

BLACKTOWN CITY COUNCIL TALLAWONG STATION PRECINCT SOUTH PROPOSED DEVELOPMENT CONSTRUCTION SOIL & WATER MANAGEMENT PLAN



LOCALITY
NOT TO SCALE

Sheet List Table	
Sheet Number	Sheet Title
001	COVER SHEET
801	SITE SOIL & WATER MANAGEMENT PLAN
802	BASEMENT EXCAVATION SOIL & WATER MANAGEMENT PLAN
803	BUILDING SOIL & WATER MANAGEMENT PLAN
811	SOIL & WATER MANAGEMENT DETAILS

Prepared for: DEICORP Pty Ltd

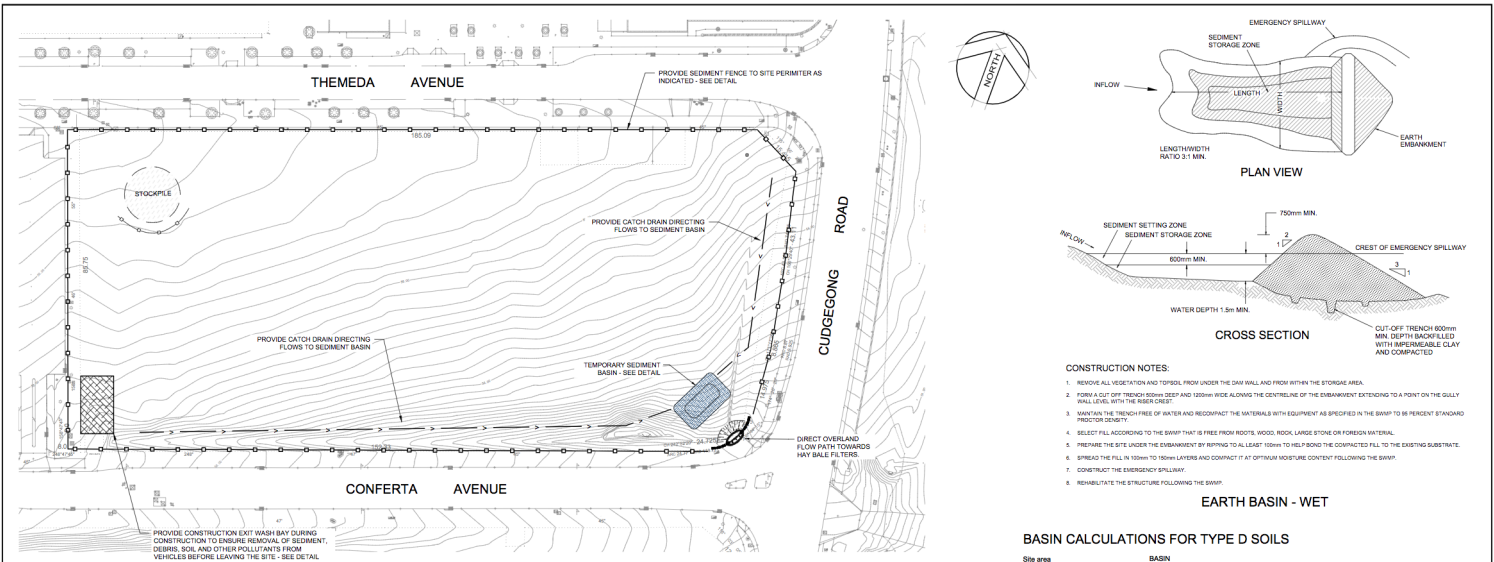
ENGINEERING | PLANNING | PROJECT MANAGEMENT | SURVEYING | CERTIFICATION

brs.com.au

Revision A
Date 26/07/2021
Project No. SY190226-02



AS/NZS 2613:04 047:042 © 2020



EROSION AND SEDIMENTATION CONTROL NOTES

- PRIOR TO THE COMMENCEMENT OF SITE DISTURBANCE, THE CONTRACTOR SHALL ESTABLISH ALL NECESSARY EROSION AND SEDIMENTATION CONTROL MEASURES IN ACCORDANCE WITH THIS PLAN, COUNCIL'S 'SOIL WORKS SPECIFICATION, PART 2 CONSTRUCTION', AND THE NEW DEPARTMENT OF HOUSING PUBLICATION 'MANAGING URBAN STORMWATER - SOILS AND CONSTRUCTION'.
- THE LOCATION OF EROSION AND SEDIMENTATION CONTROL DEVICES SHOWN ON THIS PLAN ARE INDICATIVE ONLY AND SHOULD BE ADJUSTED TO SUIT SITE CONDITIONS.
- WHERE WORKS ARE DELAYED OR IN ABeyANCE AND DISTURBED AREAS ARE LIKELY TO BE EXPOSED FOR A PERIOD OF TWO MONTHS OR MORE, TEMPORARY REHABILITATION WORKS SHALL BE UNDERTAKEN TO PROTECT THE SITE.
- ALL DISTURBED AREAS SHALL BE TOPDRESSED, SEEDED AND MULCHED WITHIN 20 DAYS OF THE COMPLETION OF THE WORKS.
- ALL AREAS WITH SLOPES STEEPER THAN 1:2 (1 H: 2 V) SHALL BE STRIPPED, MULCHED IN CONJUNCTION WITH SEEDING, OR TURFED.
- SILT BARRIERS LOCATED AROUND KERB INLET AND ROAD PITS SHALL BE REINSTATED FOLLOWING ROAD PAVING WORKS IF IT IS LIKELY THAT UNDISTURBED AREAS WILL STILL DRAIN TO THE PIT.
