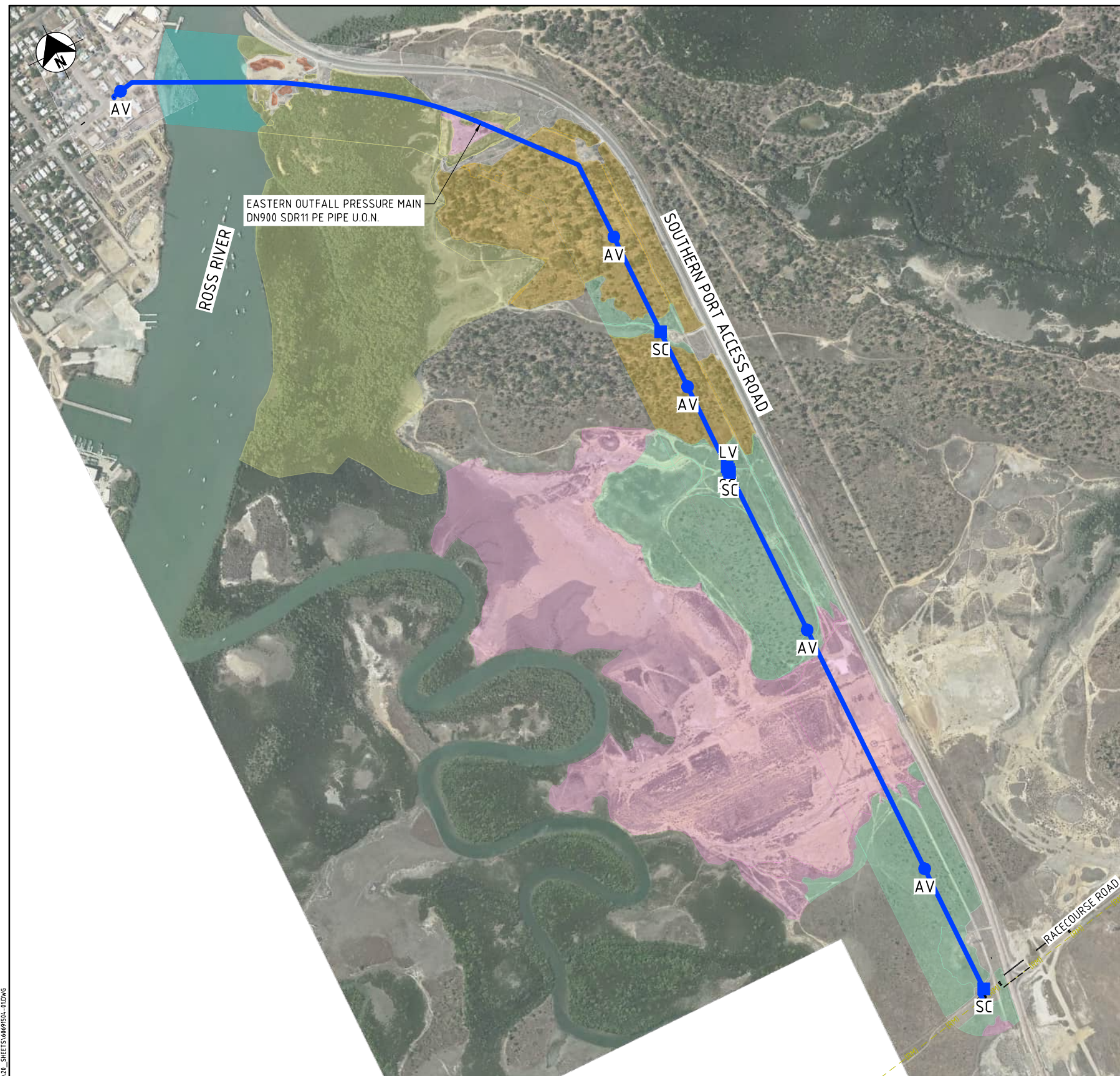


Appendix G

80% Design Drawings

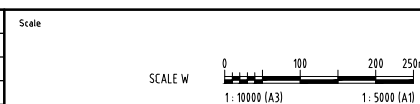
Appendix G 80% Design Drawings



LAYOUT PLAN

DRAWING INDEX	
DWG No.	TITLE
60691504-01	LAYOUT PLAN AND DRAWING INDEX
60691504-02	GENERAL NOTES AND LEGEND
60691504-03	PLAN AND LONGITUDINAL SECTION SHEET 1
60691504-04	PLAN AND LONGITUDINAL SECTION SHEET 2
60691504-05	PLAN AND LONGITUDINAL SECTION SHEET 3
60691504-06	PLAN AND LONGITUDINAL SECTION SHEET 4
60691504-07	PLAN AND LONGITUDINAL SECTION SHEET 5
60691504-08	NORTHERN CONNECTION DETAIL
60691504-09	SOUTHERN CONNECTION DETAIL
60691504-10	LINE VALVE DETAIL INCLUDING SCOUR DETAILS
60691504-11	AIR VALVE DETAIL
60691504-12	OPEN TRENCHED CONSTRUCTION TYPICAL SECTION
60691504-13	PIPE SPECIALS
60691504-14	PAVEMENT WORKS
60691504-15	VALVE SUPPORTS
60691504-20	FLOW METER CHAMBER STRUCTURAL NOTES
60691504-21	FLOW METER CHAMBER CONCRETE ARRANGEMENT PLAN & SECTIONS
60691504-22	FLOW METER CHAMBER REINFORCEMENT DETAILS PLAN, SECTIONS & DETAILS
60691504-30	FLOWMETER MAIN SWITCHBOARD POWER SCHEMATIC
60691504-31	FLOWMETER MAIN SWITCHBOARD TELEMETRY SCHEMATIC (SHEET 1)
60691504-32	FLOWMETER MAIN SWITCHBOARD TELEMETRY SCHEMATIC (SHEET 2)
60691504-33	FLOWMETER MAIN SWITCHBOARD PANEL GA
1457-001	ROSS RIVER SRM - REFERENCE HDD PROFILE ROSS RIVER, SOUTH TOWNSVILLE ALIGNMENT AND LONGSECTION PLAN
1457-002	ROSS RIVER SRM - REFERENCE HDD PROFILE 2 ROSS RIVER, SOUTH TOWNSVILLE ALIGNMENT AND LONGSECTION PLAN

This drawing is confidential and shall only be used for the purposes of this project.						
REVISIONS						
	C	PSA	30.05.25	CLIENT REVIEW		
	B	PSA	5.11.24	CONCEPT VALIDATION UPDATES'		
	A	CJM	07.08.23	CONCEPT DESIGN		
No.	BY	DATE		DESCRIPTION		APPD



THE SIGNING OF THIS TITLE BLOCK CONFIRMS THE DESIGN AND DRAFTING OF THIS PROJECT HAVE BEEN PREPARED AND CHECKED IN ACCORDANCE WITH THE AECOM QUALITY ASSURANCE SYSTEM TO ISO 9001-2000			
DESIGNED		CHECKED	
DRAWN		CHECKED	
APPROVED		DATE	

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EASTERN OUTFALL PRESSURE MAIN REPLACEMENT			
LAYOUT PLAN AND DRAWING INDEX			
Status	PRELIMINARY	Dwg No.	60691504-01
			Rev. C

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 LAST MODIFIED: 22/03/2025 10:4 AM
 REVISIONS

GENERAL NOTES

- DESIGN BY: AECOM AUSTRALIA PTY LTD
FOR: TOWNSVILLE CITY COUNCIL
- ALL LEVELS IN METRES.
- ALL DIMENSIONS IN METRES U.O.N.
- ALL CO-ORDINATE VALUES ARE IN METRES TO THE SURVEY LEVEL DATUM.
- ALL PIPE DIAMETERS IN MILLIMETRES U.O.N.
- MINIMUM COVER TO PIPELINES SHALL BE 1000mm BELOW EXISTING GROUND LEVEL U.O.N.
- PIPE DESIGN PRESSURES:
TEST PRESSURE SHALL BE 900kPa
SYSTEM DESIGN PRESSURE SHALL BE 300kPa.
- ALL VALVE BOXES IN THE ROADWAY ARE TO BE INSTALLED FLUSH WITH THE SURROUNDING RUNNING SURFACE. THE AREA AROUND THE VALVE BOX IS TO BE THOROUGHLY COMPACTED TO REDUCE THE LIKELIHOOD OF SETTLEMENT.
- DILAPIDATION SURVEY TO BE COMPLETED PRIOR TO WORKS STARTING AND THEN ON COMPLETION.
- THE CONTRACTOR SHALL UNDERTAKE ALL TEMPORARY AND PERMANENT WORKS TO ENSURE A SAFE AND STABLE WORK SITE INCLUDING STABILITY OF EXCAVATIONS AND OF ADJACENT STRUCTURES. THE CONTRACTOR MUST UNSURE THAT NO DAMAGE IS CAUSED TO ADJACENT STRUCTURES DUE TO WORK ACTIVITIES. ALL TEMPORARY WORKS SHALL BE DESIGNED AND CERTIFIED BY THE CONTRACTOR'S RPEQ ENGINEER.
- PIPELINE CENTRELINE LOCATION IS EITHER SETOUT FROM PROPERTY BOUNDARIES, BY CO-ORDINATES OF CENTRELINE INTERSECTION POINTS OR BY OFFSETS TO EXISTING STRUCTURES OR SERVICES. REFER DRAWINGS FOR DETAILS.
- PIPEWORK DISTANCES ON PLANS AND LONGITUDINAL SECTIONS ARE MEASURED HORIZONTALLY IN PLAN AND DO NOT ALLOW FOR ADDITIONAL PIPE LENGTH REQUIRED DUE TO CHANGES IN VERTICAL ALIGNMENT.
- EXISTING SURFACE LEVELS ON LONGITUDINAL SECTIONS TAKEN FROM SURVEY DATA WHICH CONTAINS FIELD SURVEY PICKUP.
- THE INVERT LEVELS TABULATED ON THE LONGITUDINAL SECTIONS ARE PIPELINE CONTROL I.L'S
- THE VERTICAL GRADING OF THE PIPELINE IS DETAILED AS STRAIGHT GRADES BETWEEN THE CONTROL I.L'S. THE EVEN GRADING OF PIPEWORK IMPLIES THAT THE CONTRACTOR SHALL USE PIPE JOINT DEFLECTIONS AND THE NOMINATED FITTINGS TO ACHIEVE THE SPECIFIED VERTICAL CHANGES OF GRADE WHILST ENSURING MINIMUM COVER IS ACHIEVED.
- HORIZONTAL AND VERTICAL DEFLECTIONS FOR ALL PIPELINES SHALL BE ACHIEVED BY USING STANDARD PIPE FITTINGS WITH PIPE JOINT DEFLECTIONS/PIPE CURVATURE OR BY PIPE JOINT DEFLECTIONS/PIPE CURVATURE ALONE U.O.N.
- VERTICAL DEFLECTIONS MAY ALSO BE ACHIEVED BY ROTATION OF THE LEG OF A HORIZONTAL BEND AT A HORIZONTAL SET-OUT POINT
- MAXIMUM PIPE JOINT DEFLECTIONS SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
- ALL DEFLECTION ANGLES PROVIDED ARE DESIGN ANGLES ONLY. THE CONTRACTOR MAY PULL JOINTS IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
- BENDS WHERE REQUIRED ARE NOMINATED ON THE PLANS. THE CONTRACTOR SHALL CONFIRM ALL BEND REQUIREMENTS
- THE PIPE LAID IN TRENCH SHALL BE PROTECTED AGAINST FLOTATION DURING CONSTRUCTION.
- THE CONTRACTOR SHALL ALLOW FOR THE COSTS OF UNDERTAKING CLEANING OF PIPES AND CCTV VERIFICATION OF CLEAN PIPES BEFORE HANDING OVER TO T.C.C.
- A MINIMUM 3.5m CLEARANCE SHALL BE PROVIDED TO ALL ELECTRICAL POLES AT ALL TIMES WHEN WORKING IN THE PROXIMITY TO ELECTRICAL POLES. WHERE MINIMUM CLEARANCE CANNOT BE ACHIEVED, TEMPORARY SUPPORT SHALL BE PROVIDED BY THE CONSTRUCTOR AND CERTIFIED BY THE CONSTRUCTOR'S RPEQ ENGINEER.
- HYDROSTATIC TEST SECTIONS INDICATED ON THE DRAWINGS ARE THE MINIMUM REQUIRED. CONSTRUCTION RISK ASSOCIATED WITH TEST FAILURE REMAINS THAT OF THE CONTRACTOR. THE CONTRACTOR MAY ELECT TO INCREASE TESTING FREQUENCY TO MANAGE CONSTRUCTION RISK AS DEEMED APPROPRIATE BY THE CONTRACTOR. ANY MODIFICATIONS TO THE TESTING SECTIONS SHALL BE DETAILED IN THE CONTRACTOR'S TESTING PLAN.

T.C.C. STANDARD DRAWINGS

SD-055 ROAD CROSSING AND FOOTPATH REINSTATEMENT FOR TRENCH LAID SERVICES

SEQ STANDARD DRAWINGS

THE FOLLOWING SEQ STANDARD DRAWINGS SHALL FORM PART OF THE DRAWING SET. IN CASE OF ANY DISCREPANCY BETWEEN THE AECOM / TCC DRAWINGS AND THE SEQ STANDARD DRAWINGS, THE AECOM / SEQ DRAWINGS SHALL TAKE PRECEDENCE.

