

PROJECT:

OPERATIONAL WORKS CIVIL ENGINEERING

PROJECT DETAILS:

'ARCHERS WAY' ESTATE - STAGE 2
AT 22-80 CASH STREET, D'AGUILAR

PROJECT NUMBER: M2584E_2
MORETON BAY REGIONAL COUNCIL
REFERENCE: DA/38032/2019/V3RL

33 ALLOTMENTS
LOT1 ON RP230991 &
LOT2 ON RP80309
AREA - 2.46ha

LOCALITY PLAN



N.T.S.

SAFETY IN DESIGN

THE ENGINEERING DESIGN FOR THE PROPOSAL HAS BEEN DEVELOPED TO MEET THE STATED PROJECT BRIEF, AS EXPRESSED IN JFP URBAN CONSULTANTS OFFER FOR THE WORKS, AND THE DESIGN STANDARDS STIPULATED BY THE LOCAL AUTHORITY NAMED ON THIS PLAN. IT IS EXPECTED THAT A COMPETENT PRINCIPAL CONTRACTOR WILL BE APPOINTED FOR THE PROJECT AND THAT ALL 'HIGH RISK' CONSTRUCTION WORKS WILL BE ADDRESSED AS PART OF THEIR PROJECT SAFETY PLAN FOR THE SITE.

NON-STANDARD DESIGN SOLUTIONS ADOPTED IN THE PREPARATION OF THE PROPOSAL ARE LISTED AS FOLLOWS;

A HAZARD ASSESSMENT OF THESE NON-STANDARD ITEMS HAS BEEN CONDUCTED AND THE FOLLOWING HAZARDS, THEIR ASSOCIATED RISKS AND THE CONTROL MEASURES SUGGESTED ARE LISTED BELOW;

NON-STANDARD DESIGN ITEM	HAZARD IDENTIFIED	RISK ASSESSMENT	CONTROL MEASURE SUGGESTED
CONSTRUCTION OF WORKS WITHIN EXISTING ROAD RESERVE	POTENTIAL THREATS TO THE SAFETY OF THE PUBLIC USING THE EXISTING ROAD AND FOOTPATHS	MODERATE/POSSIBLE MAJOR RISK	PRINCIPAL CONTRACTOR TO INCLUDE TRAFFIC MANAGEMENT (INCLUDING PEDESTRIAN) FOR WORKS IN EXISTING ROAD RESERVE IN THEIR SAFETY PLAN
SITE ACCESS UNDER EXISTING OVERHEAD ELECTRICITY	ACCESS TO SITE UNDER OVERHEAD ELECTRICITY ALONG CASH STREET	MODERATE/POSSIBLE MAJOR RISK	IDENTIFYING MARKERS TO BE APPLIED TO EXISTING OVERHEAD ELECTRICITY THROUGHOUT CONSTRUCTION

INDEX:

STAGING & SITE SURVEY PLANS

M2584E_2	L01	A	CONSTRUCTION STAGING PLAN
M2584E_2	L02	A	EXISTING SERVICES AND SITE SURVEY PLAN

EARTHWORKS PLANS

M2584E_2	EW01	B	EARTHWORKS LAYOUT PLAN
M2584E_2	EW02	C	EARTHWORKS DETAIL LAYOUT PLAN SHEET 1 of 3
M2584E_2	EW03	B	EARTHWORKS DETAIL LAYOUT PLAN SHEET 2 of 3
M2584E_2	EW04	B	EARTHWORKS DETAIL LAYOUT PLAN SHEET 3 of 3
M2584E_2	EW05	C	EARTHWORKS DETAILS PLAN

ROADWORKS PLANS

M2584E_2	R01	A	ROADWORKS LAYOUT PLAN
M2584E_2	R02	A	ROADWORKS DETAILS PLAN
M2584E_2	R03	A	ROADWORKS INTERSECTION DETAILS PLAN
M2584E_2	R04	A	ROADWORKS LONGITUDINAL SECTION - CASH STREET
M2584E_2	R05	A	ROADWORKS CROSS SECTIONS - CASH STREET
M2584E_2	R06	A	ROADWORKS LONGITUDINAL - SECTION ROAD 2 (FLINDERS STREET)
M2584E_2	R07	A	ROADWORKS CROSS SECTIONS - ROAD 2 (FLINDERS STREET)
M2584E_2	R08	A	ROADWORKS LONGITUDINAL SECTION - ROAD 3 (MUSTER STREET & FLINDERS STREET)
M2584E_2	R09	A	ROADWORKS CROSS SECTIONS - ROAD 3 (MUSTER STREET & FLINDERS STREET)

SIGNS AND LINEMARKING PLANS

M2584E_2	SL01	A	SIGNS AND LINEMARKING LAYOUT PLAN
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DRAINAGE PLANS

M2584E_2	D01	A	DRAINAGE CATCHMENT PLAN
M2584E_2	D02	A	DRAINAGE LAYOUT PLAN
M2584E_2	D03	B	DRAINAGE LONGITUDINAL SECTIONS - LINES E & H
M2584E_2	D04	A	DRAINAGE LONGITUDINAL SECTIONS - LINES 3E, 3H & I
M2584E_2	D05	A	DRAINAGE CALCULATIONS TABLES - SHEET 1 of 2
M2584E_2	D06	A	DRAINAGE CALCULATIONS TABLES - SHEET 2 of 2
M2584E_2	D07	A	DRAINAGE STRUCTURE DETAILS

EROSION & SEDIMENT CONTROL PLANS

M2584E_2	ES01	A	EROSION AND SEDIMENT CONTROL LAYOUT - BULK EARTHWORKS PHASE
M2584E_2	ES02	A	EROSION AND SEDIMENT CONTROL LAYOUT - ROADS & DRAINAGE PHASE
M2584E_2	ES03	A	EROSION AND SEDIMENT CONTROL LAYOUT - PRACTICAL COMPLETION PHASE
M2584E_2	ES04	A	EROSION AND SEDIMENT CONTROL DETAILS
M2584E_2	ES05	A	EROSION AND SEDIMENT CONTROL DETAILS - SEDIMENT BASIN 1
M2584E_2	ES06	A	EROSION AND SEDIMENT CONTROL DETAILS - SEDIMENT BASIN 2

