

DOCUMENT TRANSMITTAL SCHEDULE

To: City of Gold Coast Council

Address : PO Box 5042
GCMC 9726

Attention: Development Assessment



PROJECT: OPERATIONAL WORKS APPLICATION FOR WATER MAIN RELOCATION Job No: 5941

The documents listed below are issued for your use as indicated in the "Issued for" section.
All revisions supersede any revision of the same document.

DATE OF ISSUE	Day	06																	
	Month	05																	
	Year	20																	

Distribution:																			
Attention	Issued To																		
CoGC COUNCIL	DEVELOPMENT ASSESSMENT	1xPDF																	

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Issued for:

A																			
P	- Preliminary	C	- Construction	T	-Tender														
A	- Approval	I	- Information	O	- Other														

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Issued Media

EP																			
D	- Disk	P	Print	CP	-CAD&PDF														
ED	- DWG/DXF	EP	- PDF																

Drg/Doc No.	Title		Revision Issued																	
5941 ENG SJW WAT 001	DRAWING INDEX AND LOCALITY PLAN		A																	
5941 ENG SJW WAT 002	GENERAL NOTES		A																	
5941 ENG SJW WAT 003	LEGEND		A																	
5941 ENG SJW WAT 004	STANDARD DETAILS PLAN SHEET 1 OF 2		A																	
5941 ENG SJW WAT 005	STANDARD DETAILS PLAN SHEET 2 OF 2		A																	
5941 ENG SJW WAT 006	EXISTING WATER MAIN LAYOUT SHEET 1 OF 2		A																	
5941 ENG SJW WAT 007	EXISTING WATER MAIN LAYOUT SHEET 2 OF 2		A																	
5941 ENG SJW WAT 008	EXISTING WATER MAIN LONGITUDINAL SECTION		A																	
5941 ENG SJW WAT 009	DESIGN WATER ALIGNMENT SHEET 1 OF 2		A																	
5941 ENG SJW WAT 010	DESIGN WATER ALIGNMENT SHEET 2 OF 2		A																	
5941 ENG SJW WAT 011	DESIGN WATER MAIN LONGITUDINAL SECTION		A																	
5941 ENG SJW WAT 012	DESIGN WATER PIPE SETOUT TABLE		A																	

STANDARD DRAWINGS																				
SEQ-WAT-1200-2	SEQ	EMBEDMENT & TRENCHFILL TYPICAL ARRANGEMENT	C																	
SEQ-WAT-1201-1	SEQ	STANDARD EMBEDMENT TYPICAL FLEXIBLE & RIGID PIPES	A																	
SEQ-WAT-1301-1	SEQ	TYPICAL VALVE AND HYDRANT INSTALLATION VALVE ARRANGEMENT	C																	
SEQ-WAT-1302-1	SEQ	TYPICAL VALVE AND HYDRANT INSTALLATION HYDRANT ARRANGEMENT	C																	
SEQ-WAT-1303-1	SEQ	TYPICAL VALVE AND HYDRANT INSTALLATION FUTURE EXTENSION INSTALLATION	B																	
SEQ-WAT-1306-1	SEQ	TYPICAL SURFACE FITTING INSTALLATION VALVE AND HYDRANT SURFACE BOXES SUPPORT AND SURROUND DETAILS	C																	

Please confirm that you have received all documents listed on the Document Register & Transmittal.

I hereby acknowledge receipt of the documents listed above.

Name & Company: _____ Signed: _____ Dated: / /

Project Manager: mitchell@gassman.com.au Sent by: mitchell@gassman.com.au

OPERATIONAL WORKS APPLICATION FOR WATER MAIN RELOCATION WORKS

DRAWING INDEX		
DRAWING No.	REV No.	TITLE
594I ENG SJW WAT 001	A	DRAWING INDEX AND LOCALITY PLAN
594I ENG SJW WAT 002	A	GENERAL NOTES
594I ENG SJW WAT 003	A	LEGEND
594I ENG SJW WAT 004	A	STANDARD DETAILS PLAN SHEET 1 OF 2
594I ENG SJW WAT 005	A	STANDARD DETAILS PLAN SHEET 2 OF 2
594I ENG SJW WAT 006	A	EXISTING WATER MAIN LAYOUT SHEET 1 OF 2
594I ENG SJW WAT 007	A	EXISTING WATER MAIN LAYOUT SHEET 2 OF 2
594I ENG SJW WAT 008	A	EXISTING WATER MAIN LONGITUDINAL SECTION
594I ENG SJW WAT 009	A	DESIGN WATER ALIGNMENT SHEET 1 OF 2
594I ENG SJW WAT 010	A	DESIGN WATER ALIGNMENT SHEET 2 OF 2
594I ENG SJW WAT 011	A	DESIGN WATER MAIN LONGITUDINAL SECTION
594I ENG SJW WAT 012	A	DESIGN WATER PIPE SETOUT TABLE

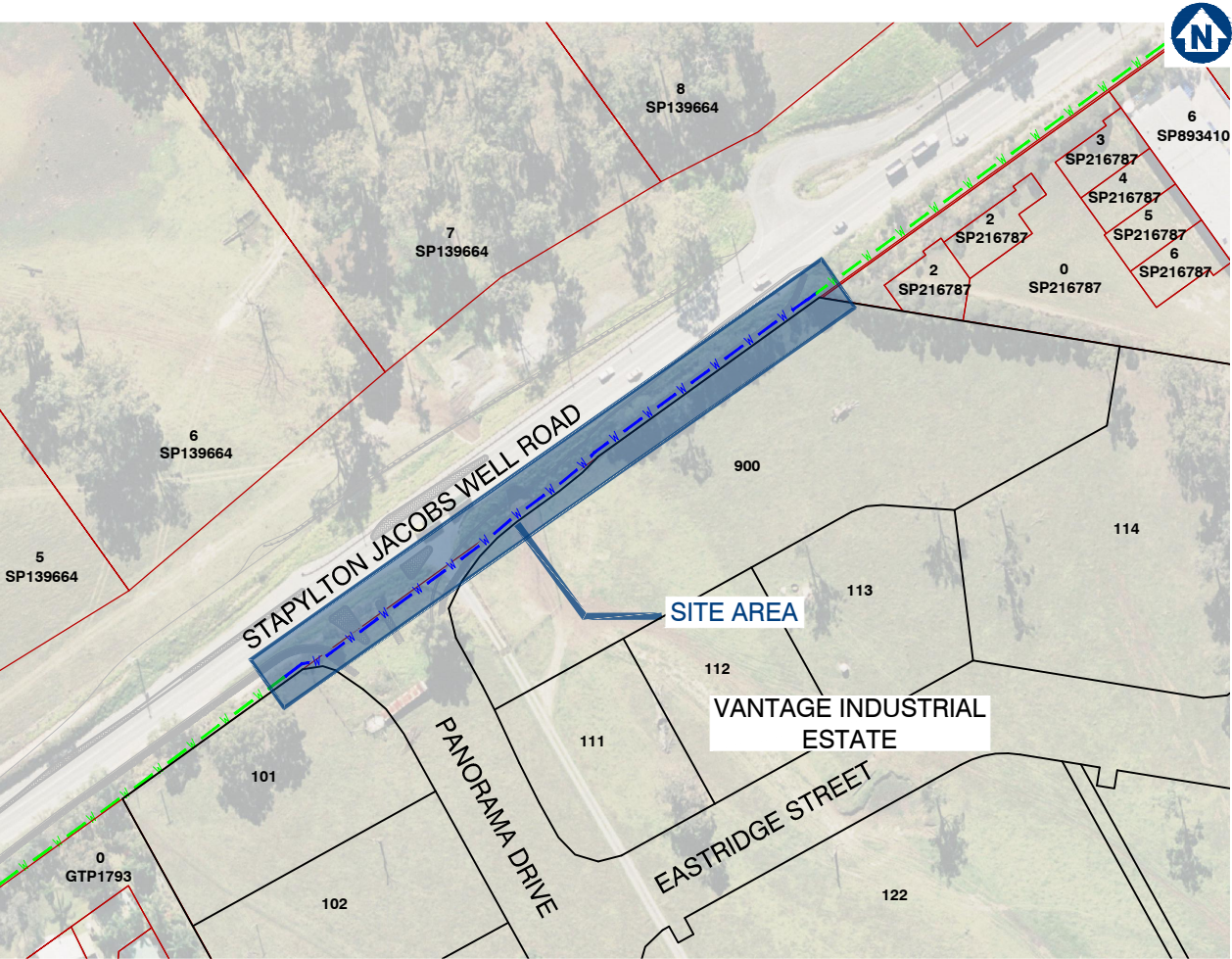
CLIENT

 **FRASERS
PROPERTY**

**FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.**

SITE ADDRESS
LOT 501 ON SP295994
60 STAPYLTON JACOBS WELL ROAD
STAPYLTON QLD 4207

STANDARD DRAWINGS			
DRAWING No.	REV No.	NETWORK	DRAWING TITLE
SEQ-WAT-I200-2	C	SEQ	EMBEDMENT & TRENCHFILL TYPICAL ARRANGEMENT
SEQ-WAT-I201-I	A	SEQ	STANDARD EMBEDMENT TYPICAL FLEXIBLE & RIGID PIPES
SEQ-WAT-I301-I	C	SEQ	TYPICAL VALVE AND HYDRANT INSTALLATION VALVE ARRANGEMENT
SEQ-WAT-I302-I	C	SEQ	TYPICAL VALVE AND HYDRANT INSTALLATION HYDRANT ARRANGEMENT
SEQ-WAT-I303-I	B	SEQ	TYPICAL VALVE AND HYDRANT INSTALLATION FUTURE EXTENSION INSTALLATION
SEQ-WAT-I306-I	C	SEQ	TYPICAL SURFACE FITTING INSTALLATION VALVE AND HYDRANT SURFACE BOXES SUPPORT AND SURROUND DETAILS



LOCALITY PLAN
SCALE 1: 1000 (A1)

1. CONTRACT DOCUMENTATION
ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE CONTRACT SPECIFICATION AND CoGC STANDARD DRAWINGS AND SPECIFICATIONS.
2. DATUM
LEVELS SHOWN ON THE PLANS ARE A.H.D.
3. SURVEY SETOUT
THE SURVEY SET OUT INFORMATION TO ALLOW THE CONTRACTOR TO ACCURATELY SET OUT THE WORKS HAS BEEN ESTABLISHED ON SITE BY THE PRINCIPAL'S SURVEYOR. THE CONTRACTOR IS NOT TO SCALE FROM THESE PLANS AS A MEANS OF OBTAINING SETOUT INFORMATION.
4. EXISTING SURVEY CONTROL STATIONS
IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT EXISTING SURVEY CONTROL STATIONS ARE NOT DISTURBED OR DAMAGED BY CONSTRUCTION ACTIVITIES. SHOULD THE CONTRACTOR IDENTIFY ANY CONFLICT BETWEEN EXISTING SURVEY CONTROL AND THE REQUIRED CONSTRUCTION ACTIVITIES THE SUPERINTENDENT IS TO BE NOTIFIED IMMEDIATELY.
5. EXISTING SERVICES
THE LOCATION OF EXISTING SERVICES WHERE SHOWN ON THE PLANS ARE INDICATIVE ONLY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE RELEVANT SERVICE AUTHORITIES TO ASCERTAIN THE EXACT LOCATION OF ALL EXISTING SERVICES PRIOR TO THE COMMENCEMENT OF WORKS AND TAKE ALL NECESSARY PRECAUTIONS TO AVOID DAMAGE TO THE EXISTING SERVICES.
6. SITE ACCESS
THE CONTRACTOR SHALL ONLY GAIN ACCESS TO THE SITE VIA ACCESS LOCATIONS APPROVED BY THE SUPERINTENDENT. FREEDOM OF ACCESS TO OTHER WORK AREAS ON THE SITE SHALL BE MAINTAINED AT ALL TIMES.
7. PROVISION FOR TRAFFIC
PROVISION FOR TRAFFIC ON LOCAL ROADS SHALL BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AND CoGC COUNCIL REQUIREMENTS.
8. WORK EXTENT
THE CONTRACTOR IS TO RESTRICT ACTIVITIES TO THOSE AREAS DESIGNATED AS WORKS AREAS UNDER THE CONTRACT. AT NO TIME IS THE CONTRACTOR TO ENTER ADJOINING PROPERTIES OR CONTRACT AREAS WITHOUT THE WRITTEN AUTHORISATION OF THE SUPERINTENDENT.
9. TESTING
ALL TESTING IS TO BE CARRIED OUT BY AN APPROVED N.A.T.A TESTING AUTHORITY IN ACCORDANCE WITH THE PROJECT SPECIFICATION AND REQUIREMENTS OF CoGC COUNCIL.
10. "AS CONSTRUCTED" SURVEY
"AS CONSTRUCTED" SURVEY SHALL BE CARRIED OUT BY THE PRINCIPAL'S SURVEYOR AS WORK PROCEEDS. THE CONTRACTOR IS TO PROVIDE ADEQUATE NOTICE TO THE PRINCIPAL'S SURVEYOR ON WHEN THIS IS REQUIRED TO ENSURE COMPLIANCE WITH THE REQUIREMENTS OF CoGC COUNCIL.
11. MAINTENANCE OF SITE CONDITION
AT THE COMPLETION OF WORKS THE SITE IS TO BE LEFT IN A CLEAN AND TIDY CONDITION TO THE SATISFACTION OF THE SUPERINTENDENT AND CoGC.

1. THE OBJECTIVES OF THE EROSION AND SEDIMENT CONTROL PROGRAM ARE:
 - a. ALLOW STORMWATER TO PASS THROUGH THE SITE IN A CONTROLLED MANNER AT NON-EROSIVE FLOW VELOCITIES.
 - b. MINIMISE SOIL EROSION FROM WATER AND WIND
 - c. MINIMISE ADVERSE EFFECTS OF SEDIMENT RUNOFF.
 - d. MINIMISE OR PREVENT ENVIRONMENTAL HARM ASSOCIATED WITH DISCHARGE FROM THE CONSTRUCTED SITE.
 - e. ENSURE THAT THE VALUE AND USE OF RESIDENTIAL AND INDUSTRIAL PROPERTIES ADJACENT TO THE DEVELOPMENT ARE NOT DIMINISHED AS A RESULT OF THE MIGRATION OF SEDIMENT FROM THE DEVELOPMENT.
2. THE EROSION AND SEDIMENT CONTROL PROGRAM SHALL COMPLY WITH THE ENVIRONMENTAL BEST ENGINEERING GUIDELINES FOR QUEENSLAND CONSTRUCTION SITES. THE CURRENT INSTITUTION OF ENGINEERS AUSTRALIA AND LOCAL AUTHORITY GUIDELINES. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO CONTROL EROSION AND DOWNSTREAM SEDIMENTATION DURING ALL STAGES OF CONSTRUCTIONS INCLUDING THE MAINTENANCE PERIOD. NOTWITHSTANDING THE FINISHED EARTHWORK DESIGN SHOWN ON THE DRAWINGS THE CONTRACTOR IS RESPONSIBLE TO IMPLEMENT ADDITIONAL SEDIMENT CONTROL MEASURES AND DEVICES USING BEST PRACTICES AS NECESSARY TO MINIMISE THE QUANTITY LEAVING THE SITE DURING CONSTRUCTION AND UPON COMPLETION OF EARTHWORKS.
3. THE CONTRACTOR IS TO FOLLOW CONSTRUCTION PHASE AS OUTLINED IN THE CONSTRUCTION SEQUENCE/SILT MANAGEMENT PROGRAM. ALL SEDIMENT CONTROL DEVICES SHALL BE MONITORED, CLEANED AND/OR REPLACED WHENEVER THE ACCUMULATED SEDIMENT REDUCE THE CAPACITY BY 50%. ALL PERIMETER BANK/SWALES SHALL HAVE UNINTERRUPTED POSITIVE GRADE TO AN OUTLET. AT ALL TIMES THE CONTRACTOR SHALL MONITOR THE PREVAILING WEATHER CONDITIONS AND PROTECT ANY DOWNSTREAM CONSTRUCTION AND GULLY INLETS. INLETS TO HAVE SILT PROTECTION IN ACCORDANCE WITH KERB INLET PROTECTION DETAIL AT LOCATIONS SHOWN OR AS INDICATED BY THE ENGINEER.
4. PRIOR TO THE COMMENCEMENT OF EARTHWORKS, THE CONTRACTOR IS TO CARRY OUT SOIL TESTING (IF REQUIRED BY SUPERINTENDENT) TO DETERMINE THE DISPERSIVE CHARACTERISTICS OF THE SOIL AND RESULTS TO BE GIVEN TO THE ENGINEERS SO THE FINALIZATION OF THE EROSION AND SEDIMENT CONTROL PLAN CAN BE COMPLETE.
5. TOPSOIL SHALL BE STRIPPED AND STOCKPILED IN LOCATIONS AGREED WITH THE SUPERINTENDENT. CLEARING OF SITE AND STOCKPILE AREAS TO BE AS DIRECTED BY THE SUPERVISING ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTROLLING DUST AT ALL TIMES INCLUDING WEEKENDS AND PUBLIC HOLIDAYS.
6. SUITABLE ACCESS SHALL BE PROVIDED TO ALLOW MAINTENANCE OF ALL SEDIMENT CONTROL DEVICES (IT IS TO BE NOTED THAT CLEARING SHALL ONLY OCCUR IN AREAS WHERE THERE IS NO OTHER ALTERNATIVE TO GAIN ACCESS TO THE LOCATION OF THE SEDIMENT CONTROL DEVICES). APPROVAL FOR REMOVAL OF PROTECTED SIZE VEGETATION MUST BE OBTAINED PRIOR TO CLEARING.

