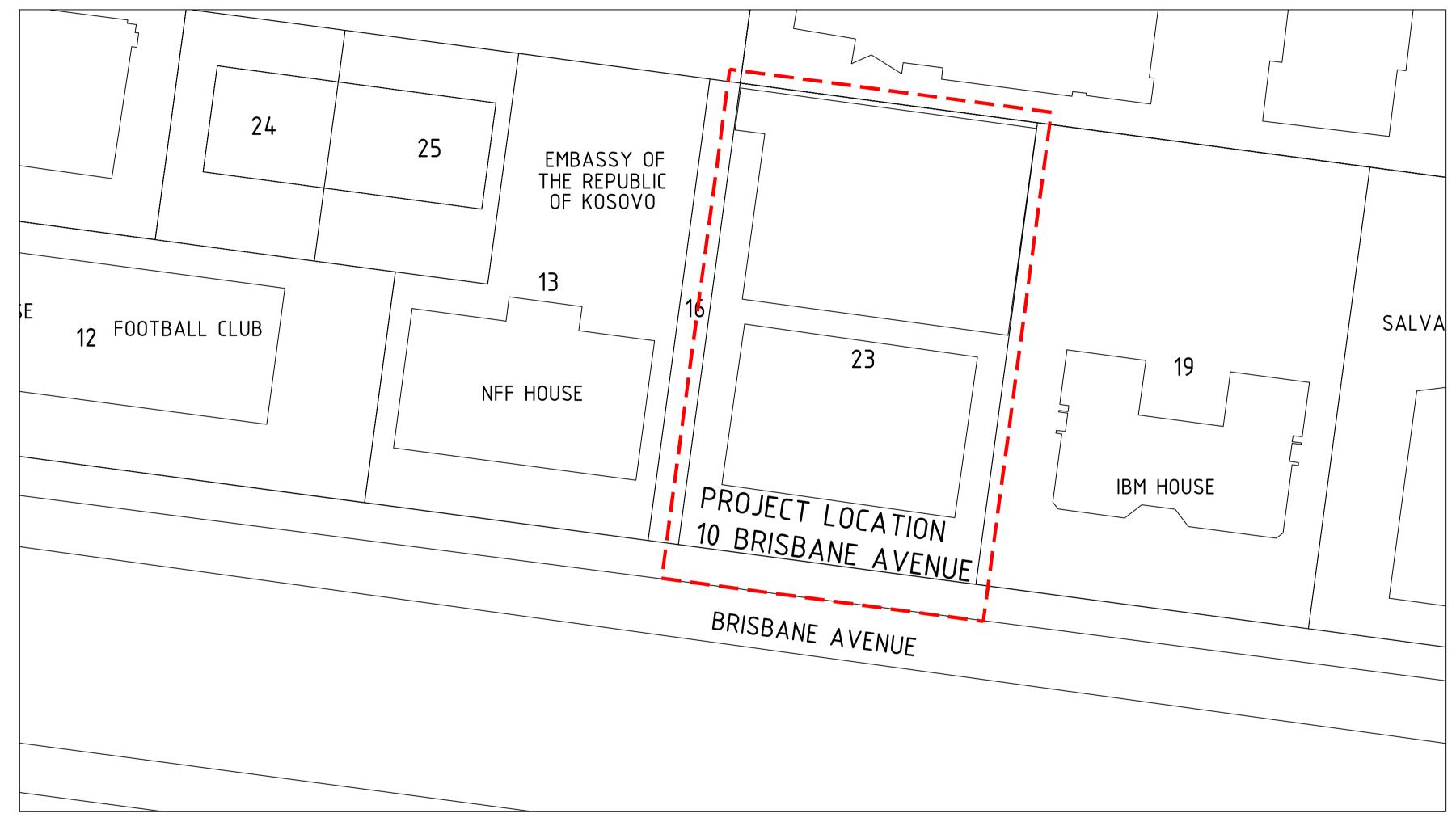
GENERAL NOTES:

- 1. ALL LEVELS ARE TO AUSTRALIAN HEIGHT DATUM AND ALL COORDINATES ARE TO MAP GRID OF AUSTRALIA (MGA) 94, ZONE 55.
- 2. ALL EXISTING SURFACE LEVELS PROVIDED BY MMB SURVEYORS SHOWN ON THE ENGINEERING DRAWINGS HAVE BEEN INTERPOLATED FROM A DIGITAL TERRAIN MODEL. THESE LEVELS HAVE BEEN USED AS THE BASIS FOR ALL ENGINEERING DESIGN AND DETERMINATION OF QUANTITIES.
- ALL WORK SHALL BE IN ACCORDANCE WITH NCA'S DESIGN AND CONSTRUCTION SPECIFICATIONS
- EXISTING SERVICES HAVE BEEN PLOTTED FROM SUPPLIED DATA. THE PRINCIPAL DOES NOT GUARANTEE THE ACCURACY OF THIS INFORMATION AND IT IS THE CONTRACTORS RESPONSIBILITY TO ESTABLISH THE LOCATION OF ALL EXISTING SERVICES PRIOR TO COMMENCING WORK, CLEARANCES SHALL BE OBTAINED FROM THE RELEVANT SERVICE AUTHORITIES.
- PRIOR TO COMMENCING CONSTRUCTION, THE CONTRACTOR SHALL CONFIRM THE POSITION AND LEVEL OF ALL EXISTING SERVICE CONNECTION POINTS AND NOTIFY THE SUPERINTENDENT IMMEDIATELY IF A DISCREPANCY IS FOUND.
- ALL EXISTING AND FINISHED SURFACE LEVELS ARE TO THE AUSTRALIAN HEIGHT DATUM (AHD).
- 7. WHERE NEW WORK ABUTS EXISTING WORK THE CONTRACTOR SHALL ENSURE THAT A SMOOTH EVEN PROFILE, FREE FROM ABRUPT CHANGES IS OBTAINED.
- ALL EARTHWORKS, BATTERS AND TRENCH LINES TO BE TOPSOILED WITH 100mm SITE TOPSOIL, TEMPORARY GRASSED & BITUMEN STRAW MULCHED.
- 9. THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN AND INSTALLATION OF ALL TEMPORARY SUPPORT OF EXISTING SERVICES DURING EXCAVATION OF TRENCHES TO THE SATISFACTION OF THE SERVICE OWNER/AUTHORITY.
- 10. ALL TREE PROTECTION FENCING TO BE CHAINWIRE FENCE TYPE, 1.8m HIGH AND ERECTED 2.0m-5.0m OUTSIDE THE TREE CANOPY AS AGREED WITH THE SUPERINTENDENT.
- 11. ALL OLD TREE STUMP HOLES TO BE TRIMMED, BACKFILLED AND COMPACTED TO 95% CONTROLLED FILL LEVEL 1.
- 12. SUPERINTENDENT TO BE NOTIFIED IF ANY ROAD OR FOOTPATH GRADE EXCEEDS 12.5% PRIOR TO CONSTRUCTION.

