SHEET LIST TABLE			
SHEET NUMBER	SHEET TITLE		
C001	COVER SHEET LOCALITY PLAN & DRAWING SCHEDULE		
C002	SURVEY SETOUT PLAN		
C003	OVERALL SERVICES LAYOUT		
C004	SAFETY IN DESIGN PLAN		
C100	ROADWORKS & DRAINAGE LAYOUT PLAN - SHEET 1 OF 2		
C101	ROADWORKS & DRAINAGE LAYOUT PLAN - SHEET 2 OF 2		
C200	EARTHWORKS LAYOUT PLAN - SHEET 1 OF 3		
C201	EARTHWORKS LAYOUT PLAN - SHEET 2 OF 3		
C202	EARTHWORKS LAYOUT PLAN - SHEET 3 OF 3		
C203	EARTHWORKS NOTES AND DETAILS		
C204	EARTHWORKS SUBGRADE ROCK PREPARATION DETAILS - SHEET 1 OF 3		
C205	EARTHWORKS SUBGRADE ROCK PREPARATION DETAILS - SHEET 2 OF 3		
C206	EARTHWORKS SUBGRADE ROCK PREPARATION DETAILS - SHEET 3 OF 3		
C300	ROADWORKS TYPICAL SECTIONS & NOTES		
C301	KESSELS BOULEVARD LONGITUDINAL SECTIONS		
C302	KESSELS BOULEVARD CROSS SECTIONS - SHEET 1 OF 3 KESSELS BOULEVARD CROSS SECTIONS - SHEET 2 OF 3		
C303 C304	KESSELS BOULEVARD CROSS SECTIONS - SHEET 2 OF 3 KESSELS BOULEVARD CROSS SECTIONS - SHEET 3 OF 3		
C304	TEAL CIRCUIT LONGITUDINAL SECTIONS		
C306	TEAL CIRCUIT CROSS SECTIONS TEAL CIRCUIT CROSS SECTIONS		
C307	GRASS LANE LONGITUDINAL AND CROSS SECTIONS		
C308	LEAF STREET LONGITUDINAL AND CROSS SECTIONS		
C309	LEAF STREET CROSS SECTIONS		
C310	DRIVEWAY 3 LONGITUDINAL AND CROSS SECTIONS		
C311	GROVE STREET LONGITUDINAL AND CROSS SECTIONS		
C312	AMAZON WAY LONGITUDINAL SECTIONS		
C313	AMAZON WAY CROSS SECTIONS		
C314	EMERALD PARADE LONGITUDINAL AND CROSS SECTIONS		
C315	HEDGE LANE LONGITUDINAL & CROSS SECTIONS		
C316	INTERSECTION DETAILS PLAN - SHEET 1 OF 2		
C317	INTERSECTION DETAILS PLAN - SHEET 2 OF 2		
C318	PAVEMENT MARKINGS AND SIGNAGE LAYOUT - SHEET 1 OF 2		
C319	PAVEMENT MARKINGS AND SIGNAGE LAYOUT - SHEET 2 OF 2		
C400	STORMWATER DRAINAGE DETAILS AND NOTES		
C401	STORMWATER DRAINAGE CATCHMENT PLAN - SHEET 1 OF 2		
C402 C403	STORMWATER DRAINAGE CATCHMENT PLAN - SHEET 2 OF 2		
C403	STORMWATER DRAINAGE LONG SECTIONS - SHEET 1 OF 5 STORMWATER DRAINAGE LONG SECTIONS - SHEET 2 OF 5		
C404	STORMWATER DRAINAGE LONG SECTIONS - SHEET 2 OF 5 STORMWATER DRAINAGE LONG SECTIONS - SHEET 3 OF 5		
C406	STORMWATER DRAINAGE LONG SECTIONS - SHEET 4 OF 5		
C407	STORMWATER DRAINAGE LONG SECTIONS - SHEET 5 OF 5		
C408	Q2 MINOR STORM CALCULATIONS - 1 OF 3		
C409	Q2 MINOR STORM CALCULATIONS - 2 OF 3		
C410	Q2 MINOR STORM CALCULATIONS - 3 OF 3		
C411	Q100 MAJOR STORM CALCULATIONS - 1 OF 3		
C412	Q100 MAJOR STORM CALCULATIONS - 2 OF 3		
C413	Q100 MAIOR STORM CALCULATIONS - 3 OF 3		
C414	STORMWATER STRUCTURE DETAILS - SHEET 1 OF 3		
C415	STORMWATER STRUCTURE DETAILS - SHEET 2 OF 3		
C416	STORMWATER STRUCTURE DETAILS - SHEET 3 OF 3		
C500	SEWERAGE RETICULATION LOCALITY PLAN & NOTES		
C501	SEWERAGE RETICULATION LAYOUT PLAN - SHEET 1 OF 2		
C502	SEWERAGE RETICULATION LAYOUT PLAN - SHEET 2 OF 2		
C503	SEWERAGE RETICULATION LONG SECTIONS - SHEET 1 OF 4		
C504	SEWERAGE RETICULATION LONG SECTIONS - SHEET 2 OF 4		
C505	SEWERAGE RETICULATION LONG SECTIONS - SHEET 3 OF 4		
C506	SEWERAGE RETICULATION LONG SECTIONS - SHEET 4 OF 4		
C507	SEWERAGE RETICULATION NOTES AND DETAILS		
C600	WATER RETICULATION LOCALITY PLAN & NOTES		
C601	WATER RETICULATION LAYOUT PLAN SHEET 1 OF 2		
C602	WATER RETICULATION LAYOUT PLAN SHEET 2 OF 2		
C700	EROSION AND SEDIMENT CONTROL LAYOUT - CLEAR AND GRUB PHASE		
C701	EROSION AND SEDIMENT CONTROL LAYOUT - BULK EARTHWORKS PHASE		

C702	EROSION AND SEDIMENT CONTROL LAYOUT - STABILISATION PHASE
C703	EROSION & SEDIMENT CONTROL NOTES & DETAILS
C800	TEMPORARY WORKS - ROADWORKS AND DRAINAGE - SHEET 1 OF 2
C801	TEMPORARY WORKS - ROADWORKS AND DRAINAGE - SHEET 2 OF 2
S001	STORMWATER STRUCTURAL NOTES
S100	STORMWATER REINFORCED CONCRETE PIT ARRANGEMENT
S101	STORMWATER REINFORCED CONCRETE PIT DETAILS

GENERAL NOTES

- I. ALL DIMENSIONS GIVEN ON THESE DRAWINGS ARE IN METRES UNLESS NOTED
- OTHERWISE.
 2. ALL NEW WORK AND MATERIALS SHALL COMPLY CURRENT RELEVANT COUNCIL STANDARDS AND SPECIFICATIONS.
- 3. ALL WORK SHALL BE JOINED NEATLY TO EXISTING CONSTRUCTION.
- 4. 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 OF WORK.
- 5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL MEASURING DEVICES, SAFETY EQUIPMENT AND MACHINERY REQUIRED TO CARRY OUT INSPECTIONS/MEETINGS AS SPECIFIED OR REQUESTED BY THE ENGINEER.
- 6. PROOF ROLLING NOMINATED SHALL BE CARRIED OUT USING A SINGLE AXLE HIGHWAY TRUCK WITH A REAR AXLE LOAD NOT LESS THAN 10 TONNES AND TYRES INFLATED TO 550kPa OR APPROVED EQUIVALENT. EQUIPMENT LABOUR AND LOADING REQUIRED FOR PROOF ROLLING IS TO BE PROVIDED BY THE CONTRACTOR.
- THE CONTRACTOR.

 THESE NOTES SHALL APPLY TO ALL PORTIONS OF WORK.

 THE DRAWINGS ARE TO BE READ
- 8. THE DRAWINGS ARE TO BE REAL IN CONJUNCTION WITH THE SPECIFICATIONS. ANY POINT OF CONFLICT WILL BE RESOLVED BY THE SUPERINTENDENT.

NOISE

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

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

PRE-CONSTRUCTION & APPROVALS

- 1. 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
- 2. 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 WORKS.
- THE CONTRACTOR IS RESPONSIBLE TO PROTECT ALL EXISTING SERVICES FROM DAMAGE.
- 4. ANY WORKS DAMAGED AS A RESULT OF CONSTRUCTION ARE TO BE REINSTATED TO RELEVANT AUTHORITY'S REQUIREMENTS AT THE CONTRACTORS COST.
- 5. FINISHED SURFACE LEVELS ARE TO BE GRADED UNIFORMLY BETWEEN LEVELS INDICATED ON THE DRAWINGS

WORKPLACE HEALTH & SAFETY

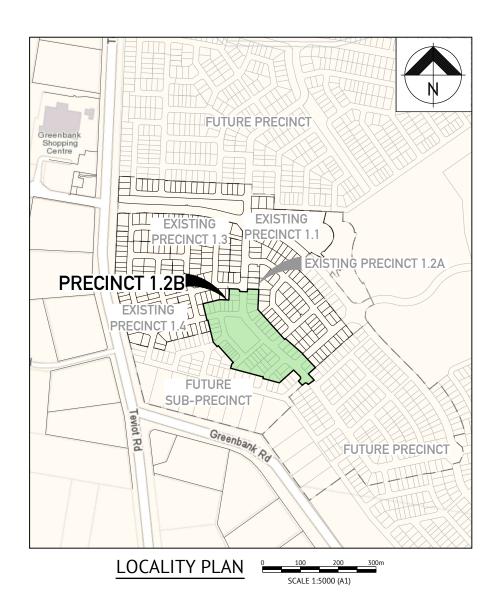
- THE CONTRACTOR SHALL BE THE PRINCIPAL CONTRACTOR AS DESIGNATED BY THE WORK HEALTH AND SAFETY ACT (2011).
- THE CONTRACTOR SHALL
 PREPARE AND IMPLEMENT A
 WORKPLACE HEALTH AND
 SAFETY PLAN AS REQUIRED BY
 THE WORK HEALTH AND SAFETY
 ACT (2011).

SETOUT NOTES

- CO-ORDINATE SETOUT
 PROVIDED ON THESE DRAWINGS
 IS BASED ON A CO-ORDINATE
 BASE PROVIDED BY SAUINDERS
 HAVILL GROUP. REFERENCE
 MARKS AND CORRESPONDING
 CO-ORDINATES ARE PROVIDED
 ON DRAWING COO2.

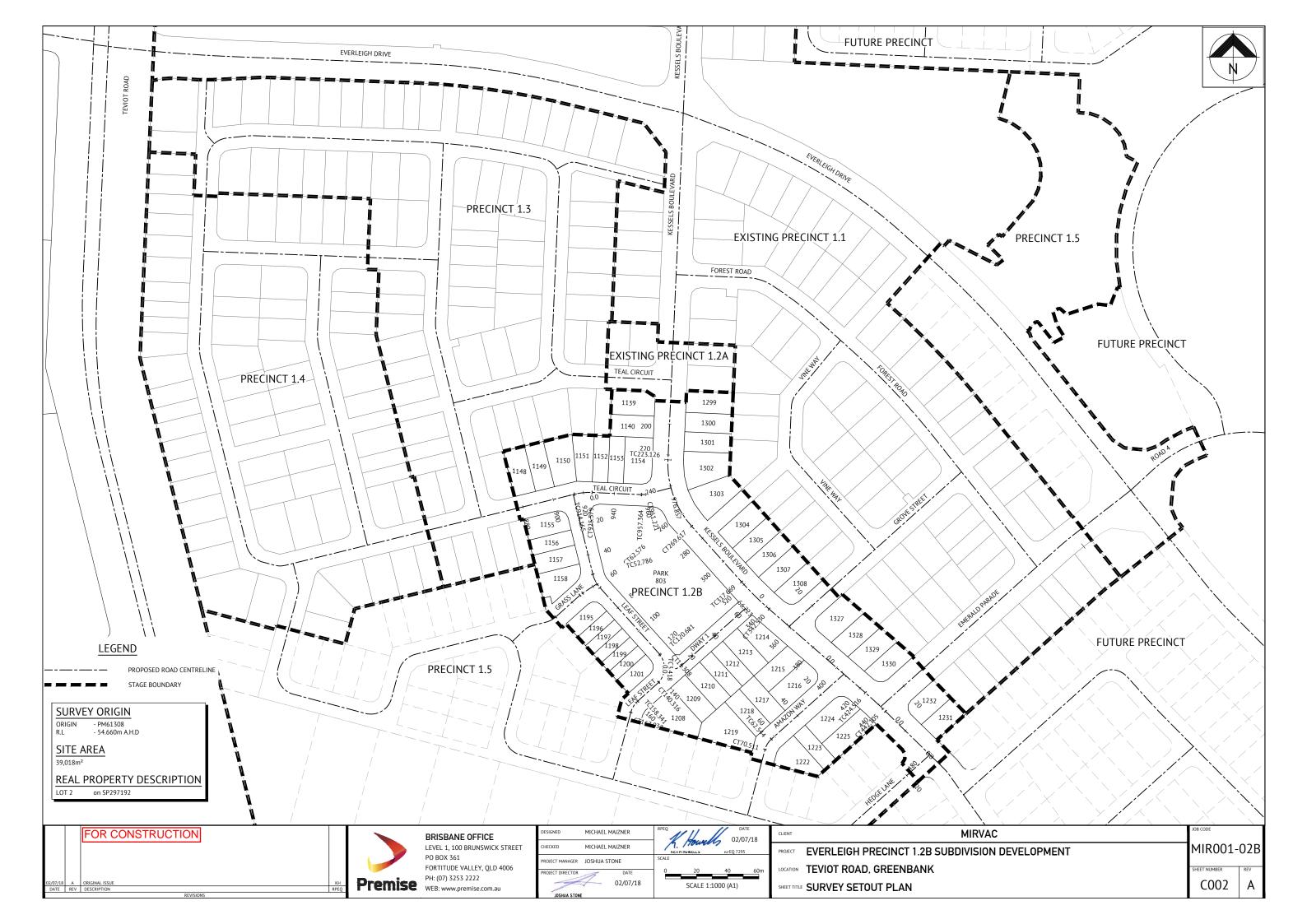
 THE LEVEL DATUM FOR WORKS
- THE LEVEL DATUM FOR WORK
 IS A.H.D (AUSTRALIAN HEIGHT
 DATUM).

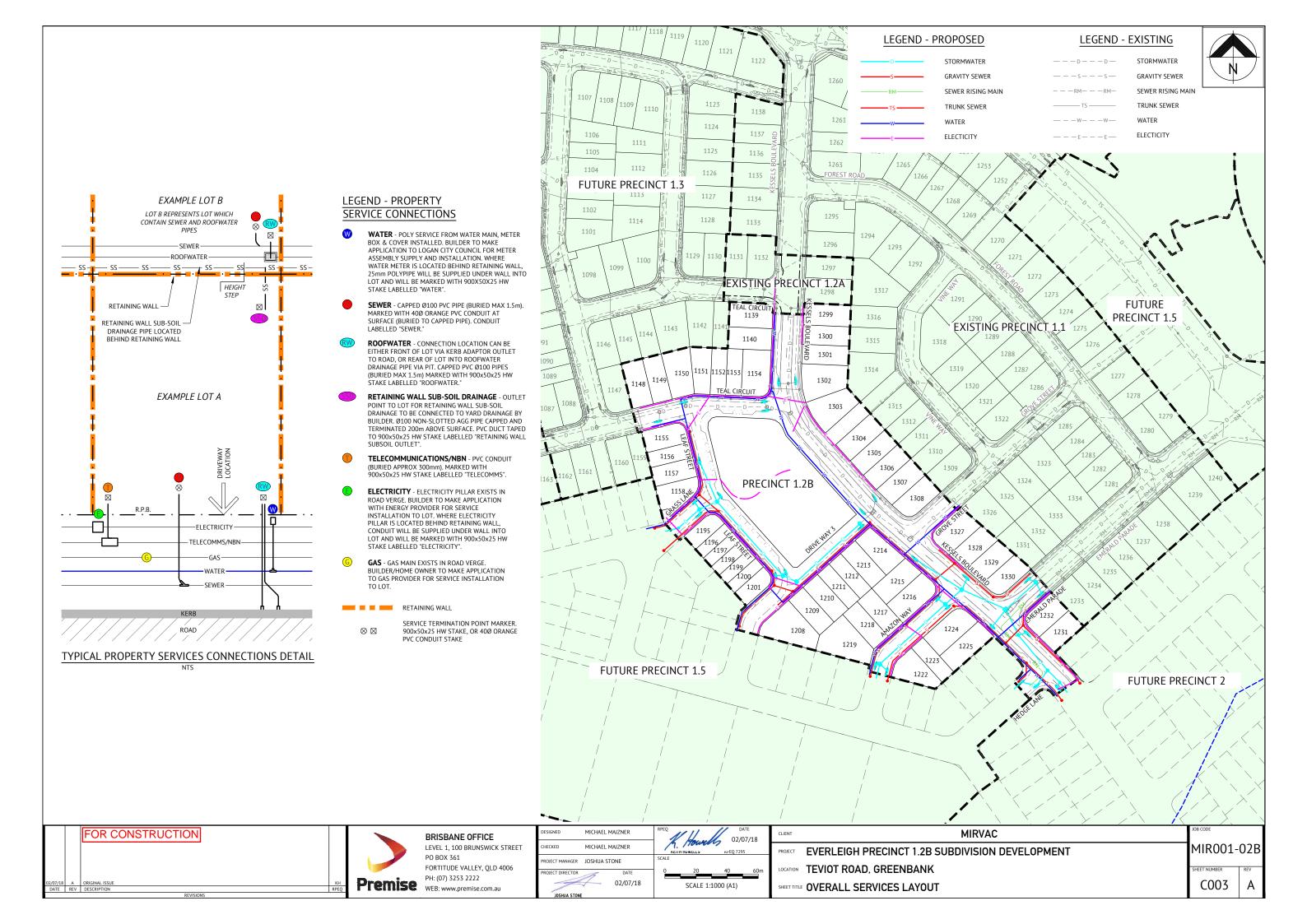
EVERLEIGH PRECINCT 1.2B SUBDIVISION DEVELOPMENT TEVIOT ROAD, GREENBANK FOR MIRVAC











DESIGN HAZARD NOTES:

- 1. 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 OLD.
- 2. THIS REPORT SUMMARISES AN INTERNAL REVIEW OF PREMISE'S 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.

	CONSEQUENCE TABLE					
	LEVEL	LEVEL CONSEQUENCE				
	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 SINGLE PÉI		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			

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

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.

	RISK ANALYSIS MATRIX						
		1 - INSIGNIFICANT	2 - MINOR	3 - MODERATE	4 - MAJOR	5 - CATASTROPHIC	
	A - ALMOST CERTAIN	MODERATE	HIGH	EXTREME	EXTREME	EXTREME	
Q0	B - LIKELY	MODERATE	HIGH	HIGH	EXTREME	EXTREME	
LIKELIHOOD	C - POSSIBLE	LOW	MODERATE	HIGH	EXTREME	EXTREME	
Ĭ	D - UNLIKELY	LOW	LOW	MODERATE	HIGH	EXTREME	
	E - RARE	LOW	LOW	MODERATE	HIGH	HIGH	

	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					

LIKELIHOOD TABLE						
LEVEL	LEVEL DESCRIPTION					
A - ALMOST CERTAIN	THE EVENT IS EXPECTED TO OCCUR IN MOST CERTAIN CIRCUMSTANCES	MORE THAN ONCE PER YEAR				
B - LIKELY	THE EVENT WILL 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 COULD 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				

	DESIGN HAZARD SCHEDULE					
ITEM	ITEM DESIGN HAZARD POTENTIAL HAZARD RISK ELIMIN		POTENTIAL HAZARD RISK ELIMINATION / MINIMISATION OF HAZARD / RISK		RESIDUAL RISK	
D1	URBAN LAYOUT HAZARD	THE URBAN LAYOUT IS DESIGNED AROUND A PARTICULAR HAZARD : INTERSECTION IS UNCLEAR WHICH ROAD HAS PRIORITY	HIGH	THE HAZARD HAS BEEN REDUCED/ELIMINATED BY: - LINE MARKED INTERSECTION TO ENSURE IT IS CLEAR WHICH ROAD HAS PRIORITY - DESIGN VEHICLE SWEPT PATH CHECKED FOR COMPLIANCE		
D2	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 PROJECT 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.	MEDIUM	
D3	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.	MEDIUM	
D4	HIGH RETAINING WALLS	SOME AREAS OF WORKS CONTAIN HIGH RETAINING WALLS WHERE LAND MORPHOLOGY DICTATES.	HIGH	HIGH RETAINING WALLS CANNOT BE AVOIDED DUE TO EXISTING LAND MORPHOLOGY. SINGLE TIER WALLS HAVE LIMITED TO A MAX HEIGHT OF 2m. CONTRACTOR WILL NEED TO TAKE ALL ACTIONS NECESSARY TO ADDRESS THIS HAZARD DURING CONSTRUCTION.	MEIDUM	
D5	WATER BODIES	PROPOSED CONSTRUCTION WATER DAMS WILL BE PRESENT ON SITE.	MEDIUM	PROPOSED WATER BODIES HAVE BEEN LOCATED AWAY FROM PUBLIC ACCESS AREAS. ACCESS TO THESE LOCATION WILL BE RESTRICTED FROM THE PUBLIC. CONTRACTOR WILL NEED TO TAKE ALL ACTIONS NECESSARY TO ADDRESS THIS HAZARD DURING CONSTRUCTION.	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	WORKS NEAR RAIL, AIRPORTS AND ROADS HAZARD	ALL REQUIRED PERMITS, APPROVALS AND SAFETY REQUIREMENTS FROM THE RELEVANT AUTHORITY SHOULD BE OBTAINED PRIOR TO COMMENCING WORK. A REPRESENTATIVE OF THE RELEVANT AUTHORITY SHALL REMAIN ON SITE DURING CONSTRUCTION WHILE THE HAZARD REMAINS.			
C5	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.			
C6	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.			
C7	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.			
C8	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.			
С9	ASBESTOS HAZARD	ALL PERSONNEL SHOULD BE ADVISED OF THE POTENTIAL PRESENCE OF ASBESTOS AND AN IDENTIFICATION AND ACTION PLAN SHALL BE PUT IN PLACE. SAMPLING AND IDENTIFICATION IS TO BE UNDERTAKEN IN ACCORDANCE WITH WORKPLACE HEALTH AND SAFETY REGULATIONS. IF SAMPLING CONFIRMS THE PRESENCE OF ASBESTOS THEN THE ACTION PLAN IS TO BE IMPLEMENTED TO REMEDIATE THE SITE.			
C10	POTENTIAL ROCK FALL	LAND ABOVE THE SITE HAS BEEN CLEARED AND SOME EARTHWORKS HAS BEEN UNDERTAKEN CREATING A POTENTIAL ROCK FALL HAZARD. SUITABLE PERSONNEL SHALL BE RESPONSIBLE FOR IDENTIFYING ANY POTENTIAL HAZARD AND THE CONTRACTOR SHALL TAKE APPROPRIATE ACTION TO ELIMINATE THE HAZARD.			

			_
ı		FOR CONSTRUCTION	
ı		FOR CONSTRUCTION	
ı			
ı			
ı			
ı			
ı			
ı	Α	ORIGINAL ISSUE	КН
4			
ı	REV	DESCRIPTION	RPEQ
		REVISIONS	



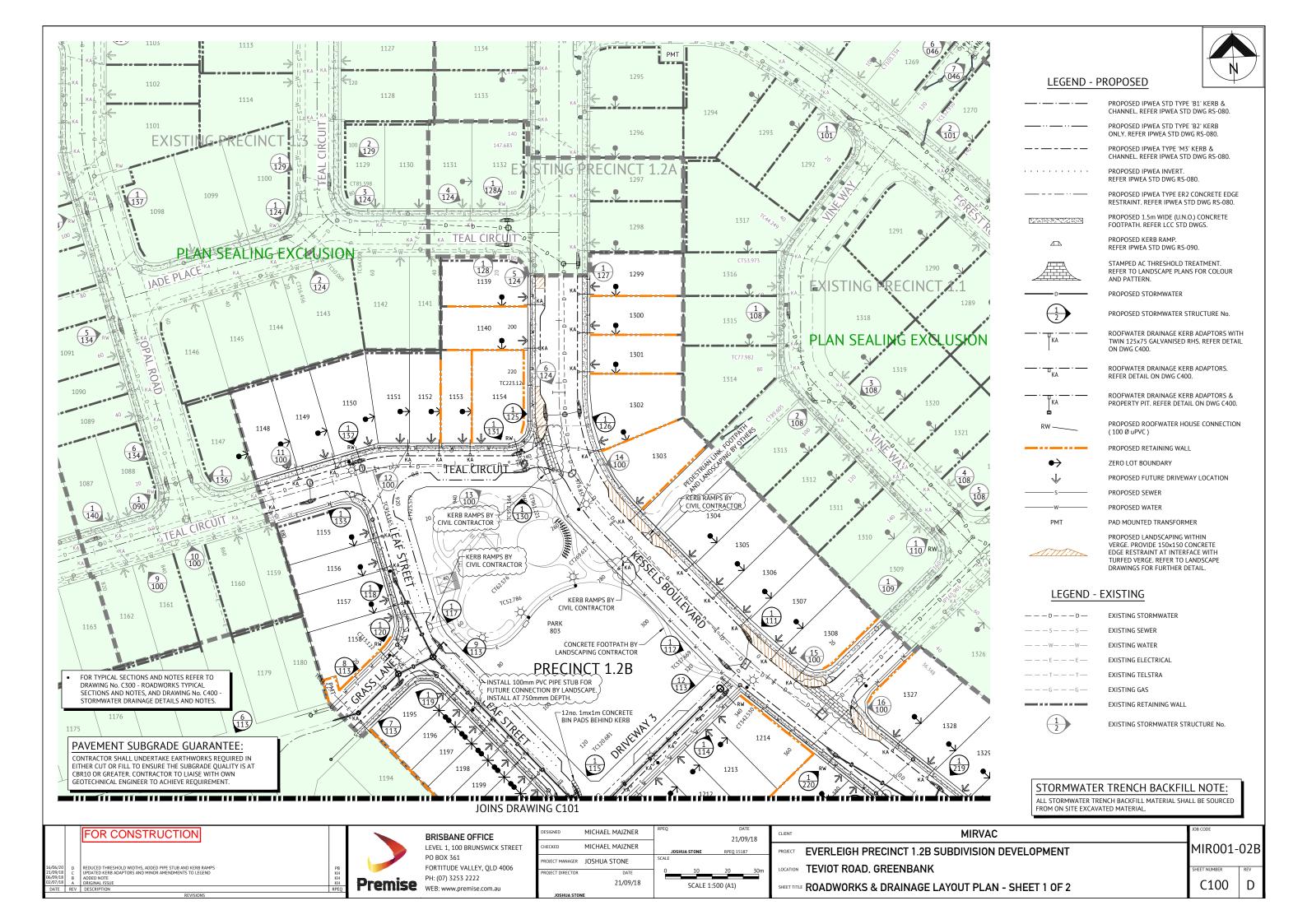
BRISBANE OFFICE LEVEL 1, 100 BRUNSWICK STREET PO BOX 361 FORTITUDE VALLEY, QLD 4006 PH: (07) 3253 2222

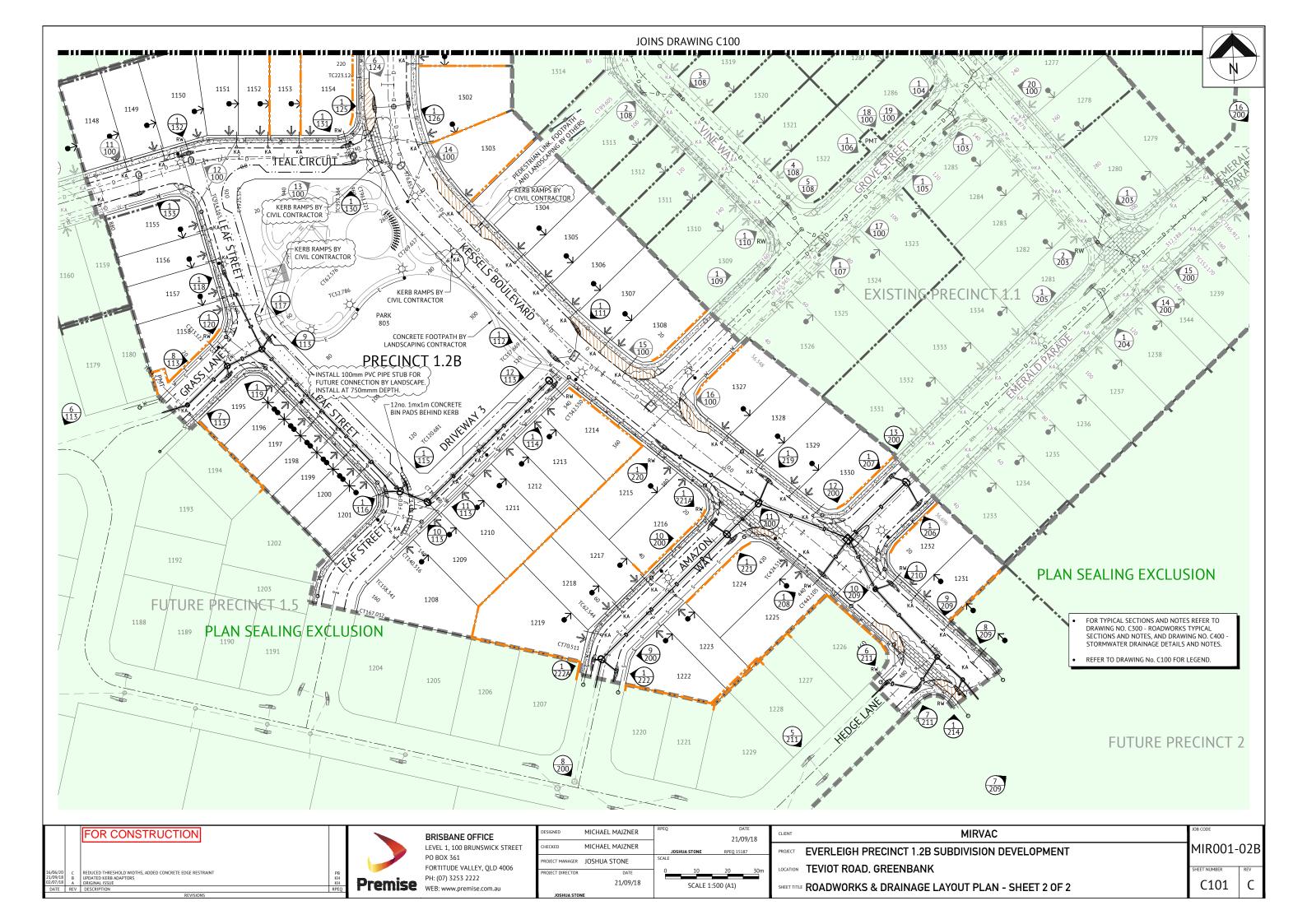
DESIGNED	MICHAEL MAJZNER	RPEQ // //	DATE
		1 Howells	02/07/18
CHECKED	MICHAEL MAJZNER	M. 1100000	
			krEQ 7295
PROJECT MANAGER	JOSHUA STONE	SCALE	
		1	
PROJECT DIRECTOR	DATE		
	02/07/18		
JOSHUA STONE		1	

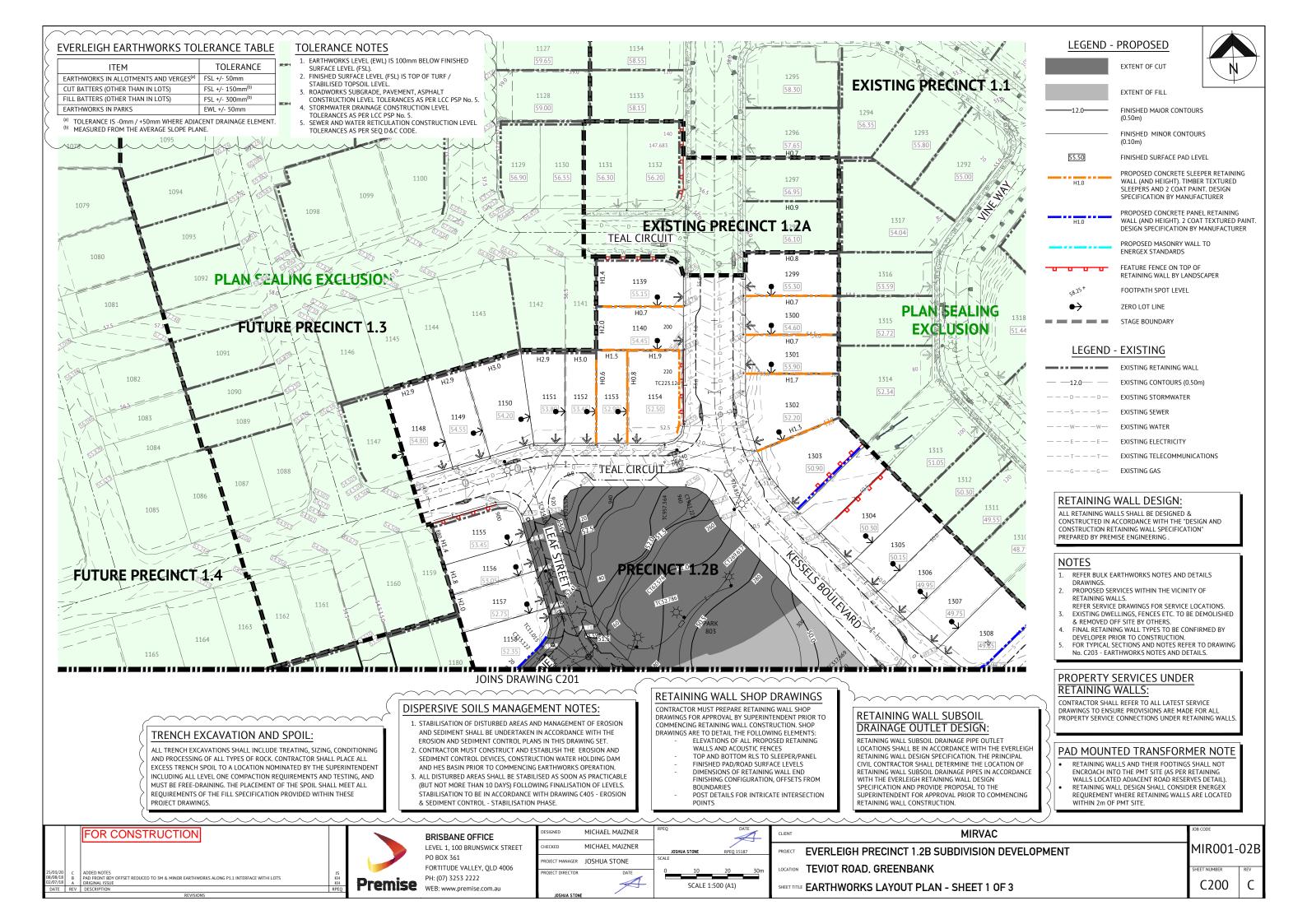
MIRVAC PROJECT EVERLEIGH PRECINCT 1.2B SUBDIVISION DEVELOPMENT LOCATION TEVIOT ROAD, GREENBANK SHEET TITLE SAFETY IN DESIGN PLAN