7. ROCK BUNDS TO BE PLACED AROUND ALL HEADWALLS DURING CONSTRUCTION.
8. 0.8m TURF IS TO BE PLACED BEHIND ON ALL BATTERS WITHIN PRIVATE OPEN SPACE STEEPER THAN 1:4 UNLESS OTHERWISE NOTED. THE EXTENT OF GRASSING SHALL BE DETERMINED BY THE ENGINEER AND SHALL BE SEEDED, AS SPECIFIED, WITHIN 7 DAYS OF FINAL TRIMMING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT GRASS STRIKE RATES ARE ACHIEVED AT ON AND OFF MAINTENANCE INSPECTION IN ACCORDANCE WITH COUNCIL REQUIREMENTS.
9. TURF IS TO BE PLACED FROM BACK OF KERB TO ROAD RESERVE BOUNDARY ON ALL ROADS AFTER EARTHWORKS ARE COMPLETE.
10. GEO-FABRIC LINING OF CHANNELS AND CHECK DAMS MAY BE REQUIRED SUBJECT TO THE SITE CONDITIONS.
11. FILLING AND OR MAINTENANCE OF EXISTING AND OR SEDIMENT BASINS MAY REQUIRE FLOCCULATION.
12. BATTERS WITHIN PUBLIC OPEN SPACE TO BE VEGETATED IN ACCORDANCE WITH THE APPROVED OPEN SPACE MANAGEMENT PLAN (OSMP).
13. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CLEAN OUT GPT'S, SEDIMENT FOREBAYS AND ALL OTHER SEDIMENT CONTROL DEVICES DURING CONSTRUCTION AND PRIOR BOTH ON AND OFF MAINTENANCE INSPECTIONS WITH C&C. THE CONTRACTOR SHALL ALLOW FOR THE COST OF THESE WORKS WITHIN THEIR SUBMITTED TENDER PRICE.

- a. ERECT SITE SIGNAGE, CONSTRUCT ENTRY AND EXIT POINT AS INDICATED CONTRACT VEHICLE WASH-DOWN AREA AND ASSOCIATED SILT MANAGEMENT DEVICES.
- b. CONSTRUCT SITE OFFICE AND STORAGE COMPOUND AREA
- c. ERECT SILT FENCE AT LOW POINTS OF THE SITE AS DEMONSTRATED
- d. ERECT TEMPORARY TREE PROTECTION FENCING FOR VEGETATION TO BE RETAINED IN ACCORDANCE WITH AN OPW (TREE CLEARING) APPROVAL OR IN ACCORDANCE WITH AS4970 PROTECTION OF TREES ON DEVELOPMENT SITE.
- e. CONSTRUCT ROCK CHECK DAMS AND SILT FENCE DOWN STREAM OF BASIN.
- f. CONSTRUCT BASIN TO FULL DEPTH.
- g. CONSTRUCT BALANCE OF BASIN IN CONJUNCTION WITH CLEARING AND BULK EARTHWORKS OPERATIONS.
- h. BASIN TO BE UTILISED AS A TEMPORARY SEDIMENT BASIN. DO NOT FILL IN FILTRATION MATERIAL UNTIL CONSTRUCTION OF DEVELOPMENT IS COMPLETE.

2. CLEARING AND BULK EARTHWORKS
THERE SHALL BE NO CLEARING OF PROTECTED SITE VEGETATION WITHOUT AN APPROVED SILT CLEARING PLAN WHICH SHALL BE IN ACCORDANCE WITH AS4970.
SILT FENCE, SAND BAGS AND EARTH RILLS WITHIN ROADS TO BE ERECTED AS INDICATED OR REQUIRED DURING CLEARING & EARTHWORKS.
SUPERINTENDENT TO CONFIRM THE EXTENT OF CLEARING PRIOR TO COMMENCEMENT OF WORKS.

3. CONSTRUCTION OF SEWER/ROOFWATER/STORMWATER/SERVICES
EXCAVATED MATERIAL TO BE PLACED ON HIGH SIDE OF TRENCH AND TO PROTECT PIPE WORK AND DIRECT SURFACE MATERIAL AWAY FROM EXCAVATIONS.
TOPSOIL AND GRASS SEED AREAS IN ALLOTMENTS IMMEDIATELY AFTER COMPLETING THE SEWER AND ROOFWATER DRAINAGE CONSTRUCTION.
DEPRESS GROUND AROUND TEMPORARY FIELD INLETS TO CREATE SILT POND.

4. CONSTRUCTION – SEDIMENT BASINS
SEDIMENT BASIN TO BE CONSTRUCTED TO THE EARTHWORK PROFILES SHOWN.
STORMWATER OUTLET PIPES TO BE TEMPORARY BLOCKED OFF UNTIL DECOMMISSIONING OF SEDIMENT BASIN (SUBSEQUENT TO CONSTRUCTION OF ALL STAGES).
PLACE SPOIL FROM SEDIMENT BASIN INTO ALLOCATED AREAS AS ENGINEERED FILL IN ACCORDANCE WITH THE STAGING ORDER.
SEDIMENT BASIN SHALL ONLY BE REMOVED AFTER APPROVAL BY SUPERINTENDENT AND COUNCIL.

5. CONSTRUCTION – STOCKPILING
TEMPORARY SILT FENCE TO BE ERECTED 5m FROM TOE OF BATTER ON LOW SIDE OF STOCKPILING.
STOCKPILE SITE TO BE CLEARED OF ADJACENT PROPERTY BOUNDARIES SO AS NOT TO CAUSE NUISANCE TO ADJOINING PROPERTIES.
NO STOCKPILES ARE TO BE LOCATED WITHIN THE DRIP ZONE OR STRUCTURAL ROOF ZONE OF ANY RETAINED VEGETATION.

6. CONSTRUCTION – ROADWORKS
SILT FENCES TO ALLOTMENTS TO BE ERECTED.
KERB INLET PROTECTION TO BE PROVIDED TO ALL GULLIES.

7. CONSTRUCTION – ALLOTMENTS
TOPSOIL AND SEED ALLOTMENTS.
SILT FENCES TO ALLOTMENTS TO BE RE-ERECTED.
COVERS TO GULLY GRATES TO BE REMOVED IF THE SUPERINTENDENT INDICATE THE GRASS STRIKE IS SUFFICIENT (80% WITHIN 30 CALENDAR DAYS OF FINAL ALLOTMENT TRIMMING).

8. POST CONSTRUCTION – ALLOTMENTS
TOPSOIL AND GRASS SEED ALL ALLOTMENTS.
COVERS TO GULLY GRATES TO BE REMOVED IF THE SUPERINTENDENT INDICATES THE GRASS STRIKE IS SUFFICIENT (80% WITHIN 30 CALENDAR DAYS OF FINAL ALLOTMENT TRIMMING).

9. POST CONSTRUCTION – BASIN
BASIN TO CONTINUE ACTING AS SEDIMENT BASIN UNTIL COMPLETION OF ALL STAGES.

10. POST CONSTRUCTION – ROAD RESERVES
TOPSOIL AND TURFING IS TO BE PROVIDED BEHIND KERB.

11. MAINTENANCE (PRE TO POST CONSTRUCTION)
THE SILT FENCES ARE TO BE INSPECTED WEEKLY.
ANY REPAIRS REQUIRED ARE TO BE EFFECTED IMMEDIATELY.
SILT AFTER RAIN IS TO BE CLEARED FROM STREETS AND ALLOTMENTS IMMEDIATELY AND CORRECTIVE ACTION TAKEN TO AVOID A RE-OCCURRENCE OF THE FAILURE.

PRIOR TO COMMENCING CONSTRUCTION OF THE DETENTION BASIN THE DIVERSION OF SURFACE WATER FROM THE PROPOSED WORK AREAS, USING MEASURES SUCH AS OPEN DRAINS/SUMPS, ARE REQUIRED TO AID IN SITE DE-WATERING. BASIN TO CONTINUE ACTING AS SEDIMENT BASIN UNTIL 85% OF CATCHMENT CONSTRUCTION IS COMPLETE.

THE FILLING FOR THE BASIN WALLS SHALL BE PLACED IN HORIZONTAL LAYERS OF 200mm THICKNESS AND COMPACTED TO DENSITY RATIO WITHIN THE RANGE 98% -102% STANDARD COMPACTION (AS 1289.5.1.). PLACEMENT MOISTURE CONTENT SHOULD BE WITHIN THE RANGE OMC -1% TO OMC -2% (WHERE OMC = OPTIMUM MOISTURE CONTENT FOR STANDARD COMPACTION). CONTRACTOR TO PROVIDE SAFETY FENCING TO BASIN DURING CONSTRUCTION AND APPROPRIATE SIGNAGE (PERMANENT OR TEMPORARY).

1. ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH CURRENT SOUTH EAST QUEENSLAND WATER SUPPLY CODE SPECIFICATIONS AND STANDARDS.
2. UNLESS SPECIFIED OTHERWISE ALL MATERIALS AND WORK SHALL COMPLY WITH THE RELEVANT AUSTRALIAN STANDARDS.
3. ADOPT LIP OF KERB OR SHOULDER OF ROAD AS PERMANENT LEVEL.
4. COVER ON MAINS FROM PERMANENT LEVEL TO BE AS SHOWN IN SEQ-WAT-1200-2.
5. CONDUITS TO BE INSTALLED IN ACCORDANCE WITH THE CITY OF GOLD COAST/GOLD COAST WATER STANDARD DRAWINGS.
6. A WATER METER SUPPLIED AT THE DEVELOPER'S COST, IS TO BE INSTALLED AT THE SERVICE POINT OF EACH LOT IN ACCORDANCE WITH THE STANDARD DRAWING FOR THE SEQ-SP.
7. ALL MATERIALS USED IN THE WORKS SHALL COMPLY WITH THE SEQ-SP'S ACCEPTED PRODUCTS AND MATERIALS LIST.
8. ALL CONCRETE FOOTPATHS TO BE CLEAR OF WATER MAINS.
9. TEST/CHLORINATION POINTS TO BE INSTALLED IN ACCORDANCE WITH STANDARD DRAWING NO.SEQ-WAT-1410-1.
10. 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 TO THE RETICULATION SYSTEM.

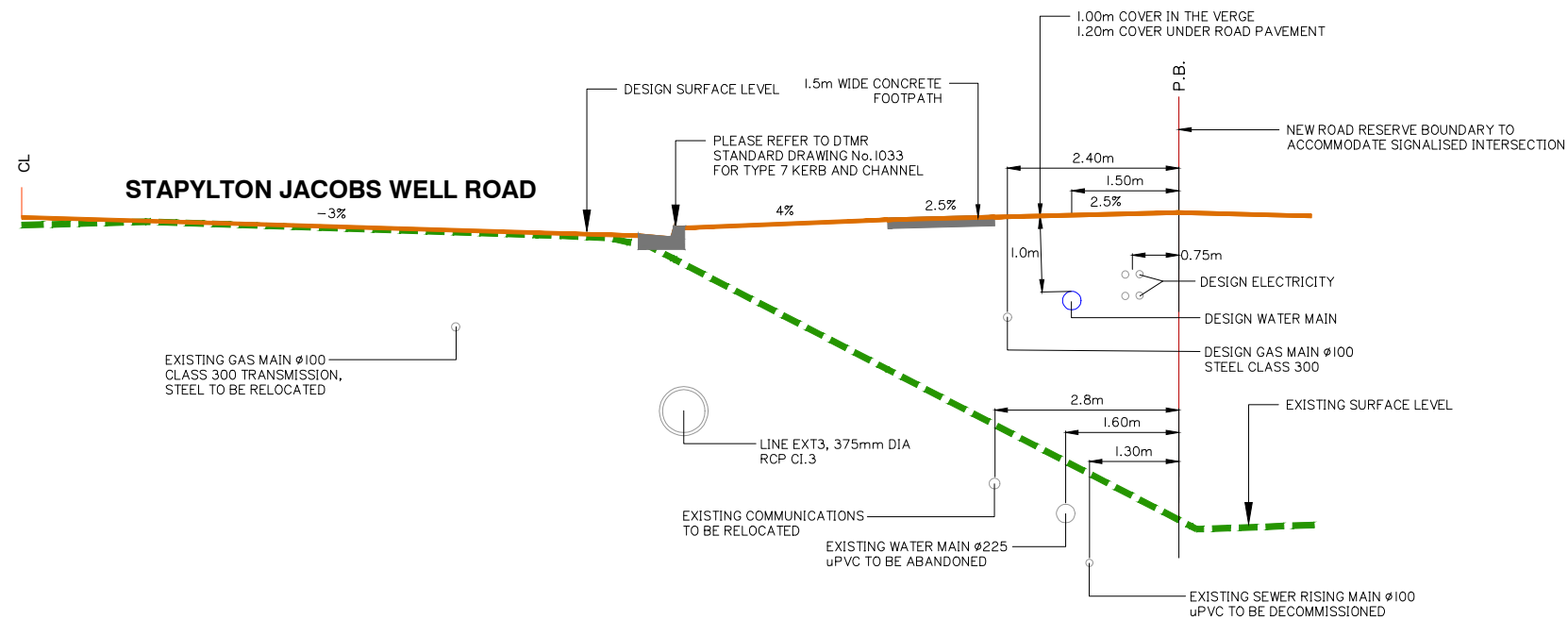
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Gold Coast & Logan 76 Business Street, Yatala QLD PO Box 392, Beenleigh 4207				
Client:				
		FRASERS PROPERTY		
FRASERS PROPERTY (AUSTRALIA) PTY. LTD.				
Project:				
VANTAGE YATALA				
Site Address:				
60 STAPYLTON JACOBS WELL ROAD, STAPYLTON QLD 4207				
THIS DRAWING IS INTENDED TO BE PRINTED IN COLOUR				
RPD:				
Lot:		501		
Plan:		SP295994		
Local Authority:		CITY OF GOLD COAST COUNCIL		
Level Datum:		AHD		
Meridian:		-		
Contour Interval:		-		
PSM:		-		
RL:		-		
ISSUED FOR APPROVAL NOT FOR CONSTRUCTION				
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ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES				
DRAWING TITLE				
GENERAL NOTES				
A	06-05-2020	ORIGINAL ISSUE	SK	MG
Issue	Date	Description	DRN	CHK
NOT APPLICABLE				
Scale at A1:		NA		
Designed:		IG		
Drafted:		SK		
Approved:		MG		
RPEQ:		16939		
Signed:				
Date:		06-05-2020		
Drawing No:		Rev. No:		
5941 ENG SJW WAT 002		A		

