CITY OF GOLDCOAST.

Application for approval of engineering drawings

Economy, Planning & Environment
Engineering & Environmental Assessment
City Development
PO Box 5042 GCMC Qld 9729
P 07 5582 8866 F 07 5596 3653
E mail@goldcoast.qld.gov.au
W cityofgoldcoast.com.au

Please use BLOCK LETTERS and complete all details in full.

Privacy statement

Council of the City of Gold Coast (Council) is collecting your personal information in order to provide the services requested, perform associated Council functions and services, and to update and maintain Council's customer information records. Your information is handled in accordance with the ***Information Privacy Act (Qld) 2009*** and may only be accessed by Councillors, Council employees and authorised contractors. Unless authorised or required by law, we will not provide your personal information to any other person or agency. For further information go to http://www.cityofgoldcoast.com.au/privacy.

Council may also use your personal information in order to contact you to provide you with information regarding Council functions and services. If you do not wish to receive such information please opt out using the unsubscribe link in the communication material sent to you.

Application details

Estate name and stage	There is no name at this early stage
Councils reference file number	PN " " reference no
Developer's name	owner Ray "Sugars

Consulting engineer details

Company name	TEG CONSULTING ENGINEERS
Contact person	SEAN EDWARDS
Postal address	PO BOX 49, Innisfail QLD 4860
Phone number	0403213714
Fax number	
Mobile number	
Email	sean.edwards@edwardsgroup.com.au
Engineering design	Yes ✓ No
Contract administration	Yes ✓ No
Existing approval number (if applicable)	Yes No App no: OPW/2019/1023

Property details

Lot number	19	Registered plan number	152380	Existing approval number (if applicable)	
Address	2 Kaningal Dr, Pimpama 4209				

Certification

I/We hereby that I/we have exercised reasonable skill, care and diligence in the design of the works in accordance with:

- Relevant development approvals
- Councils Land Development Guidelines, standard specifications and drawings
- Relevant Australian standards, codes of practice.

Signature X	RPEQ number	6138	Date 05/8/19
Consulting engineer for and on behalf of (company)	Sean Edwards		

Fees

There is no fee associated with this form.

Supporting documents

- Councils engineering drawings – Engineering drawings application checklist with relevant sections completed.
- Two complete sets of A1 size engineering drawings (incomplete drawings and partial sets will not be accepted).
- One set of the job specification.
- Any information requested in the development approval conditions.
- Any relevant supporting documents.
- Details of a non-conforming design and reasons for its use (subject to Councils approval).

Office use only

Date received	Received by

CITY OF GOLDCOAST.

Engineering drawings application checklist

Economy, Planning & Environment
Engineering & Environmental Assessment
City Development
PO Box 5042 GOLD COAST MC QLD 9729
P 07 5582 8866 F 07 5596 3653
E mail@goldcoast.qld.gov.au
W cityofgoldcoast.com.au

Please use BLOCK LETTERS and complete all details in full.

Privacy statement

Council of the City of Gold Coast (Council) is collecting your personal information in order to provide the services requested, perform associated Council functions and services, and to update and maintain Council's customer information records. Your information is handled in accordance with the ***Information Privacy Act (Qld) 2009*** and may only be accessed by Councillors, Council employees and authorised contractors. Unless authorised or required by law, we will not provide your personal information to any other person or agency. For further information go to http://www.cityofgoldcoast.com.au/privacy.

Council may also use your personal information in order to contact you to provide you with information regarding Council functions and services. If you do not wish to receive such information please opt out using the unsubscribe link in the communication material sent to you.

Application details

Estate name and stage	n/a at this stage
Councils reference file number	only OPW/2019/1023
Developer's name	Ray Sugars

Consulting engineer details

Company name	TEG Consulting Engineers
Contact person	Sean Edwards
Postal address	PO Box 49, Innisfail QLD 4860
Phone number	0403213714
Fax number	
Mobile number	
Email	sean.edwards@edwardsgroup.com.au

Property details

Lot number	19
Registered plan number	152380
Property address	2 Kaninga Dr Pimpama 4209
Existing approval number	OPW/2019/1023

Checklist items submitted

General	Items	X	or	N/A
Earthworks and roadworks	Items	↘	or	N/A
Stormwater drainage	Items	↘	or	N/A
Miscellaneous	Items	X	or	N/A

Office use only

Fees

There is no fee associated with this form.

Not approved	
Approved subject to minor alterations as shown	
Approved	
Date received	Received by

CITY OF GOLDCOAST.

Engineering drawings application checklist

A. General	Yes	N/A
1. Administration		
Application form fully completed	✓	
Approvals and clearances		
• Department of Transport and Main Roads		✓
• Department of Environment and Heritage Protection		✓
• Downstream drainage discharge rights		✓
• Clearance for works through other properties		✓
• Energex/Telstra		✓
• Others		✓
Relevant standard drawings included in application	✓	
Schedule of drawings (submitted) attached		✓
Any building and construction work costing $150,000.00 or more, the applicant is required under the *Building and Construction Industry (Portable Long Service Leave) Act 1991* to supply evidence of the following.		
Estimated cost of works: (Only earthworks)	$ $4,000	
If work is $150,000.00 or more provide one of the following.		
• Payment of levy.		✓
• Payment of the first instalment of levy.		✓
• An exemption from payment levy.		✓
• An exemption from immediate payment of levy.		✓
2. Compliance with Councils approvals		
Rezoning, consent or other Council approval		✓
Provisions for adjoining development requirements		✓
3. RPEQ certification		
All engineering drawings and specifications prepared and signed by a Registered Professional Engineer of Qld	✓	
4. Title block on engineering drawings		
Estate name (if any)		✓
Stage number (if any)		✓
Developers name	✓	
Consultants name and address	✓	
Drawing number and sheet number	✓	
Scale with scale bar		✓
Locality description	✓	
Origin of levels and location of permanent survey marks	✓	
Schedule showing date and nature of amendments		✓
Drawing title	✓	
Signed design certification by an experienced designer	✓	
5. Locality plan		
North point	✓	
Major roads project		✓
Adjacent localities	✓	
Development area outlines and shaded or crosshatched		✓
Scale noted	✓	
6. Layout of stage plan		
Layout of roads	✓	
Approved road names (road number not acceptable)	✓	
Allotment layout	✓	
Lot numbers	✓	
North point	✓	
Access restriction strips		✓
Stage boundaries clearly shown		✓
Existing easements	✓	

Engineering drawings application checklist

B. Earthworks and roadworks	Yes	N/A
1. Earthworks		
a) Drafting – drawings included		
Legend		✓
Existing and proposed contours	✓	
Cut and fill areas clearly shown		✓
Road and allotment layout (indicate numbers)		✓
Approved road names		✓
Location(s) and level(s) of permanent survey mark(s), reference stations etc used as datum for the works		✓
b) Design – complies with Councils guidelines		
Maximum cut or fill at boundary of subject land > 500 mm		✓
No ponding or nuisance created at boundary of subject land	✓	
Batter slopes	✓	
Location and level of retaining walls (if required)		✓
Defined flood level (if appropriate)		✓
Flood fill level (if appropriate)		✓
2. Roadworks drawings		
a) Drafting – drawings included		
Approved road names and road reserve boundaries		✓
Allotment boundaries, numbers, easements		✓
Centreline or construction line showing:		
• chainages		✓
• bearings		✓
• offsets if construction line is not the centreline of road		✓
• all intersection points.		✓
Information for each curve including:		
• tangent point chainages and offsets		✓
• curve radii		✓
• arc length		✓
• tangent length		✓
• superelevation (if applicable)		✓
• curve widening (if applicable).		✓
Kerb lines including:		
• kerb radii (where not parallel to centreline)		✓
• tangent point chainages (where not parallel to centreline).		✓
Edge of pavement where no kerb is constructed		✓
Position and extent of channelisation		✓
Location and details of all traffic signs, guideposts, guardrail, and other road furniture, etc		✓
Pavement markings		✓
Catchpit, manhole and pipeline locations		✓
Drainage details (if applicable)		✓
Drainage details (if applicable)		✓
Concrete footpaths and bikeways showing DDA compliance		✓
Location and details for access points, invert crossings, access ramps		✓
North point on each plan view		✓
Changes in surfacing material		✓
b) Design – complies with Councils design guidelines		
Maximum design speed		✓
Sight distances		✓
Horizontal and vertical alignment		✓
Transit lanes and road tapers		✓
Parking		✓

Engineering drawings application checklist

B. Earthworks and roadworks cont	Yes	N/A
3. Intersection cul-de-sac and speed control devices		
a) Drafting – drawings included		
Kerb levels		✓
Access ramp locations		✓
Finished design contours		✓
Channelisation details including setout details, radii, etc		✓
Location of traffic signs, guideposts		✓
Visibility benching (if applicable)		✓
Ducting for future signals (if applicable)		✓
Linemarking (linemarking and signage may be shown on a separate plan)		✓
Speed control device details (if necessary)		✓
Details of construction methods for surfacing other than asphalt or sprayed bitumen		✓
Design vehicle paths shown for all speed control devices and turnaround areas		✓
b) Design – complies with Councils design guidelines		
Layout/configuration	✓	
Contours/crossfall	✓	
Minimum kerb and channel fall		✓
Design vehicle paths and clearances		✓
Councils garbage truck manoeuvring		✓
Parking requirements		✓
Sight distances		✓
Roundabouts		✓
Access ramps at all turnouts at intersections where barrier kerb and channel is required		✓
4. Road longitudinal sections		
a) Drafting – drawings included		
Approved road names		✓
Chainages on centreline (and construction line if used)		✓
Existing surface peg levels		✓
Design road centreline levels		✓
Design grades		✓
Length and radii of vertical curves		✓
Chainage and levels at grade intersection points		✓
Chainage and levels at vertical curve tangent points		✓
Cut and/or fill depths		✓
Horizontal radii and tangent point chainage		✓
Kerb levels		✓
Approved road names, centrelines and IP chainage of intersecting (side) roads		✓
b) Design – complies with Councils design guidelines		
Maximum grades		✓
Sight distance		✓
Minimum grade		✓
Change in grades without VC		✓
Crest and sag curves		✓