DRAWING SCHEDULE

| DRAWING | DRAWING DESCRIPTION CA000 COVER SHEET CA005 GENERAL ARRANGEMENT PLAN CA020 COORDINATED SERVICES PLAN CA160 DRIVEWAY PLAN | | REVISION |
|---------|--|---|----------|
| CA000 | | | Α |
| CA005 | | | Α |
| CA020 | | | Α |
| CA160 | | | Α |
| CA161 | CA161 CIVIL DETAILS | | Α |
| CA700 | CA700 WATER SENSITIVE URBAN DESIGN PLAN | | Α |
| CA800 | CA800 EROSION AND SEDIMENT CONTROL DETAILS | | Α |
| CA801 | EROSION AND SEDIMENT CONTROL PLAN | 8 | Α |



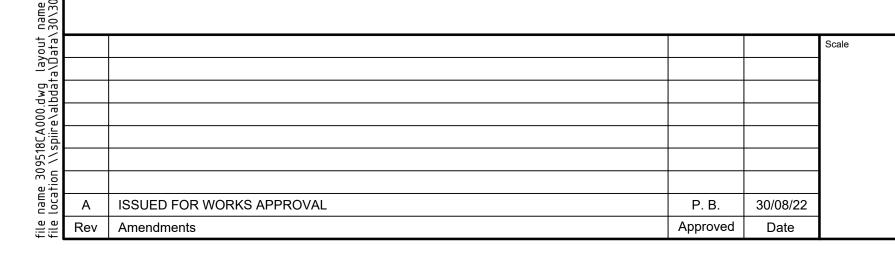




WARNING

BEWARE OF UNDERGROUND/OVERHEAD SERVICES

THE LOCATION OF SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN. SPECIAL CONSIDERATION SHOULD BE GIVEN TO CONSTRUCTION PROCEDURES UNDER OVERHEAD ELECTRICITY TRANSMISSION LINES.





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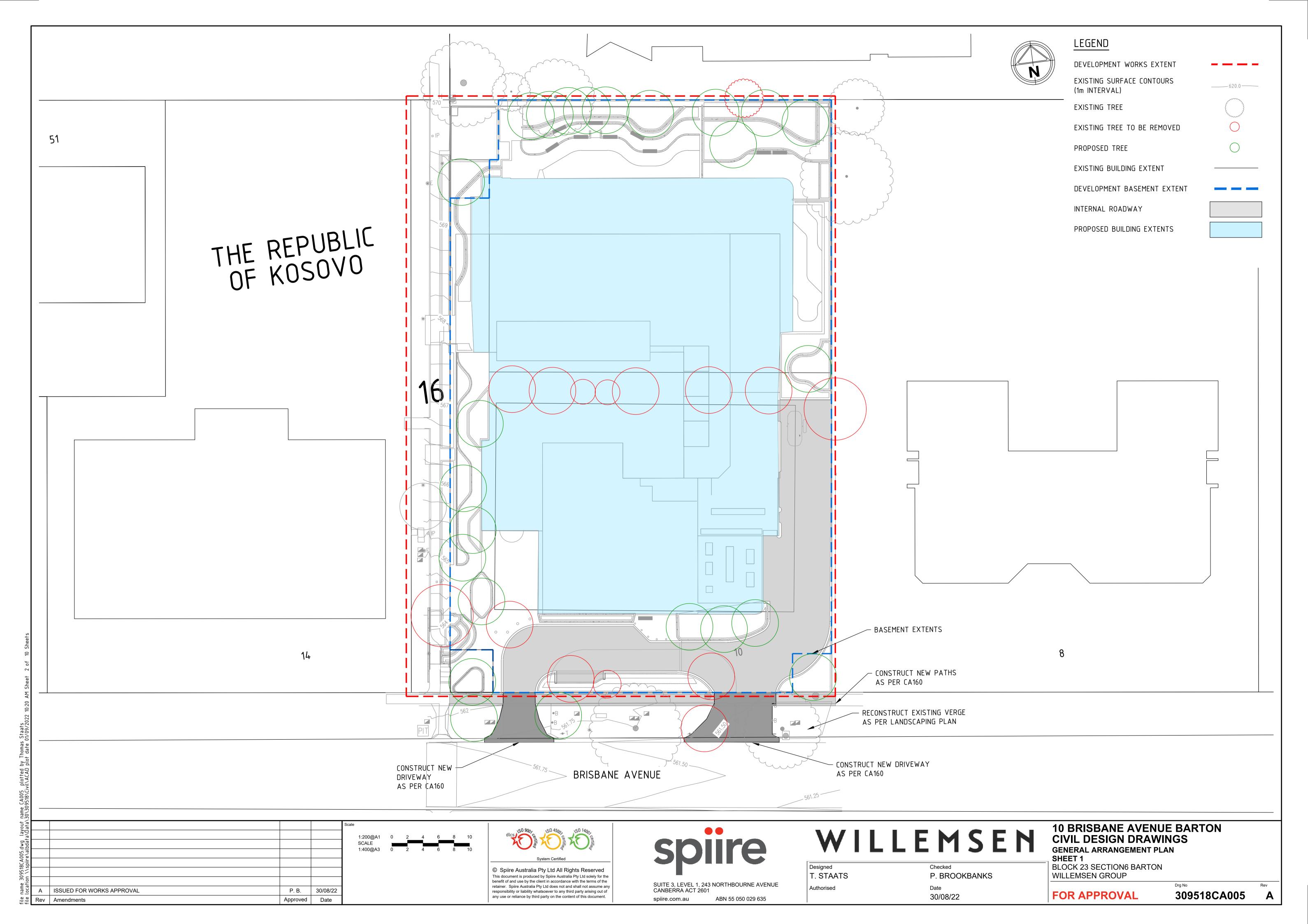
P. BROOKBANKS 30/08/22

