL SERVICES AND EQUIPMENT.
- ALL WORKS ARE NEW UNLESS NOTED OTHERWISE.
- EACH CAPTIVE SCREW OUT SHALL BE ON A DEDICATED CIRCUIT. EACH PAIR OF OUTLETS PROVIDED TO A RACK SHALL BE ON THE SAME PHASE.
- THE CONTRACTOR IS TO REFER TO THE SSU BRIEF FOR THE SECURITY SCOPE AND TECHNICAL REQUIREMENTS.
- ALL NEW DATA CABLING IS TO MEET THE D&E STRUCTURED CABLING SYSTEM SPECIFICATION v1.4.
- THE CONTRACTOR IS TO REFER TO THE NSW PUBLIC SCHOOLS - AUDIO-VISUAL STANDARDS FOR SCHOOL LEARNING DISPLAYS FOR AV SCOPE AND TECHNICAL REQUIREMENTS.

## ABBREVIATIONS

DBPO	DOUBLE GENERAL POWER OUTLET
DTO	DOUBLE TELECOMMUNICATIONS OUTLET
GPO	GENERAL POWER OUTLET (SINGLE)
LED	LIGHT EMITTING DIODE
RU	RACK UNIT
STO	SINGLE TELECOMMUNICATIONS OUTLET
TO	TELECOMMUNICATIONS OUTLET
WP	WEATHER PROOF



No. DESCRIPTION

- 1 RETICULATION OF NEW SUB-MAINS USING IN-GROUND CONDUIT WITH CABLE PITS EVERY 30M OR WHEN A CHANGE IN DIRECTION OCCURS. SUB-MAIN TO CONNECT NEW MSB AND LEVEL 1 DISTRIBUTION BOARD OF NEW PROPOSED BUILDING.
- 2 PROPOSED NEW CONSUMER MAINS RETICULATED IN-GROUND BETWEEN PROPOSED NEW SUBSTATION AND PROPOSED NEW MSB.
- 3 INDICATIVE LOCATION OF TELSTRA MAIN CONNECTION
- 4 THE SCHOOL IS CURRENTLY SUPPLIED BY AN OVERHEAD FEEDER TO A PRIVATE POLE. THE CONSUMER MAINS ARE ROUTED IN-GROUND FROM THE PRIVATE POLE TO THE EXISTING MSB. OVERHEAD FEEDER, POLE AND EXISTING CONSUMER MAINS ARE TO BE DISCONNECTED AND REMOVED FOLLOWING THE INSTALLATION OF THE NEW SUBSTATION, MSB AND CONSUMER MAINS.
- 5 INDICATIVE LOCATION OF EXISTING MAIN COMMUNICATIONS ROOM (MCR)
- 6 PROPOSED CABLE RETICULATION FROM THE MCR TO THE BCR OF THE PROPOSED NEW BUILDING. NEW CABLES SHALL RUN WITHIN IN-GROUND CONDUIT WITH CABLE PITS EVERY 30M OR WHEN A DIRECTION CHANGE OCCURS.
- 7 NEW SECURITY CONDUIT IS TO CONSIST OF MINIMUM 2x 50mm CONDUIT. SECURITY CABLE PITS TO BE SIZED BASED ON SITE CONDITIONS AND MANUFACTURER REQUIREMENTS.
- 8 COMMUNICATIONS CABLE PIT ADJACENT TO BLOCK C TO BE P8 TYPE. COMMUNICATIONS CABLE PIT ADJACENT TO PROPOSED NEW BLOCK BLOCK TO BE P5 TYPE. COMMUNICATIONS CONDUIT IS TO CONSIST OF MINIMUM 2x 100mm DIAMETER. OTHER COMMUNICATIONS PITS ALONG CONDUIT RETICULATION PATH TO BE P6 TYPE. ALL COMMUNICATION CABLE PITS USED ARE TO HAVE CONCRETE LIDS.
- 9 EXISTING BARIX PA HEADEND LOCATED IN BLOCK A ADMINISTRATION AND RECEPTION AREA. DoE TO CONFIRM IF EXISTING SYSTEM CAN BE EXTENDED TO INCLUDE PROPOSED NEW BUILDING OR IF REPLACEMENT OF THE SYSTEM IS REQUIRED.
- 10 EXISTING SECURITY HEADEND LOCATED IN BLOCK A SECURE ROOM
- 11 COMMUNICATION CONDUITS TO PENETRATE IN THE WALL CAVITY AND RETICULATE FROM LOW LEVEL TO CEILING SPACE AND CONTINUE TO BCR
- 12 COMMUNICATION CONDUITS TO RETICULATE UNDER THE BUILDING, PENETRATE IN THE WALL CAVITY NEAR THE SECURITY HEAD END AND TRANSFER TO HIGH LEVEL IN CEILING SPACE TO REACH THE HEAD END

△ MINIMUM 2x100MM DIA HD-UPVC UNDERGROUND CONDUITS

MAIN SWITCHBOARD (MSB)

(EXISTING)  
EXISTING MSB IS TO BECOME A MAIN DISTRIBUTION BOARD (MDB). INSTALL NEW SUBMAINS TO SUPPLY MDB FROM PROPOSED NEW MSB. REMOVE GROUND STAKE, MEN CONNECTION AND AUTHORITY METER. UPDATE LABELS AND DOCUMENTATION.