Engineering drawings application checklist

B. Earthworks and roadworks cont	Yes	N/A
5. Road cross section		
a) Drafting – drawings included		
Approved road names	✓	
Road reserve boundaries	✓	
Road centreline or construction line	✓	
Original natural surface line profile	✓	
Constructed cross section profile	✓	
Chainage on centreline or construction line together with natural surface level or peg level	✓	
Offset to road centreline from peg line or construction line	✓	
Cross fall batter slopes and dimensions where these differ to that shown on the type cross section	✓	
Pavement depths wherever these differ from typical cross section	✓	
b) Typical cross section shown for each road containing		
Road reserve width	✓	
Road width between nominal kerb line, or pavement width where no kerb is constructed	✓	
Verge, footpath width	✓	
Location and width of concrete footpath or bikeway, where required	✓	
Kerb and channel type	✓	
Crossfalls and/or grades of pavement, footpaths and batters, etc with offsets to change of grade point	✓	
Type and thickness of wearing surfacing	✓	
Total depth of pavement courses with CBR values of material used (if available)	✓	
c) Design – complies with Councils design guidelines		
Typical cross sections and includes: • Width for transit lands and bikeways • Typical footpath verge widths	✓	
Access grades/limits to lots	✓	
Road crossfalls	✓	
Formation batter slope stability and scour protection	✓	

C. Stormwater drainage	Yes	N/A
1. Stormwater drainage catchment plan		
Northpoint	✓	
Approved road names	✓	
Existing and proposed property and road boundaries	✓	
All catchments/sub catchments designated as per drainage calculation sheet	✓	
Catchment/sub catchment boundaries indicated by a bold line	✓	
Existing and proposed contours at a suitable interval (in different line types)		✓
Direction of watershed along the flow path giving the longest time of concentration	✓	
Stormwater reticulation schematic layout shown including manhole, inlet and outlet numbers (for urban catchments)		✓
All internal and external catchments shown to scale	✓	
2. Stormwater drainage detail plan		
Details of pipe junctions in manholes, where pipe centrelines are offset from centre point of manhole		✓
Full details including reinforcing of non-standard manholes		✓
Catchpit and filed inlet locations (chainage, offset levels, etc)		✓
Manhole locations (chainage, offset levels, etc)		✓
Invert levels and diameters of pipe connections from catchpits to manholes		✓
Approved road names		✓
Class of pipe checked		✓

Engineering drawings application checklist

C. Stormwater drainage cont	Yes	N/A
3. Roof water/inter-allotment drainage		
a) Drafting – layout plan contains		
Legend		✓
All allotments and allotment numbers	✓	
Existing and finished surface contours	✓	
Location and size of inter-allotment drainage areas		✓
Location and size of stormwater drainage to which system is connected	✓	
Label inter-allotment pits and receiving stormwater structures		✓
Pit or inlet locations, surface levels and inlet/outlet invert levels		✓
Required easements		✓
Details of connections to kerb and channel (if appropriate)		✓
b) Design – complies with Councils guidelines		
Pipe sizes and pipe materials		✓
Cover		✓
Grades		✓
4. Drainage longitudinal sections		
a) Catchpit connection details (may be in table form)		
b) Longitudinal section for each line containing		
Chainages		✓
Existing natural surface levels and design finished surface levels		✓
Manhole and endwall chainages together with surface levels and inlet and outlet invert levels		✓
Distances between manholes/catchpits/endwalls		✓
Grade of each pipe section		✓
Diameter and class and material of each pipe section (eg. marine class)		✓
Hydraulic grade line and levels, design storm frequency		✓
Drainline and manhole number		✓
Manhole diameters and/or reference to separate detail drawing		✓
Road names where applicable		✓
Open drain details		✓
c) Open drains		
Cross sections at each peg chainage (usually 20 m intervals)		✓
Details of drop structures, energy dissipators, etc (including top view, section views etc.)		✓
d) Design – complies with Councils design guidelines		
Batter slope/stability		✓
Scour velocities		✓
Maintenance criteria		✓
5. Stormwater drainage calculations		
a) Calculation table		
Stormwater calculations must be submitted for the design storms on an A1 spread sheet, preferably Councils standard stormwater drainage calculation sheet.	✓	✓
b) Design – complies with Councils design manual		
Legal point of discharge identified	✓	
Downstream drainage approvals		✓
Unflooded widths		✓
Calculations provided for major and minor systems		✓
Blockage factors to catchpits for major systems		✓

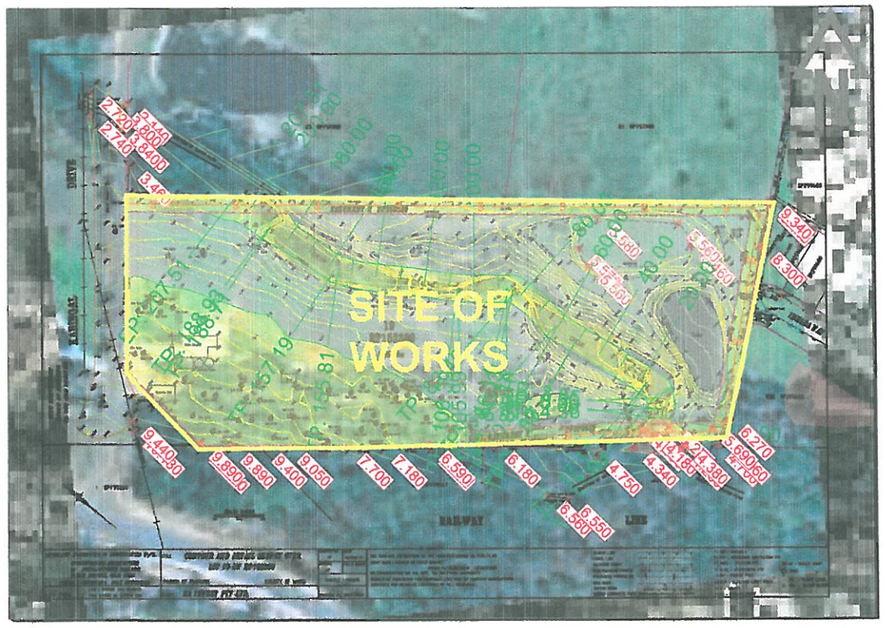
Engineering drawings application checklist

C. Stormwater drainage cont		
6. Detention basin details	**Yes**	**N/A**
a) Drawings contain		
Plan view	✓	
Sectional views		✓
Details of basin wall construction	✓	
Details of outlet structures (low and high level outlets)	✓	
Extent of any permanent storage		✓
Maximum storage level		✓
Extent and nature of any landscaping		✓
b) Design – Complies with Councils guidelines and QUDM		
Affect on runoff hydrograph for catchment checked		✓
Batter slopes		✓
Minor flood levels		✓
Maximum flooded depth		✓
Inlets and outlets		✓
Scour protection		✓
Base slopes/crossfall for active recreation use		✓
High level outlet		✓
Earthworks		✓
7. Water quality site management/runoff control works		
Plan layout/extent		✓
Site's existing topography		✓
How and when it will be altered		✓
Typical device details/materials for erosion and sediment control measures proposed		✓
Temporary and permanent works indicated		✓
Catchment boundaries and direction on flow for different drainage areas before and after development		✓
Design complies with **QUDM Section 9.03.5**		✓
8. Gross pollutant traps		
Plan layout		✓
Long section and cross sections		✓
Structural elements detailed		✓
All materials specified/indicated		✓

R. SUGARS

LOT 19 RP152380
2 KARINGAL DRV
PIMPAMA

DRAWING SCHEDULE					
DRG No	DRAWING TITLE	REV	NOTE	SHEET No	DATE
C00	COVER SHEET	A	PRELIMINARY	-	11/07/2019
N01	NOTES DETAILS	A	PRELIMINARY	1	11/07/2019
C01	EXISTING CONTOURS	A	PRELIMINARY	-	11/07/2019
C02	PROPOSED EARTHWORKS	A	PRELIMINARY	-	11/07/2019
C03	PROPOSED SWALE DRAIN LONG SECTION	A	PRELIMINARY	-	11/07/2019
C04	OPEN SWALE - CROSS SECTION	A	PRELIMINARY	1	11/07/2019
C05	OPEN SWALE - CROSS SECTION	A	PRELIMINARY	2	11/07/2019
C06	OPEN SWALE - CROSS SECTION	A	PRELIMINARY	3	11/07/2019
C07	OPEN SWALE - CROSS SECTION	A	PRELIMINARY	4	11/07/2019



LOCALITY PLAN

N.T.S.

LEGEND - EXISTING

PRINCIPAL RP BOUNDARY
ABUTTING BOUNDARY
EASEMENT BOUNDARY

CONTOUR

TREE
TREE - TO BE PROTECTED

ROAD SIGN

STORMWATER LINE
STORMWATER SWALE / TABLE DRAIN
STORMWATER PIT
STORMWATER FIELD INLET
STORMWATER MANHOLE
STORMWATER HEADWALL

SEWER LINE
SEWER MAINTENANCE HOLE

WATER LINE
VALVE
HYDRANT

TELECOmmUNICATION LINE
FIBRE OPTIC LINE
TELECOmmUNICATION PIT
TELECOmmUNICATION PLINTH

ELECTRICITY LINE OVERHEAD
ELECTRICITY LINE UNDERGROUND
ELECTRICITY POLE
STREET LIGHT

GAS LINE
GAS VALVE

LEGEND - EXISTING

BANK / BATTER
ROCK WALL
BLOCK WALL
TIMBER WALL
FENCE
EDGE OF SEAL / BITUMEN
EDGE OF GRAVEL

BUILDING
BUILDING OVER

BUILDING
BUILDING (TO BE REMOVED)
SEAL / BITUMEN
SEAL / BITUMEN (TO BE REMOVED)
CONCRETE
CONCRETE (TO BE REMOVED)
PAVERS
LANDSCAPE / PERMEABLE
VEGETATED / GARDEN AREA

LEGEND - PROPOSED

RP BOUNDARY
EASEMENT BOUNDARY

CONTOUR
LIMIT OF WORKS

TREE

ROAD SIGN

STORMWATER LINE
STORMWATER SWALE / TABLE DRAIN
BUILDING HYDRAULICS (INDIC. ONLY)
STORMWATER HOUSE CONNECTION
STORMWATER PIT
STORMWATER FIELD INLET
STORMWATER MANHOLE
STORMWATER HEADWALL