SEWERAGE RETICULATION PLANS

M2584E_2	S01	C	SEWERAGE LAYOUT PLAN
M2584E_2	S02	C	SEWERAGE DETAIL LAYOUT PLAN - SHEET 1 of 3
M2584E_2	S03	C	SEWERAGE DETAIL LAYOUT PLAN - SHEET 2 of 3
M2584E_2	S04	C	SEWERAGE DETAIL LAYOUT PLAN - SHEET 3 of 3
M2584E_2	S05	C	SEWERAGE DETAILS PLAN
M2584E_2	S06	C	SEWERAGE LONGITUDINAL SECTIONS - LINES 6 & 9
M2584E_2	S07	C	SEWERAGE LONGITUDINAL SECTIONS - LINES 8, 12 & 2

WATER RETICULATION PLANS

M2584E_2	W01	B	WATER RETICULATION LAYOUT PLAN - SHEET 1 of 3
M2584E_2	W02	B	WATER RETICULATION LAYOUT PLAN - SHEET 2 of 3
M2584E_2	W03	A	WATER RETICULATION LAYOUT PLAN - SHEET 3 of 3
M2584E_2	W04	B	WATER RETICULATION DETAILS PLAN - SHEET 1 of 2
M2584E_2	W05	B	WATER RETICULATION DETAILS PLAN - SHEET 2 of 2
M2584E_2	W06	B	WATER RETICULATION NOTES



BRISBANE - SUNSHINE COAST - CENTRAL QLD
SUNSHINE COAST
T209, Kon-Tiki Tower 1, 55 Plaza Parade,
Maroochydore Qld 4558
P 07 5450 3900 W www.jfp.com.au
JFP URBAN CONSULTANTS PTY. LTD. A.C.N. 050 414 045

