

COURTNEY DRIVE

OPERATIONAL WORKS

STAGE 04

No. 41901-04



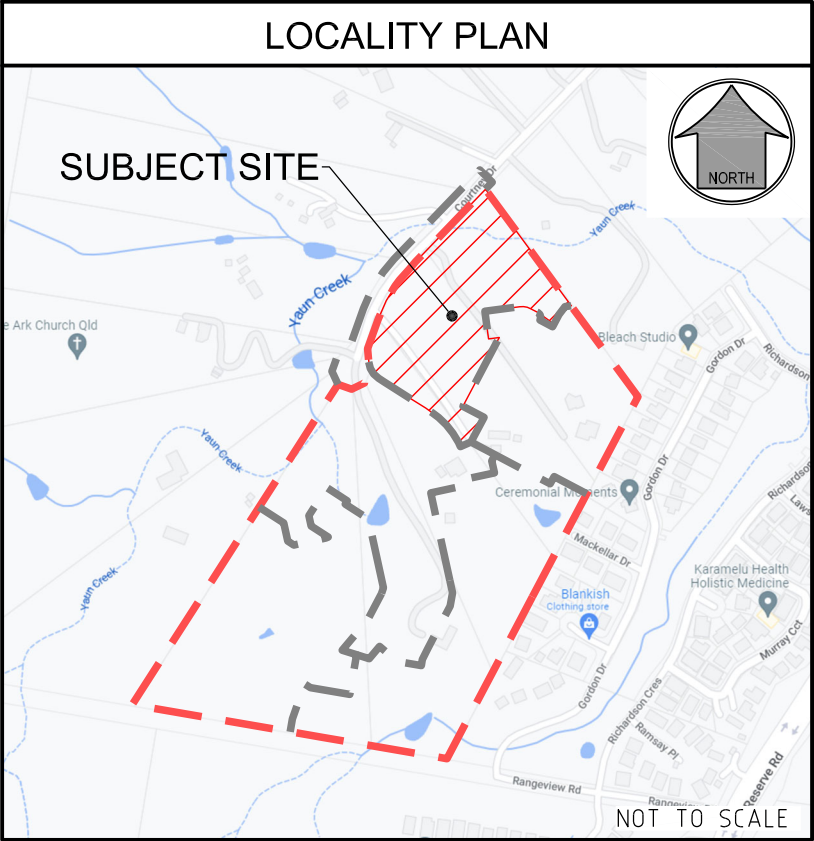
CLIENT



SUB-CONSULTANTS



SCHEDULE OF DRAWINGS					
NUMBER	REV. NO.	TITLE	NUMBER	REV. NO.	TITLE
GENERAL			SEWER: PROFILES		
41901-04-000	D	COVERT SHEET	41901-04-530	C	PROFILES SHEET 01
41901-04-003	A	SAFETY IN DESIGN	41901-04-531	C	PROFILES SHEET 02
41901-04-004	A	RISK MATRIX & NOTES	SEWER: HOUSE CONNECTION PROFILES		
41901-04-005	A	ROAD HIERARCHY & STAGING PLAN	41901-04-550	B	PROFILES SHEET 01
EARTHWORKS: RETAINING WALL & DETAIL GRADING			DRAINAGE: STORMWATER		
41901-04-060	B	PLAN SHEET 01	41901-04-600	A	PLAN SHEET 01
41901-04-061	B	PLAN SHEET 02	41901-04-601	A	PLAN SHEET 02
41901-04-062	B	PLAN SHEET 03	DRAINAGE: PROFILES		
41901-04-070	B	DETAILS SHEET 01	41901-04-620	B	PROFILES SHEET 01
EARTHWORKS: PADMOUNT SECTIONS			41901-04-621	B	PROFILES SHEET 02
41901-04-075	B	SHEET 01	41901-04-622	B	PROFILES SHEET 03
EARTHWORKS: FINAL SURFACE & SEDIMENT AND EROSION CONTROL			DRAINAGE: PIT DETAILS & TYPICAL DETAILS		
41901-04-080	A	PLAN SHEET 01	41901-04-640	A	OUTLETS & TYPICAL DETAILS SHEET 01
41901-04-081	A	PLAN SHEET 02	41901-04-650	A	PIT DETAILS SHEET 01
EARTHWORKS: COMBINED SERVICES			41901-04-651	A	PIT DETAILS SHEET 02
41901-04-090	B	PLAN SHEET 01	DRAINAGE: BASINS & CULVERTS		
ROADS: ROADWORKS			41901-04-660	A	BASIN PLAN SHEET 01
41901-04-100	A	PLAN SHEET 01	41901-04-661	A	FOREBAY DETAILS SHEET 01
41901-04-120	A	DETAILS SHEET 01	41901-04-662	A	SECTIONS SHEET 01
ROADS: LONGITUDINAL SECTIONS			41901-04-663	A	SECTIONS SHEET 02
41901-04-200	A	SHEET 01	41901-04-665	A	DETAILS SHEET 01
41901-04-201	A	SHEET 02	DRAINAGE: CATCHMENT		
ROADS: CROSS SECTIONS			41901-04-670	A	PLAN SHEET 01
41901-04-300	A	SHEET 01	DRAINAGE: CALCULATION TABLES		
41901-04-301	A	SHEET 02	41901-04-680	A	MINOR SHEET 01
41901-04-302	A	SHEET 03	41901-04-681	A	MAJOR SHEET 02
ROADS: INTERSECTION GRADING			WATER: WATER RETICULATION		
41901-04-400	A	DETAILS SHEET 01	41901-04-700	C	PLAN SHEET 01
ROADS: JOINTING DETAILS			41901-04-710	A	WATER RETICULATION DETAILS
41901-04-410	A	DETAILS SHEET 01			
ROADS: LINEMARKING AND SIGNAGE					
41901-04-420	B	PLAN SHEET 01			
SEWER: SEWER RETICULATION					
41901-04-500	C	PLAN SHEET 01			
41901-04-501	B	PLAN SHEET 02			
41901-04-510	B	DETAILS SHEET 01			



R. P. DESCRIPTION
LOT 188, 189 ON RP173728
COURTNEY DRIVE
LOCALITY OF UPPER COOMERA
LOCAL AUTHORITY - GOLD COAST CITY COUNCIL

