

NOTES

- EARTHWORKS DRAWINGS ARE TO BE READ IN CONJUNCTION WITH DRAWING C001, EROSION AND SEDIMENT CONTROL LAYOUT PLANS AND EROSION AND SEDIMENT CONTROL NOTES AND DETAILS.
- ALL EARTHWORKS TO BE CARRIED OUT UNDER 'LEVEL ONE' GEOTECHNICAL CONTROL IN ACCORDANCE WITH LOCAL AUTHORITIES AND AS3798.
- EXCESS CUT TO BE STOCKPILED IN THE LOCATION SHOWN OR
- ALL BATTERS ARE 1 IN 4 UNLESS SHOWN OTHERWISE.

TESTING

THE SUPERINTENDENT MAY ORDER ADDITIONAL TESTS. REFER TO THE LOCAL AUTHORITIES SPECIFICATION FOR STANDARDS OF COMPACTION AND MATERIAL STANDARDS.

EARTHWORKS TESTING

1. COMPACTION TESTS

COMPACTION 12313	
LOCATION	AREA PER TEST
FINISHED LEVEL OR ROAD SUBGRADE (IN CUT OR FILL)	
LOWEST TWO LEVELS OF EMBANKMENT (PER LAYER)	REFER TO THE LOCAL AUTHORITY
OTHER LAYERS OF EMBANKMENT (PER LAYER)	SPECIFICATION
PREPARED NATURAL GROUND UNDER EMBANKMENT	

- QUALITY TESTS QUALITY TESTS OF IMPORTED MATERIAL ARE REQUIRED AS SET
- OUT BY LOCAL AUTHORITY.
 SUBGRADE TESTS THE NUMBER AND LOCATION OF PAVEMENT SUBGRADE TESTS SHALL BE AS DETERMINED BY THE SUPERINTENDENT WHO SHALL RECOMMEND CBR VALUES TO BE USED IN ROAD PAVEMENT DESIGN. THE NUMBER AND TYPES OF CBR TESTS SHALL BE DETERMINED BY THE SOIL STESTING CONSULTANT TO BEST REPRESENT THE CONDITION OF THE SUBGRADE EXPECTED IN SERVICE.

DUST

- NO VISIBLE DUST EMISSIONS MUST OCCUR AT THE BOUNDARIES OF THE SITE DURING EARTHWORKS AND CONSTRUCTION ACTIVITIES ON THE SITE
- THE CONTRACTOR TO PROVIDE A WATER TRUCK AS REQUIRED TO ELIMINATE THE DUST PROBLEM CAUSED BY SITE TRAFFIC.

CONDUITS

DATE REV DESCRIPTION

THE CONTRACTOR IS TO CONFIRM THE LOCATION OF SERVICE CONDUITS WITH THE SUPERINTENDENT PRIOR TO LAYING.

FILL MANAGEMENT

- ALL FILL MATERIAL WILL BE PLACED IN ACCORDANCE WITH THE APPROVED SPECIFICATION.
- THE FILL MATERIAL WILL COMPRISE ONLY OF NATURAL EARTH AND ROCK AND SHALL BE FREE OF ALL CONTAMINATES, NOXIOUS, HAZARDOUS, DELETERIOUS AND ORGANIC MATERIAL. ALL SITE PREPARATION WORK SHOULD GENERALLY BE CARRIED
- OUT IN ACCORDANCE WITH AS3798 'GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS'.
- THE SITE SHOULD BE STRIPPED OF ANY TOPSOIL FROM CUT AND FILL AREAS, ROAD ALIGNMENTS AND CARPARKING AREAS, AND STOCKPILED FOR LATER USE.
- PRIOR TO THE PLACEMENT OF ANY STRUCTURAL FILL THE SITE SHOULD BE PROOF ROLLED USING A MINIMUM 10 TONNE (STATIC WEIGHT) PADFOOT ROLLER. ANY LOOSE OR SOFT AREAS SHOULD BE REMOVED AND RECOMPACTED OR REPLACED USING A COMPACTED SELECT FILL.
- DEPRESSIONS FORMED BY THE REMOVAL OR VEGETATION, EXISTING STRUCTURES, UNDERGROUND SERVICES ETC, SHOULD HAVE ALL DISTURBED SOIL CLEANED OUT AND BE BACKFILLED WITH COMPACTED SELECT FILL MATERIAL.
- ANY STRUCTURAL CLAY FILL SHOULD BE PLACED IN LOOSE LAYERS NOT GREATER THAN 200mm THICK AT A MOISTURE CONTENT IN THE RANGE -2% TO +3% OF THE STANDARD OPTIMUM MOISTURE CONTENT, AND BE COMPACTED TO A MINIMUM DRY DENSITY RATIO OF 98% UNDER STANDARD COMPACTION AS PER (AS1289 5.1.1/5.2.1). CLAY FILL SHOULD BE COMPACTED USING A MINIMUM 10 TONNE VIBRATING PADFOOT ROLLER, MEASURES SHOULD BE ADOPTED TO ENSURE THAT CLAY FILL MATERIAL IS NOT ALLOWED TO DRY OUT PRIOR TO THE PLACEMENT OF SUCCEEDING LAYERS OF FILL AND FINAL COVERING WITH BUILDING SLABS AND ROAD PAVEMENTS.

- ANY STRUCTURAL, FREE DRAINING SAND FILL SHOULD BE PLACED IN LOOSE LAYERS NOT GREATER THAN 200mm THICK. FLOODED, IF NECESSARY, AND COMPACTED TO A MINIMUM DENSITY INDEX OF 70% AS PER AS1289 5.5.1 LISING A STATIC SMOOTH ROLLER DRUM NOT LESS THAN 10 TONNE IN STATIC
- THE PLACEMENT OF ALL STRUCTURAL FILL TO BE INSPECTED, TESTED AND CERTIFIED BY A GEOTECHNICAL ENGINEER TO A LEVEL 1 REQUIREMENT DURING THE EARTHWORKS OPERATIONS TO ENSURE THAT ALL FILL IS PLACED IN A 'CONTROLLED MANNER'. IN ACCORDANCE WITH AS3798 'GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS'.
- THE PLACEMENT OF FILL TO BE EXECUTED SUCH THAT TO BE FREE DRAINING AT ALL TIMES AND NOT TO BE A NUISANCE OR PONDING TO ADJOINING PROPERTY OR ROADS.

 NO DEMOLITION MATERIAL TO BE USED AS FILL MATERIAL.
- WHERE UNSUITABLE MATERIAL IN AREAS OF FILL IS ENCOUNTERED, THIS WILL BE TREATED AS SET OUT IN THE EARTHWORK SPECIFICATION.
- ALL VEHICLES EXITING FROM THE SITE TO BE CLEAN TO PREVENT MATERIAL BEING TRACKED OR DEPOSITED ON THE ADJOINING PUBLIC ROADS, REFER ENVIRONMENTAL MANAGEMENT NOTES ON DRAWING C701.
- ACCESS TRACKS THROUGH THE SITE WILL BE LIMITED TO THOSE DETERMINED BY THE SUPERINTENDENT AND THE CONTRACTOR PRIOR TO ANY WORK COMMENCING.



