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TABLE OF SCHEDULES

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SHEET #	DRAWING NAME	REV	DATE
SW100	COVER PAGE	01	8/05/2025
SW101	GENERAL NOTES	01	8/05/2025
SW200	STORMWATER DESIGN - SITE PLAN	01	8/05/2025
SW300	STORMWATER PLAN - PUMP DESIGN	01	8/05/2025

UAL OCCUPANCY DWELLING AT VENUE, BELFIELD

B CONCEPT STORMWATER DESIGN





Notes:





- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECT'S, SERVICE ENGINEER'S AND CSEG PTY LTD DRAWINGS AND SPECIFICATIONS.

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	CLIENT: TRUEFLOW INFRASTRUCTURE P/L ARCHITECT: ZED ARCHITECTS SITE: DUAL OCCUPANCY		N N
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GENERAL NOTES

- THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL ARCHITECTURAL, SERVICES AND OTHER CONSULTANTS DRAWINGS THE SPECIFICATIONS AND WITH SUCH OTHER WRITTEN INSTRUCTIONS AS MAY BE ISSUED DURING THE COURSE OF THE TENDER AND CONTRACT.
- IF ANY DISCREPANCY OCCURS ON THE DRAWINGS OR BETWEEN DRAWINGS AND SPECIFICATION, THE CONTRACTOR SHALL REFER THE DISCREPANCY TO MEINHARDT INFRASTRUCTURE & ENVIRONMENT PTY LTD FOR WRITTEN CLARIFICATION BEFORE PROCEEDING WITH THE WORK ALL WORKMANSHIP AND MATERIALS SHALL COMPLY WITH COUNCIL'S
- SPECIFICATION & POLICY, AUS-SPEC, THE BUILDING CODE OF AUSTRALIA AND THE RELEVANT CURRENT AUSTRALIAN STANDARDS AS APPROPRIATE.
- ALL DIMENSIONS SHOWN SHALL BE VERIFIED ON SITE. DRAWINGS MUST NOT BE SCALED.
- ONLY SUBSTITUTIONS APPROVED IN WRITING BY MEINHARDT INFRASTRUCTURE & ENVIRONMENT PTY LTD SHALL BE ACCEPTED.
- DURING CONSTRUCTION THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL STRUCTURES AND WORKS IN A STABLE CONDITION AND SHALL ENSURE NO PART SHALL BE OVER STRESSED DURING CONSTRUCTION ACTIVITIES.

PRELIMINARY WORKS NOTES

- THE CONTRACTOR SHALL ALLOW FOR PROVIDING MATERIALS AND WORK WHICH IS INCIDENTAL TO THE ITEMS SPECIFIED AND WHICH WOULD BE NECESSARY TO ACHIEVE THE RESULTS REQUIRED BY THE
- THE CONTRACTOR WILL BE DEEMED TO HAVE INSPECTED THE SITE OF THE WORKS, ASSESSED AVAILABLE ACCESS, INQUIRED INTO THE LOCATION OF AUTHORITIES UNDERGROUND ASSETS, EXAMINED THE GEOTECHNICAL REPORT AND THE NATURE OF THE GROUND AND OBTAINED THE LOCAL CLIMATE AND RAINFALL INFORMATION.
- SAFETY REQUIREMENTS. THE CONTRACTOR SHALL ENSURE THAT ALL TIMES THE MEANS AND METHODS OF CARRYING OUT THE WORK TO BE UNDERTAKEN CONFORM WITH THE STANDARDS AND REQUIREMENTS OF OCCUPATIONAL HEALTH AND SAFETY ACT AND ANY OTHER APPLICABLE LEGISLATION, CODES OF PRACTICE AND STANDARDS.
- ALL PERSONNEL WORKING ADJACENT TO A TRAFFICABLE ROAD OR FORMATION SHALL WEAR RED SAFETY VESTS. THE CONTRACTOR SHALL PROTECT THE PUBLIC FROM DANGERS INHERENT IN EXCAVATIONS, OBSTRUCTIONS, WORKING PLANT AND FALLING OBJECTS. SUCH MEASURES THAT ARE TAKEN SHALL BE ADEQUATE TO MAINTAIN THE SAFETY OF THE PUBLIC DURING PERIODS OUTSIDE NORMAL WORKING HOURS ON SITE.
- THE CONTRACTOR SHALL ENSURE THAT ALL TRENCH EXCAVATION FOR INSTALLATION OF PIPEWORKS (OR OTHER WORKS) OF DEPTHS GREATER THAN 1.5 METRES MUST BE CONTINUOUSLY SUPERVISED AND AT ALL TIMES BE ADEOUATELY SUPPORTED.
- ALL WORK WITHIN ROAD RESERVES, PUBLIC PROPERTY OR PRIVATE PROPERTY SHALL BE EXECUTED STRICTLY IN ACCORDANCE WITH THE REQUIREMENTS OF THE RELEVANT AUTHORITY OR LAND OWNER. CONTRACTOR SHALL OBTAIN FROM THE RELEVANT AUTHORITIES DETAILS OF ALL EXISTING SERVICES WITHIN THE VICINITY OF THE WORKS AND SHALL BE HELD SOLELY RESPONSIBLE FOR ANY DAMAGE CAUSED TO
- EXISTING SERVICES DURING THE EXECUTION OF THE WORKS. THE CONTRACTOR SHALL COMPLY WITH AND GIVE NOTICES REQUIRE BY ANY ACT OF PARI IAMENT, ORDINANCE REGULATION OR BY-LAW OF ANY AUTHORITY HAVING JURISDICTION OVER THE WORKS AND SHALL PAY ALL FEES OR CHARGES LEGALLY DEMANDABLE UNDER ANY SUCH ACT
- OF PARLIAMENT, ORDINANCE, REGULATION OR BY-LAW. PRIOR TO WORKS, THE CONTRACTOR SHALL UNDERTAKE AN EXISTING DEFECTS INSPECTION AND REPORT TO LIST ANY EXISTING DAMAGE TO ROADS, FOOTPATHS, KERBS CROSSINGS CHANNELS NATURE STRIPS, FT SUCH LISTS SHALL BE PREPARED IN DUPLICATE BY THE CONTRACTOR AND A COPY SENT TO THE SUPERINTENDENT.

TRAFFIC PROVISION NOTES

- UNLESS OTHERWISE SPECIFIED. THE CONTRACTOR SHALL MAKE PROVISION FOR TRAFFIC. IN ACCORDANCE WITH THE RELEVANT AUS-SPEC OR AUSTRALIAN STANDARD AS1742 "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES"
- THE CONTRACTOR SHALL ASCERTAIN AND COMPLY WITH THE REQUIREMENTS OF THE AUTHORITY RESPONSIBLE FOR PUBLIC ROADS.
- THE CONTRACTOR SHALL SO CONDUCT THE OPERATIONS AS TO MINIMISE OBSTRUCTION AND INCONVENIENCE TO THE PUBLIC, AND SHALL NOT HAVE UNDER CONSTRUCTION AN GREATER LENGTH OR AMOUNT OF WORK THAN CAN BE MANAGED PROPERLY WITH DUE REGARD TO THE CONVENIENCE OF THE PUBLIC.

SUBSOIL DRAINAGE NOTES

- WHERE SUBSOIL DRAINAGE LINES PASS UNDER FLOOR SLABS AND VEHICULAR PAVEMENTS, UNSLOTTED uPVC DWV GRADE CLASS SN8 PIPE SHALL BE USED. PROVIDE SUBSOIL DRAINAGE IN ACCORDANCE WITH COUNCIL
- SPECIFICATIONS WITH CONTINUOUS FALL TO DOWNSTREAM PITS LOCATED AS SHOWN ON PLAN AND AS MAYBE DIRECTED BY COUNCIL / SUPERINTENDEN
- ALL SUBSOIL DRAINAGE PIPES SHALL BE Ø100mm CLASS 400 PERFORATED DRAINAGE PIPE LAID AT 1.0% MIN GRADE WRAPPED IN GEOFABRIC (UNO) AND BE LAID AT A MIN DEPTH OF 400mm BELOW PAVEMENT SUB-BASE COURSE

EXISTING SERVICES NOTES

- EXISTING SERVICES HAVE BEEN PLOTTED FROM SUPPLIED DATA AND AS SLICH THEIR ACCURACY CANNOT BE GUARANTEED IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ESTABLISH THE LOCATION AND EVEL OF ALL EXISTING SERVICES PRIOR TO THE COMMENCEMENT OF ANY WORK. ANY DISCREPANCIES SHALL BE REPORTED TO THE SUPERINTENDENT
- THE CONTRACTOR SHALL ALLOW FOR THE CAPPING OFF. EXCAVATION AND REMOVAL IF REQUIRED OF ALL REDUNDANT EXISTING SERVICES IN AREAS AFFECTED BY WORKS WITHIN THE CONTRACT AREA, AS SHOWN ON THE DRAWINGS UNLESS DIRECTED OTHERWISE BY THE SUPERINTENDENT.
- HE CONTRACTOR SHALL ENSURE THAT AT ALL TIMES SERVICES TO ALL BUILDINGS NOT AFFECTED BY THE WORKS ARE NOT DISRUPTED
- IF REQUIRED, THE CONTRACTOR SHALL CONSTRUCT TEMPORARY SERVICES TO MÀINTAIN EXISTING SUPPLY TO BUILDINGS REMAINING IN OPERATION DURING WORKS TO THE SATISFACTION AND APPROVAL OF THE JPERINTENDENT. ONCE DIVERSION IS COMPLETE AND COMMISSIONED E CONTRACTOR SHALL REMOVE ALL SUCH TEMPORARY SERVICES AND MAKE GOOD TO THE SATISFACTION OF THE SUPERINTENDENT AND THE
- RELEVANT SERVICE AUTHORITY. INTERRUPTION TO SUPPLY OF EXISTING SERVICES SHALL BE DONE SO AS NOT TO CAUSE ANY INCONVENIENCE TO THE PRINCIPAL. THE CONTRACTOR IS TO GAIN APPROVAL FROM THE SUPERINTENDENT FOR TIME OF INTERRUPTION - THE CONTRACTOR IS RESPONSIBLE FOR ALL
- ALL BRANCH GAS AND WATER SERVICES UNDER DRIVEWAYS AND BRICK PAVING SHALL BE LOCATED IN 80mm DIA uPVC SEWER GRADE CONDUITS EXTENDING A MINIMUM OF 500mm BEYOND THE EDGE OF PAVING CLEARANCE AND COVER REQUIREMENTS SHALL BE OBTAINED FROM THE
- RELEVANT SERVICE AUTHORITY BEFORE COMMENCEMENT OF WORKS AND SHALL BE ADHERED TO AT ALL TIMES CARE IS TO BE TAKEN WHEN EXCAVATING NEAR EXISTING SERVICES. NO MECHANICAL EXCAVATIONS ARE TO BE UNDERTAKEN OVER TELECOM OR

ELECTRICAL SERVICES. HAND EXCAVATE IN THESE AREAS ONLY

KERB AND GUTTER

- ALL KERB AND GUTTER SHALL COMPLY WITH AS2876-2000:'CONCRETE
- KERBS AND CHANNELS-MANUALLY OR MACHINE PLACED' CONCRETE CHARACTERISTICS SHALL BE IN ACCORDANCE WITH THE
- CONCRETE NOTES. THE CONTRACTOR SHALL LIAISE WITH RELEVANT AUTHORITIES TO DETERMINE THEIR REQUIREMENTS FOR THE KERBS AND GUTTERS
- ALL KERB & GUTTER IS TO BE MACHINE LAID UNLESS OTHERWISE