	OVERLAND FLOW PATH/SWALE
	CATCH DRAIN (NOT LINED)
	DIVERSION CHANNEL
	TABLE DRAIN
	STREAM INVERT
	CATCH DRAIN (CONCRETE LINED)
	SUBSOIL DRAINAGE
	SAWCUT
	SEDIMENT FENCE
	CHAINWIRE FENCE
	WOODEN FENCE
	BRIFEN WIRE SAFETY BARRIER
	PROPOSED GUARDRAIL
	RETAINING WALL (PILED)
	RETAINING WALL (WITH FOOTINGS)
	RETAINING WALL
	ROCKBLOCK RETAINING WALL
	TOP OF BATTER / BERM
	NOISE WALL
	EDGE OF VEGETATION
	PROPERTY LINE
	PROPERTY LINE WITH FENCE
	PROPOSED KERB, FOOTPATH
	CONTROL LINE / CENTER OF ROAD
	RAILWAY (MAJOR)
	RAILWAY (MINOR)
	EXISTING PROPERTY LINE
	EXISTING PROPERTY LINE WITH FENCE
	EXISTING KERB, FOOTPATH
	EXISTING GUARD RAIL
	EXISTING EDGE OF BITUMEN
	EXISTING RAILWAY (MAJOR)
	EXISTING RAILWAY (MINOR)
	LIMIT OF WORKS
	LIMIT OF SITE
	CATCHMENT BOUNDARY
	EXISTING CONTOURS
	DESIGN CONTOURS

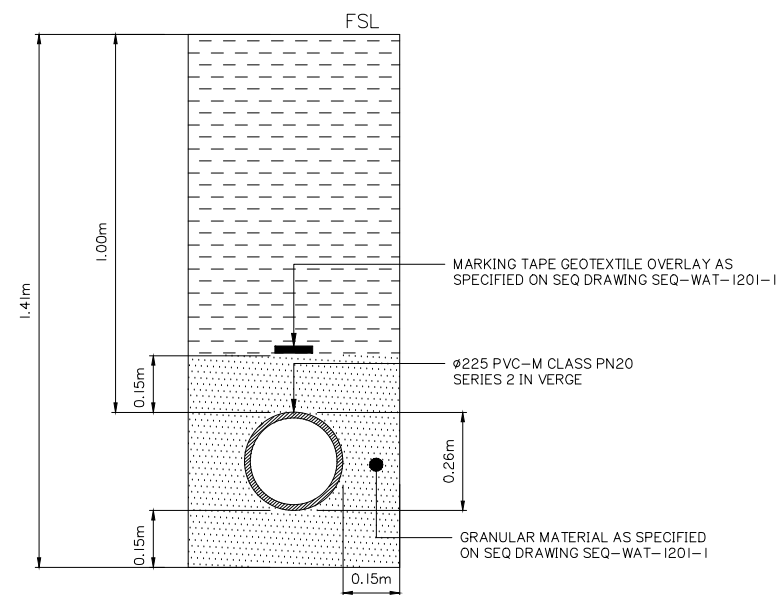
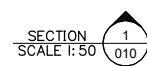
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	BK(A)		BARRIER KERB (A)
	BK(B)		BARRIER KERB (B)
	BK(G)		BARRIER KERB (G)
	MK(D)		MOUNTABLE KERB (D)
	SMK(C)		SEMI MOUNTABLE KERB (C)
	ER(E)		EDGE RESTRAINT (E)
	KER(F)		KERB EDGE RESTRAINT (F)
	RK&C(H)		ROLL TOP KERB & CHANNEL (H)
	BK&C(J)		BARRIER KERB & CHANNEL (J)
	ERH		KERB EDGE RESTRAINT (HIGH)
	ERL		KERB EDGE RESTRAINT (LOW)
	CS(K/L)		CHANNEL SECTION (K/L)
	PMB		PRECAST MOTOR BED
	DD		DISH DRAIN
	K&G		KERB AND GUTTER
	K&T		KERB AND TOE
	KO		KERB ONLY
	MK		MOUNTABLE KERB
	RK		ROLL KERB
			EXISTING SIGN
			PROPOSED SIGN
			PROPOSED ROAD EDGE GUIDE POST
	o BIN		EXISTING BIN
	□ PB		POST BOX
	□ T		TELEPHONE BOX
	□ TP		TELSTRA PIT
	□ MP		TELSTRA MARKER POST
	□ WM		WATER METER
	o VAP		WATER VALVE
			WATER TAP
			WATER HYDRANT
			WATER TEE
			WATER REDUCER
			WATER ENDCAP
			WATER CONNECTION
			SEWER MANHOLE
			SEWER RODDING END
			SEWER BEND
			SEWER MAINTENANCE SHAFT
			SEWER 'T' END
			SEWER SLUICE VALVE
			SEWER PIT
			SEWER PUMP STATION
			TEMPORARY SEWER PUMP STATION
			SEWER / STORMWATER PIT NO/LINE
			SETOUT POINT
			OFFSET PIT WITH GRATE
			IN LINE PIT WITH GRATE
			JUNCTION PIT
			LETTERBOX PIT
			GRATED INLET PIT
			MANHOLE
	MEDIUM		GULLY PIT (LIP INLINE) BARRIER KERB
	MEDIUM		GULLY PIT (LIP INLINE) BARRIER KERB
	MEDIUM		GULLY PIT (LIP INLINE) ROLL TOP KERB
	MEDIUM		GULLY PIT (LIP INLINE) ROLL TOP KERB
	MEDIUM		GULLY PIT (KERB INLINE) - GRADE
	MEDIUM		GULLY PIT (KERB INLINE) - SAG
			INFILTRATION TRENCH
			HEADWALL
			GROSS POLLUTANT TRAP
			STORMWATER CHAMBER
			BUND
	● PP		POWER POLE
	★ PP		POWER POLE WITH LIGHT
	★ LP		LIGHT POLE
	● SP		STAY POLE
			LIGHT POLE WITH EXTENSION
	□ E		ELECTRICAL INSPECTION BOX
	o		ELECTRICAL POLE

	TRAFFIC SIGNAL
	MAIN ROADS PIT
	TANGENT POINT
	KERB RETURN NO.
	PRAM RAMP
	GRAVEL ROCK CHECK DAM
	MESH & GRAVEL INLET FILTER
	STORMWATER INLET FILTER
	DIRECTION OF OVERLAND FLOW
	VEHICLE SHAKEDOWN
	GATE
	NOT IN SCOPE OF WORKS
	DEMOLITION
	PROPOSED CONCRETE FOOTPATH
	SCOUR PROTECTION
	TREES
	EARTHWORKS BATTER TADPOLE

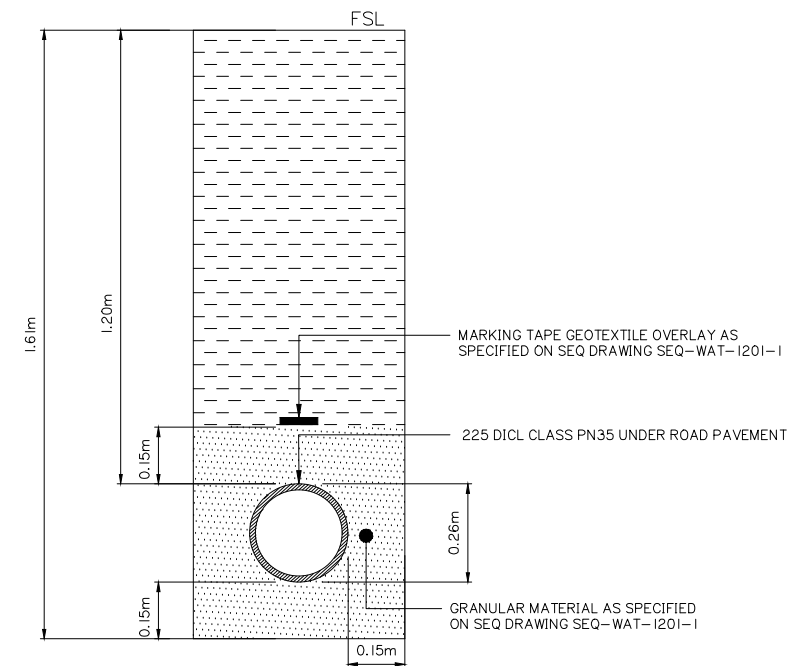


TYPICAL VERGE PROFILE FOR
STAPYLTON JACOBS WELL ROAD
SIGNALISED INTERSECTION



TYPICAL TRENCH DETAIL (TYPE C) IN
STAPYLTON JACOBS WELL ROAD VERGE

SCALE 1:10



TYPICAL TRENCH DETAIL (TYPE C) UNDER
SIGNALISED INTERSECTION PAVEMENT

SCALE 1:10

Client:



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VANTAGE YATALA

Site Address:

60 STAPYLTON JACOBS WELL
ROAD, STAPYLTON QLD 4207

THIS DRAWING IS INTENDED TO
BE PRINTED IN COLOUR

RPD:

Lot: 501
Plan: SP295994
Local Authority: CITY OF GOLD COAST
COUNCIL
Level Datum: AHD
Meridian: -
Contour interval: -
PSM: -
RL: -

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DRAWING TITLE

STANDARD DETAILS
PLAN SHEET 1 OF 2

Issue	Date	Description	SK	MG
A	06-05-2020	ORIGINAL ISSUE	SK	MG

SCALE IN METRES



1:50 (FULL SIZE A1)
1:100 (HALF SIZE A3)

Scale at A1: 1:50

Designed:	IG
Drafted:	SK
Approved:	MG
RPEQ:	16939
Signed:	
Date:	06-05-2020

Drawing No:
5941 ENG SJW WAT 004

Rev. No:
A

Client:



Project:

VANTAGE YATALA

Site Address:

60 STAPYLTON JACOBS WELL
ROAD, STAPYLTON QLD 4207

THIS DRAWING IS INTENDED TO
BE PRINTED IN COLOUR

RPD:

Lot: 501
Plan: SP295994
Local Authority: CITY OF GOLD COAST
Level Datum: AHD
Meridian: -
Contour Interval: -
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DRAWING TITLE

STANDARD DETAILS
PLAN SHEET 2 OF 2

NOT APPLICABLE

Scale at A1: NA

Designed: IG

Drafted: SK

Approved: MG

RPEQ: 16939

Signed:

Date: 06-05-2020

Drawing No: 5941 ENG SJW WAT 005 Rev. No: A

THRUST BLOCK LENGTH

PIPE DN.	FITTING	MAX. THRUST IN KN	THRUST BLOCK HEIGHT	STIFF CLAY 50 KPa.	VERY STIFF CLAY SANDY LOAM 100KPa.	SAND & GRAVEL HARDCLAY 150KPa.	SAND & GRAVEL CEMENTED WITH CLAY 200KPa.	ROCK 240KPa
100	90° BEND	19.8	400	1000	•	•	•	•
	60° BEND	14.0		700	•	•	•	•
	45° BEND	10.7		•	•	•	•	•
	22.5° BEND	5.5		•	•	•	•	•
	11.25° BEND	2.7		•	•	•	•	•
	TEE OR CLOSED END	14.0		700	•	•	•	•
150	90° BEND	41.7	450	1860	930	•	•	•
	60° BEND	29.5		1320	660	•	•	•
	45° BEND	22.6		1000	•	•	•	•
	22.5° BEND	11.5		•	•	•	•	•
	11.25° BEND	5.8		•	•	•	•	•
	TEE OR CLOSED END	29.5		1300	660	•	•	•
200	90° BEND	71.7	550	*	1300	870	650	•
	60° BEND	50.7		1850	920	•	•	•
	45° BEND	38.8		1410	700	•	•	•
	22.5° BEND	19.8		720	•	•	•	•
	11.25° BEND	9.9		•	•	•	•	•
	TEE OR CLOSED END	50.7		1850	920	•	•	•
225	90° BEND	89.4	600	*	1500	1000	750	•
	60° BEND	63.2		2110	1060	700	•	•
	45° BEND	48.4		1620	810	•	•	•
	22.5° BEND	24.6		830	•	•	•	•
	11.25° BEND	12.4		•	•	•	•	•
	TEE OR CLOSED END	63.2		210	1060	700	•	•
250	90° BEND	109.0	650	*	1700	1120	840	700
	60° BEND	77.1		2400	1200	800	•	•
	45° BEND	59.0		1820	910	•	•	•
	22.5° BEND	30.1		930	•	•	•	•
	11.25° BEND	15.1		•	•	•	•	•
	TEE OR CLOSED END	77.1		2400	1200	800	•	•
300	90° BEND	158.6	700	*	2270	1510	1140	950
	60° BEND	112.2		*	1600	1070	800	670
	45° BEND	85.9		2453	1230	820	•	•
	22.5° BEND	43.8		1250	630	•	•	•
	11.25° BEND	22.0		630	•	•	•	•
	TEE OR CLOSED END	112.2		*	1600	1070	800	750