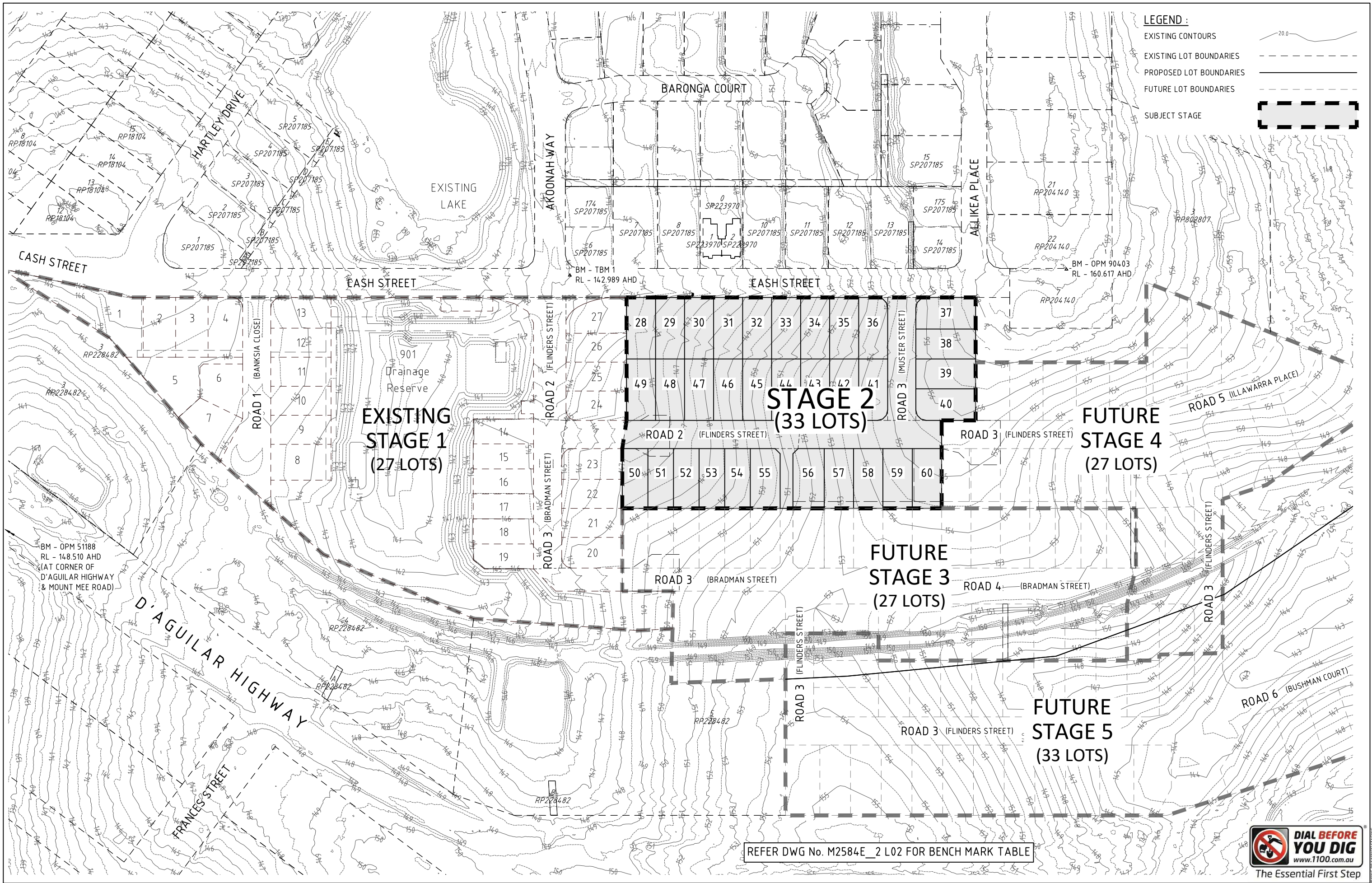
PLANNERS
URBAN DESIGNERS
SURVEYORS
ENGINEERS
LANDSCAPE ARCHITECTS



PROJECT NUMBER

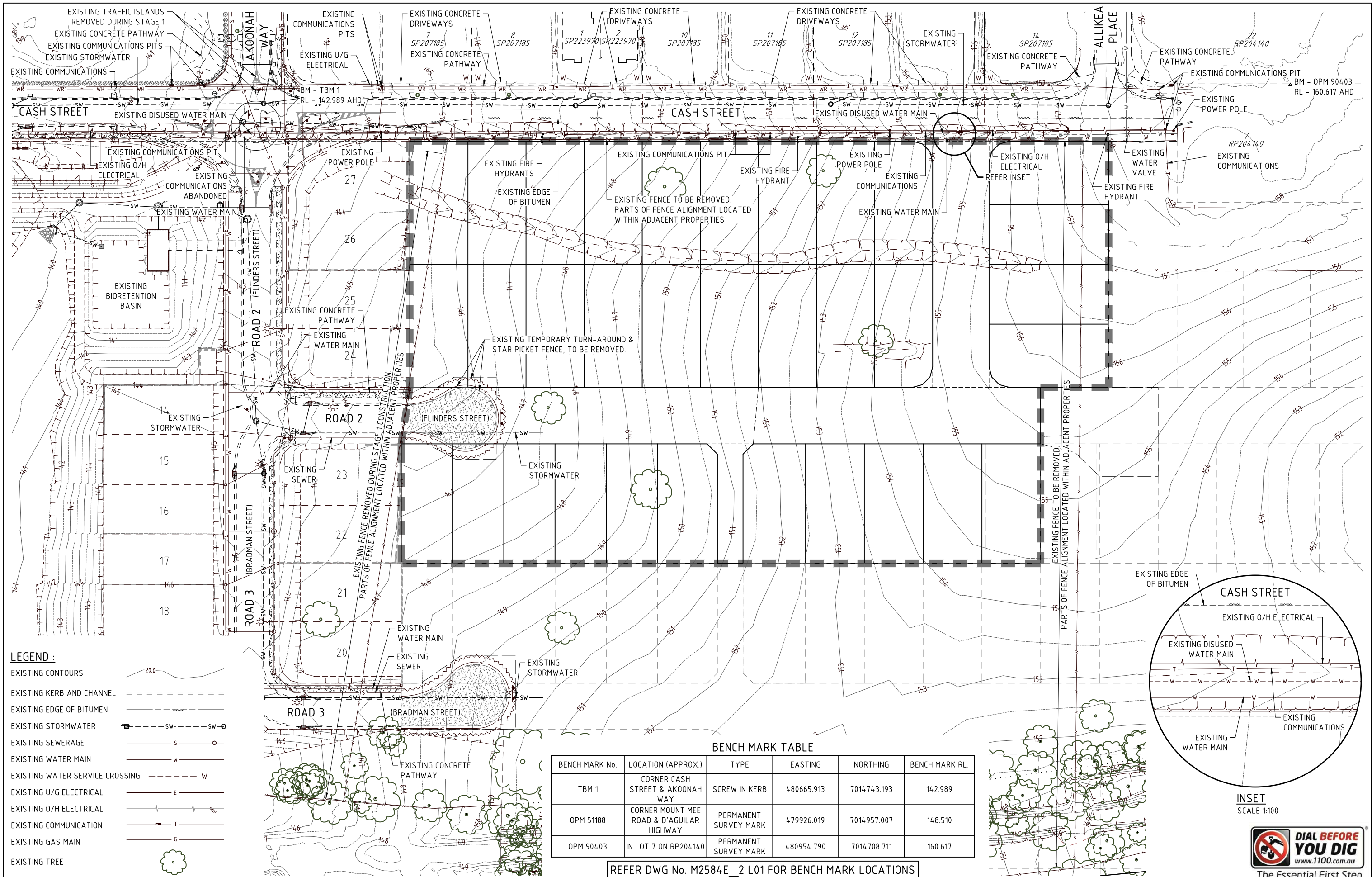
M2584E_2

FILE NAME: COVER SHEET.DWG



 JF URBANCONSULTANTS	BRISBANE - SUNSHINE COAST - CENTRAL QLD SUNSHINE COAST T209, Kon-Tiki Tower 1, 55 Plaza Parade, Maroochydore Qld 4558 P 07 5450 3900 W www.jfpc.com.au JFP URBAN CONSULTANTS PTY. LTD. A.C.N. 050 414 045	PLANNERS URBAN DESIGNERS SURVEYORS ENGINEERS LANDSCAPE ARCHITECTS	NORTH: 		SCALE: 1:1000 A1 THIS SCALE SHOWN IS ORIGINAL DRAWING SCALE 0 10 20 30 40 50 100 (A1) 1:1000 (A3) 1:2000 DO NOT SCALE FROM THIS DRAWING - USE ONLY DIMENSIONS PROVIDED - IF IN DOUBT PLEASE ENQUIRE		ISSUE: A ISSUE FOR OPERATIONAL WORKS APPROVAL DATE: 16/06/20 INIT: BJ		TITLE: CONSTRUCTION STAGING PLAN DFC (PROJECT MANAGEMENT) PTY LTD 'ARCHERS WAY' ESTATE - STAGE 2 AT 22-80 CASH STREET, D'AGUILAR		DETAILS: PROJECT: M2584E_2 L01 LOCAL AUTHORITY REF: MORETON BAY REGIONAL COUNCIL COUNCIL REF: DA/38032/2019/V3RL FILE NAME: STAGING.DWG	
			APPROVED FOR AND ON BEHALF OF JFP URBAN CONSULTANTS PTY LTD		DESIGNED: CDV DRAWN: BJ CHECKED: HW DATE: 16/06/20 INIT: BJ		PROJECT: M2584E_2 L01 LOCAL AUTHORITY REF: MORETON BAY REGIONAL COUNCIL COUNCIL REF: DA/38032/2019/V3RL FILE NAME: STAGING.DWG					
			T.M. KINNEY RPEQ 5087 A. FRASER RPEQ 5691 J. PAPPAS RPEQ 6086 S. MARSH RPEQ 8068		DATE: 16/06/20 INIT: BJ		PROJECT: M2584E_2 L01 LOCAL AUTHORITY REF: MORETON BAY REGIONAL COUNCIL COUNCIL REF: DA/38032/2019/V3RL FILE NAME: STAGING.DWG					
			APPROVED FOR AND ON BEHALF OF JFP URBAN CONSULTANTS PTY LTD		DATE: 16/06/20 INIT: BJ		PROJECT: M2584E_2 L01 LOCAL AUTHORITY REF: MORETON BAY REGIONAL COUNCIL COUNCIL REF: DA/38032/2019/V3RL FILE NAME: STAGING.DWG					