SEWER LINE
SEWER RISING MAIN
SEWER HOUSE CONNECTION
SEWER MAINTENANCE HOLE

WATER LINE
VALVE
HYDRANT

TELECOmmUNICATION LINE
FIBRE OPTIC LINE
TELECOmmUNICATION PIT
TELECOmmUNICATION PLINTH

ELECTRICITY LINE OVERHEAD
ELECTRICITY LINE UNDERGROUND
ELECTRICITY POLE
STREET LIGHT

GAS LINE
GAS VALVE

LEGEND - PROPOSED

BANK / BATTER
ROCK WALL
BLOCK WALL
TIMBER WALL
FENCE
EDGE OF SEAL / BITUMEN
EDGE OF GRAVEL

BUILDING
BUILDING OVER

BUILDING
SEAL / BITUMEN
CONCRETE
PAVERS
LANDSCAPE / PERMEABLE
VEGETATED / GARDEN AREA

SJ — SAWN JOINT

DCJ — DOWEL CRADLE JOINT

EDJ — EXPANSION DOWEL JOINT

R — 2N12 - 1000 L TIES TO U/S FABRIC

Registered Professional Engineer 699704
Mr Sean F. Edwards
MIEAust CPEng (Civil/Structural)
RPEQ No 8138
NT-BPBCE: 26906ES
RBP (Vic) EC37110
Signature ..... Date 15/07/19
Registered on the National Professional Engineers Register in the area of practice of **Civil / Structural**

TEGCE19015_Base.dwg
REFERENCE DRAWINGS

DRAWING REVISIONS

REV	BY	DATE	REVISION DESCRIPTION	CKD APP

© TEG Consulting Engineers Pty Ltd All Rights Reserved 2009
Copyright in the whole and every part of this drawing belongs to TEG Consulting Engineers Pty Ltd and may not be used, sold, transferred, copied or reproduced in whole or in part in any manner or form or on any media, to any person other than by agreement with TEG Consulting Engineers Pty Ltd.
This document is produced by TEG Consulting Engineers Pty Ltd solely for the benefit of and use by the client in accordance with the terms of the retainer. TEG Consulting Engineers Pty Ltd does not and shall not assume any responsibility or liability whatsoever to any third party arising out of any use or reliance by/third party on the content of this document.

TEG CONSULTING ENGINEERS
Use the QCODE to visit our website for more details, contacts and other projects.
P: 07 4961 8276
M: 04 0321 3741
Email: admin@tegconsultingengineers.com.au
P.O. Box 49, Innisfail, QLD 4860
Web: www.edwardsgroup.com.au

CLIENT	R. SUGARS
	2 KARINGAL DRIVE PIMPAMA WORKS APPLICATION
DRAWN SFE	DATE 12.08.19
DESIGNED SFE	DATE
CHECKED SCE	DATE
APPROVED SFE REG No 8138	DATE
DRAWING TITLE	DWG TITLE1 DWG TITLE 2 DWG TITLE 3 DWG TITLE 4
DRAWING STATUS	PRELIMINARY
DRAWING NUMBER	TEGCE19015 C00
A1	SCALES NTS
REV	A

GENERAL NOTES

G1. THESE DRAWINGS AND NOTES ARE TO BE READ IN CONJUNCTION WITH ELECTRICAL, MECHANICAL AND OTHER WORKING DRAWINGS, SPECIFICATIONS, AND WITH SUCH FURTHER DETAILS, AND INSTRUCTIONS WHICH MAY BE ISSUED. REFER ALL DISCREPANCIES TO THE PRINCIPAL BEFORE PROCEEDING WITH WORK.
G2. CONSTRUCTION OF ALL STRUCTURAL AND CIVIL WORK SHALL COMPLY WITH CURRENT EDITIONS OF RELEVANT SAA CODES.
G3. DIMENSIONS SHALL BE VERIFIED BEFORE COMMENCING CONSTRUCTION. DO NOT SCALE DRAWINGS TO OBTAIN DIMENSIONS.
G4. THROUGHOUT CONSTRUCTION THE STRUCTURE SHALL BE MAINTAINED IN A STABLE CONDITION AND NO PART SHALL BE OVER STRESSED.

EARTHWORKS NOTES

E1. THE EARTHWORKS DRAWINGS AND THESE NOTES ARE TO BE READ IN CONJUNCTION WITH THE EARTHWORKS SPECIFICATION.
E2. PRIOR TO COMMENCEMENT OF WORKS THE CONTRACTOR IS TO IDENTIFY AND BE SATISFIED WITH THE CORRECT LOCATIONS OF ALL EXISTING SERVICES WHETHER INDICATED OR NOT ON THE PLANS. ANY DAMAGE TO EXISTING SERVICES IS TO BE RECTIFIED AS SOON AS POSSIBLE AT THE CONTRACTOR'S EXPENSE.
E3. REFER TO STRUCTURAL DRAWINGS FOR DETAILED EXCAVATIONS.
E4. REFER TO ARCHITECTURAL, LANDSCAPE AND HYDRAULIC DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL WORKS AND REQUIREMENTS.
E5. FILL MATERIAL SHALL BE EITHER IMPORTED SELECT MATERIAL OR EXISTING EXCAVATED SOILS (IF APPROVED BY THE GEOTECHNICAL ENGINEER & FREE OF ORGANIC MATERIAL). IMPORTED FILL SHALL BE LOW PLASTICITY, GRANULAR FILL WITH THE FOLLOWING CHARACTERISTICS:
- CBR >15%
- PLASTICITY INDEX <15%
- % PASSING 0.075 SIEVE <25%

E6. FILL MATERIAL SHALL BE COMPACTED IN MAXIMUM 150MM THICK LAYERS TO 98% STANDARD DRY DENSITY RATIO IN ACCORDANCE WITH AS1298 UNLESS NOTED OTHERWISE.
E7. COMPACTED FILL SHALL BE MAINTAINED AT A MOISTURE CONTENT WITHIN THE RANGE ± 2% OF STANDARD OPTIMUM MOISTURE CONTENT.
E8. ALL EXCAVATED BATTERS AND FILLS ARE TO BE INSPECTED AND APPROVED BY THE GEOTECHNICAL ENGINEER.
E9. BACKFILLING OF DAMS ARE TO BE MACHINE COMPACTED ONLY. THESE AREAS WILL BE NOTED AS UNCONTROLLED FILL ON THE PLANS. FUTURE DEVELOPMENT TO UNDERTAKE THEIR OWN GEOTECHNICAL ASSESSMENT ON THESE AREAS TO ACCOUNT FOR THE UNCONTROLLED FILL AREAS.

SITE MANAGEMENT

SM1. SITE CLASSIFICATION: CLASS (UNKNOWN) TO AS2870
SM2. GARDENS SHOULD NOT BE LOCATED WITHIN 2.0M OF BUILDINGS.
SM3. TREES SHOULD NOT BE LOCATED WITHIN A DISTANCE EQUAL TO 1.0 TIMES THEIR MATURE HEIGHT FROM BUILDINGS.
SM4. SERVICE TRENCHES MUST BE KEPT AT LEAST 1.5M CLEAR FROM BUILDINGS, REFER TO ADDITIONAL DRAWING NOTES.
SM5. REPAIR ALL LEAKS IN DRAINAGE PIPES AS SOON AS THEY ARE DISCOVERED.
SM6. REFER TO CSIRO PAMPHLET BTF 18 "FOUNDATION MAINTENANCE AND FOOTING PERFORMANCE: A HOMEOWNERS GUIDE" AND FOLLOW RECOMMENDATIONS THEREIN.

DEMOLITION AND CLEARING NOTES

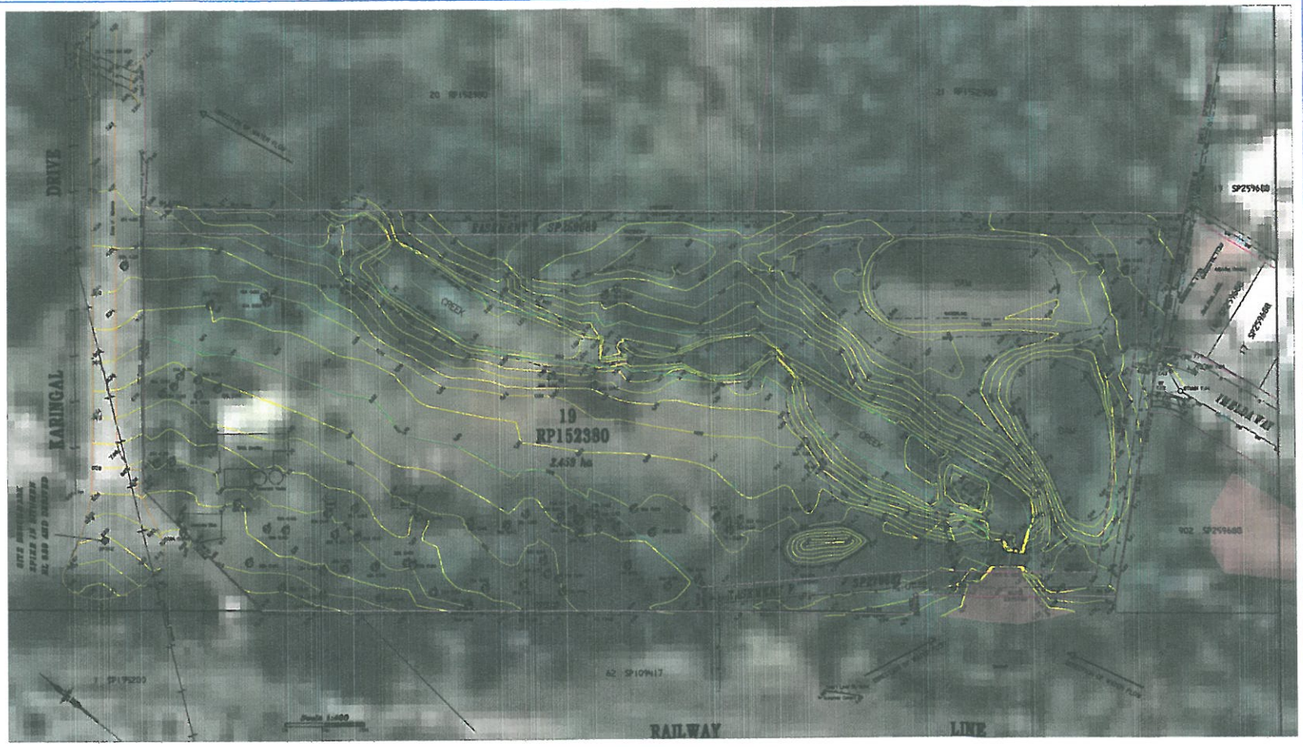
CL1. PRIOR TO CLEARING AND DEMOLITION OPERATIONS REMOVE WITHOUT DAMAGE ALL EXISTING INFRASTRUCTURE TO BE RE-USED OR STORED AS DIRECTED BY THE SITE SUPERINTENDENT.
CL2. CLEARING AND DEMOLITION SHALL BE CARRIED OUT ONLY WITHIN THOSE AREAS AFFECTED BY THE PROPOSED WORKS UNLESS NOTED OTHERWISE.
CL3. DEMOLISH EXISTING REDUNDANT INFRASTRUCTURE SUCH AS KERBS, PAVEMENT SEALS, CONCRETE FOOTPATHS, ABANDONED SERVICES ETC. TO A DEPTH OF 500MM BELOW PROPOSED PAVEMENT SUBGRADE LEVEL AND 300MM BELOW FINISHED LEVEL IN ALL OTHER AREAS AND REFILL AS NOTED BELOW. DISPOSE OF SUCH MATERIAL OFF SITE.
CL4. CLEAR RUBBISH, SCRUB, TREES, STUMPS ETC. AND GRUB OUT STUMPS AND ROOTS OVER 50MM DIAMETER TO A DEPTH OF 500MM BELOW PROPOSED PAVEMENT SUBGRADE LEVEL AND 300MM BELOW FINISHED LEVEL IN ALL OTHER AREAS AND REFILL AS NOTED BELOW.
CL5. REFILL DEMOLITION EXCAVATIONS AND GRUB HOLES WITH ON SITE MATERIAL WON FROM CUT AREAS SUITABLE FOR USE AS FILL MATERIAL. PLACE AND COMPACT FILL IN ACCORDANCE WITH EARTHWORKS NOTES.