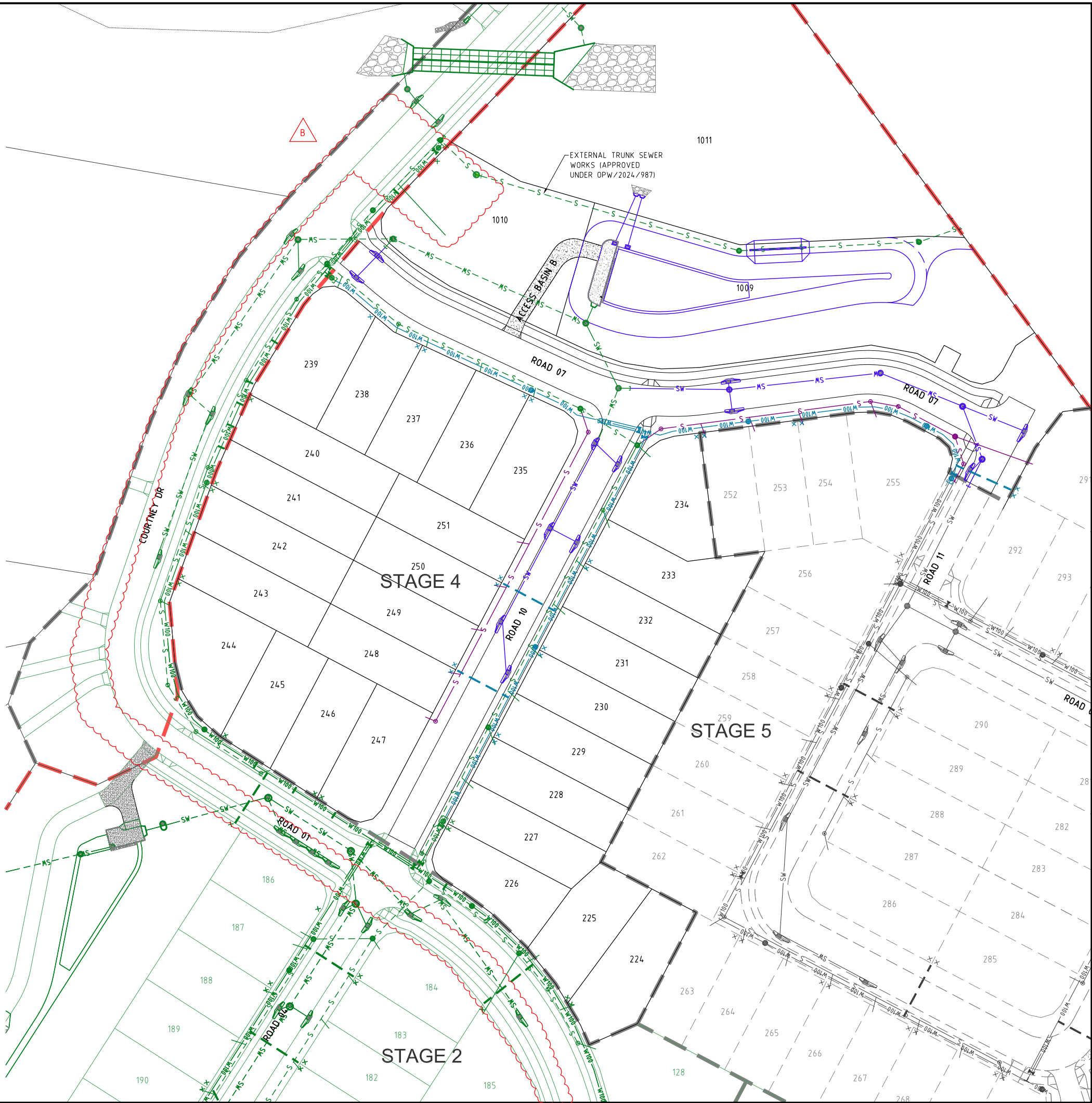
DRAWING NUMBER	AMEND.
41901-04-000	D

CONSTRUCTION SERVICES

1. CONSTRUCTION OF SEWER/ROOFWATER/STORMWATER/SERVICES
EXCAVATED MATERIAL TO BE PLACED ON HIGH SIDE OF TRENCH & TO PROTECT PIPE WORK & DIRECT SURFACE MATERIAL AWAY FROM EXCAVATIONS. TOPSOIL & GRASS SEED AREAS IN ALLOTMENTS IMMEDIATELY AFTER COMPLETING THE SEWER & ROOFWATER DRAINAGE CONSTRUCTION. DEPRESS GROUND AROUND TEMPORARY FIELD INLETS TO CREATE SILT POND.
2. TRIP HAZARD
MANHOLES OR STRUCTURES INSTALLED IN THE ROAD, FOOTPATH OR VERGE MUST MATCH NEATLY WITH NO TRIP HAZARD.
3. EXISTING SERVICES - EXTERNAL WORKS
THE LOCATIONS OF ALL EXISTING SERVICES WITHIN THE WORK AREA SHALL BE CONFIRMED BY THE CONTRACTOR PRIOR TO CONSTRUCTION COMMENCING. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE RELEVANT AUTHORITIES & TO ENSURE THAT THE EXISTING SERVICES ARE NOT DAMAGED OR DISTURBED IN ANY WAY BY THE CONTRACT WORKS.

LEGEND

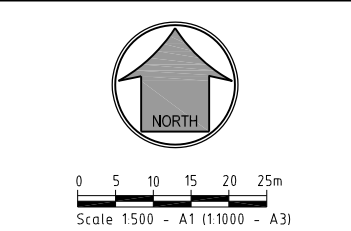
---	EXISTING PROPERTY LINE
---	EXISTING KERB (INVERT)
---	EXISTING FOOTPATH
RM	EXISTING RISING MAIN
S	EXISTING SEWER
SW	EXISTING STORMWATER
RW	EXISTING ROOFWATER
SS	EXISTING SUBSOIL
W100	EXISTING WATER
W150	EXISTING WATER
W200	EXISTING WATER
W250	EXISTING WATER
W300	EXISTING WATER
---	EXISTING WATER CONDUIT
---	PROPOSED PROPERTY LINE
---	PROPOSED KERB (INVERT)
---	PROPOSED FOOTPATH
RM	PROPOSED RISING MAIN
S	PROPOSED SEWER
SW	PROPOSED STORMWATER
RW	PROPOSED ROOFWATER
SS	PROPOSED SUBSOIL
W100	PROPOSED WATER
W150	PROPOSED WATER
W200	PROPOSED WATER
W250	PROPOSED WATER
W300	PROPOSED WATER
---	PROPOSED WATER CONDUIT
---	FUTURE PROPERTY LINE
---	FUTURE KERB (INVERT)
---	FUTURE FOOTPATH
RM	FUTURE RISING MAIN
S	FUTURE SEWER
SW	FUTURE STORMWATER
RW	FUTURE ROOFWATER
SS	FUTURE SUBSOIL
W100	FUTURE WATER
W150	FUTURE WATER
W200	FUTURE WATER
W250	FUTURE WATER
W300	FUTURE WATER
---	FUTURE WATER CONDUIT
---	SITE BOUNDARY
---	STAGE BOUNDARY



PROJECT NAME
**COURTNEY DR
UPPER COOMERA**

STAGE 04
RP DESCRIPTION
LOT 188, 189, 190, 191 & 192 ON RP173728
COURTNEY DRIVE
LOCALITY OF UPPER COOMERA
LOCAL AUTHORITY - GOLD COAST CITY COUNCIL

CLIENT
HB Land



B	27-11-24	EXISTING PUMP STATION & RISING MAIN REMOVED	BL
A	27-04-24	COUNCIL ISSUE	BL
REV	DATE	DESCRIPTION	INT

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ASSOCIATED CONSULTANTS

BIOME
WATER AND ENVIRONMENTAL CONSULTING

Robin Russell
& ASSOCIATES PTY. LTD.

BENNETT + BENNETT

DRAWING TITLE
**COMBINED SERVICES
PLAN
SHEET 01**

MORTONS
urbansolutions
Urban & Regional Planning
Civil Engineering
Project Coordination

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DESIGNED RB	DRAWN BL
APPROVED RB	DATE 30-10-24
DRAWING NUMBER 41901-04-090	REV B



SEQ CODE SEWER NOTES

SEQ CODE NOTES COPIED DIRECTLY FROM DRAWING SEQ-SEW-1101-3 (REV B1).
VEGETATION PROTECTION

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

SOIL

- A. TOPSOIL & SUBSOIL SHALL BE STOCKPILED SEPARATELY.
- B. CARE SHALL BE TAKEN TO PREVENT SEDIMENT FROM ENTERING THE STORMWATER SYSTEM. THIS MAY INVOLVE PLACING APPROPRIATE SEDIMENT CONTROLS AROUND STOCKPILES.
- C. IF ACID SULPHATE SOILS EXIST IN THE WORKS AREA. THE CONTRACTOR MUST PREPARE A RISK ASSESSMENT BASED ON THE QUEENSLAND ACID SULPHATE SOIL TECHNICAL MANUAL & MANAGE THE ACID SULPHATE SOILS AS PER THE MANUAL.

CREEK CROSSINGS

- A. SILTATION CONTROL MEASURES SHALL BE PLACED DOWNSTREAM OF ANY EXCAVATION WORK.
- B. APPROPRIATE SEDIMENT CONTROLS SHALL BE USED TO PREVENT SEDIMENT FROM ENTERING THE CREEK.
- C. NO SOIL SHALL BE STOCKPILED WITHIN 5 m OF THE CREEK.

REHABILITATION

- A. PREDISTURBANCE SOIL PROFILES & COMPACTION LEVELS SHALL BE REINSTATED.
- B. PREDISTURBANCE VEGETATION PATTERNS SHALL BE RESTORED.

SAFETY

- A. THE DESIGN & CONSTRUCTION OF THE WORKS SHALL COMPLY WITH ALL QUEENSLAND LEGISLATION.