L7BNE-0071

C210

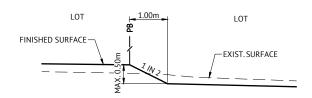
APPROVAL ISSUE - NOT FOR CONSTRUCTION



BRISBANE OFFICE LEVEL 1, 100 BRUNSWICK STREET PO BOX 361 FORTITUDE VALLEY, QLD 4006 PH: (07) 3253 2222

DESIGNED		SCALE
E.LONGMIRE		
CHECKED		
R.BARGER		
PROJECT MANAGER		
T.ZETTL		
ENGINEERING CERTIFICATION		
JOSHUA STONE	RPEQ 15187	ORIGINAL SHEET SIZE A1

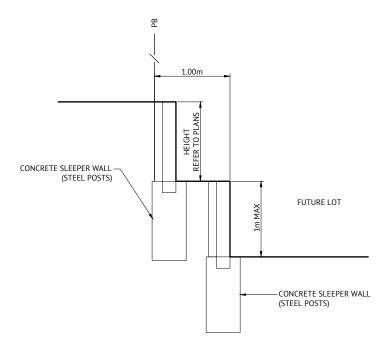
MIRVAC QUEENSLAND PTY LTD PROPOSED DEVELOPMENT - STAGE 1 (11 LOTS) LOCATION 420 SOUTH PINE ROAD - EVERTON PARK EBULK EARTHWORKS NOTES AND DETAILS - SHEET 1



TYPICAL EARTHWORKS BATTER

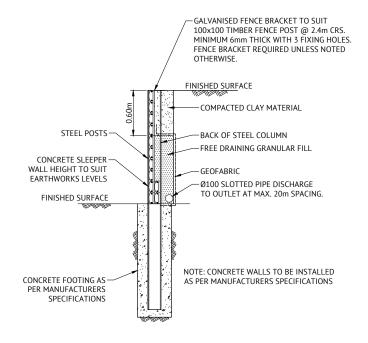
BETWEEN LOTS

SCALE 1:50



TYPICAL TERRACED CONCRETE SLEEPER RETAINING WALL

SCALE 1:25



TYPICAL CONCRETE SLEEPER RETAINING WALL DETAIL - STEEL POSTS



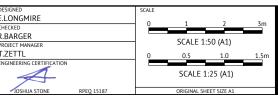
NOTES

- TO BE READ IN CONJUNCTION WITH DRAWING C001 AND EARTHWORKS DRAWINGS.
- CONTRACTOR TO PROVIDE STRUCTURAL CERTIFICATION FOR RETAINING WALLS DESIGN AND CONSTRUCTION.
- RETAINING WALLS SHALL BE DESIGNED TO ENSURE THEIR FOUNDATIONS DO NOT DIRECTLY LOAD ANY PROPOSED OR EXISTING SERVICES. WHERE PROPOSED OR EXISTING SERVICES LIE WITHIN THE RETAINING WALLS ZONE OF INFLUENCE THE CONTRACTOR SHALL PROVIDE BRIDGING ELEMENTS TO ENSURE THE SERVICES ARE UNLOADED.
- CONTRACTOR SHALL REFER TO ALL LATEST SERVICE DRAWINGS TO ENSURE PROVISIONS ARE MADE FOR ALL PROPERTY SERVICE CONNECTIONS UNDER RETAINING
- FINAL RETAINING WALL TYPES TO BE CONFIRMED BY DEVELOPER PRIOR TO CONSTRUCTION.

APPROVAL ISSUE - NOT FOR CONSTRUCTION DATE REV DESCRIPTION



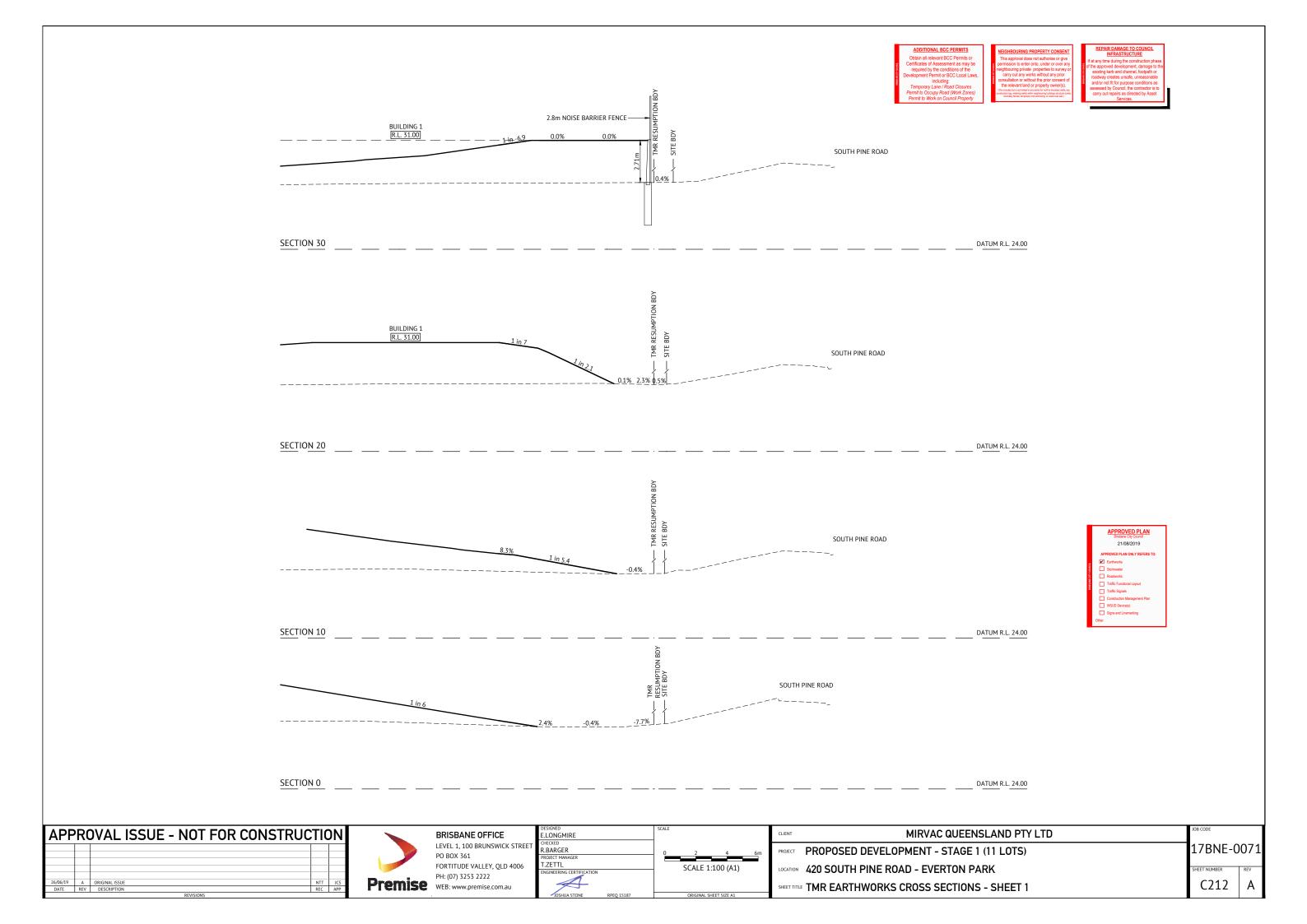
BRISBANE OFFICE LEVEL 1, 100 BRUNSWICK STREE PO BOX 361 FORTITUDE VALLEY, QLD 4006 PH: (07) 3253 2222 Premise WEB: www.premise.com.au