TEMPLATE DRAWING NOTE

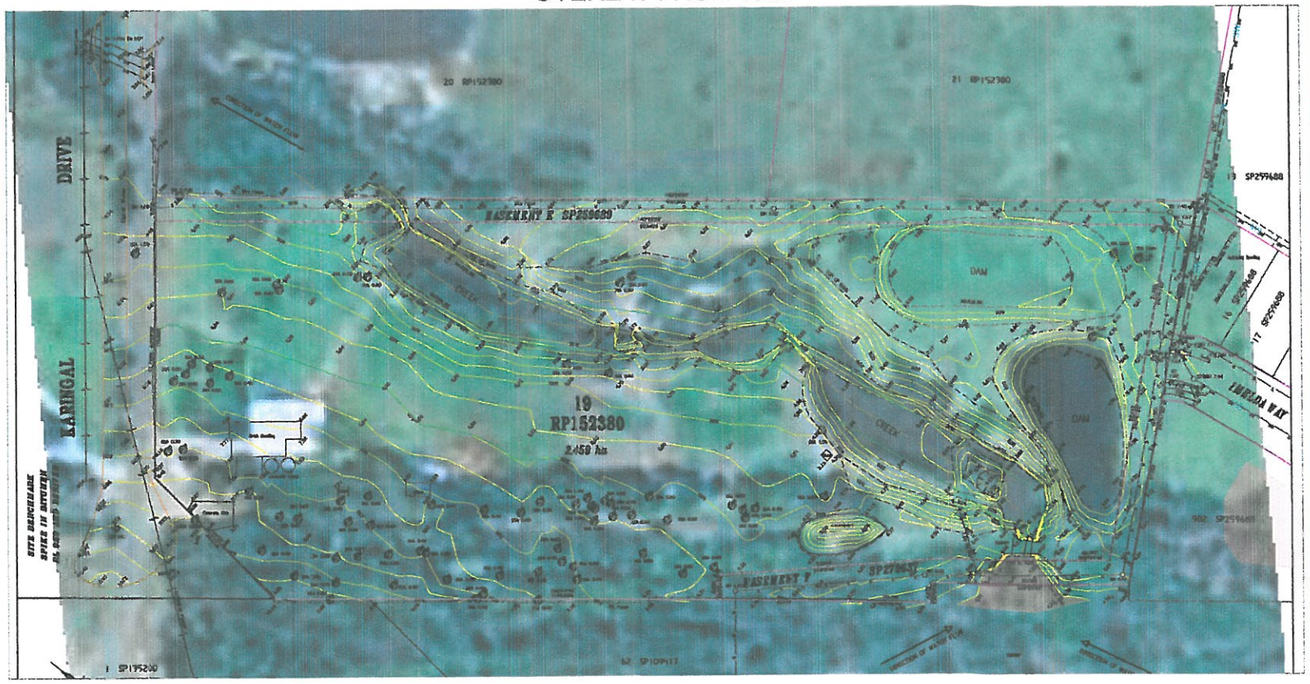
THIS DRAWING SHALL BE REVIEWED AND REVISED FOR EACH PROJECT TO PROVIDE THE DETAILS RELEVANT TO THE PROJECT. ALL REVISION HISTORY RELATED TO THE TEMPLATE SHALL BE REMOVED AND REPLACED WITH DRAWING CHECKS, DESIGN CHECKS AND ENGINEERING APPROVALS PREFORMED UNDER THE PROJECT.

PROJECT NOTES

IT IS CLEARLY NOTED FROM PAST HISTORY OVERHEAD PHOTOGRAPHY THIS SIDE WAS FULLY CLEARED OF ALL TIMBERS BACK AS CLOSE AS 1964 AND THAT ALL TIMBERS ON SITE ARE IN FACT REGROWTH. (REFER PHOTO 1)
BASED ON THESE PHOTOGRAPHS, IT SHOULD ALSO BE NOTED THAT THE EXTENT OF THE EXCAVATIONS ON-SITE FOR THE 2 DAMS AND THE EXCAVATED AREAS WITHIN THE OPEN SWALE WATERCOURSE WERE CLEARLY INSTALLED IN THE LAST 10 TO 15 YEARS AND UTILISED FOR STORAGE OF WATER FOR THE PURPOSE OF OPERATING THE LANDSCAPING BUSINESS FROM WITHIN THE SITE BY THE PREVIOUS OWNER WHICH IS ALSO SUPPORTED BY OVERHEAD PHOTOGRAPHY OVER THE FOLLOWING YEARS.



OVERLAY FROM 1983



OVERLAY FROM 1974

Registered Professional Engineer 699704
Mr Sean F. Edwards
MIEAust CPEng (Civil/Structural)
RPEQ No 6138
NT-BPBCE: 26906ES
RBP (Vic) EC37110
Signature .....Date..15/07/19
Registered on the National Professional Engineers Register in the area of practice of **Civil / Structural**

TEGCE19015_Base.dwg

REFERENCE DRAWINGS

DRAWING REVISIONS

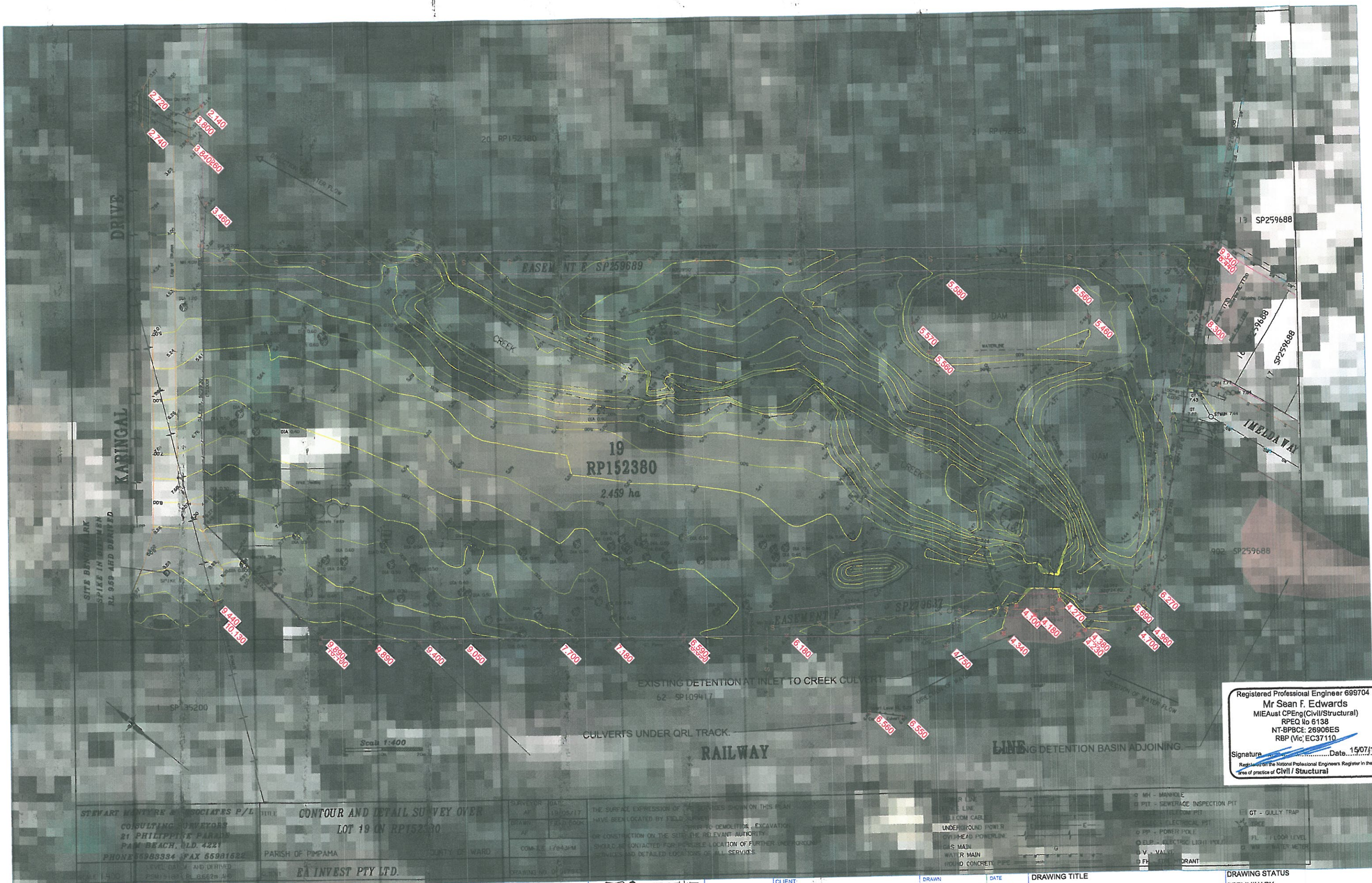
REV	BY	DATE	REVISION DESCRIPTION	CKD APP

© TEG Consulting Engineers Pty Ltd All Rights Reserved 2003. Copyright in the whole and every part of this drawing belongs to TEG Consulting Engineers Pty Ltd and may not be used, sold, transferred, copied or reproduced in whole or in part in any manner or form or on any media, to any person other than by agreement with TEG Consulting Engineers Pty Ltd.
This document is produced by TEG Consulting Engineers Pty Ltd solely for the benefit of and use by the client in accordance with the terms of the retainer. TEG Consulting Engineers Pty Ltd does not and shall not assume any responsibility or liability whatsoever to any third party arising out of any use or reliance by third party on the content of this document.