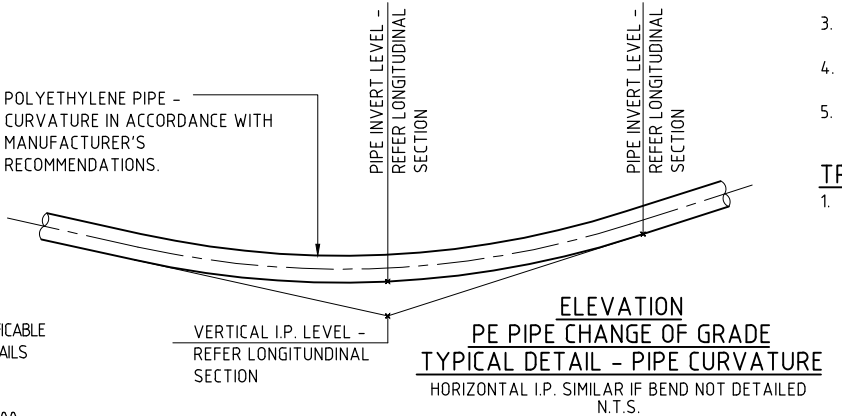
SEQ-SEW-1200-1	TYPICAL SOIL CLASSIFICATION GUIDELINES AND ALLOWABLE BEARING PRESSURES FOR ANCHORS AND THRUST BLOCKS
SEQ-SEW-1201-1	STANDARD EMBEDMENT - TYPICAL FLEXIBLE AND RIGID PIPES
SEQ-SEW-1202-1	TYPICAL SPECIAL EMBEDMENT - INADEQUATE FOUNDATIONS REQUIRING OVER EXCAVATION AND REPLACEMENT
SEQ-SEW-1203-1	TYPICAL SPECIAL EMBEDMENT - CONCRETE AND STABILISED EMBEDMENT AND FLEXIBLE JOINT DETAILS
SEQ-SEW-1205-1	TYPICAL TRENCH AND BEDDING DTEAILS WITHIN EXISTING ROADS - TYPE K TO N
SEQ-SEW-1206-1	TYPICAL TRENCH DRAINAGE BULKHEADS AND TRENCHSTOPS
SEQ-SEW-1300-1	MAINTENANCE HOLES < DN300 SEWER TYPE P1, P2 AND P3 TYPICAL PRE-CAST
SEQ-SEW-1301-26	'G', 'F', 'X' TYPE MAINTENANCE HOLES TOP SLABS REINFORCEMENT DETAILS
SEQ-SEW-1308-1	TYPICAL MAINTENANCE HOLE AND SHAFT COVER AND SURROUND DETAIL
SEQ-SEW-1308-8	MAINTENANCE HOLE COVER SEWER - CLASS D - BOLT DOWN TYPICAL BASE FRAME DETAIL
SEQ-SEW-1308-9	MAINTENANCE HOLE COVER SEWER - CLASS D - BOLT DOWN TYPICAL RISER RING DETAILS
SEQ-SEW-1308-10	MAINTENANCE HOLE COVER SEWER - CLASS D - BOLT DOWN TYPICAL COVER DETAILS
SEQ-SEW-1308-11	MAINTENANCE HOLE COVER SEWER - CLASS D - BOLT DOWN TYPICAL COVER DETAILS
SEQ-SEW-1606-1	AUTOMATIC GAS RELEASE VALVES
SEQ-SPS-1407-1	POLYETHYLENE LINING TOP SLAB AND WALLS TYPICAL DETAILS
SEQ-SPS-1604-1	SCOUR MAINTENANCE HOLE FOR RISING MAINS LARGER THAN DN300
SEQ-WAT-1300-2	TYPICAL VALVE AND HYDRANT IDENTIFICATION MARKER POSTS
SEQ-WAT-1301-1	TYPICAL VALVE INSTALLATION GENERAL ARRANGEMENT
SEQ-WAT-1305-1	TYPICAL SURFACE FITTING INSTALLATION VALVE AND HYDRANT SURFACE BOXES TRAFFICABLE AND NON-TRAFFICABLE
SEQ-WAT-1306-1	TYPICAL SURFACE FITTING INSTALLATION VALVE AND HYDRANT SURFACE BOXES SUPPORT AND SURROUND DETAILS
SEQ-WAT-1313-1	FLANGED JOINTS TYPICAL BOLTING DETAILS
SEQ-WAT-1402-1	TYPICAL STEEL PIPE JOINTING - PIPE WELD COLLARS
SEQ-WAT-1408-1	TYPICAL JOINT CORROSION PROTECTION CEMENT MORTAR LINED STEEL PIPE > DN750 TO DN1200

PIPELINE NOTES

- ALL FITTINGS SHALL BE MIN. PN16 U.O.N.
- ALL FLANGES SHALL BE A.S. 4087 PN16 U.O.N.
- ALL BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED STEEL. ALL BOLTS SHALL BE IN ACCORDANCE WITH AS4087 TABLE C1. THE THREADED SECTION OF THE BOLTS SHALL BE COATED WITH ANTI-SIEZE LUBRICANT LOCTITE 771 OR APPROVED EQUIVALENT PRIOR TO INSTALLATION
- DN DENOTES PIPE NOMINAL BORE FOR D.I.C.L. AND P.V.C. PIPE.
- DN DENOTES OUTSIDE DIAMETER FOR M.S.C.L. PIPE AND POLYETHYLENE PIPE.
- ALL FITTINGS CONNECTED BY FLEXIBLE JOINTS TO BE RESTRAINED BY CONCRETE ANCHORS.
- CONCRETE ANCHORS FOR ALL PIPELINES ARE DETAILED ON THE PROJECT DRAWINGS
- ALL VALVES TO BE SUPPORTED ON CONCRETE PADS TO CARRY WEIGHT ONLY.
- ALL BURIED VALVES TO BE INSTALLED WITH A VALVE COVER BOX AND CHAMBER.
- VALVES TO BE INSTALLED WITH EXTENDED SPINDLES IF REQUIRED.
- EXTENSION SPINDLES SHALL BE SS316 AND COMPLY WITH WSA PS-262
- PIPELINE MARKERS TO BE INSTALLED AT ALL GATE VALVES, AIR VALVES, SCOURS, CHANGES OF DIRECTIONS AND AT INTERVALS NOT GREATER THAN 100m ALONG PIPELINE ALIGNMENT.
- ALL D.I.C.L. THRUST FLANGES TO BE INTEGRALLY CAST TO PIPE OR REBATED WEEP FLANGES.
- FLANGE GASKETS AND TO BE IN ACCORDANCE WITH WSA 109.
- ALL BURIED FLANGES AND MECHANICAL JOINTS SHALL BE WRAPPED USING AN APPROVED BUTYL PRIMER, PRIMARY TAPE OUTER WRAP AND SECONDARY TAPE SYSTEM (DENSO OR APPROVED EQUIVALENT).
- ALL PIPES AND FITTINGS SHALL BE PROPERLY SECURED AND PROTECTED BY CONTRACTOR. ANY DAMAGES OR LOSS OF PIPES AND FITTINGS SHALL BE BORNE BY THE CONTRACTOR.
- WHERE PROPRIETARY ITEMS HAVE BEEN SPECIFIED, A SUITABLE EQUIVALENT MAY BE USED IF APPROVED BY THE SUPERINTENDENT.
- MARKING TAPE TO WSA PS-318 SHALL BE LAID ON TOP OF PIPE EMBEDMENT MATERIAL. REFER TO SEQ-SEW-1202-1.
- THE CONTRACTOR SHALL PROVIDE ALL TEMPORARY MEASURES INCLUDING ISOLATION VALVES, HYDRANTS AND SCOUR VALVES TO FACILITATE THE TESTING AND COMMISSIONING OF THE MAINS.
- THE CONTRACTOR SHALL ARRANGE AND PAY FOR THE WATER SUPPLY FOR TESTING AND COMMISSIONING.
- ANY DAMAGED CEMENT MORTAR LINING (CML) SHALL BE REPAIRED USING EZLINE MORTAR MIX OR APPROVED EQUIVALENT IN ACCORDANCE WITH THE MANUFACTURER'S REQUIREMENTS. AT THE TIME OF APPLICATION OF THE MORTAR THE SURFACE OF THE PIPE OR FITTINGS SHALL BE FREE OF LOOSE RUST, LOOSE MILL SCALE, DIRT, DEBRIS, OIL, GREASE, AND OTHER DETRIMENTAL MATERIALS ONCE THE CML IS CURED.

EXISTING SERVICES

- THE GENERAL LOCATION OF EXISTING WATERMAINS, SEWERS, SEWAGE RISING MAINS, RECYCLED WATER MAINS AND STORMWATER DRAINS ON THE DRAWINGS WERE SOURCED FROM T.C.C.'s "TOWNSVILLE MAPS" MAPPING SERVICE. SUBSEQUENTLY EXISTING SERVICES CROSSING THE PROPOSED ALIGNMENT HAVE BEEN LOCATED WHERE POSSIBLE TO AS 5488 QLA OR QLB, REFER SURVEY RECORDS (BRAZIER MOTTI SURVEY DRAWINGS 43417/001A SHEET 1, AND VISION SURVEY DRAWINGS 15556-CD1 SHEET 1 TO 8) AND ROWLANDS SURVEYS DRAWING 44481/01. THE EXISTING OPERATIONAL PRESSURE MAIN BENEATH ROSS RIVER HAS BEEN APPROXIMATELY LOCATED HORIZONTALLY AND VERTICALLY BY UTILITY MAPPING (REF XXX)
- ALL EXISTING SERVICES MAY NOT HAVE BEEN FOUND. PRIOR TO ANY EXCAVATION ON SITE THE RELEVANT AUTHORITY SHOULD BE CONTACTED FOR LOCATION OF EXISTING UNDERGROUND SERVICES AND THE CONTRACTOR SHALL CARRY OUT ADDITIONAL INVESTIGATIONS WHERE REQUIRED TO DETERMINE THE LOCATION OF SERVICES.
- LOCATION AND LEVELS OF ALL EXISTING SERVICES SHALL BE CONFIRMED BY THE CONTRACTOR ON SITE PRIOR TO CONSTRUCTION.
- THE CONTRACTOR SHALL COORDINATE ALL CUT-IN OPERATIONS TO EXISTING SERVICES WITH ALL RELEVANT AUTHORITIES
- THE CONTRACTOR SHALL CONFIRM DIMENSIONS OF EXISTING PIPELINES AT ALL CONNECTION POINTS PRIOR TO FABRICATION AND SUPPLY OF FITTINGS.
- EXISTING PIPELINES SHALL REMAIN OPERATIONAL UNTIL COMMENCEMENT OF CUT-INS.
- THE CONTRACTOR SHALL FULLY SUPPORT ALL EXISTING SERVICES EXPOSED DURING CONSTRUCTION.



PIPEWORK NOTES - POLYETHYLENE

- POLYETHYLENE PIPE AND FITTINGS
AS 1460 - FITTINGS FOR USE WITH POLYETHYLENE PIPES.
AS 2033 - INSTALLATION OF POLYETHYLENE PIPE SYSTEMS
AS 4129 - FITTINGS FOR POLYETHYLENE PIPES FOR PRESSURE APPLICATIONS.
AS 4130 - POLYETHYLENE PIPES FOR PRESSURE APPLICATIONS.
AS 4131 - POLYETHYLENE COMPOUNDS FOR PIPES AND FITTINGS APPLICATIONS
- ALL POLYETHYLENE PIPES TO BE PE100 SDR11 U.O.N.
- HORIZONTAL AND VERTICAL DEFLECTIONS MAY BE ACHIEVED USING STANDARD PIPE FITTINGS WITH PIPE CURVATURE OR PIPE CURVATURE ALONE.
- SWEEP BENDS OR PIPE CURVATURES TO ACHIEVE THE REQUIRED DEFLECTIONS AT THE I.P.'s ARE NOT SHOWN ON THE PLANS.
- CONNECTIONS WITH OTHER PIPE AND FITTING MATERIALS < DN450 SHALL BE FLANGED USING P.E. MAXISTUB FLANGE WITH GALVANIZED STEEL BACKING RINGS.
- CONNECTIONS WITH OTHER PIPE AND FITTING MATERIALS ≥ DN450 SHALL BE FLANGED USING P.E. STUB FLANGE WITH GALVANIZED STEEL BACKING RINGS.
- THE PIPELINE SHALL BE INSTALLED AS CLOSE TO THE SET OUT INTERSECTION POINT AS POSSIBLE BY APPLYING THE MINIMUM PIPE BENDING RADIUS TO THE PIPE.
- MINIMUM BENDING RADIUS FOR PIPE CURVATURE SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
- POLYETHYLENE PIPE JOINTS TO BE BUTT WELDED.
- ELECTROFUSION JOINTS ARE NOT ACCEPTABLE UNLESS THE CONTRACTOR DEMONSTRATES THAT BUTT WELDING IS NOT ACHIEVABLE.

D.I.C.L. PIPEWORK NOTES

- DUCTILE IRON PIPE AND FITTINGS TO BE IN ACCORDANCE WITH AS 2280 - DUCTILE IRON PIPES AND FITTINGS.
- ALL D.I.C.L. RRJ PIPE SHALL BE PN35 U.O.N.
- ALL D.I.C.L. FLANGES SHALL BE A.S. 4087 PN16 U.O.N.
- D.I.C.L. PIPE SHALL BE COATED WITH MIN 400g/m² ZINC AND 100 MICRON EPOXY SUITABLE FOR AGGRESSIVE SOIL CONDITIONS.
- D.I.C.L. FITTINGS SHALL BE COATED AND LINED WITH FUSION BONDED EPOXY IN ACCORDANCE WITH AS4158.

STEEL WELDING

- ALL WELDS SHALL BE CATEGORY SP IN ACCORDANCE WITH A.S. 1554.1
- WELD SHALL BE HEAT SHRINK SLEEVED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.
- USE PREQUALIFIED WELD PROCEDURES & CONSUMABLES TO AS/NZS 1554.1 CLAUSE 4.3 OR DEVELOP QUALIFICATION OF WELD PROCEDURE & CONSUMABLES BY TESTING TO SA/NZS1554.1 CLAUSE 4.2. LIST APPLICABLE PARAMETERS ON WELDING PROCEDURE QUALIFICATION RECORD & MAKE RECORD AVAILABLE FOR INSPECTION.
- WELDING TO BE UNDERTAKEN BY A SUITABLY QUALIFIED EXPERIENCED WELDER UNDER SUPERVISION OF QUALIFIED WELDING SUPERVISOR.
- WELDS TO BE INSPECTED BY INDEPENDENT NATA ACCREDITED QUALIFIED WELDING INSPECTOR TO AS 2214.
- UNLESS NOTED OTHERWISE, ALL FILLET WELDS SHALL BE MINIMUM 6mm CONTINUOUS WELD CATEGORY SP.