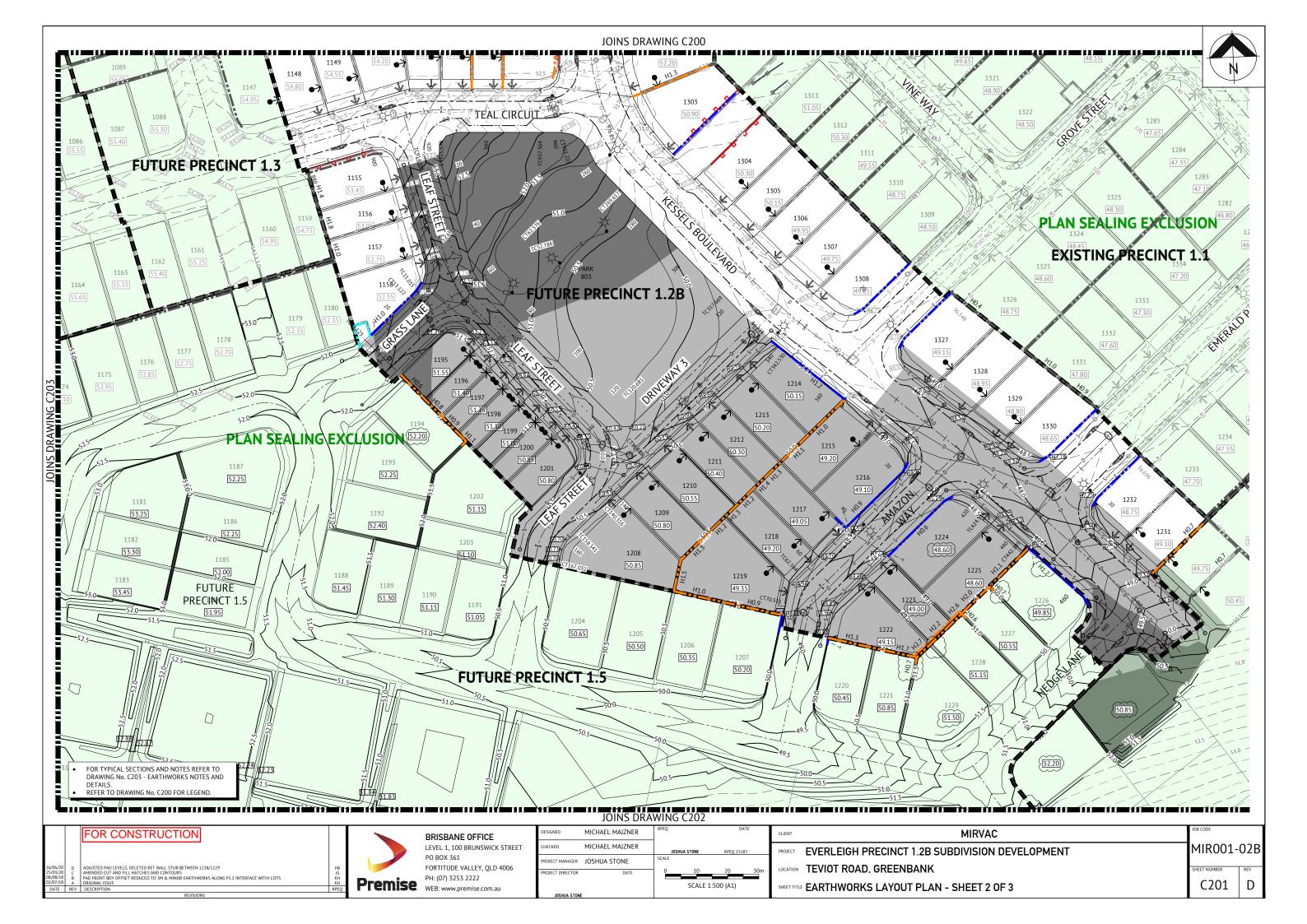
MIR001-02B

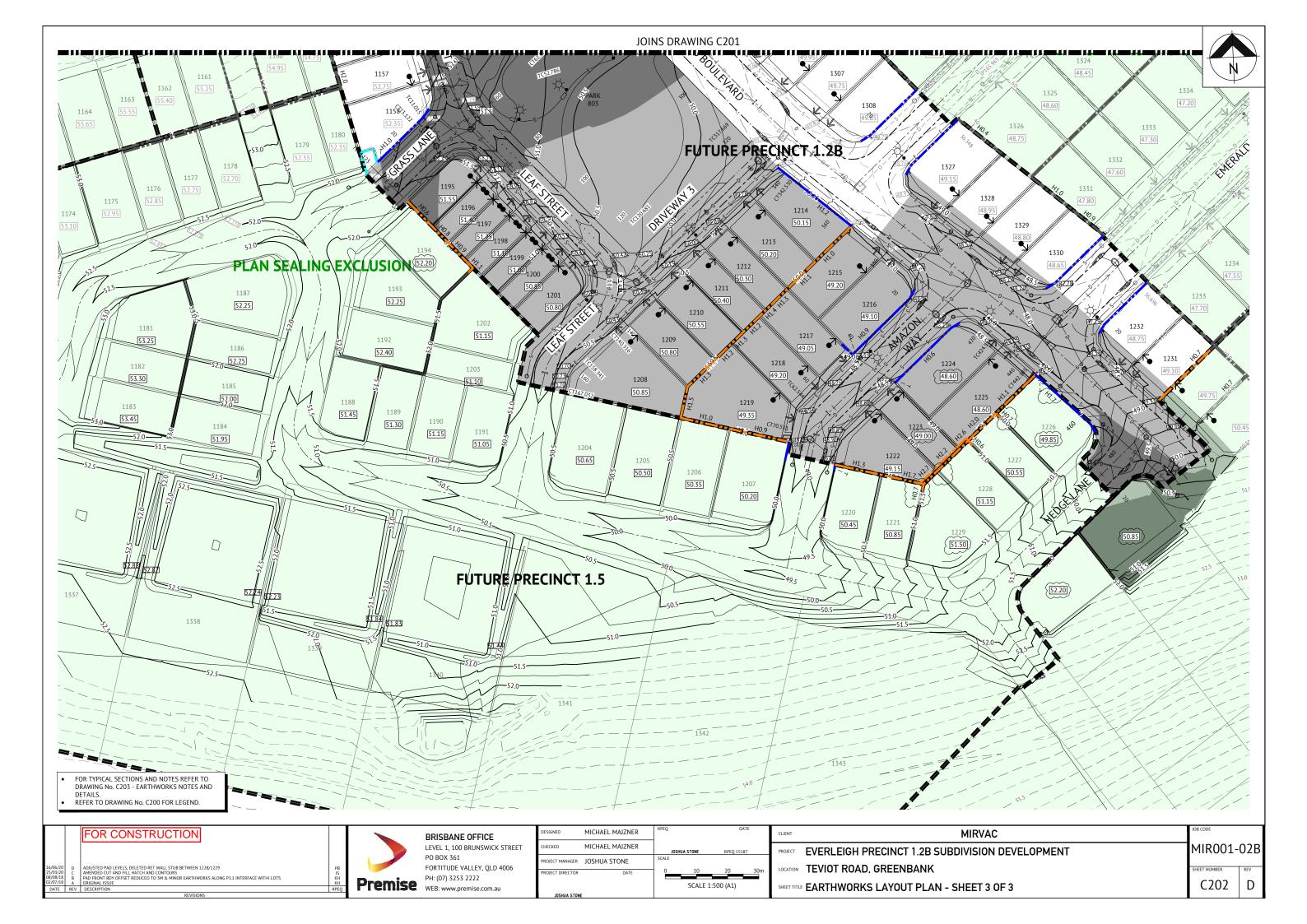
C004

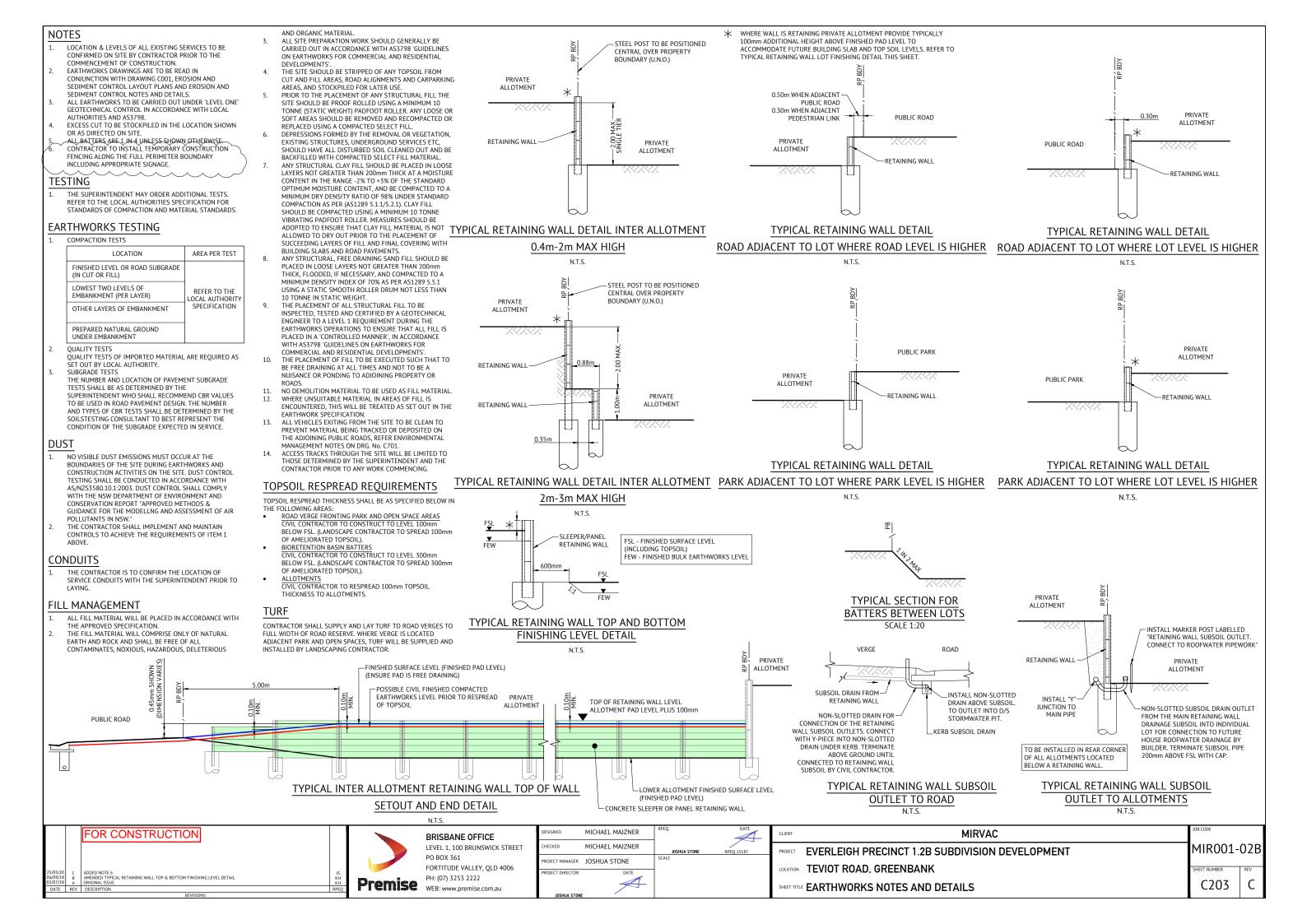


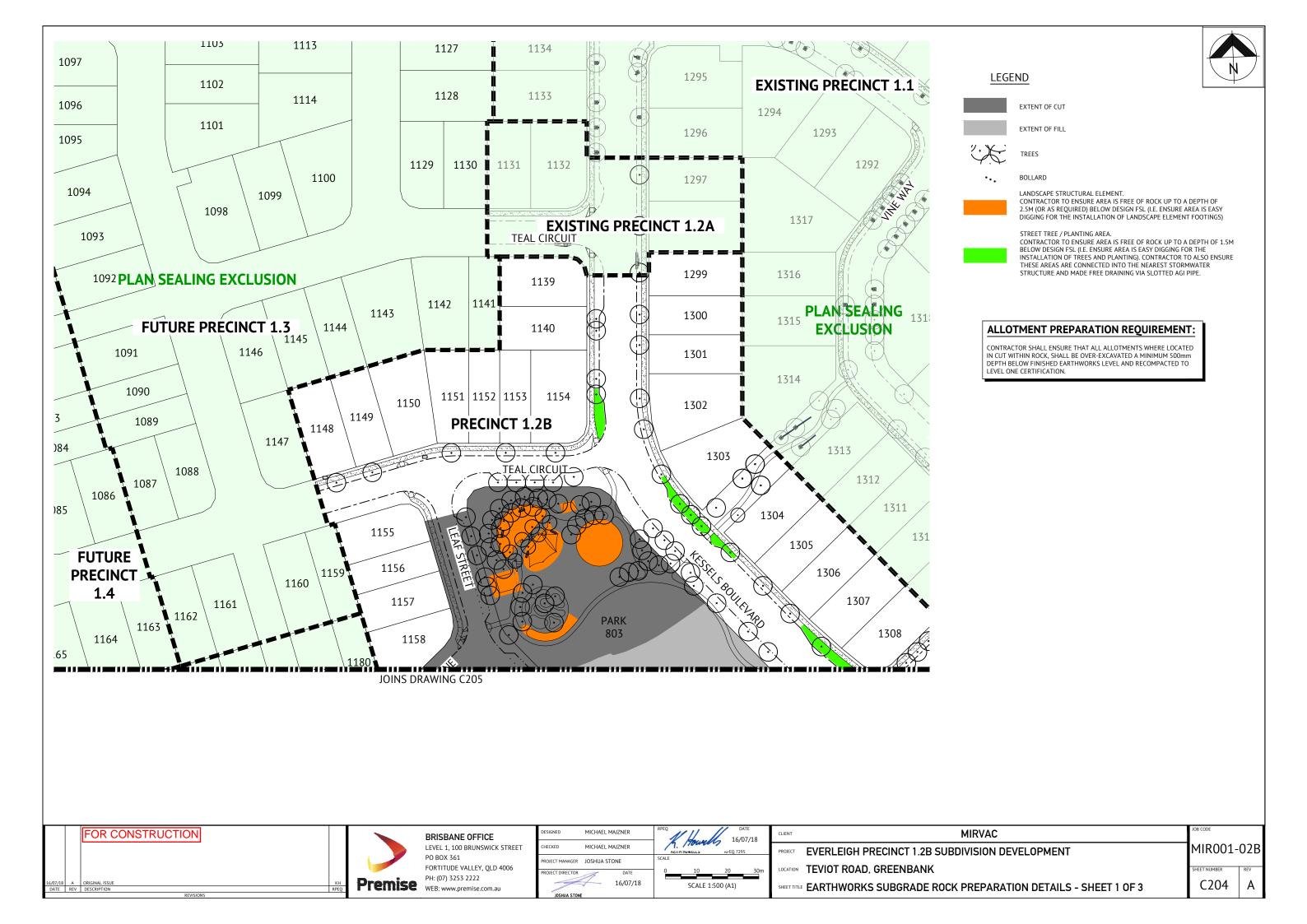


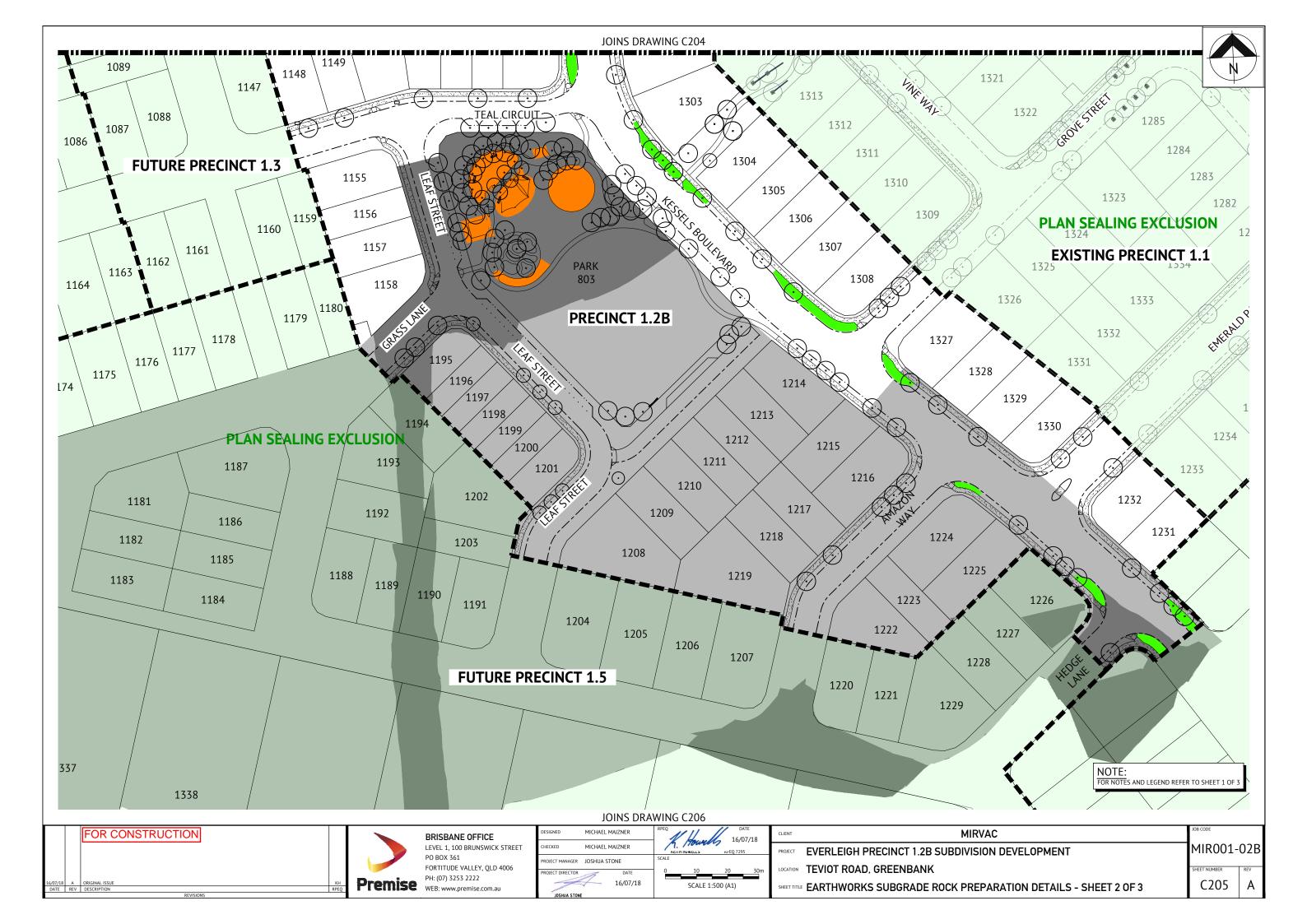


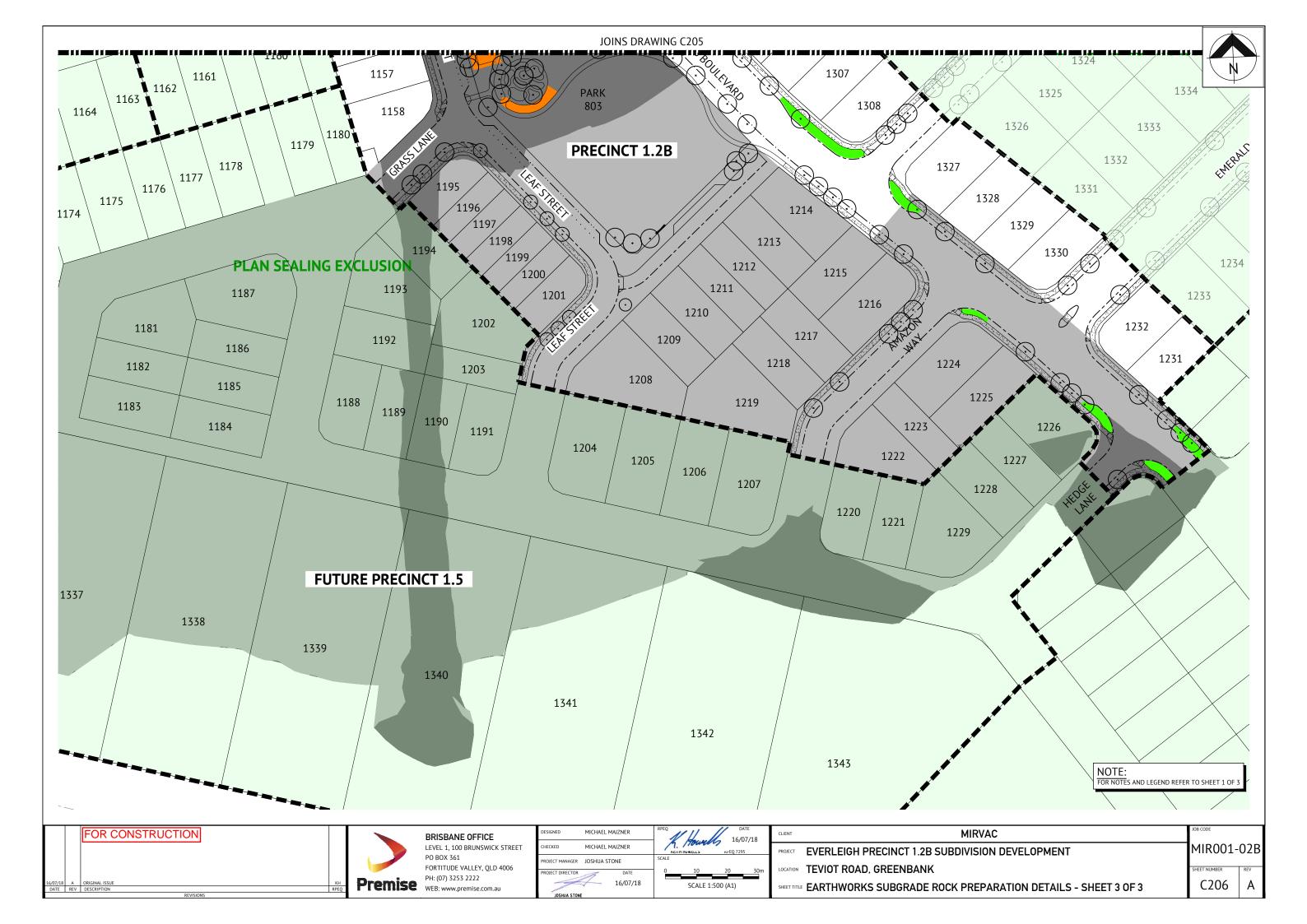












NOTES

- 1. ALL WORK IS TO BE CARRIED OUT IN ACCORDANCE WITH LOGAN CITY COUNCIL STANDARD DRAWINGS AND METHODS (U.N.O.).
- NOTWITHSTANDING THE LIMITS OF CUTTING AND FILLING SHOWN ON THE DRAWINGS, THE ACTUAL LIMITS SHALL BE DETERMINED ON SITE BY THE SUPERINTENDENT DURING CONSTRUCTION AND SIMILARLY THE FINISHED SURFACE CONTOURS MAY BE ADJUSTED BY WRITTEN DIRECTION OF THE SUPERINTENDENT DURING CONSTRUCTION.
- THE CONTRACTOR IS TO ASCERTAIN THE EXACT LOCATION OF ALL EXISTING SERVICES PRIOR TO COMMENCEMENT OF CONSTRUCTION AND SHALL BE RESPONSIBLE FOR THE COST OF RECTIFICATION OF ANY DAMAGES TO EXISTING SERVICES WHICH MAY OCCUR. THE LOCATION OF EXISTING SERVICES SHOWN ON THESE DRAWINGS ARE APPROXIMATE ONLY
- SUBGRADE TEST RESULTS TO BE FORWARDED TO SUPERINTENDENT FOR DETERMINATION OF BOX DEPTHS PRIOR TO EXCAVATION. TESTS SHALL INCLUDE SOAKED CBR AND/OR OTHER TESTS AS REQUESTED BY THE SUPERINTENDENT.
- ALLOTMENT FILLING TO BE COMPACTED TO 95% (min) OF THE R.D.D. (AS 1289 TESTS E1.1, E4.1). LEVELS AND SETOUT INFORMATION FOR KERB AND CHANNEL CONSTRUCTION IS GIVEN TO LIP OF KERB.
- LEVELS AND GRADIENTS AT JUNCTIONS WITH EXISTING WORKS MAY BE VARIED AS APPROVED BY THE SUPERINTENDENT TO ACHIEVE SATISFACTORY CONNECTION TO THE EXISTING WORKS.
- SIDE DRAINS AND MITRE DRAINS TO BE CONSTRUCTED ADJACENT TO ALL KERB AND CHANNEL
- PROVIDE FLUSH POINTS TO SUBSOIL DRAINS, LOCATIONS TO BE CONFIRMED ON SITE.
- ALL STORMWATER PIPES SHALL BE CLASS '2' (UNO) R.C. PIPES UNLESS AN ALTERNATIVE IS APPROVED BY THE SUPERINTENDENT PRIOR TO CONSTRUCTION. ALL PIPES ARE 375mm DIAMETER U.N.O.
- GULLIES AND GULLY GRATES SHALL BE TO STD. DRGs BSD-8051 BSD-8059.
 KACEY GALV. STEEL KERB ADAPTORS ARE TO BE INSTALLED TO THE REQUIREMENTS OF THE LOCAL COUNCILS STANDARD DRAWINGS AND SPECIFICATIONS.
- 13. ALL LOTS SHOWN BOXED TO HAVE ROOFWATER FOOTPATH CROSSINGS TO KERB. CROSSINGS ARE TO BE 88.9 DIA. GALV. CHS.TO KACEY KERB ADAPTOR.
- 14 ALL TEMPORARY ROOFWATER OLITLETS TO BE EXCAVATED AT 1 IN 200 TO NATURAL SURFACE
- 15. ROOFWATER PITS ARE TO BE 600mm DIAMETER FOR DEPTHS LESS THAN 750mm, 900mm DIAMETER FOR DEPTHS BETWEEN 750mm AND 1500mm DEEP AND 1050mm DIAMETER FOR DEPTHS GREATER THAN 1500mm
- 16. ALL ROOFWATER PIPES CROSSING CONCRETE FOOTPATHS ARE TO BE INSTALLED PRIOR TO CONSTRUCTION OF CONCRETE FOOTPATHS.
- 17. HAZARD MARKERS (D4-4A) TO BE PLACED AT THE END OF NEW WORKS AS DIRECTED BY
- 18. SITE CBR VALUE AND PAVEMENT DESIGN AND DEPTHS TO BE VERIFIED WITH CBR TESTS PRIOR TO CONSTRUCTION.
- LOCATION & LEVELS OF ALL EXISTING SERVICES TO BE CONFIRMED ON SITE BY CONTRACTOR PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
- 20. TO BE READ IN CONJUNCTION WITH ALL STORMWATER DRAINAGE LAYOUT PLANS & ROADWORKS

ROADWORKS NOTES

- GEOTECHNICAL TESTING FOR PAVEMENT CONSTRUCTION IS TO BE CARRIED OUT IN ACCORDANCE WITH THE PROJECT SPECIFICATION. TEST CERTIFICATES ARE TO BE PREPARED BY A REGISTERED N.A.T.A. LABORATORY AT THE CONTRACTORS COST AND SHALL BE PROVIDED TO THE ENGINEER PROGRESSIVELY THROUGH THE WORKS. THE CONTRACTOR IS TO NOTIFY THE ENGINEER OF ANY NON-CONFORMANCES. ALL NON CONFORMING WORK IS TO BE RECTIFIED AS DIRECTED BY THE ENGINEER.
- FULL DEPTH PAVEMENT CONSTRUCTION SHALL EXTEND BEHIND ALL KERB AND KERB AND CHANNEL FOR A DISTANCE WHICH IS THE GREATER OF 150mm FROM THE BACK OF KERB OR ACROSS TO THE OUTER LIMIT OF SIDE DRAIN FILTER MATERIAL.
- TRANSITION KERB AND CHANNEL TO BARRIER KERB SMOOTHLY OVER MIN. 1.0m LENGTH.
 PAVEMENT THICKNESSES NOMINATED ON THESE DRAWINGS ARE PROVISIONAL ONLY AND MAY BE
- VARIED BY THE SUPERINTENDENT SUBJECT TO INSITU PAVEMENT SUBGRADE TESTING, PAVEMENT SUBGRADES ARE TO BE INITIALLY CONSTRUCTED TO THE UNDERSIDE OF THE NOMINATED LOWER SUBBASE COURSE WITHIN FILL AREAS, AND TO THE UNDERSIDE OF THE NOMINATED UPPER SUBBASE COURSE WITHIN CUT AREAS. INSITU SUBGRADE CBR TESTING AS SPECIFIED FOR PAVEMENT DESIGN VERIFICATION IS TO BE CARRIED OUT AT THESE LEVELS.
- REPAIR ANY DAMAGE TO EXISTING KERB AND CHANNEL, FOOTPATH OR ROADWAY (INCLUDING REMOVAL OF CONCRETE SLURRY FROM FOOTPATHS, ROADS, KERB AND CHANNEL AND STORMWATER GULLIES AND SIDEDRAINS) THAT MAY OCCUR DURING ANY WORKS CARRIED OUT.

CONCRETE PAVEMENT

- THE CONCRETE PAVEMENT HAS BEEN DESIGNED BASED ON A CBR 5 AND IS SUBJECT TO CONFIRMATION UPON RECEIPT OF CBR TEST RESULT AT TIME OF CONSTRUCTION.
- CONCRETE PAVEMENT SPECIFICATION

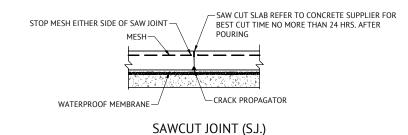
COMPRESSIVE STRENGTH: 25 MPa @ 28 DAYS 3.5 MPa @28 DAYS MAXIMUM AGGREGATE SIZE: 20mm SL72, 50 TOP COVER

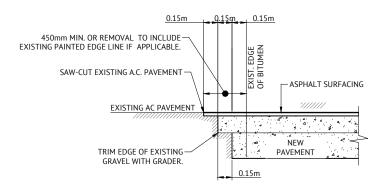
MESH: 100mm MIN CBR 15 BEDDING BEDDING:

- MATERIALS AND WORKMANSHIP SHALL COMPLY WITH AS1379, AS3600 AND AS3610.
- PROJECT ASSESSMENT OF STRENGTH IN ACCORDANCE WITH AS3600 SHALL BE ADOPTED FOR SAMPLING AND TESTING. THE CONTRACTOR SHALL PAY ALL TESTING COSTS.
- CONSTRUCTION JOINTS SHALL BE MADE ONLY AT APPROVED LOCATIONS.
 ALL JOINTS ARE TO BE SEALED JUST PRIOR TO HANDOVER WITH DOW CORNING '888' SEALANT INSTALLED
- IN ACCORDANCE WITH MANUFACTURING RECOMMENDATIONS.
 JOINTS ARE TO BE INSPECTED AND SEALANT REGULARLY REPLACED IF REOUIRED.
- DIMENSIONAL TOLERANCES OF AS3600, MODIFIED BY AS3610, SHALL APPLY UNLESS OTHERWISE NOTED. SLAB SURFACE FLATNESS TOLERANCE SHALL BE 5mm MAXIMUM DEVIATION FOR A 3m STRAIGHT FDGE.
- CONCRETE PAVEMENTS ARE TO BE BROOM FINISHED. SLAB THICKNESSES NOTED ARE EXCLUSIVE OF APPLIED FINISHES
- 10. CURE ALL CONCRETE BY AN APPROVED METHOD FOR 7 DAYS AFTER HARDENING. PVA AND RESIN BASED CURING COMPOUNDS SHALL NOT BE USED.

CONCRETE PAVEMENT MAINTENANCE NOTES

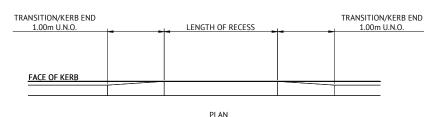
- NOTE THAT UPKEEP AND REPLACEMENT OF SEALANTS IS PART OF THE ONGOING MAINTENANCE
- REQUIREMENTS FOR THIS SITE.
 NOTE THAT SHRINKAGE CRACKS OF WIDTH < 1.5mm MAY OCCUR IN CONCRETE PAVEMENTS WITHIN 12 MONTHS OF INITIAL CASTING
- NOTE THAT THE PAVEMENT WILL NOT BE MAINTENANCE FREE FOR ITS DESIGN LIFE.
- INSPECT FLUSH SIDE DRAINS AND SUBSOIL DRAINS EVERY 12 MONTHS





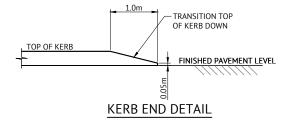
TYPICAL PAVEMENT CUT-BACK DETAIL

TRANSITION TOP OF KERB DOWN TOP OF KERB FINISHED PAVEMENT LEVEL ELEVATION PROVIDE R20mm ROUNDING AT CORNER



NOTE: REFER LAYOUT PLAN FOR TRANSITION RECESS & KERB END LOCATIONS & LENGTHS

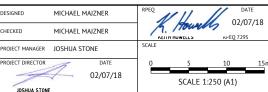
TYPICAL KERB RECESS / END DETAIL



FOR CONSTRUCTION



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



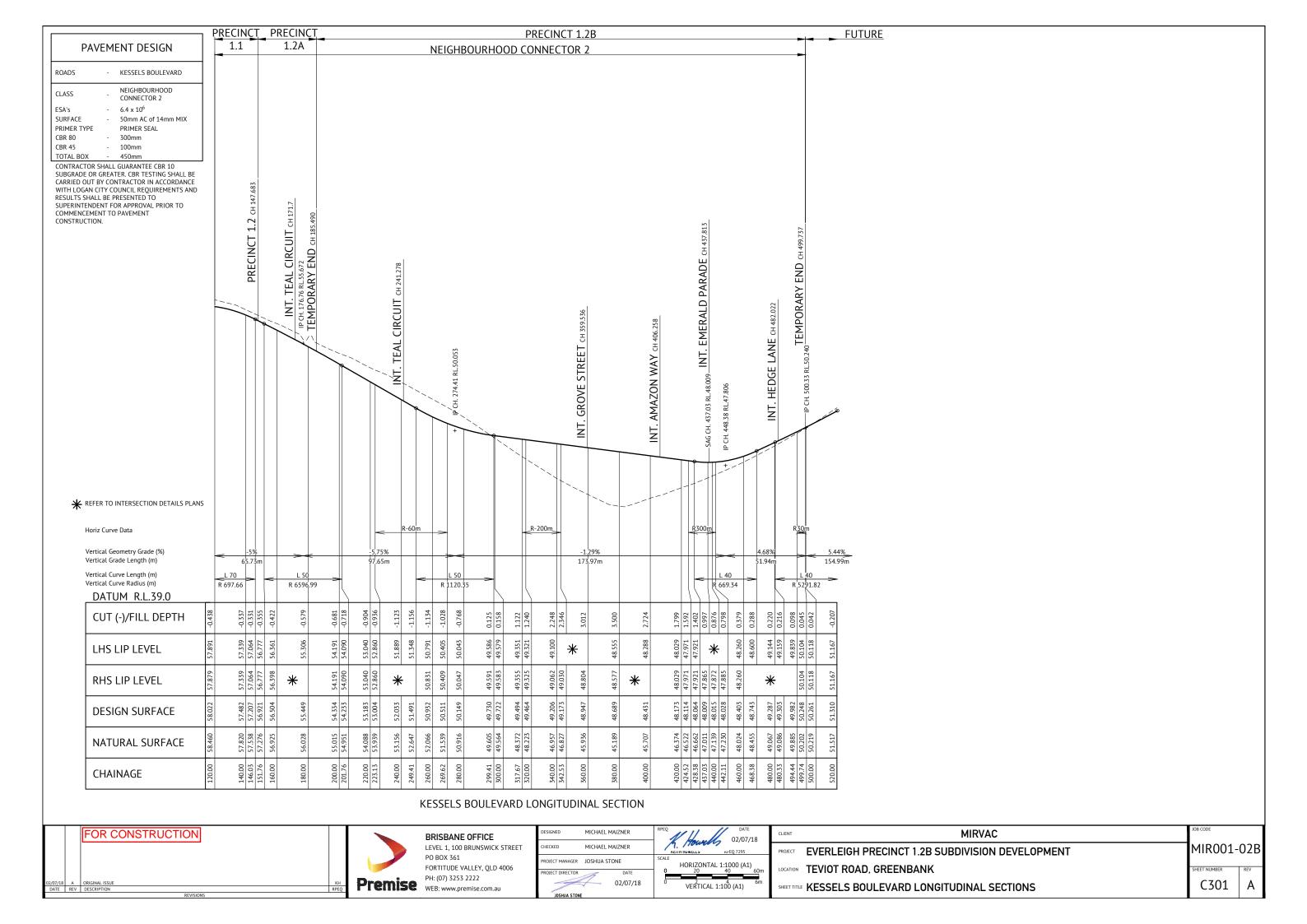
MIRVAC EVERLEIGH PRECINCT 1.2B SUBDIVISION DEVELOPMENT LOCATION TEVIOT ROAD, GREENBANK ROADWORKS TYPICAL SECTIONS & NOTES

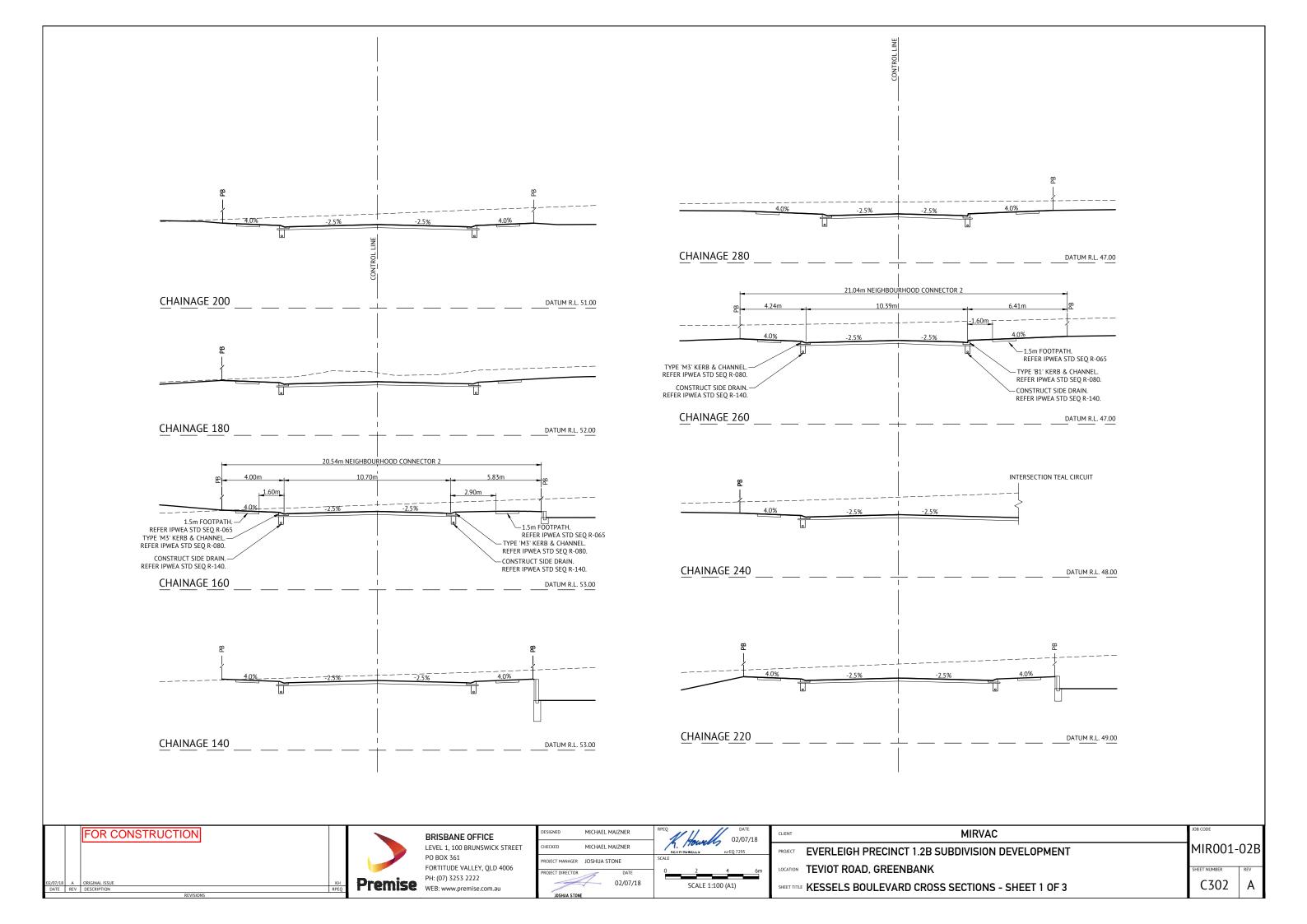
MIR001-02B

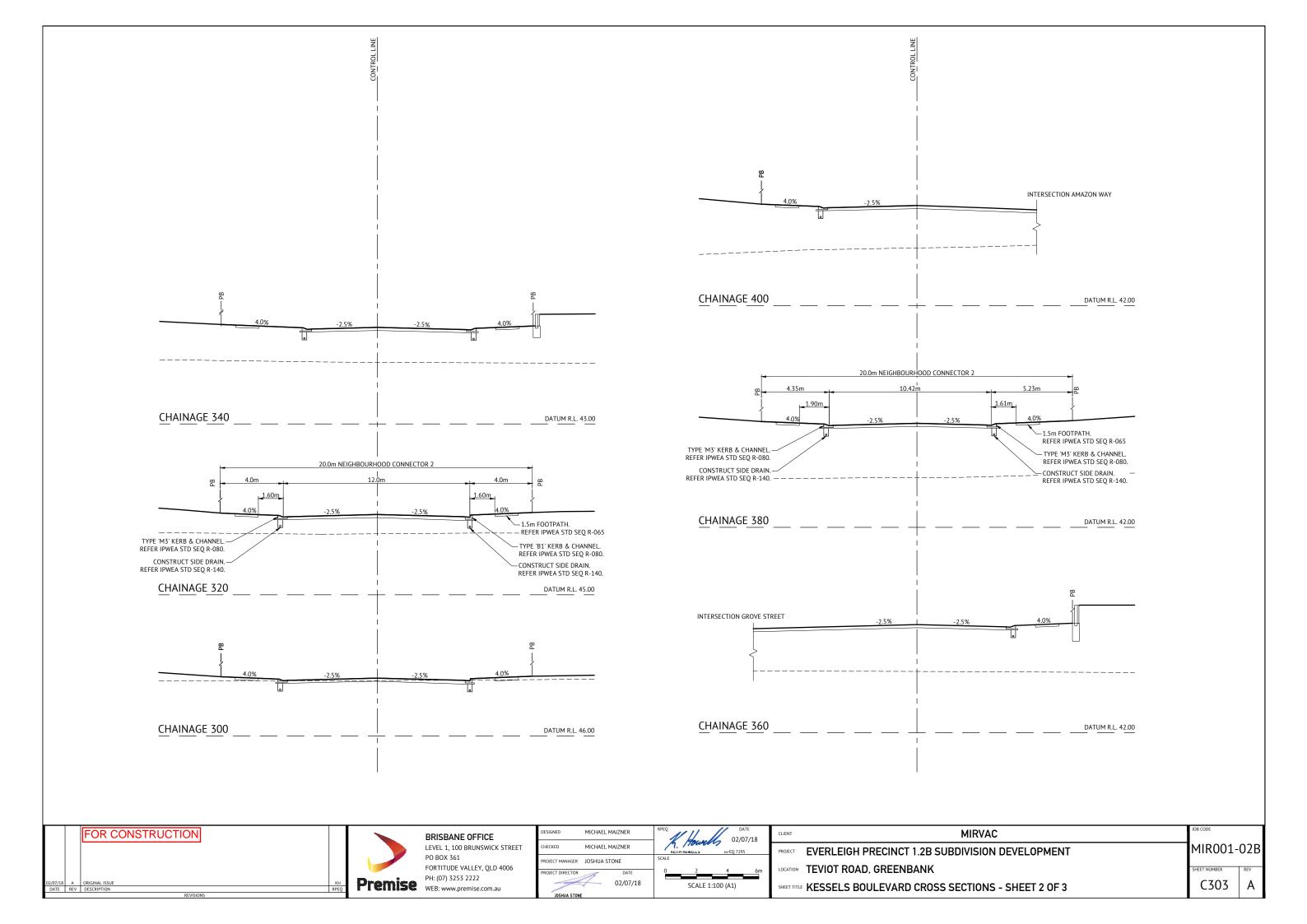
C300

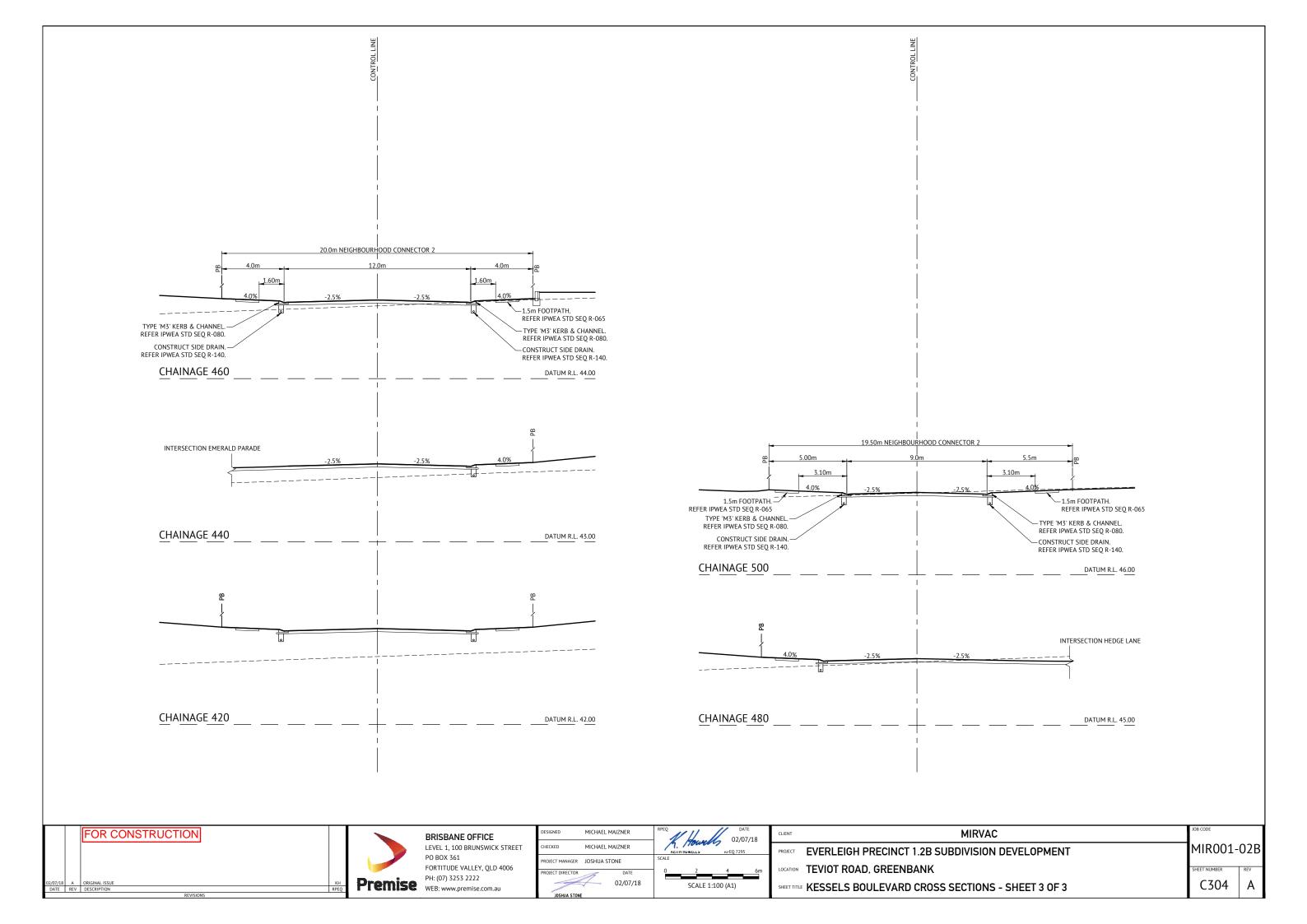
CONCRETE REQUIREMENTS

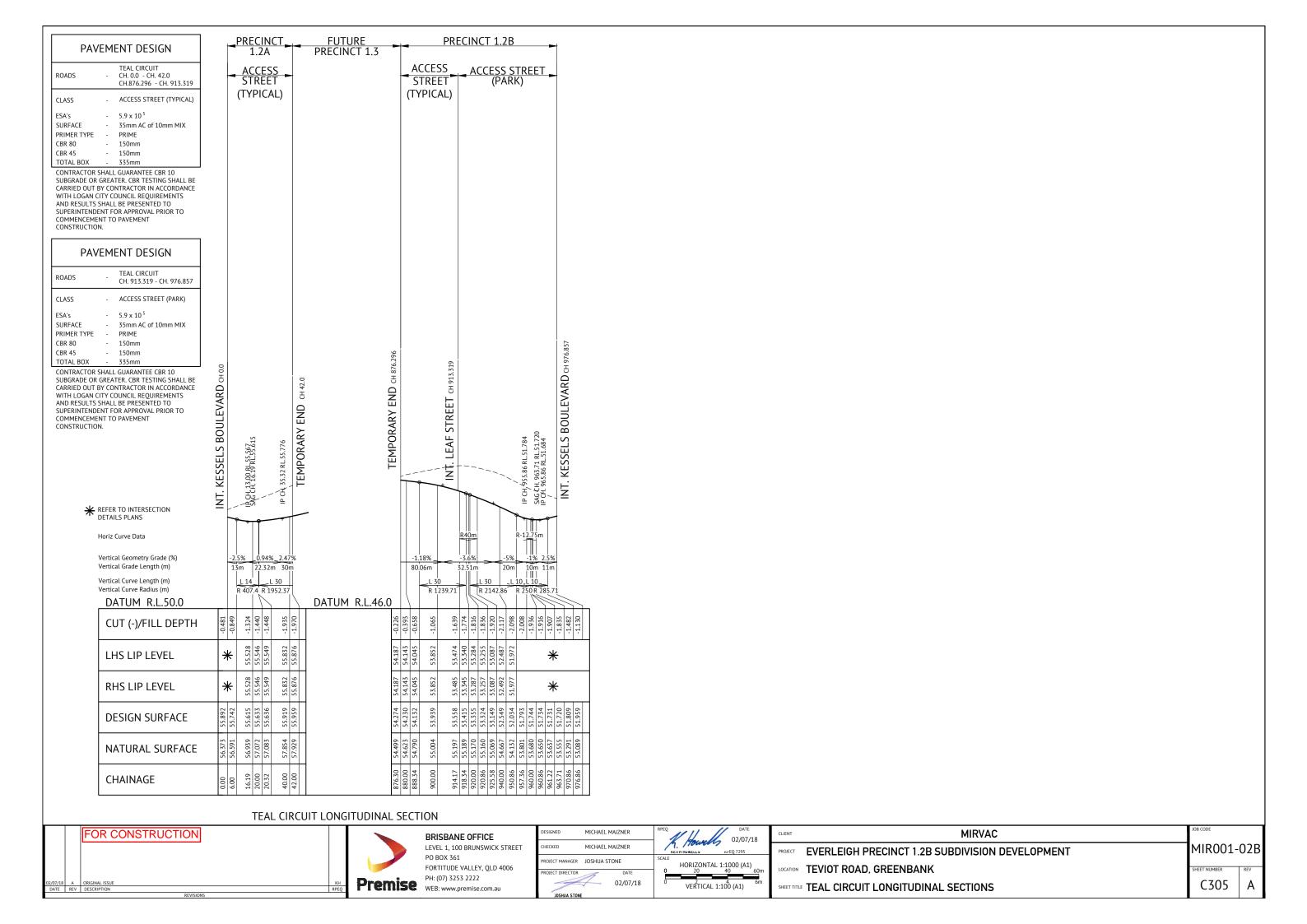
ITEM	28 DAY STRENGTH	CONCRETE CYLINDER TEST	TESTING FREQUENCY
KERB & CHANNEL	N32	REQUIRED	1 TEST PER 300m
VEHICULAR CROSSINGS	N25	REQUIRED	1 TEST PER CROSSING
BIKEWAYS	N25	REQUIRED	1 TEST PER 300m
FOOTPATHS	N25	REQUIRED	1 TEST PER 300m
CONCRETE CHANNELS	N25	REQUIRED	1 TEST PER 150m ²
STRUCTURES	AS DESIGN	REQUIRED	AS DIRECTED
ROOFWATER MH'S	N20	NOT REQUIRED	
STORMWATER MH'S	N25	NOT REQUIRED	
PRECAST MANHOLE ROOF SLABS	N40	NOT REQUIRED	
GULLY PITS			
PRECAST LINTEL	N30	NOT REQUIRED	
OTHER	N25	NOT REQUIRED	