GENERAL

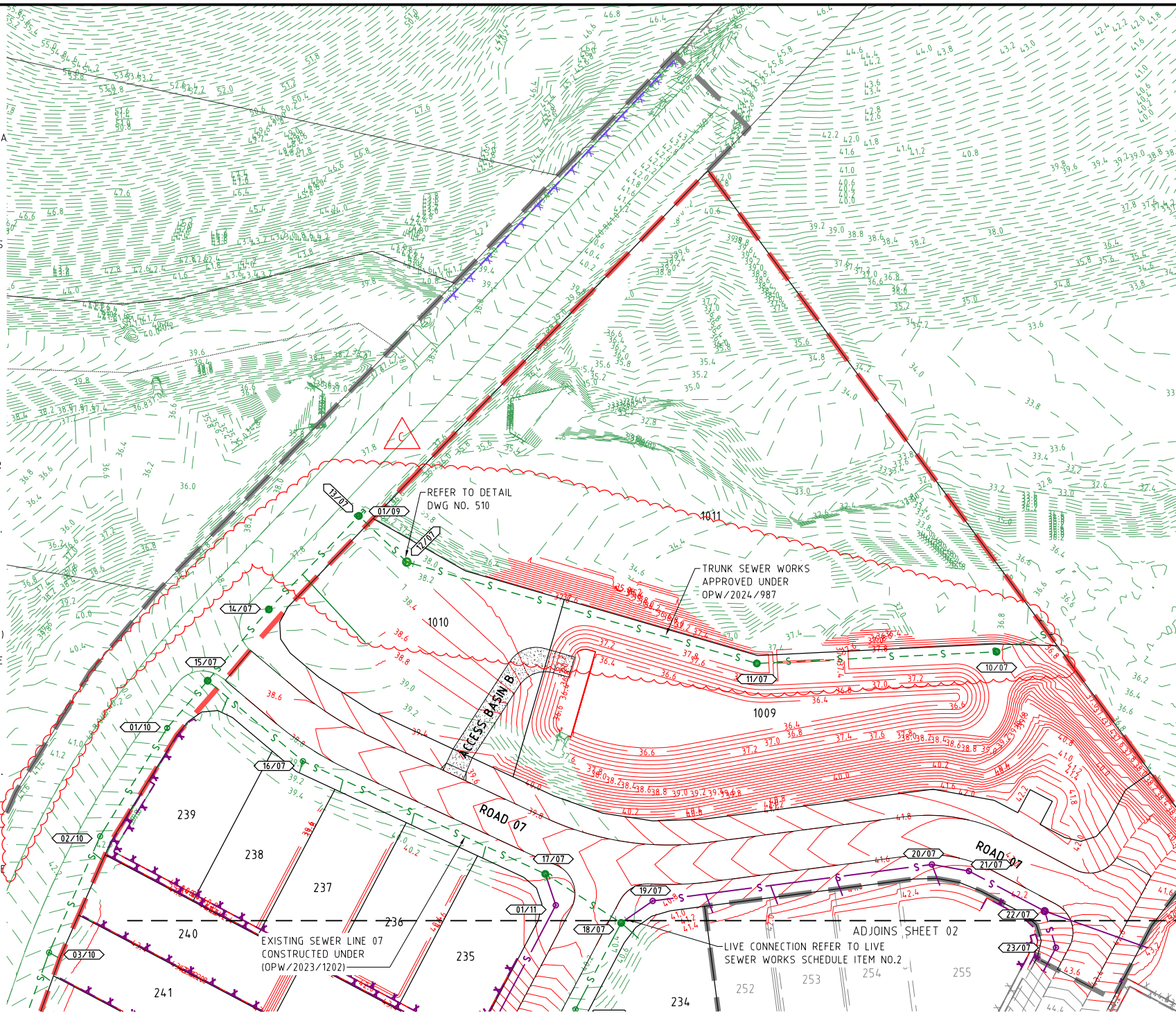
1. ALL WORK & MATERIALS SHALL BE IN ACCORDANCE WITH CURRENT SOUTH EAST QUEENSLAND SEWERAGE CODE SPECIFICATIONS & STANDARDS.
2. UNLESS SPECIFIED OTHERWISE ALL MATERIALS & WORK SHALL COMPLY WITH THE RELEVANT AUSTRALIAN STANDARDS.
3. THE CONSTRUCTION OF THE SEWERAGE WORK SHOWN ON THIS DRAWING SHALL BE SUPERVISED BY AN ENGINEER WHO HAS RPEQ REGISTRATION. SEWERAGE WORKS NOT COMPLYING WITH THIS REQUIREMENT WILL NOT BE PERMITTED TO CONNECT INTO THE SEQ SERVICE PROVIDER SEWERAGE SYSTEM.
4. ALL WORK ASSOCIATED WITH LIVE SEWERS OR MAINTENANCE HOLES SHALL BE CARRIED OUT BY DEVELOPER'S APPROVED CONTRACTOR UNDER THE SUPERVISION OF SEQ'S AGENT AT THE DEVELOPER'S COST.
5. ALL PIPES & MATERIALS SHALL COMPLY WITH THE REQUIREMENTS OF THE "ACCEPTED PRODUCTS & MATERIALS" LIST.
6. EACH ALLOTMENT SHALL BE SERVED BY A DN100 PVC PROPERTY CONNECTION. FOR ALLOTMENTS OTHER THAN SINGLE RESIDENTIAL, A DN160 PE (OR DN150 PVC) PROPERTY CONNECTION SHALL BE PROVIDED.
7. PROPERTY CONNECTIONS SHALL BE LOCATED WITHIN THE PROPERTY AS SHOWN IN THE DRAWINGS.
8. PROPERTY CONNECTION BRANCHES SHALL EXTEND INTO THE PROPERTY A MINIMUM OF 300 mm AND A MAXIMUM OF 750 mm. UNITYWATER REQUIRES MINIMUM EXTENSION OF 500 mm INTO PROPERTY.
9. WHERE PIPES ARE LAID IN FILL, THE FILLING SHALL BE CARRIED OUT IN LAYERS NOT EXCEEDING 300 mm (LOOSE) IN DEPTH AND SHALL BE COMPACTED UNTIL THE COMPACTION IS NOT LESS THAN 95% OF THE MATERIALS MAXIMUM COMPACTION WHEN TESTED IN ACCORDANCE WITH A.S. 1289 (MODIFIED COMPACTION). TESTING SHALL BE CARRIED OUT AFTER EACH ALTERNATE LAYER. IN ALL SUCH CASES APPROVAL OF CONSTRUCTED SEWERS WILL NOT BE ISSUED BY THE SEQ SERVICE PROVIDER UNLESS CERTIFICATES ARE PRODUCED CERTIFYING THAT THE REQUIRED COMPACTION HAS BEEN ACHIEVED.
10. WHERE SEWERS HAVE A GRADE OF 1 IN 20 OR STEEPER, BULKHEADS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE SEQ SEWER CODE.
11. THE CONTRACTOR SHALL VERIFY THE LOCATION & DEPTH OF EXISTING SERVICES WITH RELEVANT AUTHORITIES BEFORE COMMENCING WORKS.
12. SEWERS SHALL BE DISUSED /ABANDONED IN ACCORDANCE WITH PROCEDURES SET OUT IN THE SEQ SEWER CODE.
13. BENCH MARK & LEVELS TO AHD.
14. THE EXISTING DWELLING ON LOT 3, REFER SEQ SEW 1100, SERVED BY A SEPTIC SYSTEM, SHALL BE CONNECTED TO THE NEW SEWER BY A LICENSED PLUMBER IN ACCORDANCE WITH THE RELEVANT STATUTORY & COUNCIL REQUIREMENTS. THE SEPTIC SYSTEM, INCLUDING TRENCHES, SHALL BE REMOVED AT THE DEVELOPER'S COST. ALL FIXTURES SHALL BE UPGRADED IF REQUIRED BY PLUMBING CODE. STANDARD NOTE NOT APPLICABLE & THEREFORE DELETED.
15. EXISTING ALLOTMENTS REQUIRING A PROPERTY CONNECTION FROM EXISTING SEWERS SHALL BE PROVIDED BY THE SEQ SERVICE PROVIDER AT THE DEVELOPERS COST.

PROJECT SPECIFIC SEWER NOTES

- a. ALL SEWER MAINS TO BE AS PER SEWER PIPE SPECIFICATIONS TABLE.
- b. NOTWITHSTANDING THE STANDARD SEQ NOTES ABOVE, ALL MATERIALS & WORKS MUST BE IN ACCORDANCE WITH THE SERVICE PROVIDER'S APPROVAL CONDITIONS & THE SEQ WS&S D&C CODE.
- c. THE CONTRACTOR IS TO INCLUDE ROCK EXCAVATION AS PART OF THEIR SEWER RATES UNLESS SCHEDULED OTHERWISE WITHIN THE CONTRACT.
- d. THE CONTRACTOR TO PROVIDE CALCAREOUS CONCRETE WHERE SPECIFIED IN THE SEQ CODE BY THE RELEVANT AUTHORITY.
- e. WATER & ELECTRICAL CROSSING LOCATIONS ARE INDICATIVE ONLY. REFER TO PLANS TO DETERMINE PRECISE CROSSING LOCATIONS. WHERE SERVICE INDICATES CLASH WITH SEWER, SEWER TO TAKE PRECEDENCE, SERVICE TO BE CONSTRUCTED OVER OR UNDER SEWER ACCORDING TO SUPERINTENDENT'S INSTRUCTION
- f. ALL BENDS TO BE LONG RADIUS BEND TO MEET MANUFACTURER'S MINIMUM RADIUS REQUIREMENTS U.N.O.
- g. CONTRACTOR TO VERIFY DOWNSTREAM EXISTING PIPE LEVELS PRIOR TO COMMENCEMENT OF WORKS ON-SITE.
- h. PROPERTY CONNECTIONS HAVE BEEN DESIGNED TO CONTROL THE REQUIRED SERVICE AREA OF EACH LOT AT A GRADE OF 160 & A MAXIMUM DEPTH OF PROPERTY CONNECTION AT 1.5m. UNLESS OTHERWISE STATED.
- i. CONTRACTOR TO PAY ALL FEES & CHARGES ASSOCIATED WITH CONNECTIONS.