PROJECT SURVEY NOTES

- REFER SURVEY RECORDS (BRAZIER MOTTI SURVEY DRAWINGS 43417/001A SHEET 1, AND VISION SURVEY DRAWINGS 15556-CD1 SHEET 1 TO 8) AND ROWLANDS SURVEYS DRAWING 44481/01 FOR SURVEY DATA INCLUDING SURVEY CONTROL, SURVEY AZIMUTH, LEVEL DATUM AND POTHoles TO EXISTING SERVICES DETAILS

PROJECT GEOTECHNICAL NOTES

- REFER DOUGLAS PARTNERS REPORTS 221217.00.R.001, 221217.00.R.003 AND 221217.01.R.001 FOR GEOTECHNICAL DETAILS
- GEOTECHNICAL INFORMATION SHOWN ON THESE DRAWINGS IS INDICATIVE AND FOR INFORMATION ONLY. REFER TO THE GEOTECHNICAL REPORT FOR DETAILS.

PROJECT CONTAMINATION NOTES

- A CONTAMINATION INVESTIGATION WAS CARRIED OUT. REFER DOUGLAS PARTNERS REPORT 221217.00.R.002

ACCESS TRACK PAVEMENT NOTES

- ACCESS TRACK SHALL BE 4m WIDE U.O.N.
- PROVIDE COMPACTED FILL (100% SDD) UNDER OR TRIM EXISTING SURFACE TO PROVIDE MAX. 3% CROSS FALL TO ACCESS TRACK. BATTERS TO SIDE OF ACCESS TRACK ARE 1 ON 4 U.O.N..
- PAVEMENT SHALL BE 200mm THICK UNSEALED WEARING COURSE IN ACCORDANCE WITH THE SPECIFICATION.
- EDGE ACCESS TRACK SHALL BE 2m FROM CENTRELINE OF PIPE AND DIVERTED AS REQUIRED AROUND SCOUR VALVE INSTALLATIONS.
- TURNOUTS SHALL BE PROVIDED AT INTERSECTIONS OF ACCESS TRACKS AND CONNECTION TO PORT ACCESS ROAD.

TRENCHLESS NOTES

- TRENCHLESS DETAILS SHOWN ON THESE DESIGN DRAWINGS ARE A REFERENCE DESIGN. THE CONTRACTOR SHALL CARRY OUT THEIR OWN SPECIFIC DESIGN. REFER TO THE TECHNICAL SPECIFICATION.

NOT FOR CONSTRUCTION

ENVIRONMENTAL LEGEND

	REMNANT VEGETATION 11.1.1
	REMNANT VEGETATION 11.1.2
	REMNANT VEGETATION 11.1.4
	REMNANT VEGETATION 11.2.2 HVR
	REMNANT VEGETATION 11.2.5
	NON-REMNANT VEGETATION
	WATER

PIPEWORK LEGEND

B	BEND
T	TEE
R	TAPER
fl	FLANGE
pl	PLAIN
wC	WELD COLLAR
SV	SLUICE VALVE
AV	AIR VALVE
SC	SCOUR
U.O.N.	UNLESS OTHERWISE NOTED
O.D.	OUTSIDE DIAMETER
PE	POLYETHYLENE
D.I.C.L.	DUCTILE IRON CEMENT LINED
M.S.C.L.	MILD STEEL CEMENT LINED
CML	CEMENT MORTAR LINING
IP	STRAIGHT TO STRAIGHT INTERSECTION POINT
DN	NOMINAL DIAMETER
VD	VERTICAL DEFLECTION
HD	HORIZONTAL DEFLECTION
TDJ	THRUST DISMANTLING JOINT

DIMENSION TO BE CONFIRMED BY CONTRACTOR PRIOR TO CONSTRUCTION

LV LINE VALVE INSTALLATION (INCLUDING SCOUR INSTALLATION)

AV AIR VALVE INSTALLATION

SC SCOUR INSTALLATION

RM EXISTING SEWER RISING MAIN

S EXISTING SEWER MAIN

E EXISTING ELECTRICAL SERVICE

E EXISTING OVERHEAD ELECTRICAL SERVICE

EXISTING POWER POLE

T EXISTING COMMUNICATIONS SERVICE

W EXISTING WATER SERVICE

PROPOSED SEWER RISING MAIN

ACCESS AREA

CONSTRUCTION DISTURBANCE CORRIDOR INCLUDING ACCESS, LAYDOWN AND SOIL TREATMENT AREAS

TRENCHLESS CONSTRUCTION

PERMANENT DISTURBANCE CORRIDOR

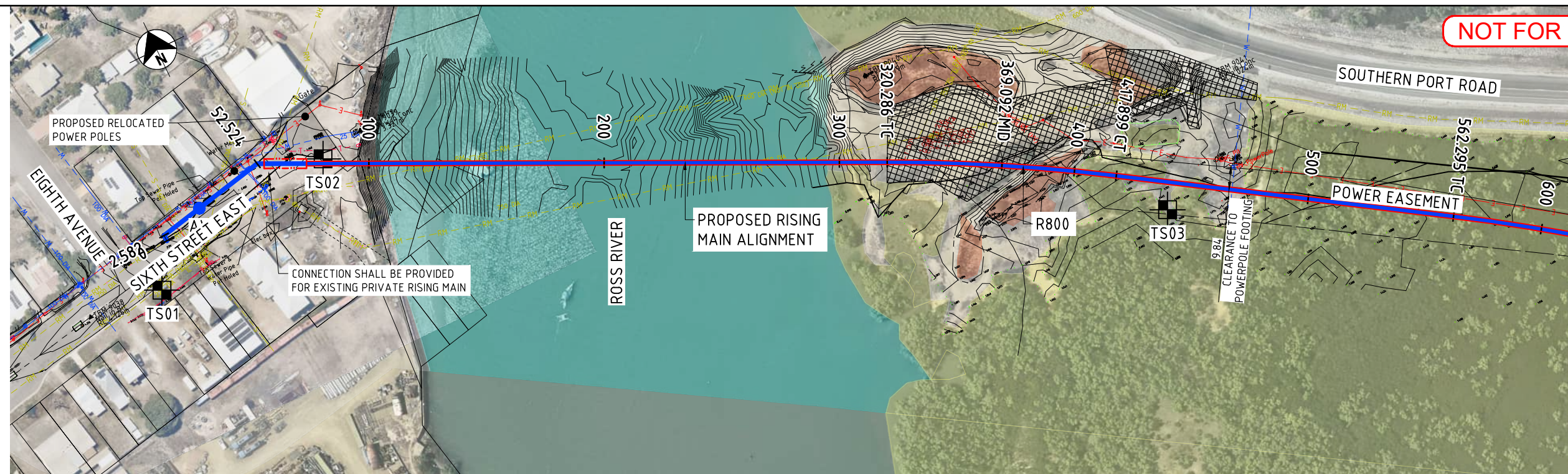
ADDITIONAL SEALED PAVEMENT

REMOVED SEALED PAVEMENT

TS02 GEOTECHNICAL TEST LOCATIONS

This drawing is confidential and shall only be used for the purposes of this project.										Scale		THE SIGNING OF THIS TITLE BLOCK CONFIRMS THE DESIGN AND DRAFTING OF THIS PROJECT HAVE BEEN PREPARED AND CHECKED IN ACCORDANCE WITH THE AECOM QUALITY ASSURANCE SYSTEM TO ISO 9001-2000				 AECOM Australia Pty Ltd A.B.N. 20 093 846 925				EASTERN OUTFALL PRESSURE MAIN REPLACEMENT					
												GENERAL NOTES AND LEGEND													
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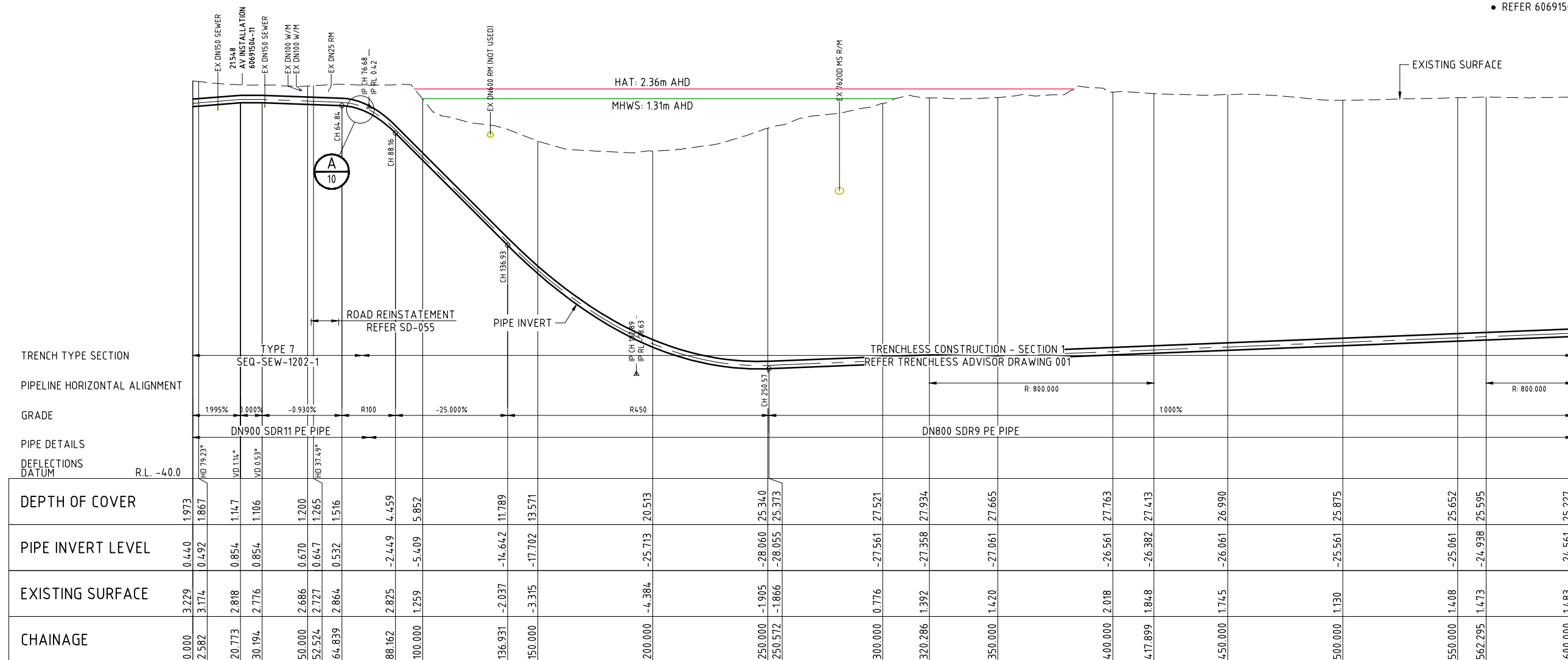
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PLAN

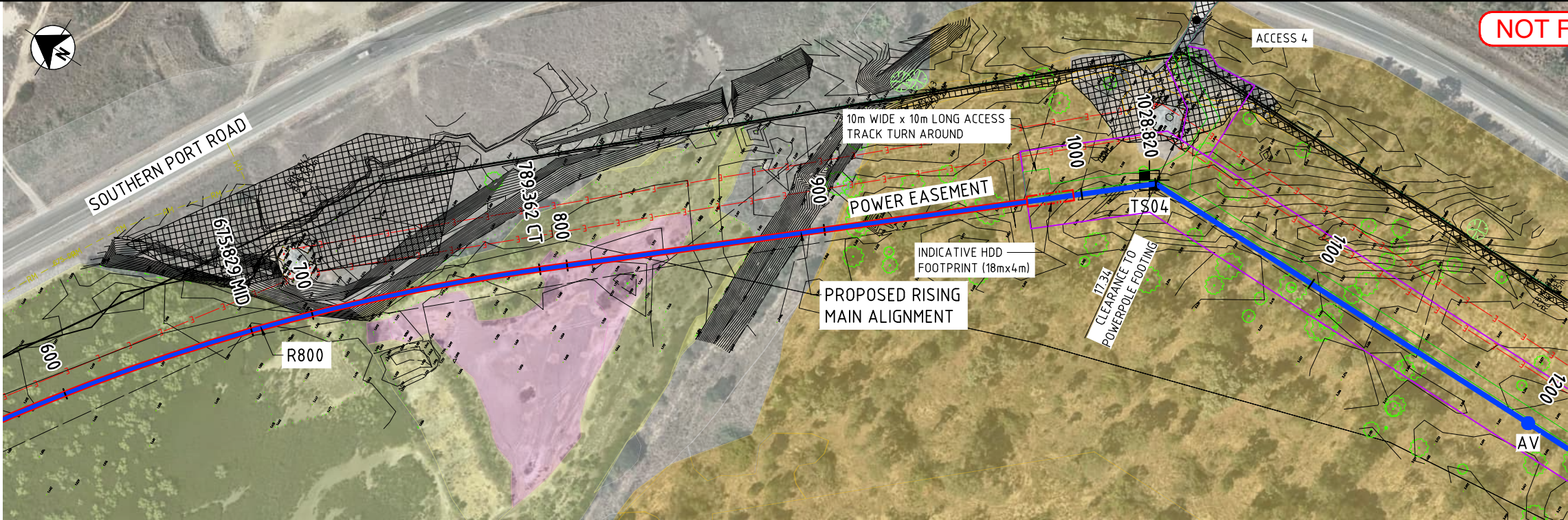
NOTES

- REFER 60691504-02 FOR GENERAL NOTES AND LEGEND.