MIRVAC QUEENSLAND PTY LTD PROPOSED DEVELOPMENT - STAGE 1 (11 LOTS) LOCATION 420 SOUTH PINE ROAD - EVERTON PARK SHEET TITLE BULK EARTHWORKS NOTES AND DETAILS - SHEET 2

17BNE-0071

C211



PROPOSED DEVELOPMENT - STAGE 2, 3A & 4A (54 LOTS) 420 SOUTH PINE ROAD - EVERTON PARK FOR MIRVAC QUEENSLAND PTY LTD

GENERAL NOTES

- ALL DIMENSIONS GIVEN ON THESE DRAWINGS ARE IN METRES LINI ESS NOTED OTHERWISE
- ALL NEW WORK AND MATERIALS SHALL COMPLY WITH THE PROJECT DRAWING SPECIFICATION AND CURRENT RELEVANT COUNCIL STANDARDS AND SPECIFICATIONS.
- ALL WORK SHALL BE JOINED NEATLY TO EXISTING CONSTRUCTION
- THE CONTRACTOR IS TO LOCATE IDENTIFY AND ESTABLISH THE CONNECTIVITY OF ALL EXISTING SERVICES WITHIN THE LIMITS OF PROPOSED WORKS AND CONFIRM THIS INFORMATION WITH THE ENGINEER PRIOR TO THE COMMENCEMENT
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL MEASURING DEVICES, SAFETY EOUIPMENT AND MACHINERY REQUIRED TO CARRY OUT INSPECTIONS/MEETINGS AS SPECIFIED OR REQUESTED BY THE ENGINEER.
- PROOF ROLLING NOMINATED SHALL BE CARRIED OUT USING A SINGLE AXLE HIGHWAY TRUCK WITH A REAR AXI F LOAD NOT LESS THAN 10 TONNES AND TYRES INFLATED TO 550kPa OR APPROVED FOUIVALENT, FOUIPMENT ROLLING IS TO BE PROVIDED BY THE CONTRACTOR
- THESE NOTES SHALL APPLY TO ALL PORTIONS
- THE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE SPECIFICATIONS. ANY POINT OF CONFLICT WILL BE RESOLVED BY THE

NOISE

ALL PLANT AND EQUIPMENT SHALL BE CONTROLLED TO MINIMISE NOISE EMISSION IN ACCORDANCE WITH AS2436 (GUIDE TO NOISE CONTROL ON CONSTRUCTION, MAINTENANCE SHOULD BE IN ACCORDANCE WITH LOCAL AUTHORITY REQUIREMENTS. WHERE NOT SPECIFIED THE HOURS SHALL BE-

MONDAY - SATURDAY 7:00am to 6:00nm SUNDAY OR PUBLIC HOLIDAY NO WORK PERMITTED

PRE-CONSTRUCTION & APPROVALS

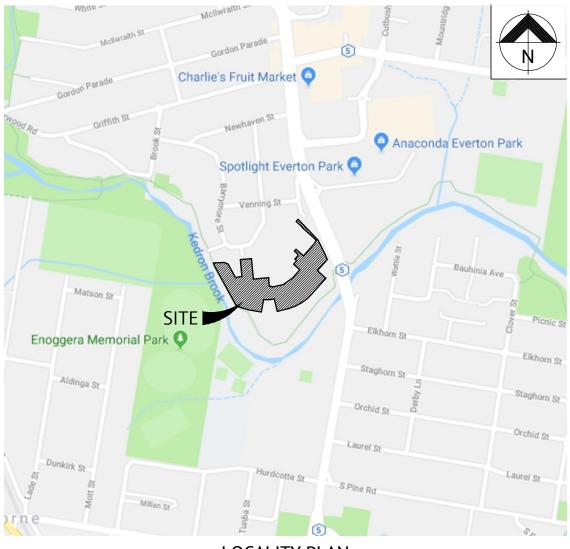
- NO LOCATING/ POTHOLING OF EXISTING SERVICES HAS BEEN CARRIED OUT. THE CONTRACTOR IS TO DETERMINE THE LOCATION AND DEPTH OF ALL EXISTING SERVICES WHICH AFFECT THE WORKS AND REPORT ANY POTENTIAL CLASHES TO THE SUPERINTENDENT PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION WORKS.
- THE CONTRACTOR IS RESPONSIBLE FOR ARRANGING WITH THE APPROPRIATE AUTHORITY FOR LOCATING EXISTING SERVICES AND FOR ANY MODIFICATIONS TO EXISTING SERVICES REQUIRED AS A RESULT OF THE
- THE CONTRACTOR IS RESPONSIBLE TO PROTECT ALL EXISTING SERVICES FROM DAMAGE.
- ANY WORKS DAMAGED AS A RESULT OF CONSTRUCTION ARE TO BE REINSTATED TO RELEVANT AUTHORITY'S REQUIREMENTS AT THE CONTRACTORS COST.
- FINISHED SURFACE LEVELS ARE TO BE GRADED UNIFORMLY BETWEEN LEVELS INDICATED ON

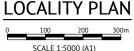
WORKPLACE HEALTH AND SAFETY

- 1. THE CONTRACTOR SHALL BE THE PRINCIPAL CONTRACTOR AS DESIGNATED BY THE WORK HEALTH AND SAFFTY ACT (2011)
- THE CONTRACTOR SHALL PREPARE AND IMPLEMENT A WORKPLACE HEALTH AND SAFETY PLAN AS REQUIRED BY THE WORK HEALTH AND SAFETY ACT (2011).

SETOUT NOTES

- THE LEVEL DATUM FOR WORKS IS A.H.D. (AUSTRALIAN HEIGHT DATUM).
- SETOUT SHALL BE MADE BY DIGITAL
- ENGINEERING DATA AND CONFIRMED ONSITE PRIOR TO CONSTRUCTION BY A SURVEYOR