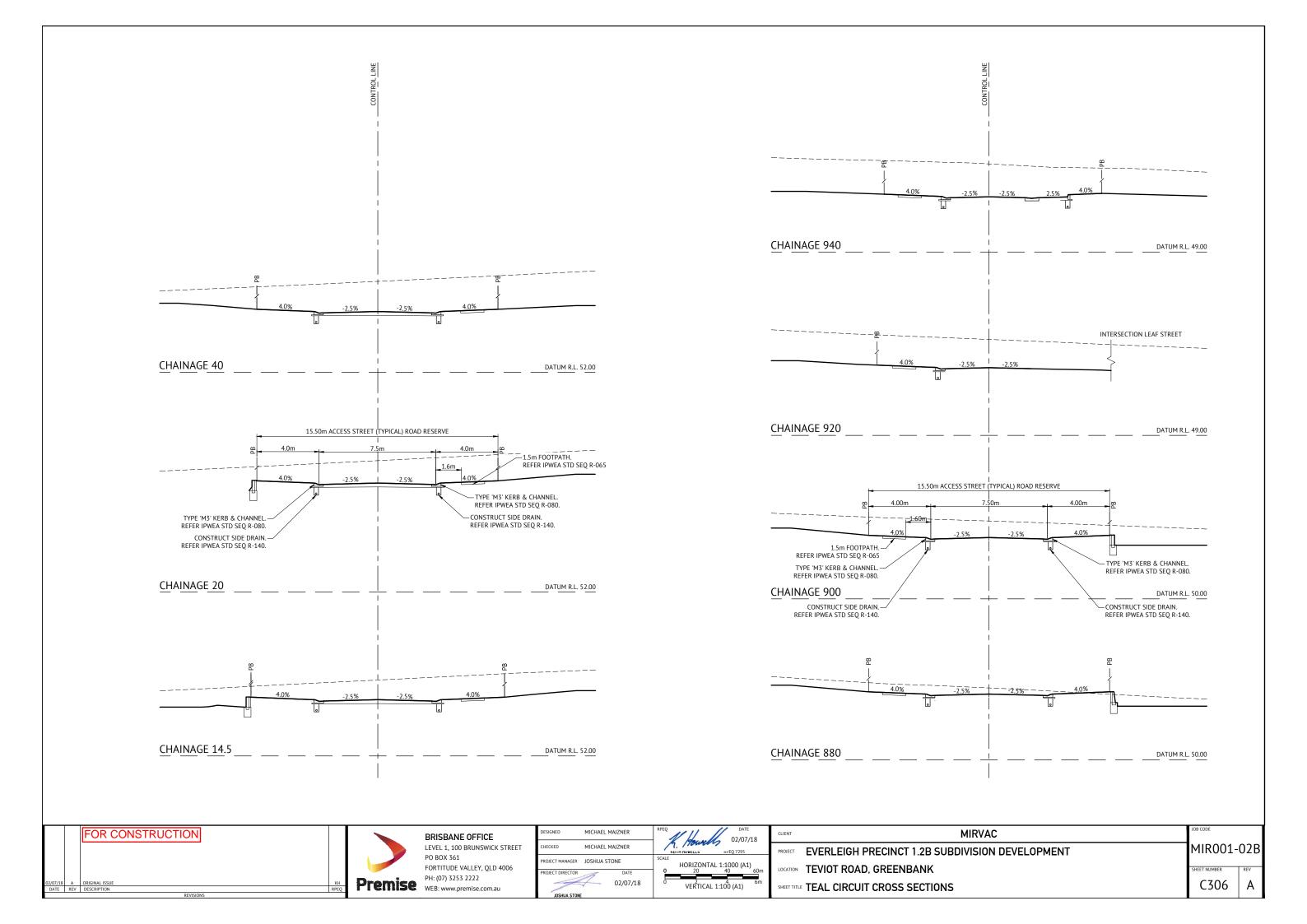


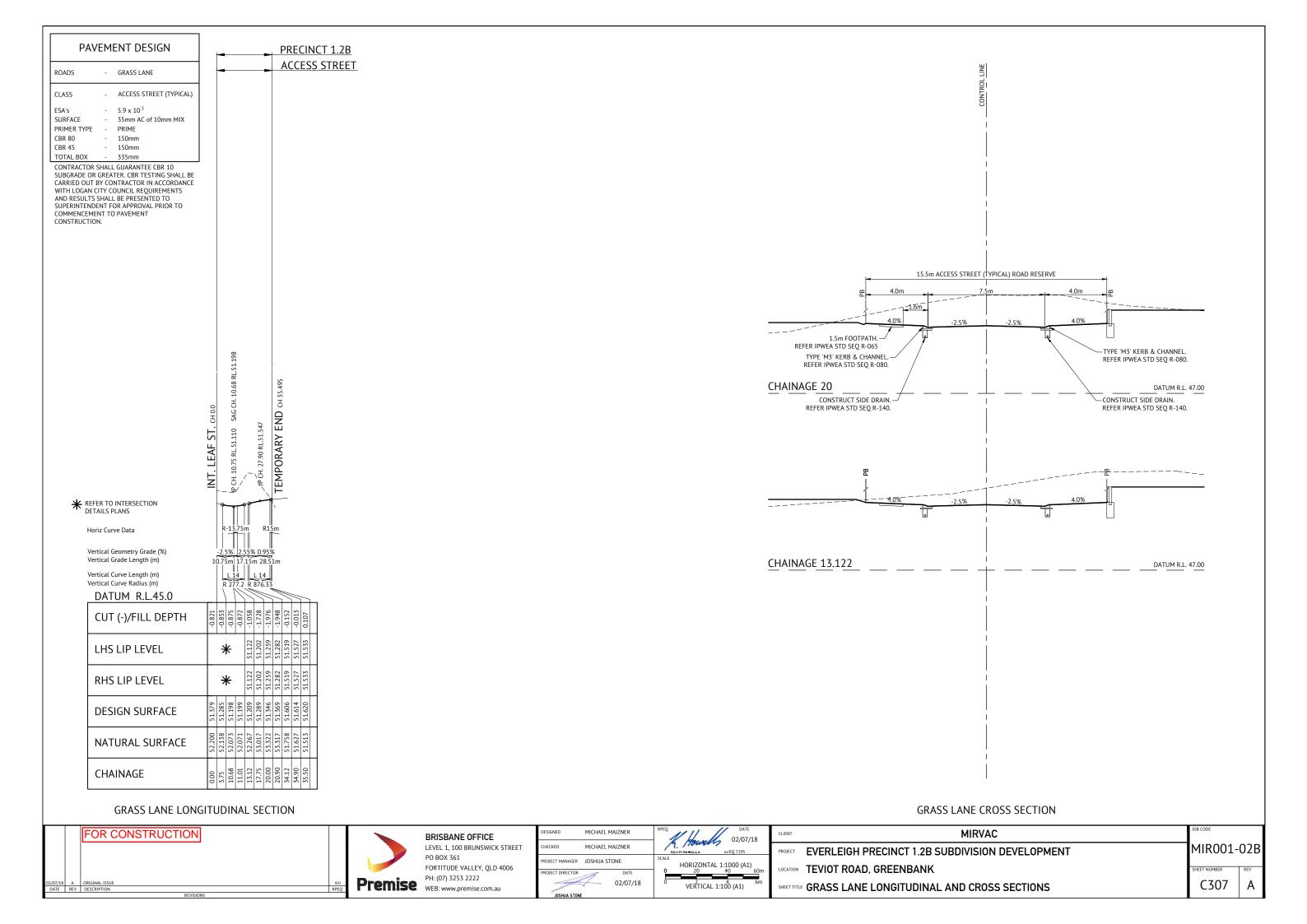


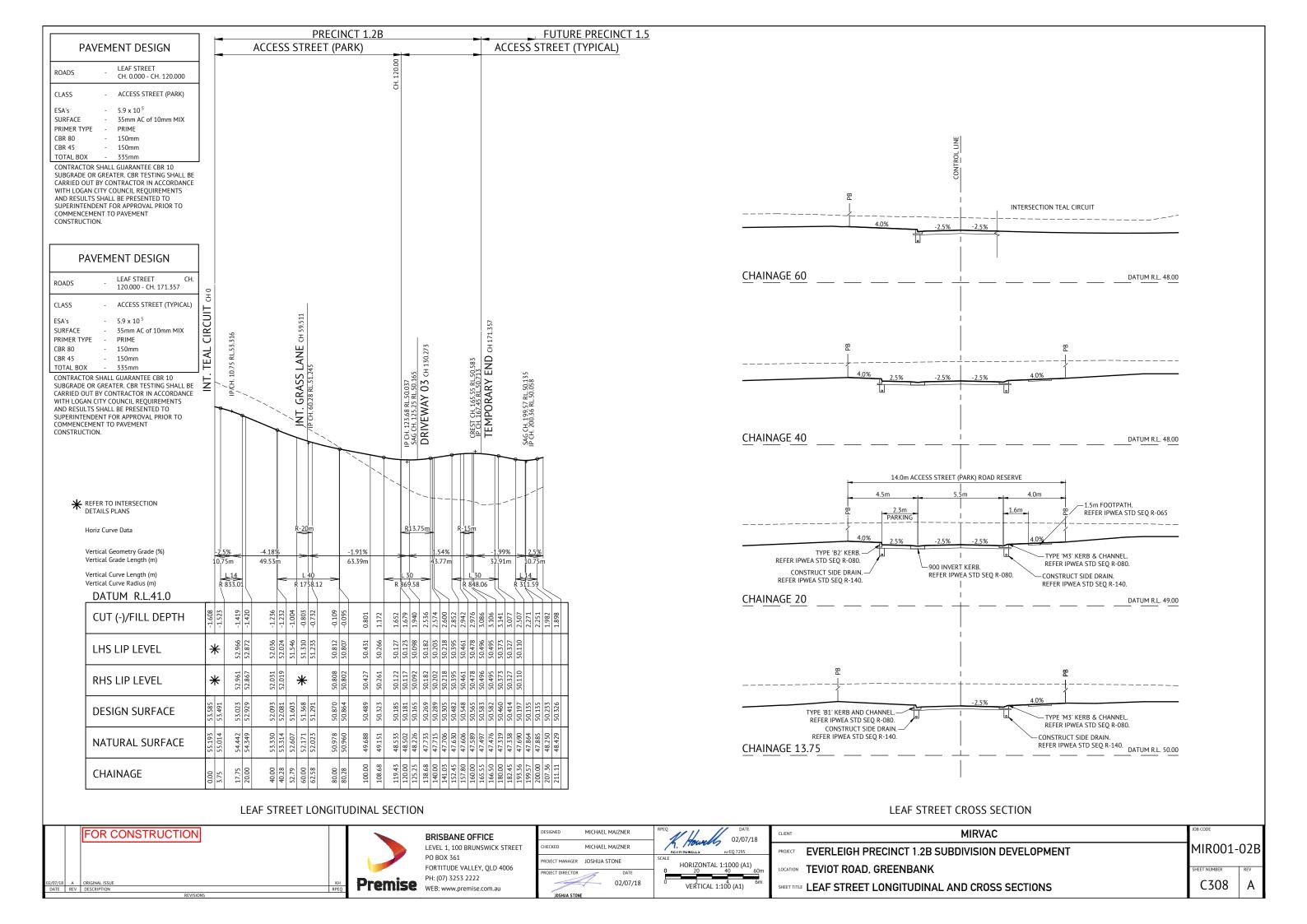


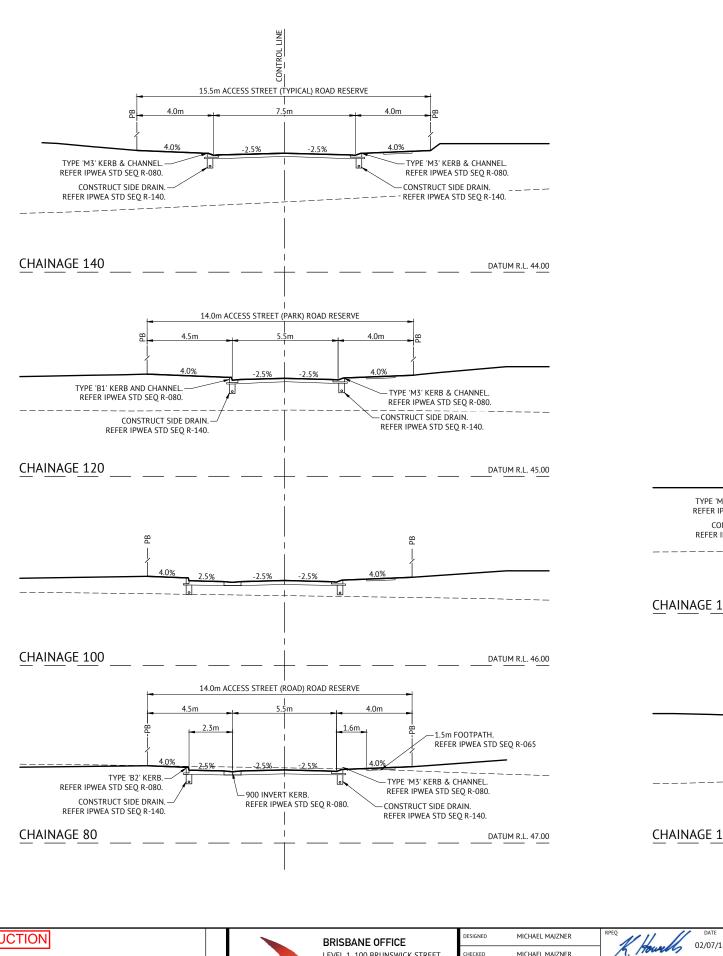


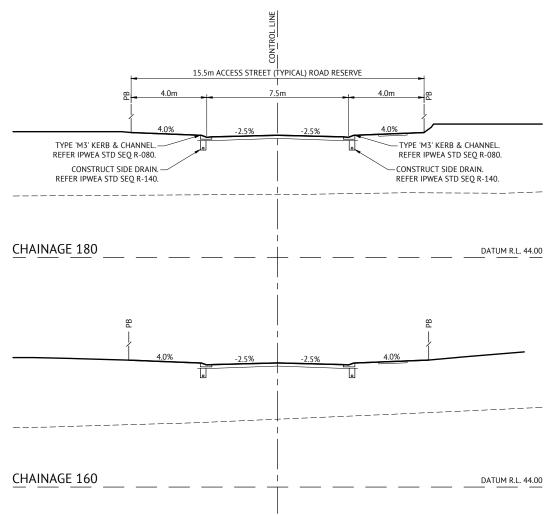


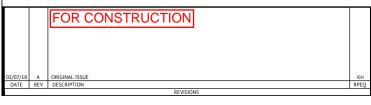














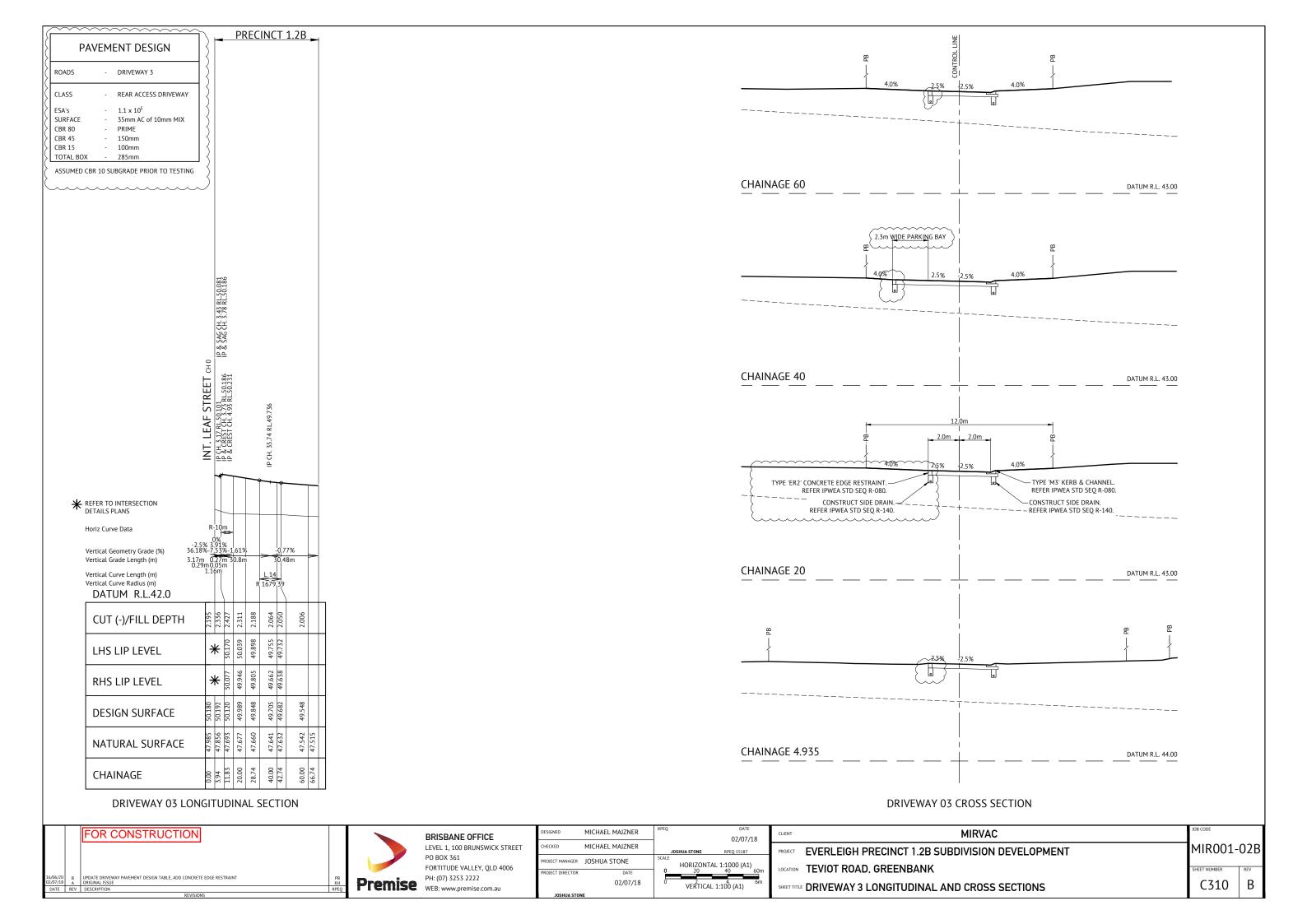
LEVEL 1, 100 BRUNSWICK STREET PO BOX 361 FORTITUDE VALLEY, QLD 4006 PH: (07) 3253 2222

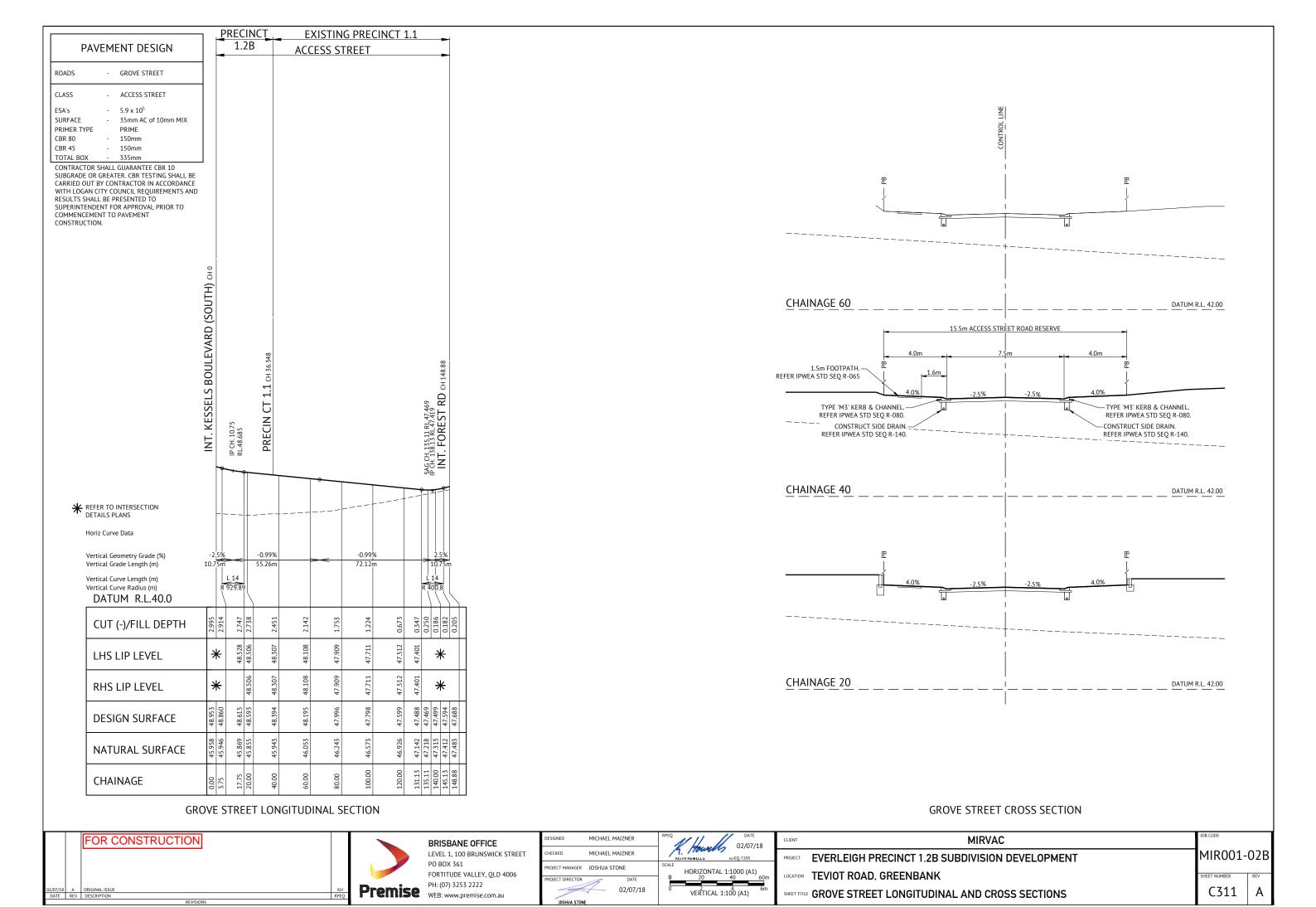
DESIGNED	MICHAEL I	MAJZNER	RPEQ	111	//	ATE 07/18
CHECKED	MICHAEL MAJZNER			HOUSELLS	KrEQ 729	•
PROJECT MANAGER	JOSHUA S	TONE	SCALE			
PROJECT DIRECTOR	1	DATE	0	2	4	6m
	-	02/07/18		SCALE 1	:100 (A1)	
JOSHUA STONE						

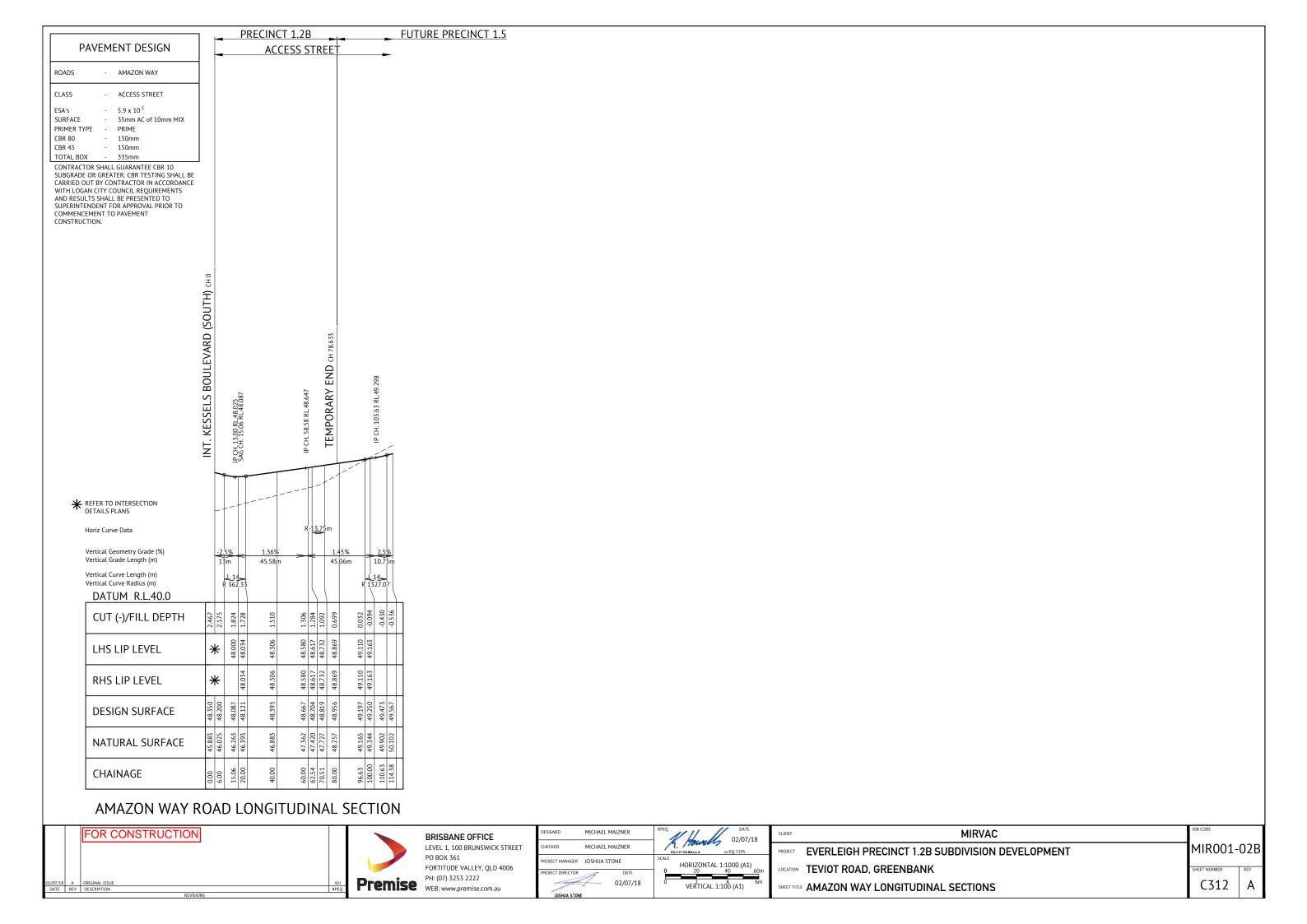
MIRVAC PROJECT EVERLEIGH PRECINCT 1.2B SUBDIVISION DEVELOPMENT LOCATION TEVIOT ROAD, GREENBANK SHEET TITLE LEAF STREET CROSS SECTIONS