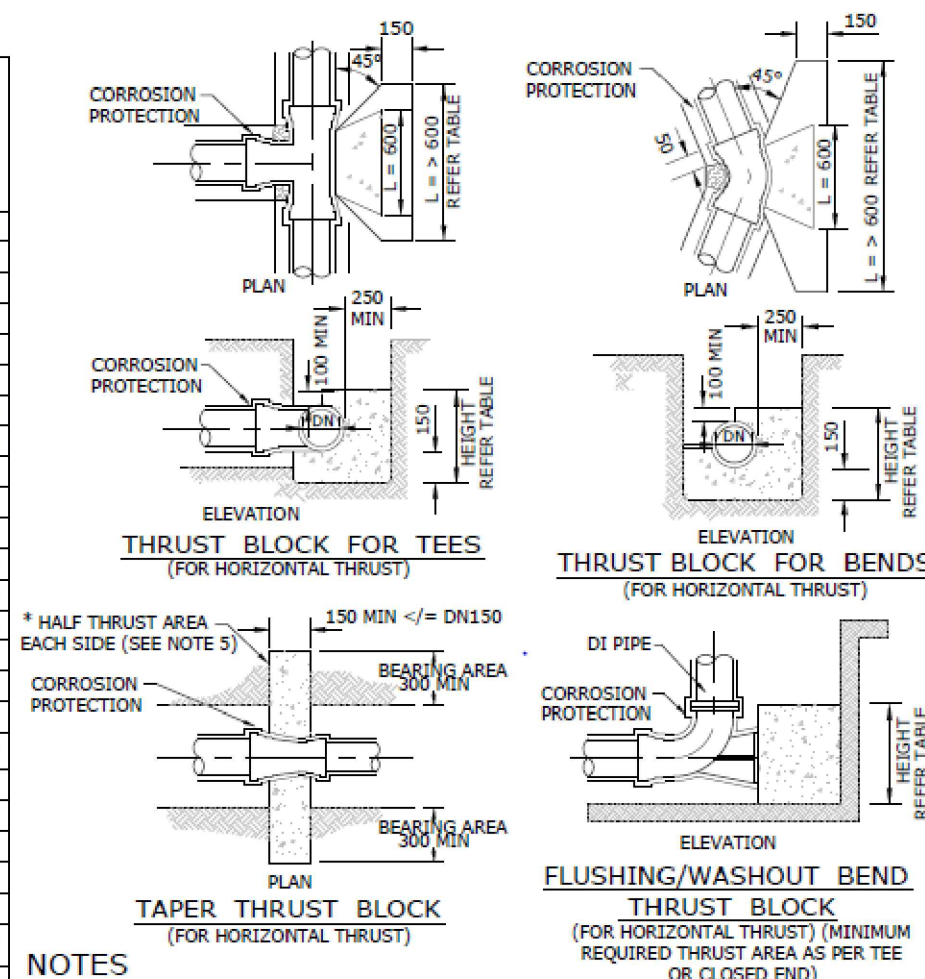
THRUST BLOCK DIMENSIONS - 1200kPa

• INDICATES BLOCK LENGTH OF 600

* = SPECIAL DESIGN

THRUST BLOCK LENGTH

PIPE DN.	FITTING	MAX. THRUST IN KN	THRUST BLOCK HEIGHT	STIFF CLAY 50 KPa.	VERY STIFF CLAY SANDY LOAM 100KPa.	SAND & GRAVEL HARDCLAY 150KPa.	SAND & GRAVEL CEMENTED WITH CLAY 200KPa.	ROCK 240KPa
375	90° BEND	241.9	800	*	*	2220	1510	1260
	60° BEND	171.0		*	2140	1430	1070	890
	45° BEND	130.9		*	1640	1090	820	680
	22.5° BEND	66.7		1670	840	•	•	•
	11.25° BEND	33.5		840	•	•	•	•
	TEE OR CLOSED END	171.0		*	2140	1430	1070	890
450	90° BEND	342.6	900	*	*	2540	1900	1590
	60° BEND	242.3		*	2690	1800	1350	1120
	45° BEND	185.4		*	2060	1375	1030	860
	22.5° BEND	94.5		2100	1050	700	•	•
	11.25° BEND	47.5		1060	•	•	•	•
	TEE OR CLOSED END	242.3		*	2690	1800	1350	1120
500	90° BEND	418	1000	*	*	2790	2090	1740
	60° BEND	295.6		*	*	1970	1480	1230
	45° BEND	226.2		*	2260	1510	1130	940
	22.5° BEND	115.3		2310	1150	770	•	•
	11.25° BEND	58.0		1160	•	•	•	•
	TEE OR CLOSED END	295.5		*	*	1970	1480	1230
600	90° BEND	593	1100	*	*	*	2700	2250
	60° BEND	419		*	*	2540	1910	1590
	45° BEND	320		*	2920	1950	1460	1220
	22.5° BEND	164		2980	1490	990	750	620
	11.25° BEND	82.2		1500	750	•	•	•
	TEE OR CLOSED END	419		*	*	2540	1910	1590
750	90° BEND	909	1300	*	*	*	*	2920
	60° BEND	643		*	*	*	2480	2060
	45° BEND	492		*	*	2530	1890	1580
	22.5° BEND	251		*	1930	1290	970	810
	11.25° BEND	126.1		1940	970	650	•	•
	TEE OR CLOSED END	643		*	*	*	2480	2060
900 (Ø960 MSCL)	90° BEND	1,228	1500	*	*	*	*	3420
	60° BEND	868		*	*	*	2900	2420
	45° BEND	664		*	*	2960	2220	1850
	22.5° BEND	339		*	2260	1510	1130	940
	11.25° BEND	170		2270	1140	760	•	•
	TEE OR CLOSED END	868		*	*	*	3300	2650

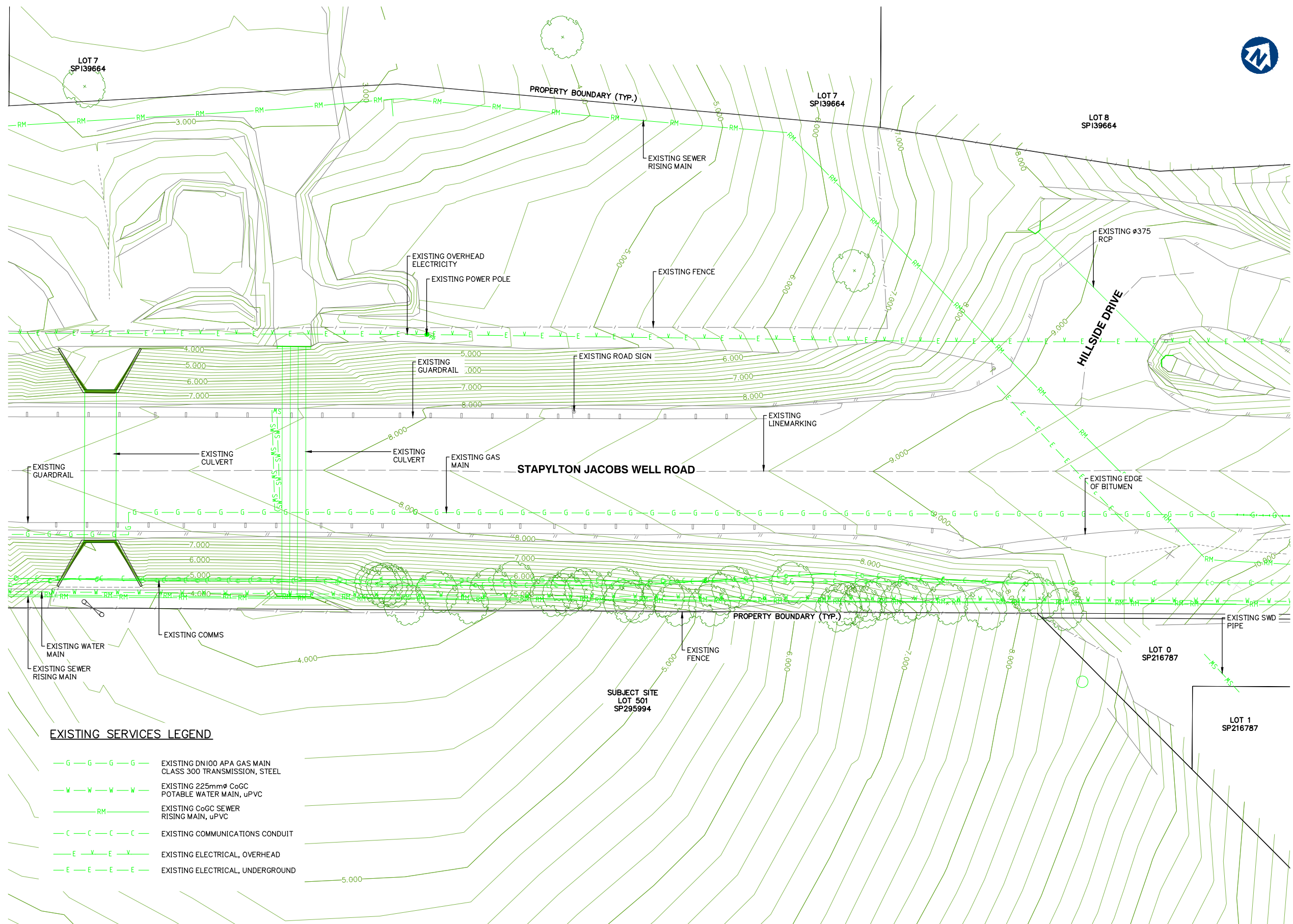


NOTES

- ALL DIMENSIONS IN MILLIMETRES UNLESS OTHERWISE SPECIFIED.
- CAST THE THRUST AREA OF ALL THRUST BLOCKS AGAINST A CLEAN FACE OF UNDISTURBED NATURAL SOIL. SOIL CLASSIFICATIONS USED ON THIS DRAWING ARE EXPLAINED IN SEQ-WAT-1200-1. DO NOT USE STANDARD THRUST BLOCKS AS SPECIFIED IN THIS DRAWING IN SOILS WITH < 50kPa BEARING CAPACITY EG;
 - VERY SOFT, SOFT OR FIRM CLAY,
 - LOOSE CLEAN SAND,
 - UNCOMPACTED FILL OR REFUSE,A GEOTECHNICAL ASSESSMENT AND INDIVIDUAL DESIGN IS REQUIRED FOR THESE SOILS. THRUST BLOCKS NOT TO INTERFERE WITH OTHER SERVICES OR BE LOCATED OUTSIDE THE WATER MAIN ALLOCATION WITHOUT WATER AGENCY APPROVAL.
- ALL CONCRETE GRADE N20. TABLE OF DIMENSIONS BASED ON REQUIRED TEST PRESSURE OF 1200kPa AND ACTUAL DI CL PIPE DIAMETERS.
- THE MINIMUM THRUST AREA FOR TAPER THRUST BLOCKS TO BE EQUAL TO THE DIFFERENCE BETWEEN THE THRUST AREAS FOR TEES OR CLOSED ENDS OF EQUIVALENT DIAMETER TO THOSE EACH SIDE OF TAPER. THE DETAIL SHOWN IS FOR < OR = DN150 MAINS. FOR LARGER MAINS, THE TAPER THRUST BLOCK SHALL BE REINFORCED AND OF A SIZE AS SHOWN IN SEQ-WAT-1206-1.
- FOR DOWNWARD VERTICAL THRUST, THE ALLOWABLE BEARING PRESSURES FOR VARIOUS SOILS MAY BE TAKEN AS TWICE THAT FOR HORIZONTAL THRUST SHOWN.
- WHEN POURING CONCRETE AGAINST FITTINGS PLACE A MEMBRANE OF POLYETHYLENE, PVC OR FELT BETWEEN THE FITTING AND CONCRETE TO PREVENT DAMAGE TO THE FITTING. PIPE JOINTS TO BE CLEAR OF CONCRETE.
- CONCRETE THRUST BLOCK ANCHORS FOR VALVES TO BE AS DETAILED ON SEQ-WAT-1206-1.

IN ACCORDANCE WITH SEQ-WAT-1205-1

Drawing No:	Rev. No:
5941 ENG SJW WAT 006	A



- EXISTING COMMUNICATIONS EXISTING SEWER RISING MAIN AND EXISTING WATER MAIN SHOWN ON THIS DRAWING ARE BASED ON A POTHOLED ALIGNMENT. HOWEVER, ALL DEPTHS AREA BASED ON ASSUMED MINIMUM COVER. ADDITIONAL SERVICES LOCATION POTHOLING IS CURRENTLY BEING UNDERTAKEN TO IMPROVE THE LOCATION ACCURACY OF THE DEPTH OF THESE SERVICES WITHIN THE STATE ROAD CORRIDOR.



AI HORZ SCALE: 1 : 400
AI VERT SCALE: 1 : 40



Project:

VANTAGE YATALA

Site Address:
60 STAPYLTON JACOBS WELL
ROAD, STAPYLTON QLD 4207

THIS DRAWING IS INTENDED TO
BE PRINTED IN COLOUR

Lot: 501
Plan: SP295994
Local Authority: CITY OF GOLD COAST
COUNCIL
Level Datum: AHD
Meridian: -
Contour Interval: -
PSM: -
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DRAWING TITLE

EXISTING WATER MAIN LONGITUDINAL SECTION

A	06-05-2020	ORIGINAL ISSUE	SK	MO
Issue	Date	Description	DRN	CH

Scale 1:400 - Lengths are in METRES.

HOZ:

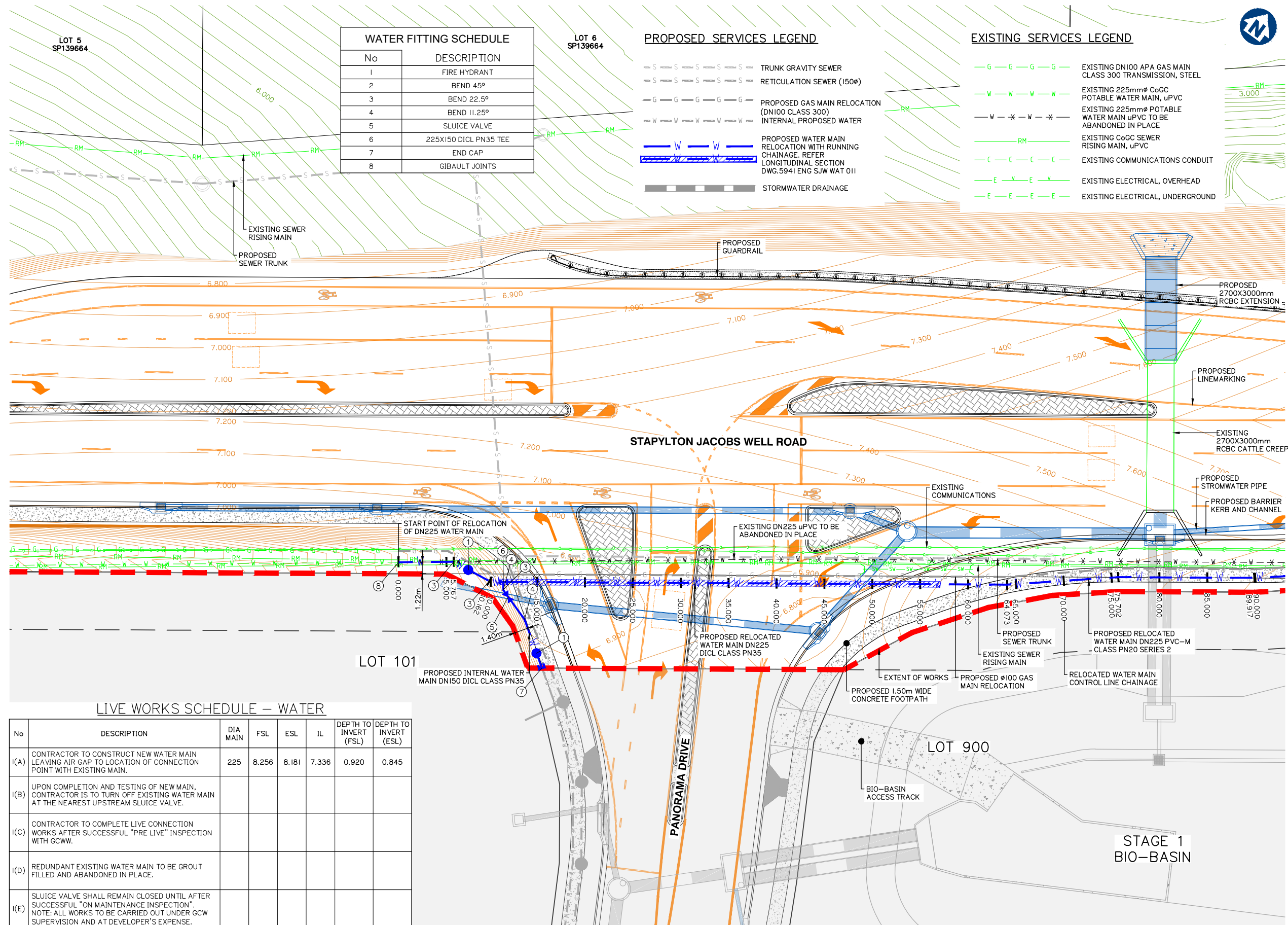
VERT: Scale 1:40 - Lengths are in Metres.