TEG CONSULTING ENGINEERS
Use the MODE to visit our website for more details, contacts and other projects.
P: 07 4661 8736
M: 04 0321 3714
Email: admin@tegconsultingengineers.com.au
P.O. Box 49, Innisfail, QLD 4860
Web: www.edwardsgroup.com.au

CLIENT: R. SUGARS	DRAWN SFE	DATE 7.08.16	DRAWING TITLE: NOTES
2 KARINGAL DRIVE PIMPAMA WORKS APPLICATION	DESIGNED SFE	DATE	
	CHECKED	DATE	
	APPROVED SFE	REG No 6138 DATE	

DRAWING STATUS: PRELIMINARY		
DRAWING NUMBER: TEGCE19015 N01		
A1	SCALES: NTS	REV: A



Registered Professional Engineer 699704
Mr Sean F. Edwards
MIEAust CPEng(Civil/Structural)
RPEQ No 6138
NT-BPBCE: 26906ES
RBP (Vic) EC37110
Signature ..... Date 15/07/19
Registered on the National Professional Engineers Register in the area of practice of **Civil / Structural**

STEWART MCINTYRE & ASSOCIATES P/L
CONSULTING SURVEYORS
21 PHILIPPINE PARADE
PALM BEACH, QLD. 4221
PHONE 55983334 FAX 55981622

CONTOUR AND DETAIL SURVEY OVER LOT 19 ON RP152380

PARISH OF PIMPAMA — COUNTY OF WARD

EA INVEST PTY LTD.

SURVEYOR: AF — DATE: 18/05/17
DRAWN: AF — FIELD BOOK:
COMPILED: AF — DRAWING NO. OF

THE SURFACE EXPRESSION OF SERVICES SHOWN ON THIS PLAN HAVE BEEN LOCATED BY FIELD SURVEY ONLY. PRIOR TO DEMOLITION, EXCAVATION OR CONSTRUCTION ON THE SITE THE RELEVANT AUTHORITY SHOULD BE CONTACTED FOR POSSIBLE LOCATION OF FURTHER UNDERGROUND SERVICES AND DETAILED LOCATIONS OF ALL SERVICES.

UNDERGROUND POWER
OVERHEAD POWERLINE
S MAIN
WATER MAIN
ROUND CONCRETE PIPE

MH - MANHOLE
PIT - SEWERAGE INSPECTION PIT
ELECTRICAL PIT
FP - POWER POLE
ELP - ELECTRIC LIGHT POLE
V - VALVE
FH - HYDRANT
GT - GULLY TRAP
FL - FLOOR LEVEL
WM - WATER METER

TEGCE19015_Base.dwg
REFERENCE DRAWINGS

DRAWING REVISIONS

REV	BY	DATE	REVISION DESCRIPTION	CKD APP

© TEG Consulting Engineers Pty Ltd All Rights Reserved 2009.
Copyright in the whole and every part of this drawing belongs to TEG Consulting Engineers Pty Ltd and may not be used, sold, transferred, copied or reproduced in whole or in part in any manner or form or on any media, to any person other than by agreement with TEG Consulting Engineers Pty Ltd.
This document is produced by TEG Consulting Engineers Pty Ltd solely for the benefit of and use by the client in accordance with the terms of the retainer. TEG Consulting Engineers Pty Ltd does not and shall not assume any responsibility or liability whatsoever to any third party arising out of any use or reliance by third party on the content of this document.

TEG CONSULTING ENGINEERS
Email: admin@tegconsultingengineers.com.au
P.O Box 49, Innisfail QLD 4860
Web: www.edwardsgroup.com.au
P: 07 4061 8276
M: 04 0321 3714

Use the ISSUE to see our website for more details, contacts and other projects.

CLIENT: R. SUGARS

2 KARINGAL DRIVE PIMPAMA
WORKS APPLICATION

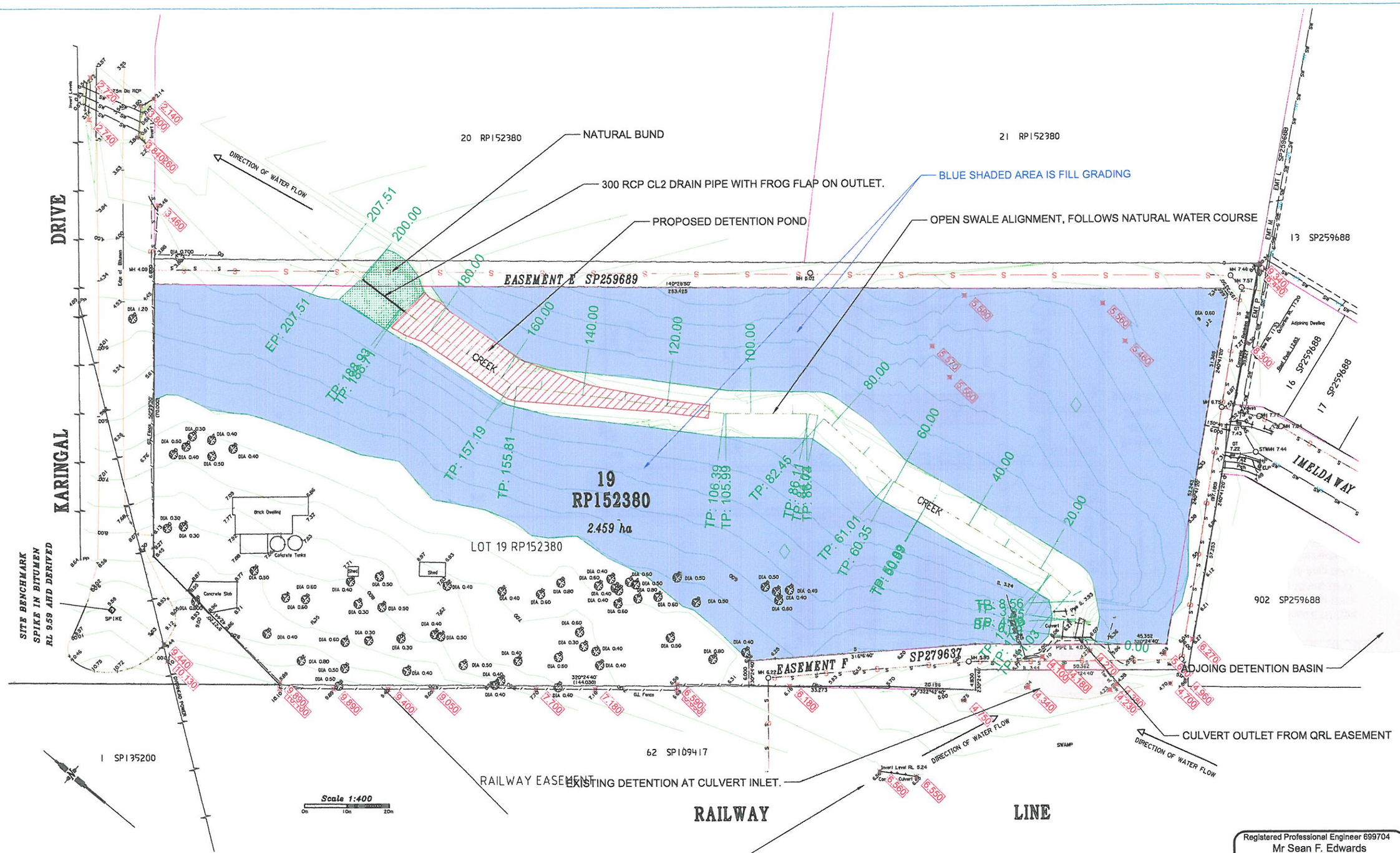
DRAWN	SFE	DATE 12.06.19
DESIGNED	SFE	DATE
CHECKED	SOE	DATE
APPROVED	SFE	REG No 6138 DATE

DRAWING TITLE
EXISTING CONTOURS

DRAWING STATUS
PRELIMINARY

DRAWING NUMBER
TEGCE19015 C01

A1	SCALES NTS	REV A



Registered Professional Engineer 699704
Mr Sean F. Edwards
MIEAust CPEng (Civil/Structural)
RPEQ No 6138
NT-BPBCE: 26906ES
RBP (Vic) EC37110
Signature ..... Date 15/07/19
Registered on the National Professional Engineers Register in the area of practice of **Civil / Structural**