LEGEND

- EXISTING SEWER
EXISTING RISING MAIN
EXISTING KERB (INVERT)
EXISTING PROPERTY LINE
EXISTING RETAINING WALL
EXISTING CONTOURS
FUTURE SEWER
FUTURE RISING MAIN
FUTURE KERB (INVERT)
FUTURE PROPERTY LINE
FUTURE RETAINING WALL
FUTURE CONTOURS
SITE BOUNDARY
STAGE BOUNDARY
PROPOSED KERB (INVERT)
PROPOSED PROPERTY LINE
PROPOSED RETAINING WALL
DESIGN CONTOURS
PROPOSED SEWER
PROPOSED RISING MAIN
- SEWER ID
SEWER MANHOLE
SEWER RODDING END
SEWER BEND
SEWER MAINTENANCE SHAFT
SEWER END CAP
SEWER PUMP STATION



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PROJECT NAME

COURTNEY DR
UPPER COOMERA

STAGE 04

RP DESCRIPTION
LOT 188, 189, 190, 191 & 192 ON RP173728
COURTNEY DRIVE
LOCALITY OF UPPER COOMERA
LOCAL AUTHORITY - GOLD COAST CITY COUNCIL

CLIENT

Scale 1:500 - A1 (1:1000 - A3)

B	27-11-24	RISE MAIN REMOVED & SEWER LINE 11 AMENDED	BL
A	27-04-24	COUNCIL ISSUE	BL
REV	DATE	DESCRIPTION	INT

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ASSOCIATED CONSULTANTS

WATER AND ENVIRONMENTAL CONSULTING

DRAWING TITLE

SEWER RETICULATION
PLAN
SHEET 02

Urban & Regional Planning
Civil Engineering
Project Coordination

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DESIGNED RB	DRAWN BL
APPROVED	REPEQ4706 DATE 30-10-24
DRAWING NUMBER 41901-04-501	REV B



STRUCTURE TYPE
LID CLASS
DROP TYPE

* CONSTRUCT BRIDGING
STRUCTURE SPANNING THE
SEWER TRENCH REFER
TYPICAL SECTIONS &
DETAILS FOR BRIDGING
STRUCTURE DETAILS
TRENCHSTOPS,
BULKHEADS & CONCRETE
ENCASEMENTS TO BE
INSTALLED IN
ACCORDANCE WITH SEQ
SEWER CODE

NOTES

1. IF SHOWN, WATER AND
ELECTRICAL CROSSING
LOCATIONS ARE
INDICATIVE ONLY.
REFER TO PLANS TO
DETERMINE CROSSING
LOCATIONS. WHERE
SERVICE INDICATES
CLASH WITH SEWER,
SEWER TO TAKE
PRECEDENCE, SERVICE
TO BE CONSTRUCTED
OVER OR UNDER SEWER
ACCORDING TO
SUPERINTENDENTS
INSTRUCTION
2. ALL GRAVITY uPVC
SEWER PIPE TO BE
CLASS SN8 U.N.O.
3. ALL PRESSURE MAINS
PE100 PN16 SDR11
4. ALL EMBEDMENT TYPE
IS TO BE TYPE 3 U.N.O.
5. ALL BENDS TO BE
LONG RADIUS BEND,
1.2m RADIUS MIN.
6. CONTRACTOR TO
VERIFY DOWNSTREAM
EXISTING PIPE LEVELS
PRIOR TO
COMMENCEMENT OF
PIPEWORK
7. PROTECTIVE COATING IS
TO BE INSTALLED TO
MAINTENANCE
STRUCTURES (WHERE
REQUIRED) IN
ACCORDANCE WITH
CLAUSE 4.7.2 OF SEQ
SEWERAGE CODE.
8. TRENCHSTOPS IN
ACCORDANCE
WITH SEQ-WAT-1209-1

PIPE DIAMETER (mm)

PIPE GRADE

DATUM R.L.

DEPTH TO INVERT

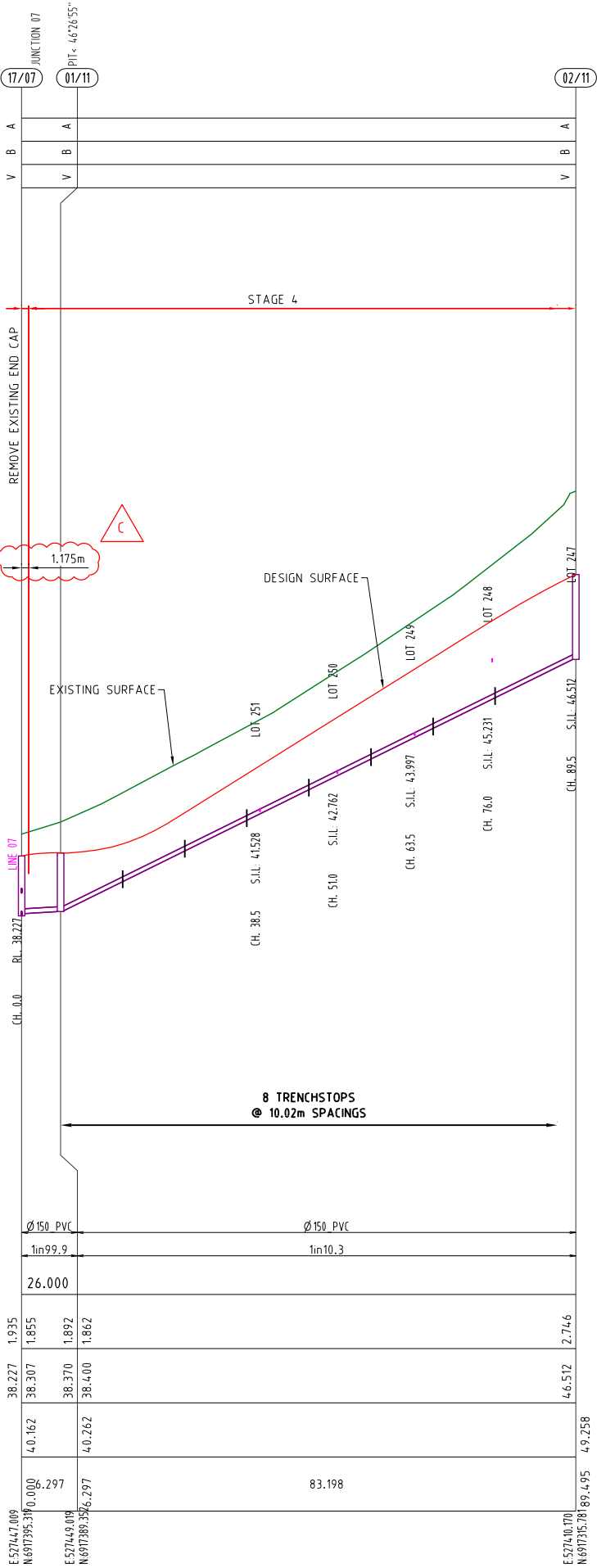
PIPE INVERT
LEVELS

DESIGN SURFACE
LEVELS

CHAINAGE

LINE NO.

11

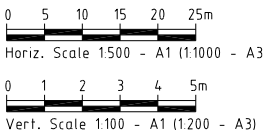


PROJECT NAME
**COURTNEY DR
UPPER COOMERA**

STAGE 04

RP DESCRIPTION
LOT 188, 189, 190, 191 & 192 ON RP173728
COURTNEY DRIVE
LOCALITY OF UPPER COOMERA
LOCAL AUTHORITY - GOLD COAST CITY COUNCIL

CLIENT



C	27-11-24	DIMENSION ADJUSTED	BL
B	07-08-24	STRUCTURE TYPE AMENDED	BL
A	27-04-24	COUNCIL ISSUE	BL
REV	DATE	DESCRIPTION	INT

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ASSOCIATED CONSULTANTS



DRAWING TITLE

SEWER RETICULATION
PROFILES
SHEET 02



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DESIGNED RB	DRAWN BL
APPROVED <i>AK</i>	REPEQ 4706
DRAWING NUMBER 41901-04-531	DATE 30-10-24 REV C

RIGS STRUCTURE DROPS	
A	SEWER PROPERTY CONNECTION (STANDARD & EXTENDED) REFER TO SEQ STD DWGS SEQ-SEW-1104-1
B	SEWER PROPERTY CONNECTION (SLOPED CONNECTION) REFER TO SEQ STD DWGS SEQ-SEW-1104-1
D	SEWER PROPERTY CONNECTION (VERTICAL RISER) REFER TO SEQ STD DWG SEQ-SEW-1105-1
V	SEWER PROPERTY CONNECTION (STRAIGHT THROUGH SEWER) REFER TO SEQ STD DWG SEQ-SEW-1303-1
X	SEWER PROPERTY CONNECTION (INTERNAL BACKDROP) REFER TO SEQ STD DWG SEQ-SEW-1303-1
Z	RISER CONNECTION TO PORTION OF MAINTENANCE SHAFT