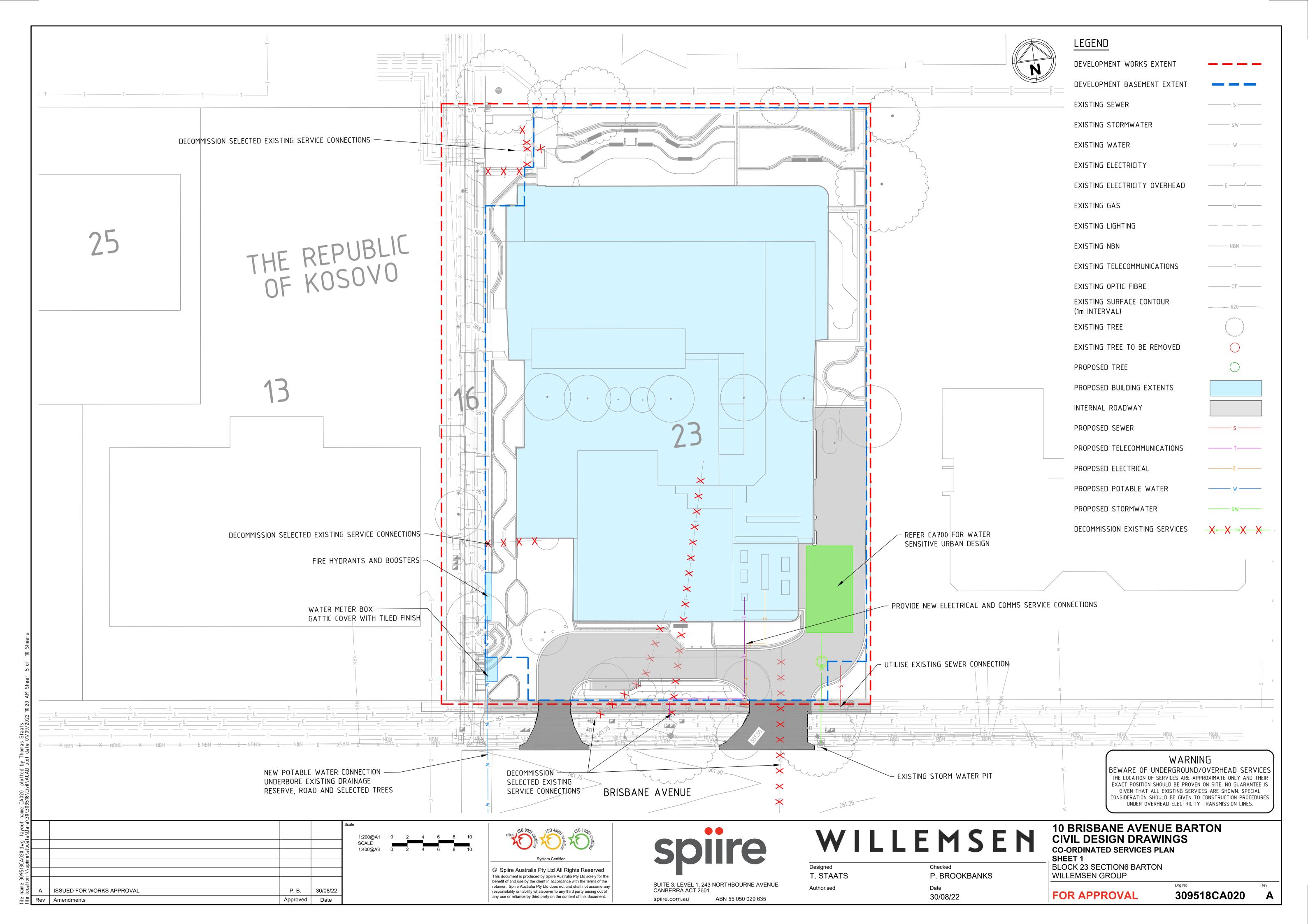
10 BRISBANE AVENUE BARTON **CIVIL DESIGN DRAWINGS COVER SHEET**

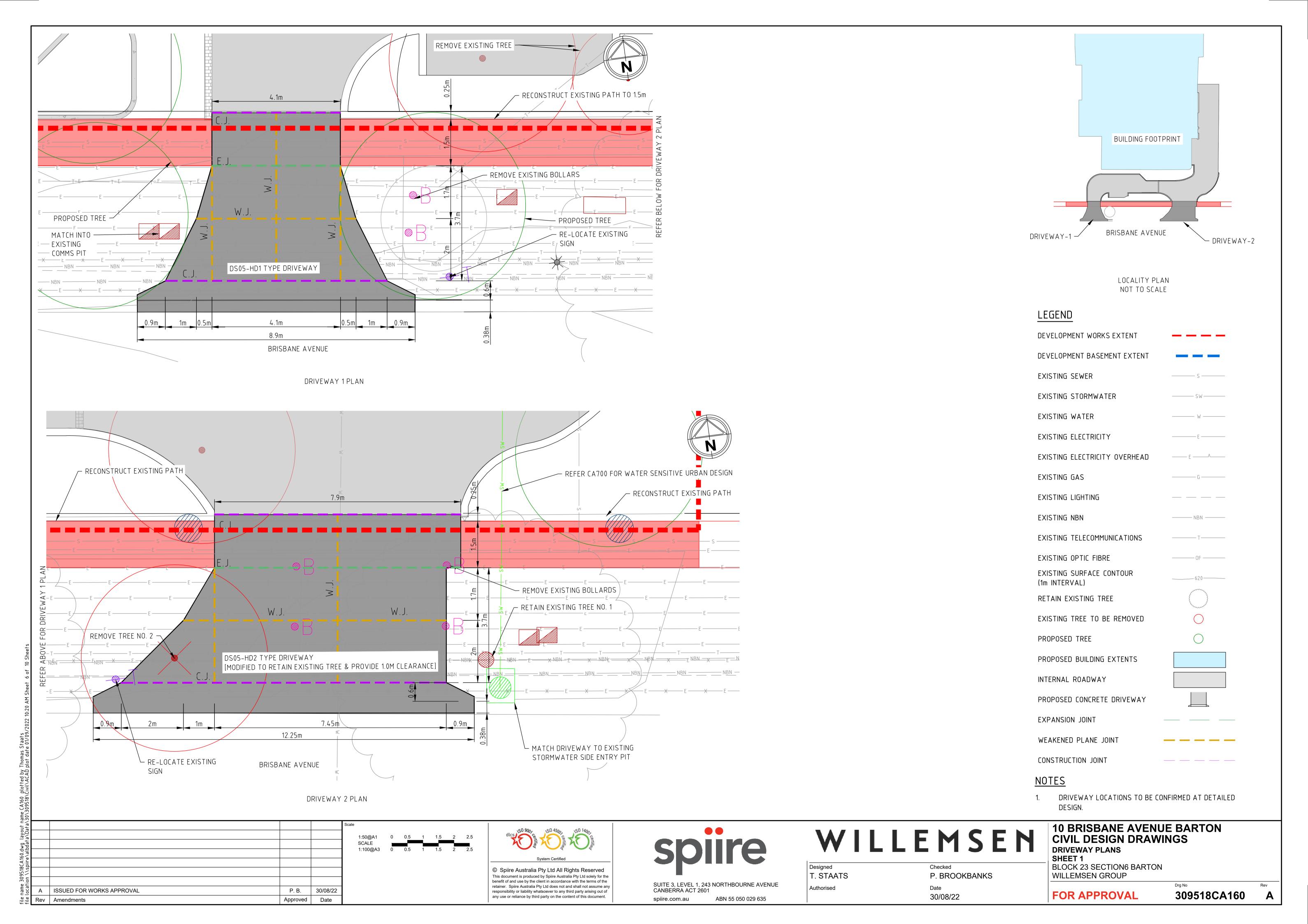