TEGCE19015_Base.dwg
REFERENCE DRAWINGS

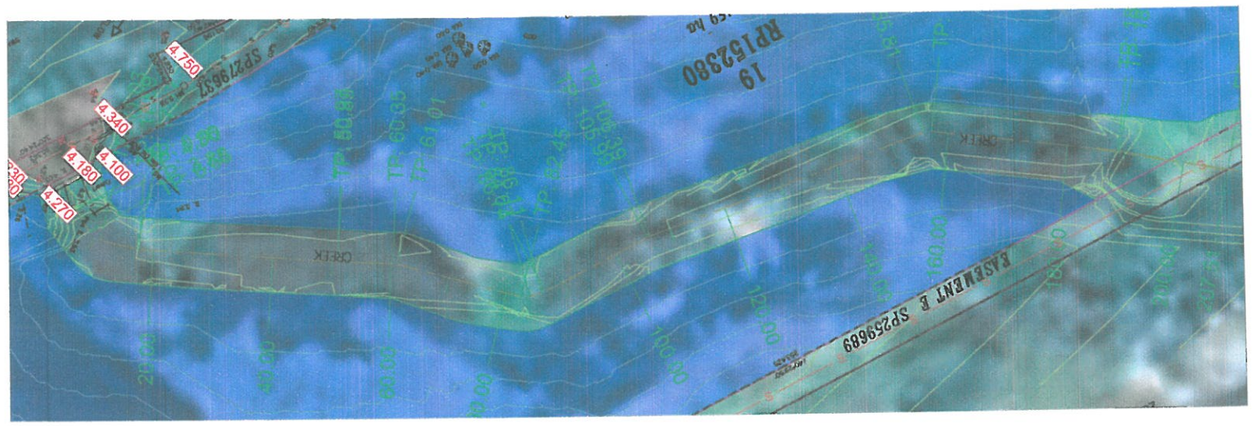
DRAWING REVISIONS

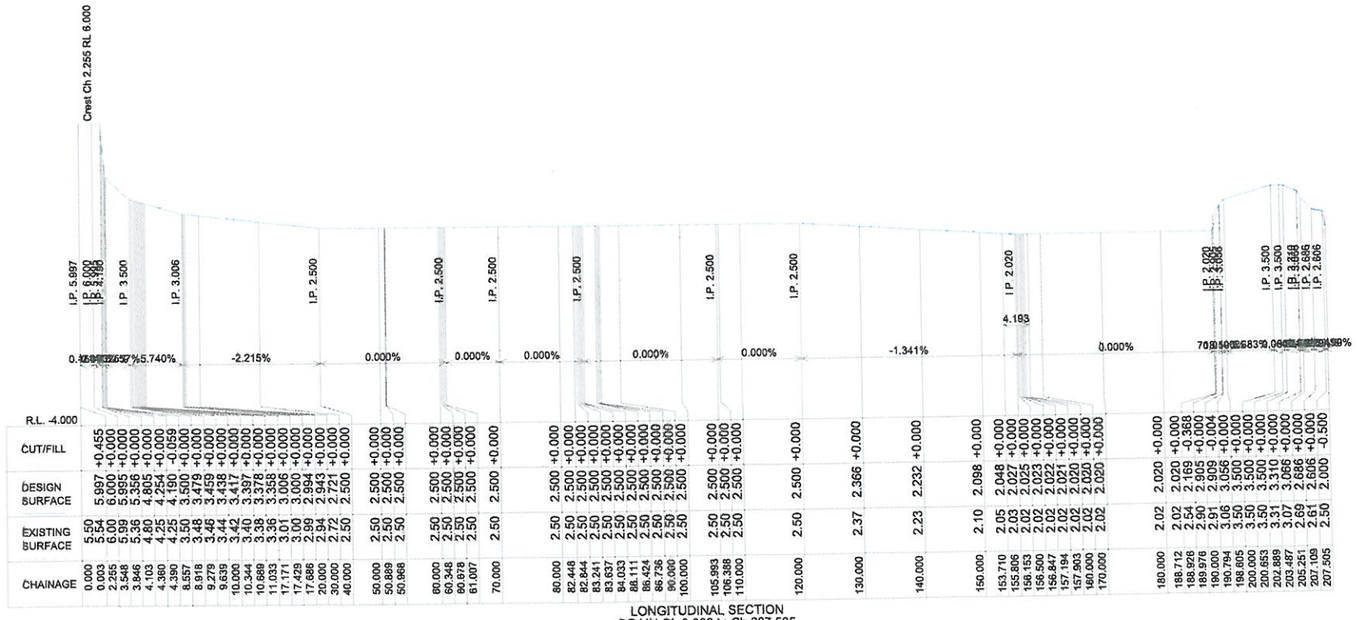
REV	BY	DATE	REVISION DESCRIPTION	CKD APP

© TEG Consulting Engineers Pty Ltd All Rights Reserved 2009.
Copyright in the whole and every part of this drawing belongs to TEG Consulting Engineers Pty Ltd and may not be used, sold, transferred, copied or reproduced in whole or in part in any manner or form or on any media, to any person other than by agreement with TEG Consulting Engineers Pty Ltd.
This document is produced by TEG Consulting Engineers Pty Ltd solely for the benefit of and use by the client in accordance with the terms of the retainer. TEG Consulting Engineers Pty Ltd disks not and shall not assume any responsibility or liability whatsoever to any third party arising out of any use or reliance by third party on the content of this document.

TEG CONSULTING ENGINEERS
Visit the BCBBC to visit our website for drawings, standards and other projects.
P: 07 4061 8276
M: 04 0321 3114
Email: admin@tegconsultingengineers.com.au
P.O. Box 49, Innisfail, QLD 4860
Web: www.edwardsgroup.com.au

CLIENT	R. SUGARS
	2 KARINGAL DRIVE PIMPAMA WORKS APPLICATION
DRAWN	SFE — DATE 21.06.19
DESIGNED	SFE — DATE
CHECKED	SDE — DATE
APPROVED	SFE — REG No. 6138 — DATE
DRAWING TITLE	PROPOSED EARTHWORKS
DRAWING STATUS	PRELIMINARY
DRAWING NUMBER	TEGCE19015 C02
A1	SCALES NTS — REV A





LONGITUDINAL SECTION
DRAIN Ch 0.000 to Ch 207.505
SCALES: HORIZONTAL 1:500 VERTICAL 1:100

DRAIN

Registered Professional Engineer 699704
Mr Sean F. Edwards
MIEAust CPEng (Civil/Structural)
RPEQ No 6138
NT-BPBCE: 26906ES
RBP (Vic) EC37110
Signature .....Date 15/07/19
Registered on the National Professional Engineers Register in the area of practice of **Civil / Structural**

REFERENCE DRAWINGS

DRAWING REVISIONS

REV	BY	DATE	REVISION DESCRIPTION	CKD	APP

TEG CONSULTING ENGINEERS

CLIENT: R. SUGARS

2 KARUNGAL DRIVE PIMPAMA
WORKS APPLICATION

DRAWN: ajb DATE
DESIGNED: ajb DATE
CHECKED DATE
APPROVED REG No DATE

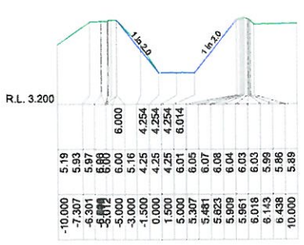
DRAWING TITLE
OPEN SWALE
(ORIGINAL CREEK ALIGNEMNT)
LONG SECTION
SHEET 1 of 1

DRAWING STATUS
PRELIMINARY

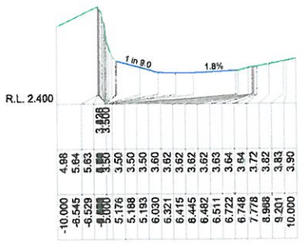
DRAWING NUMBER
TEGCE19015 C03

A1 | SCALES | REV A

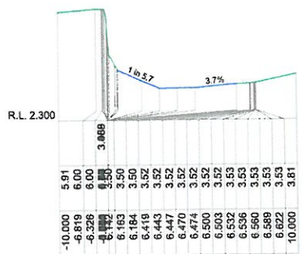
Registered Professional Engineer 699704
Mr Sean F. Edwards
MIEAust CPEng (Civil/Structural)
RPEQ No 6138
NT-BPBCE: 26906ES
RBP (Vic) EC37110
Signature ..... Date 15/07/19
Registered on the National Professional Engineers Register in the area of practice of Civil / Structural