Scale at A1: AS SHOWN

Designed:	IG
Drafted:	SK
Approved:	MG
RPEQ:	16939
Signed:	
Date:	06-05-2020

Drawing No:	Rev. No:
5941 ENG SJW WAT 008	A

- ABANDON EXISTING WATER MAIN FOLLOWING LIVE CONNECTION WORKS (177.071m LENGTH).
- WATER MAIN RELOCATION ALONG STAPYLTON JACOBS WELL ROAD TO BE DN225 PVC-M CLASS PN20 SERIES 2 AND TO BE DN225 DICL CLASS PN35 UNDER ROADS. 2.0m MAX DEPTH.



No	DESCRIPTION	DIA MAIN	FSL	ESL	IL	DEPTH TO INVERT (FSL)	DEPTH TO INVERT (ESL)
I(A)	CONTRACTOR TO CONSTRUCT NEW WATER MAIN LEAVING AIR GAP TO LOCATION OF CONNECTION POINT WITH EXISTING MAIN.	225	8.256	8.181	7.336	0.920	0.845
I(B)	UPON COMPLETION AND TESTING OF NEW MAIN, CONTRACTOR IS TO TURN OFF EXISTING WATER MAIN AT THE NEAREST UPSTREAM SLUICE VALVE.						
I(C)	CONTRACTOR TO COMPLETE LIVE CONNECTION WORKS AFTER SUCCESSFUL "PRE LIVE" INSPECTION WITH GCWW.						
I(D)	REDUNDANT EXISTING WATER MAIN TO BE GROUT FILLED AND ABANDONED IN PLACE.						
I(E)	SLUICE VALVE SHALL REMAIN CLOSED UNTIL AFTER SUCCESSFUL "ON MAINTENANCE INSPECTION". NOTE: ALL WORKS TO BE CARRIED OUT UNDER GCW SUPERVISION AND AT DEVELOPER'S EXPENSE.						

Client:



Project:

VANTAGE YATALA

Site Address:

60 STAPYLTON JACOBS WELL
ROAD, STAPYLTON QLD 4207

THIS DRAWING IS INTENDED TO
BE PRINTED IN COLOUR

RPD:

Lot:	501
Plan:	SP295994
Local Authority:	CITY OF GOLD COAST COUNCIL
Level Datum:	AHD
Meridian:	-
Contour Interval:	-
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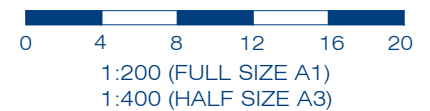
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DRAWING TITLE

DESIGN WATER
ALIGNMENT SHEET 1 OF 2

A	06-05-2020	ORIGINAL ISSUE	SK	MG
Issue	Date	Description	DRN	CHK

SCALE IN METRES



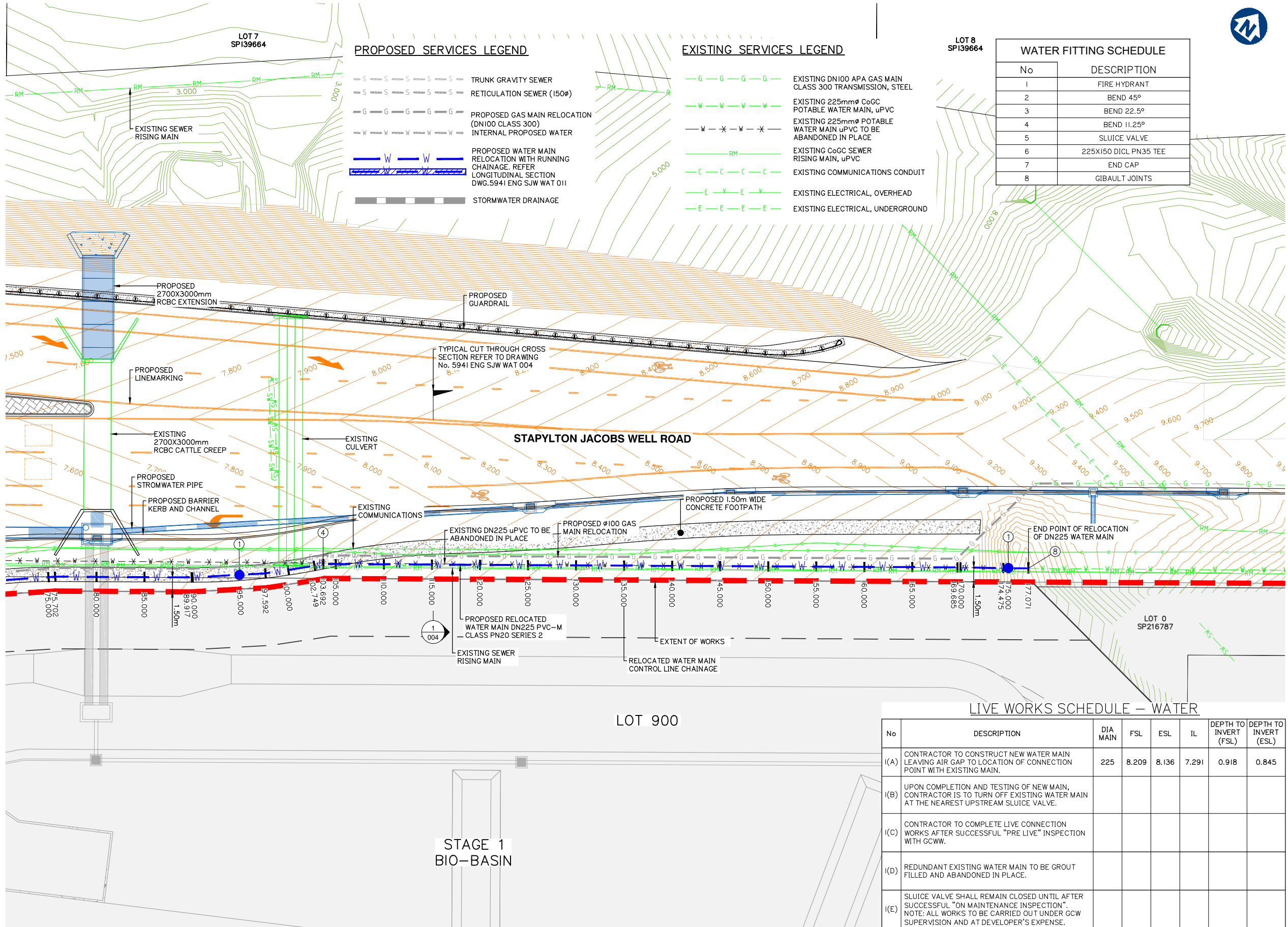
Scale at A1: 1:200

Designed:	IG
Drafted:	SK
Approved:	MG
RPEQ:	16939
Signed:	
Date:	06-05-2020

Drawing No:	Rev. No:
5941 ENG SJW WAT 009	A

NOTE:

- ABANDON EXISTING WATER MAIN FOLLOWING LIVE CONNECTION WORKS (177.071m LENGTH).
- WATER MAIN RELOCATION ALONG STAPYLTON JACOBS WELL ROAD TO BE DN225 PVC-M CLASS PN20 SERIES 2 AND TO BE DN225 DICL CLASS PN35 UNDER ROADS. 2.0m MAX DEPTH.



Client:



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VANTAGE YATALA

Site Address:

60 STAPYLTON JACOBS WELL
ROAD, STAPYLTON QLD 4207

THIS DRAWING IS INTENDED TO
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RPD:

Lot: 501
Plan: SP295994
Local Authority: CITY OF GOLD COAST
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DRAWING TITLE

DESIGN WATER
ALIGNMENT SHEET 2 OF 2

Issue	Date	Original Issue Description	SK DRN	MDL CHK
A	06-05-2020	ORIGINAL ISSUE	SK	MDL

SCALE IN METRES



1:200 (FULL SIZE A1)
1:400 (HALF SIZE A3)

Scale at A1: 1:200

Designed: IG

Drafted: SK

Approved: MG

RPEQ: 16939

Signed:

Date: 06-05-2020

Drawing No: 5941 ENG SJW WAT 010
Rev. No: A

AI HORZ SCALE: 1: 400
AI VERT SCALE: 1: 40

DESIGN DN225 WATER MAIN RELOCATION –SETOUT TABLE					
PT	CHAINAGE	EASTING	NORTHING	PIPE INVERT LEVEL	BEARING
IP 1	0.000	2167.743	7004.961	7.336	53°33’03.94”
	5.000	2171.765	7007.931	7.096	53°33’03.94”
IP 2	5.767	2172.382	7008.387	7.059	
	10.000	2176.579	7008.935	6.106	82°33’28.07”
IP 3	10.162	2176.740	7008.956	6.069	
	15.000	2180.668	7011.779	5.246	54°17’56.01”
	20.000	2184.729	7014.697	5.272	54°17’56.01”
	25.000	2188.789	7017.615	5.298	54°17’56.01”
	30.000	2192.849	7020.533	5.324	54°17’56.01”
	35.000	2196.910	7023.450	5.350	54°17’56.01”
	40.000	2200.970	7026.368	5.375	54°17’56.01”
	45.000	2205.030	7029.286	5.401	54°17’56.01”
	50.000	2209.091	7032.204	5.427	54°17’56.01”
	55.000	2213.151	7035.122	5.473	54°17’56.01”
	60.000	2217.212	7038.039	5.696	54°17’56.01”
IP 4	64.073	2220.519	7040.416	5.877	
	65.000	2221.231	7041.010	5.918	50°09’29.86”
	70.000	2225.070	7044.213	6.106	50°09’29.86”
	75.000	2228.909	7047.417	6.202	50°09’29.86”
IP 5	75.702	2229.448	7047.867	6.215	
	80.000	2232.938	7050.375	6.297	54°17’35.00”
	85.000	2236.998	7053.293	6.393	54°17’35.00”
IP 6	89.917	2240.991	7056.163	6.487	
	90.000	2241.055	7056.215	6.489	50°53’18.46”
	95.000	2244.935	7059.369	6.584	50°53’18.46”
IP 7	97.592	2246.946	7061.005	6.634	
	100.000	2248.655	7062.702	6.680	45°11’36.26”
IP 8	102.749	2250.605	7064.639	6.732	
IP 9	103.692	2251.247	7065.329	6.751	
	105.000	2252.309	7066.093	6.776	54°17’56.01”
	110.000	2256.369	7069.011	6.871	54°17’56.01”
	115.000	2260.430	7071.928	6.967	54°17’56.01”
	120.000	2264.490	7074.846	7.062	54°17’56.01”
	125.000	2268.551	7077.764	7.158	54°17’56.01”
	130.000	2272.611	7080.682	7.254	54°17’56.01”
	135.000	2276.671	7083.600	7.349	54°17’56.01”
	140.000	2280.732	7086.517	7.445	54°17’56.01”
	145.000	2284.792	7089.435	7.540	54°17’56.01”
	150.000	2288.852	7092.353	7.636	54°17’56.01”
	155.000	2292.913	7095.271	7.606	54°17’56.01”
	160.000	2296.973	7098.188	7.468	54°17’56.01”
	165.000	2301.033	7101.106	7.330	54°17’56.01”
IP 10	169.685	2304.838	7103.840	7.200	
	170.000	2305.096	7104.021	7.192	54°58’19.04”
IP 11	174.475	2308.761	7106.590	7.068	
	175.000	2309.187	7106.895	7.113	54°26’06.15”
IP 12	177.071	2310.873	7108.100	7.291	54°26’06.15”



planning | environment | landscape | engineering | survey
T: 3807 3333 | F: 3287 5461 | www.gassman.com.au
Gold Coast & Logan | 76 Business Street, Yatala QLD | PO Box 392, Beenleigh 4207

Client:



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VANTAGE YATALA

Site Address:

60 STAPYLTON JACOBS WELL
ROAD, STAPYLTON QLD 4207

THIS DRAWING IS INTENDED TO
BE PRINTED IN COLOUR

RPD:

Lot: 501
Plan: SP295994
Local Authority: CITY OF GOLD COAST
COUNCIL
Level Datum: AHD
Meridian: -
Contour Interval: -
PSM: -
RL: -

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DRAWING TITLE

DESIGN WATER PIPE
SETOUT TABLE

A	06-05-2020	ORIGINAL ISSUE	SK	MG
Issue	Date	Description	DRN	CHK

NOT APPLICABLE

Scale at A1: NA

Designed: IG

Drafted: SK

Approved: MG

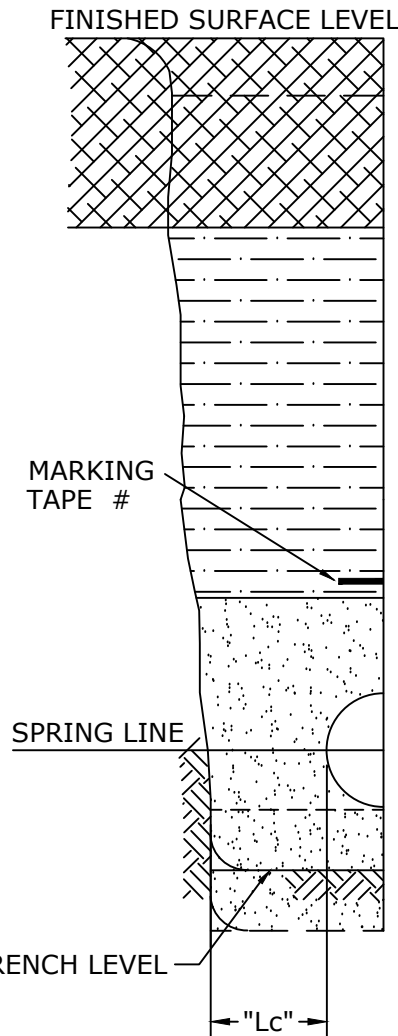
RPEQ: 16939

Signed:

Date: 06-05-2020

Drawing No: 5941 ENG SJW WAT 012
Rev. No: A

MATERIAL		ZONE	
ROAD SURFACE	VERGE & TRACK		
ROAD SURFACE LAYER	TO MATCH EXISTING	SURFACE COURSE	
TO MATCH EXISTING ROAD BASE OR TO ROAD OWNER'S REQUIREMENTS	TO ROAD OWNER'S REQUIREMENTS OR INORGANIC FILL WITH MAXIMUM 75 STONE SIZE	ROAD BASE	
TO ROAD OWNER'S REQUIREMENTS (SEE NOTE 5) OR INORGANIC FILL WITH 75 MAXIMUM STONE SIZE		TRENCH FILL	
EMBEDMENT MATERIAL IN ACCORDANCE WITH DESIGN DRAWINGS AND SEQ-SP REQUIREMENTS. WHERE APPROVED BY SEQ-SP, BEDDING MAY BE OMITTED IF TRENCH BASE IS GRANULAR SAND		OVERLAY	EMBEDMENT
		SIDE SUPPORT	
		BEDDING	
		OVER-EXCAVATION	



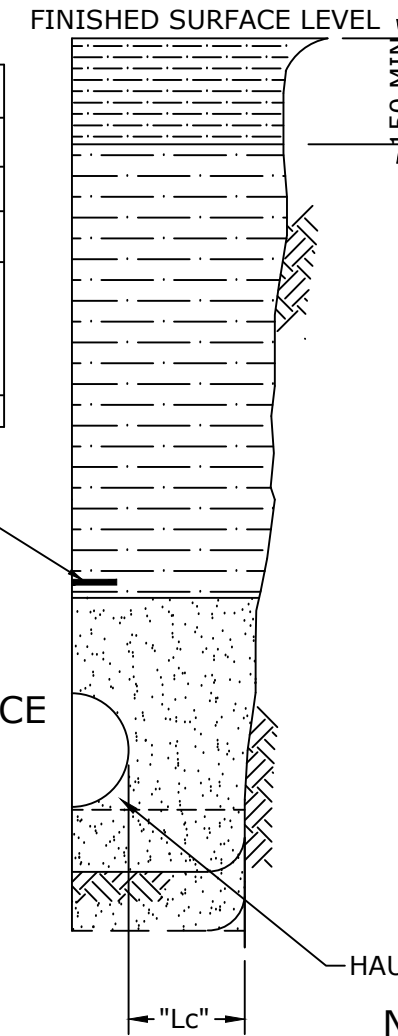
MINIMUM PIPE COVER

LOCATION	NOMINAL BORE (NB)	
	≤200	>200
NON ROADWAYS	600	1000
SEALED ROADS	600	1000
MAJOR ROADWAYS/ EMBANKMENTS/ COMMERCIAL/ INDUSTRIAL AREAS	750	1000
FREEWAYS	1200	1200

SPRING LINE TRENCH CLEARANCE

NOMINAL BORE (NB)	MINIMUM CLEARANCE "Lc" TO AS/NZS 2566.1
≤300	150
>300-≤450	200
>450-≤900	300
>900-≤1500	350

TRENCH WIDTH TO BE SUFFICIENT TO SAFELY LAY THE PIPE AND COMPACT THE SIDE SUPPORT ZONE.