SHEET 1 **BLOCK 23 SECTION6 BARTON** WILLEMSEN GROUP

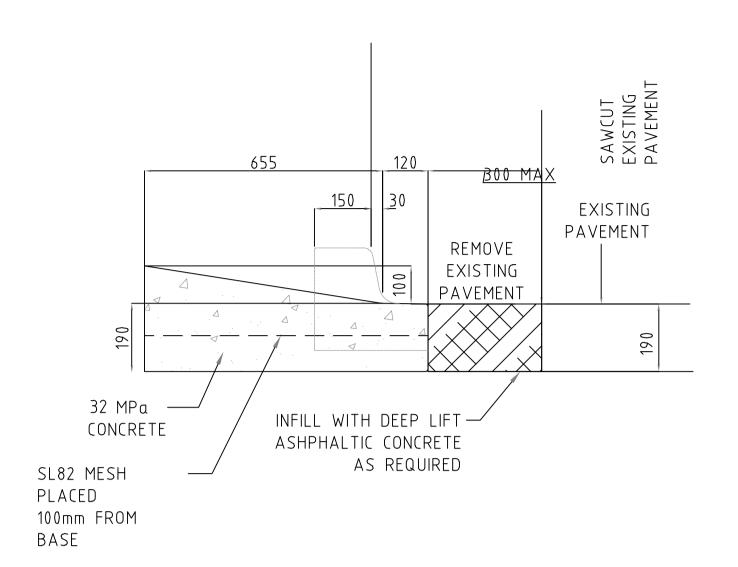
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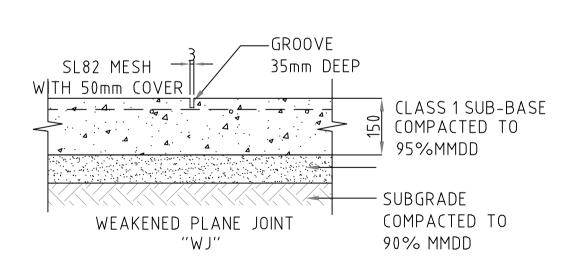