GENERAL NOTES

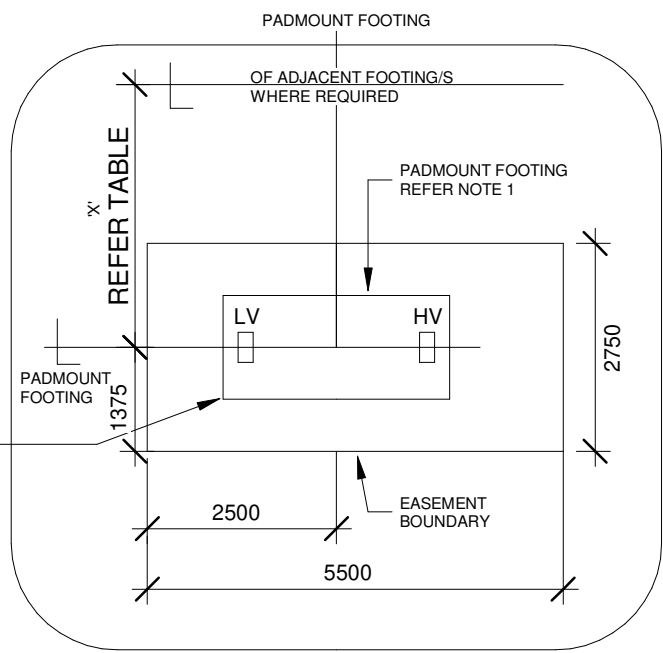
- NEW GATE WITH INTERCOM AND ASSOCIATED UPGRADE TO EXISTING SECURITY SYSTEM TO INTEGRITI SYSTEM IN PLANNING STAGE. ASSUME NEW INTEGRITI SYSTEM INSTALLED AND APPROPRIATE FOR EXPANSION TO INCLUDE NEW BUILDING.
- LOCATION OF PITS AND UNDERGROUN CONDUITS IS INDICATIVE AND NEED TO BE VERIFIED ON SITE



INDICATIVE LOCATION OF PRIVATE POLE AND POINT OF SUPPLY.

INDICATIVE LOCATION OF OVERHEAD SERVICE TO PRIVATE POLE

UTILITY SUBSTATION (315kVA)  
(EXISTING)  
INDICATIVE LOCATION OF POLE MOUNTED TRANSFORMER CURRENTLY SUPPLYING THE SCHOOL.



COMMERCIAL, HIGH DENSITY & INDUSTRIAL DEVELOPMENT  
ARRANGEMENT CAN BE FOR FOOTPATH ON EITHER LV OR HV SIDE OF PADMOUNT.

BUILDING COMMUNICATIONS ROOM (BCR)

(PROPOSED NEW)  
SEE BLOCK M LEVEL 2 POWER AND COMMUNICATIONS ARRANGEMENT FOR DETAILS.

DISTRIBUTION BOARDS (DB)

(PROPOSED NEW)  
SEE BLOCK M POWER AND COMMUNICATIONS ARRANGEMENT FOR DETAILS. REFER TO BLOCK M GROUND FLOOR POWER AND COMMUNICATIONS PLAN FOR SUBMAINS RETICULATION

MAIN SWITCHBOARD (MSB)

A NEW EXTERNAL MSB IS TO BE INSTALLED IN THE INDICATED LOCATION WITH NEW CONSUMER MAINS CONNECTING TO PROPOSED NEW SUBSTATION. A CLEAR SPACE NO LESS THAN 1400 IS TO BE PROVIDED IN FRONT OF THE NEW MSB.

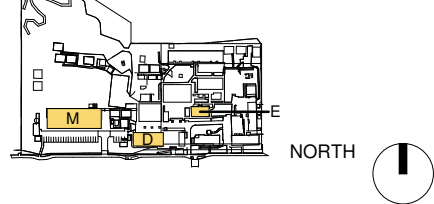
ENDEAVOUR ENERGY PADMOUNT SUBSTATION REQUIREMENTS

SUBSTATION SCOPE IS SUBJECT TO A SEPARATE PLANNING APPLICATION

**SUBSTATION (500kVA)**  
(PROPOSED NEW)  
A NEW SUBSTATION IS TO BE INSTALLED IN THE INDICATED POSITION. A CONNECTION OFFER FOR THE ASSESSED LOAD OF 488A/PHASE HAS BEEN RECEIVED FROM ENDEAVOUR ENERGY. EXTERIOR SITE FENCE IS TO BE MODIFIED SO PANELS ARE SEPARATELY GROUNDING AND SUBSTATION AND EASEMENT ARE FENCED OUT OF SITE.

EXISTING IN-GROUND WATER SERVICE IDENTIFIED BY UTILITY SURVEY. LOCATION OF SERVICE TO BE CONFIRMED BY CONTRACTOR PRIOR TO WORK AND SUBSTATION POSITIONED TO ALLOW AUTHORITY REQUIRED CLEARANCE.

KEY PLAN



REV	BY	DATE	DESCRIPTION
1	PS	11/10/2024	CONCEPT DESIGN
2	PS	28/10/2024	CONCEPT DESIGN
3	PS	29/10/2024	CONCEPT DESIGN
4	PS	12/11/2024	CONCEPT DESIGN
5	PS	06/12/2024	SCHEMATIC DESIGN
6	PS	17/01/2025	SCHEMATIC DESIGN
7	PS	13/02/2025	SCHEMATIC DESIGN
8	PS	28/02/2025	SCHEMATIC DESIGN

PROJECT NAME  
**SINSW - ULLADULLA PUBLIC SCHOOL UPGRADE**  
241 GREEN ST, ULLADULLA NSW 2539  
SITE

DRAWING TITLE  
**ELECTRICAL SERVICES**  
SITE PLAN

PROJECT NO.  
**758-0120.0041157.0001**

STATUS  
**SCHEMATIC DESIGN**

DRW	CHK	APP	DATE	SCALE
ICE	PD	PL	28/02/2025	1:500 @A1

DRAWING NO.  
**UPS-NDY-00-00-DR-E-001011**

REV  
**8**