ZONE		MATERIAL
TOPSOIL OR FOOTWAY SURFACE		ORIGINAL MATERIAL OR IMPORTED MATERIAL OF EQUAL QUALITY
TRENCH FILL		INORGANIC FILL WITH 75 MAXIMUM STONE SIZE
EMBEDMENT	OVERLAY	EMBEDMENT MATERIAL IN ACCORDANCE WITH DESIGN DRAWINGS AND SEQ-SP REQUIREMENTS. WHERE APPROVED BY SEQ-SP, BEDDING MAY BE OMITTED IF TRENCH BASE IS GRANULAR SAND
	SIDE SUPPORT	
	BEDDING	
OVER-EXCAVATION		

NO VEHICULAR LOADING

(INCLUDES LOCATIONS WHERE OCCASIONAL VEHICLES LOADINGS OCCUR EG. PARKLANDS, FOOTWAYS)

VEHICULAR LOADING

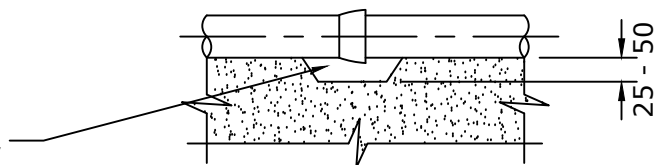
LEGEND

SPECIFIED BY THE DESIGNER IN DESIGN DRAWINGS

NOTES

- ALL DIMENSIONS IN MILLIMETRES.
- BEDDING - SPECIAL BEDDING SHALL BE SPECIFIED TO SUIT THE CONDITIONS IF THE TRENCH FLOOR HAS:
 - IRREGULAR OUTCROPS OF ROCK.
 - AHBP OF < 50 kPa (SEE SEQ-WAT-1200-1), OR
 - UNCONTROLLED GROUND WATER HAS DISTURBED THE FLOOR OF THE TRENCH.
- EMBEDMENT, TRENCH FILL AND COMPACTION TO MEET THE 3. REQUIREMENTS OF WSA-03 PART 3 AND THE RELEVANT SEQ-SP.
- SIDES OF EXCAVATION TO BE KEPT VERTICAL TO AT LEAST 150 ABOVE THE PIPE.
- DESIGNER TO CHECK ON RELEVANT ROAD AUTHORITIES REQUIREMENTS.
- ADDITIONAL INFORMATION PROVIDED IN SEQ-WAT-1200 SERIES COMMENTARY

PROVIDE POCKETS IN BEDDING, AT JOINTS PRIOR TO LAYING PIPES. FILL VOID DURING PLACEMENT OF EMBEDMENT.



PIPE JOINT BEDDING POCKETS

FOR JOINT PROJECTIONS (SOCKETS, FLANGES ETC)

REV. No.	DATE	DESCRIPTION	AUTH.
C	4/06/18	AMENDED MINIMUM PIPE COVER TABLE AND TRENCH CLEARANCE TABLES.	
B	20/08/15	MINIMUM PIPE COVER TABLE AMENDED.	

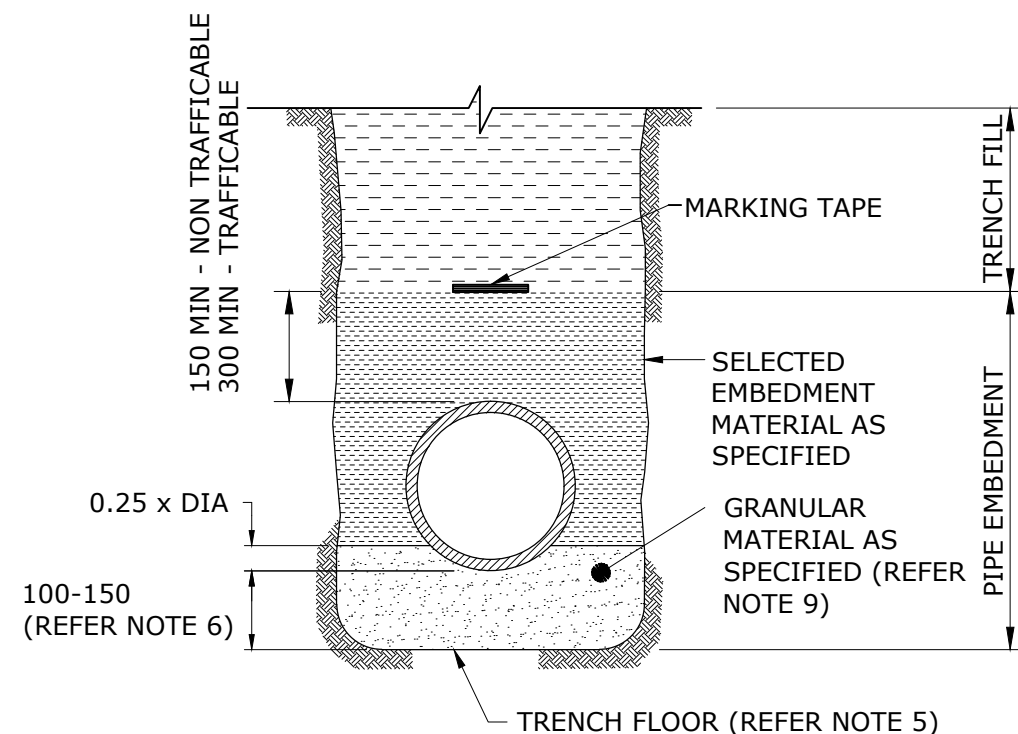
SEQ WATER SERVICE PROVIDERS

WORK PRACTICES MUST COMPLY WITH ALL APPLICABLE OCCUPATIONAL HEALTH & SAFETY LEGISLATION

WATER SUPPLY STANDARD DRAWING

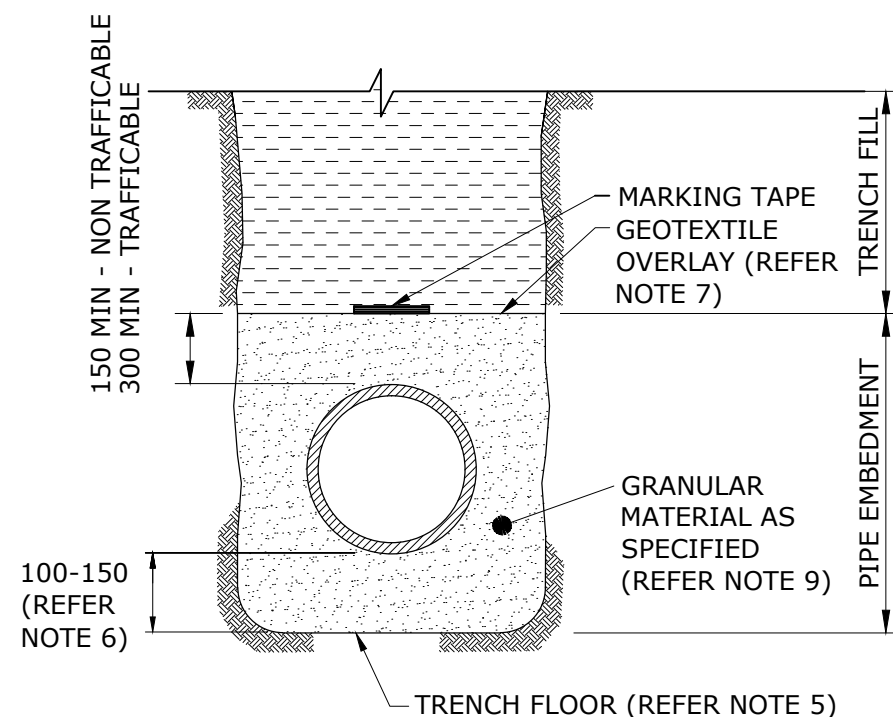
EMBEDMENT & TRENCHFILL TYPICAL ARRANGEMENT

GCCC	LCC	RCC	QUU	UW
DRAWING No.				VERSION
SEQ-WAT-1200-2				C
NOT TO SCALE				ORG DATE: 1/1/2013



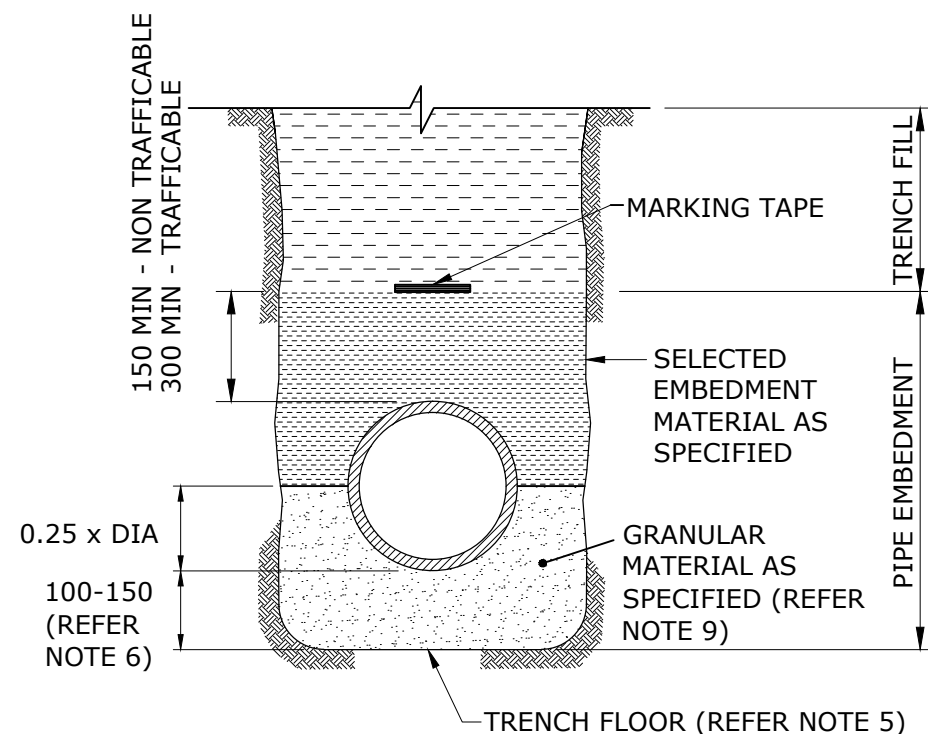
TYPE A SUPPORT

FOR RIGID PIPES ONLY (REFER NOTE 3)



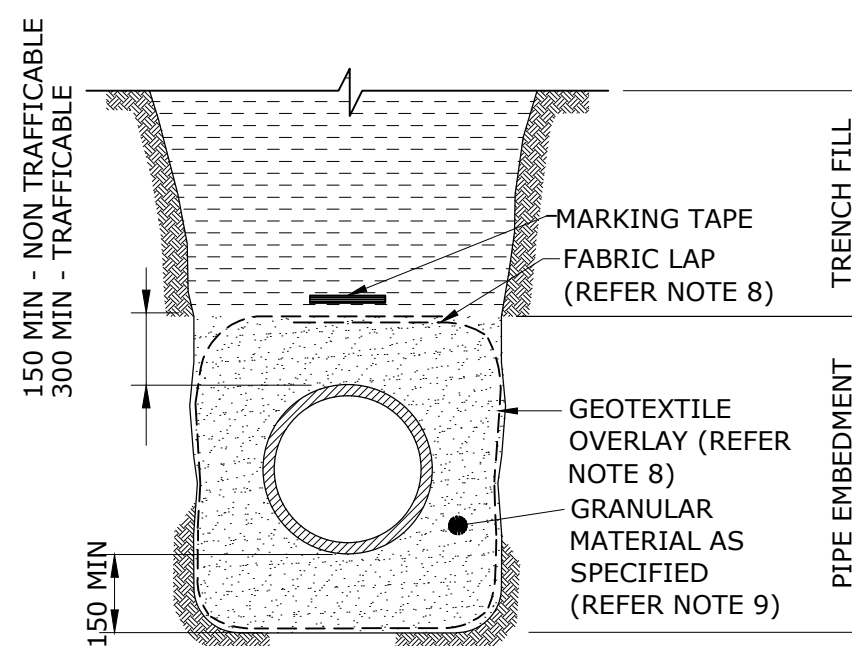
TYPE C SUPPORT

FOR FLEXIBLE & RIGID PIPES (REFER NOTE 3)



TYPE B SUPPORT

FOR RIGID PIPES ONLY (REFER NOTE 3)



TYPE D SUPPORT - WITH GEOTEXTILE

FOR FLEXIBLE & RIGID PIPES (REFER NOTE 3)

NOTES

1. ALL DIMENSIONS IN MILLIMETRES.
2. THIS DRAWING TO BE READ IN CONJUNCTION WITH SEQ-WAT-1200.
3. PIPE CLASSIFICATION
 - (a) RIGID PIPES: VC AND RC
 - (b) FLEXIBLE PIPES: PVC, GRP, STEEL, DI AND PE.
4. PLACEMENT OF EMBEDMENT, TRENCHFILL & COMPACTION TO MEET THE REQUIREMENTS OF THE CODE.
5. EXCAVATE OR COMPACT TRENCH FLOOR TO PROVIDE A FLAT FIRM BASE TO SUPPORT BEDDING MATERIAL AND MINIMISE PIPELINE SETTLEMENT. WHEN EXCAVATED, REPLACE WITH GRANULAR MATERIAL AS SPECIFIED FOR BEDDING OR ADOPT TYPE E,F,G OR H SUPPORT AS REQUIRED.
6. ENSURE BEDDING IS DEEP ENOUGH THAT PIPE JOINT PROJECTIONS (SOCKETS, FLANGES) DO NOT TOUCH TRENCH FLOOR.
- 7A. GEOTEXTILE TO BE USED WHERE TRENCH FILL IS A SAND OR FINE CLAY MATERIAL.
- 7B. TYPE D SUPPORT TO BE USED WHERE MIGRATORY NATIVE SOILS. (SANDS & CLAYS) ARE ENCOUNTERED ADJACENT TO THE EMBEDMENT ZONE AND SINGLE SIZE AGGREGATE IS USED.
8. LAY GEOTEXTILE FILTER FABRIC AGAINST TRENCH FLOOR AND WALLS SUCH THAT IT FULLY ENCASES THE EMBEDMENT.
 - PRESS FABRIC INTO THE VOIDS BEFORE INSTALLING EMBEDMENT TO PREVENT FABRIC TEARING.
 - PROVIDE A MINIMUM OF 250 OVERLAP AT ALL FABRIC JOINTS.
9. PURCHASE SPECIFICATIONS FOR TRENCH FILL AND EMBEDMENT MATERIAL ARE DETAILED IN THE CODE.