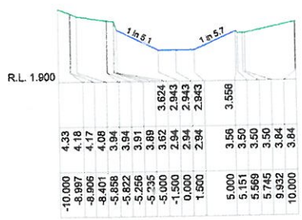
Ch 4.360
DRAIN



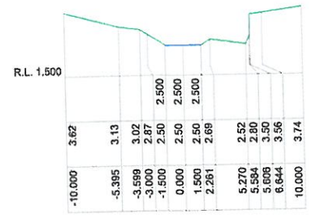
Ch 9.639
DRAIN



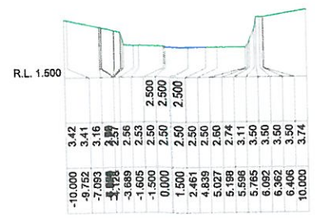
Ch 11.033
DRAIN



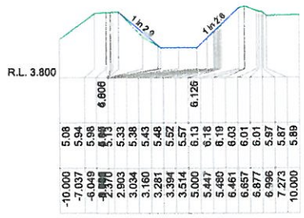
Ch 20.000
DRAIN



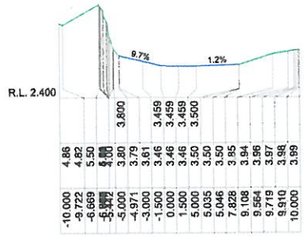
Ch 50.889
DRAIN



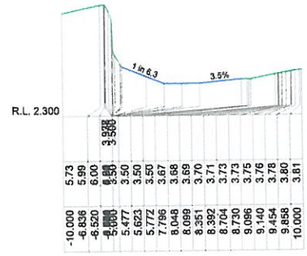
Ch 60.678
DRAIN



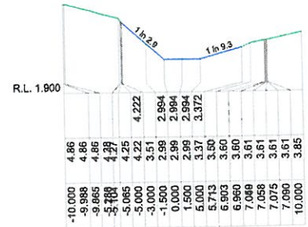
Ch 4.103
DRAIN



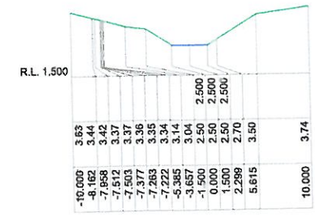
Ch 9.279
DRAIN



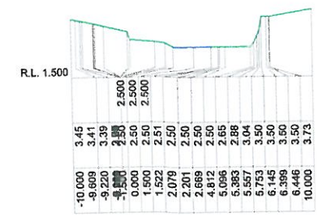
Ch 10.689
DRAIN



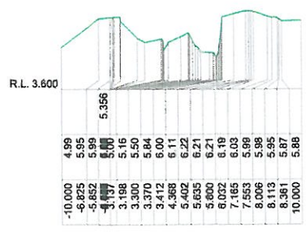
Ch 17.686
DRAIN



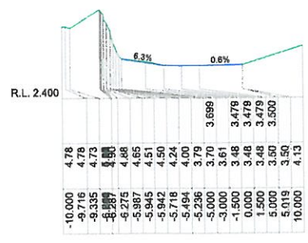
Ch 50.000
DRAIN



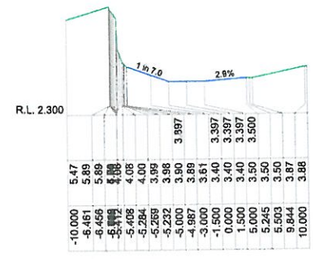
Ch 60.348
DRAIN



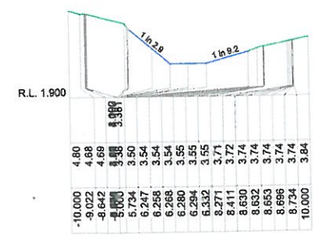
Ch 3.846
DRAIN



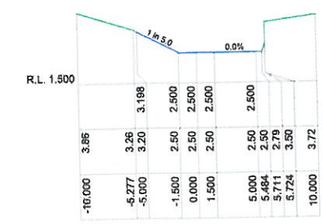
Ch 8.918
DRAIN



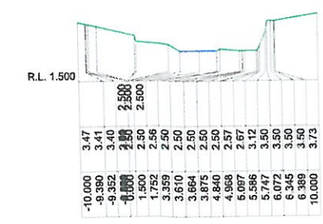
Ch 10.344
DRAIN



Ch 17.429
DRAIN



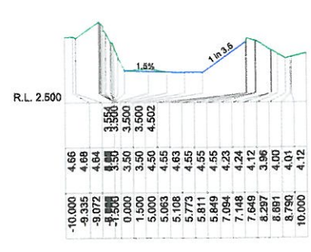
Ch 40.000
DRAIN



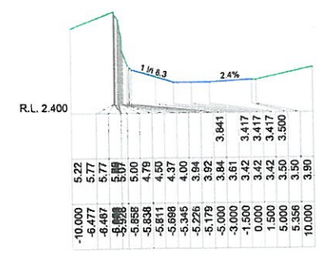
Ch 60.000
DRAIN



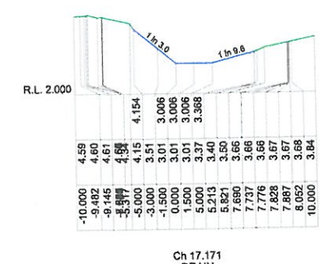
Ch 0.000
DRAIN



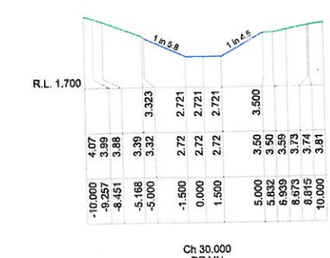
Ch 8.557
DRAIN



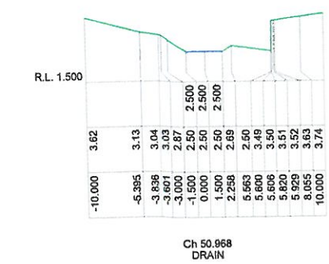
Ch 10.000
DRAIN



Ch 17.171
DRAIN



Ch 30.000
DRAIN



Ch 50.968
DRAIN

TEGCE19015_Base.dwg
REFERENCE DRAWINGS

DRAWING REVISIONS

REV	BY	DATE	REVISION DESCRIPTION	CKD	APP

© TEG Consulting Engineers Pty Ltd All Rights Reserved 2003.
Copyright in the whole and every part of this drawing belongs to TEG Consulting Engineers Pty Ltd and may not be used, sold, transferred, copied or reproduced in whole or in part in any manner or form or on any media, to any person other than by agreement with TEG Consulting Engineers Pty Ltd.
This document is produced by TEG Consulting Engineers Pty Ltd solely for the benefit of and use by the client in accordance with the terms of the retainer. TEG Consulting Engineers Pty Ltd does not and shall not assume any responsibility or liability whatsoever to any third party arising out of any use or reliance by third party on the content of this document.

TEG CONSULTING ENGINEERS
Email: admin@tegconsultingengineers.com.au
P.O. Box 49, Innisfail, QLD 4860
Web: www.advantagroup.com.au
P: 07 4061 9776
M: 04 0331 3914

Use the QCODE to visit our website for more details, contacts and other projects.

CLIENT
R. SUGARS

2 KARINGAL DRIVE PIMPAMA
WORKS APPLICATION

DRAWN	n/a	DATE
DESIGNED	n/a	DATE
CHECKED		DATE
APPROVED	REG No	DATE

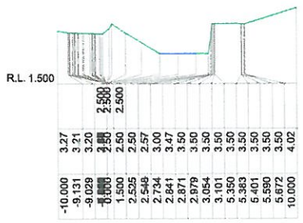
DRAWING TITLE
OPEN SWALE
CROSS SECTION
SHEET 1 of 4

CADFILE

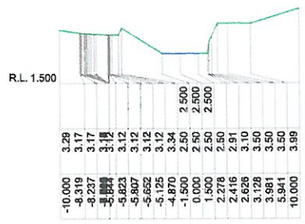
DRAWING STATUS
PRELIMINARY

DRAWING NUMBER
TEGCE19015 C04

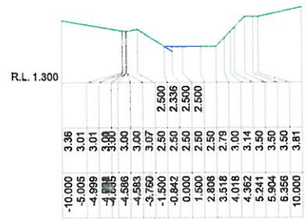
A1 | SCALES | REV A



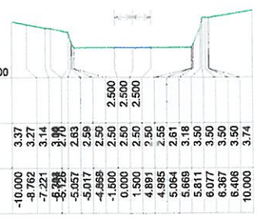
Ch 82.448
DRAIN



Ch 80.000
DRAIN



Ch 70.000
DRAIN



Ch 61.007
DRAIN

Registered Professional Engineer 699704
Mr Sean F. Edwards
MIEAust CPEng (Civil/Structural)
RPEQ No 6138
NT-BPBCE: 26906ES
RBP (Vic) EC37110
Signature .....Date..15/07/19
Registered on the National Professional Engineers Register in the area of practice of **Civil / Structural**

TEGCE19015_Base.dwg
REFERENCE DRAWINGS

DRAWING REVISIONS

REV	BY	DATE	REVISION DESCRIPTION	CKD APP

© TEG Consulting Engineers Pty Ltd All Rights Reserved 2009.
Copyright in the whole and every part of this drawing belongs to TEG Consulting Engineers Pty Ltd and may not be used, sold, transferred, copied or reproduced in whole or in part in any manner or form or on any media, to any person other than by agreement with TEG Consulting Engineers Pty Ltd.
This document is produced by TEG Consulting Engineers Pty Ltd solely for the benefit of and use by the client in accordance with the terms of the retainer. TEG Consulting Engineers Pty Ltd does not and shall not assume any responsibility or liability whatsoever to any third party arising out of any use or reliance by third party on the content of this document.

TEG CONSULTING ENGINEERS
Use the QCBC to visit our website for more details, contacts and other projects.
P. 07 4061 5276
M. 0. 0321 374
Email: admin@tegconsultingengineers.com.au
P.O. Box 49, Innisfail, QLD 4860
Web: www.edwardsgroup.com.au