- SANDBAGS SHALL BE PLACED ACROSS THE END OF ROAD CONSTRUCTION AT THE COMPLETION OF EACH DAYS WORK TO PREVENT EROSION OF THE CONSTRUCTED MATERIAL.
- THE CONTRACTOR SHALL CONDUCT WEEKLY INSPECTIONS OF THE SITE TO ENSURE THAT ALL DEVICES AND REHABILITATION AREAS HAVE BEEN ADEQUATELY MAINTAINED. THE CONTRACTOR SHALL ALSO KEEP A LOG BOOK DETAILING SUCH INSPECTIONS, AND RECORDING RAINFALL EVENTS AND OTHER RELEVANT EVENTS.
- TOPSOIL SHALL BE STOCKPILED IN THE LOCATIONS SHOWN ON THIS PLAN OR AS DIRECTED BY COUNCIL'S ENGINEER, WHERE IT IS LIKELY THAT STOCKPILES WILL REMAIN IN PLACE FOR A PERIOD EXCEEDING 4 WEEKS. THEN THE STOCKPILE SHALL BE ESTABLISHED BY SEEDING OR EQUIVALENT METHOD.
- ALL REVEGETATION WORKS ARE TO BE MAINTAINED, INCLUDING WATERING AND MOWING WHERE NECESSARY UNTIL THE COMPLETION OF THE MAINTENANCE PERIOD.
- THE MOVEMENT OF VEHICULAR TRAFFIC ON THE SITE SHALL BE CONFINED TO DESIGNATED AREAS DURING CONSTRUCTION WORKS. VEHICULAR ACCESS SHALL BE DENIED TO AREAS TO BE LEFT UNDISTURBED.
- SITE ACCESS SHALL BE LIMITED TO THE LOCATIONS SHOWN ON THIS PLAN. SHAKE-DOWN AREAS SHALL BE CONSTRUCTED AS SHOWN.
- DURING CONSTRUCTION WORKS, DUST CONTROL MEASURES SHALL BE IMPLEMENTED TO MINIMIZE THE AMOUNT OF DUST GENERATED FROM THE SITE. THESE MEASURES TO BE IMPLEMENTED TO COUNCIL'S SATISFACTION.
- MAINTENANCE AND CLEANING OF CONSTRUCTION PLANT SHALL BE CARRIED OUT IN AN AREA WHERE RUNOFF CAN BE CONTAINED AND APPROPRIATELY TREATED AND DISPOSED OF.
- ALL EROSION AND SEDIMENTATION CONTROL DEVICES SHALL REMAIN IN PLACE UNTIL ALL DISTURBED AREAS HAVE ADEQUATELY REGENERATED. THIS STAGE SHALL BE DETERMINED BY THE CERTIFIER.