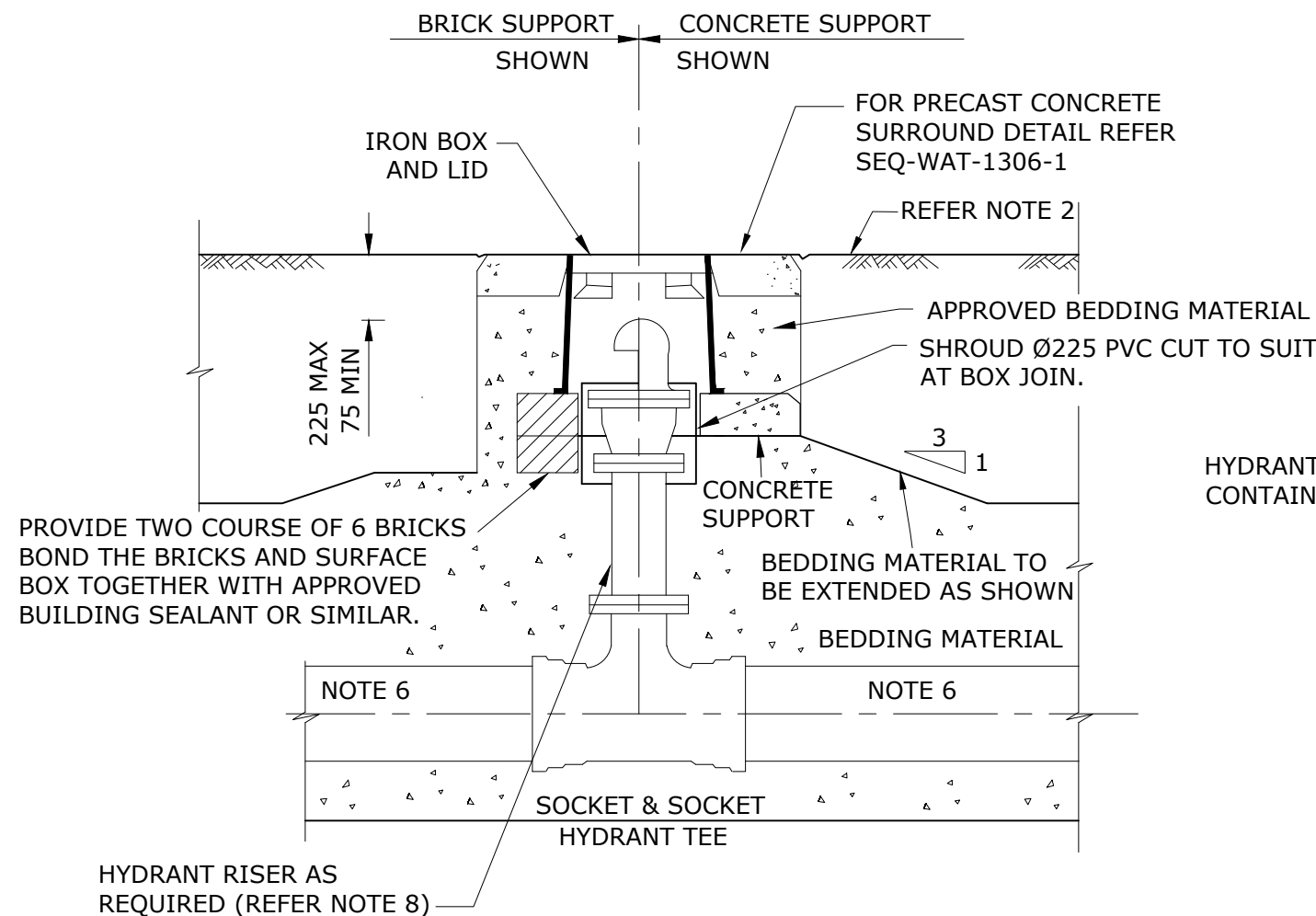
WHERE THIS DRAWING IS USED FOR THE VACUUM CODE,
ADDITIONAL INFORMATION IS PROVIDED IN SEQ-VAC-1400 SERIES COMMENTARY

REV. No.	DATE	DESCRIPTION	AUTH.	SEQ WATER SERVICE PROVIDERS		WATER SUPPLY STANDARD DRAWING STANDARD EMBEDMENT TYPICAL FLEXIBLE & RIGID PIPES		GCCC	LCC	RCC	QUU	UW
								DRAWING No. SEQ-WAT-1201-1				VERSION A
				WORK PRACTICES MUST COMPLY WITH ALL APPLICABLE OCCUPATIONAL HEALTH & SAFETY LEGISLATION				NOT TO SCALE				ORG DATE: 1/1/2013



1. THRUST BLOCK DETAILS REFER SEQ-WAT-1206-1.
2. THRUST BLOCK REINFORCEMENT AS SPECIFIED IN SEQ-WAT-1206-1 OR WITHIN DESIGN DRAWINGS.
3. INSTALL PUDDLE FLANGES ON FLANGE CLASS D1CL PIPE.
4. SOC-SOC VALVES THRUST AREA TO BE AS SHOWN IN SEQ-WAT-1206-1.
5. FLANGED SHORTS MAY BE SPIGOTED OR SOCKETED.
6. WHERE DI PIPES AND FITTINGS WITH RESTRAINED JOINTS AND PIPE SYSTEM IS USED, THRUST BLOCKS MAY NOT BE REQUIRED, SEE SEQ-WAT-1208-1.
7. VALVE ANCHOR BLOCKS TO BE SIZED FOR A TEST PRESSURE OF 1200 kPa
8. FOR SURFACE BOX DETAILS REFER SEQ-WAT-1305-1 AND SEQ-WAT-1306-1.
9. SOLID CAST DUCTILE IRON ACCEPTABLE. WELDED EXTENSION SPINDLES NOT ACCEPTABLE.
10. EXTENSION SPINDLES WITHIN CONCRETE VALVE PITS SHALL BE SUPPORTED AT THE SPINDLE CAP AND EVERY 1800.
11. VALVES LARGER THAN DN 375 MAY BE DIRECTLY BURIED WITH INSTALLATION ASSEMBLY AND THRUST RESTRAINT SHOWN IN DESIGN DRAWINGS, REFER SEQ-WAT-1206-1 FOR THRUST RESTRAINT GUIDANCE.
12. DIMENSIONS ARE IN MILLIMETERS UNLESS SHOWN OTHERWISE.
13. VALVE BOX DETAIL FOR TRAFFICABLE INSTALLATIONS TO BE APPROVED BY SEQ-SP.
14. FOR SURFACE BOX ALIGNMENT REFER SEQ-WAT-1302-1.

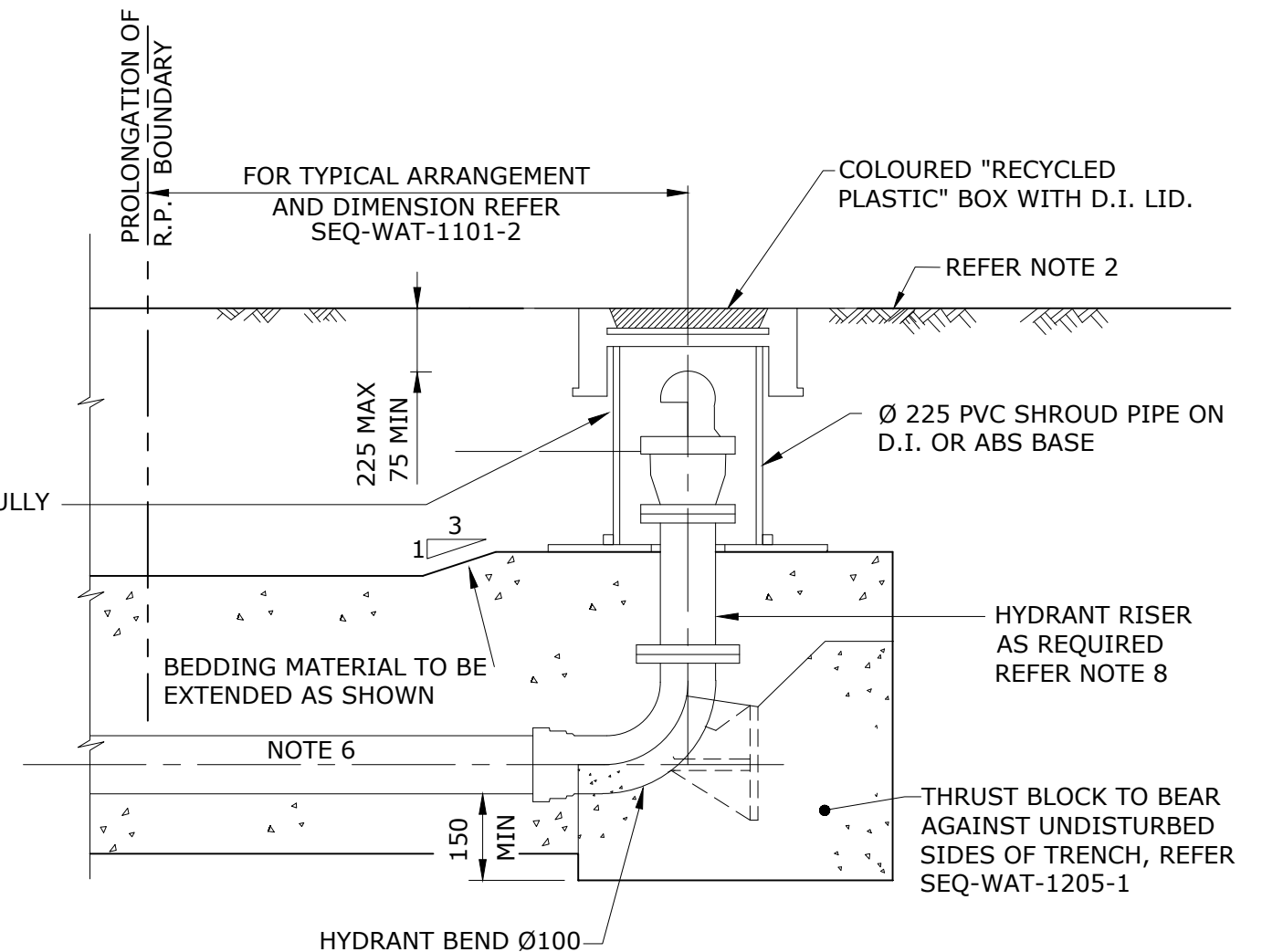
REV. No.	DATE	DESCRIPTION	AUTH.	SEQ WATER SERVICE PROVIDERS WORK PRACTICES MUST COMPLY WITH ALL APPLICABLE OCCUPATIONAL HEALTH & SAFETY LEGISLATION	WATER SUPPLY STANDARD DRAWING	CoGC	LCC	RCC	QUU	UW	
					TYPICAL VALVE AND HYDRANT INSTALLATION VALVE ARRANGEMENT	DRAWING No.					VERSION
						SEQ-WAT-1301-1					C
C	14/05/18	IMPROVED BOX SUPPORT DETAILS, ADDED NOTE 14, OTHER MINOR CHANGES									
B	15/07/15	SLUICE VALVES INSTALLATION DETAILS AMENDED.			NOT TO SCALE					ORG DATE: 1/1/2013	



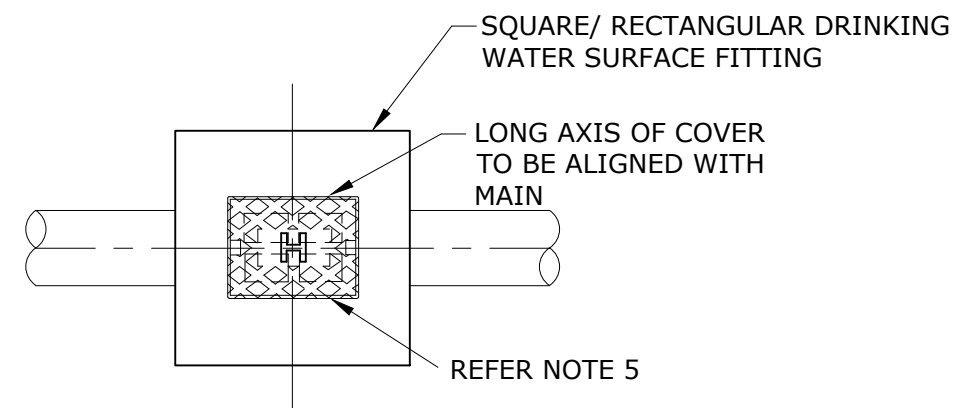
STANDARD HYDRANT ON LINE
(TRAFFICABLE HYDRANT BOX USE WHERE APPROVED BY SEQ-SP SHOWN)

NOTES

1. EITHER PRECAST CONCRETE SURROUNDS/SUPPORTS AND/OR BRICK SUPPORT OR RECYCLED PLASTIC BOX ARE ACCEPTABLE.
2. ALL CONCRETE SURROUNDS AND PLASTIC BOXES SHALL BE LAID TO THE FINISHED PROFILE OF THE FOOTPATH VERGE.
3. FOR PRECAST CONCRETE SURROUND/SUPPORT AND BRICK SUPPORT DETAILS REFER SEQ-WAT-1305-1 AND 1306-1.
4. FOR TYPICAL HYDRANT MARKING ARRANGEMENT REFER SEQ-WAT-1300 SET.
5. BOX COVERS FOR HYDRANTS SHALL BE MARKED AS PER SEQ-WAT-1300-1.
6. FOR QUU AREAS PROVIDE HYDRANT ADJACENT TO SCOUR AS SHOWN IN SEQ-WAT-1307-2.
7. DIMENSIONS ARE IN MILLIMETRES UNLESS SHOWN OTHERWISE.
8. ALL HYDRANT RISERS TO BE DN100.
9. GCCC REQUIRES SWABBING HYDRANTS FOR END OF LINES AND CUL-DE-SAC HEAD WITH LID TO STATE "SH".
10. HYDRANT TO BE PLACED ON RISER OR FITTING SO THAT THE LUGS/CLAWS ARE ON EITHER SIDE OF THE MAIN.



HYDRANT AT END OF LINE AND HEAD OF CUL-DE-SAC
(NON-TRAFFICABLE HYDRANT BOX SHOWN)



HYDRANT AND VALVE BOX ALIGNMENT
(HYDRANT BOX SHOWN)

REV. No.	DATE	DESCRIPTION	AUTH.
C	14/05/18	REMOVED DN80, ADDED CONCRETE SUPPORT, OTHER MINOR CHANGES	
B	15/07/15	HYDRANT INSTALLATION DETAILS AND NOTE 8 AMENDED.	