APPROVED BY THE SUPERINTENDENT

- EARTHWORKS NOTES
- THE CONTRACTOR SHALL COMPLY WITH THE CURRENT EDITIONS OF THE AUSTRALIAN STANDARDS. AS 1289 TESTING SOILS FOR ENGINEERING PURPOSES AS 3798 GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS
- ALL WORK SHALL COMPLY WITH THE PROJECT GEOTECHNICAL REPORT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CARRYING OUT ALL ONTROL AND COMPLIANCE EXAMINATION AND TESTING OF MATERIALS AND WORK UNI FSS OTHFRWISE SPECIFIED, ALL TESTS SHALL BE UNDERTAKEN IN
- ACCORDANCE WITH THE APPROPRIATE AUSTRALIAN STANDARD TEST METHOD. WHERE THERE IS NO RELEVANT AUSTRALIAN STANDARD TEST METHOD THEN THE CURRENT APPROPRIATE RTA TEST METHOD OR OTHER SPECIFIED TEST METHOD SHALL BE USED. ALL TESTS SHALL BE CONDUCTED BY EXPERIENCED TESTING OFFICERS IN A LABORATORY ACCREDITED BY THI NATIONAL ASSOCIATION OF TESTING AUTHORITIES-NATA.
- DETERMINATION OF THE NATURE AND QUANTITY(IES) OF THE EXISTING SITE MATERIALS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. WHERE INCLUDED IN THE DOCUMENTS, GEOTECHNICAL REPORTS ARE INCLUDED FOR INFORMATION ONLY. INTERPRETATION OF THE REPORT/S SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. USE OF ON-SITE MATERIAL WITHIN THE WORKS SHALL ONLY BE PERMITTED WHERE THE MATERIAL EITHER I. IS SPECIALLY STATED WITHIN THE DOCUMENTS AS BEING USED IN THE WORKS OR II. IS PERMITTED BY THE SUPERINTENDENT & GEOTECHNICAL TESTING /
- ALL FILL MATERIAL SHALL BE FROM A SOURCE APPROVED BY THE FOLLOWING -SUPERINTENDENT AND SHALL COMPLY WITH THE a) FREE FROM ORGANIC AND PERISHABLE MATTER; b) MAXIMUM PARTICLE SIZE 75mm; AND
- c) PLASTICITY INDEX BETWEEN 2% AND 15%.
- WHEN A SURFACE IS UNABLE TO SUPPORT CONSTRUCTION EQUIPMENT OR IT IS NOT POSSIBLE TO COMPACT THE OVERLYING MATERIALS BECAUSE OF HIGH MOISTURE CONTENT, THEN ONE OR MORE OF THE FOLLOWING ALTERNATIVE ACTIONS MAY BE TAKEN (I) ALLOW THE MATERIAL TO DRY TO A MOISTURE CONTENT WHICH ALLOW IT TO BE COMPACTED AND ALLOW THE PLACEMENT AND COMPACTION OF OVERLYING MATERIAL
- II) SCARIFY THE MATERIAL TO A DEPTH OF 200MM AND WORK AS NECESSARY TO ACCELERATE DRYING. RECOMPACT AS SPECIFIED WHEN MOISTURE CONTENT APPROXIMATES OPTIMUM
- (III) EXCAVATE AND REPLACE THE SOFT MATERIAL. THE ACTION TO BE ADOPTED SHALL BE AT THE CONTRACTOR'S DISCRETION AND EXPENSE, BUT SHALL BE ADVISED TO THE SUPERINTENDEN BEFORE ACTION COMMENCES IF THE CONTRACTOR ELECTS PURSUANT TO (I) ABOVE TO ALLOW THE
- MATERIAL TO DRV, RESULTING DELAYS, IF ANY, SHALL NOT CONSTITU GROUNDS FOR AN EXTENSION OF CONTRACT PERIOD OR DATE OF ACTICAL COMPLETION THE FINISHED SUBGRADE SHALL NOT BE DISTURBED BY TRAFFIC OR OTHER OPERATIONS, AND SHALL BE PROTECTED AND MAINTAINED BY THE CONTRACTOR UNTIL THE FIRST LAYER OF FILL OR SUB-BASE IS PLACED
- HEREON. THE SUBGRADE SHALL BE KEPT DRAINED AND COMPLETELY FREE OF STANDING WATER AT ALL TIMES. THE CONTRACTOR SHALL PLAN AND CARRY OUT THE WHOLE OF THE WORKS TO MINIMISE THE EFFECTS OF RUN-OFF AND EROSION ON THE SITE AND ON DOWNSTREAM AREAS. HE SHALL AVOID UNNECESSARY GROUND DISTURBANCE AND PROVIDE AS NECESSARY FOR THE PROPER CONTROL OF STORMWATER RUN-OFF AT EVERY STAGE OF THE WORKS ALL IN CORDANCE WITH "MANAGING URBAN STORMWATER / SOIL AND
- CONSTRUCTION" (LANDCOM "BLUE BOOK") PRIOR TO THE COMMENCEMENT OF EARTHWORKS TOPSOIL IS TO BE TRIPPED WITHIN THE LIMITS OF THE EARTHWORKS AND FROM ANY AREAS TO BE COVERED BY PAVING, STRUCTURES OR FILL, AND ALL AREAS WHICH ARE TO SUPPORT PAVEMENTS, EMBANKMENTS, STRUCTURES AND THE LIKE OR FILLING UNDER SUCH WORKS, SHALL BE STRIPPED CLEAR OF ALL TREES, OGS, STUMPS, SCRUB, GRASS, ROOT GROWTH, CULTIVATED SOIL, WET OR DELETERIOUS SUBSTANCE. THE CONTRACTOR SHALL BREAK UP AND
- EMOVE ALL ASPHALT AND CONCRETE MATERIAL UPON WHICH FILL OR PAVEMENT SHALL BE PLACED ALL MATERIAL WITHIN THE LIMIT OF THE EARTHWORKS SHALL BE WHOLLY REMOVED
- FILL ALL HOLES WITH APPROVED MATERIAL IN MAXIMUM 150MM COMPACTED THICKNESS LAYERS COMPACTED TO THE DENSITY TO THE ADJOINING UNDISTURBED SOIL AND TO THE APPROVAL OF THE SUPERINTENDEN
- EXCAVATION TO THE LINES, LEVELS AND GRADES AS REQUIRED FOR UNDERGROUND SERVICES SPECIFIED IN THE RELEVANT SERVICES SECTIONS, INCLUDING DRAINAGE, HYDRAULIC, ELECTRICAL AND THE LIKE. UNLESS OTHERWISE SPECIFIED MAKE THE TRENCHES STRAIGHT BETWEEN MANHOLES, INSPECTION POINTS, JUNCTIONS AND THE LIKE, WITH VERTICAL SIDES AND UNIFORM GRADES DEPTH SHALL BE AS REQUIRED BY THE RELEVANT SERVICES AND ITS CUT BACK ROOTS ENCOUNTERED IN TRENCHES TO LESS THAN 600mm CLEAR OF THE RELEVANT SERVICE. REMOVE SUCH OTHER OBSTRUCTIONS
- INCLUDING ROOTS, STUMPS, BOULDERS AND THE LIKE WHICH MAY, IN THE ON OF THE SUPERINTENDENT, INTERFERE WITH THE PROP FUNCTIONING OF THE SERVICE. LAY AND BED SERVICES IN ACCORDANCE WITH THE RELEVANT SERVICES SPECIFICATION SECTION. 10. BACKFILL AND COMPACT SERVICE TRENCHES AS SOON AS POSSIBLE AFTER
- APPROVAL OF LAID AND BEDDED SERVICE. COMPACT BACKFILL IN PIPE TRENCHES SO THAT THE PIPE IS BUTTRESSED BY HE WALLS OF THE TRENCH WHERE FILLING IS DESIGNATED BY THE CONTRACT OR IS SHOWN ON THE
- DRAWINGS AS STRUCTURAL OR CONTROLLED FILL THE CONTRACT ON THE SHALL ENGAGE AN INDEPENDENT GEOTECHNICAL TESTING AUTHORITY TO SUPERVISE SUBGRADE PREPARATION, FILL PLACEMENT, COMPACTION AND O UNDERTAKE SAMPLING AND TESTING AND REPORTING TO SATISFY THE EQUIREMENTS OF THIS SPECIFICATION AND THOSE OF AS 2870 AND AS 3798, FOR CONTROLLED FIL
- NO FILL SHALL BE PLACED OVER LAYERS NOT TESTED AND HAVING SATISFACTORY RESULTS WHERE EXCAVATED MATERIAL IS NOT SUITABLE FOR FILLING, FILL MATERIAL, AS SPECIFIED IN THIS SPECIFICATION SECTION, "IMPORTED FILL" SHALL BE USED
- ALL FILL MATERIAL SHALL BE PLACED IN MAXIMUM 200mm THICK LAYERS AND COMPACTED AT OPTIMUM MOISTURE CONTENT (+ OR 2%) TO ACHIEVE A DRY DENSITY DETERMINED IN ACCORDANCE WITH AS1289.5.1.1-2003-METHODS OF TESTING SOILS FOR ENGINEERING PURPOSES OF NOT LESS THAN THE FOLLOWING STANDARD MINIMUM DRY DENSITY DENSITY

LOCATION	STANDAF
DRY DENSITY	
UNDER BUILDING SLABS	98%
VEHICULAR PAVED AREAS	98%
NON-VEHICULAR PAVED AREAS	95%

- LANDSCAPED AREAS 13. UNLESS OTHERWISE PERMITTED, NO FILLING SHALL BE PLACED AGAINST ANY STRUCTURES, WING WALLS OR RETAINING WALLS WITHIN FOURTEEN DAYS OF CASTING. STRUT WALLS AS NECESSARY TO PREVENT MOVEMENT DURING PLACING AND COMPACTION.
- PLACE AND COMPACT FILLING OVER AND AROUND PIPES, CULVERTS, BRIDGES AND OTHER STRUCTURES SO AS TO AVOID UNBALANCED LOADING OR MOVEMENT. UNLESS OTHERWISE DETAILED BACKFILL AT STRUCTURES SHALL BE FILLED
- AS FOLLOWS WHERE THE GAP BETWEEN THE STRUCTURE AND UNDISTURBED GROUND EXCEEDS 2m, BACKFILL THE ZONE WITHIN 2m OF THE STRUCTURE WITH DGS20 SUBBASE FINE CRUSHED ROCK AND BACKFILL IN THE ZONE BEYOND SUPERINTENDENT OR DGS20 SUBBASE FINE CRUSHED ROCK. LINE ESS OTHERWISE DETAILED MATERIAL WITHIN 300mm OF WEEPHOLES
- SHALL BE AN APPROVED GRANULAR FILTER MEDIUM OF COARSE SAND OR CRUSHED STONE WRAPPED AND SURROUNDED WITH AN APPROVED GEOTEXTILE SEPARATION LAYER 14. HORIZONTAL:
- NO POINT SHALL BE GREATER THAN + OR 100mm FROM THE DESIGN LOCATION VERTICAL:
- SUBGRADE LEVEL: +0, -25mm PAVEMENT DESIGN SUBGRADE:
- LEVEL: +0, -25mm
- OTHER: +50, -50mm STRAIGHTNESS (EXCLUDES ROCK): MAXIMUM 20MM DEPARTURE FROM 3M STRAIGHT EDGE LAID: - PARALLEL TO ROAD CENTER LINE

MISCELLANEOUS

GEOTEXTILE FABRIC MATERIAL TO BE BIDIM A24 OR APPROVED EQUIVALENT AND SHALL COMPLY WITH AS3705-2012:'GEOTEXTILES -IDENTIFICATION, MARKING AND GENERAL DATA'

- ALL PIPE JOINTING SHALL BE CARRIED OUT IN ACCORD MANUFACTURER'S WRITTEN SPECIFICATIONS FOR THI **BEING USED**
- CONTRACTOR TO SUPPLY AND INSTALL ALL FITTINGS INCLUDING VARIOUS PIPE ADAPTORS TO ENSURE PRO CONNECTION BETWEEN DISSIMILAR PIPEWORK ALL CONNECTIONS TO EXISTING DRAINAGE PITS SHAI RADESMAN-LIKE MANNER AND THE INTERNAL WALL
- THE POINT OF ENTRY SHALL BE CEMENT RENDERED T SMOOTH FINISH WITH NO PROTRUSION. WHERE ANY PIPE IS CUT INTO A LARGER PIPE, SUCH C SHALL BE NEATLY MADE AND NO PART OF THE PIPE O SHALL BE ALLOWED TO PROJECT. ANY CUT-IN JUNCTION MADE IN THE TOP HALF OF THE LARGER PIPE. SUCH JU CONCRETE PIPES SHALL BE SURROUNDED WITH A NEA CEMENT MORTAR AS DIRECTED OR AS DETAILED ON T JUNCTIONS BETWEEN PVC PIPES SHALL USE PROPRIET
- INTENDED FOR THE PURPOSE. THE ENDS OF PIPES WHICH CONNECT WITH SIDE ENTR CONCRETE, WHERE UPVC PIPES ENTER/LEAVE PITS A R MANHOLE COUPLING SHALL BE CAST INTO THE PIT W BEDDING, HAUNCH AND OVERLAY MATERIALS SHALL DETAILS SHOWN ON THE DRAWINGS.
- ALL PITS AND ENDWALLS SHALL BE CONSTRUCTED IN AND TO THE LEVELS SHOWN ON THE DRAWINGS OR A THE SUPERINTENDENT. LOCATION OF ALL IAD PITS TO WITH SUPERINTENDED & LANDSCAPE ARCHITECT BEF CONSTRUCTION COUNCIL'S CONSTRUCTION PIT DETAILS TO TAKE PRE
- CONSTRUCTION DETAILS SHOWN IN THIS DOCUMENT PITS OR ALTERNATIVE DESIGN TYPES CAN BE USED SU COUNCIL / PCA APPROVAL. (IAD ONLY) PIT COVERS SHALL BE PLACED IN ACCORDANCE WITH PLANS AND PIT SCHEDULE (IF PROVIDED) IN REGARD
- LOCATION AND LEVEL. THE BASE OF EACH PIT SHALL BE INFILLED AND SHAPE CONCRETE OR CEMENT MORTAR TO PROVIDE A SMOO PITS DEEPER THAN 1000mm SHALL HAVE STEP IRONS I
- ACCORDANCE WITH THE LOCAL OR STATUTORY AUTH REQUIREMENTS SUPPLY APPARATUS AND MATERIALS NECESSARY FOR, THE TESTS REQUIRED BY THE SPECIFICATION OR REGU
- AUTHORITIES. IN THE PRESENCE OF THE SUPERINTEN RELEVANT AUTHORITY. LEAVE PIPE JOINTS EXPOSED 1 OBSERVATION DURING THE TESTS. ENSURE PVC SOLVENT CEMENT JOINTS HAVE BEEN CU 24 HOURS BEFORE TESTING
- THE CONTRACTOR SHALL PRESSURE TEST WITH WATE STORMWATER PIPEWORK IN OR UNDER ANY STRUCTU ACCORDANCE WITH AS 3500.3. ALL PIPEWORK TO BE SUPPORTED IN ACCORDANCE WIT
- AS3500.3-2003 20. ALL PIPEWORK IS TO BE TESTED IN ACCORDANCE WITH
- REQUIREMENTS AS SET DOWN IN AS3500.3-2003 ALL PIPEWORK TO BE INSPECTED BY THE SUPERINTENDEN CONDITIONS PRIOR TO BACKFILLING. BACKFILLING AM AS3500.3-2003.
- PIPES SHALL BE TRUE TO GRADES SHOWN AND ALIGN CENTRE OF THE INLET PIPE INTERSECTS WITH THE CEN OUTLET PIPE AT THE DOWNSTREAM FACE OF THE PIT. BED ALL PIPES FIRMLY AND EVENLY WITH IMPORTED FI THICKNESS OF BEDDING LAYER SHALL BE 75MM IN SOI
- ROC LAY AND JOINT ALL PIPES IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND AS3725 FOR INSTALLATION OF BURIED CONCRETE PIPES'.
- 24. ALLOW TO TEST ALL PIPES AND PITS TO LOCAL AUTHO REQUIREMENTS . EXCAVATE TRENCHES AND STOCKPILE ALL MATERIAL FO WITH REGARD TO REUSE FOR TRENCH BACKFILL. REMA
- TO BE REMOVED FROM SITE. BACKFILL PIPES WITH IMPORTED FILL. PROVIDE 200MM AND 150MM OVERLAY ABOVE PIPE CROWN. TRENCH
- EMBEDMENT ZONE TO THE UNDERSIDE OF THE ROAD THE FOOTWAY SHALL BE AS FOLLOW:

UNDER ROADWAY TRENCH FILL MATERIAL SHALL CONSIST OF IMPORTED FILL AS HEREIN OF EITHER HIGH GRADE COMPACTION SAND OR APP ROAD GRAVEL CONFORMING TO RMS OA SPECIFICATION 305

- OTHER THAN ROADWAY TRENCH MATERIAL EXCAVATED SHALL CONSIST OF SEI
- SPECIFIED HEREIN AND SHALL NOT CONTAIN MORE T STONES OF SIZE BETWEEN 25MM AND 75MM AND NONE LARGER THAN 75MM. PRIOR TO USE OF THE EXCAVATED MATERIAL IT SHALL BE INSPECTED AND APPROVED BY THE ENGINEER.

RESTORATION

RESTORE ALL TRAFFIC AREAS TO PRE-EXISTING CONDITIONS. FOR ALL SURFACES OTHER THAN IN TRAFFIC AREAS RESTORE DISTURBED SURFACES TO PRE-EXISTING CONDITIONS AND COMPACT AS SPECIFIED.

1 5	6 7	8	0
EARTHWORKS NOTES CONT.	SITEWORKS NOTES	CONCRETE	CONCRETE JO
- NORMAL TO INTENDED CONTOURS AREAS UPON WHICH FILLS ARE TO BE CONSTRUCTED, ALL LAYERS OF FILLING, AND MATERIALS LESS THAN 150mm BELOW PERMANENT SUBGRADE LEVEL IN CUTTINGS, SHALL BE COMPACTED SO AS TO BE CAPABLE OF WITHSTANDING TEST ROLLING, WITHOUT VISIBLE DEFORMATION OR SPRINGING, WITH A PNEUMATIC TYRED ROLLER OR HIGHWAY TRUCK BALLASTED TO COMPLY WITH THE FOLLOWING: DNEUMATIC TYPED	 THE CONTRACTOR SHALL LIAISE DIRECTLY WITH ALL SERVICE AUTHORITIES INVOLVED AND SHALL COMPLY WITH ALL THEIR REGULATIONS AND REQUIREMENTS ALL LEVELS SHOWN ARE TO AUSTRALIAN HEIGHT DATUM, UNLESS STATED OTHERWISE. ALL COORDINATES SHOWN ARE TO AUSTRALIAN MAP GRID, UNLESS STATED OTHERWISE. BASE SURVEY & SETOUT HAS BEEN SUPPLIED BY OTHERS & SHALL BE CONFIRMED ON SITE BY CONTRACTOR PRIOR TO CONSTRUCTION 	ALL WORKMANSHIP AND CONCRETE MATERIALS SHALL COMPLY WITH THE REQUIREMENTS OF THE FOLLOWING AUSTRALIAN STANDARDS AS APPLICABLE, THE SPECIFICATION AND DETAILS ON THE DRAWINGS UNLESS INSTRUCTED OTHERWISE BY THE ENGINEER: AS 1012 METHODS OF TESTING CONCRETE AS 2758.1 DENSE NATURAL AGGREGATES AS 1478 CHEMICAL ADMIXTURES FOR USE IN CONCRETE	THE JOINTS IN THE NEW WORK SHALL COINCIDE CONCRETE PAVING, OR OTHER JOINTED WORK, Y PROPOSED. IF THE SPACING OF THE JOINTS IN EX IS VERY MUCH GREATER THAN THAT SPECIFIED F ONE OR MORE EQUALLY SPACED JOINTS SHALL I BETWEEN EXISTING OR PROPOSED JOINTS SUCH WILL BE RETAINED AS NEARLY AS POSSIBLE
PNEUMATIC TYRED - NOT LESS THAN 3 T PER TYRE WITH TYRES INFLATED TO 550 KPa. HIGHWAY TRUCK - WITH REAR AXLE OR AXLES LOADED TO NOT LESS THAN 8 T EACH WITH TYRES INFLATED TO 550KPa TEST ROLLING SHALL BE CARRIED OUT IMMEDIATELY BEFORE OVERLYING	 SERVICE INFORMATION SHOWN IS BASED ON PLANS SUPPLIED AND IS APPROXIMATE ONLY. ACTUAL LOCATION CAN ONLY BE DETERMINED BY EXCAVATION. THE CONTRACTOR SHALL LIAISE WITH SERVICE AUTHORITIES FOR SERVICE LOCATIONS. THE CONTRACTOR SHALL POPTICE AND CONTRACTOR SHALL DESCRETS AND DAMAGES AT LICE 	AS 1379 READY MIXED CONCRETE AS 3972 PORTLAND AND BLENDED CEMENTS AS 1302 STEEL REINFORCING BARS FOR CONCRETE AS 1303 HARD DRAWN STEEL REINFORCING WIRE FOR CONCRETE AS 1304 HARD DRAWN STEEL WIRE FEINEORCING FARBIC FOR CONCRETE	N12 DIAGONAL CORNER BARS 1200 LONG ARE R CORNERS OF OPENINGS IN FOOTPATHS.
LAYERS ARE PLACED. WHERE TEST ROLLING IS REQUIRED AT SOME LATER DATE, THE SURFACE SHALL BE MOISTURE CONDITIONED AS AND GIVEN NOT LESS THAN FOUR COVERAGES OF THE TEST ROLLER BEFORE TEST ROLLING COMMENCES. THE WORK SHALL NOT BE ACCEPTED AS COMPLETE UNLESS ALL TEST RESULTS ARE PROVIDED TO THE SUPERINTENDENT. THE CONTRACTOR SHALL PROVIDE ALL MATERIAL PROPERTY AND QUALITY TEST RESULTS TO THE SUPERINTENDENT. THE CONTRACTOR SHALL PROGRAM THE EARTHWORKS OPERATION SO THAT THE WORKING AREAS ARE ADEQUATELY DRAINED DURING THE PERIOD OF CONSTRUCTION. THE SURFACE SHALL BE GRADED AND SEALED OFF TO REMOVE DEPRESSIONS, ROLLER MARKS AND SIMILAR WHICH WOULD ALLOW WATER TO POND AND PENETRATE THE UNDERLYING MATERIAL. ANY DAMAGE RESULTING FROM THE CONTRACTOR NOT OBSERVING THESE REQUIREMENTS SHALL BE RECTIFIED BY THE CONTRACTOR AT THEIR OWN EXPENSE.	 ALL EXISTING SERVICES AND SHALL RECTIFY ANY DAMAGE AT HIS EXPENSE ALL WORKS IN PUBLIC LANDS SHALL BE TO THE APPROVAL AND SATISFACTION OF THE RELEVANT AUTHORITY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND OBTAINING RELEVANT AUTHORITY WRITTEN APPROVAL OF THE WORKS. EXISTING SURFACE CONTOURS SHOWN ARE INTERPOLATED FROM SPOT HEIGHTS AND ARE APPROXIMATE ONLY THE CONTRACTOR MUST VERIFY ALL DIMENSIONS AND EXISTING LEVELS ON SITE PRIOR TO COMMENCEMENT OF WORK, AND REPORT ANY DISCREPANCIES TO THE SUPERINTENDENT. ALL EXISTING SERVICES (INCLUDING ANY NOT SHOWN ON THE PLANS) MUST BE ACCURATELY LOCATED IN POSITION AND LEVEL PRIOR TO ANY EXCAVATION. ANY DISCREPANCIES SHALL BE REPORTED TO THE SUPERINTENDENT. MINIMUM SERVICE CLEARANCES SHALL BE MAINTAINED EROM THE RELEVANT SERVICE A UTHORITY 	AS 1504 TIALD DIAWN STELL WIRE REINFORCEING FABRIC FOR CONCRETE AS 3600 CONCRETE STRUCTURES AS 3610 FORMWORK FOR CONCRETE THE WATER USED SHALL BE FREE OF ALL SUBSTANCES HARMFUL TO CONCRETE AND ITS REINFORCEMENT. ADMIXTURES SHALL NOT BE USED WITHOUT WRITTEN PERMISSION FROM THE SUPERINTENDENT. ALL CONCRETE SHALL BE READY MIXED CONCRETE. UNLESS OTHERWISE SPECIFIED, SHOWN ON THE DRAWINGS, OR DIRECTED BY THE SUPERINTENDENT, REINFORCEMENT FOR CONCRETE SHALL BE FREE FROM ANY COATING WHICH WILL REDUCE, OR PREVENT BONDING OF THE CONCRETE TO THE STEEL. UNLESS OTHERWISE SHOWN ON THE DRAWINGS, THE MINIMUM CLEAR COVER TO REINFORCEMENT SHALL BE 1.5 TIMES THE DIAMETER OF THE RADS	EDGINGS WHEN USING AN EXTRUSION MACHINE THE JOII METHOD APPROVED BY THE SUPERINTENDENT. WHEN USING FORMWORK, THEY SHALL CONSIS PROFILED TO MATCH THE ITEM BEING CONSTRU AREA NOT LESS THAN 75% OF THE SECTION BEIN AS IT IS PRACTICABLE AFTER THE FINISHING OF A SHALL BE REMOVED AND THE RESULTANT GAP F TOOL TO A DEPTH OF NOT LESS THAN 25MM TO WITH ROUNDED ARISES. JOINTS SHALL BE AT RE SPACING BETWEEN JOINTS SHALL NOT EXCEED 3 APPROVAL OF THE SUPERINTENDENT. PROVIDE EXPANSION JOINTS AT 30 METRE MAXI
TESTING OF THE FILL MATERIAL SHALL BE CARRIED OUT BY AN APPROVED NATA REGISTERED LABORATORY AT THE CONTRACTORS EXPENSE.	 ALL DIMENSIONS AND SET OUTS SHOWN ARE EITHER TO FACE OF BUILDING, GRID LINES OR FACE OF KERB INVERT (LINE OF KERB), UNLESS SHOWN OTHERWISE. 	OR 40mm, WHICHEVER IS GREATER. ALL KERBS, KERB & CHANNEL, SPOON DRAINS ETC. SHALL BE LAID OVER 75MM	FOOTPATHS. EXPANSION JOINT SPACING IN THE ADJ. FOOTPATHS. EXPANSION JOINTS SHALL ALSO BE POINT (START AND END OF HORIZONTAL CURVE LAYBACKS OR THE LIKE. THE EXPANSION JOINTS
STORMWATER NOTES	 CONTRACTOR SHALL BE ISSUED AN ELECTRONIC COPY OF THE CIVIL DETAIL PLANS IN AUTOCAD DWG FORMAT FOR SET OUT PURPOSES. ALL DIMENSIONS SHOWN ON PLAN SHALL OVER RIDE SETOUT POINTS SELECTED FROM ELECTRONIC FILE PROVIDED. THE CONTRACTOR SHALL APPRANCE FOR ALL SETTING OUT BY A 	MINIMUM DEPTH OF COMPACTED CLASS 2 CRUSHED ROCK, UNLESS SHOWN OTHERWISE ON THE DETAIL DRAWINGS. WHERE REQUIRED MATCH ALL NEW KERBS TO EXISTING LEVEL NEATLY,	THICK PREFORMED CORK OF THE FULL SHAPE OF THE ABUTTING KERB OR KERB AND CH NO EXPANSION OR OTHER CONSTRUCTION JOIN DISTANCE OF 3 METRES OF ANY RETURN IN THE
ALL DRAINAGE PIPES Ø300mm AND ABOVE SHALL BE SPIGOT AND SOCKET REINFORCED CONCRETE PIPES WITH RUBBER RING JOINTS (UNO). ALL DRAINAGE PIPES LESS THAN OR FOUAL TO Ø225mm SHALL BE UPVC	 THE CONTRACTOR SHALL ARRAINGE FOR ALL SETTING OUT BY A REGISTERED SURVEYOR. THE CONTRACTOR SHALL OBTAIN ALL REGULATORY AUTHORITY APPROVALS 	ENSURING MINIMUM I IN 200 GRADE, SAW CUTTING AND REINSTATING PAVEMENT IN FRONT OF KERB TO FALL TOWARDS OR AWAY FROM NEW KERB LEVEL.	OF THE CHANNEL.
DWV GRADE CLASS SN8 IN ACCORDANCE WITH AS/NZS1260:2009-PVC-U PIPES AND FITTINGS FOR DRAIN, WASTE AND VENT APPLICATION WITH SOLVENT WELDED JOINTS (UNO). ALL PIPE JUNCTIONS UP TO AND INCLUDING Ø450mm AND TAPERS, SHALL BE VIA PURPOSE MADE FITTINGS (UNO).	 WHERE NEW WORKS ABUT EXISTING, THE CONTRACTOR MUST ENSURE THAT A SMOOTH AND EVEN PROFILE, FREE FROM ABRUPT CHANGES IS OBTAINED. SAWCUT EXISTING KERB/KERB & CHANNEL AND PAVING WHERE NEW WORKS ARE TO MATCH EXISTING WORKS 	SCHEDULE OF CONCRETE PROPERTIES TO BE USED FOR THE PARTICULAR SECTION OF WORK SHALL BE AS FOLLOWS UNLESS OTHERWISE INSTRUCTED OR SHOWN ON THE DRAWINGS: (MIX DESIGNS SHALL BE SUBMITTED BY THE SUBCONTRACTOR TO THE ENGINEER FOR INSPECTION 28 DAYS PRIOR TO POUR).	EXPANSION JOINTS SHALL BE PLACED AT INTERV EITHER SIDE OF VEHICLE CROSSINGS, AT CHANG JUNCTIONS WITH BRIDGES. THEY SHALL BE 15mm WIDE AND FILLED WITH AI EXTENDING FOR THE FULL WIDTH AND FULL DEP FILLER SHALL BE PLACED IN POSITION BEFORE