STAGE 1 SITE SETUP AND EARTHWORKS STRIPPING

- PRIOR TO ANY WORKS BEING UNDERTAKEN, THE SOIL AND WATER MANAGEMENT MEASURES ARE TO BE INSTALLED.
- A CATCH DRAIN AND SILT FENCE ARE TO BE PLACED AROUND THE PERIMETER OF THE LOW SIDE OF THE SITE.
- THE SITE IS TO HAVE A SINGLE POINT OF ACCESS AWAY FROM THE SEDIMENT BASIN.
- FENCING IS TO BE ERRECTED ON THE HIGH SIDE OF THE SITE TO PREVENT ACCESS.
- ALL RUNOFF FROM DISTURBED AREAS IS TO BE DIVERTED TO A CENTRAL LOW POINT.
- THE LOW POINT (WHICH IS TO STAY IN THE GENERAL LOCATION FOR THE DURATION OF THE EARTHWORKS OPERATIONS) IS TO A SEDIMENT BASIN.
- THE SEDIMENT BASIN IS TO BE TREATED IN ACCORDANCE WITH THE BLUE BOOK AND WATER ONLY PUMPED OUT WHEN THE SEDIMENT CONTENT IS BELOW 50mg/l.
- A WASH-DOWN BAY IS TO BE SET UP TO WASH-DOWN SILT LADEEN TYPES FROM VEHICLES PRIOR TO LEAVING THE SITE.

BASIN CALCULATIONS FOR TYPE D SOILS

Site area	BASIN
Total catchment area (ha)	1.71
Design catchment area (ha)	1.024
Established catchment area (ha)	1.024

Soil Analysis	
Soil description	1
Soil Texture Group	Typical

Rainfall data	
Design rainfall depth (days)	6
Design rainfall depth (percentage)	70
1-day, 100-year return event	130
Rainfall intensity 2-year, 6-hour storm	12.1
Rainfall intensity (probability)	2.000

Total Basin Volume					
Site	Cv	"R" index "y" value (mm)	"Total catchment area (ha)	"Settling zone volume (m³)	"Total basin volume (m³)"
A	0.39	19.0000	1.0240	120.3384	66
					180.5076

SEDIMENTATION BASIN NOTES

SEDIMENTATION BASINS SHOULD BE DESIGNED BASED ON RECOMMENDATIONS OF 'SOILS AND CONSTRUCTION, MANAGING URBAN STORMWATER' TO COLLECT RUNOFF FROM EXTREME RAINFALL EVENTS. COLLECTED RUNOFF IS TO BE STORED BY A QUALIFIED LABORATORY FOR COAGULATING RATES OF ALUM OR GYPSUM TO ENSURE COAGULATION OF SEDIMENTS PRIOR TO WATER BEING DISCHARGED TO COUNCIL STORMWATER SYSTEM.

EACH BASIN IS TO HAVE A MARKER PLACED AT THE TOP LEVEL OF THE STORAGE ZONE TO INDICATE WHEN SEDIMENT IS TO BE REMOVED. REMOVED SEDIMENT IS TO BE CLASSIFIED AND DEPOSITED PRIOR TO REMOVAL FROM SITE.

ALLOWANCE IS TO BE MADE DURING BENCHING OF SITE TO ENSURE RUNOFF IS DIRECTED TO SEDIMENTATION BASINS.

SEDIMENT BASINS SHOULD BE DRAINAGED AND PUMPED OUT WITHIN THE TIME PERIOD ADOPTED IN THE DESIGN (5 DAYS IN MOST CASES, BUT IN THE RANGE OF 2-10 DAYS AS SITE CONDITIONS ALLOW) FOLLOWING RAINFALL.

ALL WATERS CAPTURED IN SEDIMENT BASINS MUST BE TREATED WITH AN APPROVED FLOCCULATING AGENT. THIS TREATMENT SHOULD ENSURE THAT DISCHARGES FROM SUCH BASINS CONTAIN NO MORE THAN 50 MILLIGRAMS PER LITRE OF NON-FILTERABLE RESIDUES.

SUITABLE ALL-WEATHER ACCESS MUST BE PROVIDED TO ALL SEDIMENT BASINS TO ENSURE CLEARING AND MAINTENANCE PROGRAMS WILL NOT BE COMPROMISED BY INCLEMENT CONDITIONS.