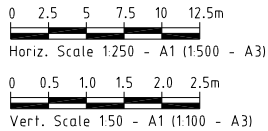


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**COURTNEY DR
UPPER COOMERA**

STAGE 04

RP DESCRIPTION
LOT 188, 189, 190, 191 & 192 ON RP173728
COURTNEY DRIVE
LOCALITY OF UPPER COOMERA
LOCAL AUTHORITY - GOLD COAST CITY COUNCIL

CLIENT



B	27-11-24	HC AMENDED	BL
A	27-04-24	COUNCIL ISSUE	BL
REV	DATE	DESCRIPTION	INT

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ASSOCIATED CONSULTANTS



DRAWING TITLE

SEWER RETICULATION
HOUSE CONNECTION
PROFILES
SHEET 01



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DESIGNED RB	DRAWN BL
APPROVED <i>A.K. Morton</i>	REQ 4706
DATE 30-10-24	REV

DRAWING NUMBER
41901-04-550

B

NOTES

1. WATER AND ELECTRICAL CROSSING LOCATIONS ARE INDICATIVE ONLY. REFER TO PLANS TO DETERMINE PRECISE CROSSING LOCATIONS. WHERE SERVICE INDICATES CLASH WITH SEWER, SEWER TO TAKE PRECEDENCE, SERVICE TO BE CONSTRUCTED OVER OR UNDER SEWER ACCORDING TO SUPERINTENDANTS INSTRUCTION.

2. ALL HOUSE CONNECTIONS TO BE 100Ø CLASS SN10 UNLESS NOTED OTHERWISE

PIPE DIAMETER (mm)
PIPE GRADE

DATUM R.L.

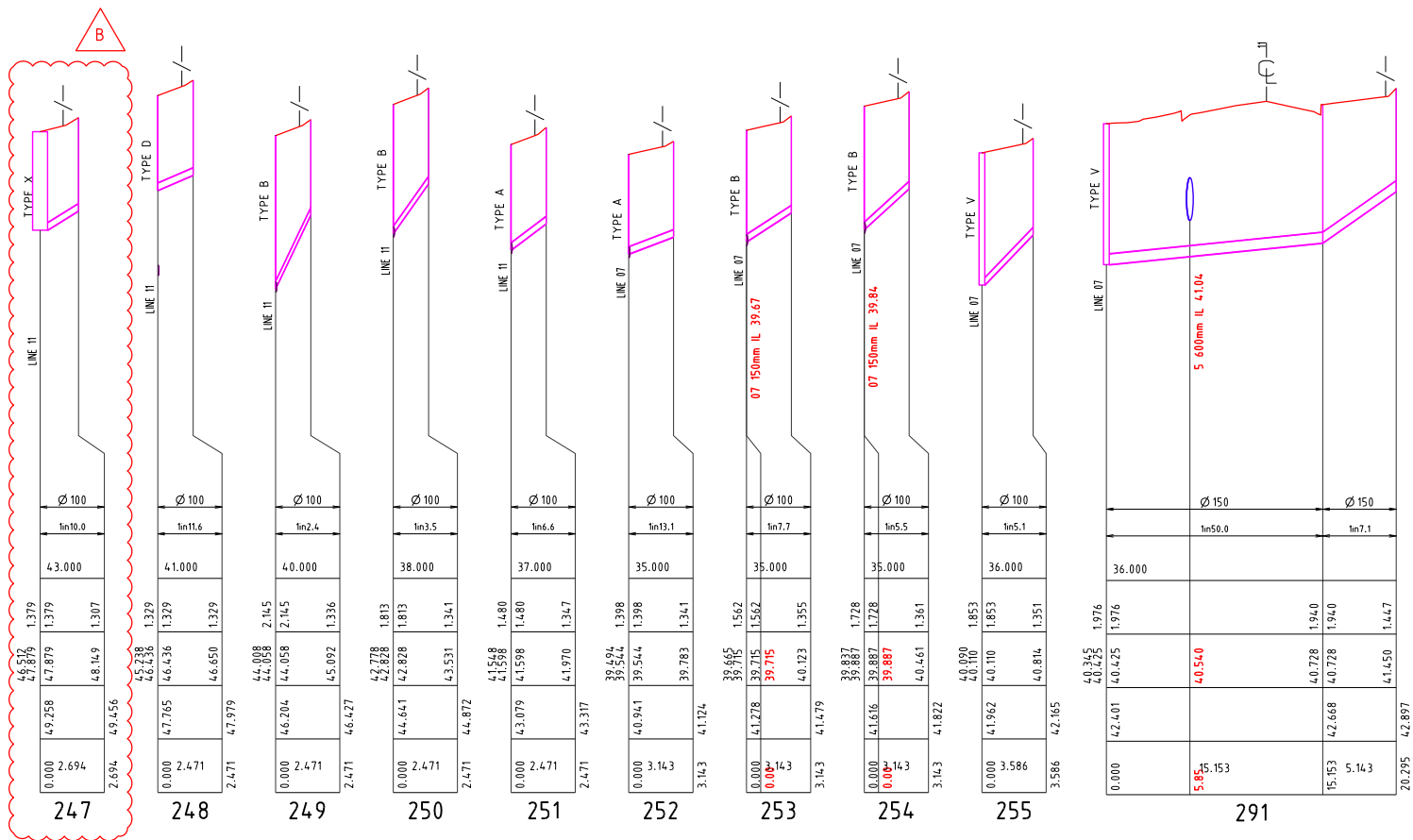
DEPTH TO INVERT

PIPE INVERT
LEVELS

DESIGN SURFACE
LEVELS

CHAINAGE

LOT NO.



STRUCTURE NAME

STRUCTURE DESCRIPTION

NOTES

- WHERE STRUCTURE DEPTHS ARE 0m TO 3m REFER TO IPWEA STANDARD DRAWINGS FOR STRUCTURE DETAILS. WHERE STRUCTURE DEPTHS ARE 3m TO 5m REFER TO TMR STANDARD DRAWINGS FOR STRUCTURE DETAILS. WHERE STRUCTURE DEPTHS EXCEED 5m STRUCTURES ARE NON-STANDARD AND STRUCTURAL DESIGN IS REQUIRED.
- STRUCTURAL DESIGN IS NOT PROVIDED AS PART OF THE TENDER DOCUMENTS, THE CONTRACTOR SHALL INCLUDE IN THEIR PRICE THE STRUCTURAL DESIGN AND CERTIFICATION OF THESE STRUCTURES.

PIPE GRADE (%)

PIPE DIAMETER (mm)

VELOCITY (m/s)

PIPE FLOW (m³/s)

PIPE CLASS

DATUM R.L.