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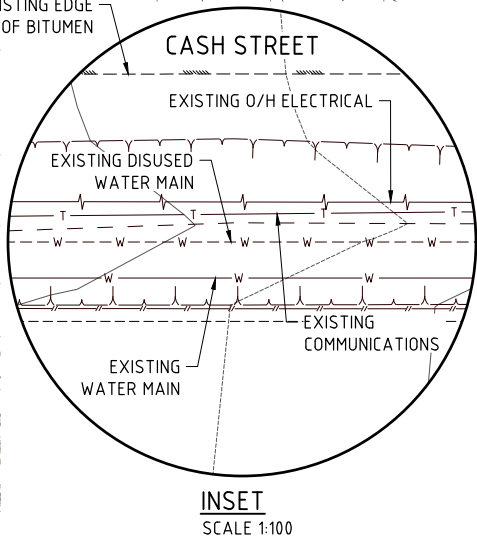


- LEGEND :**
- EXISTING CONTOURS
 - EXISTING KERB AND CHANNEL
 - EXISTING EDGE OF BITUMEN
 - EXISTING STORMWATER
 - EXISTING SEWERAGE
 - EXISTING WATER MAIN
 - EXISTING WATER SERVICE CROSSING
 - EXISTING U/G ELECTRICAL
 - EXISTING O/H ELECTRICAL
 - EXISTING COMMUNICATION
 - EXISTING GAS MAIN
 - EXISTING TREE

BENCH MARK TABLE

BENCH MARK No.	LOCATION (APPROX.)	TYPE	EASTING	NORTHING	BENCH MARK RL.
TBM 1	CORNER CASH STREET & AKOONAH WAY	SCREW IN KERB	480665.913	7014743.193	142.989
OPM 51188	CORNER MOUNT MEE ROAD & D'AGUILAR HIGHWAY	PERMANENT SURVEY MARK	479926.019	7014957.007	148.510
OPM 90403	IN LOT 7 ON RP204140	PERMANENT SURVEY MARK	480954.790	7014708.711	160.617

REFER DWG No. M2584E_2 L01 FOR BENCH MARK LOCATIONS



BRISBANE - SUNSHINE COAST - CENTRAL QLD
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PLANNERS
URBAN DESIGNERS
SURVEYORS
ENGINEERS
LANDSCAPE ARCHITECTS

NORTH:

SCALE:
1:500
A1

THIS SCALE SHOWN IS ORIGINAL DRAWING SCALE
0 5 10 15 20 25 50 Metres
(A1) 1:500
(A3) 1:1000
DO NOT SCALE FROM THIS DRAWING - USE ONLY DIMENSIONS PROVIDED - IF IN DOUBT PLEASE ENQUIRE