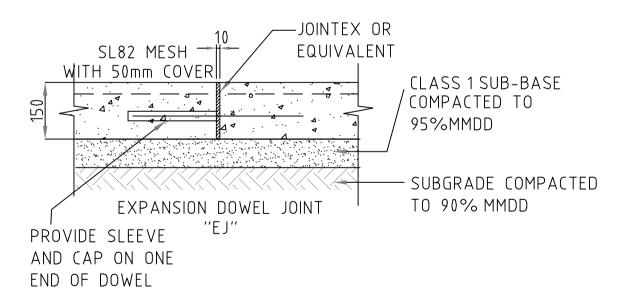






HEAVY VEHICULAR CROSSING SECTION
NTS



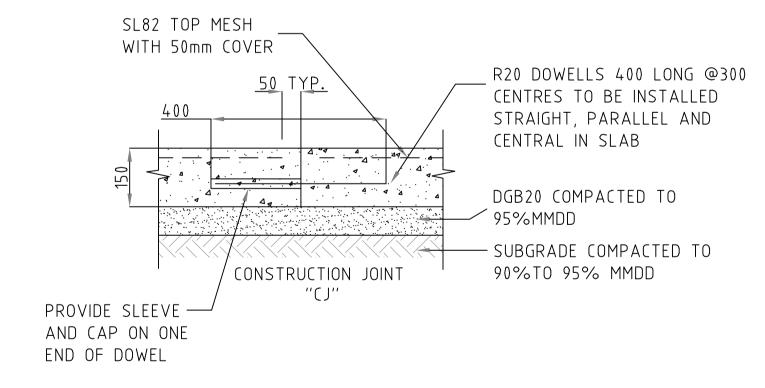


JOINT DETAILS

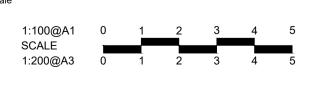
NTS

DRIVEWAY NOTES

- 1. ALL CONCRETE SHALL BE GRADE 32 (F'c = 32MPa) AGGREGATE SIZE TO BE 20mm MAX.
- 2. DRIVEWAY SHALL BE 150mm MIN. THICK OR MATCH EXISTING AND REINFORCED WITH SL82 MESH AT 50mm TOP COVER.
- 3. DRIVEWAY SHALL BE CONSTRUCTED ON CLASS 1 SUB-BASE OF 75mm MIN. THICKNESS AND COMPACTED TO 95% MMDD SUBGRADE SHALL BE COMPACTED TO 90% MMDD.
- 4. BROOMED FINISH TO BE APPLIED TO THE CONCRETE SURFACE.
- 5. ALL CONCRETE TO BE CURED CONTINUOUSLY FOR THREE (3) DAYS AFTER PLACING.
- 6. EXPANSION JOINTS ARE TO BE PLACED AT ALL CONNECTIONS TO EXISTING SLABS OR STRUCTURES AND AT A MAXIMUM OF 4M FROM VEHICLE CROSSINGS AND 1.5M ELSEWHERE.
- 7. CONNECTION TO EXISTING DRIVEWAY IS TO BE SMOOTH AND HAVE AN EVEN CHANGE IN GRADE.
- 8. DRIVEWAYS ARE NOT TO BE CONSTRUCTED CLOSER THAN 1200mm TO ANY ENGINEERING SERVICE SUCH AS SUMPS, 1500mm TO STREETLIGHTS, MINI-PILLARS, SUBSTATIONS OR BUS STOPS/SHELTERS AND 3000mm TO TREES UNLESS NOTED OTHERWISE
- 9. FOOTPATH THROUGH DRIVEWAY TO BE 150mm THICK AND CONSTRUCTED AS PER DRIVEWAY NOTES.
- 10. HEAVY RIGID VEHICLE MAXIMUM GRADE OF 10% & 1.5% / 5.5M



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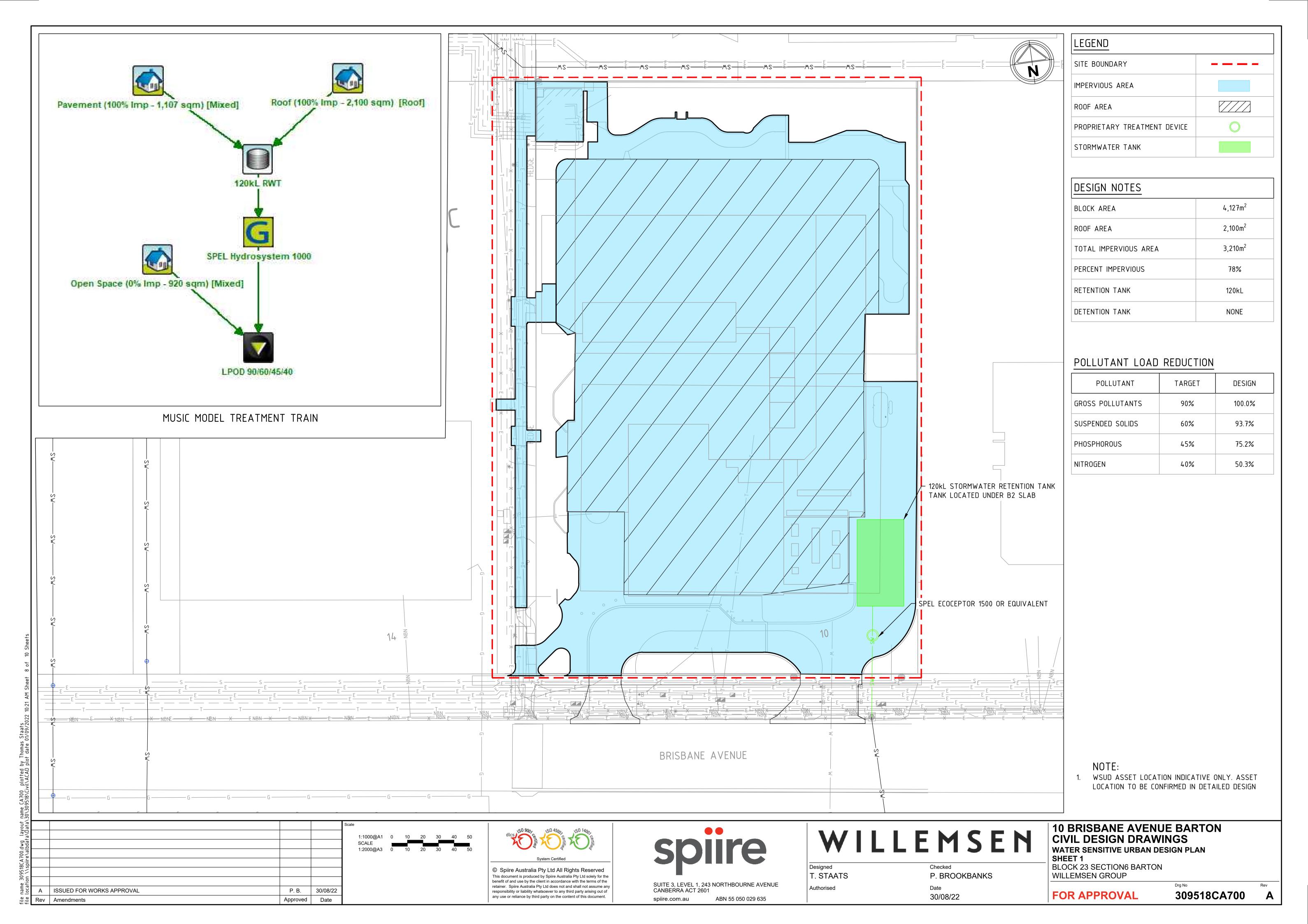
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Designed Checked
T. STAATS P. BROOKBANKS
Authorised Date
30/08/22