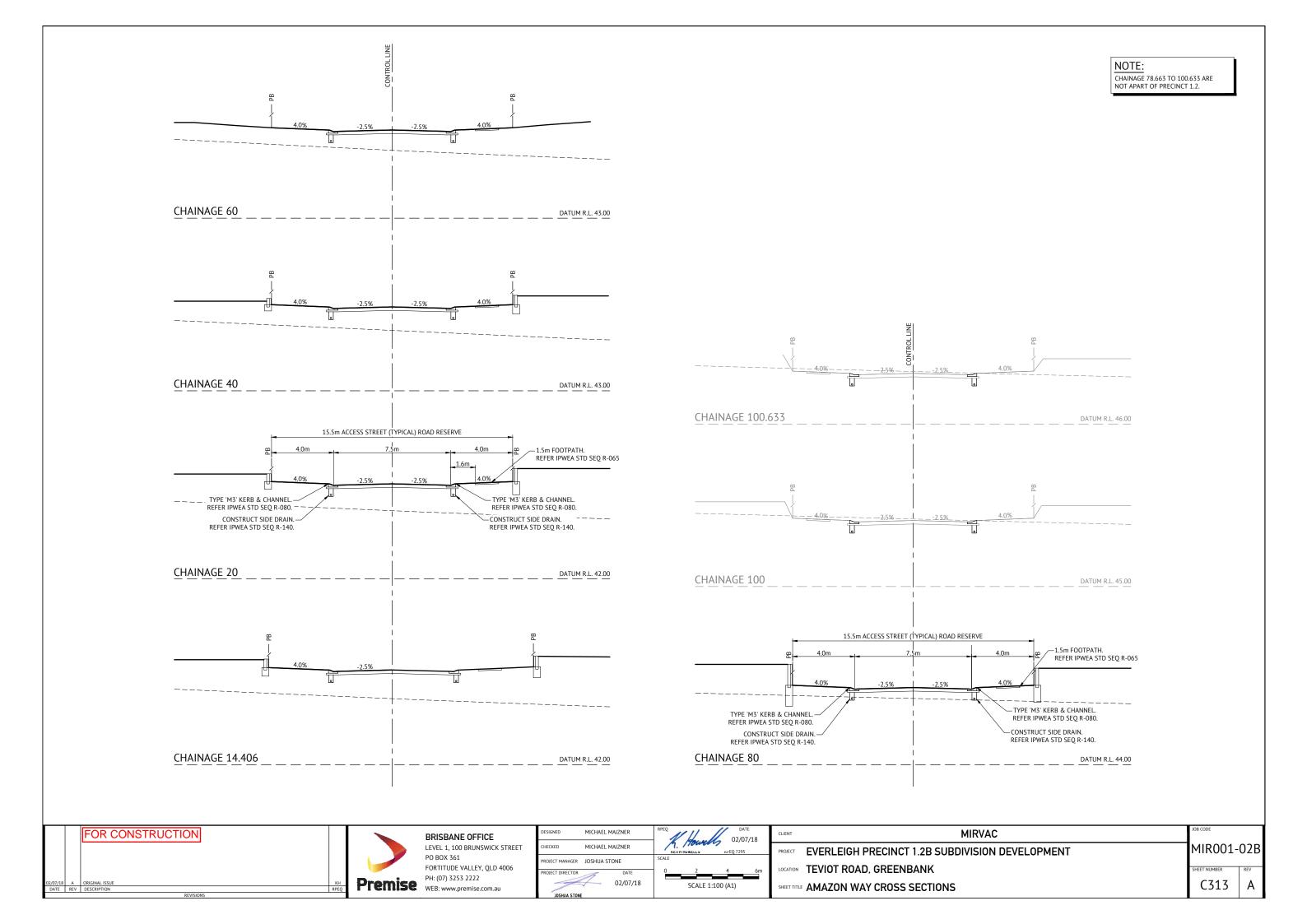
MIR001-02B

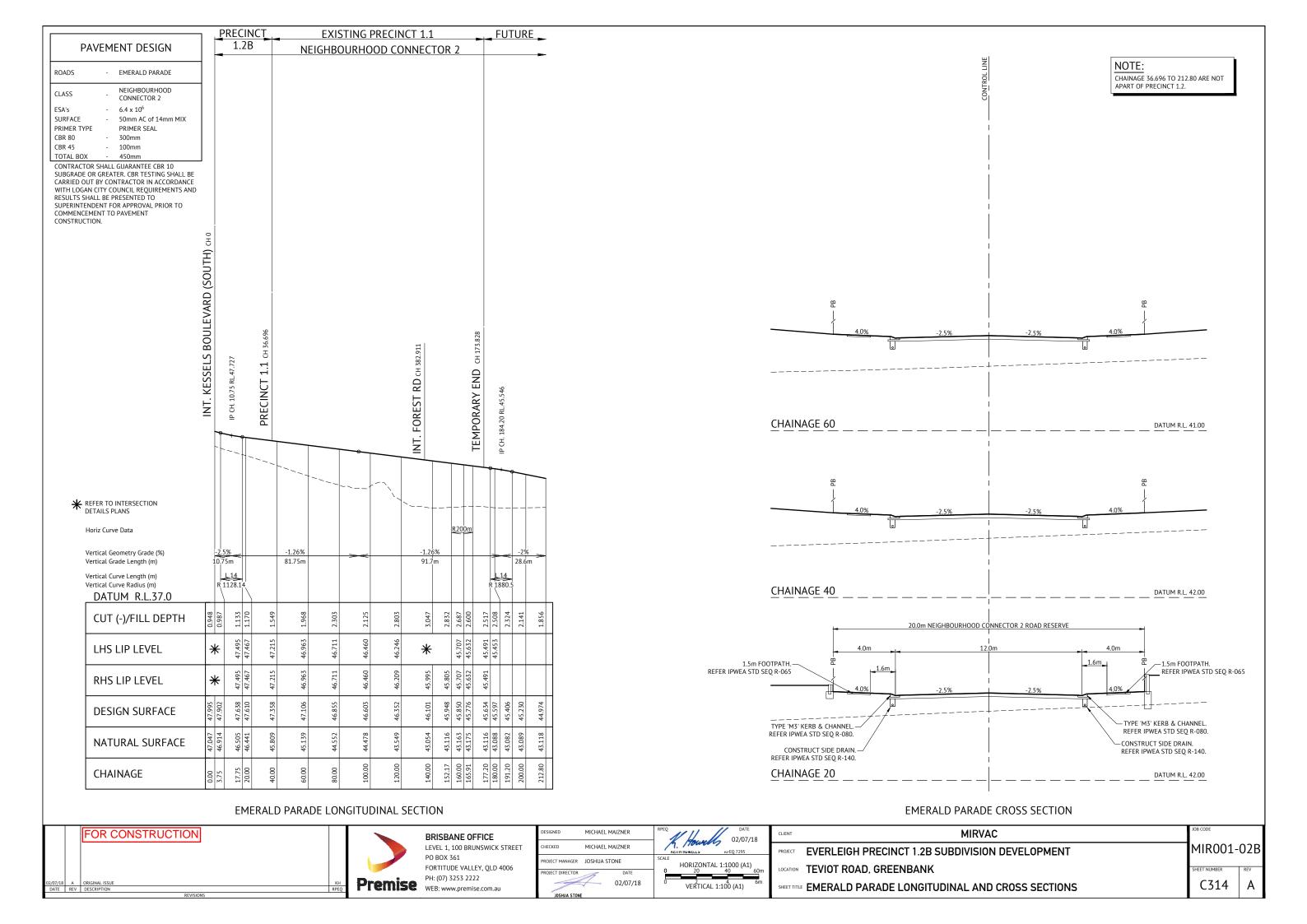
C309

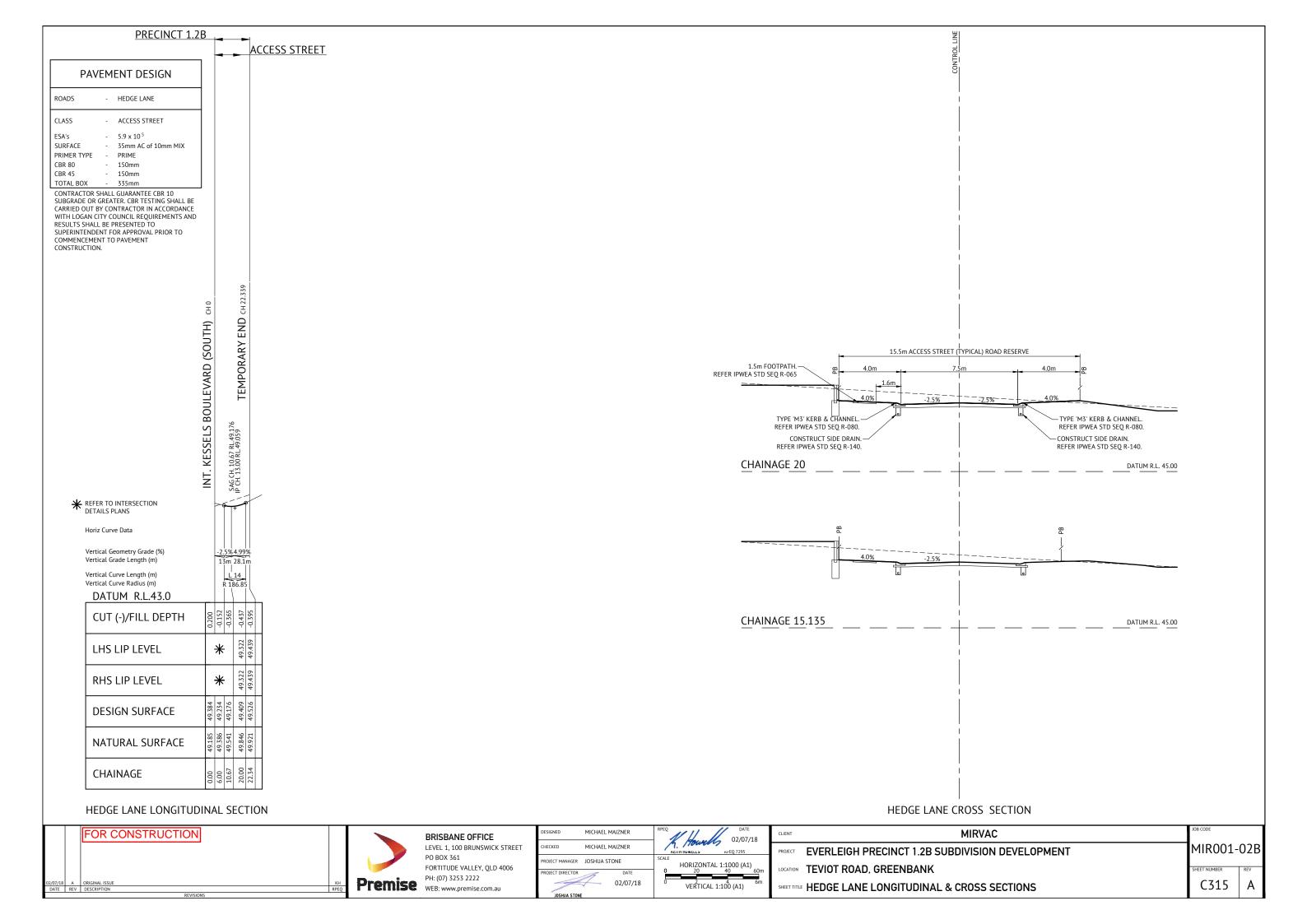


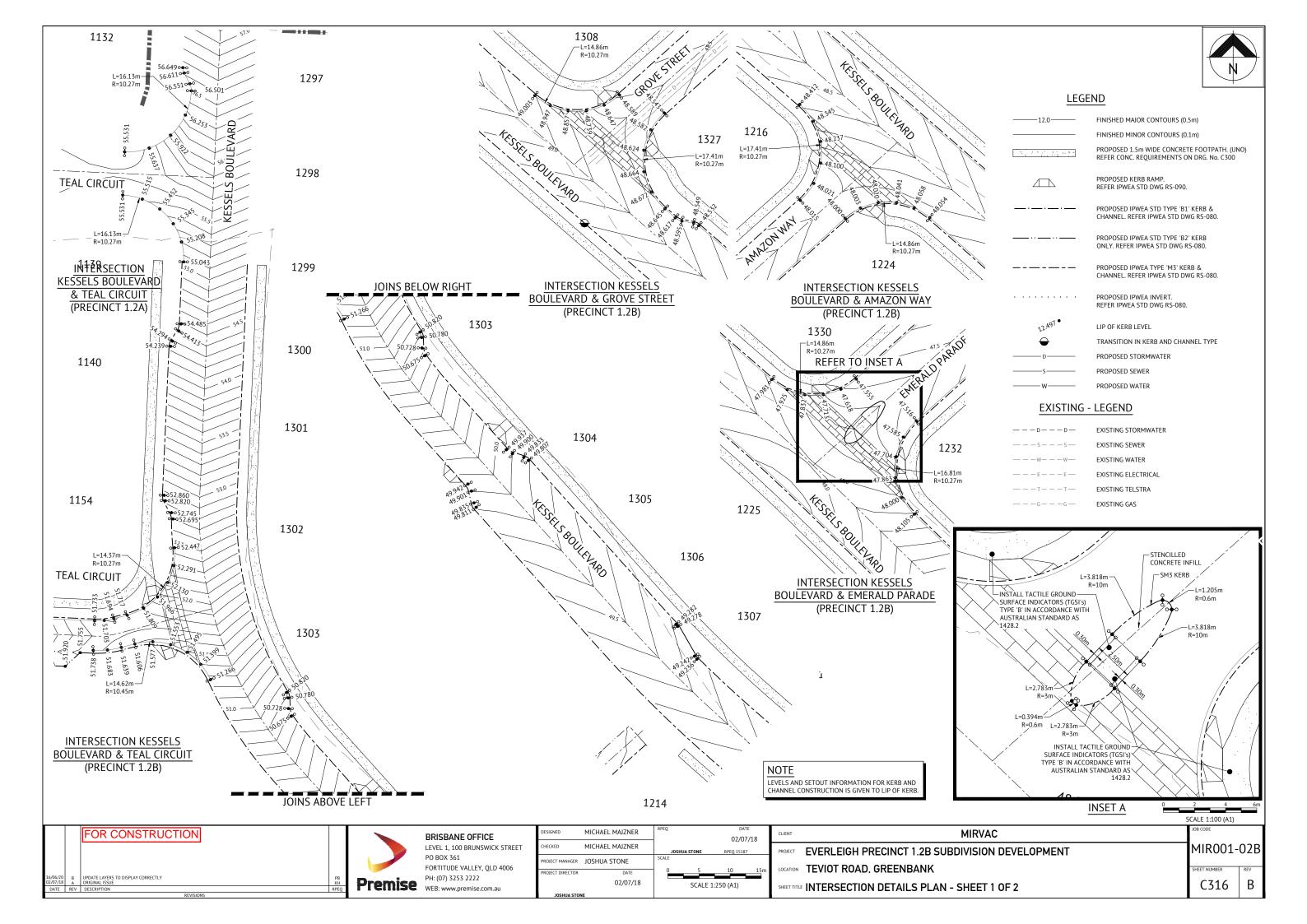


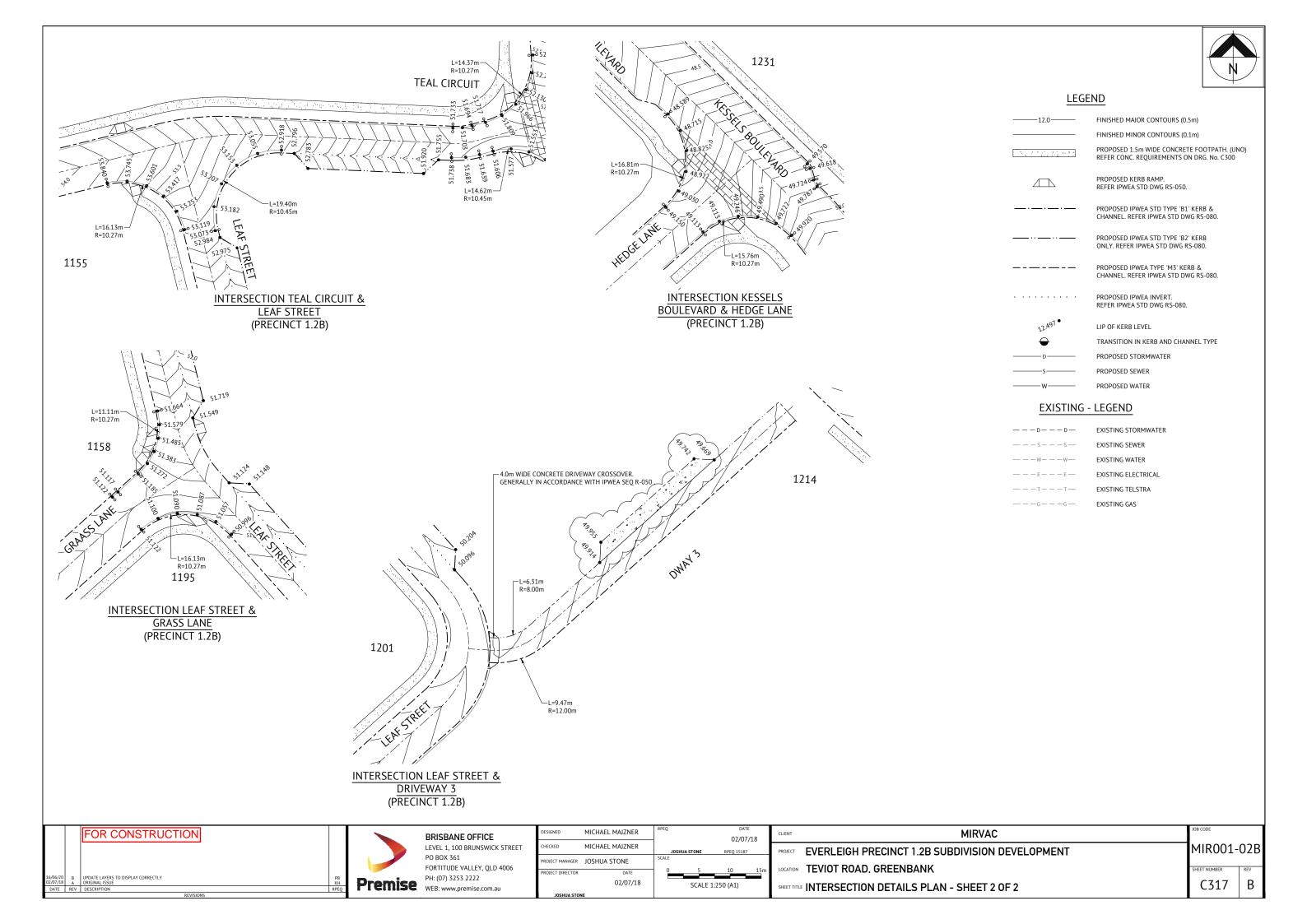


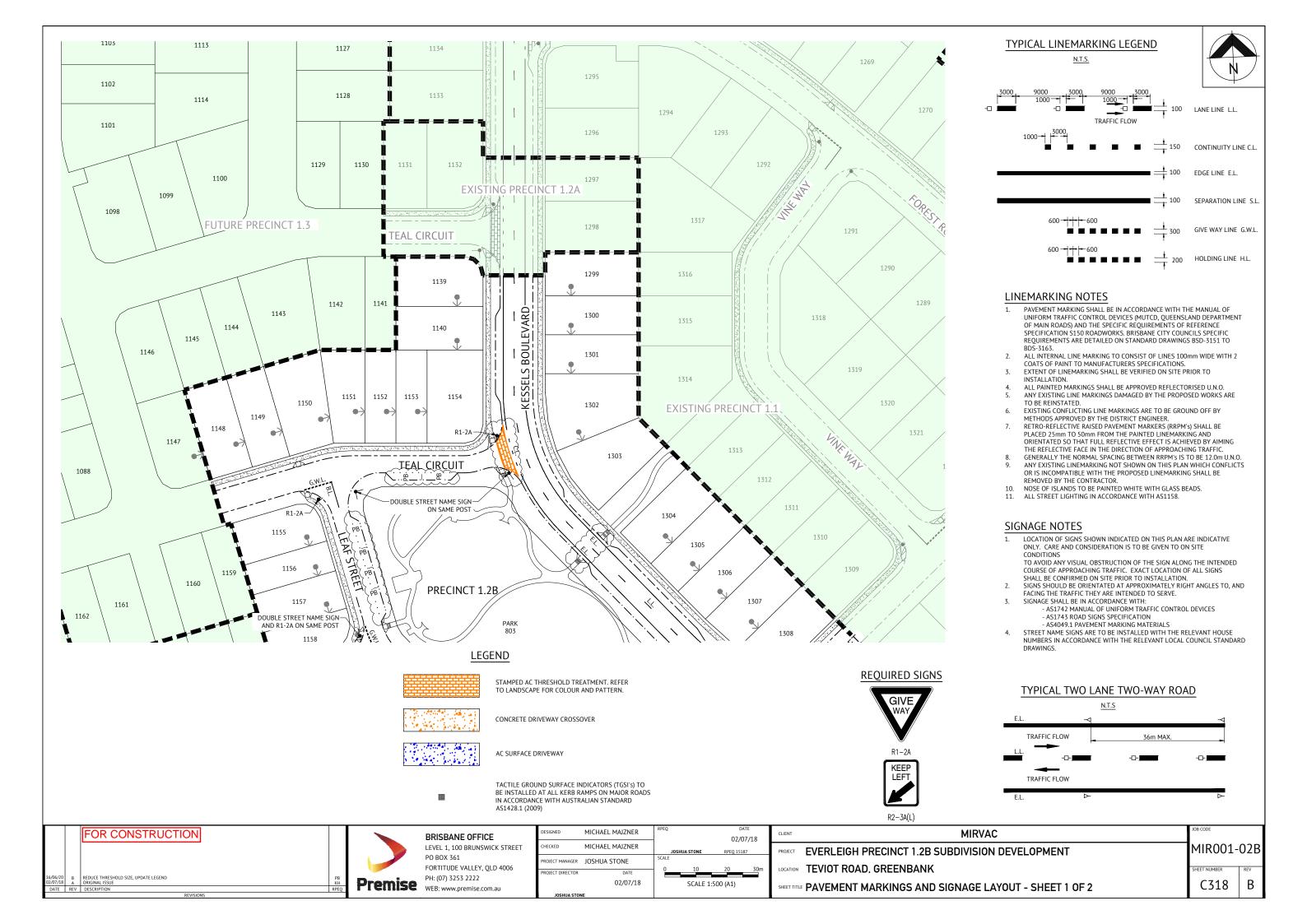


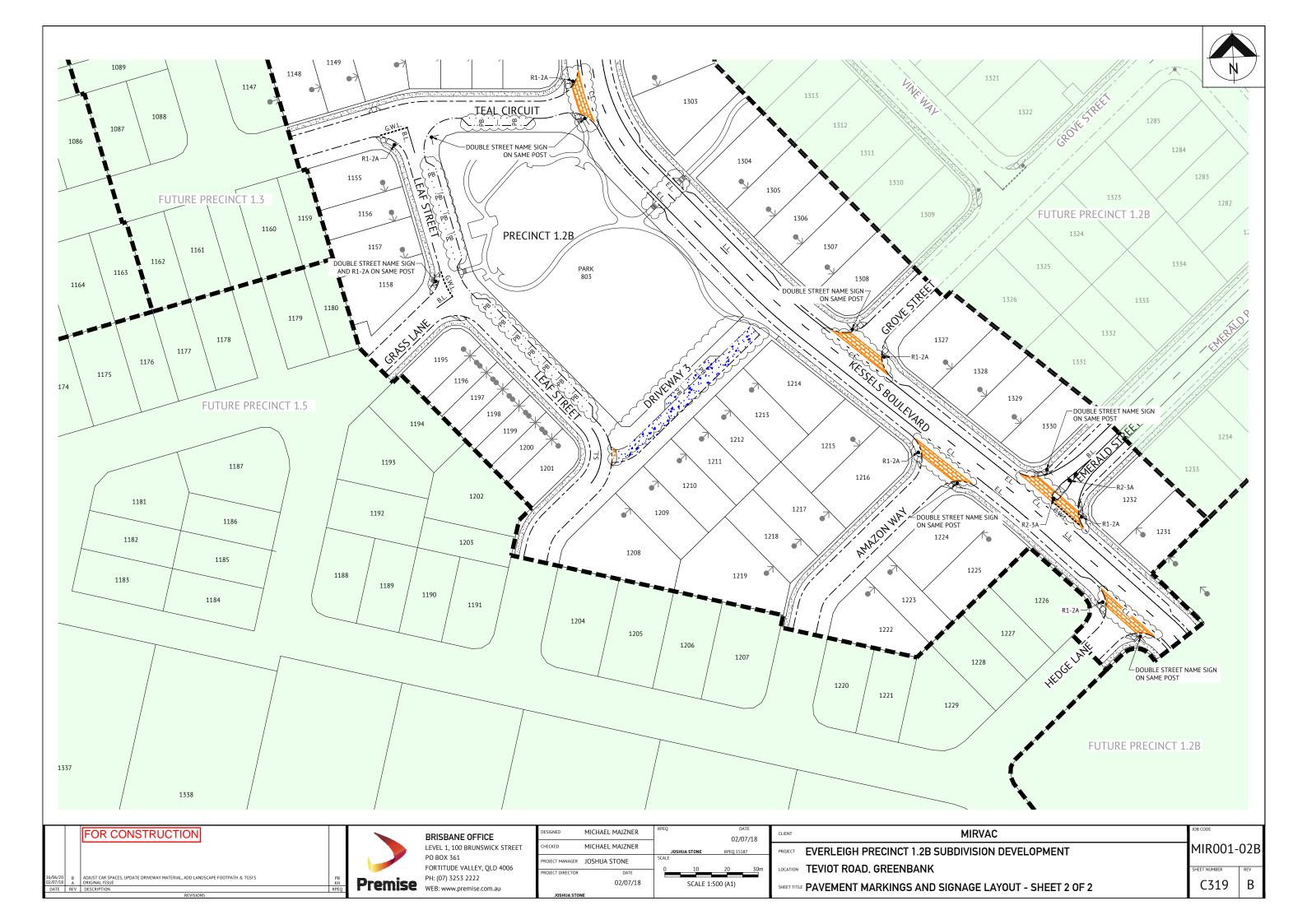










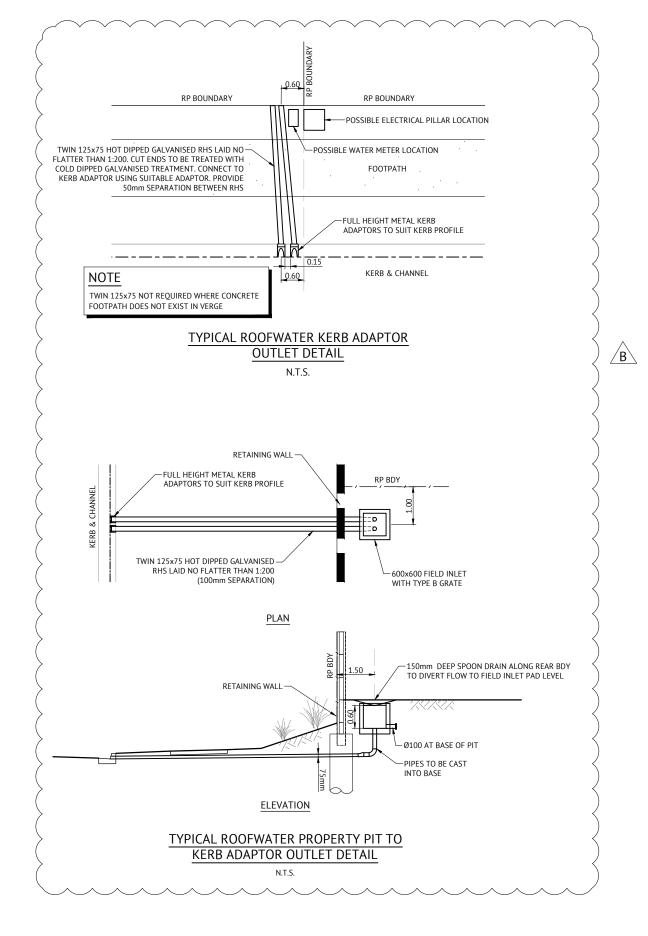


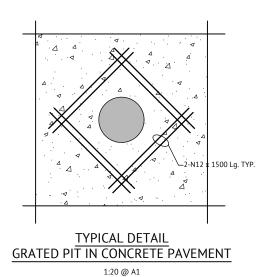
STORMWATER DRAINAGE NOTES

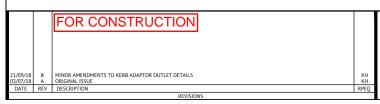
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE STORMWATER DRAINAGE DRAWINGS
- STORMWATER PITS ARE TO BE CONSTRUCTED INSITU IN ACCORDANCE WITH DRAWINGS OR AS VARIED AS NOTED ON THE DRAWING. PREFABRICATED STORMWATER PITS CAN BE USED SUBJECT TO WRITTEN APPROVAL FROM THE SUPERINTENDENT, CLASS D HEAVY DUTY GALVANIZED STEEL GRATES ARE TO BE FITTED IN TRAFFIC AREAS, CLASS B LIGHT DUTY GALVANIZED STEEL GRATES ARE TO BE FITTED IN LANDSCAPE AREAS UNLESS NOTED OTHERWISE.
- ALL DRAINAGE EXCAVATION AND CONSTRUCTION SHALL BE CARRIED OUT IN ACCORDANCE WITH AS3500 AND THE APPLICABLE LOCAL
- AUTHORITY SPECIFICATIONS AND STANDARD DETAILS.
 ALL MATERIALS SHALL MEET THE REQUIREMENTS OF AS1254 &
- ALL uPVC PIPES SHALL BE CLASS 'SN8' FOR Ø150 & Ø225, AND CLASS 'SN6' FOR Ø100 UNLESS NOTED OTHERWISE
- PIPES SHALL BE LAID AT MIN. 1% GRADE LINLESS NOTED OTHERWISE CONTRACTOR MUST VERIFY THAT ALL PIPE LEVELS AND GRADES CAN BE ACHIEVED PRIOR TO CONSTRUCTING DRAIN LINES, ANY CONFLICT SHALL BE REPORTED TO THE SUPERINTENDENT FOR ANY NECESSARY ALTERATIONS PRIOR TO ANY CONSTRUCTION OF CONNECTING
- WHERE PIPES ARE TO BE LAID WITHIN THE ZONE OF INFLUENCE OF WHERE PIPES ARE TO BE LAID WITHIN THE ZOING OF INFLUENCE OF STRUCTURAL LOADINGS (e.g. BUILDING FOOTINGS, RETAINING WALLS...etc) THE BUILDER SHALL PROVIDE ADEQUATE BRIDGING / PROTECTION. WHERE ANY DOUBT MAY EXIST REFERENCE SHALL BE
- MADE TO THE DESIGNER OF THE STRUCTURE. BENCHING OF PIT STRUCTURES SHALL HAVE A SMOOTH FINISHED SURFACE, AND PIPES SHALL NOT PROJECT INSIDE THE SHAFT OF THE
- WHERE RECTANGULAR PIT STRUCTURES ARE USED, PIPES MUST NOT CONNECT TO THE PIT AT CORNERS.
- ALL CONSTRUCTION AND EXCAVATIONS SHALL BE CARRIED OUT IN ACCORDANCE WITH THE CURRENT REQUIREMENTS OF THE WORK HEALTH AND SAFETY ACT 2011 AND SUBSEQUENT AMENDMENTS
- REFER TO LCC STD DWG'S FOR TYPICAL ROOF SLAB REINFORCEMENT

REFERENCE POINT LOCATION FOR DRAINAGE STRUCTURES

STRUCTURE TYPE	HORIZONTAL CONTROL POINT [REFERENCE POINT LOCATION]	VERTICALCONTROL REFERENCE LEVEL
MANHOLE	CENTRELINE OF MAIN SHAFT	FINISHED SURFACE LEVEL AT CENTRE OF MAIN SHAFT.
GULLY PIT OVER MANHOLE	CENTRE OF GULLY PIT	LIP LEVEL
GULLY PIT (LIP IN LINE)	CENTRE OF GULLY PIT	LIP LEVEL
HEADWALL	INTERSECTION OF HEADWALL FACE AND PIPE CENTRE LINE	INVERT LEVEL
FIELD INLET	CENTRE OF PIT	TOP OF CONCRETE PIT
ROOFWATER PIT	CENTRE OF PIT	TOP OF GRATE









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

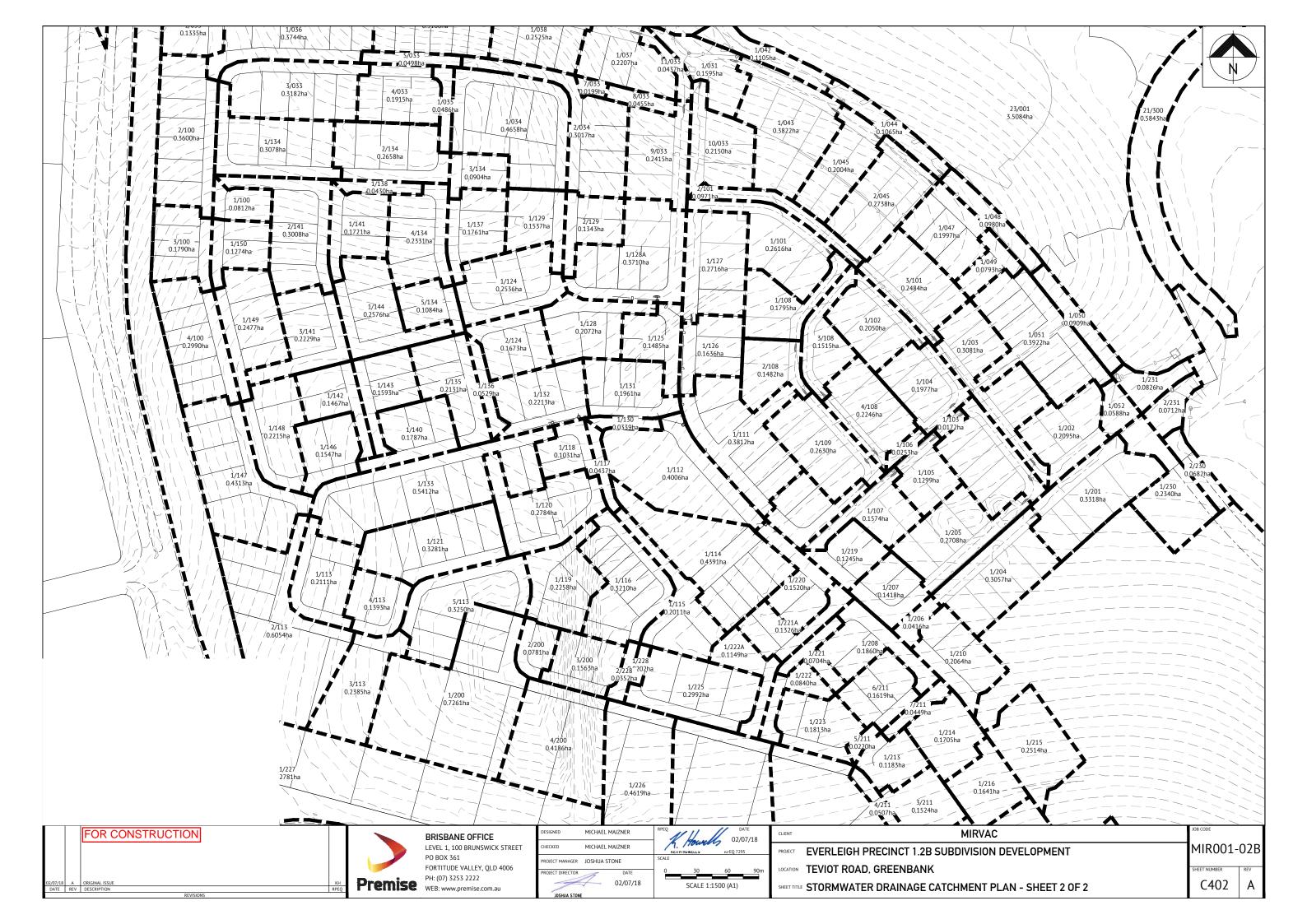


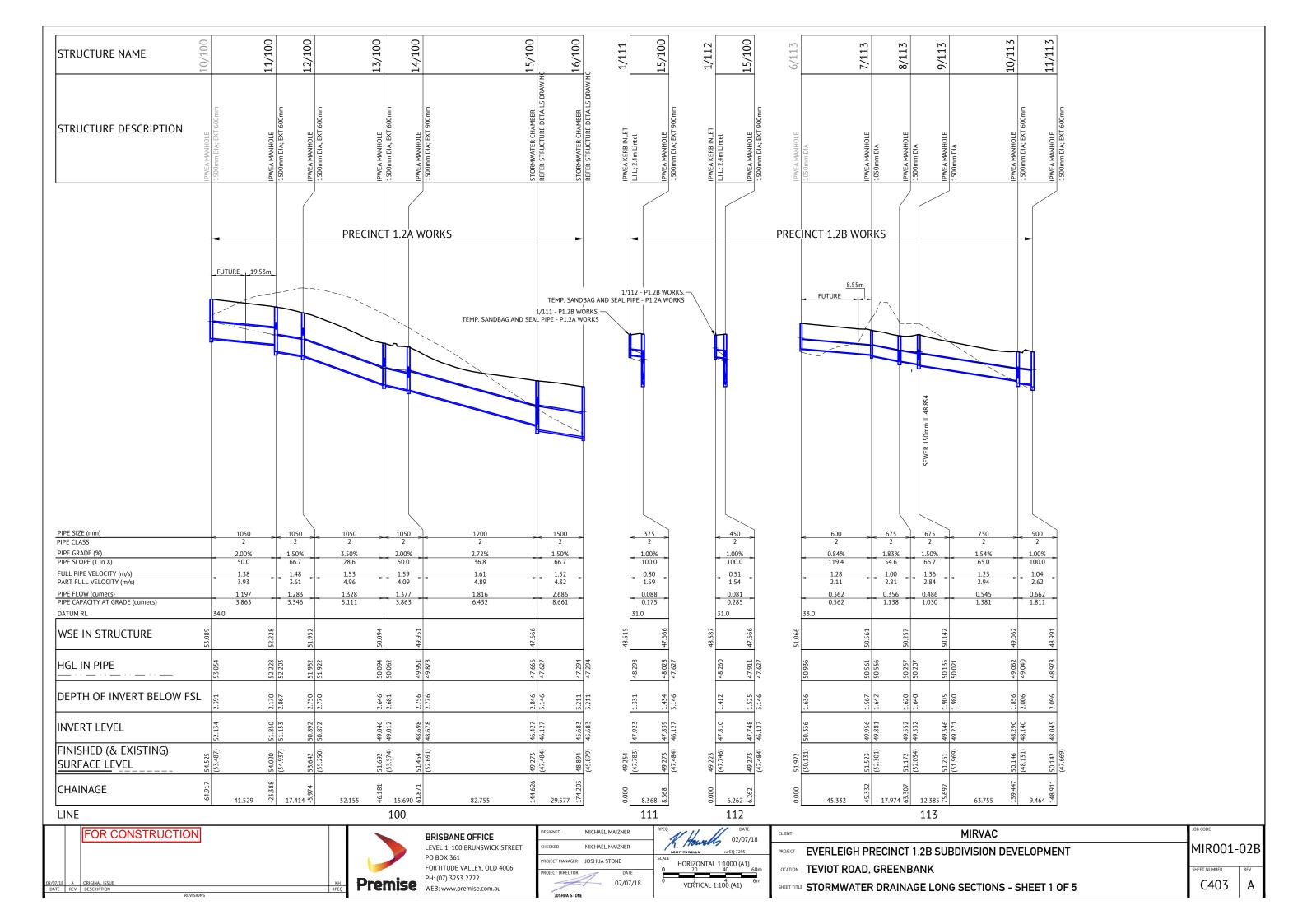
MIRVAC EVERLEIGH PRECINCT 1.2B SUBDIVISION DEVELOPMENT LOCATION TEVIOT ROAD, GREENBANK