MINIMUM GRADE TO STORMWATER LINES TO BE 1%(UNO). EQUIVALENT STRENGTH FIBROUS REINFORCED CONCRETE AND/OR VITRIFIED CLAY PIPE MAY BE USED SUBJECT TO APPROVAL BY THE SUPERINTENDENT AND CONSENT AUTHORITY.	 BUILDING AND SITE MAINTENANCE PROGRAM IS TO INCORPORATE REGULAR FLUSHING OF ALL STORMWATER PITS, PIPES, DOWNPIPES, SUB-SOIL DRAINS AND ASSOCIATED FITTINGS TO AVOID BLOCKAGES WITHIN THE SYSTEM. ALL DISTURBED AREAS SHALL BE RESTORED TO THEIR ORIGINAL 	LOCATION GRADE (MAX. GRADE (MPa) (mm) (mm)	CONCRETE IS PLACED, AND SHALL BE HELD FIRM PLACING OF THE CONCRETE. WHERE POSSIBLE IT APPROVED WATERPROOF GLUE TO THE EXISTING TOOLED OR SAWCUT JOINTS AT LEAST 20MM DE
TRENCHES MOST BE REPT CLEAR OF WATER AT ALL TIMES AND TIMBERED WHERE NECESSARY TO PREVENT COLLAPSE. PIPES SHALL BEAR EVENLY ON THE BED PREPARED AS SPECIFIED ABOVE AND LAID WITH THE SOCKETS POINTED UPGRADE. ALL PIPES SHALL BE LAID IN STRAIGHT LINES, TO TRUE INVERT LEVELS AND GRADES AS	 CONDITION, UNLESS SPECIFIED OTHERWISE. 16. EXCAVATED TRENCHES SHALL BE COMPACTED TO THE SAME DENSITY AS THE ADJACENT NATURAL MATERIAL. ANY SUBSIDENCES DURING THE PERIOD TO BE RECTIFIED AS DIRECTED BY THE SUPERINTENDENT. 	KERBS, PITS, HEADWALLS N25 20 80 ±5 FOOTPATHS, RETAINING N32 20 80 ±5	FORMED WITH A CUTTING TOOL AT INTERVALS I DIRECTED BY THE SUPERINTENDENT. JOINTS BETWEEN EDGINGS/FOOTPATHS/SURFAC
SHOWN ON PLANS. EACH PIPE SHALL BE SEPARATELY BONED BETWEEN ACCURATELY ESTABLISHED GRADE POINTS. THE CONTRACTOR SHALL ADHERE SUPERINTENDENT'S WRITTEN APPROVAL. UNLESS NOTED OTHERWISE, BEDDING SHALL BE TYPE H2 FOR PIPES NOT UNDER PAVEMENTS AND TYPE HS3 FOR PIPES UNDER PAVEMENTS IN	 THE CONTRACTOR SHALL KEEP THE SITE WELL DRAINED AND COMPLETELY FREE OF STANDING WATER AT ALL TIMES. GRADE EVENLY BETWEEN FINISHED SURFACE SPOT LEVELS. (FINISHED SURFACE CONTOURS ARE SHOWN FOR CLARITY ONLY.) WHERE FINISHED SURFACE SPOT LEVELS ARE NOT SHOWN THE SURFACE SHALL BE GRADED 	WALLS NOL O O O VEHICULAR PAVEMENT N32 TYPE 1 20 80 ±5 TYPE 1 CONCRETE SHALL HAVE THE PROPERTIES OF NORMAL N32 CONCRETE WITH A FLEXIBAL STRENGTUROF Ft= 4.4MPc	EXCEPT ON NARROW MEDIANS (LESS THAN 0.6M WIDTH, BOND BETWEEN THE CONCRETE ELEMEN SHALL BE PREVENTED BY USING A STRIP OF 12MI PREFORMED CORK FILLER OR OTHER APPROVED
ACCORDANCE WITH AS/NZS3725 (2007) - DESIGN FOR INSTALLATION OF BURIED CONCRETE PIPES. BACKFILL TRENCH WITH SAND OR APPROVED GRANULAR BACKFILL TO 300mm (MIN) ABOVE THE PIPE. WHERE THE PIPE IS UNDER PAVEMENTS BACKFILL REMAINDER OF TRENCH TO PAVEMENT SUBGRADE WITH SAND OR APPROVED GRAVEL SUB-BASE COMPACTED IN 150mm LAYERS TO 98% STANDARD MAXIMUM DRY DENSITY. THE CONTRACTOR IS TO ENSURE COMPACTION FOUIPMENT IS APPROVENIATE FOR THE PIPE	 SMOOTHLY SO THAT IT WILL DRAIN FREELY, AND TO MATCH THE LEVELS OF ADJACENT SURFACES OR STRUCTURES. 19. ANY EXISTING TREES WHICH FORM PART OF THE FINAL LANDSCAPING PLAN WILL BE PROTECTED FROM CONSTRUCTION ACTIVITIES IN ACCORDANCE WITH THE LANDSCAPE ARCHITECT'S DETAILS AND/OR BY : a) PROTECTING THEM WITH BARRIER FENCING OR SIMILAR MATERIALS INSTALLED OUTSIDE THE DRIP LINE, 	ALL REINFORCEMENT IN SLABS AND BEAMS SHALL BE SUPPORTED ON CHAIRS TO GIVE THE REQUIRED COVER. SPACING OF REINFORCEMENT CHAIRS SHALL NOT EXCEED 800mm IN ANY DIRECTION.	VEHICULAR PAVEMENT JOINTS VEHICULAR PAVEMENT JOINTING SHALL BE SHO TENDER OR CONSTRUCTION PHASE, AND JOINT AS DOCUMENTED. WHERE AN ALTERNATIVE JOIN ADOPTED WITHOUT THE ENGINEERS' APPROVAL DISCLAIMS ANY LIABILITY ARISING FROM THE PE
CLASS USED. ALL PIPE JOINTING SHALL BE CARRIED OUT IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN SPECIFICATIONS FOR THE TYPE OF PIPE BEING USED. CONTRACTOR TO SUPPLY AND INSTALL ALL FITTINGS AND SPECIALS	 b) ENSURING THAT NOTHING IS NAILED TO THEM, c) PROHIBITING PAVING, GRADING, SEDIMENT WASH OR PLACING OF STOCKPILES WITHIN THE DRIP LINE EXCEPT AS ADVISED BY A QUALIFIED ARBORIST. 	OTHERWISE: FABRIC 2 CROSS WIRES + 25mm. N12: 400mm. N24: 1100mm N16: 600mm. N28: 1350mm	PAVEMENTS. DOWELLED SAWCUT, EXPANSION AND CONSTRU PROVIDED AS SPECIFIED TO ALL VEHICULAR PAV INTERVALS. JOINT SPACING SHALL ENSURE SLAB
INCLUDING VARIOUS PIPE ADAPTORS TO ENSURE PROPER CONNECTION BETWEEN DISSIMILAR PIPEWORK. ALL CONNECTIONS TO EXISTING DRAINAGE PITS 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	20. RECEIPTORS FOR CONCEPTE AND MORTAR SLORARS, PAINTS, ACID WASHINGS, LIGHT-WEIGHT WASTE MATERIALS AND LITTER ARE TO BE EMPTIED AS NECESSARY. DISPOSAL OF WASTE SHALL BE IN A MANNER APPROVED BY THE SUPERINTENDENT OR AS SPECIFIED IN THE WASTE MANAGEMENT PLAN.	COG AND HOOK PIN DIAMETERS AND OVERALL DIMENSIONS SHALL BE AS PER THE REQUIREMENTS OF AS 3600 UNLESS NOTED OTHERWISE.	THAN 1.5 TIMES SLAB WIDTH. EXPANSION JOINT THAN 25m INTERVALS.
SMOOTH FINISH WITH NO PROTRUSION. WHERE ANY PIPE IS CUT INTO A LARGER PIPE, SUCH CONNECTION SHALL BE NEATLY MADE AND NO PART OF THE PIPE OR DOWNPIPE SHALL BE ALLOWED TO PROJECT. ANY CUT-IN JUNCTION SHALL BE	STORMWATER NOTES	OTHERWISE. REINFORCEMENT GRADES SHALL BE AS FOLLOWS: BARS: GRADE 500N TO AS/NZS 4671. FABRIC: HARD DRAWN WIRE FABRIC TO AS/NZS 4671.	CONSENT OF THE ENGINEER. THE SUBCONTRAC MANUFACTURER SPECIFICATION AND TESTING D SAMPLE FOR APPROVAL.
MADE IN THE TOP HALF OF THE LARGER PIPE. SUCH JUNCTION TO CONCRETE PIPES SHALL BE SURROUNDED WITH A NEAT COLLAR OF CEMENT MORTAR AS DIRECTED OR AS DETAILED ON THE DRAWINGS. JUNCTIONS BETWEEN PVC PIPES SHALL USE PROPRIETY FITTINGS INTENDED FOR THE PURPOSE.	1. THE CONTRACTOR SHALL ALLOW FOR THE CAPPING OFF, EXCAVATION AND REMOVAL (IF REQUIRED) OF ALL EXISTING SERVICES IN AREAS AFFECTED BY THE WORKS.	ANY STEELWORK SOURCED FROM MILLS LOCATED OUTSIDE AUSTRALIA ARE TO BE PROVIDED WITH CERTIFICATES PROVING ABOVE REQUIREMENTS VERIFIED BY NATA REGISTERED ORGANISATIONS.	ALL EDGINGS SHALL BE RENDERED WITH A STEEL SPECIFIED OTHERWISE BY THE LANDSCAPE ARCH SURFACING CONCRETE SHALL BE COMPACTED A THE COARSE AGGREGATE IS BELOW THE SURFAC
 THE ENDS OF PIPES WHICH CONNECT WITH SIDE ENTRY, JUNCTION OR OTHER PITS SHALL BE NEATLY CUT TO FIT THE INNER FACE OF THE CONCRETE. WHERE UPVC PIPES ENTER/LEAVE PITS A RUBBER RING JOINT MANHOLE COUPLING SHALL BE CAST INTO THE PIT WALL. BEDDING, HAUNCH AND OVERLAY MATERIALS SHALL CONFORM TO THE 	 THE CONTRACTOR SHALL ENSURE THAT SERVICES TO ALL BUILDINGS NOT AFFECTED BY THE WORKS ARE NOT DISRUPTED AT ALL TIMES. THE CONTRACTOR SHALL CONSTRUCT TEMPORARY SERVICES TO MAINTAIN EXISTING SUPPLY TO BUILDINGS REMAINING WHERE REQUIRED. ONCE THE WORKS ARE COMPLETE AND COMMISSIONED THE CONTRACTOR 	CONSTRUCTION JOINTS, WHERE NOT SHOWN ON THE DRAWINGS, SHALL BE LOCATED TO THE APPROVAL OF THE ENGINEER. THE MINIMUM CLEAR SPACING BETWEEN CONDUITS, CABLES, PIPES AND BARS	THE TOP. IT SHALL THEN BE STRUCK OFF AND FIN FLOAT. AS SOON AS THE CONCRETE HAS SET SUI SHALL BE PLACED AND THOROUGHLY COMPACT LEVEL OF THE TOP OF THE KERB.
DETAILS SHOWN ON THE DRAWINGS. ALL PITS AND ENDWALLS SHALL BE CONSTRUCTED IN THE POSITIONS AND TO THE LEVELS SHOWN ON THE DRAWINGS OR AS DIRECTED BY THE SUPERINTENDENT. LOCATION OF ALL IAD PITS TO BE CONFIRMED WITH SUPERINTENDED & LANDSCAPE ARCHITECT BEFORE	 SHALL REMOVE ALL SUCH TEMPORARY SERVICES AND MAKE GOOD ALL DISTURBED AREAS. 3. EXISTING PIPES WHICH FORM NO PART OF THE DRAINAGE SYSTEM SHALL DE DEMOVED OR SEALED AS INDICATED ON THE DRAINAGE SYSTEM SHALL 	SHALL BE AS REQUIRED BY AS 3600 BUT NOT LESS THAN THREE DIAMETERS HORIZONTALLY FOR HORIZONTAL CONDUITS, ETC. IN SLABS, WALLS AND FOOTINGS AND NOT LESS THAN ONE DIAMETER FOR ALL OTHER CONDUITS, ETC.	PAVEMEN