10 BRISBANE AVENUE BARTON CIVIL DESIGN DRAWINGS
ROAD DETAILS & PATH NETWORK PLAN
SHEET 2
BLOCK 23 SECTION6 BARTON
WILLEMSEN GROUP

FOR APPROVAL

309518CA161



GENERAL NOTES

- THIS DRAWING TYPIFIES THE EROSION CONTROL PRINCIPLES REQUIRED FOR WORKS WITHIN THE QUEANBEYAN PALARANG REGIONAL COUNCIL. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DESIGN, CONSTRUCT AND MAINTAIN TEMPORARY EROSION CONTROL MEASURES TO COMPLY WITH THE REQUIREMENTS OF THE QPRC SPECIFICATION C211 - CONTROL OF EROSION AND SEDIMENTATION VERSION 1 JANUARY 2019.
- VARIATIONS TO APPROVED CONCEPTS AND PROPOSALS ARE TO BE ENDORSED BY QPRC PRIOR TO IMPLEMENTATION.
- SEDIMENT AND EROSION CONTROL MEASURES ARE TO BE CONSTRUCTED AND MAINTAINED AS PER THE MANAGING URBAN STORMWATER, SOILS AND CONSTRUCTION, 4TH EDITION. 2004.

PRE CONSTRUCTION PHASE

- CONSTRUCT STABILISED DRIVEWAY ENTRANCES.
- CONSTRUCT SEDIMENT BASINS, DIVERSION CATCH DRAINS, DIVERSION BANKS OR OTHER DIVERSION WORKS AS REQUIRED. GRASS EMBANKMENTS AND INVERTS. PLACE BITUMEN STABILISED STRAW MULCH AND JUTE MESH TO WHITE WATER
- CONSTRUCT SILT FENCES AND COMBINED HAY BALE/SILT FENCES AS SHOWN.

CONSTRUCTION PHASE

- NO STOCKPILES. HAUL ROADS OR TRACKS ARE TO BE ESTABLISHED IN AREAS OTHER THAN THOSE SPECIFIED IN THE DOCUMENTS AND AS SHOWN ON THE PLAN. THE WORKS SHALL BE PLANNED TO ENSURE THAT A MINIMUM AREA OF THE SITE IS DISTURBED AT ANY ONE TIME
- ALL OVERLAND FLOW CHANNELS SHALL BE TOPSOILED, GRASSED AND MULCHED IMMEDIATELY AFTER THEIR COMPLETION.
- ALL EARTHWORKS SHALL BE CARRIED OUT EXPEDITIOUSLY, TOPSOILED, GRASSED AND MULCHED IMMEDIATELY ON COMPLETION. SITE RESTORATION SHALL BE CARRIED OUT PROGRESSIVELY AS THE WORKS PROCEED.
- ALL AREAS OF THE SITE BEYOND EARTHWORKS AND DRAINAGE WORKS LIMITS DISTURBED BY CONSTRUCTION ACTIVITIES SHALL BE REVEGETATED IMMEDIATELY AND AT THE CONTRACTOR'S EXPENSE.
- SILT FENCES ARE TO BE CONSTRUCTED ON THE DOWNSTREAM SIDE OF ANY STOCKPILES THAT DO NOT HAVE A GRASSED BUFFER OF 20m OF UNDISTURBED NATURAL VEGETATION.
- PLACE SILT FENCES ACROSS FLOW PATHS DURING CONSTRUCTION STAGING WHERE INTERMEDIATE SILT FENCES CAN BE DOWNSTREAM OF CONSTRUCTION
- ALL TRUCKS EXPORTING MATERIALS OFF SITE SHALL HAVE THE LOAD COVERED.

POST CONSTRUCTION PHASE

- FILL DIVERSIONS AND STABILISE DISTURBED AREAS.
- SILT FENCES FOR BLOCKS AND STABILISED DRIVEWAY ENTRANCES ARE TO REMAIN AFTER CONSTRUCTION.