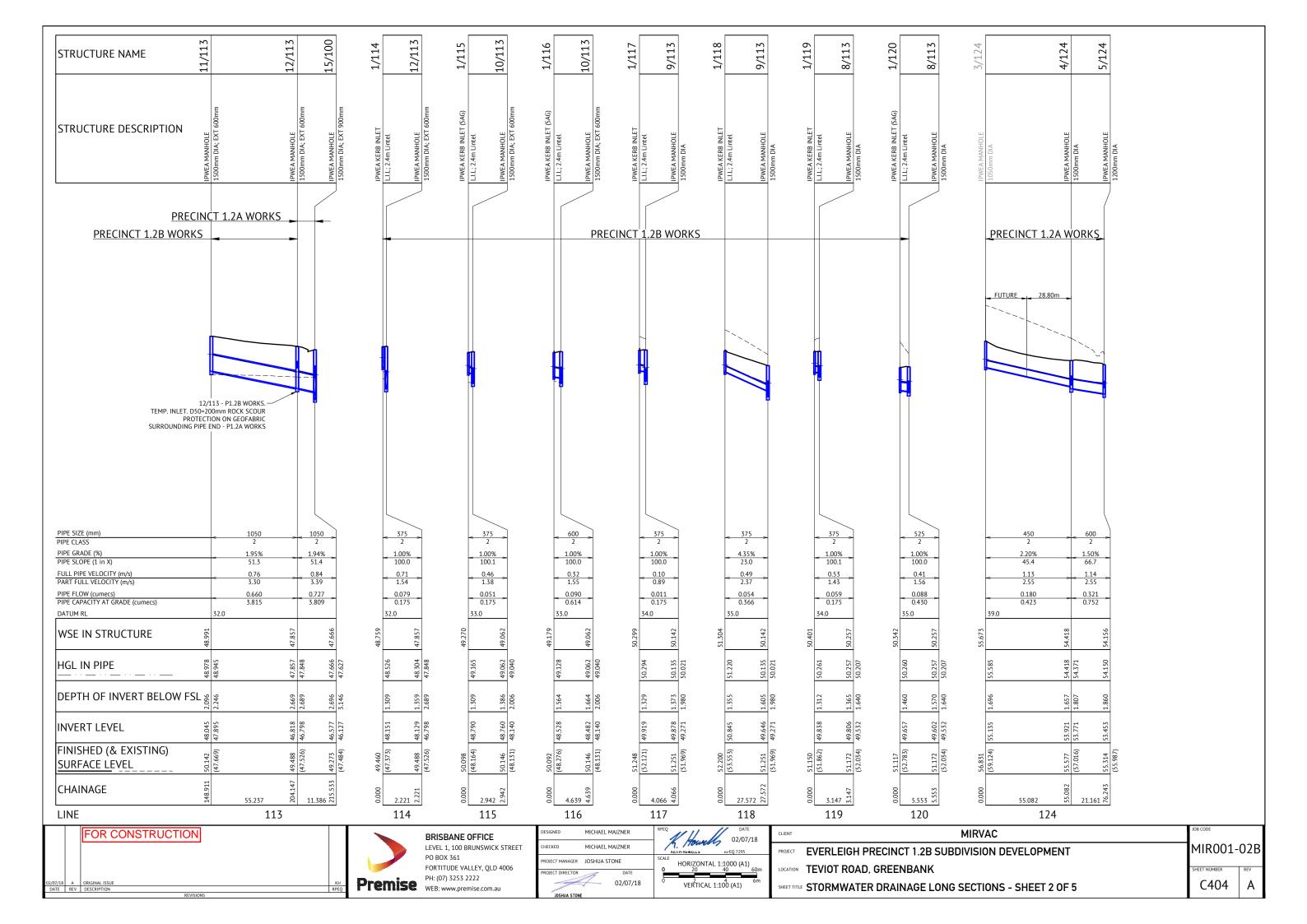
MIR001-02B

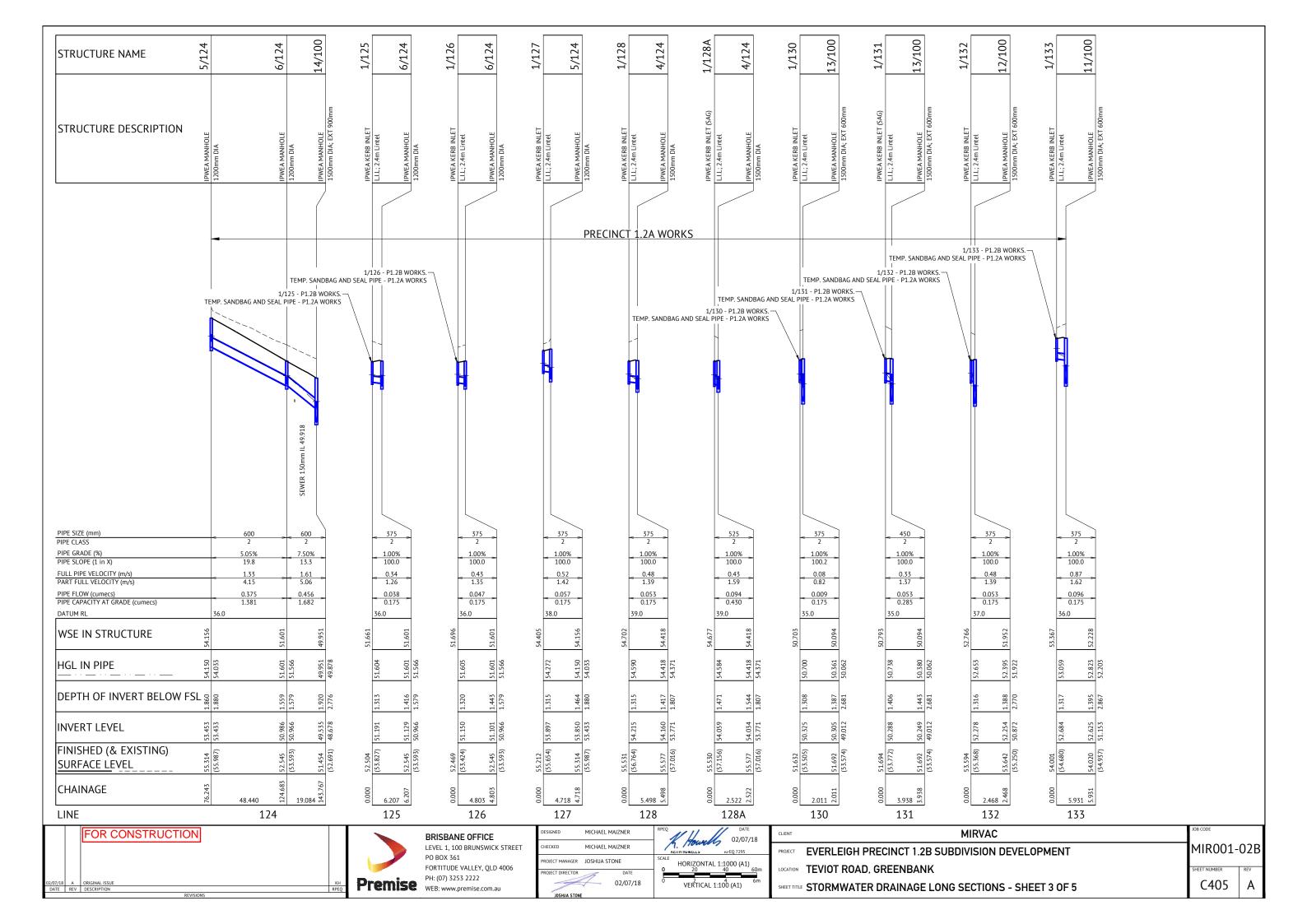
C400 SHEET TITLE STORMWATER DRAINAGE DETAILS AND NOTES

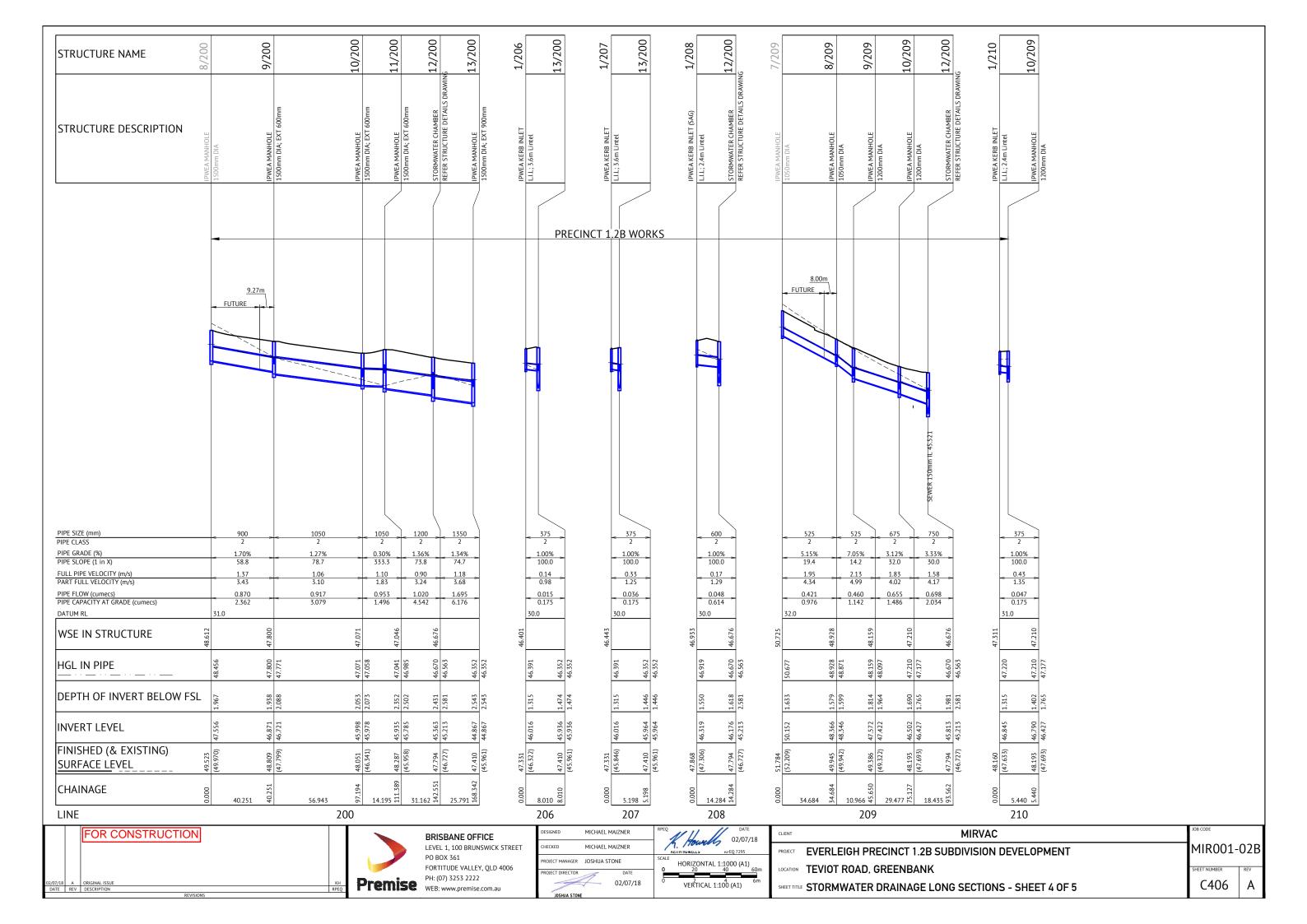


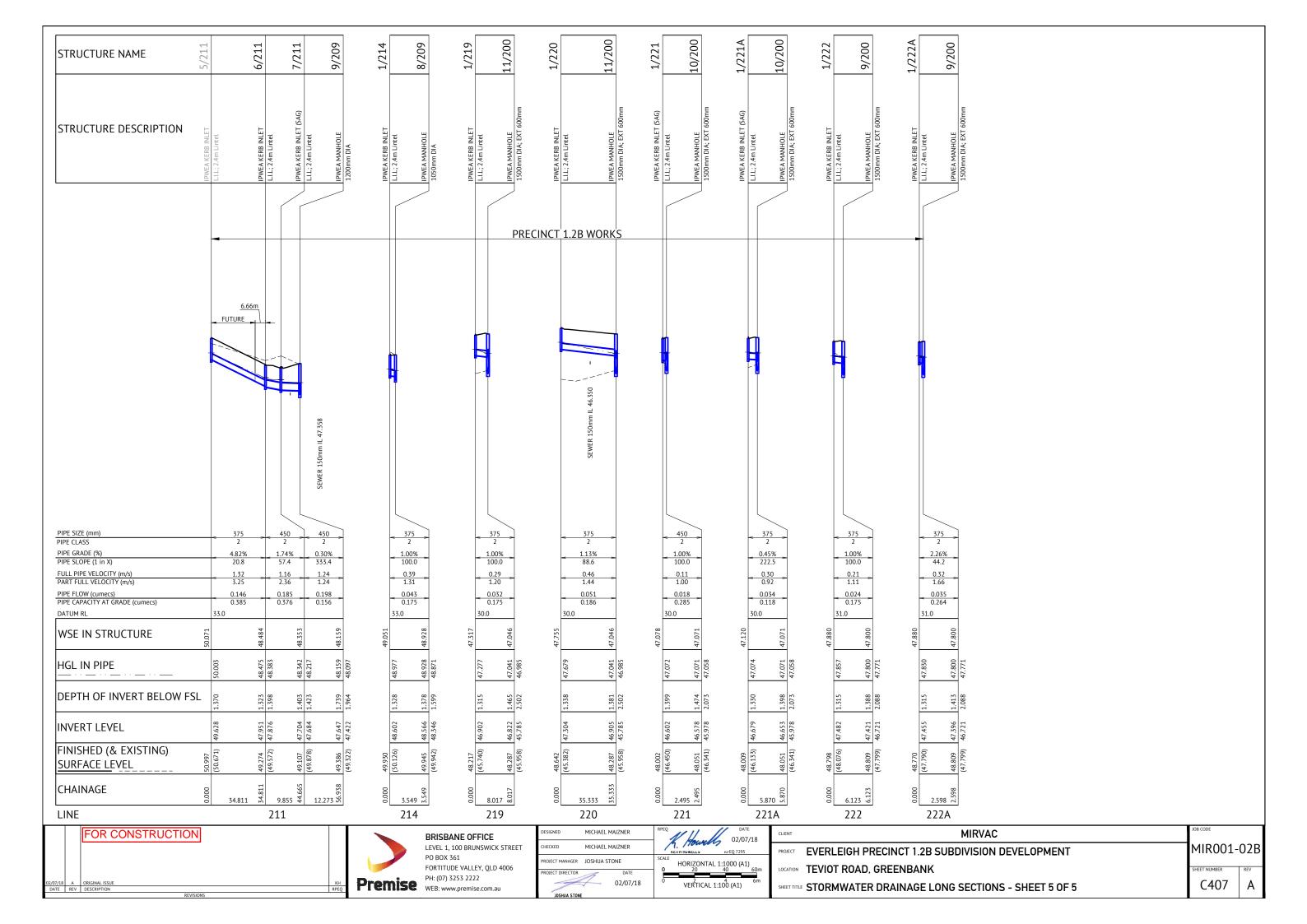




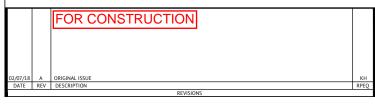








	10	CATION	1	TIME	SUB-C	`ATCHMI	ENT RUNOF	F I		IN	ILET DESI	GN					DRA	IN DESI	GN							HF	ADLOS	SES				PAI	RT FULL			DESIGN LEV	/FLS		
		CATION		I C		CA		'				Qb	tc	I	CA	Qp	L				Vf=Q/A			STRU	CTURE RA	TIOS V2/2			Kw I	nw	Sf h		Vn			DESIGN EE	VELS		
STRUCTURE NUMBER	DOWNSTREAM STRUCTURE	SUB-CATCHMENTS CONTRIBUTING	SUB-CATCHMENT TIME OF CONCENTRATION	RAINFALL INTENSITY CO-EFFICIENT OF RUNOFF		ਛ EQUIVALENT AREA	SUB-CATCHMENT DISCHARGE FLOW IN K.8.C	FLOW WIDT	FLOW	ROAD GRAD	S HALF ROAD CAPACITY S FLOW INTO INLET	BYPASS FLOW BYPASS STRUCTURE	CRITICAL TIME OF	RAINFALL INTE	로 TOTAL (C × A)	S SUM ADDITIONAL PIPE FLOW S PIPE FLOW	B REACH LENGTH	% PIPE GRADE	B PIPE/BOX DIMENSIONS	CLASS	FULL PIPE VELOCITY	TIME OF FLOW IN REACH	CHARTS USED	Q9/Qo	Du/Do	S/Do	UPSTREAN	UPSTREAM HEADLOSS		CHANGE IN W.S	% PIPE FRICTION SLOPE PIPE FRICTION HEADLOSS	× j	NORMAL	UPSTREAM OBVERT LEVEL DOWNSTREAM OBVERT		DOWNSTREAM H.G.L.	a W.S.E.	3 SURFACE OR GRATE LEVEL	STRUCTURE NUMBER
	1	/140 1/142 1/143 1/144	1	,	11a	11a	73 73	+ "	+ "	70	43 43	43	 	,	IIa	43 43	+ "	1 70	111111		111/3	1		+				 '''		-	70 11	' '''	111/3	" "					-
10/100	11/100 1, 11/100 1, 11/100 1,	7141 2/141 3/141 1/146 7147 1/148 1/149 1/150 7100 2/100 3/100 4/100 7135 1/136 1/137 1/138 7134 2/134 3/134 4/134 7134											7.38	116 3	.718	0 1197	41.529	2	1050	2	1.38	0.16	34 37	0	1 :	03 0.098	0.36	0.035	0.0	35 1.9	0.82	6 0.401	3.93	53.054 52.22	3 53.0	52.228	53.089	54.525	10/100
11/100	12/100 1, 4, 1,	/133 1/140 1/142 1/143 /144 1/141 2/141 3/141 /146 1/147 1/148 1/149 /150 1/100 2/100 3/100 /100 1/135 1/136 1/137 /138 1/134 2/134 3/134 /134 5/134											7.45	116 4	.109	0 1283	17.414	1.5	1050	2	1.48	0.08	33 34	0	1 :	.02 0.112	2 0.22	0.025	0.0	1.4	14 0.25	1 0.451	. 3.61	52.203 51.94	2 52.2	51.952	52.228	54.02	11/100
12/100	13/100 1, 3, 13/100 1, 3, 1,	/132 1/133 1/140 1/142 /143 1/144 1/141 2/141 /141 1/146 1/147 1/148 /149 1/150 1/100 2/100 /100 4/100 1/135 1/136 /137 1/138 1/134 2/134 /134 4/134 5/134											7.53	115 4	.275	0 1328	52.155	3.5	1050	2	1.53	0.15	33 34	0	1 :	03 0.12	0.25	0.03	0.0	3.5	5 1.82	8 0.365	4.96	51.922 50.09	6 51.9	50.094	51.952	53.642	12/100
13/100	14/100 1, 14/100 1, 1, 1, 1,	/130 1/131 1/132 1/133 /140 1/142 1/143 1/144 /141 2/141 3/141 1/146 /147 1/148 1/149 1/150 /100 2/100 3/100 4/100 /135 1/136 1/137 1/138 /134 2/134 3/134 4/134 /134											7.68	115 4	.447	0 1377	15.69	2	1050	2	1.59	0.06	33 34	0	1 :	03 0.129	0.25	0.032	0.0	0.7	0.11	0.433	4.09	50.062 49.74	8 50.0	49.951	50.094	51.692	13/100
14/100	15/100 1, 1, 1, 4, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	/125 1/126 1/127 1/128 /128 1/124 2/124 1/129 /129 1/130 1/131 1/132 /133 1/140 1/142 1/145 /144 1/141 2/141 3/141 /146 1/147 1/148 1/149 /150 1/100 2/100 3/100 /100 1/135 1/136 1/137 /138 1/134 2/134 3/134 /134 5/134											7.62	115 5	.823	0 1816	82.755	2.72	1200	2	1.61	0.24	34 37	0	1 :	.06 0.132	2 0.56	0.074	0.0	174 2.6	2.21	2 0.436	5 4.89	49.878 47.62	7 49.8	47.666	49.951	51.454	14/100
15/100	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	/111 1/112 1/114 1/115 /116 1/117 1/118 1/119 /120 1/113 2/113 3/113 /113 5/113 1/121 1/125 /126 1/127 1/128 1/128 /126 1/127 1/128 1/128 /130 1/131 1/132 1/133 /140 1/142 1/143 1/144 /141 2/141 3/141 1/146 /147 1/148 1/149 1/150 /100 2/100 3/100 4/100 /135 1/136 1/137 1/138 /134 2/134 3/134 4/134											7.77	114 8	.547	0 2686	5 29.577	1.5	1500	2	1.52	0.1				0.118	0.33	0.039	0.0	1.1	0.33	3 0.574	4.32	47.627 47.18	3 47.é	527 47.294	47.666	49.273	15/100
16/100																																					47.294	48.894	16/100
	15/100 1	/111	6.5	120 0.75	0.381	0.285	95 101	3.568	3 0.103	0.67 3	30 88	12 1/109	6.5	120 0	.285	0 88	8.255	1.01	375	2	0.8	0.09	32	1		.58 0.03	6.65	0.218	0.2	18 3.2	23 0.17	4 0.188	1.59	48.298 48.21	4 48.2	98 48.028			
15/100	45 405	44.2			0.101	0.00	02			1.3-	7.4	42	.	144	25-				450		0 - :		72			20 6		0		27 -	,			10.21				49.273	
1/112	15/100 1,	/112	/.5	116 0.64	0.401	0.255	82 93	5.451	0.044	1.25 8	74 81	12 1/220	7.5	116	.255	0 81	6.159	1.02	450	2	0.51	0.06	52	1		.28 0.013	9./	0.127	0.1	.2/ 5.5	0.24	1 0.164	1.54	48.26 48.19	8 48.2	26 4/.911		49.223 49.273	1/112
	7/117 1	/113 2/113 3/113 4/113						+	+	-+			011	100	265	0 763	AF 772	0.04	600		1 20	0.70	77 42 47		1	22 0.00	1 17	0.127	1 5 5 6 4	7 00	7 07-	E 0.75	2 4 4	E0.07(F0.55	6 500	76 50564			
6/113		/113 2/113 3/113 4/113 /113 1/121							1				9.14	108 1	.203	562	45.332	0.84	000	2	1.28	0.58	37 42 43	Ju	1	.22 0.083	1.4/	0.125	1.55 [0.]	٥.٥ د.	33 0.37	0.55	2.11	50.936 50.55	υ 5 0.5	20.561	51.066	51.972	6/113
7/113	5,	/113 2/113 3/113 4/113 /113 1/121											9.52	107 1	.265	0 356	17.974	1.83	675	2	1	0.09	34 37	0	0.89	.01 0.05	0.1	0.005	0.0	05 1.6	66 0.29	9 0.259	2.81	50.556 50.22	7 50.5	556 50.257	50.561	51.523	7/113
8/113	9/113 1	/119 1/120 1/113 2/113 /113 4/113 5/113 1/121											9.62	107 1	.642	0 486	12.385	1.5	675	2	1.36	0.07	34 37	0	1	08 0.094	0.54	0.051	0.0	0.5	0.07	1 0.326	2.84	50.207 50.02	1 50.2	207 50.135	50.257	51.172	8/113
9/113	10/113 1,	/117 1/118 1/119 1/120 /113 2/113 3/113 4/113 /113 1/121											9.47	107 1	.737	0 545	63.755	1.54	750	2	1.23	0.34	42 43	0	1	16 0.078	1.48	0.115	1.57 0.1	21 1.5	0.95	9 0.327	2.94	50.021 49.04	50.0	49.062	50.142	51.251	9/113
10/113	11/113 1,	/115 1/116 1/117 1/118 /119 1/120 1/113 2/113 /113 4/113 5/113 1/121 /115 1/116 1/117 1/118											9.81	106 2	.128	0 662	9.464	1	900	2	1.04	0.06	34 37	0	1	02 0.05!	0.4	0.022	0.0	0.6	0.06	2 0.376	2.62	49.04 48.94	5 49.0	48.978	49.062	50.146	10/113
11/113	12/113 1,	/113 1/116 1/117 1/118 //119 1/120 1/113 2/113 //113 4/113 5/113 1/121											9.86	106 2	.128	0 660	55.237	1.95	1050	2	0.76	0.21	37 42 43	0	0.86	.04 0.03	1.11	0.033	1.56 0.0	1.9	1.08	9 0.296	3.3	48.945 47.86	8 48.9	945 47.857	48.991	50.142	11/113





BRISBANE OFFICE LEVEL 1, 100 BRUNSWICK STREET PO BOX 361



MIRVAC

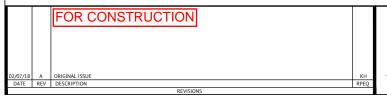
PROJECT EVERLEIGH PRECINCT 1.2B SUBDIVISION DEVELOPMENT

LOCATION TEVIOT ROAD, GREENBANK

SHEET TITLE Q2 MINOR STORM CALCULATIONS - 1 OF 3

MIR001-02B

	LC	OCATION		TIME	SUB-C	ATCHN	MENT R	UNOFF	:			INLET	DESIGN			l .			DF	AIN Γ	DESIGN						HEA	ADLOSS	ES				PART	FULL			DES	IGN LEV	ELS		
	Ī	SCATION	_	1			Q	011011					Qg Qb		tc	ı	CA		Qp L		S	Vf=Q/A			STRUCT	URE RATIOS			hu Kw	hw	Sf	hf	dn				DES	TOIT EET			
STRUCTURE NUMBER DOWNSTREAM	STRUCTURE	SUB-CATCHMENTS CONTRIBUTING	SUB-CATCHMENT TIME OF CONCENTRATION	EN	CO-EFFICIENT OF RUNOFF SUB-CATCHMENT AREA	EQUIVALENT AREA	SUB-CATCHMENT DISCHARGE	FLOW IN K&C (INC. BYPASS)	FLOW WIDTH	FLOW DEPTH	ROAD GRADE AT INLET	HALF ROAD CAPACITY	FLOW INTO INLET BYPASS FLOW	BYPASS STRUCTURE NUMBER	CRITICAL TIME OF CONCENTRATION	RAINFALL INTENSITY	TOTAL (C × A)	SUM ADDITIONAL PIPE FLOW	PIPE FLOW		PIPE GRADE PIPE/BOX DIMENSIONS	CLASS FULL PIPE VELOCITY	TIME OF FLOW IN REACH	CHARTS USED	09/00	Du/Do S/Do	VELOCITY HEAD	UPSTREAM HEADLOSS CO-EFFICIENT	UPSTREAM HEADLOSS W.S.E. CO-EFFICIENT	CHANGE IN W.S.E.	PIPE FRICTION SLOPE	PIPE FRICTION HEADLOSS (L x Sf)	NORMAL DEPTH	NORMAL DEPTH VELOCITY	UPSTREAM OBVERT LEVEL	DOWNSTREAM OBVERT LEVEL	UPSTREAM H.G.L.	DOWNSTREAM H.G.L.	W.S.E.	SURFACE OR GRATE LEVEL	STRUCTURE NUMBER
			min	mm/h	ha	ha	l/s	l/s	m	m	%	l/s	l/s l/s		min	mm/h	ha	l/s	l/s n	1	% mm	m/s	min				m		m	m	%	m	m	m/s	m	m	m	m	m	m	
	/100	1/114 1/115 1/116 1/117 1/118 1/119 1/120 1/113 2/113 3/113 4/113 5/113 1/121													7.76	114	2.213	0 7	27 11.3	86 1	94 1050	2 0.84	0.04	33 34	0 1	1.01	0.036	0.23	0.008	0.008	1.6	0.182	0.311	3.39 4	7.848	47.627	47.848	47.666	47.857		
15/100 1/114 12/	/117 1	1/11/	7 5	116	0.64 0.439	0.20	90	90	4 9 4 2	0.076	1	756	79 11	1/112	7.5	116	0.20	0 7	9 2.22	1 1	. 375	2 0.71	0.02	77	1	1.62	0.026	9.04	0.277	0.277	0.06	0.126	0.176	1 5 4 4	0 526	10 504	48.526	49.704	48.759		15/100
12/113	113 1	1/117	7.5	110	0.64 0.439	0.20	90	90	4.042	0.076	1	330	79 11	1/112	7.3	110	0.20	0 /	9 2.22	1 1	. 3/3	2 0.71	0.02	32	1	1.02	0.026	9.04	0.233	0.233	9.90	0.126	0.176	1.34 4	0.320	+0.304	40.320	40.304	47.857		12/113
1/115 10/	/113 1	1/115	6	122	0.75 0.201	0.151	51	51		0.008	0.27	375	51 0	1/114	6	122	0.151	0 5	1 2.86	4 1	.03 375	2 0.46	0.03	32	1	1.28	0.011	9.7	0.106	0.106	3.48	0.099	0.139	1.38 4	9.165	49.135	49.165	49.062		50.098	1/115
10/113						1						-											10.00				1	1		1				1.00	-	.,,,,,,				50.146	10/113
1/116 10/	/113 1	1/116	6	122	0.75 0.321	0.24	81	90		0.037	0.47	375	90 0	1/115	6	122	0.24	0 9	0 4.62	6 1	600	2 0.32	0.04	32	1	1.08	0.005	9.7	0.051	0.051	1.42	0.066	0.156	1.55 4	9.128	19.082	49.128	49.062	49.179		1/116
10/113																																							49.062		10/113
1/117 9/1	113 1	1/117	6	122	0.75 0.044	0.033	11	11	0.71	0.05	3.52	170	11 0	1/115	6	122	0.033	0 1	1 4.05	1	. 375	2 0.1	0.04	32	1	1.01	0.001	9.7	0.005	0.005	3.9	0.158	0.064	0.89 5	0.294	0.253	50.294	50.135	50.299	51.248	1/117
9/113																																							50.142	51.251	9/113
1/118 9/1	113 1	1/118	6	122	0.75 0.103	0.077	26	63	2.282	0.062	4.18	123	54 9	1/120	6	122	0.077	0 5	4 27.5	66 4	1.35 375	2 0.49	0.14	32	1	1.22	0.012	7	0.084	0.084	3.93	1.085	0.097	2.37 5	1.22	0.021	51.22	50.135	51.304	52.2	1/118
9/113																																							50.142	51.251	9/113
	113 1	1/119	6	122	0.75 0.226	0.169	57	68	2.711	0.075	1.72	192	59 9	1/116	6	122	0.169	0 5	9 3.05	1 1	03 375	2 0.53	0.03	32	1	1.5	0.014	9.69	0.14	0.14	0.11	0.004	0.15	1.43 5	0.213	0.181	50.261		50.401	51.15	1/119
8/113																																								51.172	8/113
	113 1	1/120	6	122	0.75 0.278	0.208	71	88		0.035	0.88	375	88 0	1/119	6	122	0.208	0 8	8 5.54	6 1	. 525	2 0.41	0.05	32	1	1.3	0.009	9.7	0.082	0.082	0.04	0.002	0.161	1.56 5	0.182	50.127	50.26			51.117	1/120
8/113	124 1	1,4242,4244,4202,420													6.74	424	0.574	0 4	00 55.0	02 2	2 450	2 447	0.74	77.42.47	0 4	1.2	0.045	4.20	0.004 4.75	0.000	2.42	1 1 6 7	0.205	2.55		4 774			50.257		8/113
	- 1	1/124 2/124 1/129 2/129 1/128 1/128A 1/124 2/124													6.34		0.531	0 1		82 2		2 1.13		37 42 43	0 1		0.065		0.084 1.35	0.088	2.12						55.585		55.673		3/124
4/124 5/1		1/129 2/129													6.55	120	0.959	0 3	21 21.1	61 1	5 600	2 1.14	0.13	34 37	0 1	1.08	0.066	0.72	0.047	0.047	1.04	0.22	0.274	2.55 5	4.371	54.053	54.371	54.15	54.418	55.577	4/124
5/124 6/1		1/127 1/128 1/128A 1/124 2/124 1/129 2/129													6.68	119	1.162	0 3	75 48.4	4 5	6.05 600	2 1.33	0.17	37 42 43	0 1	1.21	0.09	1.3	0.117 1.37	0.123	5.02	2.432	0.214	4.15 5	4.033	51.586	54.033	51.601	54.156	55.314	5/124
6/124 14/	/100 1	1/125 1/126 1/127 1/128 1/128A 1/124 2/124 1/129 2/129													6.85	119	1.396	0 4	156 19.0	84 7	7.5 600	2 1.61	0.05	33 34	0 1	1.06	0.133	0.27	0.035	0.035	8.46	1.506	0.214	5.06 5	1.566	50.135	51.566	49.951	51.601	52.545	6/124
14/100																																							49.951	51.454	14/100
1/125 6/1	124 1	1/125	6	122	0.75 0.149	0.111	38	38	1.748	0.052	5.35	506	38 0	1/131	6	122	0.111	0 3	8 6.20	6 1	. 375	2 0.34	0.07	32	1	1.26	0.006	9.7	0.058	0.058	0.05	0.003	0.118	1.26 5	1.566	51.504	51.604	51.601	51.661	52.504	1/125
6/124																																							51.601	52.545	6/124
1/126 6/1	124 1	1/126	6	122	0.75 0.164	0.122	41	53	1.632	0.06	6.39	2121	47 6	1/111	6	122	0.122	0 4	4.80	1 1	. 375	2 0.43	0.05	32	1	1.46	0.009	9.7	0.091	0.091	0.07	0.004	0.133	1.35 5	1.525 5	51.476	51.605		51.696		1/126
6/124								1																															51.601		
1/127 5/1	124 1	1/12/	6	122	0.75 0.272	0.203	69	69	2.164	0.062	5.43	1205	57 12	1/126	6	122	0.203	0 5	7 4.71	8 1	. 375	2 0.52	0.05	32	1	1.36	0.014	9.7	0.133	0.133	2.58	0.117	0.148	1.42 5	4.2/2	04.225	54.2/2		54.405		1/127
5/124 1/128 4/1	124 1	1/120	6	122	0.75 0.207	0.155	E 7	E 7	7 1 2	0.005	0.47	102	53 0	1/125	6	122	0.155	0 [3 5.49	c 1	. 375	2 0.48	0.06	77	1	1.7	0.013	9.7	0.112	0.112	7 1 7	0.162	0.141	1.39 5	4 50 5	. 4 5 7 5	E4 E0		54.156 54.702		5/124 1/128
4/124	147	1,120	U	122	0.75 0.207	0.133	33	53	3.12	0.003	U.+/	102	0 0	1/123	U	122	U.133	9 5	3.49	J 1	. 3/3	2 0.48	0.06	24	1	1.5	0.012	2.1	0.112	0.112	2.13	0.102	0.141	1.07 5	לן לע.ד	CCC.T-1	סד.סד		54.702		4/124
	124 1	1/128A	6	122	0.75 0.371	0.278	94	94		0.04	0.47	375	94 0	1/128	6	122	0.278	0	94 2.51	2 1	. 525	2 0.43	0.02	32	1	1.18	0.01	9.7	0.094	0.094	6.58	0.16	0.167	1.59 5	4.584	54.559	54.584		54.677		1/128A
4/124	+				1	†	1					-	- 1							+			† · · ·				1	1		1	<u> </u>	<u> </u>							54.418		4/124
1/130 13/	/100 1	1/130	6	122	0.75 0.034	0.025	9	9	0.7	0.05	1.87	178	9 0	1/112	6	122	0.025	0 9	1.99	1 1	.01 375	2 0.08	0.02	32	1	1.01	0	9.7	0.003	0.003	16.83	0.304	0.056	0.82 5	0.7	50.68	50.7		50.703		1/130
13/100	\neg																																						50.094		13/100
1/131 13/	/100 1	1/131	6	122	0.75 0.196	0.147	50	53		0.009	1.42	375	53 0	1/130	6	122	0.147	0 5	3 3.92	6 1	450	2 0.33	0.04	32	1	1.12	0.006	9.7	0.055	0.055	9.09	0.267	0.132	1.37 5	0.738	0.699	50.738	50.38	50.793	51.694	1/131
13/100																																							50.094	51.692	13/100
1/132 12/	/100 1	1/132	6	122	0.75 0.221	0.166	56	56	2.255	0.065	2.83	253	53 3	1/131	6	122	0.166	0 5	3 2.46	8 1	. 375	2 0.48	0.03	32	1	1.3	0.012	9.7	0.113	0.113	10.48	0.172	0.141	1.39 5	2.653	2.629	52.653		52.766		1/132
12/100	_																										1												51.952		12/100
1/133 11/	/100 1	1/133	7	118	0.75 0.541	0.405	133	133	3.507	0.096	1.52	191	96 37	1/118	7	118	0.405	0 9	6 5.91	5 1	. 375	2 0.87	0.06	32	1	1.82	0.039	7.96	0.308	0.308	3.98	0.14	0.198	1.62 5	3.059	53	53.059		53.367		1/133
11/100		1/225 1/224 1/224				-																					1												52.228	54.02	11/100
8/200 9/2	200 2	1/225 1/226 1/227 1/228 2/228 1/200 2/200 3/200 4/200 1/223 2/223													9.4	107	2.902	0 8	40.2	51 1	7 900	2 1.37	0.18	42 43	0 1	1.17	0.095	1.53	0.146 1.64	0.156	1.63	0.656	0.378	3.43 4	8.456	47.771	48.456	47.8	48.612	49.523	8/200
9/200 10/	/200 1	1/222 1/222A 1/225 1/226 1/227 1/228 2/228 1/200 2/200 3/200 4/200 1/223 2/223													9.58	107	3.051	0	56.9	43 1	27 1050	2 1.06	0.27	34 37	0 0	0.99 1.03	0.057	0.51	0.029	0.029	1.23	0.699	0.393	3.1 4	7.771	47.048	47.771	47.071	47.8	48.809	9/200
10/200 11/	/200 1	1/221 1/221A 1/222 1/222A 1/225 1/226 1/227 1/228 2/228 1/200 2/200 3/200 4/200 1/223 2/223													9.84	106	3.203	0 9	953 14.1	95 0	0.3 1050	2 1.1	0.14	33 34	0 1	1.04	0.062	0.22	0.013	0.013	0.12	0.017	0.609	1.83 4	7.028	46.985	47.058	47.041	47.071	48.051	10/200





BRISBANE OFFICE LEVEL 1, 100 BRUNSWICK STREET

DESIGNED	MICHAEL	MAJZNER	RPEQ // //	DATE
CHECKED	MICHAEL	MAJZNER	NEITH HOWELLS	02/07/18 KPEO 7295
PROJECT MANAGER	JOSHUA S	TONE	SCALE	
PROJECT DIRECTOR	16	DATE	1	
	-	02/07/18		

MIRVAC

PROJECT EVERLEIGH PRECINCT 1.2B SUBDIVISION DEVELOPMENT

LOCATION TEVIOT ROAD, GREENBANK

SHEET TITLE Q2 MINOR STORM CALCULATIONS - 2 OF 3

MIR001-02B

	LC	OCATION	1	ГІМЕ	SUB-	CATCH	IMENT F	RUNOF	F			INLET	DESIGN						DRA	AIN E	DESIGN								HEADL	OSSES					PAR ¹	Γ FULL			DES	SIGN LE	VELS		
			tc	1	C A	CA	, Q						Qg Qb		tc	ı	CA		Qp L		S		Vf=Q/A			STRUC	TURE RAT	ios '	V2/2g	Ku	hu Kw	hw	Sf	hf	dn	Vn					\perp	\perp	
STRUCTURE NUMBER DOWNSTREAM	STRUCTURE	SUB-CATCHMENTS CONTRIBUTING		RAINFALL INTENS	CO-EFFICIENT OF RUNOFF SUB-CATCHMENT AREA	EQUI	SUB-CATCHIN				ROAD GRADE AT INLET	HALF ROAD CAPACITY	FLOW INTO INLET BYPASS FLOW	BYPASS STRUCTURE NUMBER	0.0	RAINFALL INTENSITY	TOT	SUM ADDITIONAL PIPE FLOW	PIPE FLOW REACH LENGTH	-	PIPE GRADE PIPE/BOX DIMENSIONS	CLASS	FULL PIPE	TIME OF FLOW IN REACH	CHARTS USED	Q9/Qo	Du/Do	S/Do		CO-EFFICIENT	UPSTREAM HEADLOSS W.S.E. CO-EFFICIENT		PIPE FRIC	PIPE FRICTION HEADLOSS (L × Sf)	<u>Š</u>	NORMAL DEPTH VELOCITY	UPSTREAM OBVERT LEVEL	DOWNSTREAM OBVERT LEVEL	UPSTREAM H.G.L.	DOWNSTREAM H.G.L.	W.S.E.	SURFACE OR GRATE LEVEL	STRUCTURE NUMBER
	1	L/219 1/220 1/221 1/221A	min r	nm/h	ha	ha	l/s	l/s	m	m	%	l/s	l/s l/s		min	mm/h	ha	l/s	l/s m	+	% mm		m/s	min					m		m	m	%	m	m	m/s	m	m	m	m	m	m	+
11/200 12/	/200 1 2	7/119 1/220 1/221 1/221A 1/222 1/222A 1/225 1/226 1/227 1/228 2/228 1/200 1/200 3/200 4/200 1/223 1/223													9.98	105	3.41	0	1020 31.16	2 1	1.36 1200	2	0.9	0.13	37 42 43	0	0.98 1.0	05 0	0.042 1	.35 0.	056 1.46	0.061	1.01	0.315	0.387	3.24	46.985	46.563	46.985	46.67	47.046	48.287	11/200
12/200 13/	/200 3 /200 1 1 1 1	//208 1/210 1/211 2/211 //211 4/211 1/213 5/211 //211 7/211 1/214 1/217 //218 2/218 1/209 2/209 //209 4/209 5/209 1/215 //216 1/219 1/220 1/221 //221A 1/222 1/222A 1/225 //226 1/227 1/228 2/228 //200 2/203 3/200 4/200 //223 2/223													9.12	109	5.631	0	1695 25.79	1 1	1.34 1350	2	1.18	0.1	42 43	0	1 1.0	0 80	0.072 1.	.5 0.	1.59	0.114	0.82	0.211	0.484	3.68	46.563	46.217	46.563	46.352	46.676	47.794	12/200
13/200																																									46.352	47.41	13/200
1/206 13/	/200 1	./206	6 1	.22 0	.75 0.042	0.031	1 11	15	1.58	6 0.049	1.28	593	15 0	1/204	6	122	0.031	0	15 7.995	1	L 375	2	0.14	0.08	32	1	1.0	03 0	0.001 9	.7 0.	01	0.01	0.49	0.039	0.075	0.98	46.391	46.311	46.391	46.352	46.401	47.331	1/206
13/200																																									46.352	47.41	13/200
1/207 13/	/200 1	./207	6 1	.22 0	.75 0.142	0.106	6 36	36	2.23	2 0.064	1.28	582	36 0	1/205	6	122	0.106	0	36 5.159	1	1.01 375	2	0.33	0.05	32	1	1.3	14 0	0.005 9	.7 0.	052	0.052	0.75	0.039	0.115	1.25	46.391	46.339	46.391	46.352	46.443	47.331	1/207
13/200																																										47.41	13/200
1/208 12/	/200 1	./208	6 1	.22 0	.75 0.186	0.139	9 47	48		0.005	0.35	375	48 0	1/207	6	122	0.139	0	48 14.28	2 1	L 600	2	0.17	0.11	32	1	1.0	02 0	0.001 9	.7 0.	014	0.014	1.74	0.248	0.113	1.29	46.919	46.776	46.919	46.67		47.868	
12/200	1	/247 4 /240 2 /240 4 /200																																-	+						46.676	47.794	12/200
7/209 8/	209 2	./217 1/218 2/218 1/209 2/209 3/209 4/209 5/209 ./215 1/216													6.93	118	1.315	0	421 34.68	4 5	5.15 525	2	1.95	0.13	33 34	0	1 1.0	09 0	0.193 0	.25 0.	048	0.048	5.04	1.749	0.241	4.34	50.677	48.891	50.677	48.928	50.725	51.784	7/209
8/209 9/	209 1 5	./214 1/217 1/218 2/218 ./209 2/209 3/209 4/209 5/209 1/215 1/216													7.05	118	1.442	0	460 10.96	6 7	7.05 525	2	2.13	0.03	33 34	0	1 1.:	11 0	0.231 0	.25 0.	057	0.057	6.49	0.712	0.232	4.99	48.871	48.097	48.871	48.159	48.928	49.945	8/209
9/209 10/	/209 1 1	/211 2/211 3/211 4/211 /213 5/211 6/211 7/211 /214 1/217 1/218 2/218 /209 2/209 3/209 4/209 6/209 1/215 1/216													6.97	118	2.066	0	655 29.47	7 3	3.12 675	2	1.83	0.12	34 37	0	1 1.0	09 0	0.171 0	.36 0.	061	0.061	3.01	0.887	0.314	4.02	48.097	47.177	48.097	47.21	48.159	49.386	9/209
	/200 4 /2 7 2	//210 1/211 2/211 3/211 4/211 1/213 5/211 6/211 7/211 1/214 1/217 1/218 2/218 1/209 2/209 3/209 4/209 5/209 1/215 1/216													7.02	118	2.216	0	698 18.43	5 3	3.33 750	2	1.58	0.07	33 34	0	1 1.0	04 0	0.127 0	.26 0.	033	0.033	2.75	0.507	0.303	4.17	47.177	46.563	47.177	46.67	47.21	48.193	10/209
12/200																				_								4													_		12/200
1/210 10/	/209 1	./210	6 1	.22 0	.75 0.206	0.154	4 52	52	2.17	3 0.063	3.06	908	47 5	1/206	6	122	0.154	0	47 5.384	1	L.01 375	2	0.43	0.06	32	1	1.3	24 0	0.009 9	.7 0.	091	0.091	0.17	0.009	0.133	1.35	47.22	47.165	47.22	47.21		48.16	1/210
10/209	1	1/211 2/211 3/211 4/211								-																									+-								10/209
5/211 6/	211 1	/213 5/211	6 1	.22 0	.75 0.022	0.016	6 6	6	0.73	6 0.03	5	333	6 0	6/211	6.46	120	0.477	0	146 34.81	1 4	4.82 375	2	1.32	0.17	34 37	0.04	1 1.:	18 0	0.089 0	.76 0.	068	0.068	4.39	1.528	0.16	3.25	50.003	48.326	50.003	48.475	50.071	50.997	5/211
6/211 7/	′211 1 1	./211 2/211 3/211 4/211 ./213 5/211 6/211	6 1	.22 0	.75 0.162	0.121	1 41	41	1.89	6 0.056	4.67	288	41 0	1/208	6.63	119	0.598	0	185 9.698	1	1.77 450	2	1.16	0.07	37 42 43	0.22	0.83 1.3	35 0	0.069 1	.33 0.	092 1.45	0.1	0.42	0.042	0.223	2.36	48.326	48.154	48.383	48.342	48.484	49.274	6/211
7/211 9/	209 1	/211 2/211 3/211 4/211 ./213 5/211 6/211 7/211	6 1	.22 0	.75 0.045	0.034	4 11	13		0	0.29	383	13 0	6/211	6.7	119	0.631	0	198 12.25	8 0	0.3 450	2	1.24	0.21	37 42 43	0.07	1 1.4	49 0	0.079 1	.58 0.	124 1.72	0.135	0.48	0.059	0.45	1.24	48.134	48.097	48.217	48.159	48.353	49.107	7/211
9/209											1									\top															T						48.159	49.386	9/209
1/214 8/	209 1	./214	6 1	.22 0	.75 0.171	0.128	8 43	44	2.21	6 0.049	5.89	369	43 2	7/211	6	122	0.128	0	43 3.528	1	1.01 375	2	0.39	0.04	32	1	1.3	2 0	0.008 9	.7 0.	074	0.074	1.39	0.049	0.126	1.31	48.977	48.941	48.977	48.928	49.051	49.93	1/214
8/209																																									48.928	49.945	8/209
1/219 11/	/200 1	./219	6 1	.22 0	.75 0.125	0.093	3 32	32	2.09	3 0.062	1.29	607	32 0	1/207	6	122	0.093	0	32 8.001	1	L 375	2	0.29	0.08	32	1	1.3	11 0	0.004 9	.7 0.	04	0.04	2.94	0.229	0.108	1.2	47.277	47.197	47.277	47.041	47.317	48.217	1/219
11/200																																										48.287	
1/220 11/	/200 1	1/220	6 1	.22 0	.75 0.152	0.114	4 39	51	2.52	1 0.072	1.29	608	51 0	1/221	6	122	0.114	0	51 35.32	9 1	L.13 375	2	0.46	0.35	32	1	1	2 0	0.011 7	0.	076	0.076	1.81	0.547	0.134	1.44	47.679	47.28	47.679	47.041			1/220
11/200											1									\perp								_															11/200
1/221 10/	/200 1	./221	6 1	.22 0	.75 0.07	0.053	3 18	18		0	0.38	383	18 0	1/208	6	122	0.053	0	18 2.495	1	L 450	2	0.11	0.02	32	1	1.0	06 0	0.001 9	.7 0.	006	0.006	0	0	0.076	1	47.052	47.028	47.072	47.071		48.002	
10/200	1205	(224.1						-			1									_										_			-		-						_	48.051	
1/221A 10/	/200 1	L/221A	6 1	.22 0	.75 0.133	0.099	54	34		0	0.83	5/5	34 0	LOST	6	122	0.099	U	34 5.869	- 0	0.45 375	2	0.3	0.09	52	1	1.1	1/ 0	0.005 9	./ 0.	U46	0.046	0.04	0.002	0.137	0.92	4/.054	4/.028	47.074	4/.071			1/221A
1/222 9/	7200 4	(222		22 2	75 0001	0.00	7 24	2.4	1.07	0 0055	1 45	170	24 0	1/221	6	122	0.067		24 (070	+	101 775	2	0.24	0.07	77	1	1	26 2	003	7 0	027	0.037	0.04	0.057	0.007	1 1 1	47.057	47.704	47.057	47.0		48.051	_
9/200	200 1	./	6 1	.22 0	.75 0.084	0.063	21	24	1.83	9 0.055	1.45	1/9	24 0	1/221	ь	122	0.063	U	24 6.078	1	1.01 375	2	0.21	0.06	52	1	1.0	J6 0	0.002 9	./ 0.	025	0.023	0.94	0.05/	0.093	1.11	4/.85/	4/./96	47.857	4/.8	47.88		
1/222A 9/	200 1	/2224	6 1	22 0	.75 0.115	0.094	6 20	35	214	2 0.062	1 / 5	181	35 0	1/221	1 6	122	0.086	0	35 2.575	1	2.28 375	2	0.32	0.02	37	1	1 -	13 0	0.005 9	7 0	05	0.05	1 1 /	0.03	0.092	1 66	47 97	A7 771	47.83	47.0	47.8 47.88	48.809	1/222A
9/200	200 1	-/	0 1	.22 0	0.115	0.086	29	33	2.14.	2 0.002	1.45	101	0 0	1/2214	, 0	122	0.000	0	2.5/5	+2	2.20 3/3		U.JZ	0.02	J4	1	1	. 0	1.003 9	., 0.	ر ن	0.05	1.14	0.03	0.092	1.00	77.03	77.771	77.00	77.0			9/200
7/200	+		+	+		+	+	+	-		1			+						+								+	+	-					+-						17.0	70.009	7/200
											1	1		1																							1	1	1	1	Ь		
									_							_			MICHAEL MAIZN		RPEQ			DATE									ALDV/A								10.	B CODE	