DEPTH TO INVERT

HYDRAULIC GRADE LINE

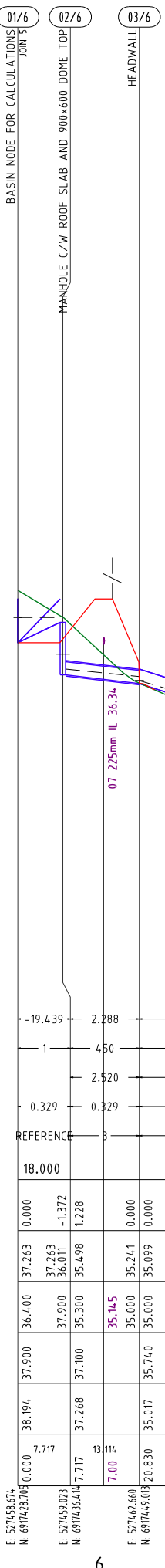
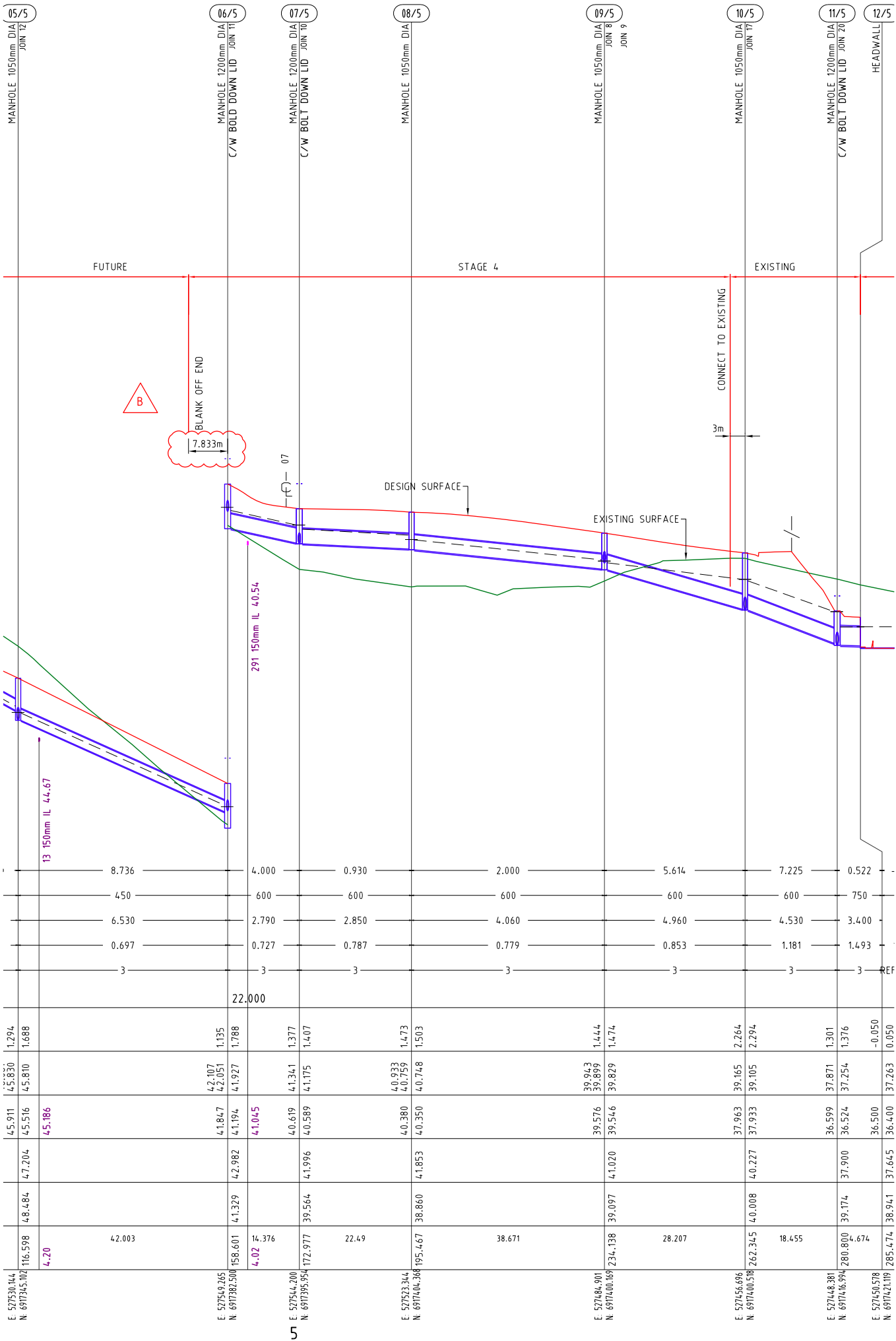
PIPE INVERT LEVELS

DESIGN SURFACE LEVELS

EXISTING SURFACE LEVELS

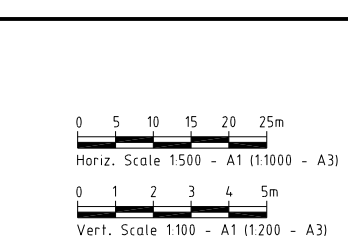
CHAINAGE

DRAINAGE LINE



PROJECT NAME
**COURTNEY DR
UPPER COOMERA**

STAGE 04
RP DESCRIPTION
LOT 188, 189, 190, 191 & 192 ON RP173728
COURTNEY DRIVE
LOCALITY OF UPPER COOMERA
LOCAL AUTHORITY - GOLD COAST CITY COUNCIL



REV	DATE	DESCRIPTION	INT
B	27-11-24	DIMENSIONS AMENDED	BL
A	27-04-24	COUNCIL ISSUE	BL

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DRAWING TITLE

**STORMWATER
PROFILES
SHEET 01**



DESIGNED RB	DRAWN BL
APPROVED <i>A.K.M.</i>	REQ 4706
DRAWING NUMBER 41901-04-620	REV B

STRUCTURE NAME

STRUCTURE DESCRIPTION

NOTES

1. WHERE STRUCTURE DEPTHS ARE 0m TO 3m REFER TO IPWEA STANDARD DRAWINGS FOR STRUCTURE DETAILS.
WHERE STRUCTURE DEPTHS ARE 3m TO 5m REFER TO TMR STANDARD DRAWINGS FOR STRUCTURE DETAILS.
WHERE STRUCTURE DEPTHS EXCEED 5m STRUCTURES ARE NON-STANDARD AND STRUCTURAL DESIGN IS REQUIRED.
2. STRUCTURAL DESIGN IS NOT PROVIDED AS PART OF THE TENDER DOCUMENTS, THE CONTRACTOR SHALL INCLUDE IN THEIR PRICE THE STRUCTURAL DESIGN AND CERTIFICATION OF THESE STRUCTURES.

PIPE GRADE (%)

PIPE DIAMETER (mm)

VELOCITY (m/s)

PIPE FLOW (m3/s)

PIPE CLASS

DATUM R.L.

DEPTH TO INVERT

HYDRAULIC GRADE LINE

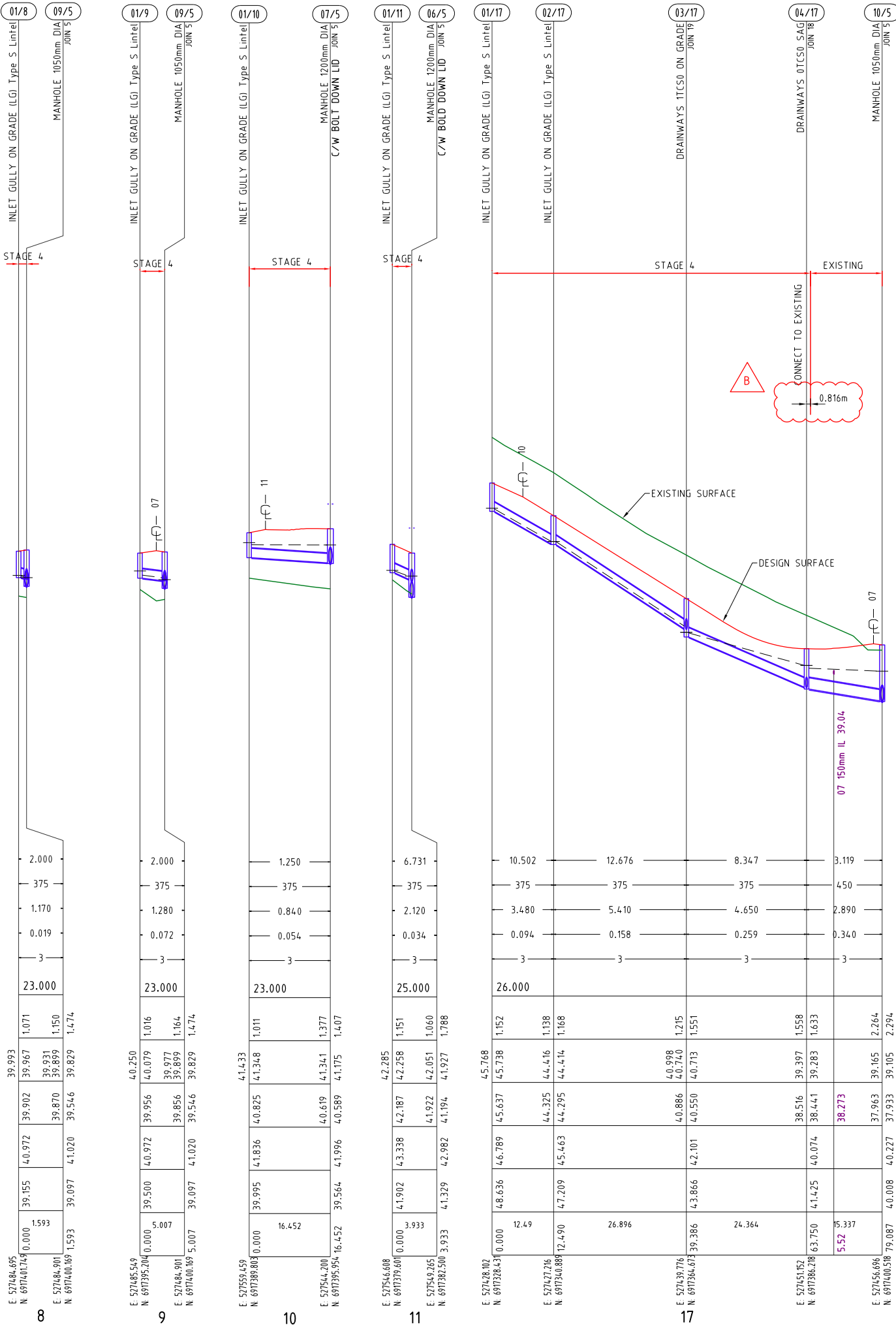
PIPE INVERT LEVELS

DESIGN SURFACE LEVELS

EXISTING SURFACE LEVELS

CHAINAGE

DRAINAGE LINE



PROJECT NAME

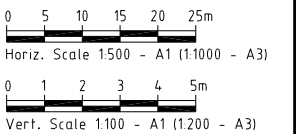
COURTNEY DR
UPPER COOMERA

STAGE 04

RP DESCRIPTION

LOT 188, 189, 190, 191 & 192 ON RP173728
COURTNEY DRIVE
LOCALITY OF UPPER COOMERA
LOCAL AUTHORITY - GOLD COAST CITY COUNCIL

CLIENT



B	27-11-24	DIMENSIONS AMENDED	BL
A	27-04-24	COUNCIL ISSUE	BL
REV	DATE	DESCRIPTION	INT

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ASSOCIATED CONSULTANTS



DRAWING TITLE

STORMWATER
PROFILES
SHEET 02



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DESIGNED RB	DRAWN BL
APPROVED <i>A.K.M.</i>	REPEQ4706
DRAWING NUMBER	DATE 30-10-24

41901-04-621

REV
B

STRUCTURE NAME

STRUCTURE DESCRIPTION

NOTES

1. WHERE STRUCTURE DEPTHS ARE 0m TO 3m REFER TO IPWEA STANDARD DRAWINGS FOR STRUCTURE DETAILS.
WHERE STRUCTURE DEPTHS ARE 3m TO 5m REFER TO TMR STANDARD DRAWINGS FOR STRUCTURE DETAILS.
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PIPE GRADE (%)

PIPE DIAMETER (mm)

VELOCITY (m/s)

PIPE FLOW (m³/s)

PIPE CLASS

DATUM R.L.