CONSTRUCTION COUNCIL'S CONSTRUCTION PIT DETAILS TO TAKE PRECEDENCE TO THE CONSTRUCTION DETAILS SHOWN IN THIS DOCUMENTATION. PRECAST PITS OR ALTERNATIVE DESIGN TYPES CAN BE USED SUBJECT TO COUNCIL (PCA APPROVAL (AD ONLY)	BE REMOVED OR SEALED AS INDICATED ON THE PLANS, PIPES OP TO 300MM DIAMETER SHALL BE SEWER GRADE UPVC WITH SOLVENT WELDED JOINTS (U.N.O.). ALL PIPE JUNCTIONS AND TAPERS SHALL BE VIA PURPOSE MADE FITTINGS.	ALL PRIMARY REINFORCEMENT SHALL BE PLACED OUTERMOST. CONCRETE SHALL NOT BE PLACED UNTIL THE SUPERINTENDENT HAS EXAMINED BOTH FORMWORK AND REINFORCEMENT IN PLACE AND GIVEN	ALL PAVEMENT MATERIALS SHALL COMPLY WITH SPECIFICATIONS AND BE OF CONSISTENT QUALI ALL BASE COURSE AND SUB-BASE MATERIAL SHA
PIT COVERS SHALL BE PLACED IN ACCORDANCE WITH THE DETAIL SITE PLANS AND PIT SCHEDULE (IF PROVIDED) IN REGARD TOTYPE, SIZE, LOCATION AND LEVEL.	 WHERE DOWNPIPES PASS UNDER FLOOR SLABS, SEWER GRADE UPVC WITH RUBBER RING JOINTS ARE TO BE USED. MINIMUM GRADE TO DRAINAGE PIPES TO BE 1% (U.N.O.), MIN. SIZE 	GIVEN TO THE SUPERINTENDENT BEFORE PLACEMENT OF ANY CONCRETE HAS COMMENCED. CONCRETE SHALL NOT BE PLACED UNDER WATER OR DROPPED THROUGH A	TINSW STANDARD SPECIFICATIONS.
 THE BASE OF EACH PIT SHALL BE INFILLED AND SHAPED WITH CONCRETE OR CEMENT MORTAR TO PROVIDE A SMOOTH FLOW PATH. PITS DEEPER THAN 1000mm SHALL HAVE STEP IRONS INSTALLED IN ACCORDANCE WITH THE LOCAL OR STATUTORY AUTHORITY REOUIREMENTS. 	 100MM DIAMETER (U.N.O.). PIPES LARGER THAN OR EQUAL TO 300MM DIAMETER TO BE REINFORCED CONCRETE RUBBER RING JOINTED TYPE (CLASS 2) MANUFACTURED TO ACADER (U.N.O.) 	DISTANCE GREATER THAN 1.5M WITHOUT THE CONSENT OF THE SUPERINTENDENT. DURING AND IMMEDIATELY AFTER THE PLACING OPERATION CONCRETE SHALL BE THOROUGHLY COMPACTED BY TAMPING, VIBRATION OR OTHER MEANS APPROVED BY THE SUPERINTENDENT.	THE RECECTED CONSIDERED CONSIDERED SUBJE AND APPROPRIATE CERTIFICATIONS BEING PROV OF MEINHARDT GROUP.
SUPPLY APPARATUS AND MATERIALS NECESSARY FOR, AND CARRY OUT THE TESTS REQUIRED BY THE SPECIFICATION OR REGULATORY AUTHORITIES, IN THE PRESENCE OF THE SUPERINTENDENT AND THE RELEVANT AUTHORITY. LEAVE PIPE JOINTS EXPOSED TO ENABLE OBSERVATION DURING THE TESTS	 PIPE INSTALLATION UNDER TRAFFICABLE AREAS SHALL BE IN ACCORDANCE WITH CONCRETE PIPE ASSOCIATION OF AUSTRALIA PUBLICATION "CONCRETE PIPE SELECTION & INSTALLATION" TYPE HS3 	THE CONCRETE SHALL BE SPRAYED WITH AN APPROVED CURING MEMBRANE SUCH AS CONCURE WB, IN STRICT ACCORDANCE WITH THE MANUFACTURERS SPECIFICATION.	CONCRETE PAVEMENT N16 DIAGONAL CORNER BARS 1200 LONG ARE R CORNERS OF OPENINGS IN PAVEMENT SLABS.
ENSURE PVC SOLVENT CEMENT JOINTS HAVE BEEN CURED FOR AT LEAST 24 HOURS BEFORE TESTING. THE CONTRACTOR SHALL PRESSURE TEST WITH WATER, ALL	SUPPORT. 8. EQUIVALENT STRENGTH FRC PIPES MAY BE USED SUBJECT TO AUTHORITY APPROVAL.	APPROVALS	JOINTS SHALL BE SAWCUT IN A NEAT LINE TO THE SUPERINTENDENT AND HAVE 300mm OVERLAP.
STORMWATER PIPEWORK IN OR UNDER ANY STRUCTURES, IN ACCORDANCE WITH AS 3500.3. ALL PIPEWORK TO BE SUPPORTED IN ACCORDANCE WITH AS3500.3-2003.	9. MINIMUM PIPE COVER TO BE 600MM UNDER TRAFFICABLE AREAS AND 300MM ELSEWHERE (U.N.O.).	1. THE ASBUILT WORKS SHALL BE INSPECTED BY THE ENGINEER. MINIMUM 48 HOURS NOTICE SHALL APPLY TO ALL INSPECTIONS.	ALL TRENCHING WORKS IN EXISTING PAVEMENT NEW PAVEMENT REINSTATED WITH DOWELS AN EXISTING LEVELS.
ALL PIPEWORK IS TO BE TESTED IN ACCORDANCE WITH THE REQUIREMENTS AS SET DOWN IN AS3500.3-2003. ALL IN-GROUND PIPEWORK TO BE INSPECTED BY THE SUPERINTENDENT UNDER TEST CONDITIONS PRIOR TO BACKFILLING. BACKFILLING AND BEDDING TO AS3500.2, 2003.	10. CONTRACTOR TO SUPPLY AND INSTALL ALL FITTINGS AND SPECIALS INCLUDING VARIOUS PIPE ADAPTORS TO ENSURE PROPER CONNECTION BETWEEN DISSIMILAR PIPEWORK.	 THE DESIGN PLANS HEREIN ARE SUBJECT TO LOCAL COUNCIL APPROVAL PRIOR TO CONSTRUCTION. OBTAIN EXPRESS (WRITTEN) ADVICE TO PROCEED FROM PROJECT SUPERINDENDENT PRIOR TO COMMENCEMENT. CURNITALIONICAS, EXECUTED DRAMINES IN DWG FORMAT AND HARD 	ASPHALT PAVEMENT ASPHALT LAYERS UP TO 50mm THICKNESS SHAL CHARACTERISTIC VALUE OF DENSITY RATIO ASPHALT LAYERS GREATER THAN 50mm THICKN 96% CHARACTERISTIC VALUE OF DENSITY RATIO
PIPES SHALL BE TRUE TO GRADES SHOWN AND ALIGNED SO THAT THE CENTRE OF THE INLET PIPE INTERSECTS WITH THE CENTRE OF THE OUTLET PIPE AT THE DOWNSTREAM FACE OF THE PIT.	 PROVIDE CLEANING EYES TO ALL DOWNPIPES NOT DIRECTLY CONNECTED TO PITS. STORMWATER DRAINAGE CONNECTIONS TO COUNCIL'S SYSTEM SHALL 	3. SUBMIT WORK-AS-EXECUTED DRAWINGS IN DWG FORMAT AND HARD COPY FORMAT UNDERTAKEN BY A REGISTERED SURVEYOR. VERIFY ALL CONSTRUCTION WORKS SHOWN HEREON.	THE SURFACE FINISH OF THE ASPHALT LAYERS SI COMPOSITION AND OF CONSISTENT DENSITY. A
 BED ALL PIPES FIRMLY AND EVENLY WITH IMPORTED FILL ONLY. THICKNESS OF BEDDING LAYER SHALL BE 75MM IN SOIL AND 200MM IN ROCK. LAY AND JOINT ALL PIPES IN ACCORDANCE WITH THE MANULE CTURED'S RECOMMENDATIONS AND AS2725-2007. DESIGN 	 BE TO THE REQUIREMENTS AND THE SATISFACTION OF LOCAL COUNCIL. 13. PITS DEEPER THAN 1200MM TO BE FITTED WITH STEP IRONS AT 300 CENTRES TO A\$1657-2013: FIXED PLATFORMS, WALKWAYS, STAIRWAYS 	 CERTIFY THAT THE ASBUILT SYSTEM HAS BEEN BUILT IN ACCORDANCE WITH THE APPROVED PLANS ISSUED FOR CONSTRUCTION. ALLOW FOR SUBGRADE AND PAVEMENT THICKNESS TO BE VERIFIED BY THE GEOTECHNICAL ENGINEER AFTER INSPECTION OF PRELIMINARY 	AREAS THAT ARE EVIDENT SHALL BE FULLY REWO SATISFACTION.
FOR INSTALLATION OF BURIED CONCRETE PIPES'. ALLOW TO TEST ALL PIPES AND PITS TO LOCAL AUTHORITY'S REQUIREMENTS.	 AND LADDERS - DESIGN, CONSTRUCTION AND INSTALLATION'. 14. ALL EXPOSED EDGES TO BE ROUNDED WITH 20MM RADIUS, OR CHAMFERED 20MM X 20MM. 	 BOXING. ALLOW FOR ANY SUBGRADE REPLACEMENT WORK TO BE DETERMINED AS BEQUIRED BY GEOTECHNICAL ENGINEED AT THE TIME OF DAVENATION. 	
 EXCAVATE TRENCHES AND STOCKPILE ALL MATERIAL FOR INSPECTION WITH REGARD TO REUSE FOR TRENCH BACKFILL. REMAINING MATERIAL TO BE REMOVED FROM SITE. BACKFILL PIPES WITH IMPORTED FILL. PROVIDE 200MM SIDE SUPPORT AND 150MM OVERLAY ABOVE PIPE CROWN. TRENCH FILL ABOVE THE EMPEDMENT ZONE TO THE INFORMATION OF THE DATA DATA TO THE INFORMATION OF THE EMPEDMENT ZONE TO THE INFORMATION OF THE DATA DATA TO THE INFORMATION OF THE EMPEDMENT ZONE TO THE INFORMATION OF THE DATA DATA TO THE INFORMATION OF THE EMPEDMENT ZONE TO THE INFORMATION OF THE DATA DATA TO THE INFORMATION OF THE EMPEDMENT ZONE TO THE INFORMATION OF THE DATA DATA TO THE DATA DATA TO THE INFORMATION OF THE EMPEDMENT ZONE TO THE INFORMATION OF THE DATA DATA TO THE INFORMATION OF THE EMPEDMENT ZONE TO THE INFORMATION OF THE DATA DATA TO THE INFORMATION OF THE EMPEDMENT ZONE TO THE INFORMATION OF THE DATA DATA TO THE INFORMATION OF THE EMPEDMENT ZONE TO THE INFORMATION OF THE DATA DATA TO THE INFORMATION OF THE EMPEDMENT ZONE TO THE INFORMATION OF THE DATA DATA TO THE INFORMATION OF THE EMPEDMENT ZONE TO THE INFORMATION OF THE DATA DATA TO THE INFORMATION OF THE EMPEDMENT ZONE TO THE INFORMATION OF THE DATA DATA TO THE DATA DATA TO THE INFORMATION OF THE EMPEDMENT ZONE TO THE INFORMATION OF THE DATA DATA TO THE INFORMATION OF THE EMPEDMENT ZONE TO THE INFORMATION OF THE DATA DATA TO THE DATA DATA DATA TO THE DATA DATA TO THE DATA DATA TO THE DATA DATA DATA DATA DATA DATA DATA DAT	 PIT REINFORCEMENT - MESH SL82 LAP TO BE 400MM MIN. CLEAR COVER 40 MIN. CAST AGAINST BLINDING OR FORMWORK. CORNER RETURNS MAY BE FABRIC OR EQUIVALENT BARS. 	CONSTRUCTION.	GEOTECHNICAL DESIGI
EIVIBEDMENT ZONE TO THE UNDERSIDE OF THE ROAD PAVEMENT OR THE FOOTWAY SHALL BE AS FOLLOW:- NDER ROADWAY	WARNING		ALL COMPACTION REQUIREMENT RESULTS SHA ACCORDANCE WITH GEOTECHNICAL REPORT R
RENCH FILL MATERIAL SHALL CONSIST OF IMPORTED FILL AS SPECIFIED REIN OF EITHER HIGH GRADE COMPACTION SAND OR APPROVED CRUSHED DAD GRAVEL CONFORMING TO RMS QA SPECIFICATION 3051 OR SIMILAR.	PROPOSED SERVICES THE LOCATION AND EXTENT OF PROPOSED SERVICES IS INDICATIVE ONLY AND ARE NOT TO BE USED FOR		LATENT CONDITIONS (SUBGRADE IMPROVEMEN
THER THAN ROADWAY 7. TRENCH MATERIAL EXCAVATED SHALL CONSIST OF SELECT FILL AS SPECIFIED HEREIN AND SHALL NOT CONTAIN MORE THAN 20% OF	CONSTRUCTION. REFER TO AUTHORISED DOCUMENTATION BY RELEVANT AUTHORITY FOR CONSTRUCTION DETAILS		SHALL BE APPROVED PRIOR TO THE COMMENC INCLUDE THE FOLLOWING PROVISIONS: a) NOTIFICATIONS FOR INSPECTIONS TO SUP