SHEET TITLE SHEET NO. COVER SHEET LOCALITY PLAN & DRAWING SCHEDULE SAFETY IN DESIGN SHEET STAGING PLAN C003 ROADWORKS AND DRAINAGE LAYOUT PLAN C100 BULK EARTHWORKS LAYOUT PLAN C200 BULK EARTHWORKS AND FINISHED SURFACE SECTIONS C201 C210 BULK EARTHWORKS NOTES AND DETAILS C300 ROADWORKS NOTES AND DETAILS ROAD 1 LONGITUDINAL SECTION C310 C311 ROAD 1. DRIVEWAY 2 & DRIVEWAY 3 LONG SECTIONS C312 ROAD 1 CROSS SECTIONS - SHEET 1 C313 **ROAD 1 CROSS SECTIONS - SHEET 2** C314 ROAD 1, DRIVEWAY 2 & DRIVEWAY 3 CROSS SECTIONS C320 INTERSECTION DETAILS PLAN - SHEET 1 C321 INTERSECTION DETAILS PLAN - SHEET 2 C330 PAVEMENT MARKINGS AND SIGNAGE LAYOUT C400 STORMWATER DRAINAGE CATCHMENT PLAN C410 STORMWATER DRAINAGE LONG SECTIONS - SHEET 1 C411 STORMWATER DRAINAGE LONG SECTIONS - SHEET 2 C412 STORMWATER DRAINAGE LONG SECTIONS - SHEET 3 C413 STORMWATER DRAINAGE LONG SECTIONS - SHEET 4 C420 STORMWATER DRAINAGE NOTES AND DETAILS C430 STORMWATER DRAINAGE STRUCTURE DETAILS - SHEET 1 C431 STORMWATER DRAINAGE STRUCTURE DETAILS - SHEET 2 C440 STORMWATER CALCULATIONS 39% AEP STORM - SHEET 1 C441 STORMWATER CALCULATIONS 39% AEP STORM - SHEET 2 STORMWATER CALCULATIONS 2% AEP STORM - SHEET 1 C443 STORMWATER CALCULATIONS 2% AEP STORM - SHEET 2 C500 SEWERAGE LOCALITY PLAN & NOTES C510 SEWERAGE LAYOUT PLAN C520 SEWERAGE LONG SECTION C600 WATER RETICULATION LOCALITY PLAN & NOTES C610 WATER RETICULATION LAYOUT PLAN AND DETAILS C700 EROSION AND SEDIMENT CONTROL LAYOUT - CLEAR AND GRUB PHASE C710 EROSION AND SEDIMENT CONTROL LAYOUT - CLEAR AND GRUB PHASE C720 EROSION AND SEDIMENT CONTROL LAYOUT - STABILISATION PHASE C730 FROSION AND SEDIMENT CONTROL NOTES AND DETAILS - SHEET 1 C731 FROSION AND SEDIMENT CONTROL NOTES AND DETAILS - SHEET 2 C732 FROSION AND SEDIMENT CONTROL NOTES AND DETAILS - SHEET 3 C733 FROSION AND SEDIMENT CONTROL NOTES AND DETAILS - SHEET 4

EROSION AND SEDIMENT CONTROL NOTES AND DETAILS - SHEET 5

C734

SHEET LIST TABLE

SURVEY ORIGIN

PM106537 29.906m A.H.D

SITE AREA

REAL PROPERTY DESCRIPTION

LOT 100 on SP 155725

INDEMNITY - EXISTING SERVICES

NOT WITHSTANDING THAT EXISTING SERVICES MAY OR MAY NOT BE SHOWN ON THESE DRAWINGS, NO RESPONSIBILITY IS TAKEN BY THE ENGINEER OR THE PRINCIPAL FOR THIS INFORMATION WHICH HAS BEEN SUPPLIED BY OTHERS. TH DETAILS ARE PROVIDED FOR INFORMATION ONLY, THE CONTRACTOR SHALL ASCERTAIN THE POSITION OF ALL UNDERGROUND SERVICES PRIOR TO EXCAVATION AND DAMAGES CAUSED AS A RESULT OF THE WORKS

Premi	5e

ENGINEERING CERTIFICATION	DATE	JOB CODE	SHEET NUMBER	REVISION
		17BNE-0071	C001	Α
JOSHUA STONE	RPEQ 15187			

DESIGN HAZARD SCHEDULE

ITEM	DESIGN HAZARD	POTENTIAL HAZARD	RISK	ELIMINATION / MINIMISATION OF HAZARD / RISK	RESIDUAL RISK	
D1	URBAN LAYOUT HAZARD	THE URBAN LAYOUT IS DESIGNED AROUND A PARTICULAR HAZARD: FLOODING OF KEDRON BROOK	HIGH	THE HAZARD HAS BEEN REDUCED/ELIMINATED BY : PROVIDING LOT DESIGN HIGHER THAN Q100 FLOOD LEVEL IN ACCORDANCE WITH BCC FLOOD PLANNING POLICIES AND STANDARDS	LOW	
D2	EMBANKMENT AND SLOPE STABILITY HAZARD	ALLOTMENTS HAVE BEEN BENCHED FOR HOUSE PADS WHICH HAVE CREATED STEEP EMBANKMENTS WHICH WILL HAVE A LONG TERM SLOPE STABILITY ISSUE AND THE EMBANKMENTS ARE GREATER THAN 1M HIGH.	HIGH	A RETAINING WALL IS TO BE CONSTRUCTED ALONG THE BOUNDARY TO ELIMINATE THE UNSTABLE SLOPE HAZARD AND THE CONTRACTOR IS TO BE ADVISED TO MITIGATE THE HEIGHT HAZARD DURING CONSTRUCTION.	MODERATE	
D3	EXISTING UNDERGROUND / OVERHEAD SERVICES HAZARD	EXISTING UNDERGROUND AND/OR OVERHEAD SERVICES HAZARD EXIST ON SITE AND NEEDS TO BE REMOVED AND RELOCATED.	HIGH	THE DESIGN OF THE STRUCTURE HAS INCORPORATED THE RELOCATION OF THESE EXISTING SERVICES AND THE CONTRACTOR IS TO BE MADE AWARE OF THESE EXISTING SERVICES AND TAKE ALL ACTIONS NECESSARY TO MITIGATE THIS HAZARD DURING CONSTRUCTION.	MODERATE	
D4	DEEP EXCAVATION HAZARD	DEEP EXCAVATION IS REQUIRED TO INSTALL SEWER TO SERVICE STRUCTURE.	HIGH	THE DEEP EXCAVATION HAZARD CANNOT BE AVOIDED AND THE CONTRACTOR WILL NEED TO TAKE ALL ACTIONS NECESSARY TO ADDRESS THIS HAZARD DURING CONSTRUCTION.	MODERATE	
D5	EXISTING STRUCTURE HAZARD	AN EXISTING STRUCTURE IS LOCATED IN CLOSE PROXIMITY TO THE NEW STRUCTURE .	MODERATE	THE DESIGN OF THE NEW STRUCTURE HAS ENSURED THE EXISTING STRUCTURE HAZARD IS NOT COMPROMISED BY - MAINTAINING SUFFICIENT DISTANCE - RELOCATING EXISTING SEWER MAINS TO NEW ALIGNMENT IN LOT 32 VERGE	LOW	
D6	EXISTING WETLAND	THE TOP OF BANK OF EXISTING WETLAND HAS BEEN LOCATED BY SURVEY AND THERE IS NO ACCESS OR CLEARING AREA ALLOWED WITHIN THIS AREA.	MODERATE	THE SURVEYED TOP OF BANK IS INDICATED ON THE DRAWINGS AND THE STRUCTURE HAS BEEN DESIGNED TO AVOID THESE AREAS UNLESS ABSOLUTELY NECESSARY FOR PUBLIC INFRASTRUCTURE. THE CONTRACTOR WILL NEED TO TAKE ALL NECESSARY MEASURES TO ENSURE NO CLEARING OR MACHINERY ENTERS BEYOND THE EXISTING WETLAND AREA EXTENT.	LOW	