APPROVED

FOR AND ON BEHALF OF JFP URBAN CONSULTANTS PTY LTD

☐ T.M. KINNEY RPEQ 5087
☐ S. MARSH RPEQ 8068
☒ A. FRASER RPEQ 5691
☐ J. PAPPAS RPEQ 6086

DESIGNED: CDV
DRAWN: BJ
CHECKED: HW
DATE: 16/06/20

ISSUE: A
ISSUE FOR OPERATIONAL WORKS APPROVAL
DATE: 16/06/20
INIT: BJ

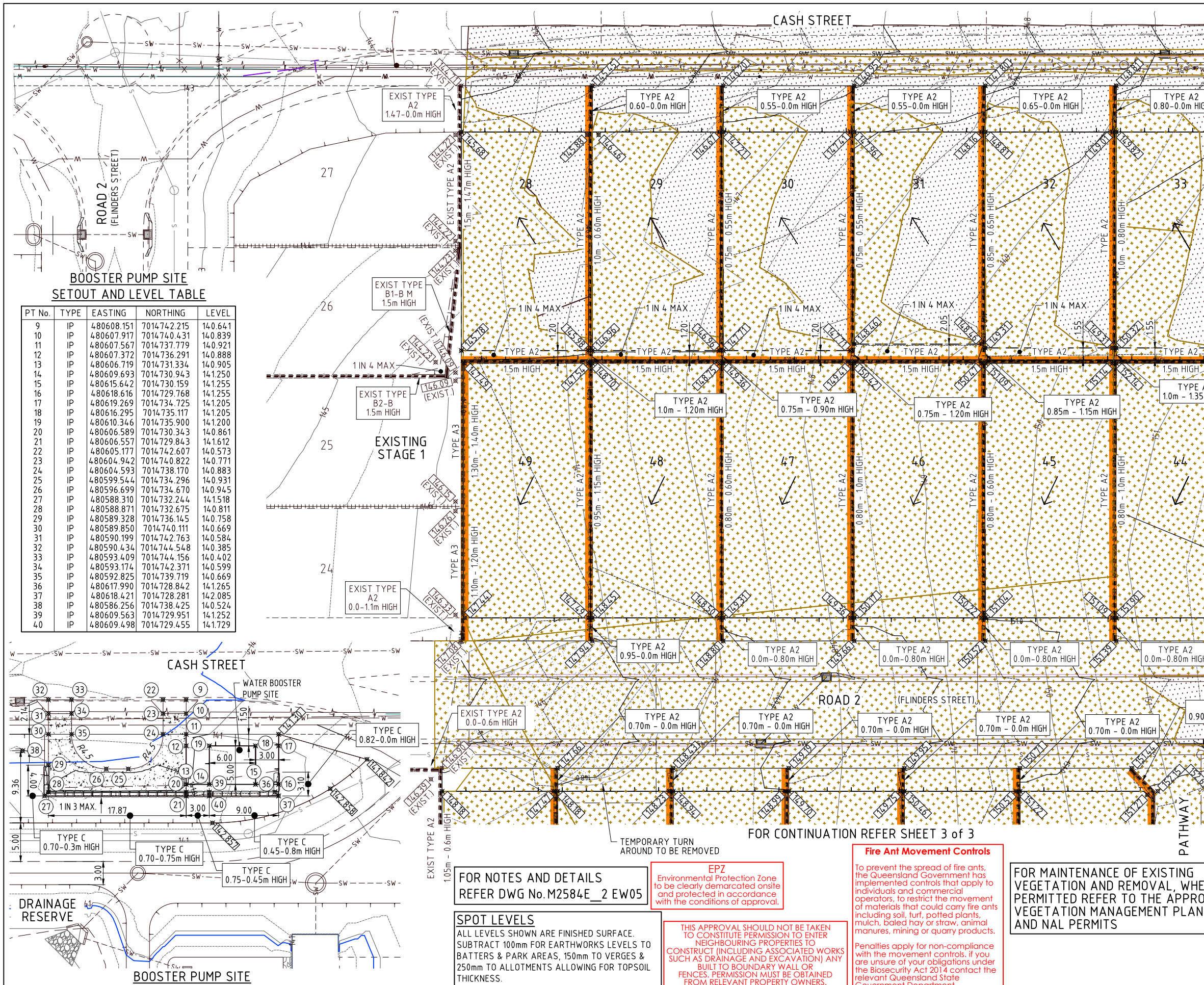
TITLE:
EXISTING SERVICES AND SITE SURVEY PLAN
DFC (PROJECT MANAGEMENT) PTY LTD
'ARCHERS WAY' ESTATE - STAGE 2
AT 22-80 CASH STREET, D'AGUILAR

DETAILS:
PROJECT: M2584E_2
LOCAL AUTHORITY REF: MORETON BAY REGIONAL COUNCIL
COUNCIL REF: DA/38032/2019/V3RL
FILE NAME: STAGING.DWG

PLAN: L02
ISSUE: A

DENNIS FAMILY CORPORATION

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- LEGEND:**
- EXISTING CONTOURS
 - FINISHED CONTOURS
 - PROPOSED KERB AND CHANNEL
 - SPOT LEVELS
(#19.62 DENOTES NATURAL SURFACE LEVEL)
 - PROPOSED FILL
 - PROPOSED CUT
 - PROPOSED CONCRETE SLEEPER RETAINING WALL
 - EXISTING CONCRETE SLEEPER RETAINING WALL
 - FUTURE CONCRETE SLEEPER RETAINING WALL
 - BATTER BETWEEN ALLOTMENTS (AT 1 IN 2 MAX.)
 - BATTER TO ALLOTMENT
 - PROPOSED SEWERAGE LINE
 - PROPOSED STORMWATER LINE
 - PROPOSED ROOFWATER LINE

- TREE LEGEND**
- TREES TO BE RETAINED AND PROTECTED
 - TREES TO BE RETAINED AND REQUIRES THE SUPERVISION OF ANY EXCAVATION OR SERVICES WORKS WITHIN THE HATCHED PROTECTION ZONE BY AN ARBORIST ON SITE.

TPZ
Tree Protection Zone
All vegetation to be protected in accordance with AS4970 - Protection of Trees on Development Sites & any conditions of approval.

NOTE:
THE CONTRACTOR IS TO ENSURE THAT FOOTINGS FOR RETAINING WALLS ARE CLEAR OF THE PROPOSED SEWER AND ROOFWATER LINES REFER DETAILS ON DWG EW05.

SAFETY FENCE NOTE
STAR PICKET AND SAFETY BARRIER MESH FENCE TO BE ERECTED ON TOP OF ALL RETAINING WALLS GREATER THAN 1.0m IN HEIGHT

RETAINING WALL CERTIFICATION

- CIVIL CONTRACTOR TO OBTAIN DESIGN AND CONSTRUCTION RPEQ CERTIFICATION FOR ALL CONCRETE SLEEPER, SANDSTONE BOULDER & CONCRETE BLOCK RETAINING WALLS.
- WALL DESIGN AND CERTIFICATION TO BE PROVIDED TO SUPERVISING ENGINEER PRIOR TO CONSTRUCTION.
- CONSTRUCTION CERTIFICATION TO BE PROVIDED TO SUPERVISING ENGINEER PRIOR TO "ON MAINTENANCE" INSPECTION.

EXISTING SERVICES LOCATIONS
THE DESIGN DETAILED ON THIS PLAN HAS BEEN PREPARED BASED ON SERVICE AUTHORITY AS CONSTRUCTED INFORMATION. NO POT HOLING HAS BEEN UNDERTAKEN TO VERIFY EXISTING SERVICES LOCATIONS AND DEPTHS. IT IS THE CONTRACTORS RESPONSIBILITY TO UNDERTAKE POT HOLING (HYDROVAC EXCAVATION) PRIOR TO COMMENCEMENT OF CONSTRUCTION.

FOR NOTES AND DETAILS
REFER DWG No. M2584E_2 EW05

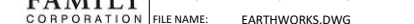
SPOT LEVELS
ALL LEVELS SHOWN ARE FINISHED SURFACE. SUBTRACT 100mm FOR EARTHWORKS LEVELS TO BATTERS & PARK AREAS, 150mm TO VERGES & 250mm TO ALLOTMENTS ALLOWING FOR TOPSOIL THICKNESS.