WARNING

BEWARE OF UNDERGROUND SERVICES THE LOCATIONS OF UNDERGROUND SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN.

TE JOINTING

LL COINCIDE WITH THOSE IN ABUTTING NTED WORK, WHICH IS EITHER EXISTING OR IOINTS IN EXISTING OR PROPOSED WORK SPECIFIED FOR THE NEW WORK THEN DINTS SHALL BE MADE IN THE NEW WORK OINTS SUCH THAT THE SPECIFIED SPACING

LONG ARE REQUIRED AT ALL RE-ENTRANT

HINE THE JOINTS SHALL BE MADE BY A

HALL CONSIST OF 3mm THICK STEEL PLATE NG CONSTRUCTED AND SHALL HAVE AN ECTION BEING CONSTRUCTED. AS SOON VISHING OF ANY WORK THE TEMPLATES LTANT GAP FINISHED WITH A GROOVING AN 25MM TO PRODUCE A NEAT GROOVE ALL BE AT REGULAR INTERVALS AND THE OT EXCEED 3 METRES WITHOUT THE

METRE MAXIMUM CENTRES AND OR G IN THE ADJACENT ROADS OR HALL ALSO BE PLACED AT EACH TANGENT ONTAL CURVES) AND EACH SIDE OF SION JOINTS SHALL CONSIST OF 15mm

KERB AND CHANNEL ETC. RUCTION JOINT SHALL BE MADE WITHIN A JRN IN THE KERBS OR FINISHING POINT

ED AT INTERVALS NOT EXCEEDING 15M, ON , AT CHANGES IN DIRECTION, AND AT

LLED WITH AN APPROVED CORK FILLER ND FULL DEPTH OF THE PAVING. THE

E HELD FIRMLY IN POSITION DURING THE POSSIBLE IT SHALL BE GLUED WITH AN THE EXISTING FACE OF THE JOINT AST 20MM DEEP AND 5MM WIDE SHALL BE INTERVALS NOT EXCEEDING 2.5M OR AS

THS/SURFACING/STRUCTURES

S THAN 0.6M WIDE) SURFACED FULL RETE ELEMENT AND OTHER STRUCTURE FRIP OF 12MM RAPPROVED MATERIAL BETWEEN THEM.

HALL BE SHOWN ON THE DRAWINGS AT , AND JOINTING SHALL BE CONSTRUCTED RNATIVE JOINTING SOLUTION HAS BEEN APPROVAL, MEINHARDT GROUP FROM THE PERFORMANCE OF THE

ND CONSTRUCTION JOINTS SHALL BE HICULAR PAVEMENTS NOT EXCEEDING 6.0m NSURE SLAB LENGTH IS NO GREATER **NSION JOINTS SHALL BE NO GREATER**

ST NOT BE USED WITHOUT THE PRIOR UBCONTRACTOR SHALL SUBMIT A ND TESTING DATA OF THE PROPOSED

WITH A STEEL TROWEL FINISH UNLESS SCAPE ARCHITECT, FRESH FOOTPATH AND OMPACTED AND WORKED UNTIL ALL OF THE SURFACE THE MORTAR COMES TO OFF AND FINISHED WITH A WOODEN HAS SET SUFFICIENTLY, SUITABLE FILLING LY COMPACTED BEHIND AND UP TO THE

MENTS

OMPLY WITH THNSW STANDARD TENT QUALITY.

ATERIAL SHALL BE IGNEOUS ROCK IFIED OTHERWISE AND COMPLY WITH

FIGNEOUS ROCK AS A SUB-BASE MATERIAL ONCRETE MATERIAL COMPLYING WITH DERED SUBJECT TO MATERIAL SAMPLES BEING PROVIDED TO THE SATISFACTION

LONG ARE REQUIRED AT ALL RE-ENTRANT

TO THE PROPOSED KERB OR PROPOSED LINE TO THE SATISFACTION OF THE

PAVEMENTS SHALL BE NEATLY SAWCUT, DOWELS AND TO NEATLY MATCH

KNESS SHALL BE COMPACTED TO 94% mm THICKNESS SHALL BE COMPACTED TO

LT LAYERS SHALL BE OF UNIFORM DENSITY. ANY 'BONEY' OR UNEVEN FULLY REWORKED TO THE ENGINEER'S

DESIGN COMPLIANCE TION ATTENDANCE

RESULTS SHALL BE CARRIED OUT IN L REPORT RECOMMENDATIONS. APROVEMENTS)

MAY LEAD TO A VARIATION E COMMENCEMENT OF ANY WORKS AND

IONS TO SUPPORT POTENTIAL VARIATION CLAIMS REQUIRE MINIMUM 48 HR NOTICE PERIODS. (SITE REPRESENTATION WILL BE AT THE DISCRETION OF THE CIVIL ENGINEER) SUBGRADE IMPROVEMENTS ARE TO BE MANAGED BY THE PROJECT GEOTECHNICAL ENGINEER WITH INPUT FROM THE CIVIL ENGINEER CONSULTANT COSTS FOR GEOTECHNICAL REPRESENTATION AND REPORTING TO BE BORNE BY THE CONTRACTOR d) ADDITIONAL INSPECTIONS BY THE CIVIL ENGINEER TO SUPPORT

VARIATION CLAIMS FOR LATENT CONDITIONS SHALL BE BORNE BY

CONTRACTOR

Notes:



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	1 2	3	4 5
	STORMWATER NOTES	EROSION CONTROL	CONCRETE
	BENCHING TO BE HALF OUTGOING PIPE DEPTH. CONCRETE FOR BENCHING TO BE 20MPa MASS CONCRETE.	BEFORE EARTHWORKS CAN COMMENCE THE EROSION & SEDIMENT CONTROL MEASURES MUST BE IN PLACE.	AGGREGATES
	APPROVED PRECAST PITS MAY BE USED.	DURING THE CONSTRUCTION PERIOD, THESE CONTROL MEASURES WILL NEED TO BE INSPECTED & MAINTAINED REGULARLY, ESPECIALLY AFTER STORM	CONCRETE AGGREGATES SHALL COMPLY WITH AS2758.1-1998:'CONCRETE AGGREGATES'.
À	100mm DIAMETER HOLE FOR SUBSOIL DRAINAGE OUTLET TO BE LOCATED 100mm ABOVE INVERT OF ALL INLET PIPES. SUBSOIL DRAINAGE TO EXTEND FOR A DISTANCE OF 3m UPSTREAM OF PIT (AT EACH INLET TRENCH) WITH THE UPSTREAM END SEALED.	EVENTS, BY THE CONTRACTOR. ALL WORK IS TO BE CARRIED OUT TO PREVENT EROSION, CONTAMINATION & SEDIMENTATION OF THE STORAGE SITE, SURROUNDING AREAS & DRAINAGE	CEMENT CEMENT TO BE TYPE SL U.N.O. TO AS3972-1997:'PORTLAND AND BLENDED CEMENTS'. MAXIMUM 56 DAYS SHRINKAGE TO BE 600 MICROSTRAIN TO AS2350.13-2006:'DETERMINATION OF DRYING SHRINKAGE OF CEMENT
	ALL CONNECTIONS TO EXISTING DRAINAGE PITS SHALL BE MADE IN TRADESMAN-LIKE MANNER AND THE INTERNAL WALL OF THE PIT AT THE POINT OF ENTRY SHALL BE CEMENT RENDERED TO ENSURE A SMOOTH FINISH.	MINIMIZE DISTURBED AREA COVERED WITH NATURAL VEGETATION. ONLY THOSE AREAS DIRECTLY REQUIRED FOR CONSTRUCTION ARE TO BE	NO ADMIXTURES ARE TO BE USED WITHOUT THE APPROVAL OF THE ENGINEER
	PIT GRATE, FRAMES AND SOLID COVERS SHALL BE CLASS B IN NON TRAFFIC AREAS AND CLASS D IN TRAFFICABLE AREAS IN ACCORDANCE WITH AS3996.	INSTALL EROSION/SEDIMENT CONTROL MEASURES PRIOR TO	THE CONTRACTOR MAY ADD AN APPROVED SUPERPLASTICISING ADMIXTURE
_	ALL GRATES SHALL BE PROVIDED WITH A LOCKING CLIP.	COMMENCEMENT OF CONSTRUCTION OR EXCAVATION OPERATIONS. PROVIDE SILT FENCE/STRAW BAIL BARRIERS TO THE LOW SIDE OF ALL EXPOSED	TO INCREASE SLUMP OF PAVEMENT CONCRETE TO NOT MORE THAN 100MM. QUALITY AND MIXING PROCEDURE TO BE IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS AND TO COMPLY WITH
	MAXIMUM FRONT ENTRY PIPE:- STRAIGHT ENTRY - Ø750 SKEW ENTRY 45° - Ø525	EARTH EXCAVATIONS. TIE SEDIMENT FENCING MATERIAL TO CYCLONE WIRE SECURITY FENCE. SEDIMENT CONTROL FABRIC SHALL BE AN APPROVED MATERIAL (EG. HUMES PROPEX SILT STOP) STANDING 300MM ABOVE GROUND & EXTENDING 150MM BELOW GROUND.	AS1478.1-2000:'ADMIXTURES FOR CONCRETE'. SUPPLY CONCRETE SUPPLY SHALL BE IN ACCORDANCE WITH
	PIT GRATING TO BE GALVANISED STEEL TYPE 'WELDLOK' OR APPROVED EQUIVALENT.	ISOLATE EXISTING STORMWATER PITS WITH STRAW BALES OR SILT TRAPS TO	AS1379-2007: SPECIFICATION AND SUPPLY OF CONCRETE'.
	SUBSOIL DRAINAGE SUBSOIL PIPES SHALL BE LAID AT A MIN GRADE OF 0.5% (U.N.O.).	DO NOT STOCKPILE EXCAVATED MATERIAL ON THE ROAD WAY.	DEPOSITED UNIFORMLY WITHOUT SEGREGATION.
5	ADDITIONAL SUBSOIL DRAINAGE SHALL BE LAID TO SUIT SITE CONDITIONS AND GROUNDWATER PRESENCE AS DIRECTED.	DIVERT CLEAN WATER FROM UNDISTURBED AREAS AROUND THE WORKING AREAS.	CONCRETE CURING CURING SHALL COMMENCE WITHIN TWO HOURS OF FINISHING OPERATIONS AND SHALL BE CONTINUED FOR A MINIMUM OF SEVEN DAYS BY AN APPROVED PROPRIETARY COMPOUND OR BY KEEPING CONTINUOUSLY WET.
	SUBSOIL PIPES SHALL BE LAID BEHIND KERBS IN CUT AREAS OF THE STE. SUBSOIL DRAINAGE SHALL CONSIST OF A SLOTTED 100mm DIAMETER PLASTIC PIPE WRAPPED IN GEOTEXTILE AND PLACED A MINIMUM OF 650mm BELOW THE FINISHED SURFACE LEVEL AND COVERED WITH 500mm OF 20mm GRAVEL. PROVIDE A MINIMUM OF 150mm GRAVEL AROUND SUBSOIL PIPE. TRENCH TO	CONSTRUCTION ENTRY/EXIT SHALL BE VIA THE LOCATION NOTED ON THE DRAWING. CONTRACTOR SHALL ENSURE ALL DROPPABLE SOIL & SEDIMENT IS REMOVED PRIOR TO CONSTRUCTION TRAFFIC EXITING SITE. CONTRACTOR SHALL ENSURE ALL CONSTRUCTION TRAFFIC ENTERING AND LEAVING THE SITE DO SO IN A FORWARD DIRECTION.	CONCRETE TO BE COVERED BY ASPHALT SHALL BE CURED BY THE USE OF ONE OF THE FOLLOWING:- - BITUMEN EMULSION GRADE CRS/170 COMPLYING WITH AS1160-1996: BITUMINOUS EMULSIONS FOR THE CONSTRUCTION AND MAINTENANCE OF PAVEMENTS' FOR ASPHALT WEARING SURFACE
-	GRATES TO PITS IN FOOTPATH AREAS SHALL BE HEEL SAFE COMPLYING WITH THE DISABLED ACCESS CODE	DISCHARGE WATER RUNOFF WITH SUSPENDED SOLIDS SO THE DISCHARGE WATER QUALITY TO COUNCIL STORMWATER DRAINAGE SYSTEM HAS A MAXIMUM CONCENTRATION OF SUSPENDED SOLIDS THAT DOES NOT EXCEED 50 MILLIGRAMS PER LITRE IN ACCORDANCE WITH THE PROTECTION OF THE ENVIRONMENT OPERATION ACT (POEO 1997) AND SHALL BE APPROVED BY LOCAL COUNCIL	AS3799-1998:'LIQUID MEMBRANE-FORMING CURING COMPOUND FOR CONCRETE' CLASS C TYPE 1D OR RESIN-BASED CURING COMPOUND COMPLYING WITH AS3799-1998 CLASS B, TYPE 1D OR TYPE 2.
	AUTHORITY STORMWATER NOTES	ADOPT TEMPORARY MEASURES AS MAY BE NECCESSARY FOR EROSION &	CONSTRUCTION JOINTS SHALL BE PROPERLY FORMED AND USED ONLY WHERE SHOWN OR APPROVED BY THE ENGINEER.
	IT IS THE CONTRACTOR'S RESPONSIBILITY TO CHECK ALL SET OUT AND LEVELS PRIOR TO COMMENCEMENT OF WORKS AND TO REPORT ANY DISCREPANCIES FOLIND TO THE SUPERINTENDANT	 DRAINS: TEMPORARY DRAINS AND CATCH DRAINS. SPREADER BANKS OR OTHER STRUCTURES: TO DISPERSE 	WHERE NOT SHOWN CONSTRUCTION JOINTS SHALL BE LOCATED TO THE APPROVAL OF THE ENGINEER.
-	ALL SET OUT DIMENSIONS ARE TO FACE OF KERB, CENTERLINE OF FENCE/BOLARD/PIPE.	CONCENTRATED RUNOFF. - SILT TRAPS: CONSTRUCTION AND MAINTENANCE OF SILT TRAPS TO PREVENT DISCHARGE OF SCOURED MATERIAL TO DOWNSTREAM AREAS.	FINISH FOOTWAY - CONCRETE SHALL BE FINISHED WITH A STEEL TROWEL TO PRODUCE A SMOOTH UNIFORM FINISH, FREE OF IRREGULARITIES AND THEN
	SMOOTH ALL TRANSITIONS BETWEEN NEW AND EXISTING WORK IN BOTH LEVEL AND ALIGNMENT.	AFTER RAIN, INSPECT, CLEAN, AND REPAIR IF REQUIRED, TEMPORARY EROSION & SEDIMENT CONTROL MEASURES.	BROOM FINISH APPLIED. ROAD - CONCRETE SHALL BE COMPACTED AND FINISHED TO PRODUCE A
	IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE ALL SAFETY FENCES, WARNING SIGNS, TRAFFIC DIVERSIONS AND THE LIKE DURING CONSTRUCTION. ALL WORKS TO COMPLY WITH OCCUPATIONAL HEALTH AND	REMOVE TEMPORARY EROSION & SEDIMENT CONTROL MEASURES WHEN THEY ARE NO LONGER REQUIRED.	LEVEL UNIFORM SURFACE FREE OF IMPERFECTIONS WHICH WILL IMPACT ON THE FINISHED SURFACE.
	SAFETY REQUIREMENTS AND OTHER RELEVANT AUTHORITY SAFETY REQUIREMENTS. NO TREES SHALL BE REMOVED. CUTBACK OR RELOCATED WITHOUT THE	COMPLY WITH THE REQUIREMENTS OF LANDCOM'S MANAGING URBAN STORMWATER - SOIL AND CONSTRUCTION 'THE BLUE BOOK' LATEST EDITION THE EROSION & SEDIMENT CONTROL PLAN PROVIDED IS ONLY INDICATIVE.	PROFILE FREE OF DEPRESSIONS AND HIGH AREAS TO SATISFY THE REQUIREMENTS OF AN INITIAL FINISH.
	WRITTEN INSTRUCTION FROM THE SUPERINTENDENT. THE CONTRACTOR SHALL PROVIDE CERTIFICATION OF COMPACTION AND PAVEMENT THICKNESS FROM A NATA REGISTERED TESTING AUTHORITY	SPECIFIC SITE CONDITIONS	STEEL REINFORCEMENT REINFORCEMENT IS PRESENTED DIAGRAMMATICALLY, IT IS NOT NECESSARILY SHOWN IN TRUE PROJECTION.
)	MINIMUM THREE TESTS PER LAYER AS FOLLOWS PIPE BACKFILL DENSITY INDEX 75 DENSITY INDEX 75	FOOTPATH REINSTATEMENT NOTES REMOVE ALL SAND FILL WITHIN THE FOOTPATH AREA TO THE EXISTING	SPLICES IN REINFORCEMENT SHALL BE MADE ONLY IN THE POSITIONS SHOWN. THE WRITTEN APPROVAL OF THE ENGINEER SHALL BE OBTAINED FOR ANY OTHER SPLICES. WHERE THE LAP LENGTH IS NOT SHOWN IT SHALL BE SUFFICIENT TO DEVELOP THE FULL LENGTH OF THE REINFORCEMENT, AS
	SELECT FILL 95% STANDARD SELECT FILL (LESS THAN 300mm 98% MODIFIED BELOW BASE COURSE)	SUBGRADE. SUPPORT ALL AUTHORITY SERVICES TO STRUCTURAL ENGINEERS DETAILS	NOMINATED IN AS/NZS4671-2001: STEEL REINFORCING MATERIALS.
	THE AUSPEC SPECIFICATION SHALL BE THE SPECIFICATION FOR THESE WORKS.	DURING EXCAVATION. REINSTATE FOOTPATH SUBGRADE.	U.N.O. WELDING OF REINFORCEMENT WILL NOT BE PERMITTED UNLESS SHOWN ON
	STANDARD PUMP OUT NOTES	THE CONTRACTOR SHALL PROVIDE CERTIFICATION OF COMPACTION FROM A NATA REGISTERED TESTING AUTHORITY. MINIMUM THREE TESTS PER LAYER AS	THE STRUCTURAL DRAWINGS. PIPES OR CONDUITS SHALL NOT BE PLACED WITHIN THE CONCRETE COVER TC
-	THE PUMP OUT SYSTEM SHALL BE DESIGNED TO BE OPERATED IN THE	FOLLOWS: SELECT FILL 95% MODIFIED SELECT FILL (LESS THAN 300MM 98% MODIFIED	REINFORCEMENT WITHOUT THE APPROVAL OF THE ENGINEER.
	FOLLOWING MANNER: - I). THE PUMPS SHALL BE PROGRAMMED TO WORK ALTERNATELY TO ALLOW BOTH PUMPS TO HAVE AN EQUAL OPERATION LOAD AND PUMP LIFE.	BELOW BASE COURSE) BASE COURSE 100% MODIFIED	MATERIALS'): N - DENOTES GRADE 500N HOT ROLLED HIGH STRENGTH BARS SL - DENOTES SQUARE WITH EDGE SIDE-LAPPING BARS TM - DENOTES TRENCH MECH
	II). A FLOAT SHALL BE PROVIDED TO ENSURE THAT THE MINIMUM REQUIRED WATER LEVEL IS MAINTAINED WITHIN THE SUMP AREA OF THE BELOW	ASPHALT	STEEL GALVANISING SHALL COMPLY WITH AS/NZS4680-2006:'HOT-DIP
-	GROUND TANK. IN THIS REGARD THIS FLOAT WILL FUNCTION AS AN OFF SWITCH FOR THE PUMPS AT THE MINIMUM WATER LEVEL. THE SAME FLOAT SHALL BE SET TO TURN ONE OF THE PUMPS ON UPON THE WATER LEVEL IN THE TANK RISING TO APPROXIMATELY 300MM ABOVE THE MINIMUM WATER LEVEL. THE PUMP SHALL OPERATE UNTIL THE TANK IS DRAINED TO THE	GENERAL ALL ASPHALTIC CONCRETE WORK SHALL BE CARRIED OUT IN ACCORDANCE WITH GOOD ASPHALT PAVING PRACTICE AS DESCRIBED IN AS2150-2005:'HOT MIX ASPHALT - A GUIDE TO GOOD PRACTICE'.	TESTING CONCRETE TESTING SHALL COMPLY WITH AS1012:'METHODS OF TESTING CONCRETE' AS AMENDED.
	III). A SECOND FLOAT SHALL BE PROVIDED AT A HIGH LEVEL, WHICH IS APPROXIMATELY THE ROOF LEVEL OF THE BELOW GROUND TANK. THIS FLOAT SHALL START THE OTHER PUMP THAT IS NOT OPERATING AND ACTIVATE THE	ALL MATERIALS ALL MATERIALS AND PROCEDURES SHALL BE TO A STANDARD TO ACHIEVE A HIGH QUALITY PRODUCT AND FINISH. FINISHED SURFACES SHALL BE OF GOOD APPEARANCE HAVING A UNIFORM TEXTURE FREE OF DEFECTS.	FORMWORK FORMWORK SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH AS3610-1995:'FORMWORK FOR CONCRETE'. FORMWORK SHALL NOT BE STRIPPED NOR PROPS REMOVED WITHOUT THE APPROVAL OF THE ENGINEER.
_	ALARM. IV). AN ALARM SYSTEM SHALL BE PROVIDED WITH A FLASHING STROBELIGHT AND A PUMP FAILURE WARNING SIGN WHICH ARE TO BE LOCATED AT THE	MINERAL AGGREGATES TO COMPLY WITH AS2758.5-1996:'ASPHALT AGGREGATES' MINERAL FILLER CHARACTERISTICS TO AS1141.17-1995:'VOIS IN DRY COMPACTED FILLER'	ASPHALT
	DRIVEWAY ENTRANCE TO THE BASEMENT LEVEL. THE ALARM SYSTEM SHALL BE PROVIDED WITH A BATTERY BACK-UP IN CASE OF POWER FAILURE. V). A CONFINED SPACE DANGER SIGN SHALL BE PROVIDED AT ALL ACCESS	BITUMEN BINDER SHALL COMPLY WITH AS2008-1997:'RESIDUAL BITUMEN FOR PAVEMENTS'. MIX PROPORTIONS	SPREADING ALL ASPHALTIC CONCRETE SHALL BE SPREAD WITH AN APPROVED SELF PROPELLED PAVING MACHINE WITH THE EXCEPTION OF AREAS WHERE SUCH PLANT CANNOT ACCESS OR WHERE SUCH PLANT COULD INTERFERE WITH
	POINTS TO THE PUMP OUT STORAGE TANK IN ACCORDANCE WITH THE UPPER PARRAMATTA RIVER CATCHMENT TRUST OSD HANDBOOK.	AC MIX SHALL BE AS NOMINATED ON DRAWINGS. MIX DESIGN TO BE SUBMITTED FOR WRITTEN APPROVAL OF SUPERINTENDENT PRIOR TO PLACEMENT.	ADJACENT ELEMENTS. ASPHALTIC CONCRETE MAY ONLY BE HAND PLACED AT THE APPROVAL OF THE
-		AIR VOIDS IN COMPACTED MIX BETWEEN 4% AND 7% OF THE VOLUME OF THE MIX.	WHERE ASPHALTIC CONCRETE IS PLACED BY HAND EXTREME CARE SHALL BE TAKEN TO MINIMIZE THE TEXTURE DIFFERENTIAL BETWEEN THE MACHINE AND THE HAND PLACED AREAS.
		AGGREGATE FILLED BY BINDER IN ACCORDANCE WITH AS2150-2005. HOT MIX ASPHALT - A GUIDE TO GOOD PRACTICE'.	THE ASPHALTIC CONCRETE SHALL BE LAID AT A MIX TEMPERATURE AS SHOWN BELOW
		PAVEMENT PREPARATION THE EXISTING SURFACE TO BE SEALED SHALL BE DRY AND BROOMED BEFORE COMMENCEMENT OF WORK TO ENSURE COMPLETE REMOVAL OF ALL SUBEREICIAL EOREIGN MATTER	ROAD SURFACE TEMPERATURE IN SHADE MIX TEMPERATURES (°C) (°C) 5-10 NOT PERMITTED
		ALL DEPRESSIONS OR UNEVEN AREAS ARE TO BE TACK-COATED AND BROUGHT UP TO GENERAL LEVEL OF PAVEMENT WITH ASPHALTIC CONCRETE	10-15 150 15-25 145 OVER 25 140
		BEFORE LAYING OF MAIN COURSE. ALL DEFECTS IN THE BASE COURSE INCLUDING CRACKS, SURFACE DEFORMATION AND THE LIKE SHALL BE REPAIRED AS DIRECTED BY THE SUPERINTENDENT PRIOR TO PLACEMENT OF TACK COAT AND/OR AC	ASPHALTIC CONCRETE SHALL NOT BE LAID WHEN THE ROAD SURFACE IS WET OR WHEN COLD WINDS CHILL THE MIX TO ADVERSELY AFFECT SPREADING AND COMPACTION.
6		TACK COAT THE WHOLE OF THE AREA TO BE SHEETED WITH ASPHALTIC CONCRETE SHALL	THE NUMBER OF JOINTS BOTH LONGITUDINAL AND TRANSVERSE SHALL BE KEPT TO A MINIMUM.
		BE LIGHTLY AND EVENLY COATED WITH RAPID SETTING BITUMEN TO AS2157-1997:'CUTBACK BITUMEN'. APPLICATION RATE FOR RESIDUAL BITUMEN SHALL BE 0.30 LITRES/SQUARE METER. APPLICATION SHALL BE BY MEANS OF A MECHANICAL SPRAYER WITH A SPRAY BAR	THE DENSITY AND SURFACE FINISH AT JOINTS SHALL BE SIMILAR TO THOSE OF THE REMAINDER OF THE LAYER.
		MENTO OF A MECHANICAL SENATER WITT A SERAT DAK.	ALL COMPACTION SHALL BE UNDERTAKEN USING SELF PROPELLED ROLLERS.
			BELOW 105°C. SECONDARY ROLLING SHALL BE COMPLETED BEFORE THE MIX TEMPERATURE FALLS BELOW 80°C
			TOLERANCES FINISHED SURFACES SHALL BE SMOOTH, DENSE AND TRUE TO SHAPE AND
			SHALL NOT VARY MORE THAN:- - 3MM FROM THE SPECIFIED PLAN LEVEL AT ANY POINT. - 3MM FROM THE BOTTOM OF A 3M STRAIGHT EDGE LAID TRANSVERSELY.
4			 5MM FROM THE BOTTOM OF A 3M STRAIGHT EDGE LAID LONGITUDINALLY. MINUS 0 TO PLUS 2MM ADJACENT TO OTHER ELEMENTS SUCH AS KEBS, GRANITE TRIM AND THE LIKE TO AVOID POOLING OF SUPPACE WATER
			TESTING ASPHALT TESTING SHALL COMPLY WITH AS/NZS2891. BITUMEN TESTING
			SHALL COMPLY WITH AS/N2S2341:'METHODS OF TESTING BITUMEN AND RELATED ROADMAKING PRODUCTS'.