DEPTH TO INVERT

HYDRAULIC GRADE LINE

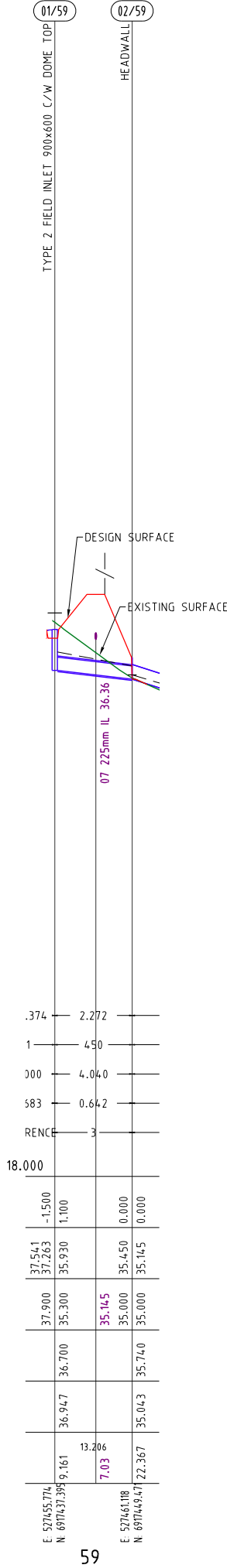
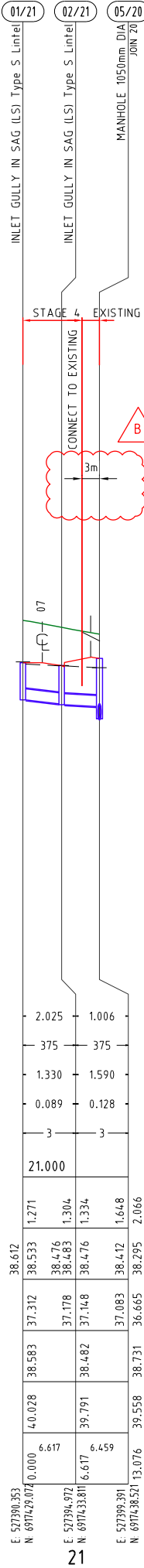
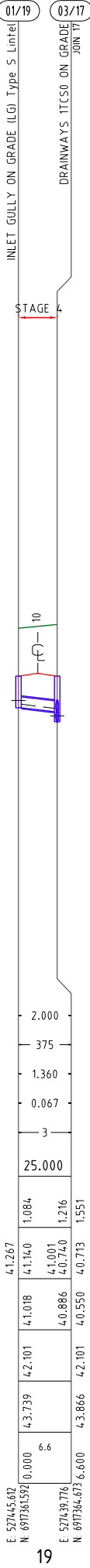
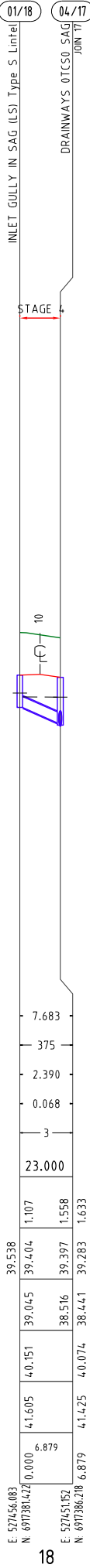
PIPE INVERT LEVELS

DESIGN SURFACE LEVELS

EXISTING SURFACE LEVELS

CHAINAGE

DRAINAGE LINE



PROJECT NAME

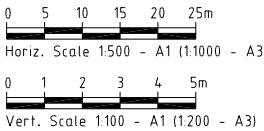
COURTNEY DR
UPPER COOMERA

STAGE 04

RP DESCRIPTION

LOT 188, 189, 190, 191 & 192 ON RP173728
COURTNEY DRIVE
LOCALITY OF UPPER COOMERA
LOCAL AUTHORITY - GOLD COAST CITY COUNCIL

CLIENT



B	27-11-24	DIMENSIONS AMENDED	BL
A	27-04-24	COUNCIL ISSUE	BL
REV	DATE	DESCRIPTION	INT

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ASSOCIATED CONSULTANTS



DRAWING TITLE

STORMWATER
PROFILES
SHEET 03

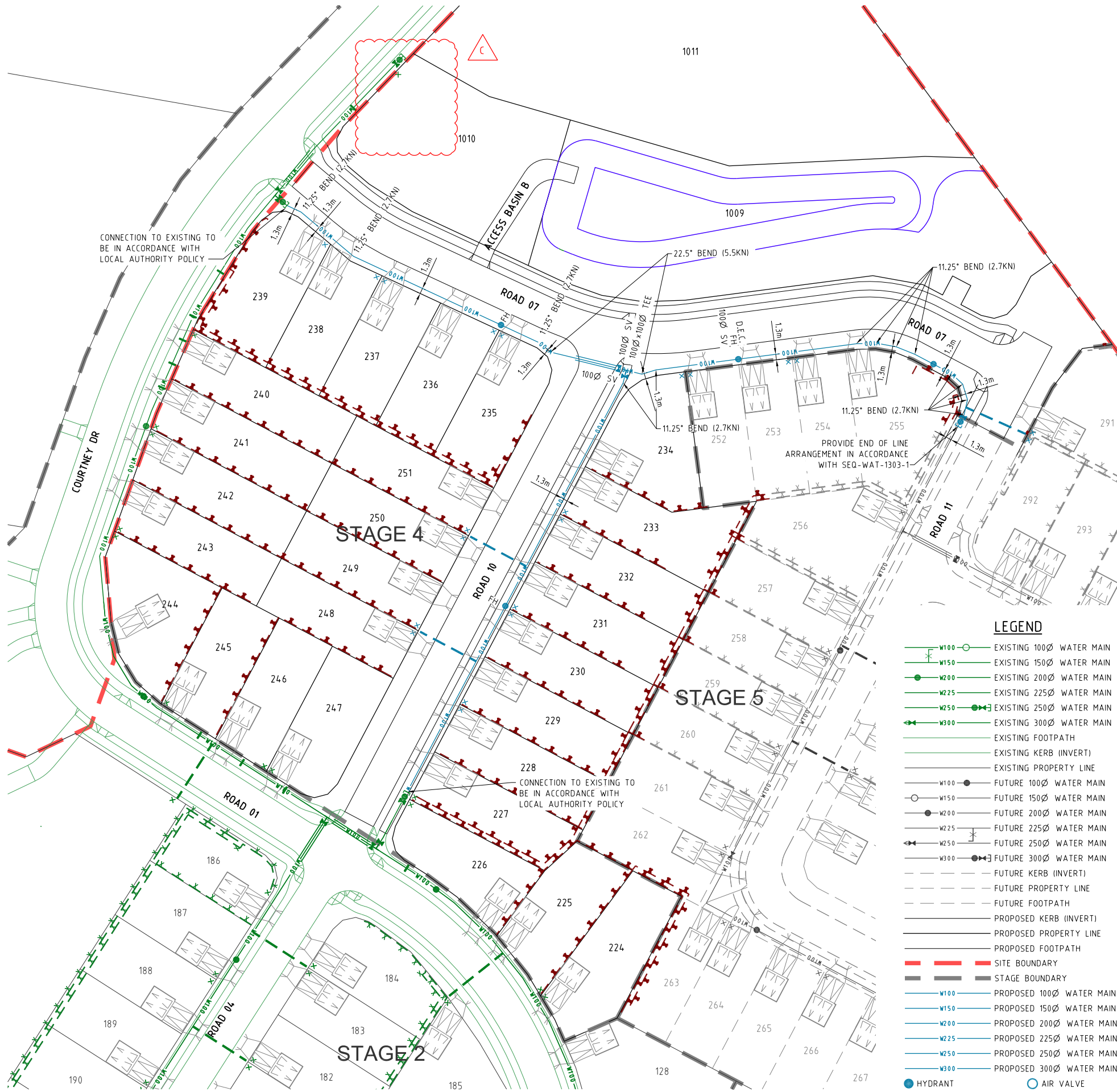


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DESIGNED RB	DRAWN BL
APPROVED <i>A.K.M.</i>	DATE 30-10-24
DRAWING NUMBER 41901-04-622	REV B