EPZ
Environmental Protection Zone to be clearly demarcated onsite and protected in accordance with the conditions of approval.

THIS APPROVAL SHOULD NOT BE TAKEN TO CONSTITUTE PERMISSION TO ENTER NEIGHBOURING PROPERTIES TO CONSTRUCT (INCLUDING ASSOCIATED WORKS SUCH AS DRAINAGE AND EXCAVATION) ANY BUILT TO BOUNDARY WALL OR FENCES. PERMISSION MUST BE OBTAINED FROM RELEVANT PROPERTY OWNERS.

Fire And Movement Controls
To prevent the spread of fire ants, the Queensland Government has implemented controls that apply to individuals and commercial operators, to restrict the movement of materials that could carry fire ants including soil, turf, potted plants, mulch, baled hay or straw, animal manures, mining or quarry products.
Penalties apply for non-compliance with the movement controls. If you are unsure of your obligations under the Biosecurity Act 2014 contact the relevant Queensland State Government Department.

FOR MAINTENANCE OF EXISTING VEGETATION AND REMOVAL, WHERE PERMITTED REFER TO THE APPROVED VEGETATION MANAGEMENT PLAN AND NAL PERMITS



EARTHWORKS NOTES

1. ALL LOTS TO BE FREE DRAINING TO ROOFWATER DRAINAGE OR ROADWAY.
- CLEARING AND GRUBBING**
2. ANY CLEARING REQUIRED TO BE UNDERTAKEN BY THE CONTRACTOR IS TO BE STRICTLY IN ACCORDANCE WITH THE COUNCIL APPROVED VEGETATION MANAGEMENT PLAN, INCLUDING THE LIMITS OF ALLOWABLE CLEARING, TREE PROTECTION REQUIREMENTS AND THE USE OF A FAUNA SPOTTER/CATCHER, AS SPECIFIED.
3. UNLESS OTHERWISE SPECIFIED OR DIRECTED, THE AREA TO BE CLEARED IS THAT REQUIRED BY SITE REGRADING WORKS, INCLUDING THE AREA OCCUPIED BY THE COMPLETED ROAD FORMATION AND ASSOCIATED DRAINAGE WORKS AND EROSION AND SEDIMENTATION MEASURES, THE CONTRACTOR SHALL ENSURE THAT ONLY THE ABSOLUTE MINIMUM AREA FOR CONSTRUCTION IS CLEARED.
4. THE AREA WITHIN THE LIMITS OF CLEARING SHALL BE CLEARED OF ALL VEGETATION, BOTH LIVING AND DEAD, ALL MINOR MAN-MADE STRUCTURES (SUCH AS FENCES, BUILDING MATERIAL AND EXISTING DRIVEWAYS), ALL RUBBISH AND OTHER MATERIALS WHICH, IN THE OPINION OF THE SUPERINTENDENT, ARE UNSUITABLE FOR USE IN THE WORKS WITH THE EXCEPTION OF CERTAIN TREES MARKED FOR PRESERVATION.
5. ALL TREES AND STUMPS ON OR WITHIN THE LIMITS OF CLEARING, THAT ARE TO BE REMOVED BY GRUBBING OPERATION SHALL BE CARRIED OUT TO A DEPTH OF 0.5m BELOW THE NATURAL SURFACE OR 15 METRES BELOW THE FINISHED SURFACE LEVEL, WHICHEVER IS THE LOWER.

TOPSOIL

6. ALL TOPSOIL ON ROADWORKS AREAS SHALL BE STRIPPED AND STOCKPILED PRIOR TO THE COMMENCEMENT OF ANY EARTHWORKS OPERATIONS. A TOPSOIL DEPTH OF 150mm HAS BEEN USED TO DETERMINE TOPSOIL AND EARTHWORK QUANTITIES. THE CONTRACTOR IS TO SATISFY HIMSELF OF THE ACCURACY OF THESE QUANTITIES AND TO MAKE ANY NECESSARY ALLOWANCE IF HE DISAGREES WITH QUANTITIES.

EARTHWORKS

7. EARTHWORKS ARE TO BE IN ACCORDANCE WITH AS 3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS" (LATEST ISSUE - INCLUDING ALL AMENDMENTS).
8. ALL FILLING SHALL BE COMPLETED TO A LEVEL 1 ARRANGEMENT, UNDER THE SUPERVISION OF THE PRINCIPAL'S OR CONTRACTOR'S APPOINTED GEOTECHNICAL ENGINEER.
9. THE EARTHWORKS QUANTITIES FOR ROADWORKS ARE CALCULATED USING THE MINIMUM ALLOWABLE TOTAL PAVEMENT THICKNESS (NOMINAL PAVEMENT). VARIATIONS TO THE PAVEMENT DEPTHS WILL BE PAYABLE AT THE RATES SHOWN IN THE PRICED SCHEDULE OF RATES.
10. "CUT" AND "FILL" QUANTITIES HAVE BEEN CALCULATED TO THE UNDERSIDE OF THE TOPSOIL LAYER.
11. ALL EARTHWORK QUANTITIES HAVE BEEN CALCULATED AND BILLED IN THE CONTRACT AS "NETT" QUANTITIES, THAT IS NO ALLOWANCE FOR BULKING OR COMPACTION HAS BEEN MADE.
12. ALL FILL PLACED ON THIS SITE IS TO COMPRISE OF ONLY NATURAL EARTH AND APPROVED ROCK AND IS TO BE FREE OF ALL CONTAMINANTS (REFER TO THE ENVIRONMENTAL PROTECTION ACT 1994 SECTION 11), NO DEMOLITION MATERIAL IS TO BE USED.