LONGITUDINAL SECTION

This drawing is confidential and shall only be used for the purposes of this project.										Scale HORIZONTAL 1:2000 (A3) 0 10 20 30 40 50m VERTICAL 1:500 (A3) 0 2.5 5 7.5 10 12.5m 1:250 (A1)		THE SIGNING OF THIS TITLE BLOCK CONFIRMS THE DESIGN AND DRAFTING OF THIS PROJECT HAVE BEEN PREPARED AND CHECKED IN ACCORDANCE WITH THE AECOM QUALITY ASSURANCE SYSTEM TO ISO 9001-2000 <table><tr><td>DESIGNED</td><td></td><td>CHECKED</td><td></td></tr><tr><td>DRAWN</td><td></td><td>CHECKED</td><td></td></tr><tr><td>APPROVED</td><td></td><td>DATE</td><td></td></tr></table>		DESIGNED		CHECKED		DRAWN		CHECKED		APPROVED		DATE		AECOM AECOM Australia Pty Ltd A.B.N. 20 093 846 925		City of Townsville		EASTERN OUTFALL PRESSURE MAIN REPLACEMENT		
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REVISIONS										PLAN AND LONGITUDINAL SECTION SHEET 1																						
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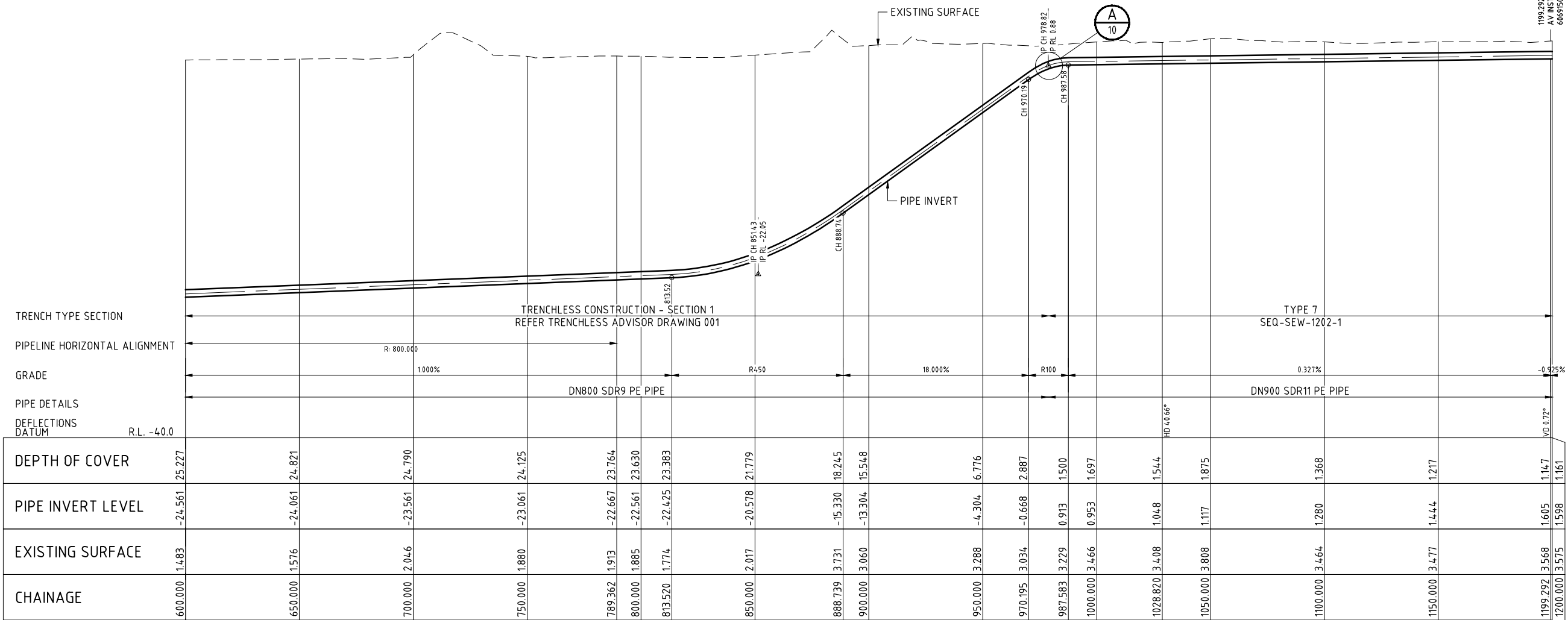


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PLAN

NOTES

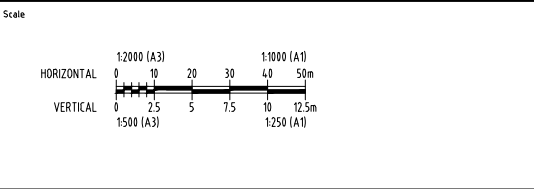
- REFER 60691504-02 FOR GENERAL NOTES AND LEGEND.



LONGITUDINAL SECTION

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LAST MODIFIED: 27/02/2025 03:11 AM

This drawing is confidential and shall only be used for the purposes of this project.				
REVISIONS				
No.	BY	DATE	DESCRIPTION	APPROVED
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B	PSA	5.11.24	CONCEPT VALIDATION UPDATES	
A	CJM	07.08.23	CONCEPT DESIGN	



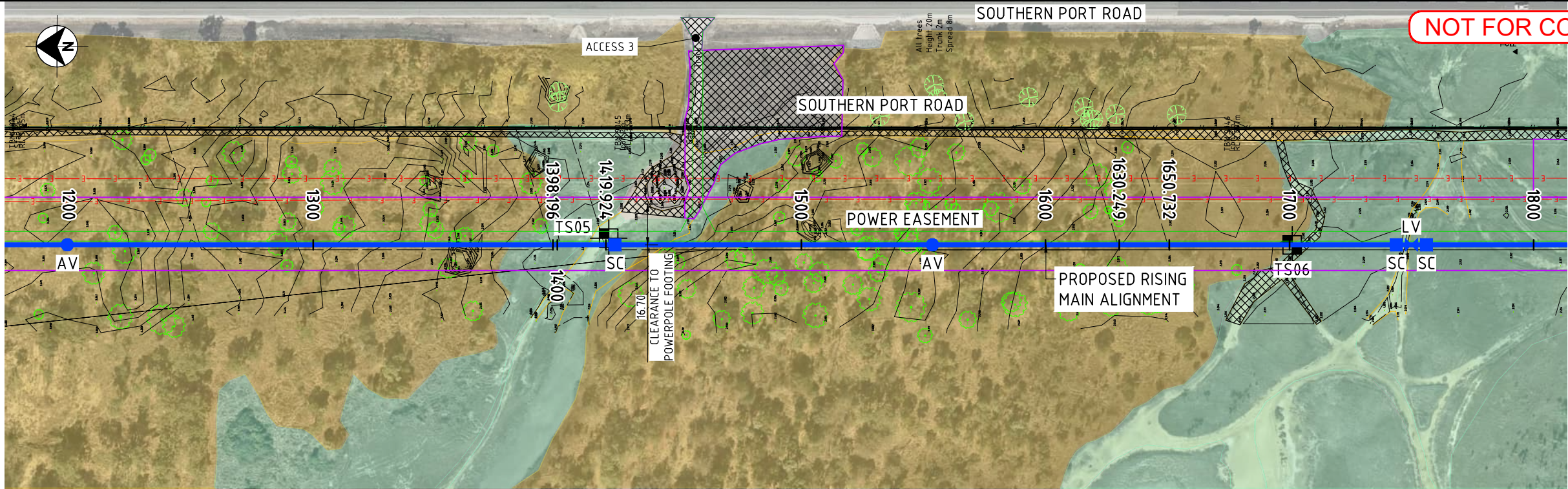
THE SIGNING OF THIS TITLE BLOCK CONFIRMS THE DESIGN AND DRAFTING OF THIS PROJECT HAVE BEEN PREPARED AND CHECKED IN ACCORDANCE WITH THE AECOM QUALITY ASSURANCE SYSTEM TO ISO 9001:2000			
DESIGNED		CHECKED	
DRAWN		CHECKED	
APPROVED		DATE	

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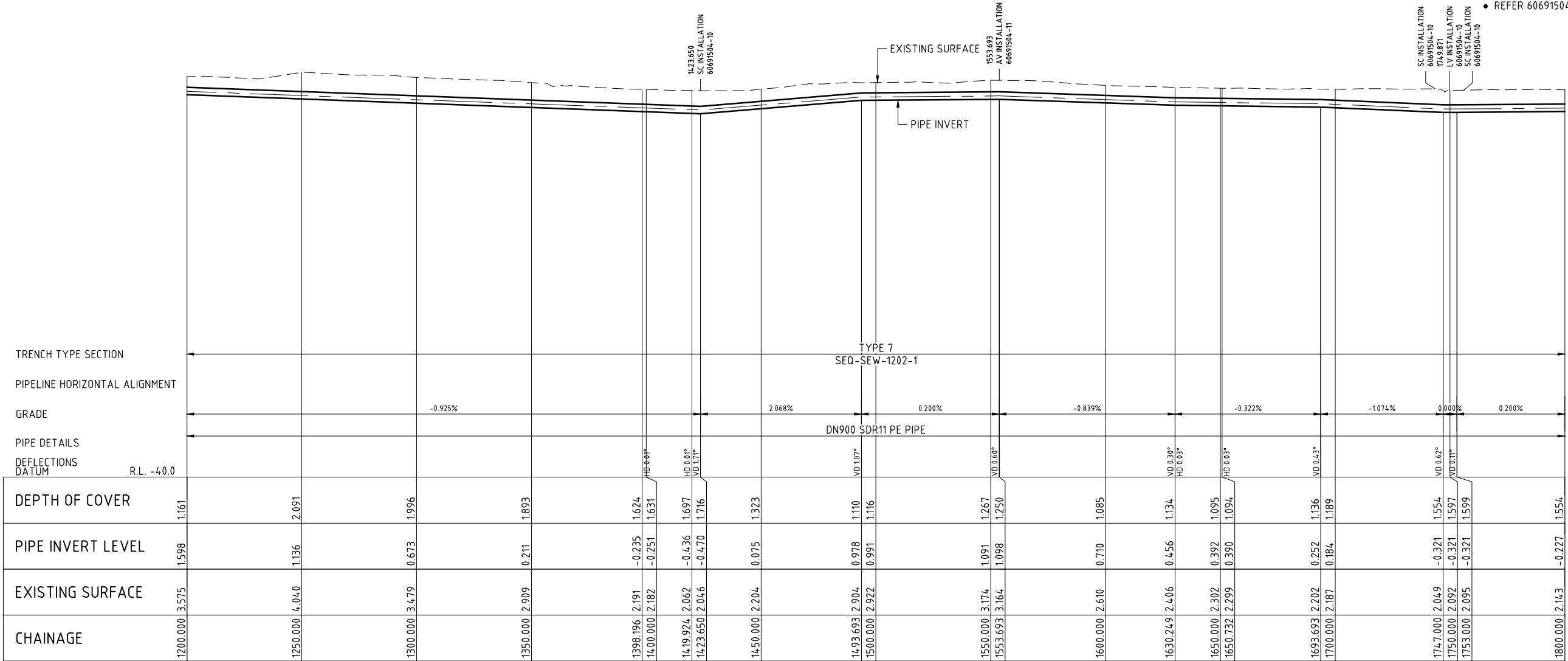
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PLAN AND LONGITUDINAL SECTION SHEET 2		
Status	PRELIMINARY	Rev. C
Dwg No.	60691504-04	



NOT FOR CONSTRUCTION

PLAN

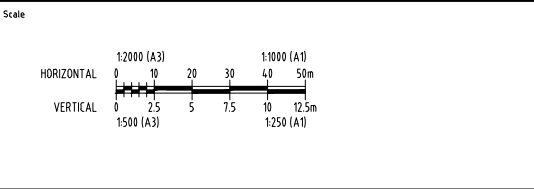
NOTES
• REFER 60691504-02 FOR GENERAL NOTES AND LEGEND.



LONGITUDINAL SECTION

CAD: REP-1466X16691504-1908_CAD_GISV100_CADV3_SHEET50609504-05.DWG
LAST MODIFIED: 27/03/2025 04:14 AM
REVISIONS

This drawing is confidential and shall only be used for the purposes of this project.				
No.	BY	DATE	DESCRIPTION	APPRO
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B	PSA	5.11.24	CONCEPT VALIDATION UPDATES	
A	CJM	07.08.23	CONCEPT DESIGN	



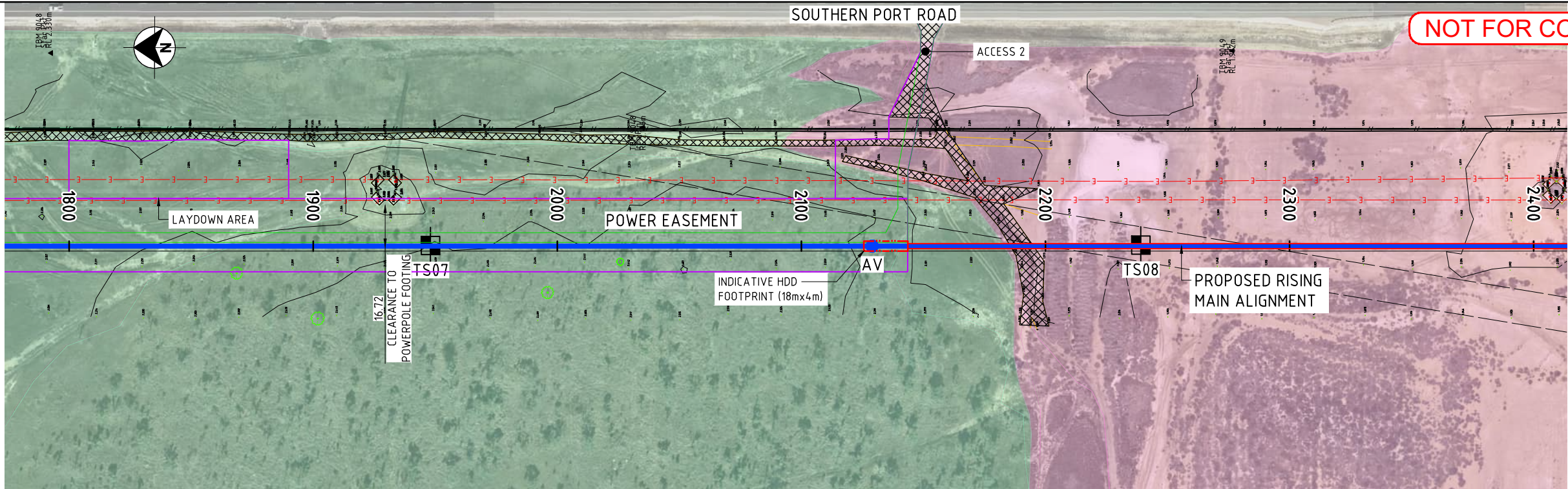
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DESIGNED		CHECKED	
DRAWN		CHECKED	
APPROVED		DATE	