SEDIMENT CONTROL NOTES

- SEDIMENT AND EROSION CONTROL DEVICES TO BE INSTALLED AND FULLY OPERATIONAL PRIOR TO STRIPPING OF SITE TOPSOIL
- STOCK PILE/S TO BE LOCATED AWAY FROM DRAINAGE LINES AND SURFACE FLOW PATHS. CONTOURED STRIATIONS OR FURROWS TO BE PROVIDED TO STOCK PILES TO MINIMISE EROSION.
- 3. STABILISED CONSTRUCTION ENTRANCE TO BE CONSTRUCTED PRIOR TO ACCESS TO SITE BY CONSTRUCTION VEHICLES. AGGREGATE TO BE TURNED WHEN SEDIMENT BUILDS UP.
- 4. TOTAL SITE AREA IS ?ha.
- TOTAL DISTURBED AREA IS ?ha.
- CONTRACTOR IS TO ESTABLISH A MAINTENANCE PROGRAM FOR SEDIMENT AND EROSION CONTROL DEVICES TO ENSURE INSPECTION AFTER SIGNIFICANT RAINFALL AND THAT ANY REPAIRS NECESSARY ARE QUICKLY ATTENDED TO.
- LIMIT ACCESS TO SITE DURING AND IMMEDIATELY AFTER WET WEATHER.
- REGULARLY REMOVE ANY SOIL FROM ROADS ADJACENT TO THE SITE.
- NO STORAGE OF CONSTRUCTION MATERIALS, PARKING OF VEHICLES NOR
- EQUIPMENT PERMITTED IN VERGES OR OPEN SPACE WITHOUT QRPC APPROVAL. 10. NO SITE SHEDS, STORAGE SHEDS, SITE AMENITIES TO BE ERECTED ON VERGES
- OR OPEN SPACE WITHOUT QRPC APPROVAL. 11. PROVIDE KERBSIDE FILTER ROLL TO EXISTING DOWNSTREAM SUMPS.
- 12. KERBSIDE FILTER ROLLS TO BE REMOVED, CLEANED AND REINSTATED ON WEEKLY BASIS AT A MINIMUM. TRAPPED SEDIMENT AROUND SUMPS ALSO TO BE REMOVED. CLEANING IS ALSO TO TAKE PLACE IMMEDIATELY AFTER PERIODS OF RAINFALL DURING CONSTRUCTION.
- 13. EXCESS SOIL IS TO BE DISPOSED AT A LOCATION APPROVED BY SUPERINTENDENT. ALL BUILDING MATERIAL AND WASTE STOCKPILES SHALL BE LOCATED WITHIN A WASTE ENCLOSURE OR WASTE CONTAINMENT AREA ON THE

SEDIMENT BASINS

- SEDIMENT BASINS SHALL BE FULLY MAINTAINED BY THE CONTRACTOR UNTIL THE DISTURBED CATCHMENT AREA IS PROTECTED AGAINST EROSION BY PERMANENT STABILISATION. PROTECTION SHALL BE PROVIDED FOR THE FINAL LANDSCAPE WORKS UTILISING SILT CONTROL FENCING.
- 2. THE SEDIMENT BASIN SHALL BE CLEANED OUT WHEN THE VOLUME REMAINING IS REDUCED BY SEDIMENTATION TO 90%.
- THE EMBANKMENT SHALL BE STABILISED WITH HESSIAN TEMPORARILY.
- 4. QRPC TO BE ADVISED OF PROPOSED POND DISCHARGE PRIOR TO DISCHARGE
- BASINS TO BE GRASSED.

MAINTENANCE SCHEDULE

- 1. TURN OVER STABILISED CONSTRUCTION ENTRY MATERIAL AND TOP UP AS REQUIRED. WEEKLY:
- 2. CHECK AND REINSTATE SILT CONTROL DEVICES.
- MONITOR CONDITION AND STORAGE VOLUMES OF ALL SEDIMENT AND TEMPORARY SEDIMENT BASINS

DAILY:

- 4. SWEEP AND REMOVE ANY DIRT TRACKED ONTO PUBLIC ROADS BY VEHICLES. ALL NECESSARY STEPS SHOULD BE TAKEN THAT ARE PRACTICAL AND REASONABLE TO MINIMISE DUST POLLUTION FROM THE SITE.
- CHECK WEATHER REPORT AT www.bom.gov.au FOR ANTICIPATED PRECIPITATION. 6. EMPTY TEMPORARY SEDIMENT BASINS IF STORM EVENT IS FORECAST OR

DUST MANAGEMENT

IMMINENT.

- 1. A WATER CART/S OR SUFFICIENT WATER SPRAYS SHALL BE MADE AVAILABLE IN DRY AND WINDY CONDITIONS TO MAINTAIN DUST SUPPRESSION
- 2. WATER SHALL BE APPLIED TO SUPPRESS DUST FROM OPEN EARTHWORKS AS
- WELL AS UNPROTECTED STOCKPILES. 3. STOCKPILES SHALL BE EITHER COVERED OR SEEDED TO PREVENT DUST. 4. AREAS OF COMPLETED EARTHWORKS SHALL BE PROGRESSIVELY REHABILITATED WITH DRYLAND GRASS AND FENCED OFF AS SOON AS PRACTICABLE TO PREVENT FURTHER EROSION.
- 5. THE CONTRACTOR SHALL CONTACT QRPC TO OBTAIN AN EXEMPTION TO USE WATER ON THE SITE.
- IN THE EVENT OF HIGH WINDS, WHERE DUST CANNOT BE CONTROLLED, WORK SHALL CEASE IMMEDIATELY.

CONTROL OF WASTE

1. ALL BUILDING MATERIAL AND WASTE STOCKPILES MUST BE LOCATED ON SITE. THE WASTE ENCLOSURE IS TO BE USED AND IS TO BE CAPABLE OF HOLDING ALL WASTES ON SITE UNTIL THEY CAN BE DISPOSED OF IN AN APPROPRIATE MANNER.

EXPORT OF SOIL

1. IF SOIL IS TO BE REMOVED FROM OR IMPORTED TO SITE, THE DETAILS OF THE ORIGIN OF THE SOIL IMPORTED OR THE LOCATION WHERE THE SOIL IS TO BE EXPORTED ARE TO BE PROVIDED TO QRPC A MINIMUM OF 2 WEEKS IN ADVANCE OF THE WORK.