FOR CONSTRUCTION

Premise PH: (07) 3253 2222
WEB: www.premise.com.au

BRISBANE OFFICE LEVEL 1, 100 BRUNSWICK STREET PO BOX 361 FORTITUDE VALLEY, QLD 4006

MICHAEL MAJZNER MICHAEL MAJZNER PROJECT MANAGER JOSHUA STONE 02/07/18

MIRVAC

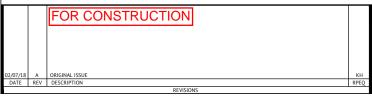
PROJECT EVERLEIGH PRECINCT 1.2B SUBDIVISION DEVELOPMENT

LOCATION TEVIOT ROAD, GREENBANK

SHEET TITLE Q2 MINOR STORM CALCULATIONS - 3 OF 3 $\,$

MIR001-02B

	L	OCATION		TIME	_	+	CATCHN	_	UNOF	F			ESIGN	1						IN DES	_		\ (C \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \							LOSSE		1				PART				DESIG	N LEVE	LS			RUNOF	F	
STRUCTURE NUMBER	DOWNSTREAM STRUCTURE	SUB-CATCHMENTS CONTRIBUTING	SUB-CATCHMENT TIME OF CONCENTRATION	L INTENSITY	CO-EFFICIENT OF RUNOFF	SUB-CATCHMENT AREA	EQUIVALENT AREA	F	FLOW IN K&C	ROAD GRADE AT INLET	INTO INLET	BYPASS FLOW	TURE		RAINFALL INTENSITY —	TOTAL (C x A)	NAL	PIPE FLOW	REACH LENGTH	PIPE GRADE	PIPE/BOX DIMENSIONS	CLASS	FULL PIPE VELOCITY (S)	TIME OF FLOW IN REACH	CHARTS USED	STRU OÕ/60	OCTURE RA OQ/NQ	S/Do	ү неар	UPSTREAM HEADLOSS CO-EFFICIENT	STREAM HEADLOSS	-EFFICIENT	CHANGE IN W.S.E.	PIPE FRICTION SLOPE	PIPE FRICTION HEADLOSS $_{\mp}$ (L x Sf)	NORMAL DEPTH	NORMAL DEPTH S	M OBVERT	DOWNSTREAM OBVERT	UPSTREAM H.G.L.	DOWNSTREAM H.G.L.		W.S.E.	SURFACE OR GRATE LEVEL	SURFACE	MAJOR SURFACE FLOW	STRUCTURE NUMBER
			min	mm/h	1	ha	ha		l/s		l/s				mm/h	ha		l/s	m	%	mm		m/s	min				\Box	m		m		m	%	m	m	m/s		m		m		m	m		/s	
10/100	11/100	1/140 1/142 1/143 1/144 1/141 2/141 3/141 1/146 1/147 1/148 1/149 1/150 1/100 2/100 3/100 4/100 1/135 1/136 1/137 1/138 1/134 2/134 3/134 4/134 5/134												7.38	259	4.968	0	2661	41.52	9 2	1050	2 3	3.07	0.16	34 37	0	1	1.29	0.482	0.64	0.307	0	.307 1	1.6	0.666	0.641	4.81	53.054	52.223	53.054	52.38	53.	.361 54	4.525 (0	1	10/100
11/100	12/100	1/133 1/140 1/142 1/143 1/144 1/141 2/141 3/141 1/146 1/147 1/148 1/149 1/150 1/100 2/100 3/100 4/100 1/135 1/136 1/137 1/138 1/134 2/134 3/134 4/134 5/134												7.45	258	5.491	0	2821	17.41	4 1.5	1050	2 3	3.26	0.08	33 34	0	1	1.18	0.541	0.22	0.12	0	.12 1	1.07	0.186	0.739	4.33	52.203	51.942	2 52.268	3 52.08	33 52.	.388 54	4.02	0	1	11/100
12/100	13/100	1/132 1/133 1/140 1/142 1/143 1/144 1/141 2/141 3/141 1/146 1/147 1/148 1/149 1/150 1/100 2/100 3/100 4/100 1/135 1/136 1/137 1/138 1/134 2/134 3/134 4/134 5/134												7.53	257	5.712	0	3013	52.15	5 3.5	1050	2 3	3.48	0.15	33 34	0	1	1.15	0.618	0.26	0.161	0	.161 1	1.47	0.768	0.58	6.14	51.922	50.096	5 51.92	2 51.15	54 52.	.083 53	3.642	0	1	12/100
13/100	14/100	1/130 1/131 1/132 1/133 1/140 1/142 1/143 1/144 1/141 2/141 3/141 1/146 1/147 1/148 1/149 1/150 1/100 2/100 3/100 4/100 1/135 1/136 1/137 1/138 1/134 2/134 3/134 4/134												7.68	256	5.942	0	3384	15.69	2	1050	2 3	3.91	0.06	34	0	1	2.04	0.779	0.27	0.209	0	.209 1	1.53	0.241	0.762	5.03	50.062	49.748	3 50.94	5 50.70)4 51.	.154 51	1.692 (0	1	13/100
14/100	15/100	1/125 1/126 1/127 1/128 1/128A 1/124 2/124 1/129 2/129 1/130 1/131 1/132 1/133 1/140 1/142 1/143 1/144 1/141 2/141 3/141 1/146 1/147 1/148 1/149 1/150 1/100 2/100 3/100 4/100 1/135 1/136 1/137 1/138 1/134 2/134 3/134 4/134 5/134												7.62	256	7.781	0	4365	82.75	5 2.72	1200	2 3	3.86	0.24	34 37	0	1 :	1.69 (0.76	0.56	0.426	0	.426 1	1.25	1.037	0.725	6.11	49.878	47.627	7 50.278	3 49.24	¥1 50.	.704 51	1.454 (0	1	14/100
15/100	16/100	1/111 1/112 1/114 1/115 1/116 1/117 1/118 1/119 1/120 1/113 2/113 3/113 1/121 1/123 2/113 3/113 1/123 1/121 1/125 1/126 1/127 1/128 1/128 1/128 1/124 1/129 2/129 1/130 1/131 1/132 1/133 1/140 1/142 1/143 1/144 1/141 2/141 3/141 1/146 1/147 1/148 1/149 1/150 1/100 2/100 3/100 4/100 1/135 1/136 1/137 1/138 1/134 2/134 3/134 4/134 5/134												7.77	255	11.478	3 0	6140	29.57	7 1.5	1500	2 3	3.47	0.1				(0.502	0.33	0.166	0	.166).61	0.182	0.933	5.32	47.627	47.183	3 49.07	6 48.89	94 49.	2.241 49	9.273	0	1	15/100
16/100																							_						_	_					_		_					_	.894 48			_	16/100
1/111	15/100	1/111	6.5	269	1	0.381	0.381	285	577	0.67	0	577	1/109	6.5	269	0.381	0	0	8.255	1.01	3/5	2 0	J	0.09	52				U	0	J	0	()	0	0	0	48.298	48.214	49.24	1 49.24		.241 49		2163 37		1/111 15/100
	15/100	1/112	7.5	258	0.89	0.401	0.356	254	1600	1.25	0	1600	1/220	7.5	258	0.356	0	0	6.159	1.02	450	2 0)	0.06	32				0	0)	0	()	0	0	0	48.26	48.198	3 49.24	1 49.24				2531 16	00	1/112
15/100		1/117 7/117 7/147 4/47																									+	\Box														49.	.241 49	9.273		1	15/100
6/113	//115	1/113 2/113 3/113 4/113 5/113 1/121										_		9.14	241	1.728	0	732	45.33	2 0.84	600	2 2	2.59	0.38	42 43	0	1	2.69	0.205	1.23	0.252 1	1.32 0	.27	0.85	0.386	0.6	2.59	50.936	50.556	51.679	51.29	3 51.	.949 51	1.972	0		6/113
7/113		1/113 2/113 3/113 4/113 5/113 1/121	L											9.52	237	1.728	0	715	17.97	4 1.83	675	2 2	2	0.09	34 37	0	0.89	2.09	0.204	0.1	0.021	0	.021	0.72	0.13	0.388	3.36	50.556	50.227	51.27	51.14	2 51.	.293 51	1.523	0		7/113
8/113		1/119 1/120 1/113 2/113 3/113 4/113 5/113 1/121												9.62	236	2.232	0	1056	12.38	5 1.5	675	2 2	2.95	0.07	34 37			(0	0		0	(0	0.57	3.27	50.207	50.021	51.14	51.14	51.	.142 51	1.172	0		8/113
9/113	10/113	1/117 1/118 1/119 1/120 1/113 2/113 3/113 4/113 5/113 1/121												9.69	236	2.379	0	1219	63.75	5 1.54	750	2 2	2.76	0.34	37 42 43	0	1	2.49	0.308	1.23	0.379 1	1.28 0	.396).95	0.607	0.548	3.53	50.021	49.04	50.74	5 50.14	51.	.142 51	1.251	0		9/113
10/113	11/113	1/115 1/116 1/117 1/118 1/119 1/120 1/113 2/113 3/113 4/113 5/113 1/121								0.34				9.81	235	2.88	0	1891	9.464	1	900	2 2	2.97	0.06	34 37	0	1	2.22	0.343	0.56	0.193	0	.193	0.83	0.078	0.78	3.23	49.04	48.945	49.94	7 49.86	59 50.	.14 50	0.146	0	1	10/113
11/113	12/113	1/115 1/116 1/117 1/118 1/119 1/120 1/113 2/113 3/113 4/113 5/113 1/121								1.34				9.86	234	2.88	0	1887	55.23	7 1.95	1050	2 2	2.18	0.21	37 42 43	0	0.86	1.95	0.242	1.09	0.264 1	1.41 0	.34	0.48	0.264	0.522	4.39	48.945	47.868	49.60	5 49.34	1 49.	.945 50	0.142	0	1	11/113



FORTIUDE VALLEY, QLD 4006
PH: (07) 3253 2222
WEB: www.premise.com.au

BRISBANE OFFICE LEVEL 1, 100 BRUNSWICK STREET PO BOX 361

MICHAEL MAJZNER L. Hours 02/07/18 MICHAEL MAJZNER PROJECT MANAGER JOSHUA STONE 02/07/18

PROJECT EVERLEIGH PRECINCT 1.2B SUBDIVISION DEVELOPMENT

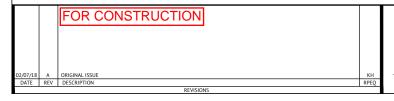
MIRVAC

LOCATION TEVIOT ROAD, GREENBANK

SHEET TITLE Q100 MAJOR STORM CALCULATIONS - 1 OF 3

MIR001-02B

		LOCATION		TIME		SUB-C	CATCHM	1ENT R	UNOFF	F	INL	LET DES	SIGN						DRAII	N DESIG	ΞN						I	HEADLO	SSES					PART	FULL			DESIGN	I LEVELS	5		RUNOFF	F	
			tc	I	С	Α	CA	Q			Qg	Qb	Ŧ	tc	I	CA		Qp	L	S		Vf=Q/A			STRU	CTURE RAT	IOS V2	2/2g Kı	u hu	Kw	hw	Sf	hf	dn	Vn									4
STRUCTURE NUMBER	DOWNSTREAM STRUCTURE	SUB-CATCHMENTS CONTRIBUTING	SUB-CATCHMENT TIME OF CONCENTRATION	ALL	CO-EFFICIENT OF RUNOFF	SUB-CATCHMENT AREA	EQUIVALENT AREA	SUB-CATCHMENT DISCHARGE	FLOW IN K&C (INC. BYPASS)	ROAD GRADE AT INLET	FLOW INTO INLET	BYPASS FLOW	BYPASS STRUCTURE NUMBER	CKITICAL TIME OF CONCENTRATION	RAINFALL INTENSITY	TOTAL (C × A)	SUM ADDITIONAL PIPE FLOW	PIPE FLOW	REACH LENGTH	PIPE GRADE	PIPE/BOX DIMENSIONS	CLASS FULL PIPE VELOCITY	TIME OF FLOW IN REACH	CHARTS USED	Qg/Qo	od/no	2008	VELOCITY HEAD UPSTREAM HEADLOSS	CO-EFFICIENT UPSTREAM HEADLOSS	W.S.E. CO-EFFICIENT	CHANGE IN W.S.E.	PIPE FRICTION SLOPE	PIPE FRICTION HEADLOSS (L × Sf)	NORMAL DEPTH	NORMAL DEPTH VELOCITY	UPSTREAM OBVERT LEVEL	DOWNSTREAM OBVERT LEVEL	UPSTREAM H.G.L.	DOWNSTREAM H.G.L.	W.S.E.	SURFACE OR GRATE LEVEL	MAJOR SURFACE FLOW CAPACITY MAJOR SURFACE ELOW	SUKFACE	STRUCTURE NUMBER
			min	mm/h		ha	ha	l/s			l/s	l/s			mm/h	ha		l/s	m	%	mm	m/s	min					m	m		m	%	m	m	m/s	m	m	m	m	m	m	l/s l/:	/s	
12/113	15/100	1/114 1/115 1/116 1/117 1/118 1/119 1/120 1/113 2/113 3/113 4/113 5/113 1/121											7	7.76	255	3	0	1856	11.386	1.94	1050	2 2.14	0.04	33	0	1 2.4	2 0.2	234 0.2	0.047		0.047	0.46	0.053	0.517	4.37	47.848	47.627	49.294	49.241		49.488	0		2/113
15/100	12/117	1 /11 4	7.5	250	0.00	0.470	0.70	270	474	4		474	1/112 7	, -	250	0.70			2 224	1	775	2 0	0.03	72				0	0		0	0		0		40.534	40.504	40.744	40.744		49.273	4020 474	_	.5/100
1/114	12/113	1/114	7.5	258	0.89	0.439	0.39	279	471	1	0	4/1	1/112 7	7.5	258	0.39	0	0	2.221	1	375	2 0	0.02	32			0	0	0		0	0	0	0	0	48.526	48.504	49.341	49.341	49.341		1929 471		2/113
1/115	10/113	1/115	6	275	1	0.201	0.201	154	567	0.27	375	192	1/114 6	;	275	0.201	0	375	2.864	1.03	375	2 3.4	0.03	32			0	0	0		0	0	0	0.375	3.4	49.165	49.135	50.14	50.14	50.14	50.098	567		1/115
10/113	,			2,3	-	0.201	0.201	127.	1507	0.27	3.3	172	7,221		2,3	0.201	+	3,3	2.001	1.03	3.3	3.1	0.03	32			-							0.373	3	17.203	17.133	30.11	30.11	50.14	50.146	307	_	.0/113
1/116	10/113	1/116	6	275	1	0.321	0.321	245	788	0.47	375	413	1/115 6	5	275	0.321	0	375	4.626	1	600	2 1.33	0.04	32			0	0	0		0	0	0	0.339	2.28	49.128	49.082	50.14	50.14	50.14	50.092	788	8 1	1/116
10/113																																								50.14	50.146		1	0/113
1/117	9/113	1/117	6	275	1	0.044	0.044	33	33	3.52	33	0	1/115 6	5	275	0.044	0	33	4.05	1	375	2 0.3	0.04	32	1	3.2	6 0.0	005 3.51	0.016		0.016	0.04	0.001	0.111	1.22	50.294	50.253	51.127	51.125	51.143	51.248	1680 33	1	1/117
9/113								_									_																							-	51.251		_	9/113
1/118	9/113	1/118	6	275	1	0.103	0.103	79	283	4.18	150	133	1/120 6		275	0.103	0	150	27.566	4.35	375	2 1.36	0.14	32	1	2.3	52 0.0)94 4.1	2 0.389		0.389	0.73	0.202	0.167	3.15	51.22	50.021	51.328	51.125	-		1656 283	_	1/118
9/113	0 /1 1 7	1/110		275	1	0.226	0.226	172	F (7	1.72	24	F 4 7	1/116 6		275	0.226	10	24	7.051	1.07	775	2 0.21	0.03	73	1	3.5		002 3.26	5 0.008		0.000	0.02	0.001	0.007	1 11	FO 247	FO 101	F1 1 47	F1 142	1	51.251	1867 567		9/113 1/119
1/119 8/113	8/113	1/119	ь	2/3	1	0.226	0.226	1/2	367	1.72	24	543	1/110 6)	275	0.226	0	24	3.051	1.03	3/3	2 0.21	0.03	32	1	5.:	0.0	002 3.26	0.008		0.008	0.02	0.001	0.093	1.11	50.215	50.181	51.145	51.142	51.15	51.15 51.172	1867 567	_	8/113
1/120	8/113	1/120	6	275	1	0.278	0.278	213	458	0.88	375	83	1/119 6	;	275	0.278	0	375	5.546	1	525	2 1.73	0.05	32			0	0	0		0	0	0	0.379	2.24	50.182	50.127	51.142	51.142	+		458	_	1/120
8/113	-,			273	-	0.270	0.270	1223	1.50	0.00	3.3	05	7,227			0.270	+	1373	3.5.0	1	323	13	0.03	32										0.577		30.102	30.127	71.1.1.	32.12.12	_	51.172	1.50	_	8/113
3/124	4/124	1/124 2/124 1/129 2/129											6	5.34	271	0.709	0	192	55.082	2.2	450	2 1.21	0.34	42 46 43 47	0	1 1.3	9 0.0	74 1.58	8 0.118	1.74	0.129	1.22	0.672	0.213	2.6	55.585	54.371	55.585	54.912	1	56.831	0		3/124
4/124	5/124	1/128 1/128A 1/124 2/124											6	5.55	268	1.281	0	622	21.161	1.5	600	2 2.2	0.13	37 42 43	0	1 1.9	0.2	247 0.9	3 0.23	0.95	0.235	1.03	0.217	0.416	2.97	54.371	54.053	54.682	54.465	54.917	55.577	0	4	4/124
"	-,	1/129 2/129	-					+		+				,.55			+		22,101	1.5			0.23	37 12 13	+	1 1	- 0.2		0.23	- 0.73	0.233	1.03	0.227	0.110	2.,,	3 1.37 1	3 1.033		3 103	3, 1	33.377			
5/124	6/124	1/127 1/128 1/128A 1/124 2/124 1/129 2/129											6	5.68	267	1.553	0	734	48.44	5.05	600	2 2.6	0.17	37 42 43	0	1 1.3	′5 0.3	1.26	0.432	1.31	0.451	4.48	2.171	0.311	4.96	54.033	51.586	54.033	51.863	54.484	55.314	0	5	5/124
6/124	14/100	1/125 1/126 1/127 1/128 1/128A 1/124 2/124 1/129 2/129											6	5.77	266	1.86	0	1036	19.084	7.5	600	2 3.66	0.05	34 37	0	1 1.4	19 0.6	584 0.43	3 0.297		0.297	4.52	0.862	0.34	6.25	51.566	50.135	51.566	50.704		52.545	0		6/124
14/100	6/124	1/125		275	1	0.140	0.140	117	F00	F 7F	201	770	1/171 (275	0.140	10	201	(20(1	775	2 102	0.07	73	1	7	0 01	7 7 7 7	7 0555		0.555	1 72	0.002	0.775	1.02	F1 F()	F1 F04	F1 04F	F1 067		51.454	1607 500	_	.4/100 1/125
6/124	6/124	1/123	Ь	275	1	0.149	0.149	113	380	5.55	201	3/8	1/131 6)	2/5	0.149	0	201	6.206	1	375	2 1.82	0.07	32	1	3.4	9 0.1	3.27	7 0.555		0.555	1.52	0.082	0.375	1.82	31.300	51.504	31.943	51.865	52.5 51.863		1607 580	_	6/124
<u> </u>	6/124	1/126	6	275	1	0.164	0.164	125	209	6.39	117	92	1/111 6	5	275	0.164	0	117	4.801	1	375	2 1.06	0.05	32	1	2.0	5 0.0	057 4.5	7 0.26		0.26	0.44	0.021	0.224	1.7	51.525	51.476	51.884	51.863	-	52.469	1567 209	_	1/126
6/124	-																																								52.545			6/124
1/127	5/124	1/127	6	275	1	0.272	0.272	207	207	5.43	124	84	1/126 6	5	275	0.272	0	124	4.718	1	375	2 1.12	0.05	32	1	2.4	5 0.0	064 5.11	1 0.327		0.327	0.5	0.023	0.232	1.72	54.272	54.225	54.488	54.465	54.816	55.212	1607 207	7 1	1/127
5/124																																								54.484	55.314		5	5/124
1/128	4/124	1/128	6	275	1	0.207	0.207	158	636	0.47	170	466	1/125 6	5	275	0.207	0	170	5.496	1	375	2 1.54	0.06	32	1	3.:	.6 0.1	21 3.62	0.438		0.438	0.94	0.052	0.298	1.81	54.59	54.535	54.964	54.912	55.402	55.531	1787 636	6 1	1/128
4/124			1					1		1			1.110-				1	1				-	-		1.														ļ	ļ	55.577			4/124
1/128A	4/124	1/128A	6	275	1	0.371	0.371	283	310	0.47	280	30	1/128 6)	275	0.371	0	280	2.512	1	525	2 1.29	0.02	32	1	2.4	7 0.0	085 5.04	4 0.43		0.43	0.42	0.011	0.309	2.12	54.584	54.559	54.923	54.912	-		310		/128A
4/124	13/100	1/170	6	275	1	0.074	0.034	26	1070	1 07	155	075	1/112 6	:	275	0.034	0	155	1.991	1.01	775	2 1.4	0.02	77	1	7	11 0.1	3.58	0.757		0.357	0.70	0.016	0.274	1 70	EO 7	E0.60	E1 17	E1 1E4		55.577	1815 103		4/124 1/130
13/100	13/100	1/130	0	2/3	1	0.034	0.034	20	1030	1.07	133	6/3	1/112 6)	2/3	0.034	10	133	1.991	1.01	3/3	2 1.4	0.02	32	1	3	1 0.1	3.30	0.337		0.557	0.76	0.016	0.274	1.79	30.7	30.06	31.17	31.134		51.692	1015 105		3/100
_ ·	13/100	1/131	6	275	1	0.196	0.196	150	1258	1.42	255	1004	1/130 6	,	275	0.196	0	255	3.926	1	450	2 1.6	0.04	32	1	3.0	7 0.1	31 3.72	2 0.486		0.486	0.8	0.031	0.332	2.03	50.738	50.699	51.186	51.154		51.694	1 125		1/131
13/100																	1																							-	51.692			3/100
1/132	12/100	1/132	6	275	1	0.221	0.221	169	946	2.83	216	730	1/131 6	,	275	0.221	0	216	2.468	1	375	2 1.96	0.03	32	1	2.9	9 0.1	.95 3.82	0.746		0.746	2.68	0.04	0.375	1.96	52.653	52.629	52.653	52.587			1743 946	6 1	1/132
12/100																																								52.083	53.642		1	.2/100
-	11/100	1/133	7	263	1	0.541	0.541	395	395	1.52	191	204	1/118 7	'	263	0.541	0	191	5.915	1	375	2 1.73	0.06	32	1	2.	6 0.1	.53 4.3	3 0.66		0.66	1.95	0.082	0.375	1.73	53.059	53	53.059	52.943	-		1867 395		1/133
11/100								1									1	_																						52.388	54.02		1	1/100
8/200	9/200	1/225 1/226 1/227 1/228 2/228 1/200 2/200 3/200 4/200 1/223 2/223											9	9.4	238	4.014	0	1484	40.251	1.7	900	2 2.33	0.18	42 43	0	1 1.	0.2	278 1.53	3 0.424	1.63	0.454	1.43	0.576	0.517	3.92	48.456	47.771	48.456	47.88	48.909	49.523	0	8	8/200
9/200	10/200	1/222 1/222A 1/225 1/226 1/227 1/228 2/228 1/200 2/200 3/200 4/200 1/223 2/223											9	9.58	237	4.213	0	1707	56.943	1.27	1050	2 1.97	0.27	34 37	0	0.99 1.:	. 0.1	.98 0.5	5 0.109		0.109	0.73	0.418	0.559	3.65	47.771	47.048	47.771	47.353	47.88	48.809	0	ç	9/200
10/200	11/200	1/221 1/221A 1/222 1/222A 1/225 1/226 1/227 1/228 2/228 1/200 2/200 3/200 4/200 1/223 2/223											9	9.84	234	4.416	0	2004	14.195	0.3	1050	2 2.31	0.14	33 34	0	1 1.3	51 0.2	273 0.2	5 0.067		0.067	0.54	0.076	1.05	2.31	47.028	46.985	47.286	47.21	47.353	48.051	0	1	.0/200



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



PROJECT EVERLEIGH PRECINCT 1.2B SUBDIVISION DEVELOPMENT
LOCATION TEVIOT ROAD GREENBANK

TEVIOT ROAD, GREENBANK

SHEET TITLE Q100 MAJOR STORM CALCULATIONS - 2 OF 3

MIR001-02B

	LOCATION		TIME		SUB-C	CATCHI	MENT R	UNOFF		INL	ET DE	SIGN						DRAIN	DESIGN	١								HEAI	DLOSSE	S					PART	FULL			DESIG	SN LEVEL	_S		RUI	NOFF	
		tc	I		Α	CA	Q			Qg	Qb		tc	I	CA		Qp	L	S		Vf	=Q/A	\Box		STRU	CTURE R	RATIOS	V2/2g	Ku	hu	Kw	hw	Sf	hf	dn	Vn	\vdash			#		-	\mp		=
STRUCTURE NUMBER	DOWNSTREAM STRUCTURE SUB-CATCHMENTS CONTRIBUTING	SUB-CATCHMENT TIME OF CONCENTRATION	RAIN	CO-EFFICIENT OF RUNOFF	SUB-CATCHMENT AREA	EQUIVALENT AREA	SUB-CATCHMENT DISCHARGE			FLOW INTO INLET	BYPASS FLOW	BYPASS STRUCTURE NUMBER	CRITICAL TIME OF CONCENTRATION	RAINFALL INTENSITY		PIPE FLOW	PIPE FLOW	REACH LENGTH	PIPE GRADE	PIPE/BOX DIMENSIONS	CLAS	FULL PIPE	TIME OF FLOW IN REACH	CHARTS USED	Q9/Qo	Du/Do	S/Do	VELOCITY HEAD	UPSTREAM HEADLOSS CO-EFFICIENT	UPSTREAM HEADLOSS	W.S.E. CO-EFFICIENT	CHANGE IN W.S.E.	PIPE FRICTION	PIPE FRICTION HEADLOSS (L × Sf)	NORMAL DEPTH	NORMAL DEPTH VELOCITY	UPSTREAM OBVERT LEVEL			DOWNSTRE	W.S.E.	SURFACE OR GRATE LEVEL	MAJOR SURFACE FLOW CAPACITY	Σ	STRUCTURE NUMBER
	1/219 1/220 1/221 1/221A	min	mm/h		ha	ha	l/s	l/s	%	l/s	l/s		min	mm/h	ha	l/s	l/s	m	%	mm		n/s	min					m		m		m	%	m	m	m/s	m	m	m	m	m	m	l/s	l/s	
11/200	1/222 1/222A 1/225 1/226 12/200 1/227 1/228 2/228 1/200 2/200 3/200 4/200 1/223 2/223												9.98	233	4.693) :	1976	31.162	1.36 1	.200	2 1.7	5	0.13	37 42 43	0	0.98	1.2	0.156	1.11	0.172	1.18	0.183	0.26	0.08	0.554	3.87	46.985	46.563	47.038	8 46.958	47.221	48.287	7 0		11/200
	1/208 1/210 1/211 2/211 3/211 4/211 1/213 5/211 6/211 7/211 1/214 1/217 1/218 2/218 1/209 2/209 3/209 4/209 5/209 1/215 1/216 1/219 1/220 1/221 1/221A 1/222 1/222A 1/225 1/226 1/227 1/228 2/228 1/200 2/200 3/200 4/200 1/223 2/223												9.12	241	7.651 () 3	3433	25.791	1.34 1	.350	2 2.4		0.1	37 42 43	0	1	1.31	0.293	1.35).395	1.42	0.416	0.74	0.191	0.719	4.43	46.563	46.217	46.56	3 46.372	46.978	47.79	4 0		12/200
13/200																					\perp																		↓			47.41	_	$\perp \!\!\! \perp \!\!\! \perp$	13/200
1/206	13/200 1/206	6	275	1	0.042	0.042	32	86	1.28	80	6	1/204	6	275	0.042) [8	80	7.995	1 3	75	2 0.7	3	0.08	32	1		1.64	0.027	8.93	0.241	- 0	0.241	0.24	0.019	0.178	1.55	46.391	46.311	46.391	1 46.372	_			86	1/206
13/200	17/200 1/207		275	1	0.4.42	0.143	108	4054	4.20	250	1.01	1/205		275	0.4.42	,	250	5.450	1.01 7	7.5	2 22	,	0.05	72	4		7.5	0.262	7.25	0.057		0.057	204	0.406	0.775	2.27	46.704	46.770	46.47	1 46 77		47.41	_	1054	13/200
1/207	13/200 1/207	6	275	1	0.142	0.142	108	1851	1.28	250	1601	1/205	6	2/5	0.142	,	250	5.159	1.01 3	1/5	2 2.2	<u> </u>	0.05	52	1		3.5	0.262	3.25	0.853		0.853	2.04	0.106	0.375	2.27	46.391	46.539	46.477	7 46.372	_	47.33	_	1851	1/207
1/208	12/200 1/208	6	275	1	0.186	0.186	142	1644	0.35	375	1269	1/207	6	275	0.186	, ;	375	14.282	1 6	500	2 1.3	3	0.11	32	1		2.12	0.09	6.48	0.582		0.582	0.37	0.053	0.339	2.28	46.919	46.776	47.01	1 46.958		_	_	1644	1/208
12/200	,	+				1		1							-						1 1		-		 		1						-				1	1	+	+		47.794	_	+	12/200
7/209	8/209 1/217 1/218 2/218 1/209 2/209 3/209 4/209 5/209 1/215 1/216												6.93	264	1.757) ;	767	34.684	5.15 5	25	2 3.5	4	0.13	33 34	0	1	1.32	0.641	0.26	0.167	(0.167	4.62	1.602	0.351	4.99	50.677	48.891	50.677	7 49.074	50.844	51.784	1 0		7/209
8/209	9/209 1/214 1/217 1/218 2/218 1/209 2/209 3/209 4/209 5/209 1/215 1/216												7.05	262	1.927) [860	10.966	7.05 5	25	2 3.9	7	0.03	33 34	0	1	1.39	0.805	0.25	0.204	(0.204	5.12	0.562	0.34	5.79	48.871	48.097	48.87	1 48.309	49.074	49.94!	5 0		8/209
9/209	1/211 2/211 3/211 4/211 1/213 5/211 6/211 7/211 10/209 1/214 1/217 1/218 2/218 1/209 2/209 3/209 4/209 5/209 1/215 1/216												6.91	264	2.754 () 1	1219	29.477	3.12 6	575	2 3.4	1	0.12	34 37	0	1	1.31	0.592	0.36	0.211	(0.211	2.61	0.771	0.465	4.63	48.097	47.177	48.09	7 47.327	48.309	49.380	5 0		9/209
10/209	1/210 1/211 2/211 3/211 4/211 1/213 5/211 6/211 12/200 7/211 1/214 1/217 1/218 2/218 1/209 2/209 3/209 4/209 5/209 1/215 1/216												7.02	263	2.961) 1	1305	18.435	3.33 7	'50	2 2.9	5	0.07	33 34	0	1	1.2	0.445	0.26	0.116	(0.116	1.37	0.253	0.437	4.88	47.177	46.563	47.21:	1 46.958	47.327	48.19	3 0		10/209
12/200																																										47.794		\perp	12/200
<u> </u>	10/209 1/210	6	275	1	0.206	0.206	158	158	3.06	103	54	1/206	6	275	0.206) :	103	5.384	1.01 3	75	2 0.9	4	0.06	32	1		2.11	0.045	6.52	0.291	- 0	0.291	0.35	0.019	0.207	1.65	47.22	47.165	47.346	6 47.327	_			158	1/210
10/209	1/211 2/211 7/211 4/214															_						_															+		+	+		48.193		1	10/209
5/211	6/211 1/211 2/211 3/211 4/211 1/213 5/211	6	275	1	0.022	0.022	17	17	5	17	0	6/211	6.46	269	0.637)	329	34.811	4.82 3	75	2 2.9	7_	0.17	34 37	0.05	1	3.11	0.452	0.66	0.298		0.298	3.51	1.221	0.267	3.91	50.003	48.326	50.496	49.274	50.794	50.997	1631	17	5/211
6/211	7/211 1/211 2/211 3/211 4/211 1/213 5/211 6/211 1/212 1/211 2/211 3/211 4/211		275		0.162			540				1/208						9.698			2 1.5			37 42 43	0				0.5							2.53				48.943			4 1631		6/211
7/211	9/209 1/211 2/211 3/211 4/211 1/213 5/211 6/211 7/211	6	275	1	0.045	0.045	34	536	0.29	120	416	6/211	6.7	267	0.844) 3	368	12.258	0.3 4	150	2 2.3	1 '	0.21	37 42 43	0.32	1	2.83	0.273	1.57	0.43	1.63	0.445	1.67	0.204	0.45	2.31	48.134	48.097	48.513	3 48.309	48.958	49.107		536	7/211
9/209																																										49.386	_	$\perp \!\!\! \perp \!\!\! \perp$	9/209
1/214	8/209 1/214	6	275	1	0.171	0.171	130	502	5.89	106	396	7/211	6	275	0.171) [106	3.528	1.01 3	75	2 0.9	6	0.04	32	1		2.11	0.047	6.53	0.307		0.307	0.37	0.013	0.21	1.66	48.977	48.941	49.087	7 49.074		_	_	502	1/214
8/209	11/200 1/219	6	275	1	0125	0.125	95	605	1 20	221	174	1/207	6	275	0.125	,	221	8 001	1 7	75	2 2		0.08	37	1		715	0.205	3.64	7/15		0.745	1.59	n 127	0 275	2	47 277	47 107	17 77	7 47.21		49.945		605	8/209 1/219
11/219	11/200 1/217	0	2/3	1	0.125	0.125	95	695	1.29	771	4/4	1/20/	0	2/3	0.123	,	221	0.001	1 3	17.3	2 2		0.08	JZ	1		3.13	0.205	5.04	J./43		J./43	1.37	U.12/	0.375	²	47.277	47.197	47.557	47.21	_	48.217	_	C40	11/200
	11/200 1/220	6	275	1	0.152	0.157	116	796	1.29	-202	998	1/221	6	275	0.152)	602	35.329	1.13 3	75	2 5.4	5	0.35	32				1.515	0	,		0	1.13	0.399	0.375	5.45	47.679	47.28	47.67	9 47.279				796	1/220
11/200		1	<u> </u>			1		1.7	1 /		-	· -	-	-		+				-																	<u> </u>	1.20	+	+		48.287	_	+	11/200
1/221	10/200 1/221	6	275	1	0.07	0.07	54	1074	0.38	183	891	1/208	6	275	0.07) :	183	2.495	1 4	150	2 1.1	5	0.02	32	1		2.45	0.068	5.09	0.344	10	0.344	0.41	0.01	0.262	1.9	47.052	47.028	47.36	3 47.353				1074	1/221
10/200																																									47.353	48.051	1		10/200
	10/200 1/221A	6	275	1	0.133	0.133	101	1186	0.83	164	1021	LOST	6	275	0.133) [164	5.869	0.45 3	75	2 1.4	9	0.09	32	1		3.06	0.113	3.73	0.422	(0.422	0.88	0.052	0.375	1.49	47.054	47.028	47.40′	5 47.353	47.827	48.00)	1186	1/221A
10/200	0.700 4.700	1						1.				4 /200 :																									1		<u> </u>			48.051		1	10/200
1/222	9/200 1/222	6	275	1	0.084	0.084	64	117	1.45	95	22	1/221	6	275	0.084)	95	6.078	1.01 3	/5	2 0.8	5	0.06	52	1		1.88	0.038	7.66).289		D.289	0.29	0.018	0.197	1.62	47.857	47.796	47.898	8 47.88	_		8 1904	117	1/222
9/200	9/200 1/222A	6	275	1	0115	0.115	00	1252	1 45	167	1004	1/2214	6	275	0115	,	167	2 575	7 70 7	75	2 4 5	,	0.02	77	1		264	0117	16	1570		0.570	0.01	0.024	0.217	2 5 7	47.07	A7 774	47.00	Z 47.00		48.809	_	1252	9/200 1/2224
9/200	7/200 1/222A	Ь	275	1	0.115	0.115	88	1252	1.45	10/	1084	1/221A	Ь	2/5	0.115) [10/	2.575	2.28 3	1/3	2 1.5	4	0.02	3 2	1		2.64	U.11/	4.6	7.559		U.35Y	0.71	U.UZ4	0.21/	2.55	47.85	4/.//1	47.905	3 47.88		48.77	_	1252	1/222A 9/200
																																				<u> </u>						—		ш	
l Ir	EOD CONSTDUCTION	 															DESIG			EL MAJZN		PEO		, //	DATE	_									MID\//								$\overline{}$	JOB CODE	