AECOM

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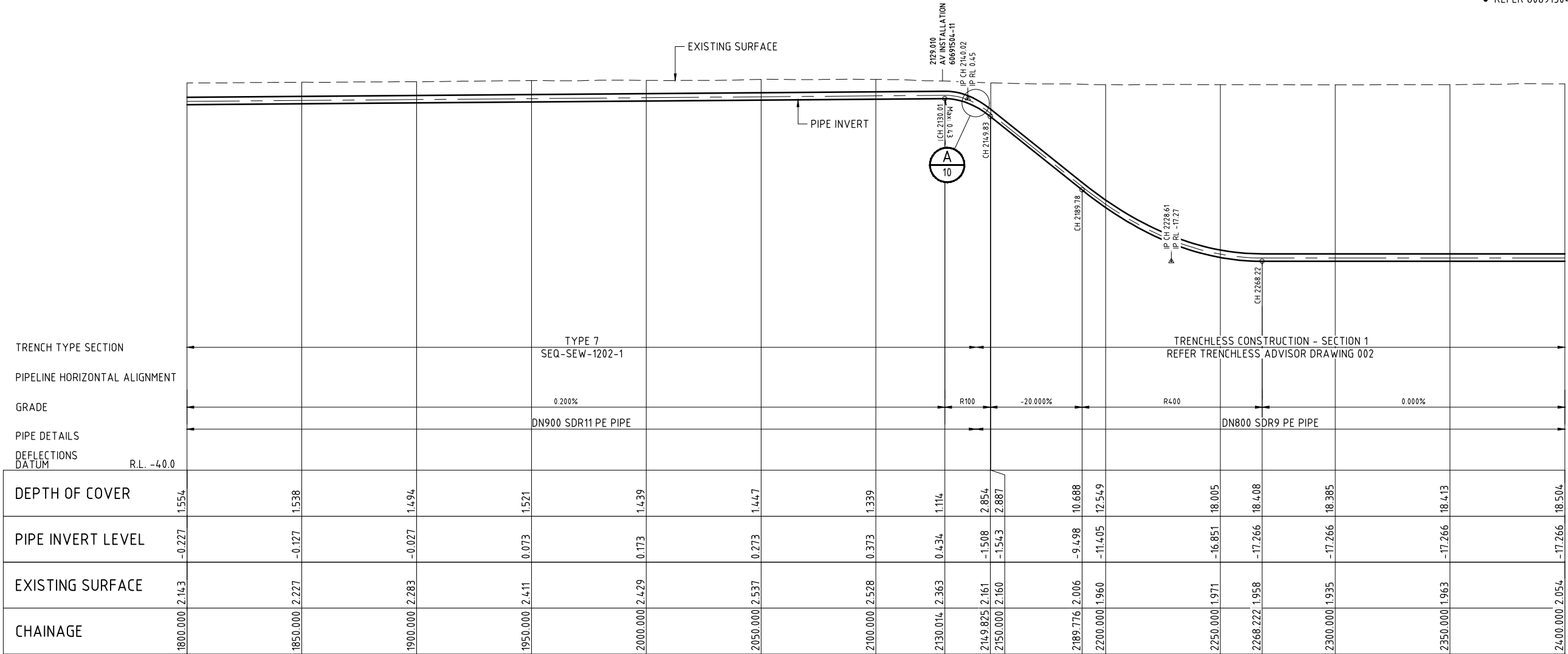
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PLAN AND LONGITUDINAL SECTION SHEET 3		
Status	PRELIMINARY	Rev. C
Dwg No.	60691504-05	



NOT FOR CONSTRUCTION

PLAN

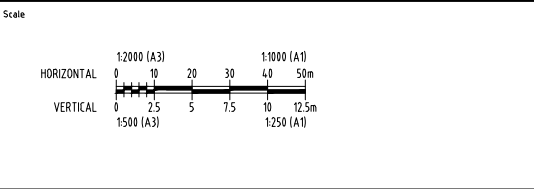
- NOTES
- REFER 60691504-02 FOR GENERAL NOTES AND LEGEND.



LONGITUDINAL SECTION

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LAST MODIFIED: 27/02/2025 02:57 PM
REVISIONS

No.	BY	DATE	DESCRIPTION	APPROVED
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B	PSA	5.11.24	CONCEPT VALIDATION UPDATES	
A	CJM	07.08.23	CONCEPT DESIGN	



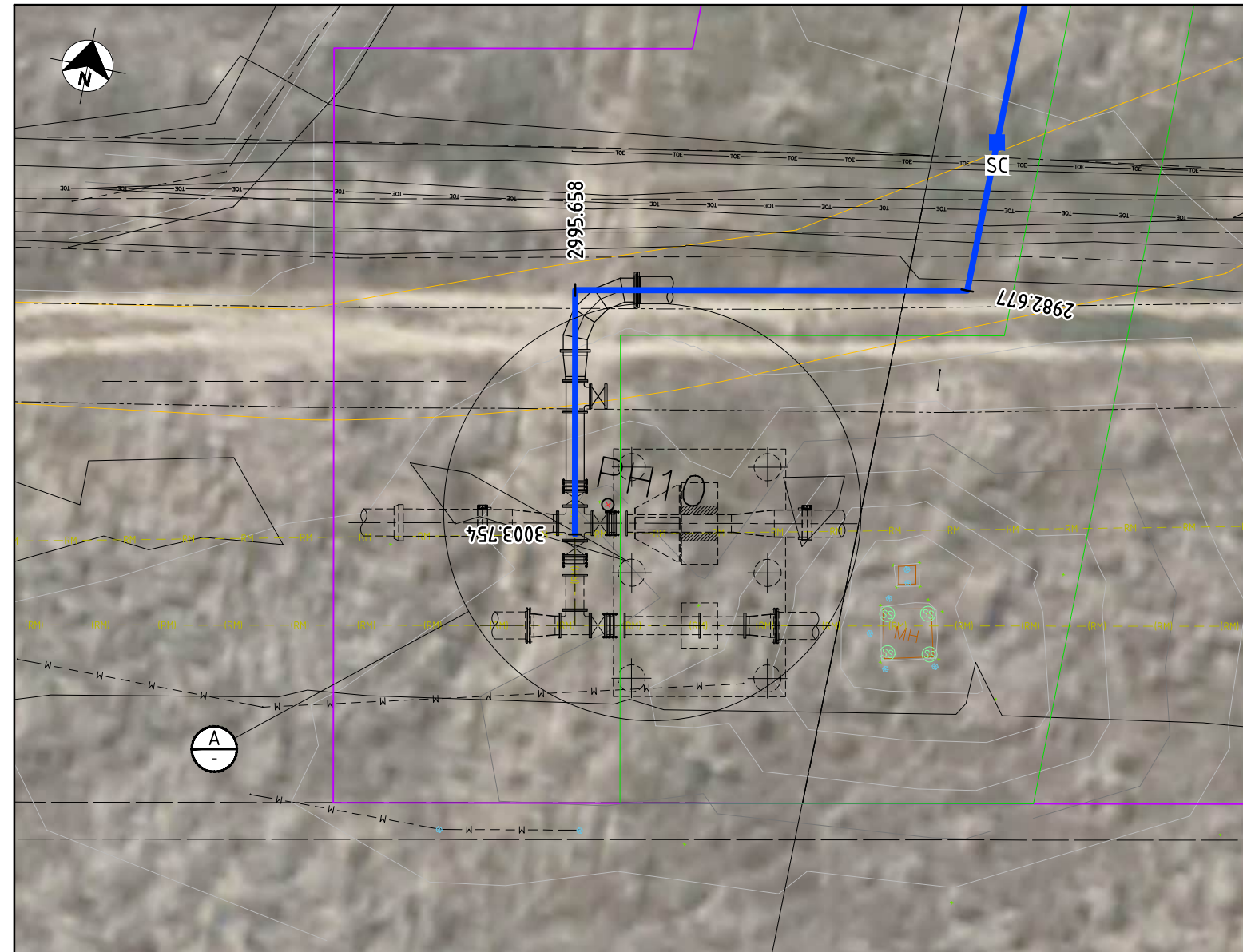
THE SIGNING OF THIS TITLE BLOCK CONFIRMS THE DESIGN AND DRAFTING OF THIS PROJECT HAVE BEEN PREPARED AND CHECKED IN ACCORDANCE WITH THE AECOM QUALITY ASSURANCE SYSTEM TO ISO 9001:2000			
DESIGNED		CHECKED	
DRAWN		CHECKED	
APPROVED		DATE	

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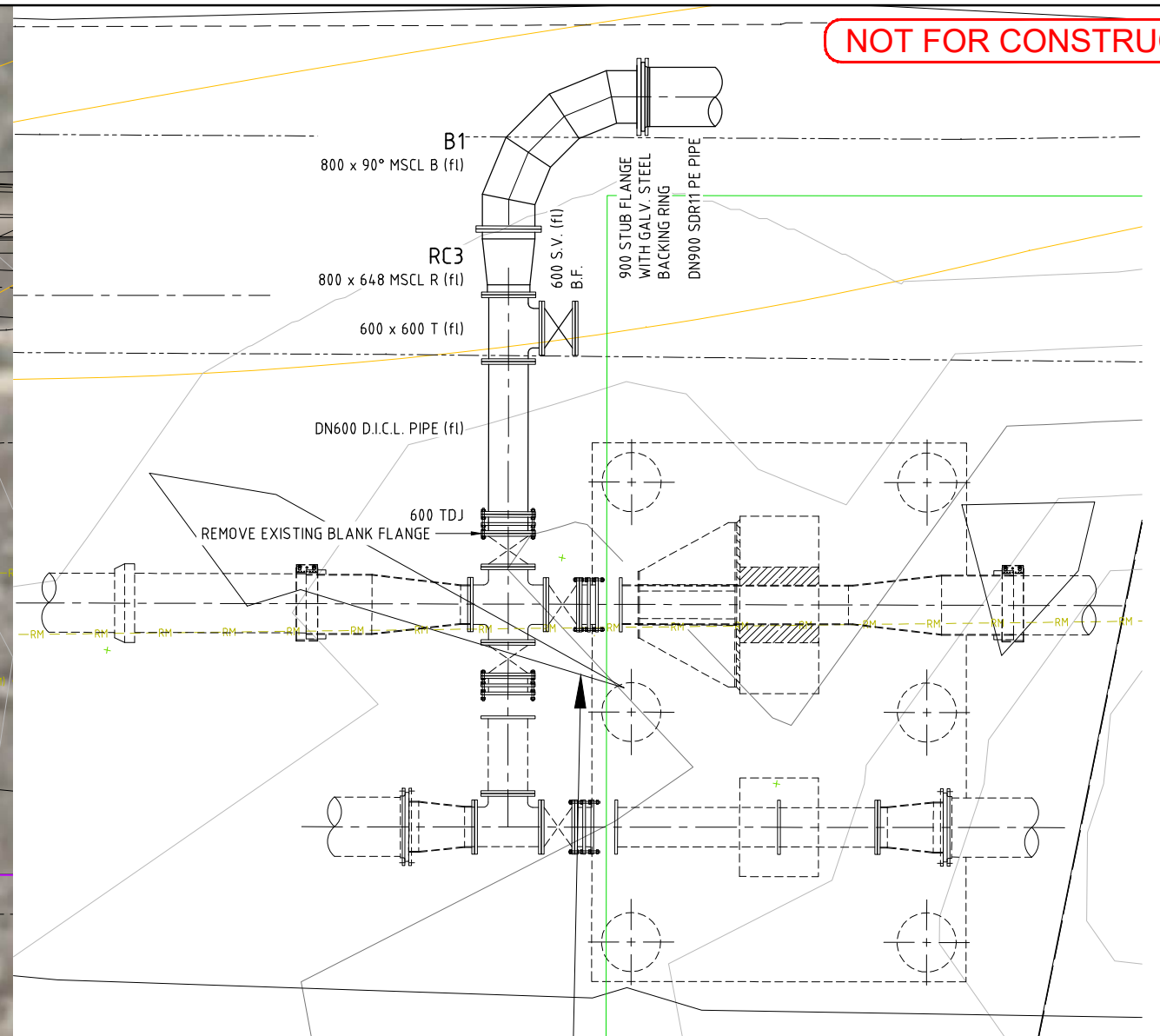
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EASTERN OUTFALL PRESSURE MAIN REPLACEMENT		
PLAN AND LONGITUDINAL SECTION		
SHEET 4		
Status	PRELIMINARY	Rev. C
Dwg No.	60691504-06	



PLAN
SCALE E



DETAIL
SCALE F

NOT FOR CONSTRUCTION

NOTES
• REFER 60691504-02 FOR GENERAL NOTES AND LEGEND.