ALLOTMENT FILLING COMPACTION/TESTING

13. MATERIAL TO BE PLACED IN 300mm (MAXIMUM) LAYERS AND COMPACTED TO A MINIMUM OF 95% AS 1289(STANDARD) OF THE MAXIMUM DRY DENSITY.THE INSITU DENSITY OF THE FILL MATERIAL SHALL BE TESTED AT THE RATE OF ONE LOCATION PER ALLOTMENT AT THE FOLLOWING INTERVALS
- TOTAL DEPTH LESS THAN 300mm: -NO TEST REQUIRED
 - TOTAL DEPTH OF FILL 300mm - 600mm: -ONE(1) TEST PER ALLOTMENT
 - TOTAL DEPTH EXCEEDING 600mm: -ONE(1) TEST IN THE FIRST LAYER THEN -ONE(1) TEST ON EACH ALTERNATIVE LAYER PLACED OVER THE FIRST LAYER

SAFETY FENCE NOTE

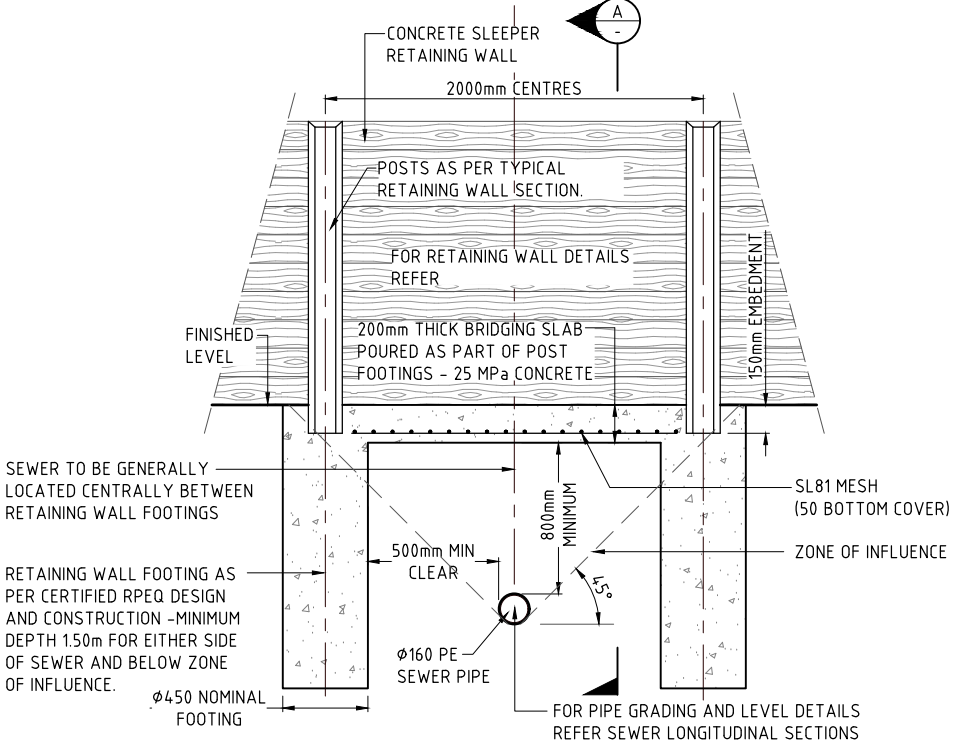
STAR PICKET AND SAFETY BARRIER MESH FENCE TO BE ERECTED ON TOP OF ALL RETAINING WALLS GREATER THAN 1.0m IN HEIGHT

RETAINING WALL CERTIFICATION

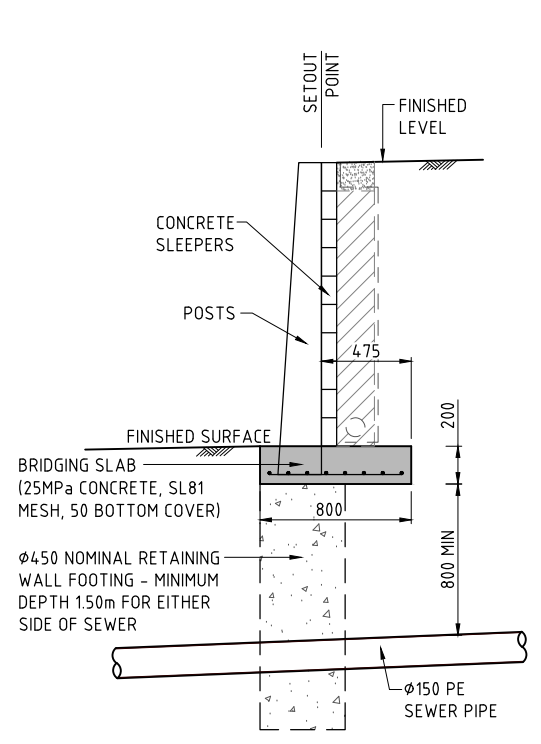
1. CIVIL CONTRACTOR TO OBTAIN DESIGN AND CONSTRUCTION RPEQ CERTIFICATION FOR ALL CONCRETE SLEEPER, SANDSTONE BOULDER & CONCRETE BLOCK RETAINING WALLS.
2. WALL DESIGN AND CERTIFICATION TO BE PROVIDED TO SUPERVISING ENGINEER PRIOR TO CONSTRUCTION.
3. CONSTRUCTION CERTIFICATION TO BE PROVIDED TO SUPERVISING ENGINEER PRIOR TO "ON MAINTENANCE" INSPECTION.