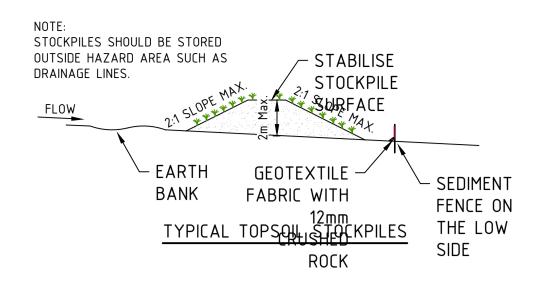
DESIGN BASIS

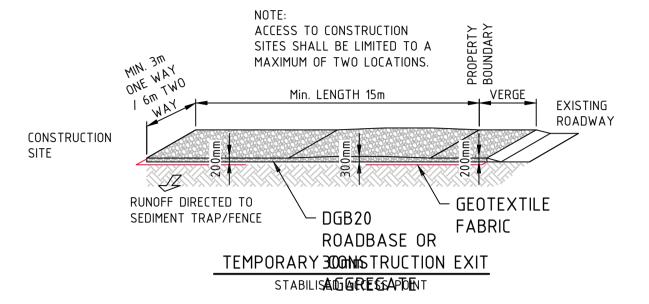
1. THE PRINCIPLES OF THESE PLANS ARE BASED ON THE MANAGING URBAN STORMWATER, SOILS AND CONSTRUCTION, 4TH EDITION. 2004 GUIDELINES.

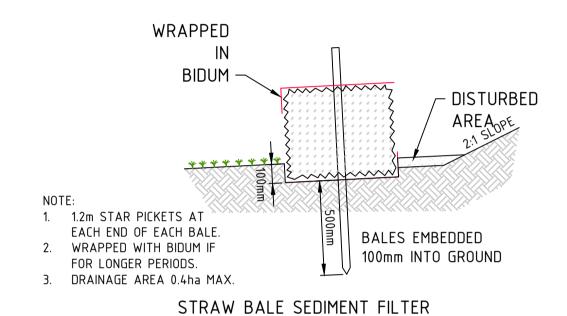
TIMBER FROM FELLED TREES

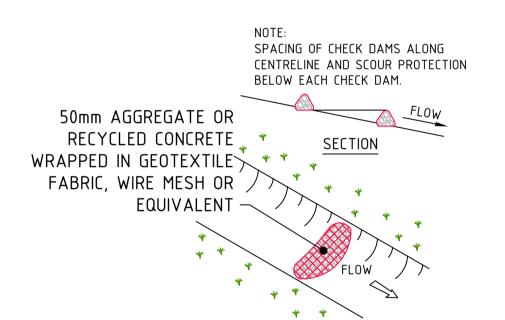
1. TIMBER FROM THE APPROVED FELLING OF ANY NATIVE TREES IS TO BE SALVAGED AND MOVED TO ---

| BUFFER | ZONE WIDTHS |
|--------------|------------------|
| SLOPE (%) | BUFFER WIDTH (m) |
| 2 | 15 |
| 4 | 20 |
| 6 | 30 |
| 8 | 40 |
| 10 | 50 |
| 12 | 60 |
| 14 | 70 |

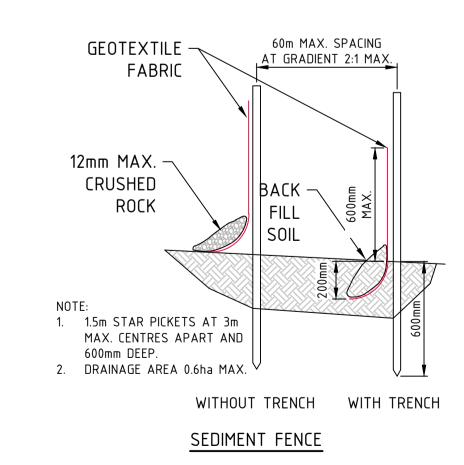






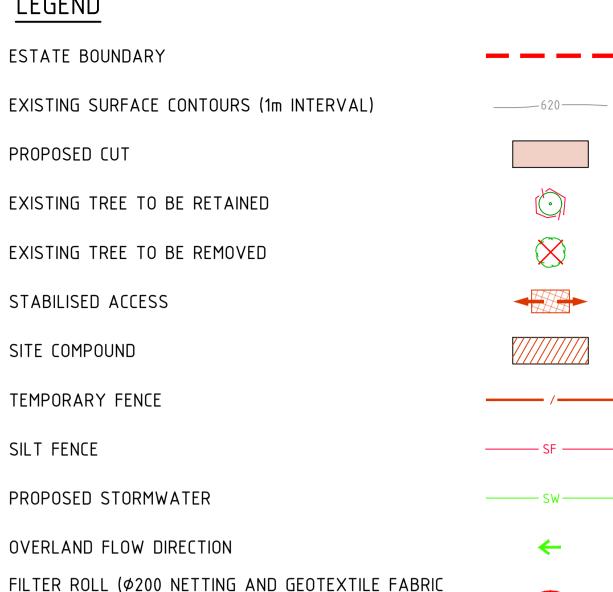


ROCK BUND/GABION CHECK DAM

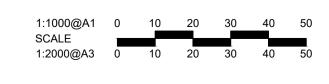


LEGEND

FILLED WITH 25mm GRAVEL)



ISSUED FOR WORKS APPROVAL 30/08/22 Approved Date Rev | Amendments





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P. BROOKBANKS 30/08/22

10 BRISBANE AVENUE BARTON CIVIL DESIGN DRAWINGS ENVIRONMENTAL CONTROLS CONCEPT PLAN

SHEET 1 **BLOCK 23 SECTION6 BARTON** WILLEMSEN GROUP

FOR APPROVAL

309518CA800