FOR CONSTRUCTION

Premise PH: (07) 3253 2222
WEB: www.premise.com.au

BRISBANE OFFICE LEVEL 1, 100 BRUNSWICK STREET PO BOX 361 FORTITUDE VALLEY, QLD 4006

MICHAEL MAJZNER PROJECT MANAGER JOSHUA STONE — 02/07/18

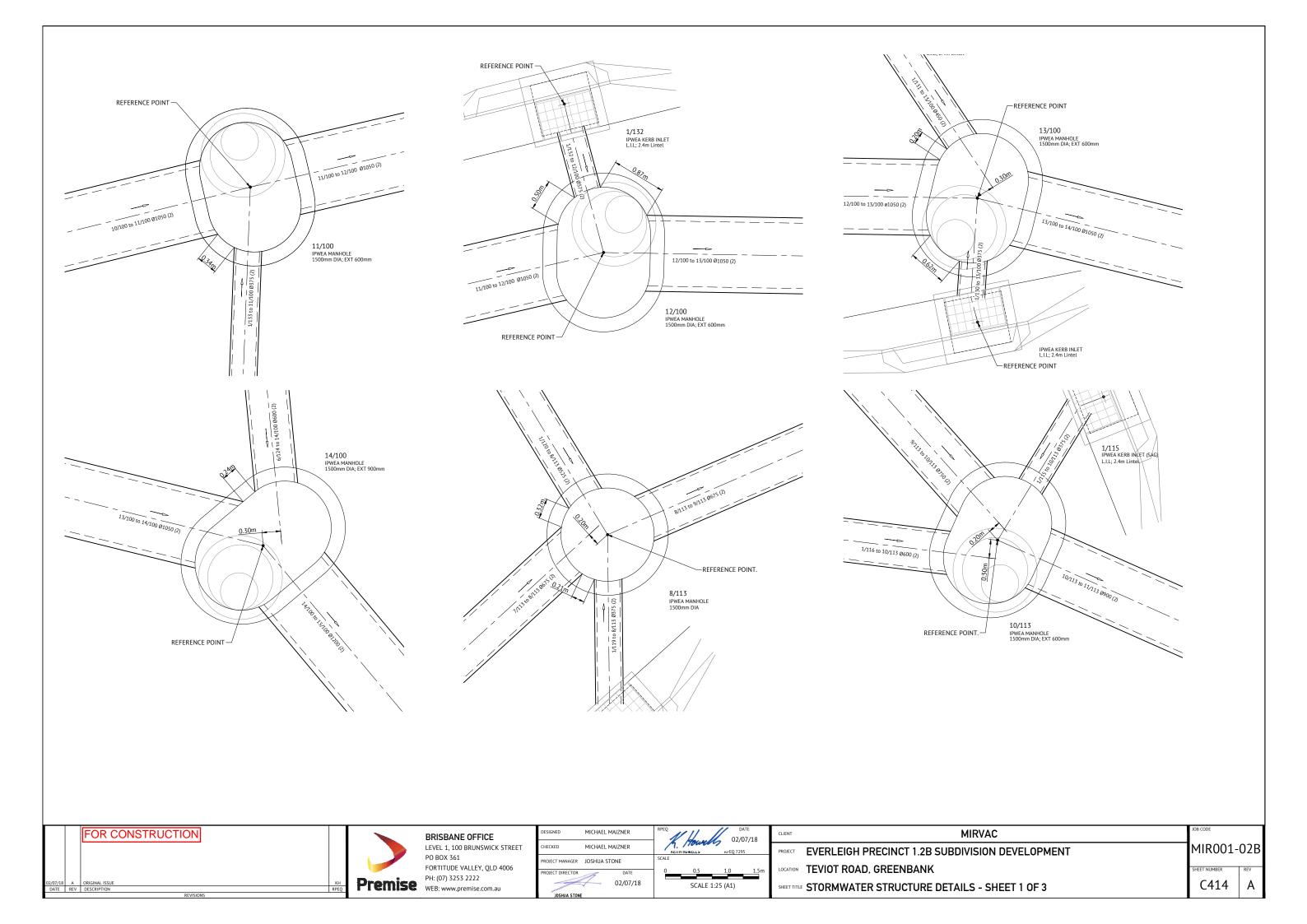
MIRVAC

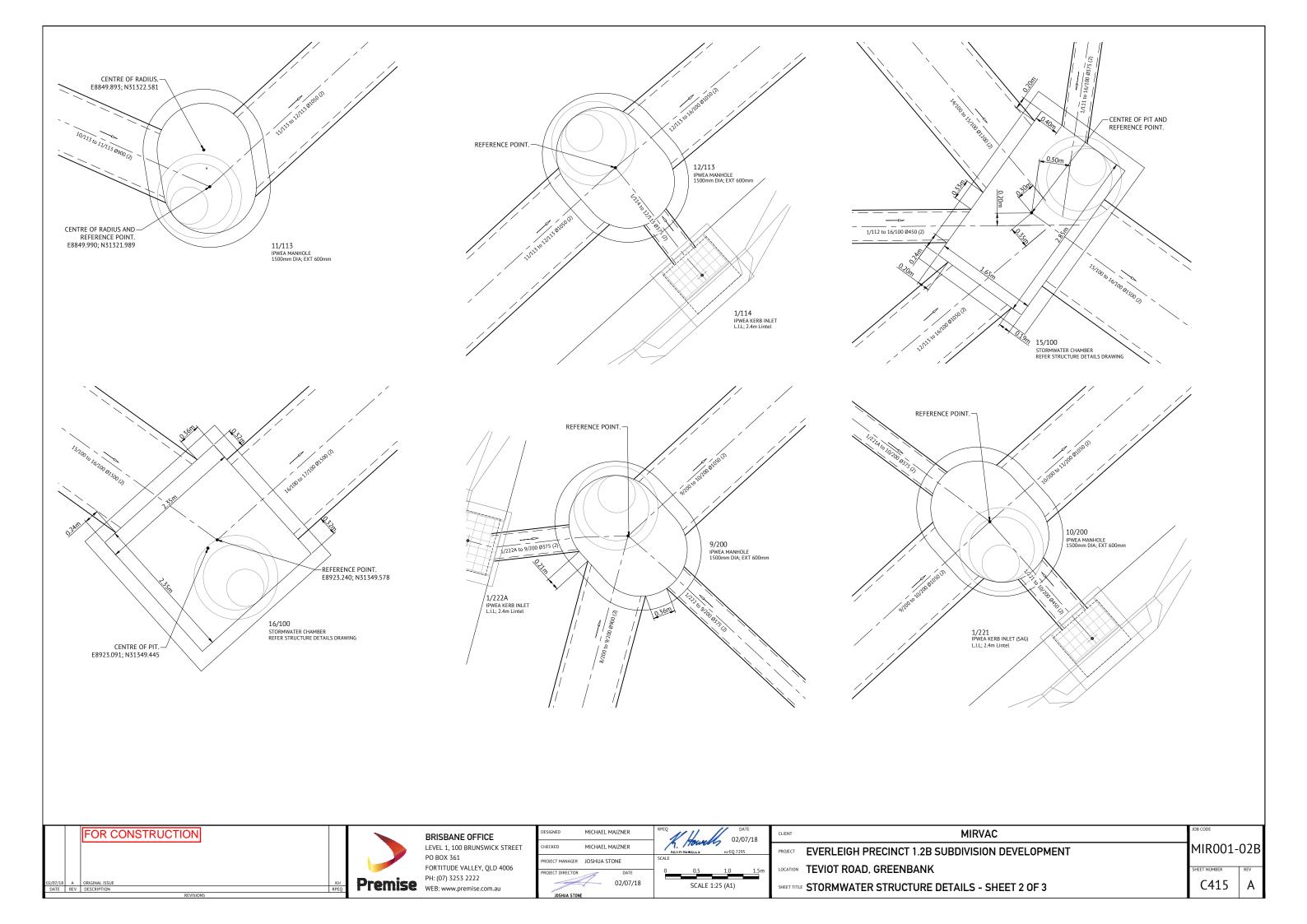
PROJECT EVERLEIGH PRECINCT 1.2B SUBDIVISION DEVELOPMENT

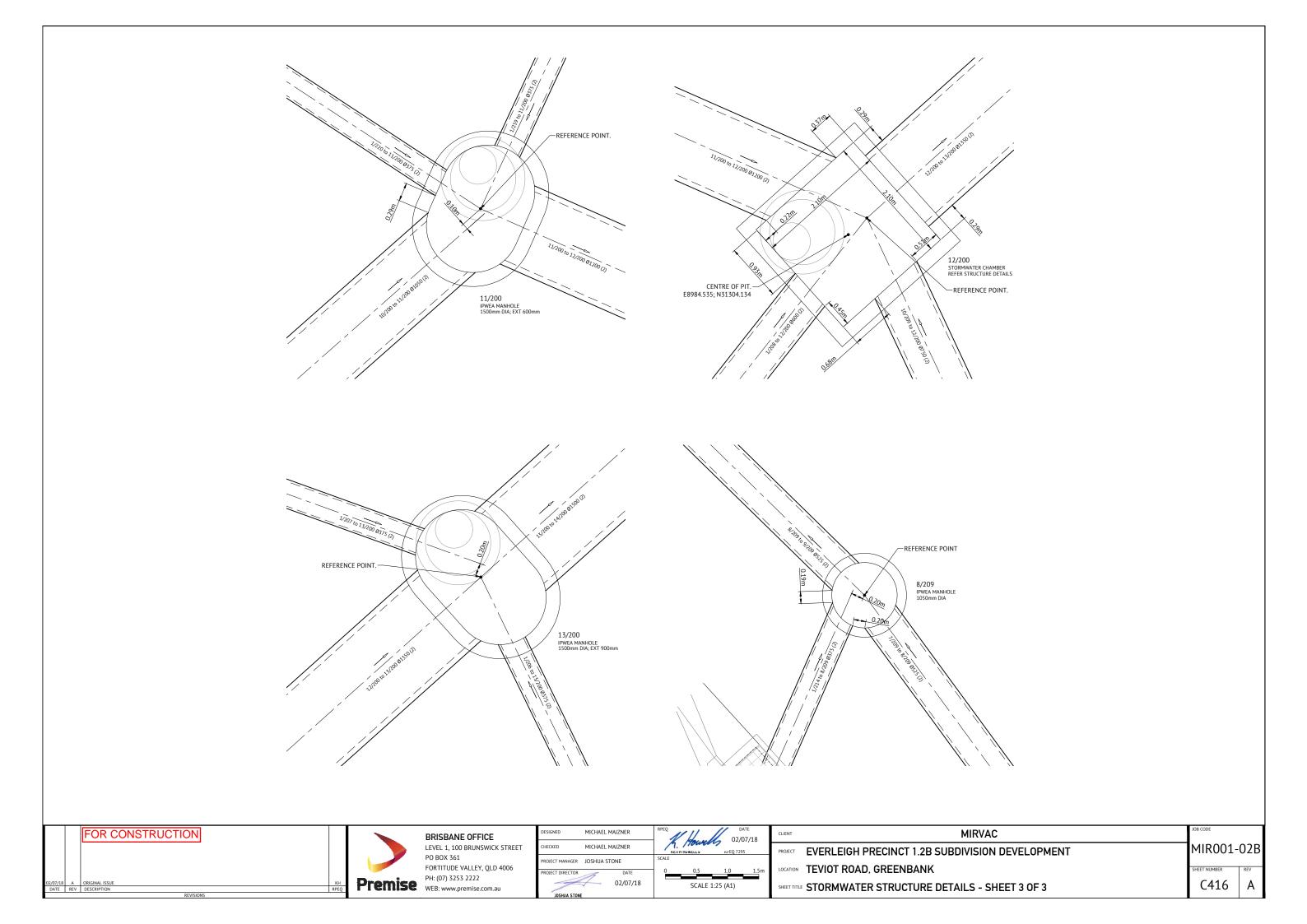
LOCATION TEVIOT ROAD, GREENBANK

SHEET TITLE Q100 MAJOR STORM CALCULATIONS - 3 OF 3

MIR001-02B







EVERLEIGH PRECINCT 1.2B SUBDIVISION DEVELOPMENT TEVIOT ROAD, GREENBANK **FOR MIRVAC**

SEWERAGE RETICULATION



LOCALITY PLAN

SCALE 1:5000 (A1)

REAL PROPERTY DESCRIPTION

LOT 205 & 434 on RP845844 LOT 9 on S312355

SH	HEET LIST TABLE
SHEET NUMBER	SHEET TITLE
C500	SEWERAGE RETICULATION LOCALITY PLAN & NOTES
C501	SEWERAGE RETICULATION LAYOUT PLAN - SHEET 1 OF 2
C502	SEWERAGE RETICULATION LAYOUT PLAN - SHEET 2 OF 2
C503	SEWERAGE RETICULATION LONG SECTIONS - SHEET 1 OF 4
C504	SEWERAGE RETICULATION LONG SECTIONS - SHEET 2 OF 4
C505	SEWERAGE RETICULATION LONG SECTIONS - SHEET 3 OF 4
C506	SEWERAGE RETICULATION LONG SECTIONS - SHEET 4 OF 4
C507	SEWERAGE RETICULATION NOTES AND DETAILS

GENERAL NOTES

- ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH CURRENT SOUTH EAST QUEENSLAND SEWERAGE CODE SPECIFICATIONS AND STANDARDS.
- UNLESS SPECIFIED OTHERWISE ALL MATERIALS AND WORK SHALL COMPLY WITH THE RELEVANT AUSTRALIAN STANDARDS.
- THE CONSTRUCTION OF THE SEWERAGE WORK SHOWN ON THIS DRAWING SHALL BE SUPERVISED BY AN ENGINEER WHO HAS RPEO REGISTRATION. SEWERAGE WORKS NOT COMPLYING WITH THIS REQUIREMENT WILL NOT BE PERMITTED TO CONNECT INTO THE SEQ SERVICE PROVIDER SEWERAGE
- 4. ALL WORK ASSOCIATED WITH LIVE SEWERS OR MAINTENANCE HOLES SHALL BE CARRIED OUT BY THE CONTRACTOR UNDER LOGAN WATER SUPERVISION AT THE DEVELOPER'S COST.
 ALL PIPES AND MATERIALS SHALL COMPLY WITH THE REQUIREMENTS OF
- THE "ACCEPTED PRODUCTS AND MATERIALS" LIST.
 EACH ALLOTMENT SHALL BE SERVED BY A DN100 PROPERTY CONNECTION.
- FOR ALLOTMENTS OTHER THAN SINGLE RESIDENTIAL, A DN150 PROPERTY CONNECTION SHALL BE PROVIDED.
- PROPERTY CONNECTIONS SHALL BE LOCATED WITHIN THE PROPERTY AS SHOWN IN THE DRAWINGS.
- PROPERTY CONNECTION BRANCHES SHALL EXTEND INTO THE PROPERTY A MINIMUM OF 300mm AND A MAXIMUM OF 750mm
- WHERE PIPES ARE LAID IN FILL, THE FILLING SHALL BE CARRIED OUT IN LAYERS NOT EXCEEDING 300mm (LOOSE) IN DEPTH AND SHALL BE COMPACTED UNTIL THE COMPACTION IS NOT LESS THAN 95% OF THE MATERIALS MAXIMUM COMPACTION WHEN TESTED IN ACCORDANCE WITH A.S. 1289 (MODIFIED COMPACTION). TESTING SHALL BE CARRIED OUT AFTER EACH ALTERNATE LAYER, IN ALL SUCH CASES APPROVAL OF CONSTRUCTED SEWERS WILL NOT BE ISSUED BY THE SEQ SERVICE PROVIDER UNLESS CERTIFICATES ARE PRODUCED CERTIFYING THAT THE REQUIRED COMPACTION HAS BEEN ACHIEVED.
- 10. WHERE SEWERS HAVE A GRADE OF 1 IN 20 OR STEEPER, BULKHEADS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE SEO SEWER CODE.
- THE CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF EXISTING SERVICES WITH RELEVANT AUTHORITIES BEFORE COMMENCING WORKS.
- 12. SEWERS SHALL BE DISUSED /ABANDONED IN ACCORDANCE WITH PROCEDURES SET OUT IN THE SEO SEWER CODE.
- BENCH MARK AND LEVELS TO AHD.
- 14. REFER TO BULK EARTHWORKS DRAWINGS FOR FINISHED SURFACE LEVELS. 15. ALL SEWER CONSTRUCTION WORK UNDERTAKEN BY THE CONTRACTOR
- SHALL COMPLY WITH THE REQUIREMENTS OF THE OLIFENSI AND WORK HEALTH AND SAFETY ACT. FOR INFORMATION PHONE: 1300 369 915. 16 THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL NECESSARY
- PERMITS TO ALLOW CONSTRUCTION OF THE SEWER SYSTEM.
- 17. THE CONTRACTOR IS RESPONSIBLE FOR EXCAVATION AND SAFE SHORING TO ALLOW SEWER MAINTENANCE SECTION TO CARRY OUT LIVE SEWER
- 18. CONSTRUCT TRENCHES TO SEQ-SEW-1200-2, WITH EMBEDMENT TYPE 3 SUPPORT MINIMUM TO SEQ-SEW-1201-1, AND ROAD CROSSINGS TO SEQ-SEW-1205-1 AND LCC STANDARDS.
- 19. CONSTRUCT PROPERTY CONNECTIONS TO SEQ-SEW-1100 SERIES.
 20. CONSTRUCT MAINTENANCE STRUCTURES TO SEQ-SEW-1300 SERIES.
- CONSTRUCT BULKHEADS TO SEQ-SEW-1206-1.
- 22. INSTALL DETECTABLE MARKER TAPE ON ALL MAINS AND PROPERTY

VEGETATION PROTECTION

A. TREES LOCATED ALONG THE FOOTPATH SHALL BE, TRANSPLANTED PRIOR TO CONSTRUCTION, OR REPLACED IF DESTROYED.

B. WHEN WORKING WITHIN 4m OF TREES, RUBBER OR HARDWOOD GIRDLES S HALL BE CONSTRUCTED WITH 1.8m BATTENS CLOSELY SPACED AND ARRANGED VERTICALLY FROM GROUND LEVEL, GIRDLES SHALL BE STRAPPED TO TREES PRIOR TO CONSTRUCTION AND REMAIN UNTIL COMPLETION.

C. TREE ROOTS SHALL BE TUNNELLED UNDER, RATHER THAN SEVERED, IE ROOTS. ARE SEVERED THE DAMAGED AREA SHALL BE TREATED WITH A SUITABLE FUNGICIDE, CONTACT RELEVANT COUNCIL ARBORIST FOR FURTHER ADVICE D. ANY TREE LOPPING REQUIRED SHOULD BE UNDERTAKEN BY AN APPROVED

A. TOPSOIL AND SUBSOIL SHALL BE STOCKPILED SEPARATELY. B. CARE SHALL BE TAKEN TO PREVENT SEDIMENT FROM ENTERING THE STORMWATER SYSTEM. THIS MAY INVOLVE PLACING APPROPRIATE SEDIMENT

C. IF ACID SUI PHATE SOILS EXIST IN THE WORKS AREA. ACID SUI PHATE SOILS ARE TO MANAGED IN ACCORDANCE WITH AN APPROVED ACID SULPHATE SOIL

CREEK CROSSINGS

A. SILTATION CONTROL MEASURES SHALL BE PLACED DOWNSTREAM OF ANY

B APPROPRIATE SEDIMENT CONTROLS SHALL BE USED TO PREVENT SEDIMENT

C NO SOIL SHALL BE STOCKPILED WITHIN 5m OF THE CREEK

REHABILITATION

A. PREDISTURBANCE SOIL PROFILES AND COMPACTION LEVELS SHALL BE B. PREDISTURBANCE VEGETATION PATTERNS SHALL BE RESTORED.

A. THE DESIGN AND CONSTRUCTION OF THE WORKS SHALL COMPLY WITH ALL **OUFFNSLAND LEGISLATION**

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 SHALL BE RESPONSIBLE FOR THE COST OF REPAIRS TO DAMAGES CAUSED AS A RESULT OF THE WORKS.

ALL ENVIRONMENT PROTECTION MEASURES SHALL BE IMPLEMENTED PRIOR TO COMMENCING ANY CONSTRUCTION WORK, INCLUDING CLEARING.

ALL SEWER CONSTRUCTION WORK UNDERTAKEN BY THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF THE QUEENSLAND WORKPLACE HEALTH AND SAFETY ACT 2011. CONTACT THE DIVISION OF HEALTH & SAFETY FOR INFORMATION. PHONE: 1300 369 915

CONTACT "DIAL BEFORE YOU DIG" ON 1100 FOR LOCATION OF EXISTING PUBLIC SERVICES PRIOR TO EXCAVATION

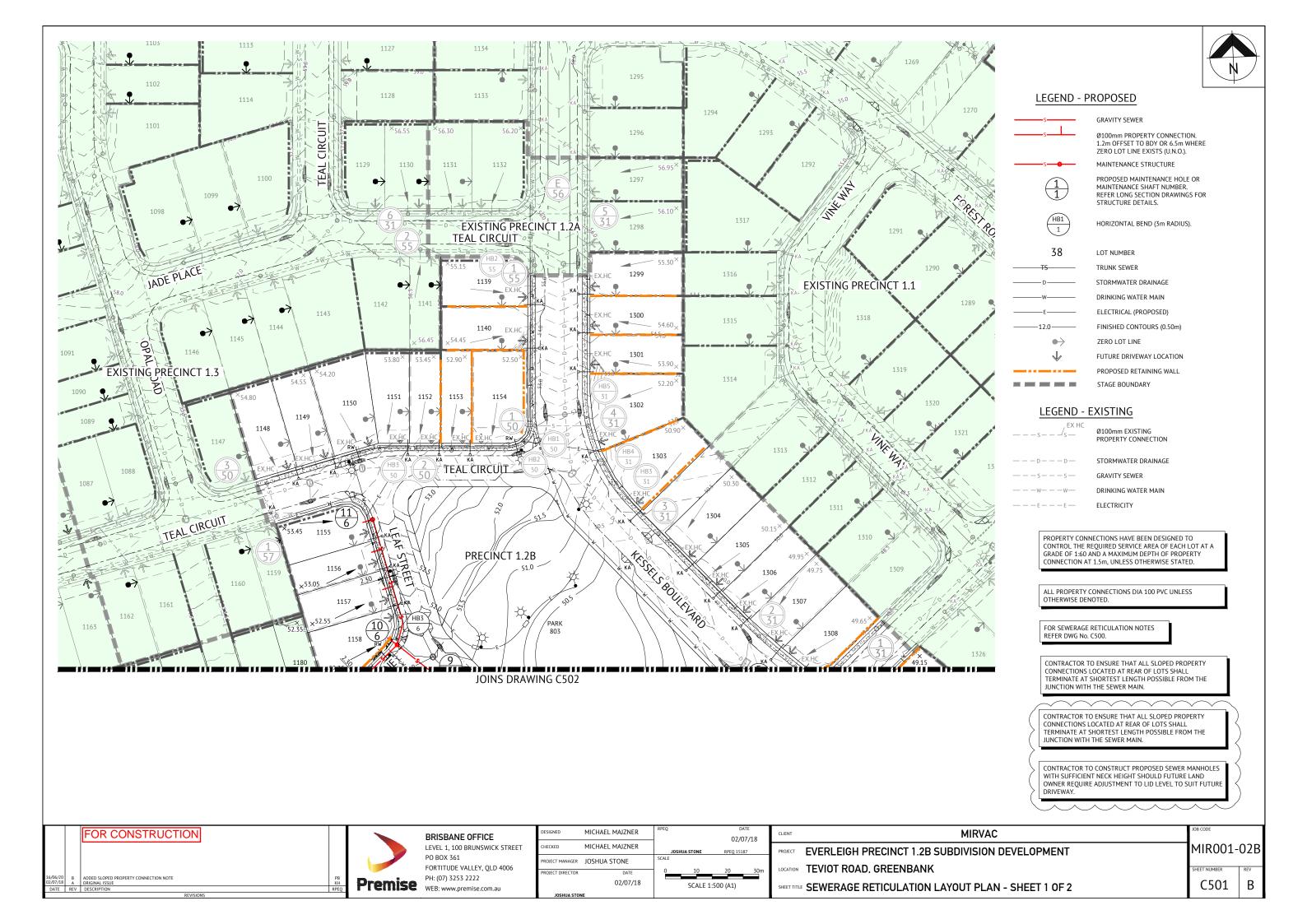
NAME OF ES	STATE	1.2B SUBDIVISION DEVELOPMENT
SUBDIVIDER		MIRVAC
APPLICATION No.		-
SP DELEGATE APPRO	OVAL DATE	5 JUNE 2017
COUNCIL DA APPRO	VAL No.	DEV 2016 / 768
DRAWING/PLAN No.		C501-C502
No. OF ALLOTMENT	S	42
AREA IN Ha.		3.9 Ha
LENGTH OF SEWERS	DN150 uPVC SN8	825m

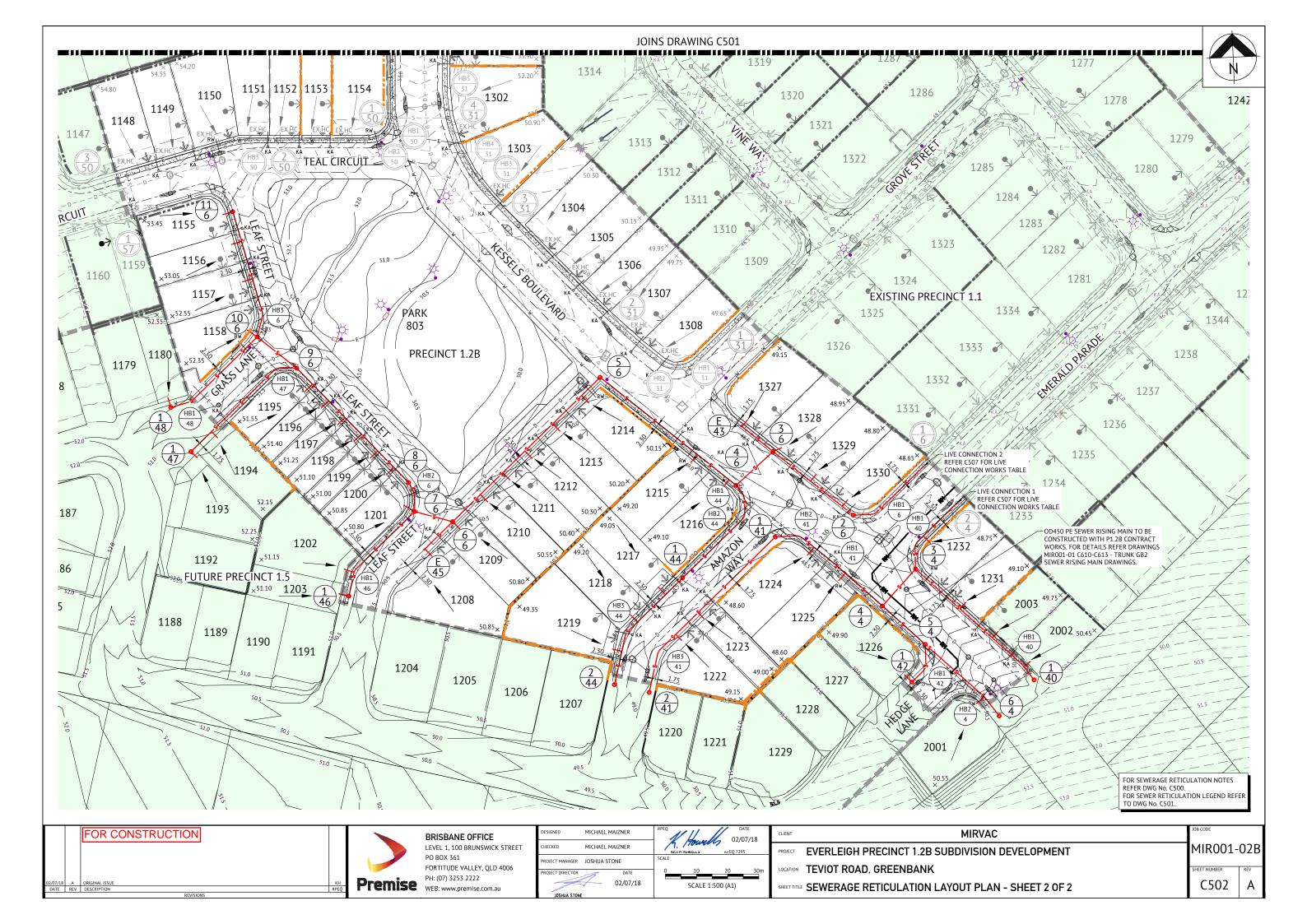
EVEDI EICH DDECING

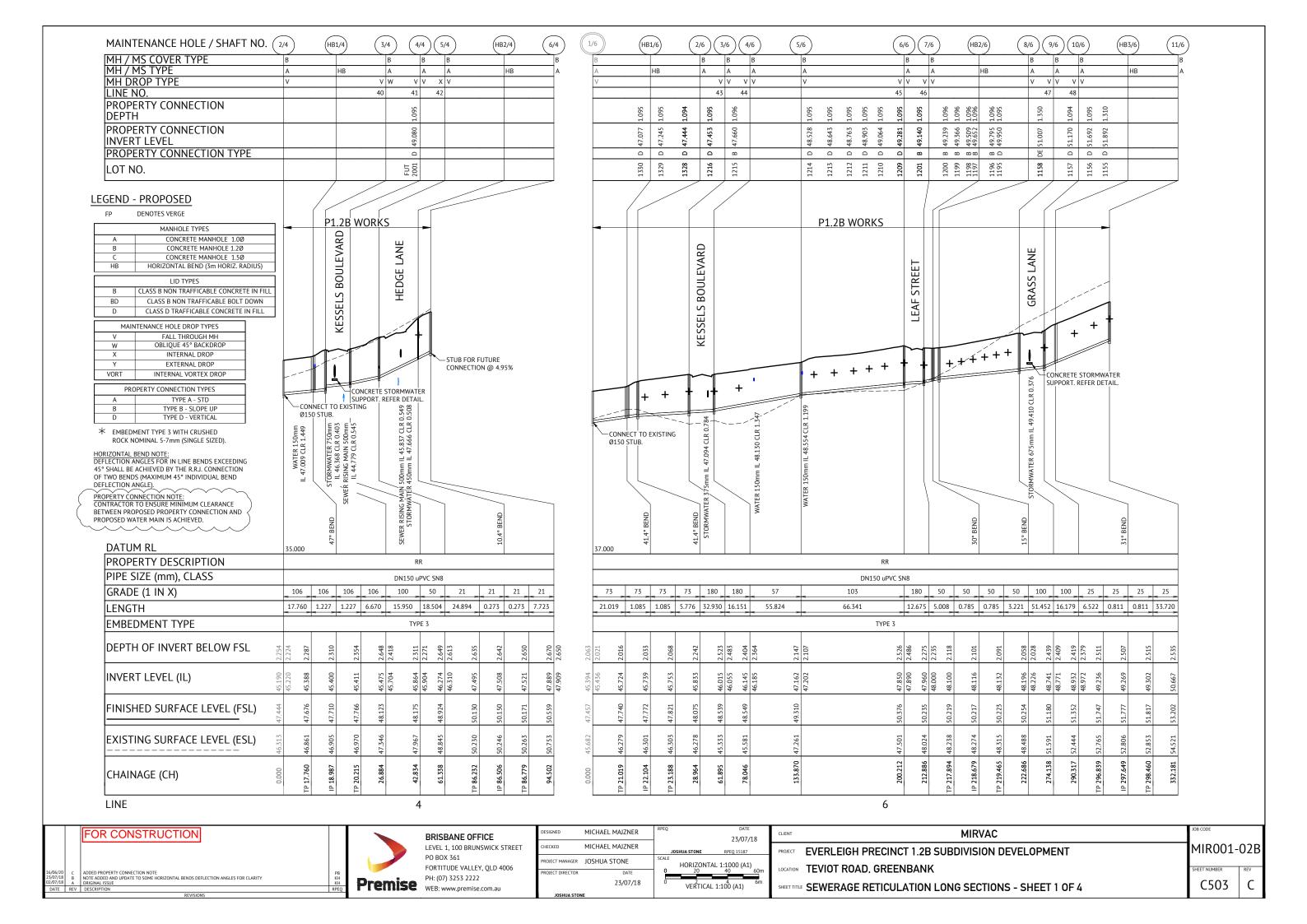


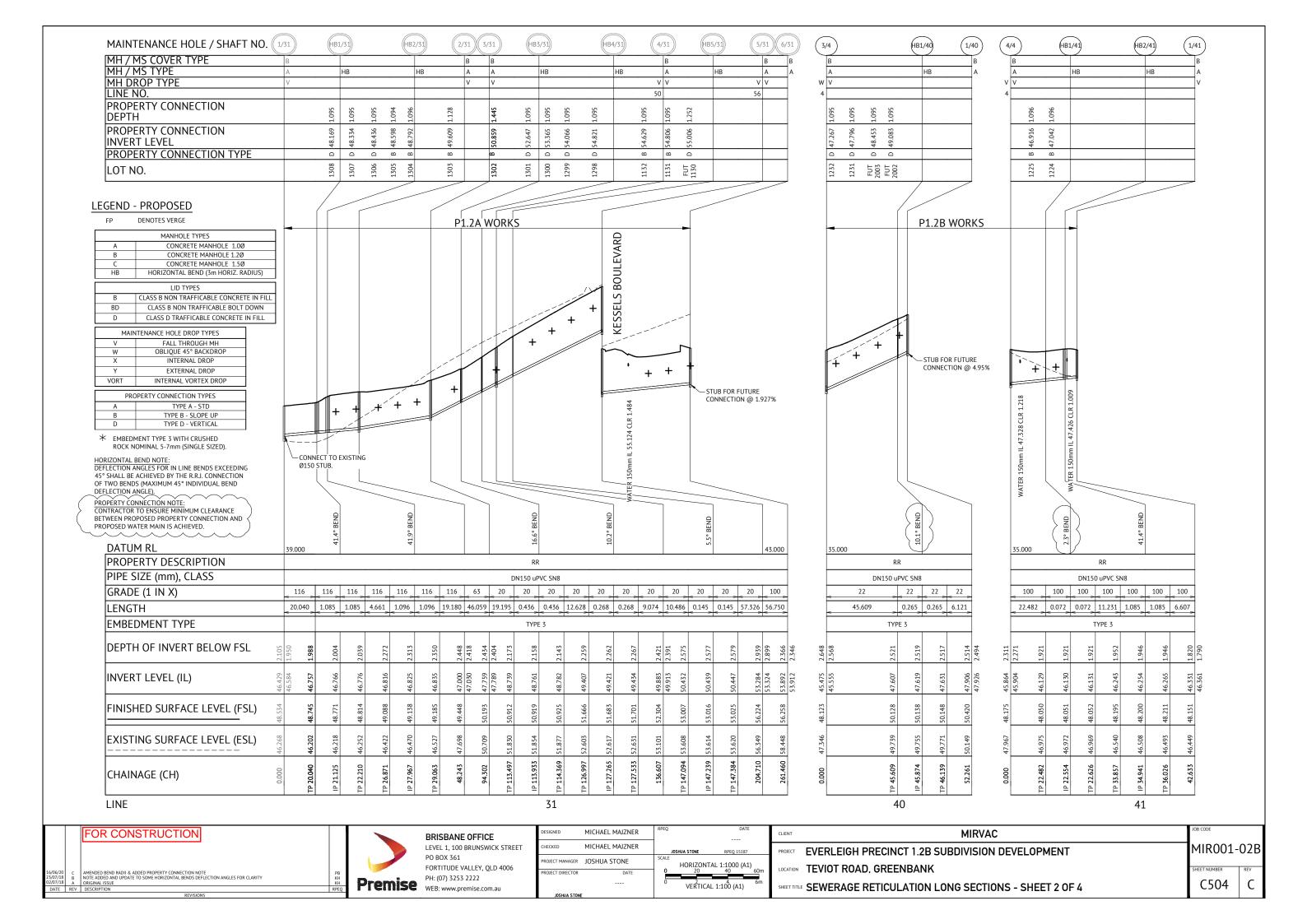
FOR CONSTRUCTION

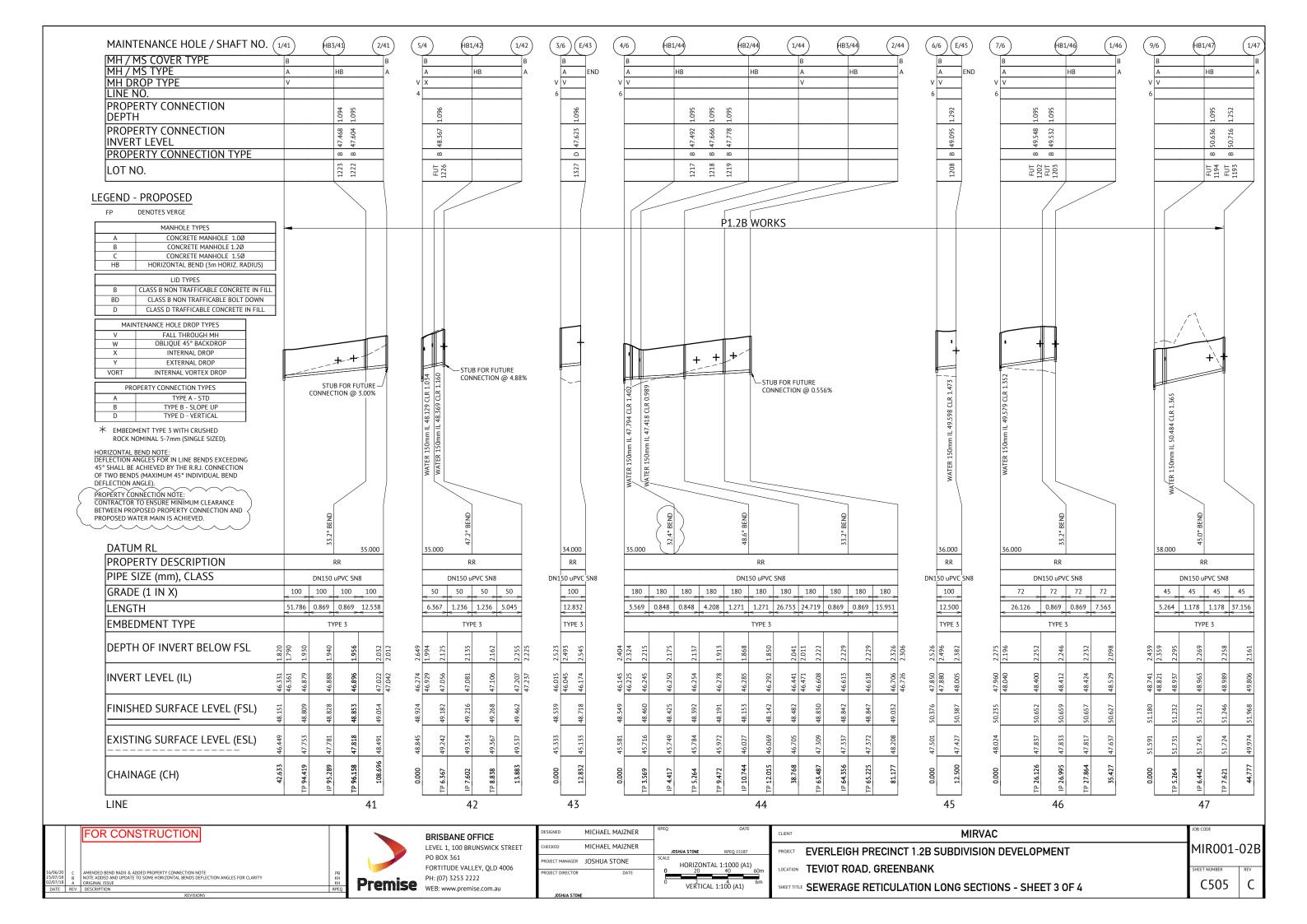


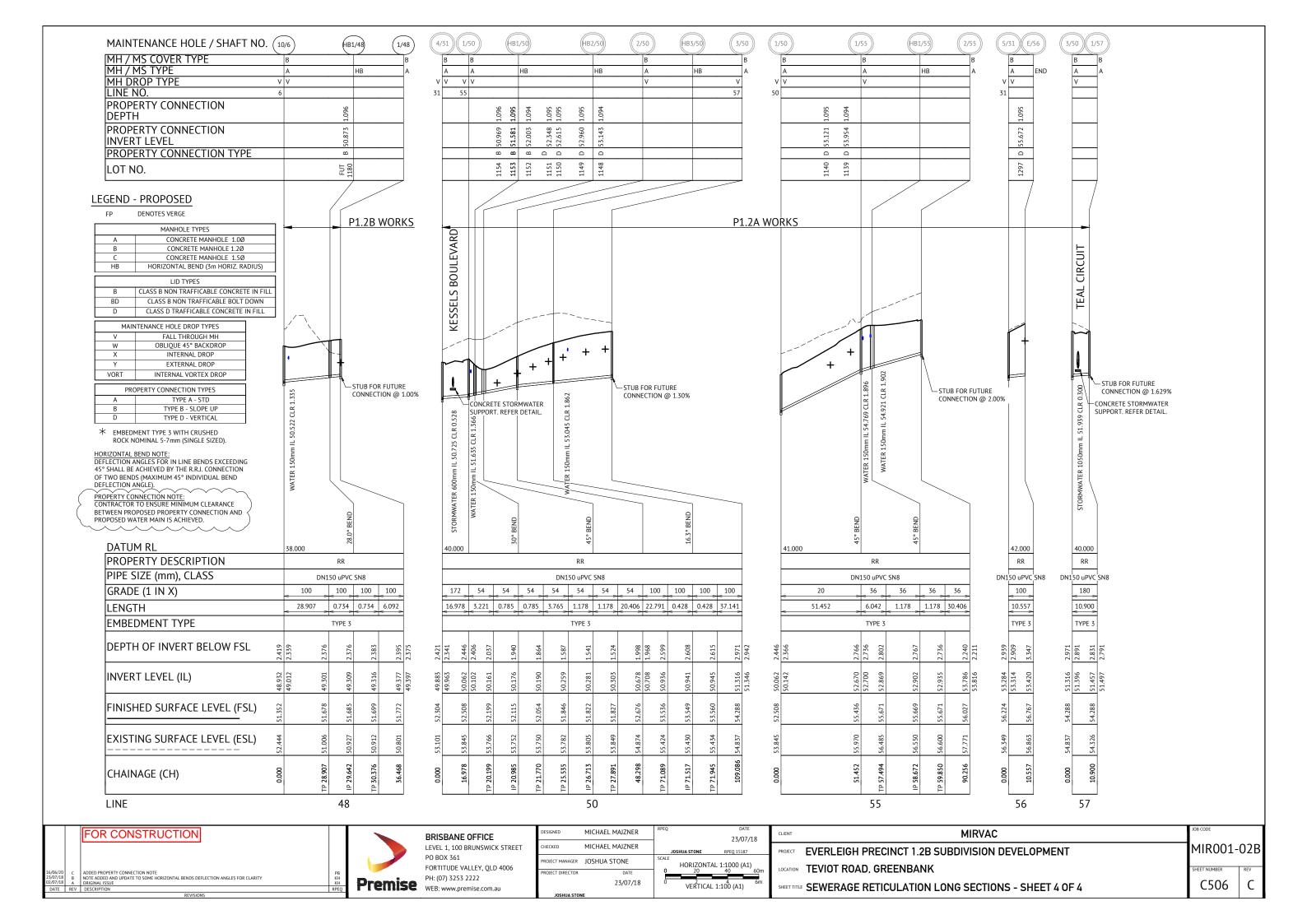


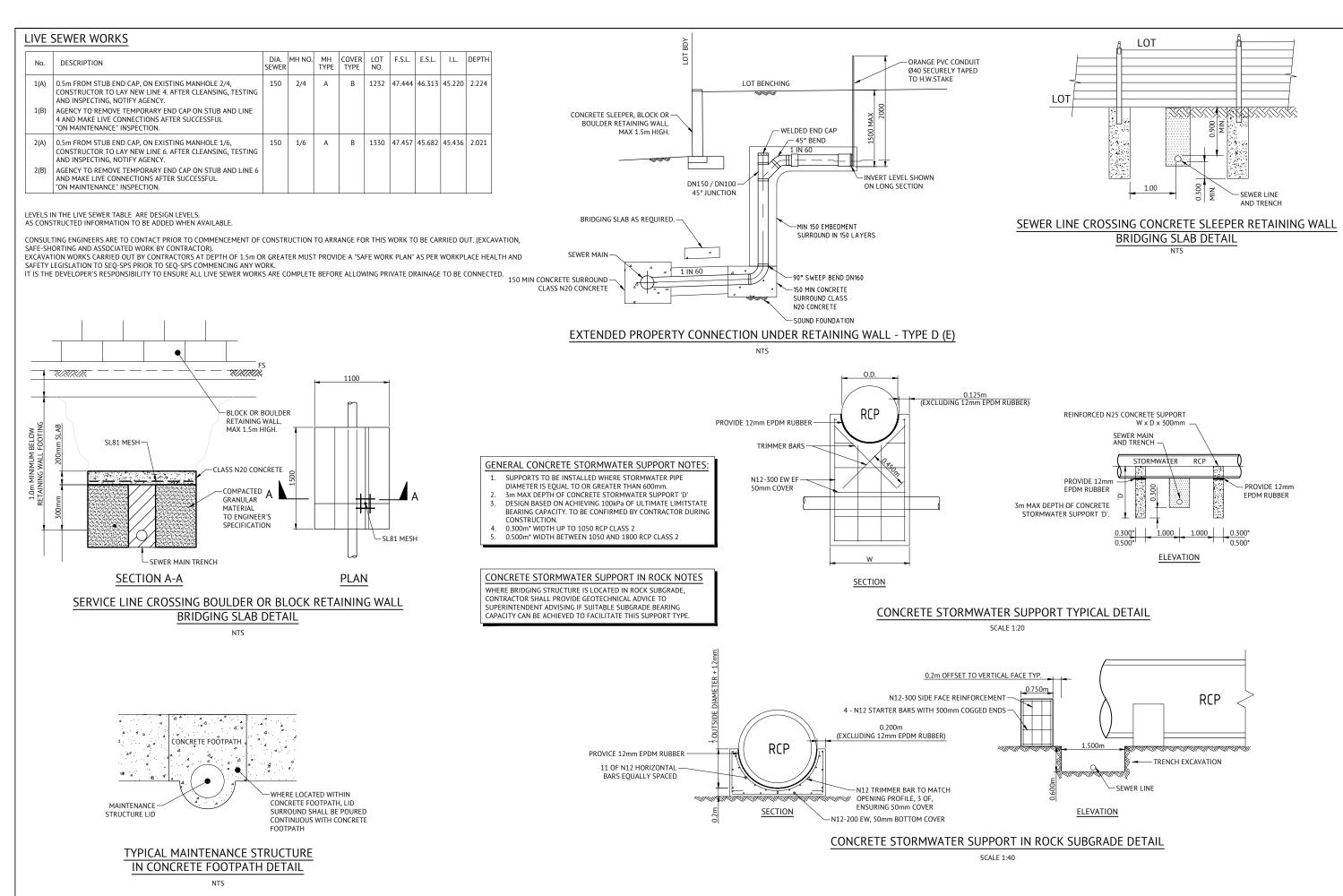












FOR CONSTRUCTION

Premise WEB: www.premise.com.au

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

MICHAEL MAJZNER 02/07/18 MICHAEL MAJZNER ROJECT MANAGER JOSHUA STONE AS SHOWN 02/07/18

MIRVAC EVERLEIGH PRECINCT 1.2B SUBDIVISION DEVELOPMENT LOCATION TEVIOT ROAD, GREENBANK SHEET TITLE SEWERAGE RETICULATION NOTES AND DETAILS

MIR001-02B

EVERLEIGH PRECINCT 1.2B SUBDIVISION DEVELOPMENT TEVIOT ROAD, GREENBANK FOR MIRVAC

WATER RETICULATION



SCALE 1:5000 (A1)

LOCALITY PLAN

REAL PROPERTY DESCRIPTION

LOT 205 & 434 on RP845844 LOT 9 on S312355



GENERAL NOTES

- ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH CURRENT SOUTH EAST QUEENSLAND WATER SUPPLY CODE SPECIFICATIONS AND STANDARDS.
- UNLESS SPECIFIED OTHERWISE ALL MATERIALS AND WORK SHALL COMPLY WITH THE RELEVANT AUSTRALIAN STANDARDS.
- ADOPT LIP OF KERB OR SHOULDER OF ROAD AS PERMANENT LEVEL.
 COVER OF MAIN FROM PERMANENT LEVEL TO BE AS SHOWN IN
- 4. COVER OF MAIN FROM PERMANENT LEVEL TO BE AS SHOWN IN SEQ-WAT-1200-2.
- 5. CONDUITS TO BE INSTALLED IN ACCORDANCE WITH THE STANDARD DRAWINGS.
- 6. ALL MATERIALS USED IN THE WORKS SHALL COMPLY WITH SEQ-SP'S ACCEPTED PRODUCTS AND MATERIALS LIST OR BE APPROPRIATELY SHOWN, LISTED AND DEFINED IN THE ENGINEERING SUBMISSION SO THAT THE ALTERNATIVE PRODUCT OR MATERIAL CAN BE ASSESSED AND IF APPROPRIATE, APPROVED BY SEQ-SP'S
- 7. ALL CONCRETE FOOTPATHS TO BE CLEAR OF WATER MAINS. WHERE POSSIBLE
- 8. TEST/CHLORINATION POINTS TO BE INSTALLED IN ACCORDANCE WITH STANDARD DRAWING NO. SEO-WAT-1410-1
- CONSTRUCTION OF THE WATER RETICULATION WORK SHOWN ON THIS DRAWING MUST BE SUPERVISED BY AN ENGINEER WHO HAS RPEQ REGISTRATION. WORKS NOT COMPLYING WITH THIS REQUIREMENT WILL NOT BE PERMITTED TO CONNECT TO THE RETICULATION SYSTEM.
- ALL WATER CONSTRUCTION WORK UNDERTAKEN BY THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF THE QUEENSLAND WORK HEALTH AND SAFETY ACT 2011. CONTACT THE DIVISION OF WORKPLACE HEALTH & SAFETY FOR INFORMATION. PHONE: 1300 362 128.
- CONSTRUCT THRUST BLOCKS ON ALL BENDS, TEES, TAPERS AND DEAD ENDS IN ACCORDANCE WITH SEQ-WAT-1205-1, AND SEQ-WAT-1206-1.
 CONSTRUCT TRENCHES IN ACCORDANCE WITH SEQ-WAT-1200-2, PIPE
- CONSTRUCT I RENCHES IN ACCORDANCE WITH SEQ-WAI-1200-2, PII EMBEDMENT TO SEQ-WAT-1201-1 (TYPE C SUPPORT) AND ROAD CROSSINGS TO SEQ-WAT-1204-1 AND BCC STANDARDS.
- 13. INSTALL SCOURS IN ACCORDANCE WITH SEQ-WAT-1307-2.