EXISTING SERVICES LOCATIONS

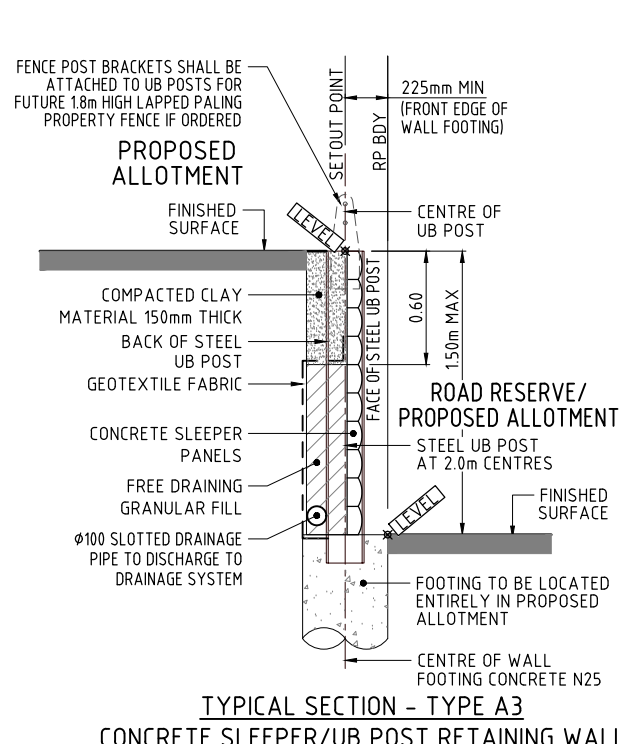
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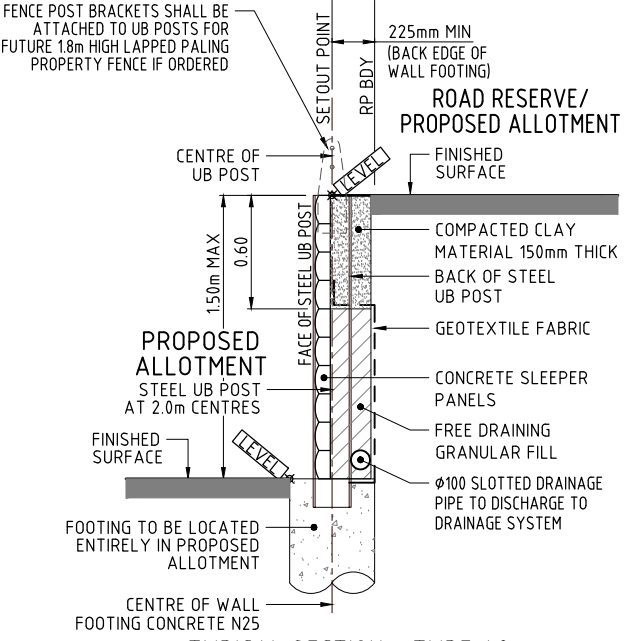
TYPICAL DETAIL - SEWER CROSSING UNDER
CONCRETE SLEEPER RETAINING WALL
SCALE 1: 20



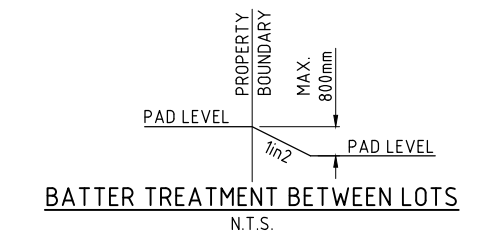
SECTION A-A
SCALE 1: 20



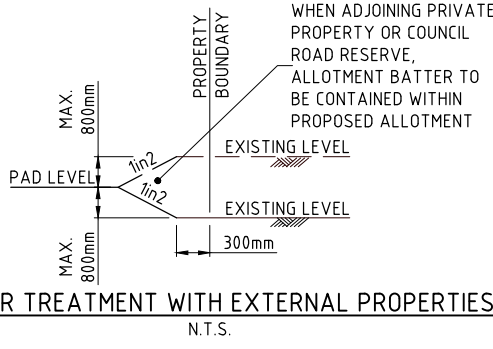
TYPICAL SECTION - TYPE A3
CONCRETE SLEEPER/UB POST RETAINING WALL
SCALE 1:20
NOTE: RETAINING WALL DESIGN (INCLUDING FENCE POST BRACKETS AND FITTINGS) AND CONSTRUCTION CERTIFICATION TO INCORPORATE LOADING FROM FUTURE 1.8m HIGH LAPPED PALING PROPERTY FENCE



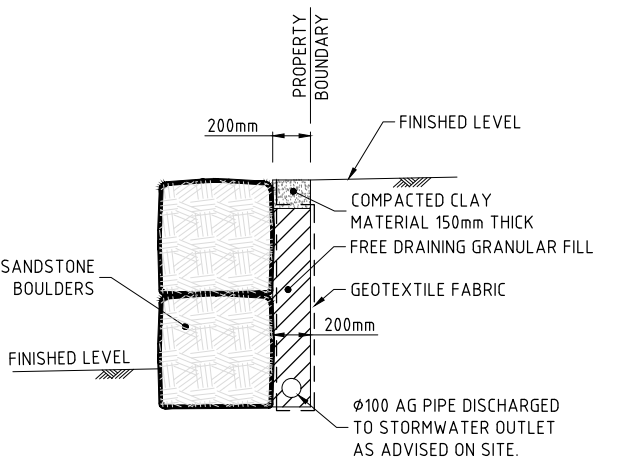
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CONCRETE SLEEPER/UB POST RETAINING WALL
SCALE 1:20
NOTE: RETAINING WALL DESIGN (INCLUDING FENCE POST BRACKETS AND FITTINGS) AND CONSTRUCTION CERTIFICATION TO INCORPORATE LOADING FROM FUTURE 1.8m HIGH LAPPED PALING PROPERTY FENCE



BATTER TREATMENT BETWEEN LOTS
N.T.S.



BATTER TREATMENT WITH EXTERNAL PROPERTIES
N.T.S.



TYPICAL SECTION
SANDSTONE BOULDER RETAINING WALL - TYPE C
SCALE 1:20

NOTE:
THE CONTRACTOR IS TO ENSURE THAT FOOTINGS FOR RETAINING WALLS ARE CLEAR OF THE PROPOSED SEWER AND ROOFWATER LINES REFER DETAILS ON DWG EW05.