LAST MODIFIED: 27/03/2025 10:02 AM
C:\PROJECTS\60691504\1\100_CAD_GIS\100_CAD\100_SHEETS\60691504-02.DWG

This drawing is confidential and shall only be used for the purposes of this project.				
No.	BY	DATE	DESCRIPTION	APPD
C	PSA	30.05.25	CLIENT REVIEW	
B	PSA	5.11.24	CONCEPT VALIDATION UPDATES	
A	CJM	07.08.23	CONCEPT DESIGN	

Scale	
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SCALE F	0 1000 2000 2500mm 1: 100 (A3) 1: 50 (A1)

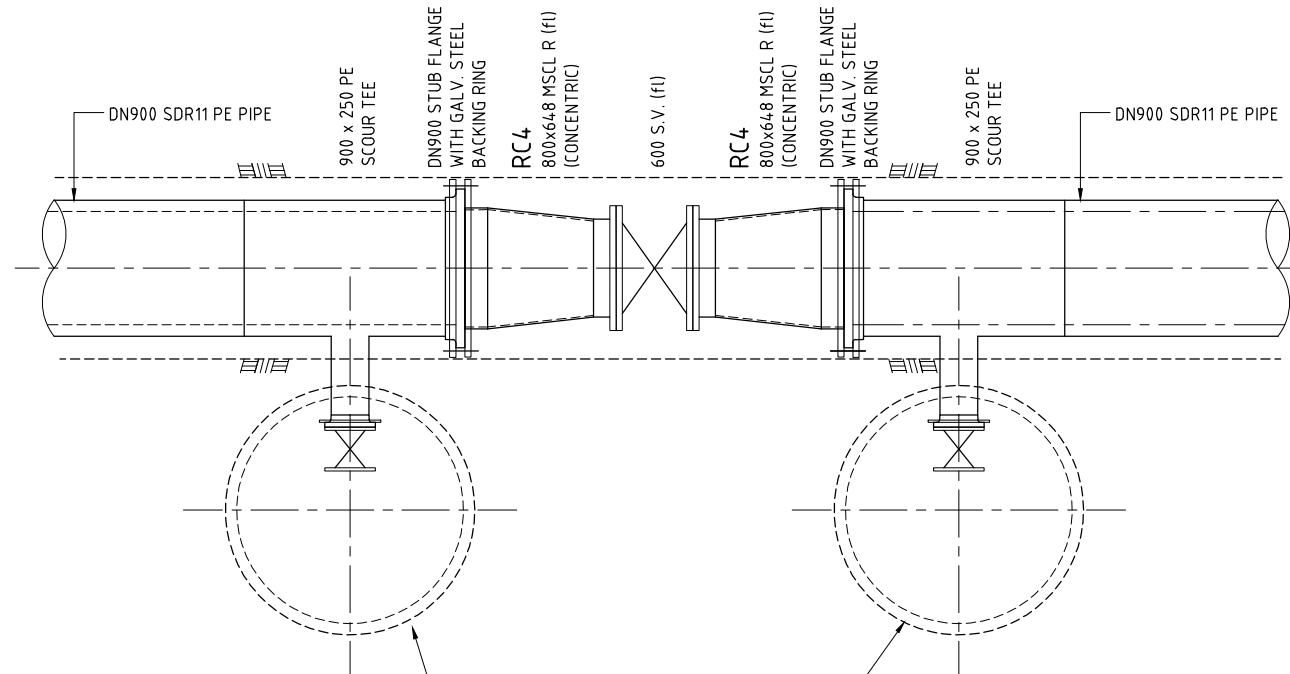
THE SIGNING OF THIS TITLE BLOCK CONFIRMS THE DESIGN AND DRAFTING OF THIS PROJECT HAVE BEEN PREPARED AND CHECKED IN ACCORDANCE WITH THE AECOM QUALITY ASSURANCE SYSTEM TO ISO 9001-2000			
DESIGNED		CHECKED	
DRAWN		CHECKED	
APPROVED		DATE	



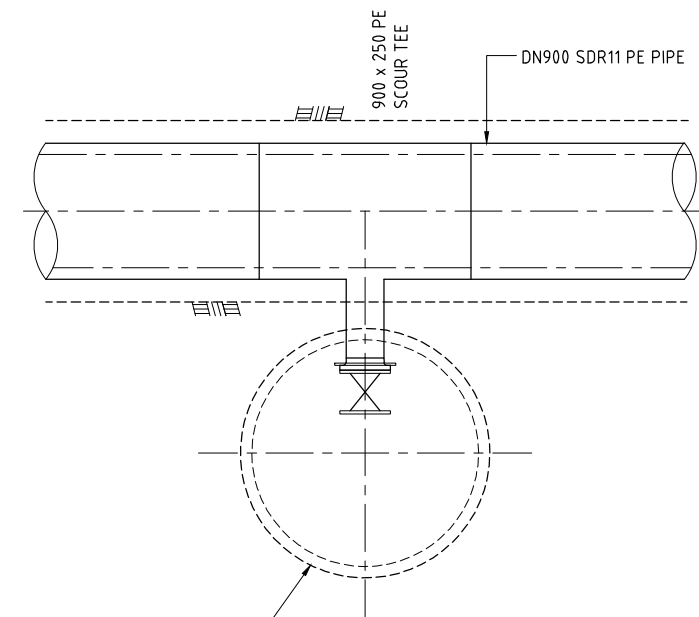
AECOM Australia Pty Ltd A.B.N. 20 093 846 925



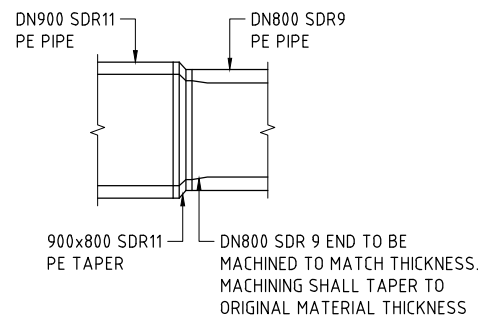
EASTERN OUTFALL PRESSURE MAIN REPLACEMENT			
SOUTHERN CONNECTION DETAIL			
Status	PRELIMINARY	Dwg No.	60691504-09
Rev.	C		



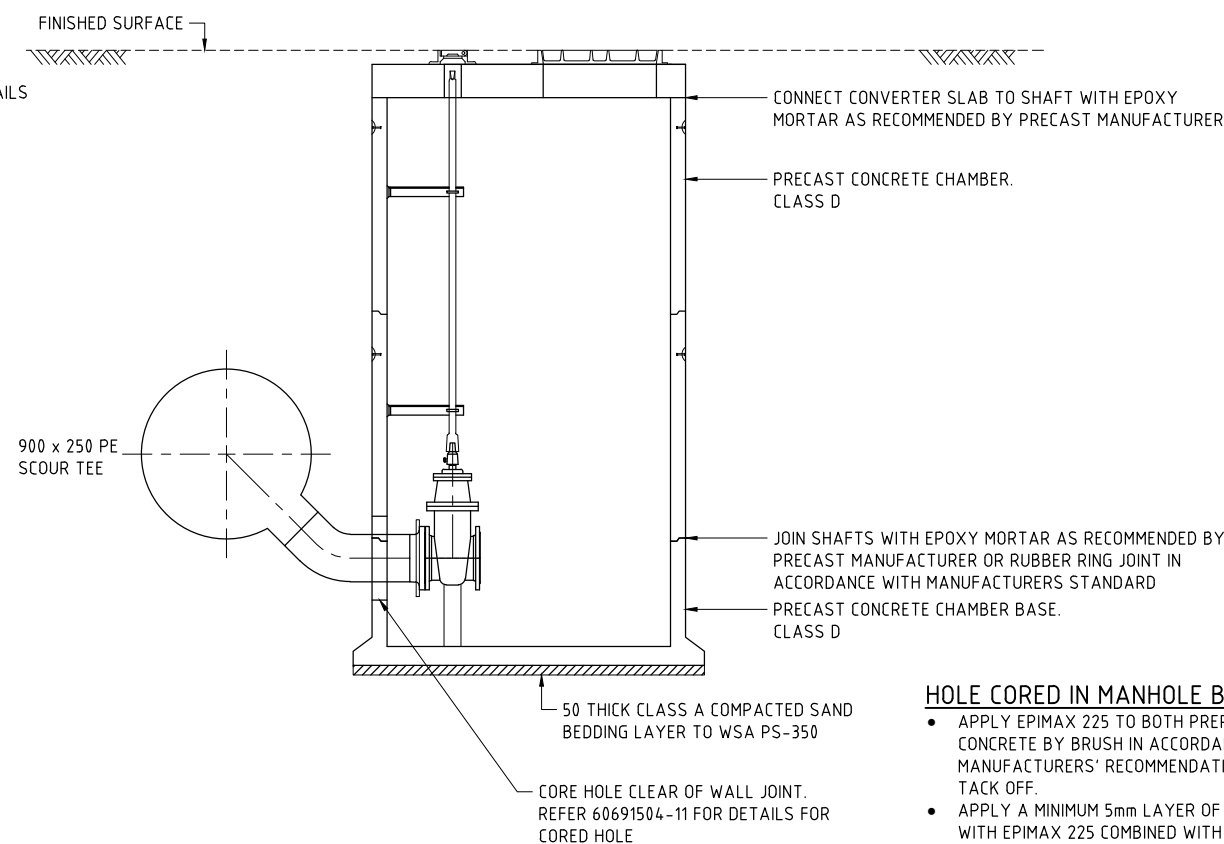
PLAN
DN600 LINE VALVE
DN900 PE PIPE
SCALE G
ALL SCOURS SHALL BE INSTALLED ON
ACCESS TRACK SIDE OF PIPELINE U.O.N.
FOR DETAILS NOT SHOWN REFER SEQ-SPS-1604-1 FOR DETAILS



PLAN
DN250 SCOUR VALVE
DN900 PE PIPE
SCALE G
ALL SCOURS SHALL BE INSTALLED ON
ACCESS TRACK SIDE OF PIPELINE U.O.N.
FOR DETAILS NOT SHOWN REFER SEQ-SPS-1604-1 FOR DETAILS



DETAIL
SCALE G
A



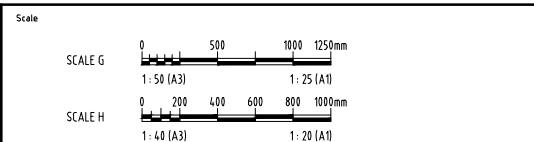
TYPICAL SECTION
SCALE H
FOR DETAILS NOT SHOWN REFER SEQ-SPS-1604-1 FOR DETAILS

- HOLE CORED IN MANHOLE BASE/WALL**
- APPLY EPIMAX 225 TO BOTH PREPARED STEEL AND CONCRETE BY BRUSH IN ACCORDANCE WITH THE MANUFACTURERS' RECOMMENDATIONS AND ALLOW TO TACK OFF.
 - APPLY A MINIMUM 5mm LAYER OF MORTAR PREPARED WITH EPIMAX 225 COMBINED WITH KLIN DRY AGGREGATE EA3 OR EA4 TO A RESIN RICH, TROWELABLE CONSISTENCY IN ACCORDANCE WITH THE MANUFACTURERS' RECOMMENDATIONS

- NOTES**
- REFER 60691504-02 FOR GENERAL NOTES AND LEGEND.
 - DESIGN BASED ON A 100kPa MIN. ALLOWABLE SOIL BEARING CAPACITY. ASSUMED SOIL PROPERTIES SHALL BE CONFINED AFTER EXCAVATION AND PRIOR TO PLACEMENT OF PRECAST ELEMENTS AND IF DIFFERENT TO THE PROPERTIES ASSUMED REFER TO PRINCIPAL'S REPRESENTATIVE.

LAST MODIFIED: 22/02/2025 8:08 AM
CAD: REP-1660X-1660PSA-V08_CAD_GIS-V08_CAD-V08_SHEET-1660PSA-11.DWG

This drawing is confidential and shall only be used for the purposes of this project.				
REVISIONS				
No.	BY	DATE	DESCRIPTION	APPD
C	PSA	30.05.25	CLIENT REVIEW	
B	PSA	5.11.24	CONCEPT VALIDATION UPDATES	
A	CJM	07.08.23	CONCEPT DESIGN	