SEQ WATER SERVICE PROVIDERS

WORK PRACTICES MUST COMPLY WITH ALL APPLICABLE OCCUPATIONAL HEALTH & SAFETY LEGISLATION

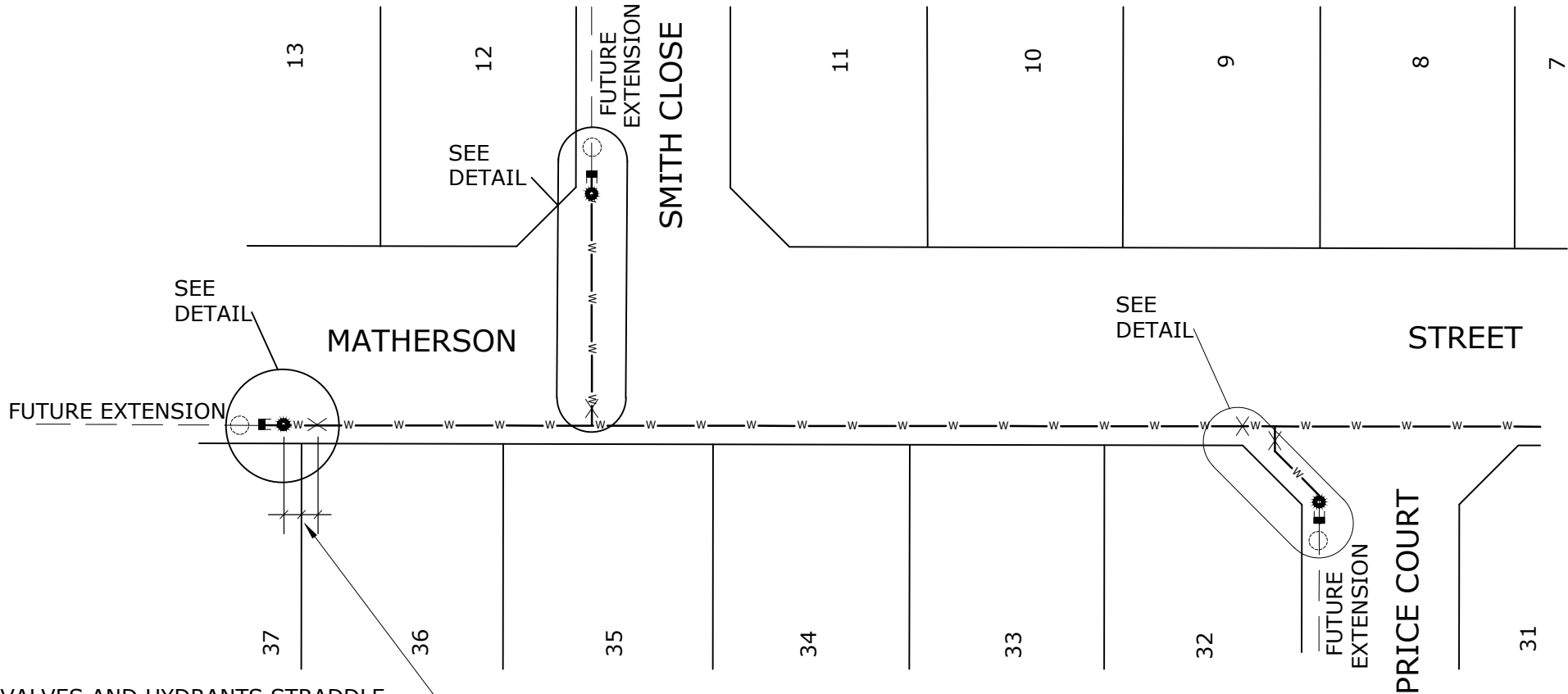
WATER SUPPLY STANDARD DRAWING

TYPICAL VALVE AND HYDRANT INSTALLATION HYDRANT ARRANGEMENT

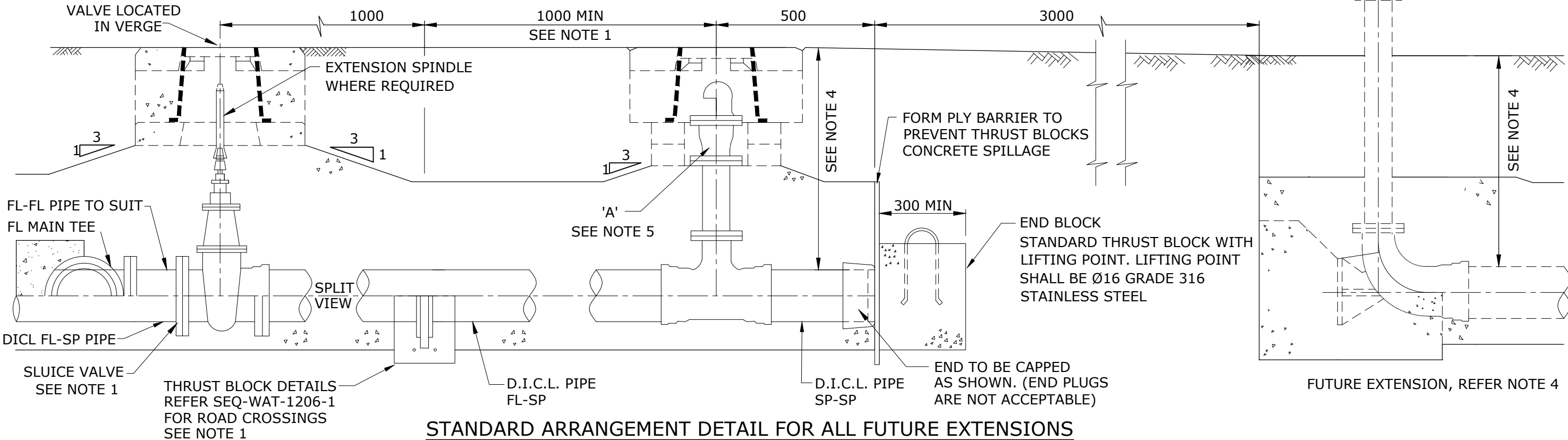
CoGC	LCC	RCC	QUU	UW
DRAWING No.				VERSION
SEQ-WAT-1302-1				C
NOT TO SCALE				ORG DATE: 1/1/2013

NOTES

- 1. FUTURE EXTENSIONS THAT CROSS A ROADWAY SHALL PROVIDE THE FL-FL VALVE TO THE FL MAIN TEE AND SHALL THRUST RESTRAIN THE VALVE AS SHOWN FOR A SOC-SOC VALVE IN SEQ-WAT-1206-1.
- 2. FOR PE PIPES REFER TO SEQ-WAT-1102-1 AND 1105-1.
- 3. HYDRANT DETAILS REFER TO SEQ-WAT-1302-1.
- 4. INSTALLATION TOLERANCE FOR FUTURE EXTENSION MAIN IS 200 HORIZONTAL AND 150 VERTICAL.
- 5. HYDRANT SPACING SHALL COMMENCE FROM HYDRANT 'A'.
- 6. FOR TRUNK MAINS WITHOUT PERMANENT HYDRANTS, THE DESIGN SHALL NOMINATE THE FITTING ASSEMBLIES REQUIRED FOR COMMISSIONING OF THE FUTURE EXTENSION AND THEIR STATUS FOLLOWING LIVE CONNECTION.
- 7. FOR QUU AREAS REFER SEQ-WAT-1303-2.
- 8. FOR UNITYWATER, HYDRANT SHALL BE LOCATED INLINE WITH SIDE BOUNDARY. FOR PERMANENT HYDRANT A HYDRANT TEE SHALL BE USED AND FOR TEMPORARY HYDRANT (REMOVED WITH NEXT STAGE EXTENSION OR WATER MAIN) A DUCKS FOOT HYDRANT SHALL BE USED. ANY VALVE REQUIRED ON THIS LEG OF WATER MAIN SHALL HAVE THE VALVE LOCATED BACK ADJACENT TO THE PREVIOUS TEE BRANCH OF THE WATER MAIN.



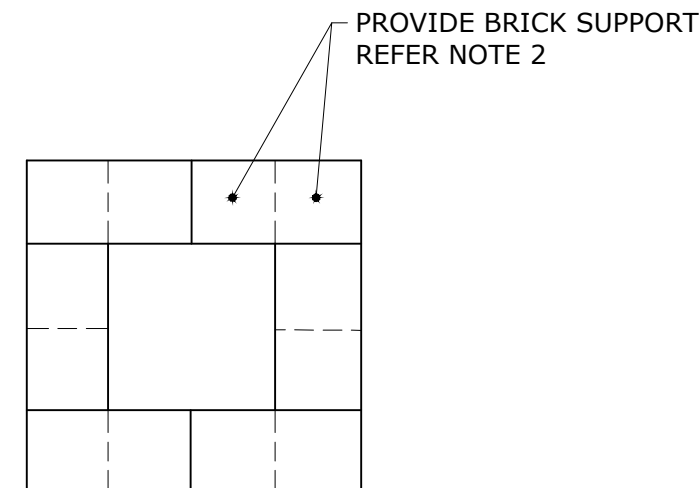
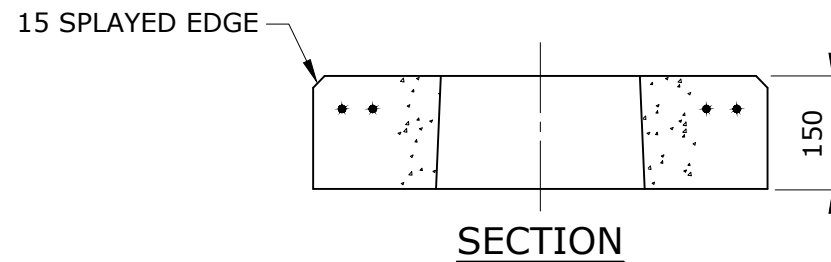
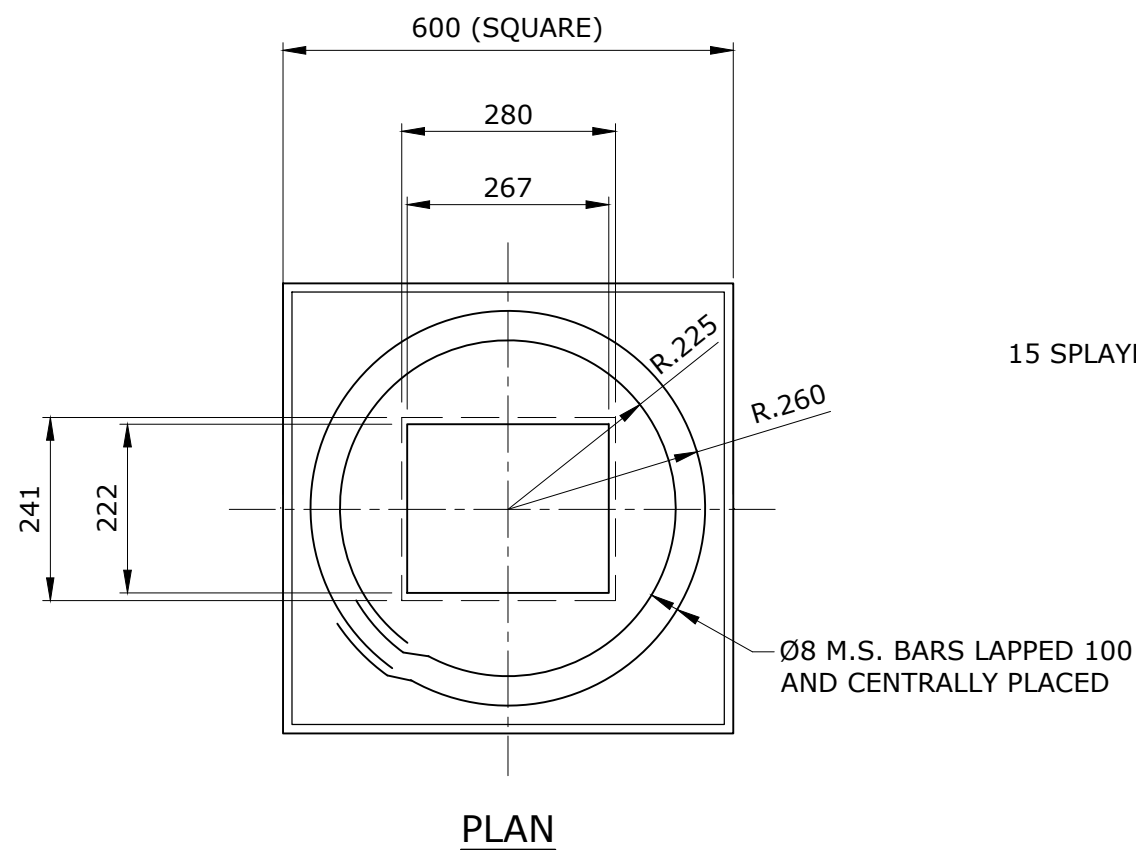
TYPICAL ARRANGEMENT
(REFER NOTE 7)



STANDARD ARRANGEMENT DETAIL FOR ALL FUTURE EXTENSIONS

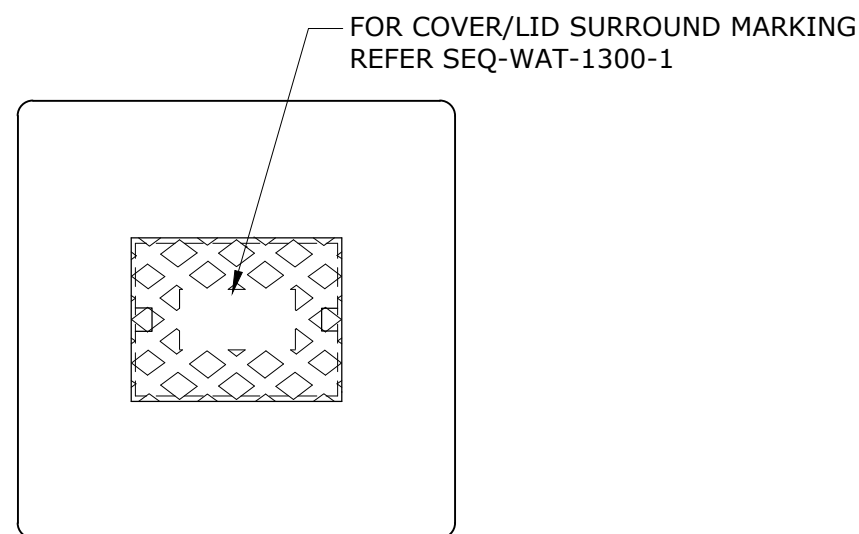
REV. No.	DATE	DESCRIPTION	AUTH.	SEQ WATER SERVICE PROVIDERS	WATER SUPPLY STANDARD DRAWING	CoGC	LCC	RCC	QUU	UW	
						TYPICAL VALVE AND HYDRANT INSTALLATION FUTURE EXTENSION INSTALLATION	DRAWING No.				VERSION
							SEQ-WAT-1303-1				B
							NOT TO SCALE				ORG DATE: 1/1/2013
B	13/08/18	REMOVED TAPPING POINT ON HYDRANT. ADDED END OF LINE REQUIREMENT		WORK PRACTICES MUST COMPLY WITH ALL APPLICABLE OCCUPATIONAL HEALTH & SAFETY LEGISLATION							

WORK PRACTICES MUST COMPLY WITH ALL APPLICABLE
OCCUPATIONAL HEALTH & SAFETY LEGISLATION



BRICK SUPPORT LAYOUT

**PRECAST CONCRETE SURROUND
AND SUPPORT DETAILS**



SURFACE FITTING ARRANGEMENT

NOTES

1. BOTH PRECAST CONCRETE SURROUND AND BRICK SUPPORT DETAILS SHOWN ARE ACCEPTABLE.
2. BRICK SUPPORTS SHALL BE A MINIMUM TWO COURSES AND LAID DRY OVER THE BEDDING MATERIAL. APPLY BUILDING SEALANT OR SIMILAR TO BOND BRICKS TOGETHER AND TO THE VALVE/HYDRANT BOX.
3. FOR HYDRANTS AND FLUSHING POINTS THE CONCRETE SURROUND AND LID SHALL BE PAINTED IN ACCORDANCE WITH THE COLOUR CODE SHOWN ON SEQ-WAT-1300-1.
4. FOR VALVES AND OTHER FITTINGS THE CONCRETE SURROUND AND LID SHALL BE PAINTED WITH APPROVED REFLECTIVE PAINT IN ACCORDANCE WITH THE COLOUR CODE SHOWN ON SEQ-WAT-1300-1.
5. CONCRETE TO BE GRADE N25.
6. DIMENSIONS ARE IN MILLIMETRES UNLESS SHOWN OTHERWISE.

REV. No.	DATE	DESCRIPTION	AUTH.	SEQ WATER SERVICE PROVIDERS <
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