CONSTRUCTION HAZARD SCHEDULE

ITEM	POTENTIAL HAZARD	POSSIBLE PREVENTATIVE ACTION
C1	DEEP EXCAVATION HAZARD	ALL STEPS MUST BE TAKEN TO OBTAIN CURRENT UNDERGROUND SERVICES INFORMATION BEFORE EXCAVATION WORKS COMMENCE. EXCAVATION WORK MUST BE UNDERTAKEN BY APPROPRIATELY EXPERIENCED AND QUALIFIED PERSONNEL. EXCAVATIONS SHALL BE ADEQUATELY SHORED AND APPROPRIATE BARRICADES AND SIGNAGE ERECTED, IF REQUIRED.
C2	OVERHEAD POWER HAZARD	WARNING SIGNS AND MARKERS SHALL BE ERECTED ADVISING OF THE PRESENCE OF LIVE OVERHEAD CABLES. A REPRESENTATIVE OF THE SUPPLY AUTHORITY SHALL REMAIN ON SITE DURING EARTHWORKS AND ANY OTHER HIGH RISK WORKS, IF REQUIRED.
C3	UNDERGROUND ELECTRICAL, TELECOMMUNICATION, GAS AND WATER MAIN HAZARD	WARNING SIGNS AND MARKERS SHALL BE ERECTED ADVISING OF THE PRESENCE OF THE EXISTING SERVICE. THE SERVICE SHALL BE IDENTIFIED AND MARKED BY THE SUPPLY AUTHORITY PRIOR TO THE COMMENCEMENT OF EXCAVATION. A REPRESENTATIVE OF THE SUPPLY AUTHORITY SHALL REMAIN ON SITE DURING THE EXCAVATION WORK, IF REQUIRED.
C4	PEDESTRIAN ACCESS HAZARD	WORK WITHIN OR ADJACENT TO AREAS WHICH THE PUBLIC REQUIRES PEDESTRIAN ACCESS MUST HAVE APPROPRIATE BARRICADES AND SIGNAGE ERECTED AT ALL TIMES.
C5	POTENTIAL VEHICLE HAZARD	SITE PERSONNEL SHALL BE ADVISED OF THE POTENTIAL HAZARDS AND THE APPROPRIATE PROCEDURES FOR WORKING ADJACENT TO OPERATING PUBLIC ROADS, APPROPRIATE SAFETY CLOTHING SHALL BE WORN AND THE REQUIRED SIGNAGE SHALL BE ERECTED. THE WORKS SHALL BE UNDERTAKEN IN A MANNER WHICH DOES NOT COMPROMISE THE SAFETY OF THE VEHICLE OCCUPANTS OR THE SITE PERSONNEL.
C6	DEMOLITION AND CLEARING HAZARD	SUITABLE QUALIFIED AND EXPERIENCED PERSONNEL SHALL BE RESPONSIBLE FOR THE DEMOLITION AND CLEARING WORKS FOR THE PROJECT AT ALL TIMES. THE CONTRACTORS WORK METHOD STATEMENT SHALL ALSO GIVE CONSIDERATION TO FALLING DEBRIS, COLLAPSE AND DANGEROUS AIRBORNE AGENTS.
С7	TRAFFIC MANAGEMENT HAZARD	SUITABLE QUALIFIED AND EXPERIENCED PERSONNEL SHALL BE RESPONSIBLE FOR THE SAFE AND ORDERLY PASSAGE OF VEHICULAR AND PEDESTRIAN TRAFFIC THROUGH THE PROJECT AT ALL TIMES. THE CONTRACTOR SHALL DEVELOP A TRAFFIC MANAGEMENT PLAN (TMP) FOR THE PROJECT TO ESTABLISH APPROPRIATE CONTROLS IN ACCORDANCE WITH THE MANUAL FOR UNIFORM TRAFFIC CONTROL.

DESIGN HAZARD NOTES:

- 1. PREMISE AUSTRALIA PTY LTD (PREMISE), HAVING BEEN COMMISSIONED TO CARRY OUT DETAILED DESIGN AND DOCUMENTATION OF THESE WORKS, CONFIRM THAT THE PREMISE DRAWING SET HAS BEEN INTERNALLY REVIEWED FOR DESIGN SAFETY IN ACCORDANCE WITH SECTION 22 OF THE WORK HEALTH AND SAFETY ACT 2011 QLD.
- 2. THIS REPORT SUMMARISES AN INTERNAL REVIEW OF THE PREMISE DETAILED DESIGN DRAWINGS FOR DESIGN SAFETY.

 3. THIS REPORT IN NO WAY RELIEVES THE PRINCIPAL, CONTRACTOR OR ANY OTHER PARTY OF THEIR OWN OBLIGATIONS AND RESPONSIBILITIES UNDER THE WORK HEALTH AND SAFETY ACT 2011 QLD, INCLUDING (BUT NOT LIMITED TO) CONSULTATION WITH THE DESIGNER UNDER SECTION 294 OF THE ACT, THE PREPARATION OF SATISFACTORY SAFE WORK METHOD STATEMENTS AND DUTIES OF CARE.
- 4. IT IS A REQUIREMENT UNDER SECTION 296 OF THE WORK HEALTH AND SAFETY ACT 2011 QLD, THAT A COPY OF THIS REPORT BE PROVIDED TO THE CONTRACTOR BY THE ENTITY COMMISSIONING THE WORK SHOWN OF THE PREMISE DRAWINGS.
- 5. AS PER THE DEPARTMENT OF JUSTICE AND THE ATTORNEY-GENERAL- WORKPLACE HEALTH AND SAFETY QUEENSLAND, A WRITTEN REPORT IS NOT REQUIRED FOR DESIGNS THAT HAVE TYPICAL FEATURES.

CONSTRUCTION HAZARD NOTES:

- 1. UNDER THE QUEENSLAND WORK HEALTH AND SAFETY ACT 2011, THE WORK HEALTH AND SAFETY REGULATION 2011 AND OTHER LEGISLATION AND GUIDELINES, THE PRINCIPAL CONTRACTOR HAS SPECIFIC OBLIGATIONS IN RELATION TO THE SAFE OPERATION OF THE SITE AND OF THE WORKS. TO ASSIST THE PRINCIPAL CONTRACTOR IN COMPLYING WITH THESE OBLIGATIONS THE PROJECT DESIGNERS HAVE IDENTIFIED BY DRAWING NOTES, AREAS WHERE POTENTIAL HAZARDS MAY ARISE. THESE NOTES OR ADVICE, SHALL NOT NECESSARILY BE CONSIDERED COMPLETE AND ARE BASED UPON THE DESIGNERS' UNDERSTANDING OF THE SAFETY RISKS ASSOCIATED WITH THE WORKS.
- THESE NOTES OR ADVICE SHALL NOT RELIEVE THE PRINCIPAL CONTRACTOR OF ANY OBLIGATION UNDER THE RELEVANT LEGISLATION OR GUIDELINE. THE PRINCIPAL CONTRACTOR SHALL REMAIN RESPONSIBLE FOR THE PREPARATION OF AN APPROPRIATE WORK HEALTH SAFETY MANAGEMENT PLAN AND SAFE WORK METHOD STATEMENTS FOR THE SITE.
 2. PURSUANT TO THE WORK HEALTH AND SAFETY ACT 2011 WE HEREBY ADVISE THAT OUR DESIGN SAFETY REVIEW HAS IDENTIFIED UNUSUAL OR
- ATYPICAL DESIGN FEATURES THAT MAY PRESENT ADDITIONAL HAZARDS OR RISKS DURING THE CONSTRUCTION PHASE AND THESE ARE LISTED IN THE CONSTRUCTION HAZARD SCHEDULE.