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DESIGNED		CHECKED	
DRAWN		CHECKED	
APPROVED		DATE	

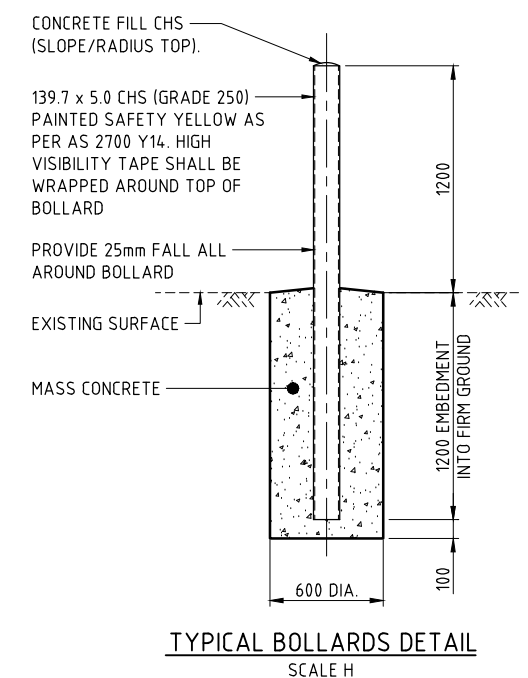
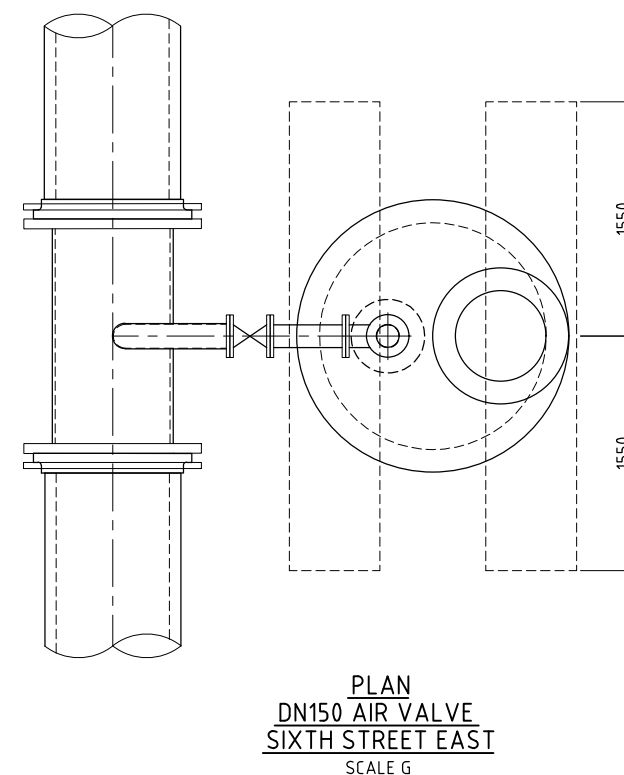
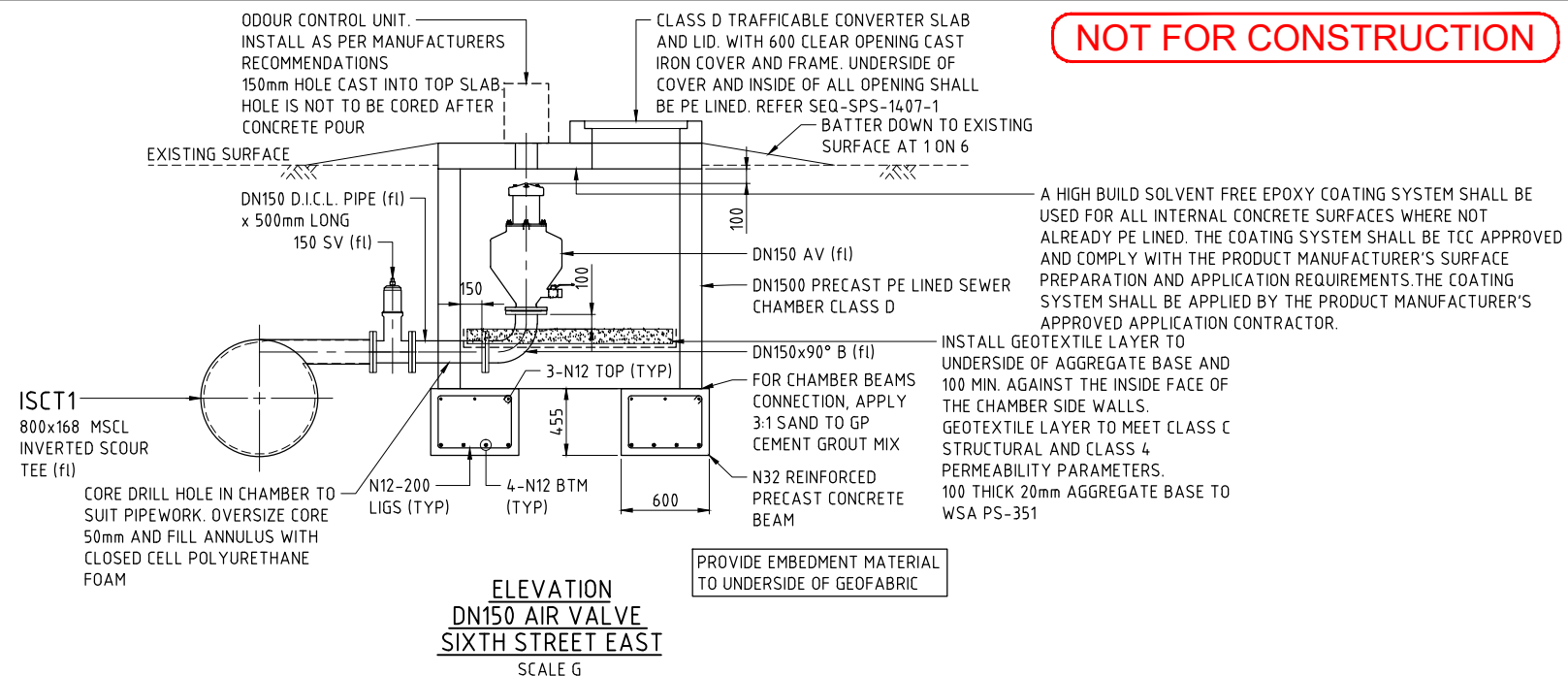
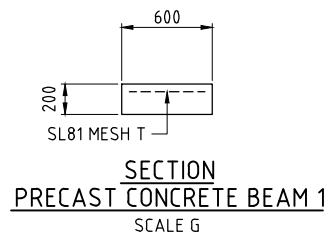
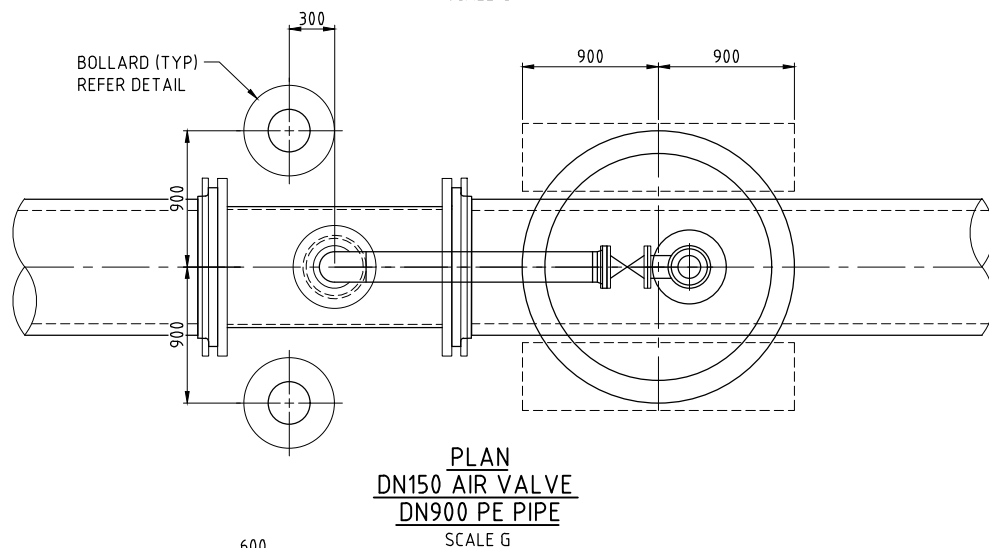
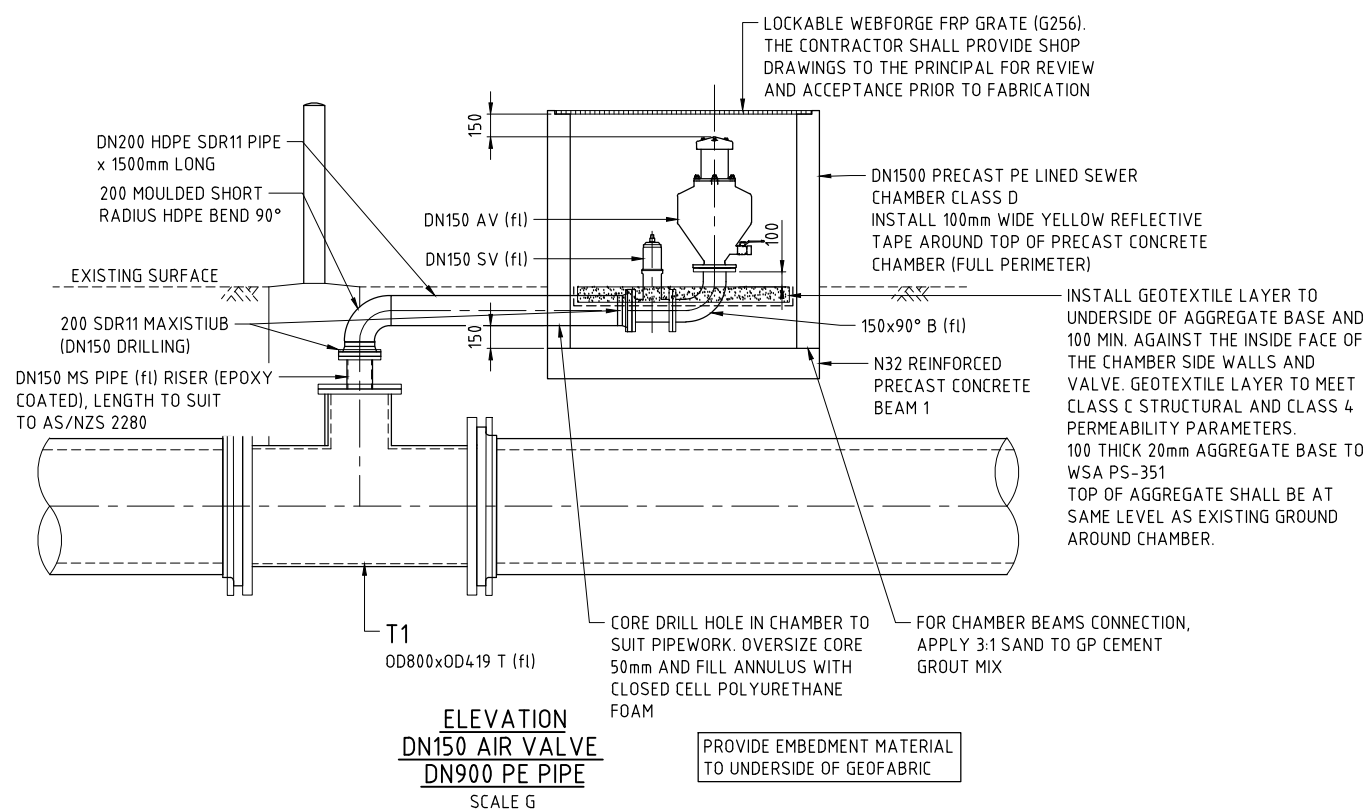
AECOM

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City of Townsville

EASTERN OUTFALL PRESSURE MAIN REPLACEMENT		
LINE VALVE DETAIL INCLUDING SCOUR DETAILS		
Status	PRELIMINARY	Rev. C
Dwg No.	60691504-10	

NOT FOR CONSTRUCTION



- ## HOLE CORED IN MANHOLE BASE/WALL
- APPLY EPIMAX 225 TO BOTH PREPARED STEEL AND CONCRETE BY BRUSH IN ACCORDANCE WITH THE MANUFACTURERS' RECOMMENDATIONS AND ALLOW TO TACK OFF.
 - APPLY A MINIMUM 5mm LAYER OF MORTAR PREPARED WITH EPIMAX 225 COMBINED WITH KLIN DRY AGGREGATE EA3 OR EA4 TO A RESIN RICH, TROWELABLE CONSISTENCY IN ACCORDANCE WITH THE MANUFACTURERS' RECOMMENDATIONS

NOTES

- REFER 60691504-02 FOR GENERAL NOTES AND LEGEND.

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ALYSON					
	C	PSA	30.05.25	CLIENT REVIEW	
	B	PSA	5.11.24	CONCEPT VALIDATION UPDATES	
A	CJM	07.08.23	CONCEPT DESIGN		
No.	BY	DATE	DESCRIPTION		APPD

Scale

SCALE G

0 500 1000 1250mm

1 : 50 (A3) 1 : 25 (A1)

SCALE H

0 200 400 600 800 1000mm

1 : 40 (A3) 1 : 20 (A1)

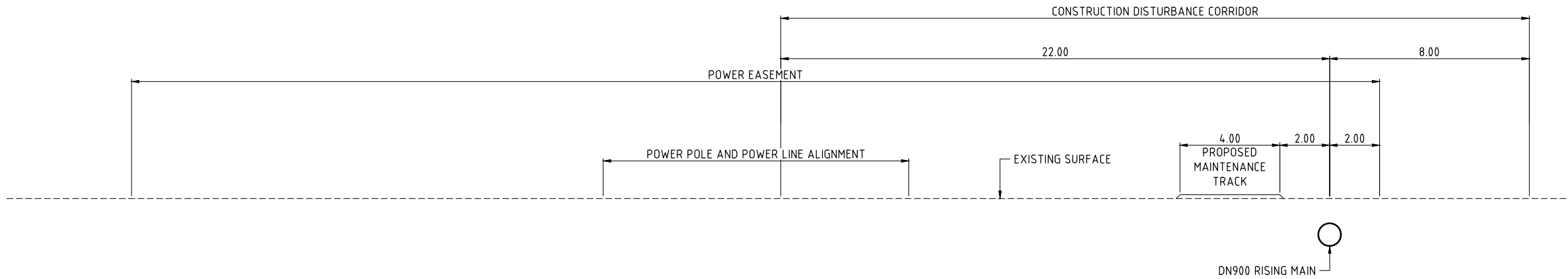
THE SIGNING OF THIS TITLE BLOCK CONFIRMS THE DESIGN AND DRAFTING OF THIS PROJECT HAVE BEEN PREPARED AND CHECKED IN ACCORDANCE WITH THE AECOM QUALITY ASSURANCE SYSTEM TO ISO 9001-2000			
DESIGNED		CHECKED	
DRAWN		CHECKED	
APPROVED		DATE	

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AECOM Australia Pty Ltd ABN 20 093 846 925



EASTERN OUTFALL PRESSURE MAIN REPLACEMENT			
AIR VALVE DETAIL			
Status	PRELIMINARY	Orig. No.	60691504-11
			Rev. C



OPEN TRENCHED CONSTRUCTION
TYPICAL SECTION

NOTES
• REFER 60691504-02 FOR GENERAL NOTES AND LEGEND.

LAST MODIFIED: 27/02/2025 08:48 AM
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This drawing is confidential and shall only be used for the purposes of this project.				
REVISIONS				
No.	BY	DATE	DESCRIPTION	APPD
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B	PSA	5.11.24	CONCEPT VALIDATION UPDATES'	
A	CJM	07.08.23	CONCEPT DESIGN	

Scale	0 1 2 3 4 5m 1: 200 (A3) 1: 100 (A1)
SCALE E	

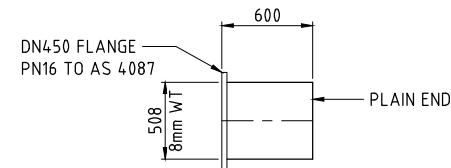
THE SIGNING OF THIS TITLE BLOCK CONFIRMS THE DESIGN AND DRAFTING OF THIS PROJECT HAVE BEEN PREPARED AND CHECKED IN ACCORDANCE WITH THE AECOM QUALITY ASSURANCE SYSTEM TO ISO 9001-2000			
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DRAWN		CHECKED	
APPROVED		DATE	


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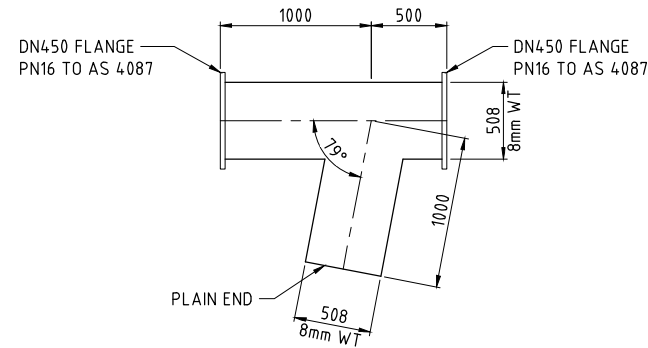


EASTERN OUTFALL PRESSURE MAIN REPLACEMENT		
OPEN TRENCHED CONSTRUCTION TYPICAL SECTION		
Status	PRELIMINARY	Rev. C
Dwg No.	60691504-12	