WATER PIPE SPECIFICATIONS

WATER MAIN LOCATION	PIPE MATERIAL SPECIFICATION
FOOTPATH VERGE	PVC-M SERIES 2 PN16
ROAD CROSSING	DICL PN35

LEGEND	
	EXISTING 100Ø WATER MAIN
	EXISTING 150Ø WATER MAIN
	EXISTING 200Ø WATER MAIN
	EXISTING 225Ø WATER MAIN
	EXISTING 250Ø WATER MAIN
	EXISTING 300Ø WATER MAIN
	EXISTING FOOTPATH
	EXISTING KERB (INVERT)
	EXISTING PROPERTY LINE
	FUTURE 100Ø WATER MAIN
	FUTURE 150Ø WATER MAIN
	FUTURE 200Ø WATER MAIN
	FUTURE 225Ø WATER MAIN
	FUTURE 250Ø WATER MAIN
	FUTURE 300Ø WATER MAIN
	FUTURE KERB (INVERT)
	FUTURE PROPERTY LINE
	FUTURE FOOTPATH
	PROPOSED KERB (INVERT)
	PROPOSED PROPERTY LINE
	PROPOSED FOOTPATH
	SITE BOUNDARY
	STAGE BOUNDARY
	PROPOSED 100Ø WATER MAIN
	PROPOSED 150Ø WATER MAIN
	PROPOSED 200Ø WATER MAIN
	PROPOSED 225Ø WATER MAIN
	PROPOSED 250Ø WATER MAIN
	PROPOSED 300Ø WATER MAIN
	HYDRANT
	TEE
	REDUCER
	SLUICE VALVE
	ENDCAP
	SCOUR VALVE
	AIR VALVE
	METER LOCATION
	TRENCH STOP
	SERVICE CONDUIT
	DICL ROAD CROSSING

SEQ CODE WATER NOTES

SEQ CODE NOTES COPIED DIRECTLY FROM DRAWING SEQ-WAT-1101-3 (REV A).

VEGETATION PROTECTION

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

SOIL

- TOPSOIL & SUBSOIL SHALL BE STOCKPILED SEPARATELY.
- CARE SHALL BE TAKEN TO PREVENT SEDIMENT FROM ENTERING THE STORMWATER SYSTEM. THIS MAY INVOLVE PLACING APPROPRIATE SEDIMENT CONTROLS AROUND STOCKPILES.
- IF ACID SULPHATE SOILS EXIST IN THE WORKS AREA, THE CONTRACTOR MUST PREPARE A RISK ASSESSMENT BASED ON THE QUEENSLAND ACID SULPHATE SOIL TECHNICAL MANUAL & MANAGE THE ACID SULPHATE SOILS AS PER THE MANUAL.

CREEK CROSSINGS

- SILTATION CONTROL MEASURES SHALL BE PLACED DOWNSTREAM OF ANY EXCAVATION WORK.
- APPROPRIATE SEDIMENT CONTROLS SHALL BE USED TO PREVENT SEDIMENT FROM ENTERING THE CREEK.
- NO SOIL SHALL BE STOCKPILED WITHIN 5m OF THE CREEK.

REHABILITATION

- PREDISTURBANCE SOIL PROFILES & COMPACTION LEVELS SHALL BE REINSTATED.
- PREDISTURBANCE VEGETATION PATTERNS SHALL BE RESTORED.

GENERAL NOTES

- ALL WORK & MATERIALS SHALL BE IN ACCORDANCE WITH CURRENT SOUTH EAST QUEENSLAND WATER SUPPLY CODE SPECIFICATIONS & STANDARDS.
- UNLESS SPECIFIED OTHERWISE ALL MATERIALS & WORK SHALL COMPLY WITH THE RELEVANT AUSTRALIAN STANDARDS.
- ADOPT LIP OF KERB OR SHOULDER OF ROAD AS PERMANENT LEVEL.
- COVER ON MAINS FROM PERMANENT LEVEL TO BE AS SHOWN IN SEQ-WAT-1200-2.
- CONDUITS TO BE INSTALLED IN ACCORDANCE WITH THE STANDARD DRAWINGS.
- 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.
- ALL MATERIALS USED IN THE WORKS SHALL COMPLY WITH THE SEQ-SP'S ACCEPTED PRODUCTS & MATERIALS LIST OR BE APPROPRIATELY SHOWN, LISTED & DEFINED IN THE ENGINEERING SUBMISSION SO THAT THE ALTERNATIVE PRODUCT OR MATERIAL CAN BE ASSESSED & IF APPROPRIATE, APPROVED BY THE SEQ-SP.
- ALL CONCRETE FOOTPATHS TO BE CLEAR OF WATER MAINS.
- TEST/CHLORINATION POINTS TO BE INSTALLED IN ACCORDANCE WITH STANDARD DRAWING NO. SEQ-WAT-1410-1.
- 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.

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

PROJECT SPECIFIC WATER NOTES

- ALL PROPERTY CONNECTION ROAD CROSSINGS TO BE SLEEVED WITH DN100 uPVC FOR COGC CONDUIT.
- ALL MATERIALS ARE TO BE SUPPLIED & CONSTRUCTED IN ACCORDANCE WITH SEQ CODE.
- WATER METERS ARE TO BE SUPPLIED & INSTALLED AT ALL WATER SERVICE / CONNECTION POINTS IN ACCORDANCE WITH SEQ-WAT-1106-1.
- THRUST BLOCKS TO BE LOCATED & INSTALLED BY CONTRACTOR IN ACCORDANCE WITH SEQ CODE.
- TRENCH STOPS & BULKHEADS TO BE IN ACCORDANCE WITH WATER AUTHORITY REQUIREMENTS.
- THE CONTRACTOR IS TO INCLUDE ROCK EXCAVATION AS PART OF THEIR WATER RATES UNLESS SCHEDULED OTHERWISE WITHIN THE CONTRACT.
- FOOTPATHS SHOWN FOR INFORMATION PURPOSES ONLY.
- ALL WATER CONSTRUCTION WORK UNDERTAKEN BY THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE WORKPLACE HEALTH & SAFETY LEGISLATION.
- MINIMUM WATERMAIN COVER TO BE IN ACCORDANCE WITH SECTION 7.4.2 TABLE 7.2 OF THE SEQ AMENDMENT TO WATER SUPPLY CODE OF AUSTRALIA.
- CONTRACTOR TO PAY ALL FEES & CHARGES ASSOCIATED WITH CONNECTIONS.
- END OF LINE ARRANGEMENTS (EG. CUL-DE-SAC HEADS) TO BE CONSTRUCTED IN ACCORDANCE WITH SEQ-WAT-1104-1.
- TEMPORARY CONSTRUCTION HYDRANTS TO BE PROVIDED IN ACCORDANCE WITH SEQ-WAT-1303-1 AT ALL CONNECTIONS.
- ALL LIVE CONNECTIONS ARE TO BE ORGANISED BY THE CIVIL CONTRACTOR & UNDERTAKEN BY COUNCIL AT THE DEVELOPERS EXPENSE.
- MINIMUM CLEARANCES ARE TO BE MAINTAINED BETWEEN PROPOSED WATER & SEWER IN ACCORDANCE WITH TABLE 5.5 OF WSA03 WATER SUPPLY CODE AUSTRALIA.

PROJECT NAME

COURTNEY DR
UPPER COOMERA

STAGE 04

RP DESCRIPTION

LOT 188, 189, 190, 191 & 192 ON RP173728
COURTNEY DRIVE
LOCALITY OF UPPER COOMERA
LOCAL AUTHORITY - GOLD COAST CITY COUNCIL

CLIENT



0 5 10 15 20 25m
Scale 1:500 - A1 (1:1000 - A3)

C	27-11-24	EXISTING PUMP STATION & WATER SERVICE REMOVED	BL
B	07-08-24	NOTE ADDED	BL
A	27-04-24	COUNCIL ISSUE	BL
REV	DATE	DESCRIPTION	INT

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ASSOCIATED CONSULTANTS



DRAWING TITLE

WATER
RETICULATION
PLAN
SHEET 01



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DESIGNED RB	DRAWN BL
APPROVED	PEQ4706 DATE 30-10-24

DRAWING NUMBER

41901-04-700

REV

C