CONSEQUENCE TABLE

LEVEL	CONSEQUENCE	COST/TIME
5 - CATASTROPHIC	FATALITY OR MULTIPLE PERSONS ONSITE WITH LIFE THREATENING HEALTH EFFECT OR INABILITY TO CONTINUE	HUGE FINANCIAL OR TIME LOSS
4 - MAJOR	EXTENSIVE INJURIES, OR ONSET OF SEVERE OR LIFE THREATENING HEALTH EFFECT TO SINGLE PERSON ONSITE. MULTIPLE PERSONS WITH ONSET OF IRREVERSIBLE HEALTH EFFECTS. PREMANENT INJURT TO PERSON INSITE.	MAJOR FINANCIAL OR TIME LOSS
3 - MODERATE	MEDICAL TREATMENT REQUIRED. IRREVERSIBLE HEALTH EFFECT TO A SINGLE PERSON. MULTIPLE PERSONS ONSITE WITH REVERSIBLE HEALTH EFFECTS.	HIGH FINANCIAL OR TIME LOSS
2 - MINOR	FIRST AID, SINGLE OR MULTIPLE INJURIES AMONGST PERSONS ONSITE. SINGLE PERSON ONSITE WITH MODERATE SHORT TERM REVERSIBLE HEALTH EFFECTS.	MEDIUM FINANCIAL OR TIME LOSS
1 - INSIGNIFICANT	NO INJURIES. OVER EXPOSURE TO A SINGLE PERSON ONSITE, BUT NO REPORTED HEALTH EFFECTS.	LOW FINANCIAL OR TIME LOSS

LIKELIHOOD TABLE

LEVEL	DESCRIPTION	QUANTIFICATION GUIDE			
A - ALMOST CERTAIN	THE EVENT <u>IS</u> EXPECTED TO OCCUR IN MOST CERTAIN CIRCUMSTANCES	MORE THAN ONCE PER YEAR			
B - LIKELY	THE EVENT <u>WILL</u> PROBABLY OCCUR IN MOST CIRCUMSTANCES	AT LEAST ONCE IN 5 YEARS			
C - POSSIBLE	THE EVEN T SHOULD OCCUR AT SOME TIME	AT LEAST ONCE IN 10 YEARS			
D - UNLIKELY	THE EVENT <u>COULD</u> OCCUR AT SOME TIME	AT LEAST ONCE IN 30 YEARS			
E - RARE	THE EVENT MAY OCCUR IN EXCEPTIONAL CIRCUMSTANCES	LESS THAN ONCE IN 30 YEARS			

RISK EVALUATION TABLE

RISK LEVEL	ACTION REQUIRED	
EXTREME	UNACCEPTABLE RISK. RE-DESIGN REQUIRED. DO NOT PROCEED WITHOUT ADDITIONAL CONTROLS.	
HIGH	UNACCEPTABLE RISK. ADDITIONAL CONTROLS NEEDED. CONSIDER FURTHER REVIEW AND CONSIDER RE-DESIGN	
MODERATE	RISK MAY BE ACCEPTABLE. MANAGEMENT TO DETERMINE ACTIONS REQUIRED	
LOW	ACCEPTABLE. MANAGE RISK THROUGH ROUTINE PROCEDURES AND OTHER ADMINISTRATIVE CONTROLS	

RISK ANALYSIS MATRIX

				CONSEQUENCE		
		1 - INSIGNIFICANT	2 - MINOR	3 - MODERATE	4 - MAJOR	5 - CATASTROPHIC
	A - ALMOST CERTAIN	MODERATE	HIGH	EXTREME	EXTREME	EXTREME
00C	B - LIKELY	MODERATE	HIGH	HIGH	EXTREME	EXTREME
LIHO	C - POSSIBLE	LOW	MODERATE	HIGH	EXTREME	EXTREME
-IKE	D - UNLIKELY	LOW	LOW	MODERATE	HIGH	EXTREME
	E - RARE	LOW	LOW	MODERATE	HIGH	HIGH

APPROVAL ISSUE - NOT FOR CONSTRUCTION				
05/07/19	A	ORIGINAL ISSUE	NTT	JCS
DATE	REV	DESCRIPTION	REC	APP
	REVISIONS			



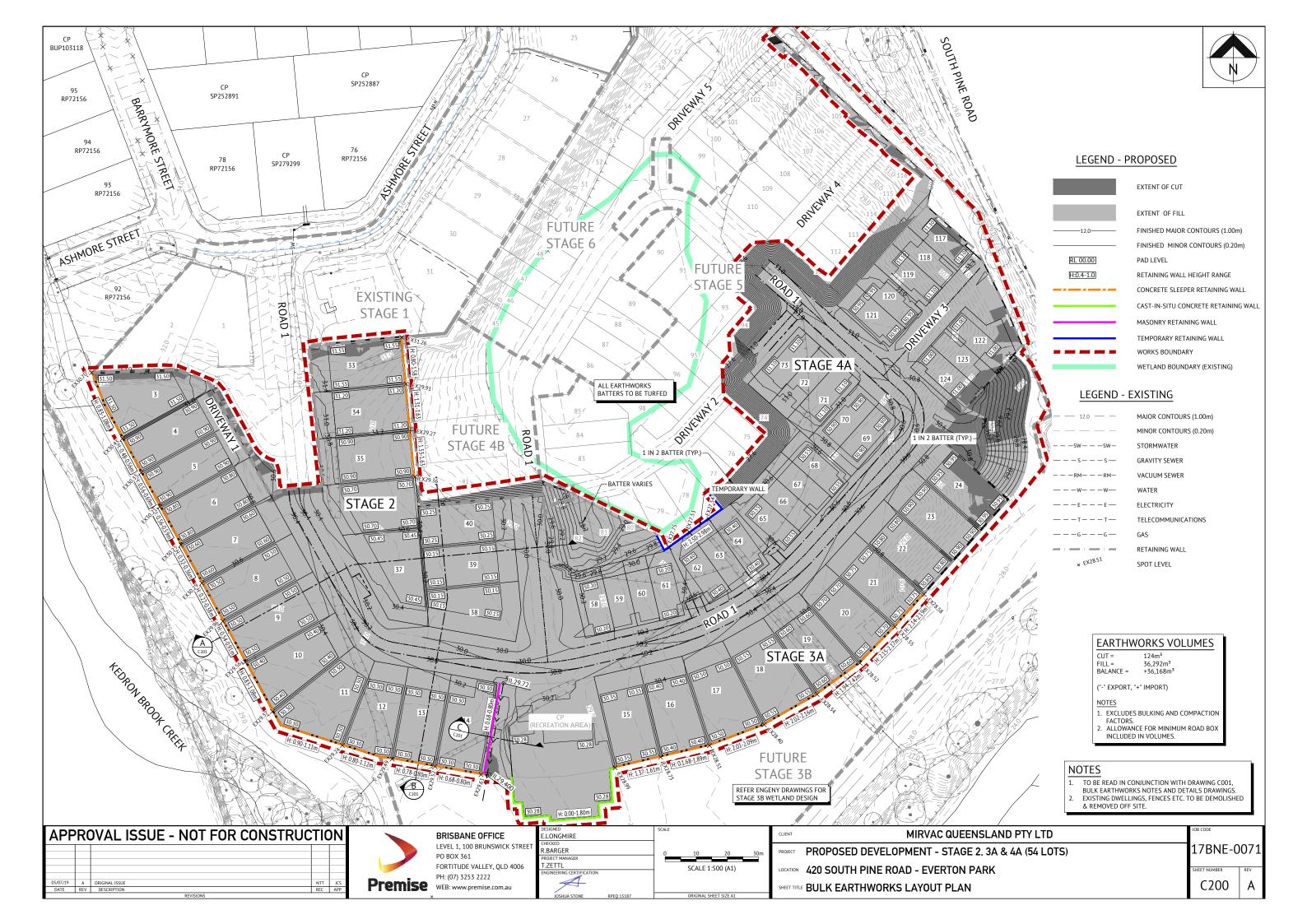
BRISBANE OFFICE LEVEL 1, 100 BRUNSWICK STREET FORTITUDE VALLEY, QLD 4006 PH: (07) 3253 2222