 14. INSTALL DETECTABLE MARKER TAPE ON ALL WATER MAINS AND
- PROPERTY SERVICES.

 15. INSTALL HYDRANTS IN ACCORDANCE WITH SEQ-WAT-1302-1,
- SEQ-WAT-1303-2 AND SEQ-WAT-1409-1

 16. INSTALL PAVEMENT MARKERS IN ACCORDANCE WITH SEQ-SEW-1300-1
- INSTALL PAVEMENT MARKERS IN ACCURDANCE WITH SEQ-SEW-1500
 & 2.

VEGETATION PROTECTION

- TREES LOCATED ALONG THE FOOTPATH SHALL BE, TRANSPLANTED PRIOR TO CONSTRUCTION, OR REPLACED IF DESTROYED.
- WHEN WORKING WITHIN 4m OF TREES, RUBBER OR HARDWOOD GIRDLES SHALL BE CONSTRUCTED WITH 1.8m BATTENS CLOSELY SPACED AND ARRANGED VERTICALLY FROM GROUND LEVEL. GIRDLES SHALL BE STRAPPED TO TREES PRIOR TO CONSTRUCTION AND REMAIN UNTIL COMPLETION.
- TREE ROOTS SHALL BE TUNNELLED UNDER, RATHER THAN SEVERED, IF ROOTS ARE SEVERED THE DAMAGED AREA SHALL BE TREATED WITH A SUITABLE FUNGICIDE. CONTACT RELEVANT COUNCIL ARBORIST FOR FURTHER ADVICE.
- ANY TREE LOPPING REQUIRED SHOULD BE UNDERTAKEN BY AN APPROVED ARBORIST.

SOIL

TOPSOIL AND SUBSOIL SHALL BE STOCKPILED SEPARATELY.
 CARE SHALL BE TAKEN TO PREVENT SEDIMENT FROM ENTERING THE STORMWATER SYSTEM. THIS MAY INVOLVE PLACING APPROPRIATE SEDIMENT CONTROLS AROUND STOCKPILES.

CREEK CROSSINGS

- SILTATION CONTROL MEASURES SHALL BE PLACED DOWNSTREAM OF ANY EXCAVATION WORK.
- 2. APPROPRIATE SEDIMENT CONTROLS SHALL BE USED TO PREVENT
- SEDIMENT FROM ENTERING THE CREEK.

 NO SOIL SHALL BE STOCKPILED WITHIN 5m OF THE CREEK.

REHABILITATION

- .. PRE-DISTURBANCE SOIL PROFILES AND COMPACTION LEVELS SHALL BE REINSTATED.
- PRE-DISTURBANCE VEGETATION PATTERNS SHALL BE RESTORED, ALL DISTURBED AREAS ASSOCIATED WITH CONSTRUCTION SHALL BE REHABILITATED, HEAVILY COMPACTED AREAS SHOULD BE RIPPED PRIOR TO TREATMENT.
- ALL DISTURBED AREAS ARE TO BE LEFT IN STABLE CONDITION.
 ALL DIATUNG/RF-VFGFTATION WILL NEED TO BE MAINTAINED.
- ALL PLANTING/RE-VEGETATION WILL NEED TO BE MAINTAINED THROUGHOUT THE MAINTENANCE PERIOD.

CONSTRUCTION REQUIREMENTS

- LIVE WATER CONNECTIONS TO BE CARRIED OUT BY CONTRACTOR IN ACCORDANCE WITH A VALID NETWORK ACCESS PERMIT UNDER LOGAN WATER SUPERVISION AT DEVELOPERS EXPENSE AT LOCATION MARKED
- 2. PRIOR TO ANY EXCAVATION, CONTRACTOR IS TO LOCATE ACTUAL
- POSITIONS OF PUBLIC SERVICE UTILITIES BY POT HOLES.

 3. UPON COMPLETION OF ALL WORKS, CONTRACTORS SHALL SUPPLY THE SUPERVISING RPEQ DETAILED "AS CONSTRUCTED" INFORMATION OF THE WORK. "AS CONSTRUCTED" INFORMATION SHALL COMPLY WITH CURRENT SEQ CODE OR LOCAL AUTHORITY STANDARDS FOR PLAN AND DIGITAL INFORMATION.
- 4. CONTRACTOR IS TO BE RESPONSIBLE FOR ARRANGING ALL LOGAN WATER CONNECTIONS AND PAYMENTS OF CONNECTION FEES.

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. THE DETAILS ARE PROVIDED FOR INFORMATION ONLY. THE CONTRACTOR SHALL ASCERTAIN THE POSITION OF ALL UNDERGROUND SERVICES PRIOR TO EXCAVATION AND SHALL BE RESPONSIBLE FOR THE COST OF REPAIRS TO DAMAGES CAUSED AS A RESULT OF THE WORKS.

RPEQ CERTIFICATION

THE CONSTRUCTION OF THE WATER RETICULATION WORK SHOWN ON THIS DRAWING MUST BE SUPERVISED BY AN ENGINEER WHO HAS RPEQ REGISTRATION. WORKS NOT COMPLYING WITH THIS REQUIREMENT WILL NOT BE PERMITTED TO CONNECT INTO LOGAN WATER RETICULATION SYSTEM. ALL RPEQ CERTIFIED DRAWINGS COMPLY WITH SEQ CODE AND LOGAN WATER REQUIREMENTS.

INSPECTION REQUIREMENTS

PRIOR TO COMMENCEMENT OF WORKS, CONTACT PREMISE (07) 3253 2222 AND LOGAN WATER TO CONFIRM INSPECTIC REQUIREMENTS INCLUDING LIVE CONNECTIONS.

A MINIMUM 48 HOURS NOTICE IS REQUIRED

INSPECTIONS ARE REQUIRED TO BE ORGANIZED WITH PREMISE AND LOGAN WATER. ANY COSTS ASSOCIATED WITH ENGAING LOGAN WATER TO UNDERTAKE INSPECTIONS OUTSIDE OF THE FEE PAID SHALL BE BORNE BY THE CONTRACTOR

ALL ENVIRONMENT PROTECTION MEASURES SHALL BE IMPLEMENTED PRIOR TO COMMENCING ANY CONSTRUCTION WORK, INCLUDING CLEARING.

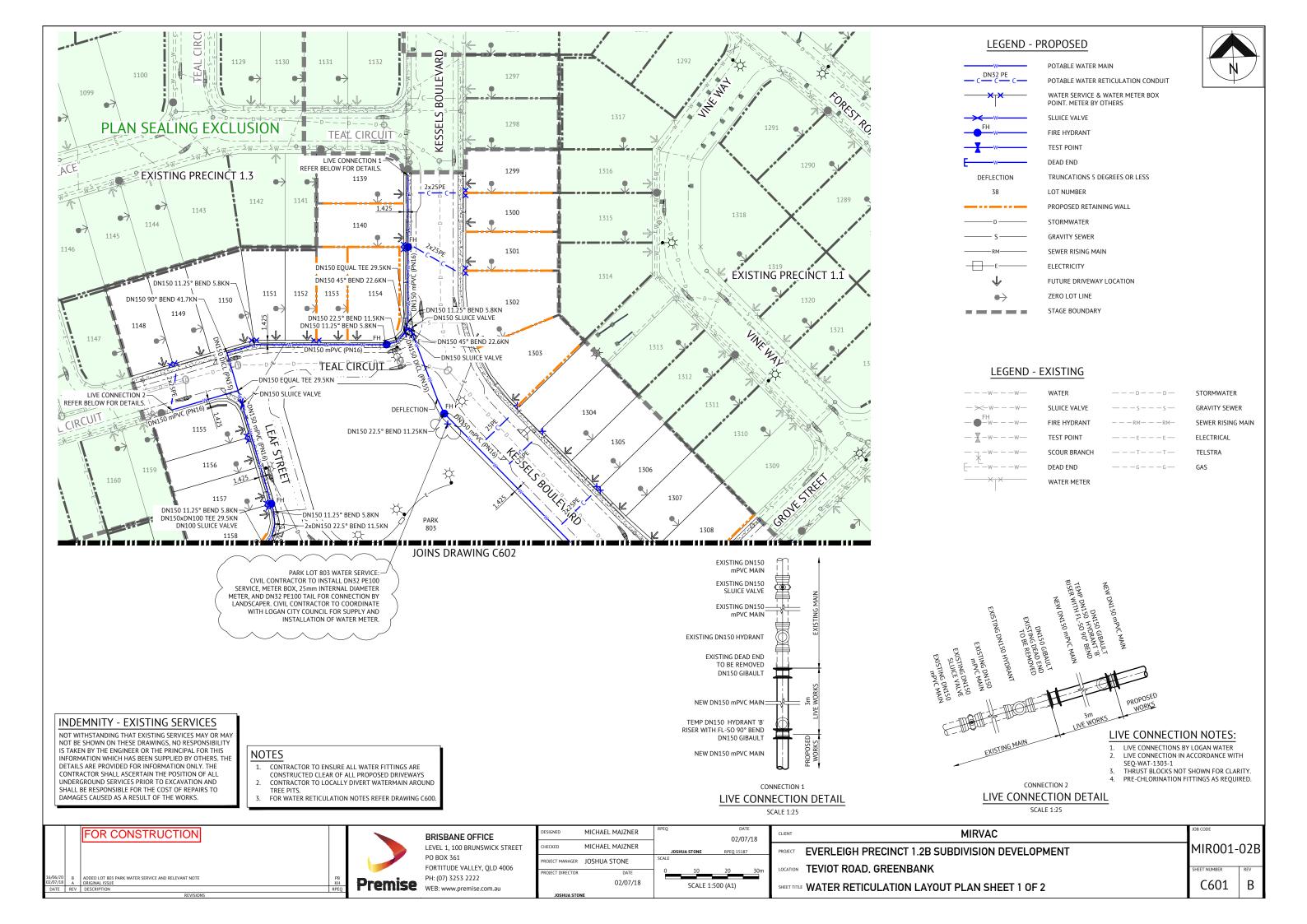
ALL WATER CONSTRUCTION WORK UNDERTAKEN BY THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF THE QUEENSLAND WORK HEALTH AND SAFETY ACT 2011. CONTACT THE DIVISION OF WORKPLACE HEALTH & SAFETY FOR INFORMATION, PHONE: 1300 362 128

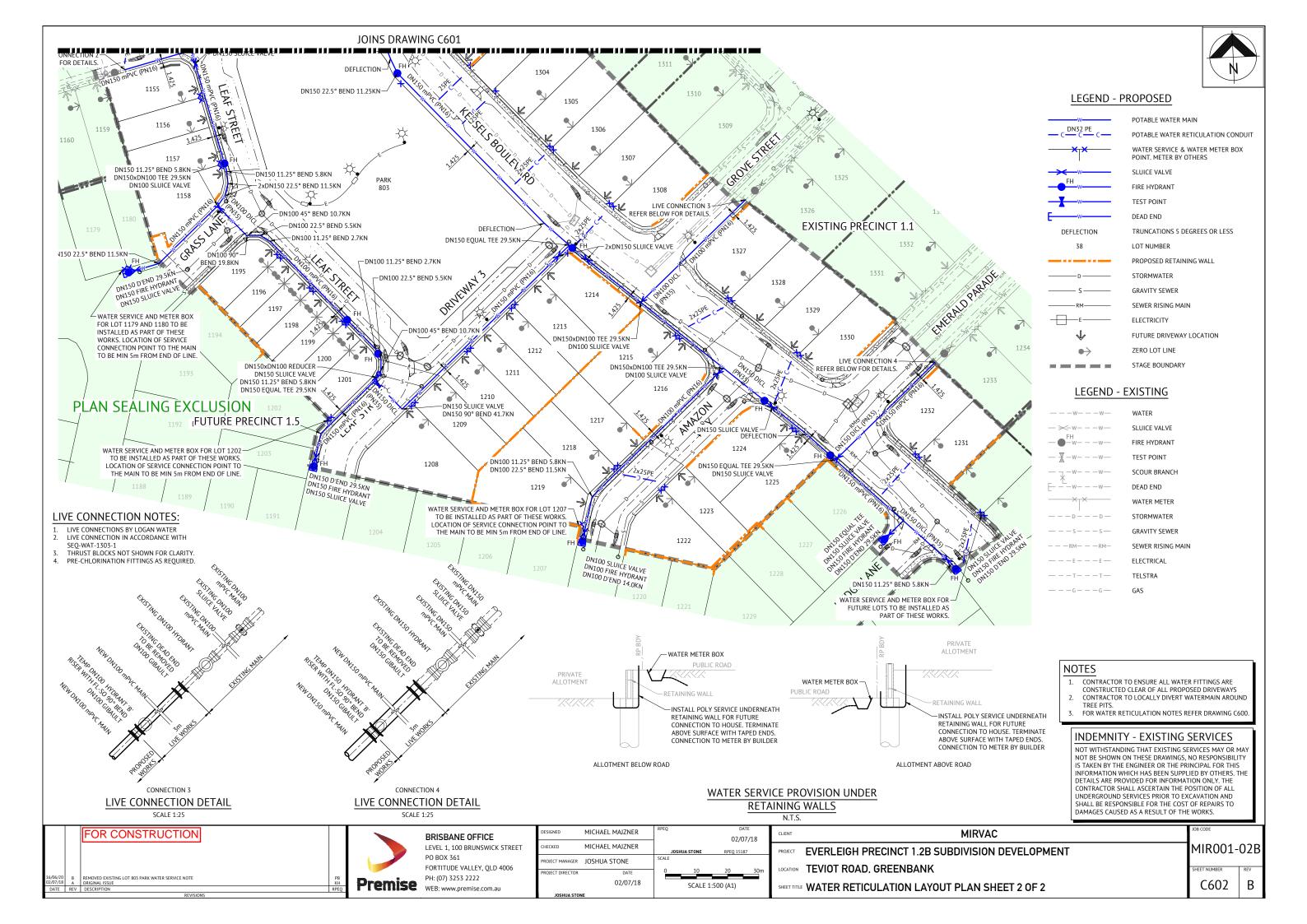
SEQ CODE STD DRAWING SCHEDULE

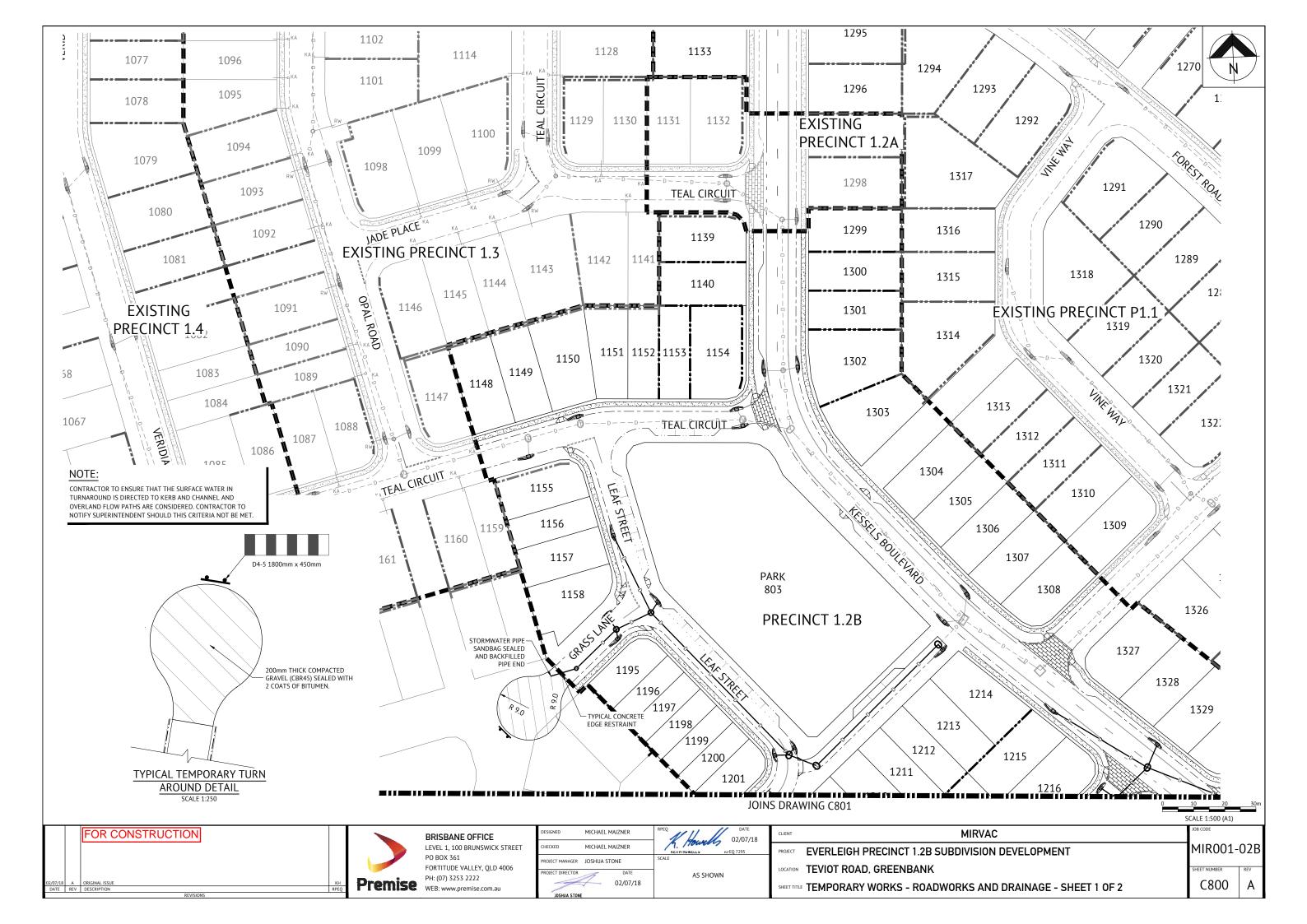


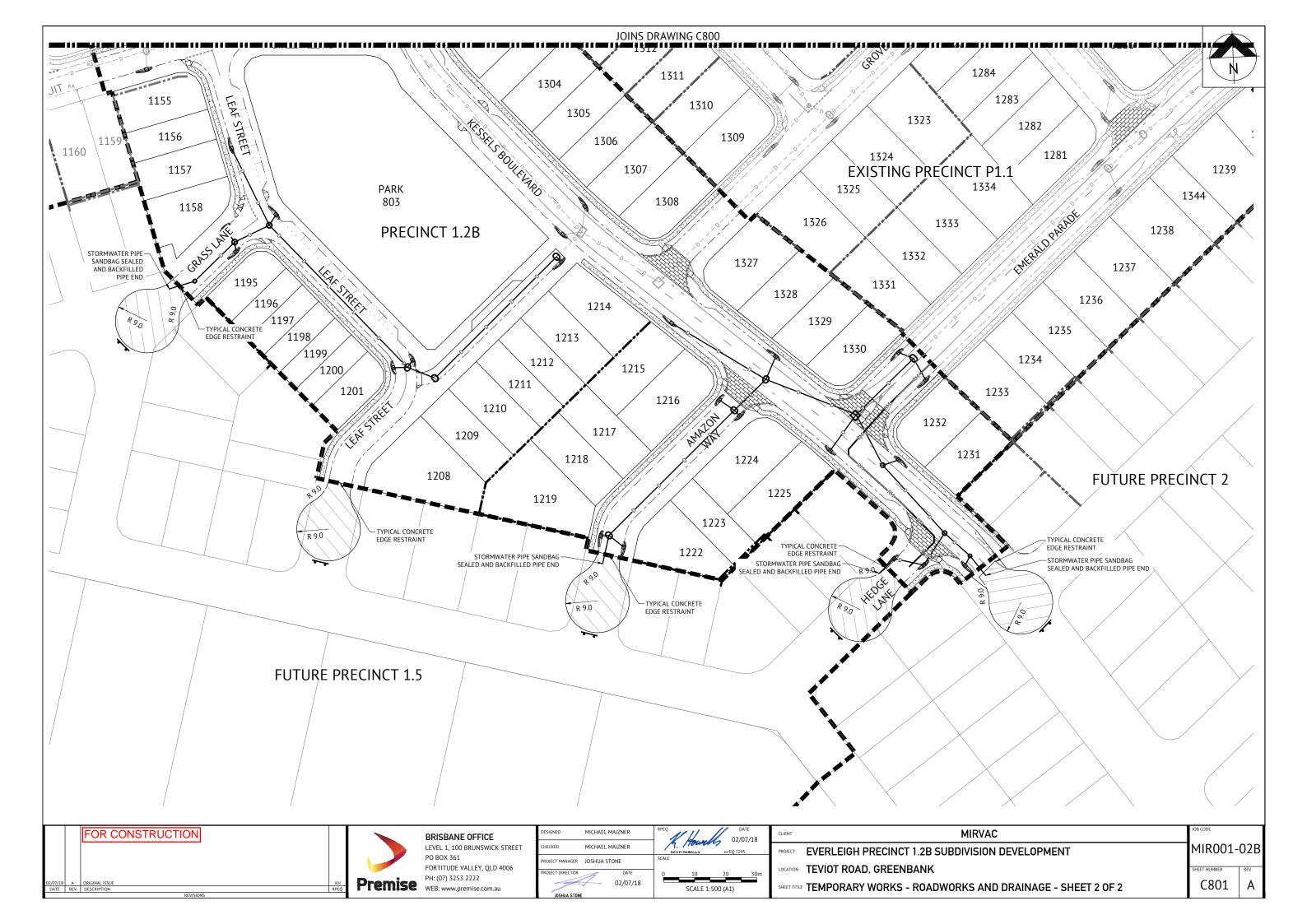
FOR CONSTRUCTION











GENERAL:

- G.1. CONSTRUCTION METHODS ARE THE RESPONSIBILITY OF THE BUILDER. DETAILS SHOWN ARE A GUIDE AND ALTERNATE DETAILS MAY BE SUBMITTED FOR ENGINEERING APPROVAL, PRIOR TO
- MAINTAIN THE STRUCTURE IN A STABLE CONDITION DURING CONSTRUCTION.
- DO NOT OVERSTRESS ANY PART OF THE MEMBERS DURING FABRICATION, TRANSPORTATION OR
- PROPRIETARY ITEMS ARE TO BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS
- SPECIFICATION AND DESIGN DETAILS.
 IT IS THE RESPONSIBILITY OF THE BUILDER TO MAKE GOOD ANY DAMAGE CAUSED TO ADJOINING STRUCTURES OR ELEMENTS CREATED DURING CONSTRUCTION.

SERVICE LOADS:

- SL.1. STRUCTURAL WORK HAS BEEN DESIGNED FOR THE FOLLOWING LOADS:
 - PERMANENT DEAD LOAD OF STRUCTURE AS SHOWN ON DRAWINGS
 - LIVE LOADS TO AS/NSZ5100.2: IMPOSED SURCHARGE LOAD ON GROUND:

80 kN (W80 WHFFL LOAD)

- - 20 kN/m³ (HEIGHT OF SOIL OVER ROOF SLAB = 0.5m MAX.)
- AT REST LATERAL EARTH PRESSURE COEFFICIENT ko:
- THE ABOVE DO NOT INCLUDE LOADS WHICH MAY BE APPLIED DURING CONSTRUCTION.

SITE PREPARATION AND FOUNDATIONS:

- REFER TO GEOTECHNICAL INVESTIGATIONS PREPARED BY MORRISON GEOTECHNIC
- NO GEOTECHNICAL INVESTIGATION HAS BEEN COMPLETED. BUILDER TO CONFIRM SITE CLASSIFICATION AND INSITU MATERIAL PROPERTIES PRIOR TO POURING FOUNDATIONS.
- GEOTECHNICAL ENGINEER SHALL BE ENGAGED, AT THE BUILDER'S EXPENSE TO CERTIFY THAT THE ALLOWABLE BEARING PRESSURE HAS BEEN ACHIEVED IN THE BASE OF ALL FOOTINGS. GEOTECHNICAL ENGINEER'S CERTIFICATE SHALL BE SUBMITTED TO STRUCTURAL ENGINEER PRIOR TO PLACEMENT OF 50mm BLINDING LAYER AND /OR REINFORCEMENT
- EARTHWORKS SHALL BE IN ACCORDANCE WITH AS 3798 INCLUDING THE FOLLOWING
- THE BUILDING SITE SHALL BE STRIPPED OF ALL VEGETABLE MATTER AND THE ASSOCIATED LAYER
- FOUNDATIONS HAVE BEEN DESIGNED FOR A SAFE BEARING CAPACITY OF 100 kPa. IT IS THE RESPONSIBILITY OF THE BUILDER TO DETERMINE FINAL BEARING PRESSURE ON SITE, UPON FXCAVATION
- THE TOP 150mm OF SUBGRADE (UNDER FOUNDATIONS, FOOTINGS AND SLABS) SHALL BE COMPACTED TO A DENSITY OF NOT LESS THAN 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED IN ACCORDANCE WITH METHOD 5.1.1 OF AS 1289 (STANDARD COMPACTION).
- FILL MATERIAL SHALL BE SAND FILL OR OTHER APPROVED GRANULAR MATERIAL AND SHALL BE PLACED IN LAYERS NOT EXCEEDING 150mm IN THICKNESS. FILL SHALL BE COMPACTED TO 95% OF THE MAXIMUM DRY DENSITY AS PER ABOVE. FOR COHESIONLESS FILL WITH LESS THAN 5% PASSING THE 75 MICRON SIEVE, THE MATERIAL SHALL BE COMPACTED TO 70% DENSITY INDEX IN ACCORDANCE WITH AS 1289 TEST E6.1.
- TO AVOID SWELLING OF FOUNDATIONS AND SLAB MOVEMENTS. THE AREA AROUND THE SLAB SHALL BE EFFECTIVELY DRAINED, BOTH BEFORE AND AFTER CONSTRUCTION, TO ENSURE NO PONDING OF WATER ON OR ADJACENT TO THE SLAB AREA. SPOON DRAINS SHALL BE PROVIDED AS REQUIRED TO FACILITATE DRAINAGE ADJACENT TO THE SLAB AND AT THE TOPS OF BANKS.
- ALL SLABS SHALL BE CAST ON A MINIMUM THICKNESS OF 50mm OF BEDDING SAND.
- A MOISTURE BARRIER OF 0.2mm POLYETHYLENE FILM LAPPED 200mm AND TAPED AT JOINTS SHALL BE PROVIDED UNDER THE SLAB.

CONCRETE:

- C.1. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS2870 AND AS3600.
- CONCRETE SHALL HAVE THE FOLLOWING PROPERTIES SEE TABLE BELOW:

	CONC	RETE TABLE			
ELEMENT	CLASS	CLASS & GRADE (CONCRETE)	CLEAR COVER TO REINF'T (mm)	MAX AGG. SIZE (mm)	MAX SLUMP (mm)
STORMWATER PIT WALLS	B1	N32	40	20	80
STORMWATER PIT BASE	B1	N32	40	20	80
STORMWATER PIT ROOF SLAB	A2	N32	40	20	80

- SPLICES IN REINFORCEMENT MUST BE MADE ONLY IN POSITIONS SHOWN ON THE STRUCTURAL DRAWINGS OR IN POSITIONS OTHERWISE APPROVED IN WRITING BY THE SUPERINTENDENT, LAPS MUST BE IN ACCORDANCE WITH AS 3600 AND NOT LESS THAN THE DEVELOPMENT LENGTH FOR EACH BAR.
- SPLICES IN MESH: THE OUTERMOST TRANSVERSE WIRES MUST BE OVERLAPPED BY AT LEAST THE SPACING OF THE TRANSVERSE WIRES PLUS 50mm
- WELDING OF REINFORCEMENT IS NOT PERMITTED U.N.O. ON THE STRUCTURAL DRAWINGS OR APPROVED BY THE SUPERINTENDENT.
- CURING OF ALL CONCRETE MUST BE ACHIEVED BY KEEPING SURFACES CONTINUOUSLY WET FOR A PERIOD OF 7 DAYS U.N.O. IN ACCORDANCE WITH AS 3600. APPROVED SPRAY-ON CURING COMPOUNDS THAT COMPLY WITH AS 3799 MAY BE USED WHERE FLOOR FINISHES WILL NOT BE AFFECTED, POLYTHENE SHEETING OR WET HESSAIN MAY BE LISED TO RETAIN CONCRETE MOISTURE WHERE PROTECTED FROM THE WIND AND TRAFFIC. CURING MUST COMMENCE IMMEDIATELY AFTER CONCRETE PLACEMENT

REINFORCEMENT:

- SYMBOLS ON DRAWINGS FOR GRADE AND TYPE OF REINFORCEMENT ARE AS FOLLOWS:
- R: DENOTES STRUCTURAL GRADE 250 PLAIN ROUND BAR TO AS4671 N: DENOTES HOT ROLLED GRADE 500 DEFORMED BAR DUCTILITY CLASS N TO AS4671
- R.1.3. L: DENOTES HARD DRAWN WIRE GRADE 500 SQUARE REINFORCING MESH DUCTILITY CLASS TO AS4671
- RL: DENOTES HARD DRAWN WIRE GRADE 500 RECTANGULAR REINFORCING MESH DUCTILITY CLASS L TO AS4671
- ALL N BARS TO BE GRADE 500.
- FOLLOWING ABBREVIATIONS APPLY TO LOCATION OF REINFORCEMENT:
- BB: BOTTOM BOTTOM (LAID FIRST) TT: TOP TOP (LAID LAST) EW: EACH WAY FF: FAR FACE
- EF: EACH FACE B: BOTTOM NF: NEAR FACE T: TOP
- CP: CENTRALLY PLACED
- CLEAR COVER TO REINFORCEMENT SHALL BE PROVIDED BY APPROVED CHAIRS, SPACERS OR TIES AS REQUIRED TO PROVIDE ADEQUATE SUPPORT AS FOLLOWS
- BARS 16mm AND LESS AND FABRIC 1000mm CENTERS
- BARS 20mm AND OVER 1200mm CENTERS
- USE MESH SUPPLIED IN FLAT SHEETS UNLESS APPROVED OTHERWISE
- WELDING AND BENDING OF REINFORCEMENT IS NOT PERMITTED UNLESS SHOWN ON THE DRAWINGS OR APPROVED BY ENGINEER.

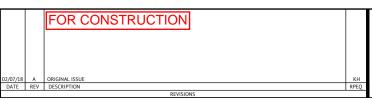
REINFORCEMENT NOMINATIONS:

RN.7. NOMINATION CALL OUT DESCRIPTION: LENGTH OF BARS NUMBER OF

SIZE OF BARS

RN.8. LAP LENGTHS TO COMPLY WITH AS3600, OR FOR SLAB AND WALL REINFORCEMENT WITH BARS AT > 150mm CENTRES WITH THE FOLLOWING UNO: REFER TO TABLE BELOW:

REI	NFOR	CEMENT	LAP TAB	LE		
LOCATION	F'C	В	ar size ai	ND LAP LE	NGTH (mr	n)
LOCATION	FC	N12	N16	N20	N24	N28
LIGHTONT IN BARCHUTTI	25	500	675	1000	1300	1600
HORIZONTAL BARS WITH ≤ 300mm CONCRETE BELOW	32	450	625	875	1175	1400
Soonini Corrected Below	40+	450	600	775	1050	1250
HORIZONTAL BARS WITH >	25	650	875	1300	1700	2050
300mm CONCRETE BELOW BAR,	32	575	775	1175	1525	1850
& VERT. BARS	40+	575	775	1000	1350	1650

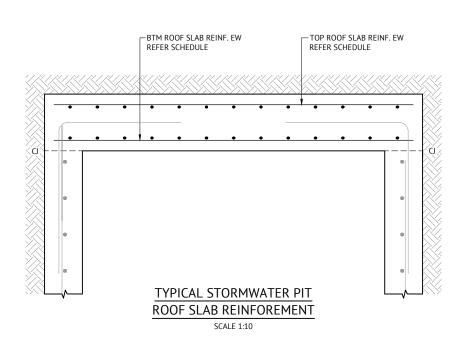




BRISBANE OFFICE LEVEL 1, 100 BRUNSWICK STREET PO BOX 361 FORTITUDE VALLEY, QLD 4006 PH: (07) 3253 2222

DESIGNED	MICHAEL MAJZNER	RPEQ	DATE
			02/07/18
CHECKED	MICHAEL MAJZNER		PDF-O-44074
		BEN LANCINI	RPEQ 16031
PROJECT MANAGER	JOSHUA STONE	SCALE	
PROJECT DIRECTOR	DATE		
-	02/07/18		
	_		
JOSHUA STONE		1	

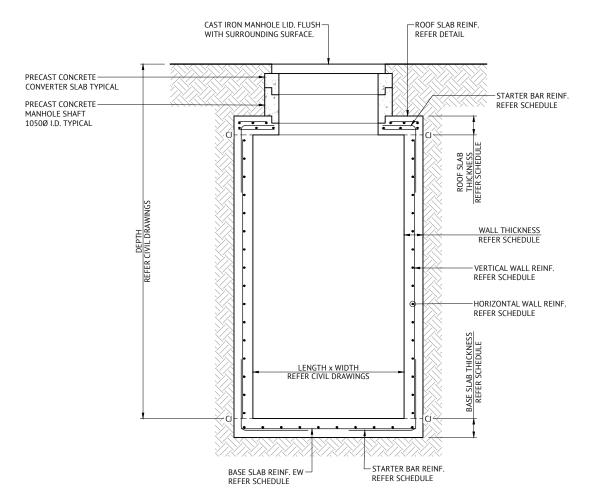
MIRVAC MIR001-02B PROJECT EVERLEIGH PRECINCT 1.2B SUBDIVISION DEVELOPMENT LOCATION TEVIOT ROAD, GREENBANK S001 SHEETTITLE STORMWATER STRUCTURAL NOTES

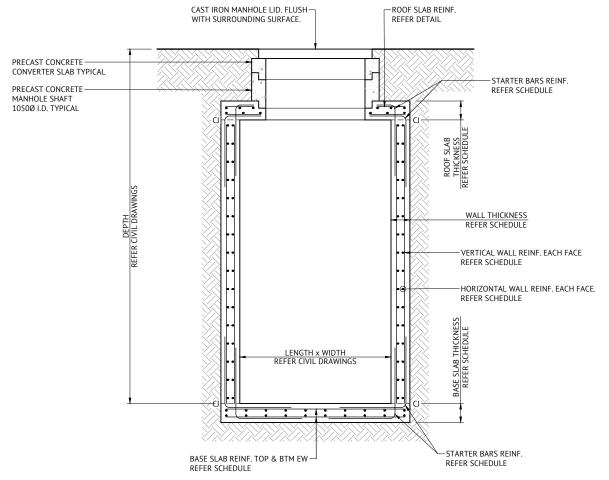




NOTES

1. REFER DRAWING No. S001 FOR STRUCTURAL NOTES





TYPICAL STORMWATER PIT SINGLE LAYER REINFORCEMENT

SCALE 1:20

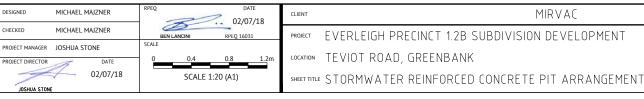
TYPICAL STORMWATER PIT DOUBLE LAYER REINFORCEMENT SCALE 1:20

SCALE 1:10 (A1)

		FOR CONSTRUCTION	
02/07/18	A	ORIGINAL ISSUE	кн
DATE	REV	DESCRIPTION	RPEO
		REVISIONS	•

Premise PH: (U/) 3253 2222 WEB: www.premise.com.au

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



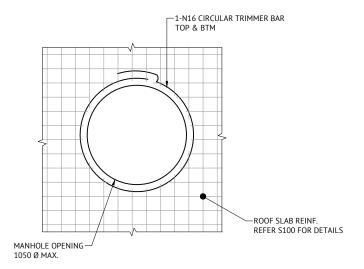
MIRVAC PROJECT EVERLEIGH PRECINCT 1.2B SUBDIVISION DEVELOPMENT LOCATION TEVIOT ROAD, GREENBANK

S100

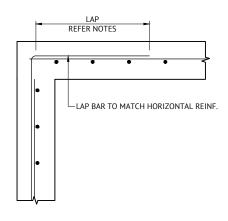
MIR001-02B

NOTES

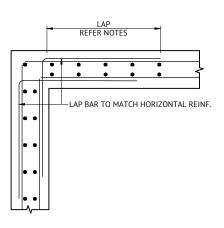
REFER DRAWING No. S001 FOR STRUCTURAL NOTES



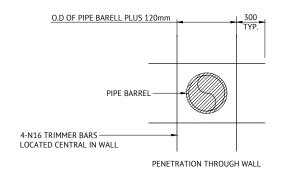
TYPICAL ROOF PENETRATION REINFORCEMENT DETAIL

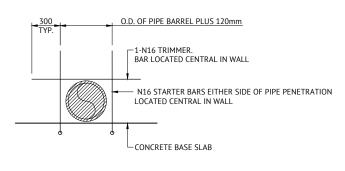


TYPICAL 'L' INTERSECTION DETAIL SINGLE LAYER REINFORCEMENT



TYPICAL 'L' INTERSECTION DETAIL DOUBLE LAYER REINFORCEMENT

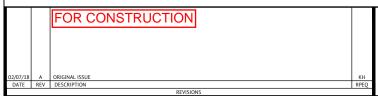




PENETRATION THROUGH WALL AT BASE SLAB

TYPICAL WALL PIPE PENETRATION REINFORCEMENT DETAIL

NOT TO SCALE





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

DESIGNED	MICHAEL	MAJZNER	RPEQ	DATE 02/07/18	ſ
CHECKED	MICHAEL	MAJZNER	BEN LANCINI	RPEQ 16031	f
PROJECT MANAGER	JOSHUA S	TONE	SCALE		ı
PROJECT DIRECTOR JOSHUA STONE	1	DATE 02/07/18			

CLIENT	MIRVAC
PROJECT	EVERLEIGH PRECINCT 1.2B SUBDIVISION DEVELOPMENT
LOCATION	TEVIOT ROAD, GREENBANK
SHEET TITLE	STORMWATER REINFORCED CONCRETE PIT DETAILS

MIR001-02B

S101