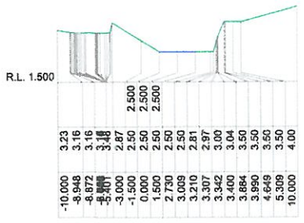
CLIENT:
R. SUGARS

2 KARINGAL DRIVE PIMPAMA
WORKS APPLICATION

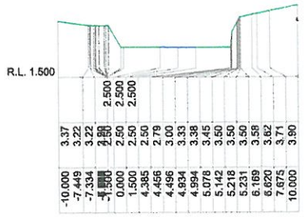
DRAWN — DATE
DESIGNED — DATE
CHECKED — DATE
APPROVED — REG No — DATE

DRAWING TITLE
PROPOSED DRAIN
CROSS SECTION
SHEET 2 of 4

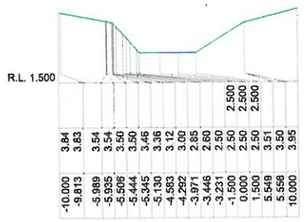
DRAWING STATUS
PRELIMINARY
DRAWING NUMBER
TEGCE19015 C05
A1 | SCALES | REV A



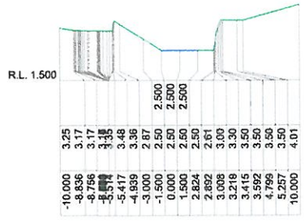
Ch 84.033
DRAIN



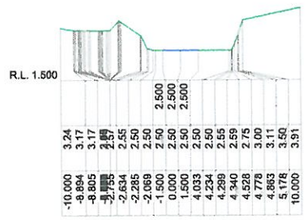
Ch 90.000
DRAIN



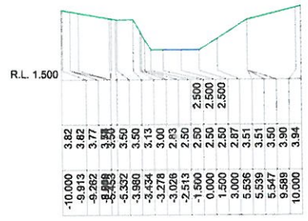
Ch 110.000
DRAIN



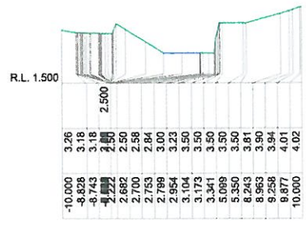
Ch 83.637
DRAIN



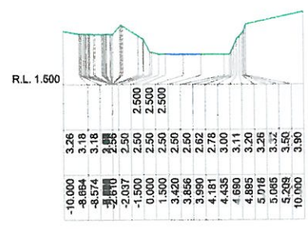
Ch 86.736
DRAIN



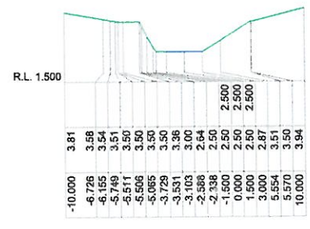
Ch 106.388
DRAIN



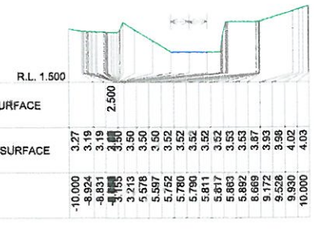
Ch 83.241
DRAIN



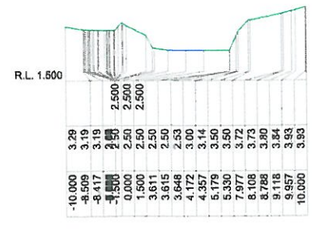
Ch 86.424
DRAIN



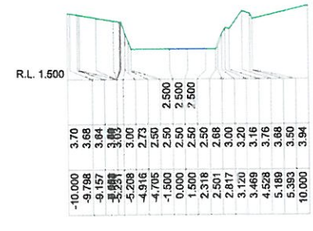
Ch 105.993
DRAIN



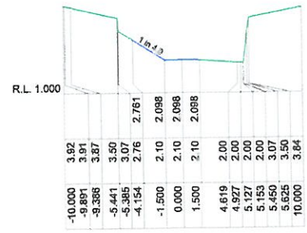
Ch 82.844
DRAIN



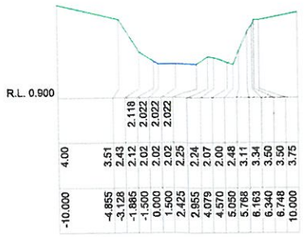
Ch 86.111
DRAIN



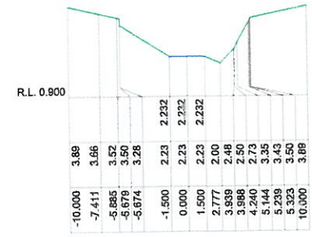
Ch 100.000
DRAIN



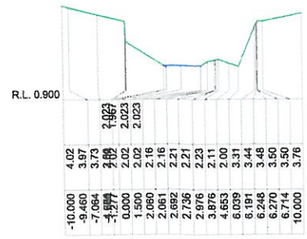
Ch 150.000
DRAIN



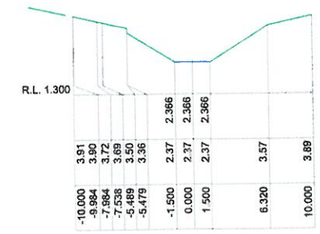
Ch 156.847
DRAIN



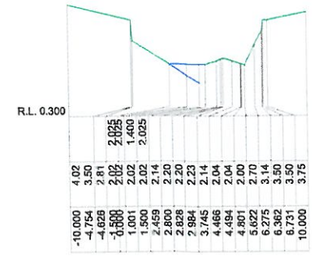
Ch 140.000
DRAIN



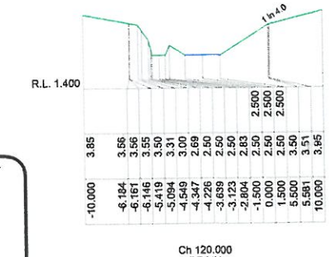
Ch 156.500
DRAIN



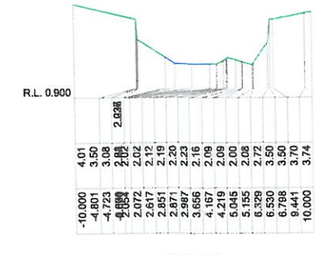
Ch 130.000
DRAIN



Ch 156.153
DRAIN



Ch 120.000
DRAIN



Ch 155.806
DRAIN

Registered Professional Engineer 699704
Mr Sean F. Edwards
MIEAust CPEng (Civil/Structural)
RPEQ No 6138
NT-BPBCE: 26906ES
RBP (Vic) EC37110
Signature .....Date 15/07/19
Registered on the National Professional Engineers Register in the area of practice of Civil / Structural

TEGCE19015_Base.dwg
REFERENCE DRAWINGS

DRAWING REVISIONS

REV	BY	DATE	REVISION DESCRIPTION	CKD	APP

© TEG Consulting Engineers Pty Ltd All Rights Reserved 2009.
Copyright in the whole and every part of the drawing belongs to TEG Consulting Engineers Pty Ltd and may not be used, sold, transferred, copied or reproduced in whole or in part in any manner or form or on any media, to any person other than by agreement with TEG Consulting Engineers Pty Ltd.
This document is produced by TEG Consulting Engineers Pty Ltd solely for the benefit of and use by the client in accordance with the terms of the retainer. TEG Consulting Engineers Pty Ltd does not and shall not assume any responsibility or liability whatsoever to any third party arising out of any use or reliance by third party on the content of this document.

TEG CONSULTING ENGINEERS
Use the QCODE to visit our website for more details, contacts and other projects.
Email: admin@tegconsultingengineers.com.au
P.O. Box 49, Ionyfail, QLD 4860
Web: www.edwardsgroup.com.au
P: 07 4041 8276
M: 04 0321 3714

CLIENT
R. SUGARS

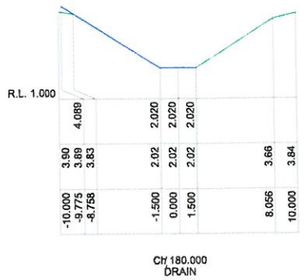
2 KARINGAL DRIVE PIMPAMA
WORKS APPLICATION

DRAWN	STB	DATE
DESIGNED	STB	DATE
CHECKED		DATE
APPROVED	REG No	DATE

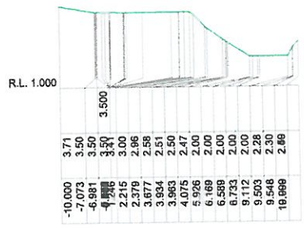
DRAWING TITLE
PROPOSED DRAIN
CROSS SECTIONS
SHEET 3 of 4

DRAWING STATUS
PRELIMINARY
DRAWING NUMBER
TEGCE19015 C06

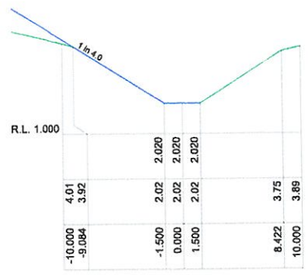
A1	SCALES	REV A



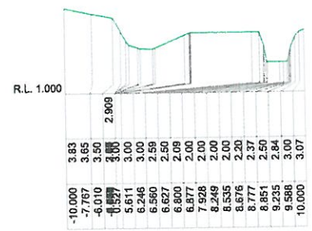
Ch 180.000
DRAIN



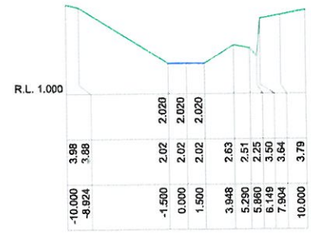
Ch 200.000
DRAIN



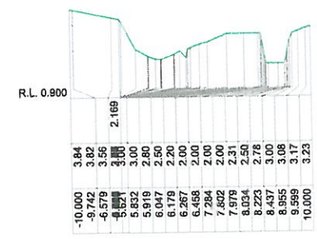
Ch 170.000
DRAIN



Ch 190.000
DRAIN



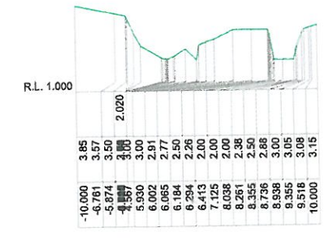
Ch 160.000
DRAIN



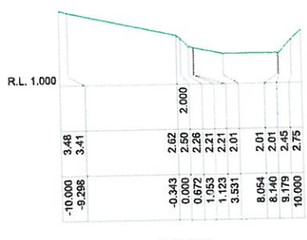
Ch 188.926
DRAIN



Ch 157.194
DRAIN



Ch 188.712
DRAIN



Ch 207.505
DRAIN

Registered Professional Engineer 699704
Mr Sean F. Edwards
MIEAust CPEng (Civil/Structural)
RPEQ No 6138
NT-BPBCE: 26906ES
RBP (Vic) EC37110
Signature .....Date 15/07/19
Registered on the National Professional Engineers Register in the area of practice of **Civil / Structural**

TEGCE19015_Base.dwg
REFERENCE DRAWINGS

DRAWING REVISIONS

REV	BY	DATE	REVISION DESCRIPTION	CKD	APP

© TEG Consulting Engineers Pty Ltd All Rights Reserved 2003.
Copyright in the whole and every part of this drawing belongs to TEG Consulting Engineers Pty Ltd and may not be used, sold, transferred, copied or reproduced in whole or in part in any manner or form or on any media, to any person other than by agreement with TEG Consulting Engineers Pty Ltd.
This document is produced by TEG Consulting Engineers Pty Ltd solely for the benefit of and use by the client in accordance with the terms of the retainer. TEG Consulting Engineers Pty Ltd does not and shall not assume any responsibility or liability whatsoever to any third party arising out of any use or reliance by third party on the content of this document.

TEG CONSULTING ENGINEERS
Use the QCODE to visit our website for more details, contacts and other projects.
P: 07 4061 5774
M: 04 0321 3774
Email: admin@tegconsultingengineers.com.au
P.O. Box 43, Innisfail, QLD 4860
Web: www.edwardsgroup.com.au

CLIENT
R. SUGARS

2 KARINGAL DRIVE PIMPAMA
WORKS APPLICATION

DRAWN		DATE
DESIGNED		DATE
CHECKED		DATE
APPROVED	REG No	DATE

DRAWING TITLE
PROPOSED DRAIN
CROSS SECTIONS
SHEET 4 of 4

DRAWING STATUS
PRELIMINARY

DRAWING NUMBER
TEGCE19015 C07

A1 | SCALES | REV A