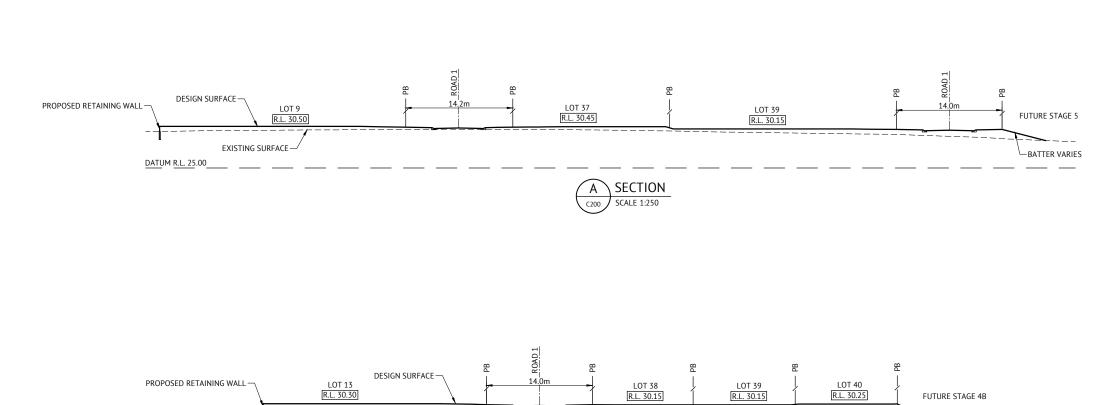
DESIGNED		SCALE
E.LONGMIRE		
CHECKED		
R.BARGER		
PROJECT MANAGER		
T.ZETTL		
ENGINEERING CERTIFICATION		
JOSHUA STONE	RPEQ 15187	ORIGINAL SHEET SIZE A1

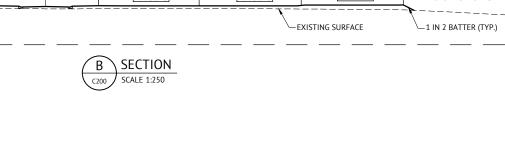
MIRVAC QUEENSLAND PTY LTD PROPOSED DEVELOPMENT - STAGE 2, 3A & 4A (54 LOTS) LOCATION 420 SOUTH PINE ROAD - EVERTON PARK HEET TITLE SAFETY IN DESIGN SHEET

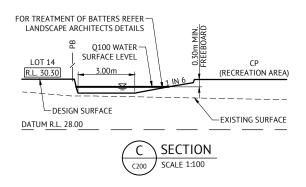
17BNE-0071

C002









APPR	OVAL ISSUE - NOT FOR COI	NSTRUCTIO	N
05/07/19 A	ORIGINAL ISSUE	NTT	JCS
DATE RE	/ DESCRIPTION	REC	APP



<u>DATUM</u> R.<u>L. 25.0</u>0

DESIGNED	SCALE				Г
E.LONGMIRE	_	2	4	6m	ı
CHECKED				OIII	₽
R.BARGER		CCALE 1	100 (41)		ı
PROJECT MANAGER	SCALE 1:100 (A1)				
T.ZETTL	0	5	10	15m	ı
ENGINEERING CERTIFICATION					
\mathcal{A}	SCALE 1:250 (A1)				
JOSHUA STONE RPEO 15187		ORIGINAL SI	HEET SIZE A1		ı
JOSHUA STONE RPEQ 15187		ORIGINAL SI	HEET SIZE A1		

CLIENT	MIRVAC QUEENSLAND PTY LTD	JOB CODE	
PROJECT	PROPOSED DEVELOPMENT - STAGE 2, 3A & 4A (54 LOTS)	17BNE-0	071
LOCATION	420 SOUTH PINE ROAD - EVERTON PARK	SHEET NUMBER	REV
SHEET TITLI	BULK EARTHWORKS AND FINISHED SURFACE SECTIONS	C201	Α

- EARTHWORKS DRAWINGS ARE TO BE READ IN CONJUNCTION WITH DRAWING CO01, EROSION AND SEDIMENT CONTROL LAYOUT PLANS AND EROSION AND SEDIMENT CONTROL NOTES AND DETAILS.
- ALL EARTHWORKS TO BE CARRIED OUT UNDER 'LEVEL ONE' GEOTECHNICAL CONTROL IN ACCORDANCE WITH LOCAL
- EXCESS CUT TO BE STOCKPILED IN THE LOCATION SHOWN OR
- ALL BATTERS ARE 1 IN 4 UNLESS SHOWN OTHERWISE.

TESTING

THE SUPERINTENDENT MAY ORDER ADDITIONAL TESTS. REFER TO THE LOCAL AUTHORITIES SPECIFICATION FOR STANDARDS OF COMPACTION AND MATERIAL STANDARDS.

EARTHWORKS TESTING

COMPACTION TESTS

COMPACTION TESTS						
LOCATION	AREA PER TEST					
FINISHED LEVEL OR ROAD SUBGRADE (IN CUT OR FILL)						
LOWEST TWO LEVELS OF EMBANKMENT (PER LAYER)	REFER TO THE LOCAL AUTHORITY					
OTHER LAYERS OF EMBANKMENT (PER LAYER)	SPECIFICATION					
PREPARED NATURAL GROUND UNDER EMBANKMENT						

QUALITY TESTS QUALITY TESTS OF IMPORTED MATERIAL ARE REQUIRED AS SET OUT BY LOCAL AUTHORITY.
SUBGRADE TESTS

THE NUMBER AND LOCATION OF PAVEMENT SUBGRADE TESTS SHALL BE AS DETERMINED BY THE SUPERINTENDENT WHO SHALL RECOMMEND CBR VALUES TO BE USED IN ROAD PAVEMENT DESIGN. THE NUMBER AND TYPES OF CBR TESTS SHALL BE DETERMINED BY THE SOILSTESTING CONSULTANT TO BEST REPRESENT THE CONDITION OF THE SUBGRADE EXPECTED IN SERVICE.

DUST

- NO VISIBLE DUST EMISSIONS MUST OCCUR AT THE BOUNDARIES OF THE SITE DURING EARTHWORKS AND CONSTRUCTION ACTIVITIES ON THE SITE
- THE CONTRACTOR TO PROVIDE A WATER TRUCK AS REQUIRED TO ELIMINATE THE DUST PROBLEM CAUSED BY SITE TRAFFIC.