	DEMOLITION
E	DEMOLITION WORKS TO BE CARRIED OUT IN ACCORDANCE WITH AS2601-2001: DEMOLITION OF STRUCTURES'.
	BEFORE COMMENCING DEMOLITION, SUBMIT EVIDENCE THAT:-
	CONTRACT HAVE BEEN ASCERTAINED; - A PERMIT TO DEMOLISH HAS BEEN OBTAINED FROM THE APPROPRIATE
	AUTHORITY; - A SCAFFOLD PERMIT HAS BEEN OBTAINED FROM THE APPROPRIATE AUTHORITY (IF SCAFFOLDING IS PROPOSED TO BE USED);
ER.	- PRECAUTIONS NECESSARY FOR PROTECTION OF PERSONS AND PROPERTY HAVE BEEN TAKEN AND SUITABLE PROTECTIVE AND SAFETY
E	DEVICES PROVIDED TO THE APPROVAL OF THE RELEVANT AUTHORITY TREATMENT FOR RODENT INFESTATION HAS BEEN CARRIED OUT AND A CERTIFICATE HAS BEEN OBTAINED FROM THE APPROPRIATE AUTHORITY:
Л.	- AND FEES AND OTHER COSTS HAVE BEEN PAID.
	SUBMIT THE WORK PLAN BEFORE DEMOLITION OR STRIPPING WORK. INCLUDE THE FOLLOWING INFORMATION:- - THE METHOD OF PROTECTION AND SUPPORT FOR ADJACENT
	PROPERTY. - LOCATIONS AND DETAILS OF NECESSARY SERVICE DEVIATIONS AND
	TERMINATIONS. - IF REMOVAL OF ASBESTOS OR MATERIAL CONTAINING ASBESTOS IS REQUIRED. THE INFORMATION SPECIFIED IN NOHSC 2002 (2005) CODE OF
	PRACTICE FOR THE SAFE REMOVAL OF ASBESTOS (2ND EDITION).
	REMOVE FROM THE SITE DEMOLISHED MATERIALS. PREVENT SPILLAGE OF DEMOLISHED MATERIALS IN TRANSIT.
	PROVIDE SUPPORTS TO ADJACENT STRUCTURES WHERE NECESSARY, SUFFICIENT TO PREVENT DAMAGE RESULTING FROM THE WORKS.
	GIVE AT LEAST 7 WORKING DAYS NOTICE OF COMPLETION OF DEMOLITION SO THAT ADJACENT STRUCTURES MAY BE INSPECTED FOLLOWING COMPLETION
	OF DEMOLITION.
	DO NOT USE EXPLOSIVES.
	GRASSING
	REFER TO SUBGRADE PREPARATION NOTES FOR THE PREPARATION OF THE SURFACE RECEIVING THE GRASSING.
	TOPSOILING, FERTILISING, SOWING OF SEED OR TURFING SHALL COMPLY WITH AS4419-2003.'SOILS FOR LANDSCAPING AND GARDEN LISE' AND
	AS4454-2003:'COMPOSTS, SOIL CONDITIONERS AND MULCHES'.
	RIP OFF THE AREAS TO BE GRASSED UP TO 200MM DEPTH PRIOR TO TOPSOILING.
	COMPACT TOPSOIL WITH A LIGHT ROLLER.
	THE FERTILISER SHALL BE AN APPROVED NITROGEN, PHOSPHATE POTASSIUM (K) STARTER FERTILISER & SPREAD EVENLY AT A RATE OF 0.02KG/M ² , LIGHTLY RAKED & RE-WATERED
	THE TURF SHALL BE KIKUYU GRASS UNLESS OTHERWISE SPECIFIED &/OR
	APPROVED.
Y	ESTABLISHMENT PERIOD.
	ABBREVIATION
	Ø OR DIA DIAMETER CBR CALIFORNIA BEARING RATIO
	CH CHAINAGE CL CENTER LINE
	DD DISH DRAIN DDO DISH DRAIN OUTLET
	DEJ DOWELLED EXPANSION JOINT DGB DENSE GRADED BASECOURSE
	DGS DENSE GRADED SOB-BASE DP DOWNPIPE E EXISTING
	FFL FINISHED FLOOR LEVEL GTD GRATED TRENCH DRAIN
	HYD HYDRANT IJ ISOLATING JOINT
	IK INTEGRAL KERB IL INVERT LEVEL
	IP INTERSECTION POINT KIP KERB INLET PIT KO KERB ONLY
	K&G KERB & GUTTER KR KERB RETURN
	LS LONGITUDINAL SECTION NGL NATURAL GROUND LEVEL OFP OVERI AND FLOW PATH
	OSD ON-SITE DETENTION R RADIUS
	RCP REINFORCED CONCRETE PIPE RK ROLL KERB & GUTTER RI REDLICED I EVEL
	RW RETAINING WALL RWT RAINWATER TANK
	SJ SAWN CONTROL JOINT SMH SEWER MAN HOLE SW STORMWATER
	SWP STORMWATER PIT SWRM STORMWATER RISING MAIN
E	SWS STORMWATER SUMP SV STOP VALVE
	TOK TOP OF KERB TOW TOP OF WALL
- ND	TWL TOP WATER LEVEL TP TANGENT POINT UNIV ACTICISED POINT
VN	UPVC UNPLASTICISED POLYVINYL CHLORIDE UNO UNLESS NOTED OTHERWISE
	WPJ WEAKENED PLANE JOINT FF FIRST FLUSH DEVICE
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PROJECT NO:	DRAWING NO: SW102		REVISION:

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- THE SITE IS GOVERNED BY CANTERBURY BANKSTOWN DEVELOPMENT CONTROL PLAN
- IN ACCORDANCE WITH COUNCIL'S SWMP, SITE RUNOFF FOR THE PROPOSED DEVELOPMENT SHOULD NOT EXCEED THE PRE DEVELOPMENT FOR THE 5 YEAR EVENT.

Δ ON SITE DETENTION NOT REQUIRED Δ

ALL DOWNPIPES AND GUTTERING HAVE BEEN DESIGNED TO ACCOMMODATE FOR THE 1 IN

LOCATION OF ALL STORMWATER PIPES, PITS & TRENCHES TO BE CO-ORDINATED WITH

DOWNPIPE LOCATIONS ARE INDICATIVE AND TO BE CONFIRMED DURING CONSTRUCTION.

SITE IS FLOOD AFFECTED BY THE 1%AEP THROUGH TO PMF. REFER TO FLOOD IMPACT ASSESSMENT REPORT CSW2025.56.FIA.REV.01 FOR FURTHER DETAILS

Notes: Before



NOTES THE COPYRIGHT OF THIS DRAWING IS VESTED IN CSEG PTY LTD AND IT MAY NOT BE REPRODUCED IN WHOLE OR PART OR USED FOR THE MANUFACTURE OF ANY ARTICLE WITHOUT THE EXPRESS PERMISSION OF THE COPYRIGHT HOLDERS.

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- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECT'S, SERVICE ENGINEER'S AND CSEG PTY LTD DRAWINGS AND SPECIFICATIONS.

01	FOR APPROVAL			CS	MS	SCH	8-May-25	ן ר
REV:	DESCRIPTION:		D	DRAFT	DESIGN	СНЕСК	DATE:	
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P @W A	- 1300 APEXO - ADMIN@AI - WWW.APEX - SUITE 04, LE	C I V CE PEXCE.COM.AU CIVILENGINEI EVEL 03, 180-1	U ERS.COM 86 BURV	E N	GIN ROAD,			
P @ W A	- 1300 APEXC - ADMIN@AI - WWW.APEX - SUITE 04, LE T: ELOW INFRASTRU	CIV CE PEXCE.COM.AU CIVILENGINE EVEL 03, 180-1	J ERS.COM 86 BURV	E N M.AU WOOD	GIN ROAD,	J E E	RS	
P @ W A LIEN RUEF	- 1300 APEXC - ADMIN@AI - WWW.APEX - SUITE 04, LE T: ELOW INFRASTRU	CIV CE PEXCE.COM.AU CIVILENGINE VEL 03, 180-1	J ERS.COM 86 BURV	E N wood	GIN ROAD,	BURWC] .
P @W A LIEN RUEF	- 1300 APEXC - ADMIN@AI - WWW.APEX - SUITE 04, LE T: ELOW INFRASTRU	CIV CE PEXCE.COM.AN COVILENGINE EVEL 03, 180-1	J ERS.COM 86 BURV	E N	GIN ROAD,	BURWC	R S	
P @W A LIEN RUEF	- 1300 APEXC - ADMIN@AI - WWW.APEX - SUITE 04, LE T: ELOW INFRASTRU	CIV CE PEXCE.COM.AU CIVILENGINE EVEL 03, 180-1	J ERS.COM 86 BURV	E N M.AU WOOD	GIN ROAD,	BURWC	C R S	
	- 1300 APEXC - ADMIN@AI - WWW.APEX - SUITE 04, LE T: ELOW INFRASTRU	CIV CE PEXCE.COM.AU CIVILENGINE EVEL 03, 180-1	J ERS.COM 86 BURV	E N M.AU WOOD	GIN ROAD,	BURWC	A R S	
P @WA A LIEN/ RUEF RCH ED A	- 1300 APEXC - ADMIN@AI - WWW.APEX - SUITE 04, LE T: ELOW INFRASTRU ITECT: RCHITECTS	CIV CE EXECCOMAN COVILENGINE EVEL 03, 180-1	J ERS.COM 86 BURV	E N M.AU WOOD	GIN ROAD,	BURWC		
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P WW A ULEN RUEF RCH ED A CH ED A CH ED A	- 1300 APEXC - ADMIN@AI - WWW.APEX - SUITE 04, LE T: ELOW INFRASTRU ITECT: RCHITECTS OCCUPANCY LAN	CIV CE PEXCE.COM.AU CVILENGINE EVEL 03, 180-1	J ERS.COM 86 BURV	E N M.AU WOOD	GIN ROAD,	BURWC		
P @ W A LIEN RUEF RUEF RCH RCH RCH TE: JAL TE: TE P CALE	- 1300 APEXC - ADMIN@AI - WWW.APEX - SUITE 04, LE T: ELOW INFRASTRU ITECT: RCHITECTS OCCUPANCY LAN AT A1:	CIV CE PEXCE.COM.AU CVILENGINE COVILENGINE	J ERS.COM 86 BURV		GIN ROAD,	BURWC		
P Q Q Q Q Q Q Q Q Q Q Q Q Q	- 1300 APEXC - ADMIN@AI - WWW.APEX - SUITE 04, LE T: COW INFRASTRUE ITECT: RCHITECTS OCCUPANCY LAN AT A1: T NO:	DATE: 8-May-25			GIN ROAD,			







LEGEND: BACKGROUND IS YELLOW TEXT IS WHITE ON BLACK BACKGROUND





















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Notes:





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STANDARD DETAILS

TITLE:

DUAL OCCUPANCY

01 FOR APPROVAL REV: DESCRIPTION:

DEVELOPMENT APPLICATION (DA)

1300 APEXCE ADMIN@APEXCE.COM.AU

TRUEFLOW INFRASTRUCTURE P/L

WW.APEXCIVILENGINEERS.COM.AU

STATUS:

CLIENT:

ARCHITECT:

ZED ARCHITECTS

SCALE AT A1 HECKED RAWN 8-May-25 SCH PROJECT NO: DRAWING NO: REVISION: CSW2025.56 SW300

 CS
 MS
 SCH
 8-May-25

 DRAFT
 DESIGN
 CHECK
 DATE:

CIVIL ENGINEE

VEL 03, 180-186 BURWOOD ROAD, BURWOOD