CONDUITS

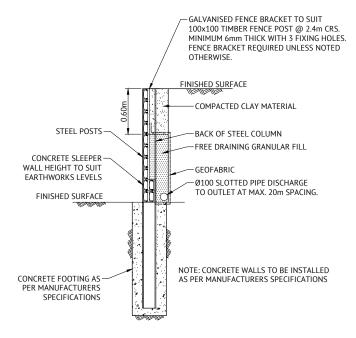
THE CONTRACTOR IS TO CONFIRM THE LOCATION OF SERVICE CONDUITS WITH THE SUPERINTENDENT PRIOR TO LAYING.

FILL MANAGEMENT

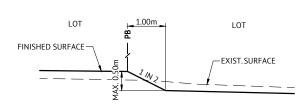
- ALL FILL MATERIAL WILL BE PLACED IN ACCORDANCE WITH THE APPROVED SPECIFICATION.
- THE FILL MATERIAL WILL COMPRISE ONLY OF NATURAL EARTH AND ROCK AND SHALL BE FREE OF ALL CONTAMINATES, NOXIOUS, HAZARDOUS, DELETERIOUS AND ORGANIC MATERIAL. ALL SITE PREPARATION WORK SHOULD GENERALLY BE CARRIED
- OUT IN ACCORDANCE WITH AS3798 'GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL
- THE SITE SHOULD BE STRIPPED OF ANY TOPSOUL FROM CUT AND FILL AREAS, ROAD ALIGNMENTS AND CARPARKING AREAS, AND STOCKPILED FOR LATER USE.
- PRIOR TO THE PLACEMENT OF ANY STRUCTURAL FILL THE SITE SHOULD BE PROOF ROLLED USING A MINIMUM 10 TONNE (STATIC WEIGHT) PADFOOT ROLLER. ANY LOOSE OR SOFT AREAS SHOULD BE REMOVED AND RECOMPACTED OR REPLACED USING A COMPACTED SELECT FILL.
- DEPRESSIONS FORMED BY THE REMOVAL OR VEGETATION, EXISTING STRUCTURES, UNDERGROUND SERVICES ETC, SHOULD HAVE ALL DISTURBED SOIL CLEANED OUT AND BE BACKFILLED WITH COMPACTED SELECT FILL MATERIAL.
- ANY STRUCTURAL CLAY FILL SHOULD BE PLACED IN LOOSE LAYERS NOT GREATER THAN 200mm THICK AT A MOISTURE CONTENT IN THE RANGE -2% TO +3% OF THE STANDARD OPTIMUM MOISTURE CONTENT, AND BE COMPACTED TO A MINIMUM DRY DENSITY RATIO OF 98% UNDER STANDARD COMPACTION AS PER (AS1289 5.1.1/5.2.1). CLAY FILL SHOULD BE COMPACTED USING A MINIMUM 10 TONNE VIBRATING PADFOOT ROLLER, MEASURES SHOULD BE ADOPTED TO ENSURE THAT CLAY FILL MATERIAL IS NOT ALLOWED TO DRY OUT PRIOR TO THE PLACEMENT OF SUCCEEDING LAYERS OF FILL AND FINAL COVERING WITH BUILDING SLABS AND ROAD PAVEMENTS.

- ANY STRUCTURAL, FREE DRAINING SAND FILL SHOULD BE PLACED IN LOOSE LAYERS NOT GREATER THAN 200mm THICK, FLOODED, IF NECESSARY, AND COMPACTED TO A MINIMUM DENSITY INDEX OF 70% AS PER AS1289 5 5 1 LISING A STATIC SMOOTH ROLLER DRUM NOT LESS THAN 10 TONNE IN STATIC
- THE PLACEMENT OF ALL STRUCTURAL FILL TO BE INSPECTED, TESTED AND CERTIFIED BY A GEOTECHNICAL ENGINEER TO A LEVEL 1 REQUIREMENT DURING THE EARTHWORKS OPERATIONS TO ENSURE THAT ALL FILL IS PLACED IN A 'CONTROLLED MANNER'. IN ACCORDANCE WITH AS3798 'GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS'.
- THE PLACEMENT OF FILL TO BE EXECUTED SUCH THAT TO BE FREE DRAINING AT ALL TIMES AND NOT TO BE A NUISANCE OR PONDING TO ADJOINING PROPERTY OR ROADS.

 NO DEMOLITION MATERIAL TO BE USED AS FILL MATERIAL.
- WHERE UNSUITABLE MATERIAL IN AREAS OF FILL IS ENCOUNTERED, THIS WILL BE TREATED AS SET OUT IN THE EARTHWORK SPECIFICATION.
- ALL VEHICLES EXITING FROM THE SITE TO BE CLEAN TO PREVENT MATERIAL BEING TRACKED OR DEPOSITED ON THE ADJOINING PUBLIC ROADS, REFER ENVIRONMENTAL MANAGEMENT NOTES ON DRAWING C701.
- ACCESS TRACKS THROUGH THE SITE WILL BE LIMITED TO THOSE DETERMINED BY THE SUPERINTENDENT AND THE CONTRACTOR PRIOR TO ANY WORK COMMENCING.



TYPICAL CONCRETE SLEEPER RETAINING WALL DETAIL - STEEL POSTS



TYPICAL EARTHWORKS BATTER **BETWEEN LOTS** SCALE 1:50

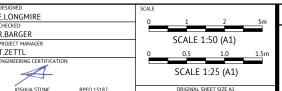
NOTES

- TO BE READ IN CONJUNCTION WITH DRAWING C001 AND EARTHWORKS DRAWINGS.
- CONTRACTOR TO PROVIDE STRUCTURAL CERTIFICATION FOR RETAINING WALLS DESIGN AND CONSTRUCTION.
- RETAINING WALLS SHALL BE DESIGNED TO ENSURE THEIR FOUNDATIONS DO NOT DIRECTLY LOAD ANY PROPOSED OR EXISTING SERVICES. WHERE PROPOSED OR EXISTING SERVICES LIE WITHIN THE RETAINING WALLS ZONE OF INFLUENCE THE CONTRACTOR SHALL PROVIDE BRIDGING ELEMENTS TO ENSURE THE
- CONTRACTOR SHALL REFER TO ALL LATEST SERVICE DRAWINGS TO ENSURE PROVISIONS ARE MADE FOR ALL PROPERTY SERVICE CONNECTIONS UNDER RETAINING
- FINAL RETAINING WALL TYPES TO BE CONFIRMED BY DEVELOPER PRIOR TO CONSTRUCTION.

APPROVAL ISSUE - NOT FOR CONSTRUCTION DATE REV DESCRIPTION



BRISBANE OFFICE LEVEL 1, 100 BRUNSWICK STREE PO BOX 361 FORTITUDE VALLEY, QLD 4006 PH: (07) 3253 2222 Premise WEB: www.premise.com.au



MIRVAC QUEENSLAND PTY LTD PROPOSED DEVELOPMENT - STAGE 2, 3A & 4A (54 LOTS) LOCATION 420 SOUTH PINE ROAD - EVERTON PARK SHEET TITLE BULK EARTHWORKS NOTES AND DETAILS

17BNE-0071

C210