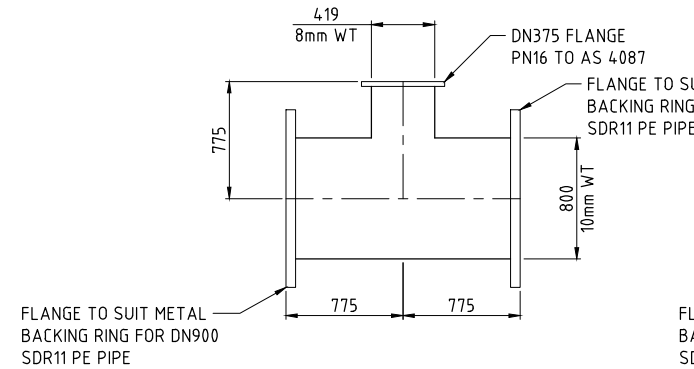
NOT FOR CONSTRUCTION



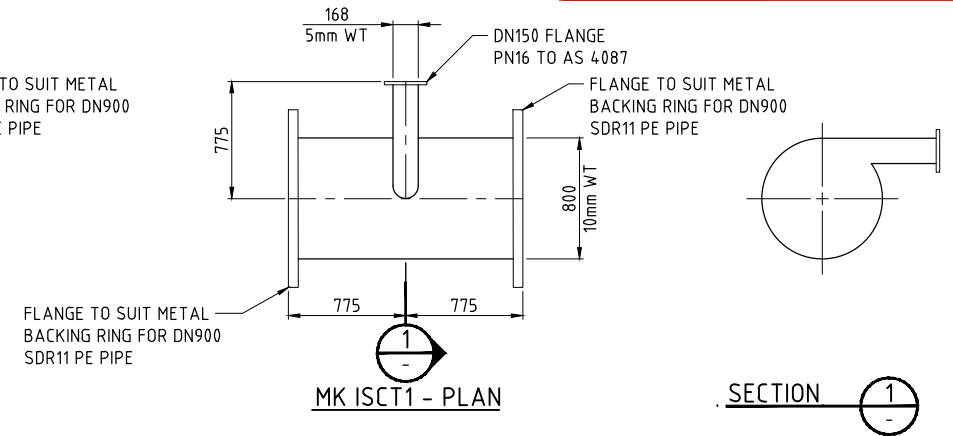
MK P1 - PLAN



MK AT1 - PLAN

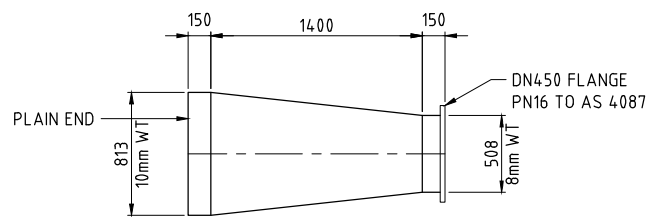


MK T1 - PLAN

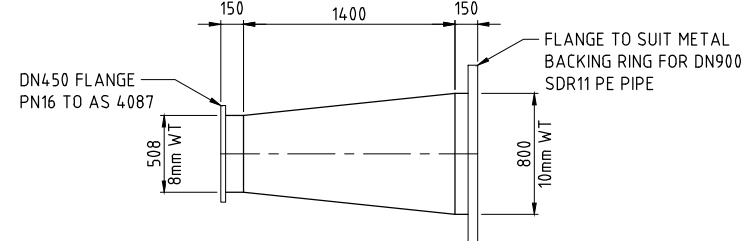


MK ISCT1 - PLAN

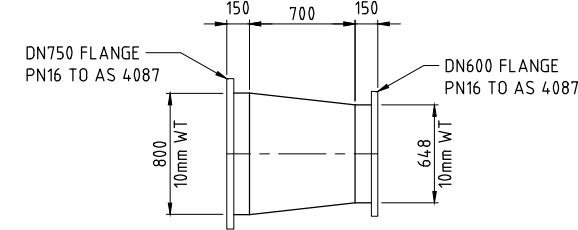
SECTION 1



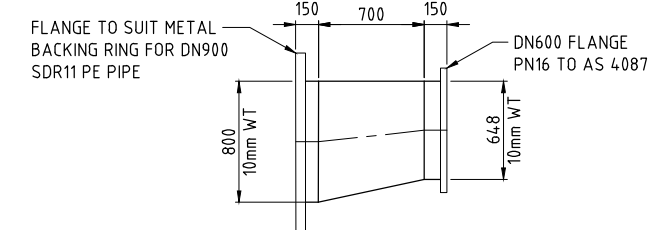
MK RC1 - ELEVATION



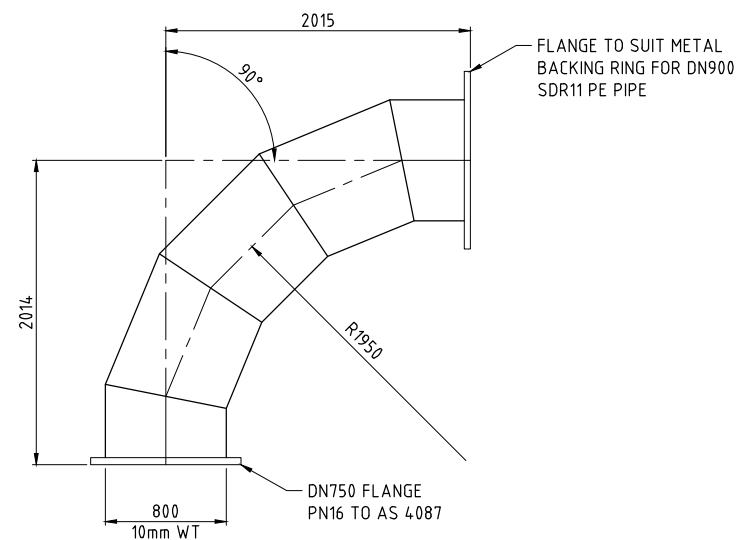
MK RC2 - ELEVATION



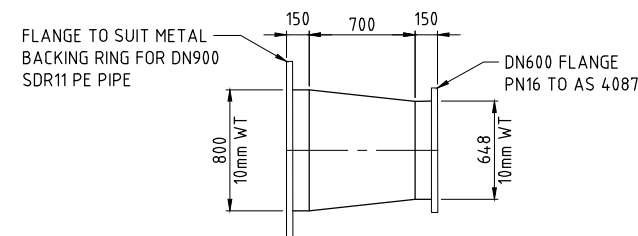
MK RC3 - ELEVATION



MK RE1 - ELEVATION



MK B1 - PLAN



MK RC4 - ELEVATION

STEEL PIPEWORK NOTES

- PIPE FITTINGS SHALL BE MANUFACTURED IN ACCORDANCE WITH A.S.1579. REINFORCING FOR TEES AND BRANCHES SHALL BE DESIGNED BY THE CONTRACTOR IN ACCORDANCE WITH AWWA MANUAL M11 (5TH EDITION) STEEL PIPE - A GUIDE FOR DESIGN AND INSTALLATION. CONTRACTOR TO PROVIDE SHOP DRAWINGS TO THE SUPERINTENDENT FOR ALL FITTINGS FOR VERIFICATION PRIOR TO COMMENCEMENT OF FABRICATION.
- CONTRACTOR'S DESIGNER SHALL BE AN RPEQ ENGINEER.
- STEEL PIPES AND FITTINGS SHALL HAVE A MINIMUM YIELD STRENGTH OF 300MPa IN ACCORDANCE WITH AS/NZS 1594
- ALL M.S.C.L. PIPE SHALL HAVE A MILD STEEL THICKNESS OF 10.0mm U.O.N.
- ALL PIPE SHALL BE CEMENT LINED
- PLAIN ENDS SHALL BE PREPARED TO SUIT WELDED COLLAR JOINT U.O.N.
- ALL EXTERNAL SURFACES OF STEEL PIPE, FITTINGS AND FLANGES SHALL BE COATED WITH SINTAKOTE (FUSION BONDED POLYETHYLENE) OR APPROVED EQUIVALENT TO AS 4321. THE INTERNAL LINING FOR PIPE AND FITTINGS SHALL BE CEMENT MORTAR LINING TO AS 1281.
- ALL M.S.C.L. PIPE, INCLUDING REPAIRS SHALL BE TESTED WITH A HIGH VOLTAGE HOLIDAY DETECTOR PRIOR TO INSTALLATION. ANY COATING DEFECTS SHALL BE REPAIRED IN ACCORDANCE WITH THE STEEL MAINS STEEL PIPE MANUAL.

NOTES

- REFER 60691504-02 FOR PIPELINE NOTES AND LEGEND

CAD: REP: 14/06/2025 14:06:05:1908 CAD: 60691504-02:1908 SHEET: 14/06/2025 14:06:05:1908

This drawing is confidential and shall only be used for the purposes of this project.				
REV	BY	DATE	DESCRIPTION	APPD
A	PSA	30.05.25	CLIENT REVIEW	
No.	BY	DATE	DESCRIPTION	APPD

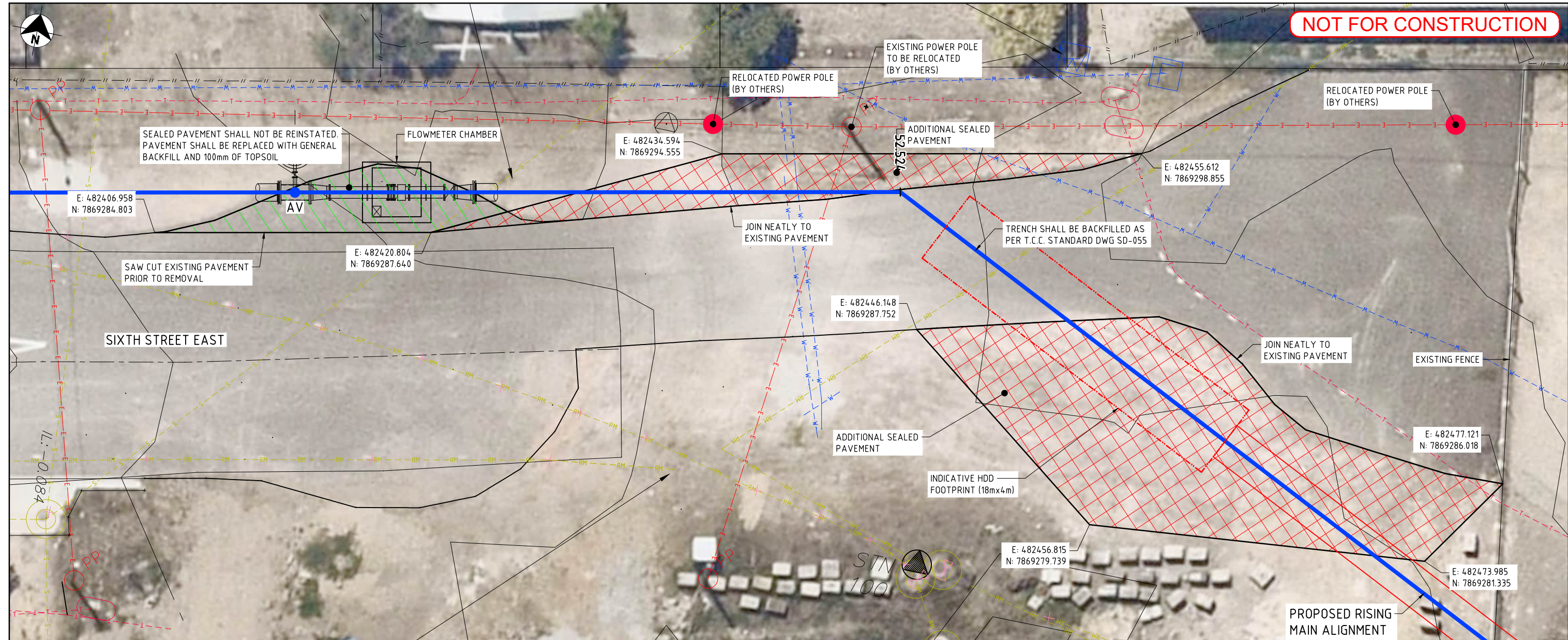
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THE SIGNING OF THIS TITLE BLOCK CONFIRMS THE DESIGN AND DRAFTING OF THIS PROJECT HAVE BEEN PREPARED AND CHECKED IN ACCORDANCE WITH THE AECOM QUALITY ASSURANCE SYSTEM TO ISO 9001-2000			
DESIGNED		CHECKED	
DRAWN		CHECKED	
APPROVED		DATE	

AECOM	
AECOM Australia Pty Ltd A.B.N. 20 093 846 925	

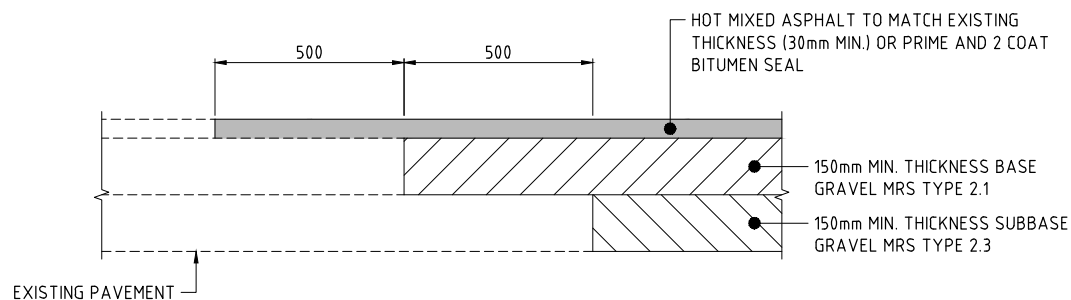
	
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EASTERN OUTFALL PRESSURE MAIN REPLACEMENT			
PIPE SPECIALS			
Status	PRELIMINARY	Dwg No.	60691504-13
Rev.	A		



NOT FOR CONSTRUCTION

PLAN
SCALE E



PAVEMENT JOINT AND PAVEMENT DETAILS
SCALE J

NOTES
• REFER 60691504-02 FOR GENERAL NOTES AND LEGEND.

REVISIONS

LAST MODIFIED: 5/27/2025 7:18 AM

A	PSA	30.05.25	CLIENT REVIEW	
No.	BY	DATE	DESCRIPTION	APPD

Scale

SCALE E

0

1

2

3

4

5m

1: 200 (A3)

1: 100 (A1)

SCALE J

0

100

200

300

400

500 mm

1: 20 (A3)

1: 10 (A1)

THE SIGNING OF THIS TITLE BLOCK CONFIRMS THE DESIGN AND DRAFTING OF THIS PROJECT HAVE BEEN PREPARED AND CHECKED IN ACCORDANCE WITH THE AECOM QUALITY ASSURANCE SYSTEM TO ISO 9001-2000

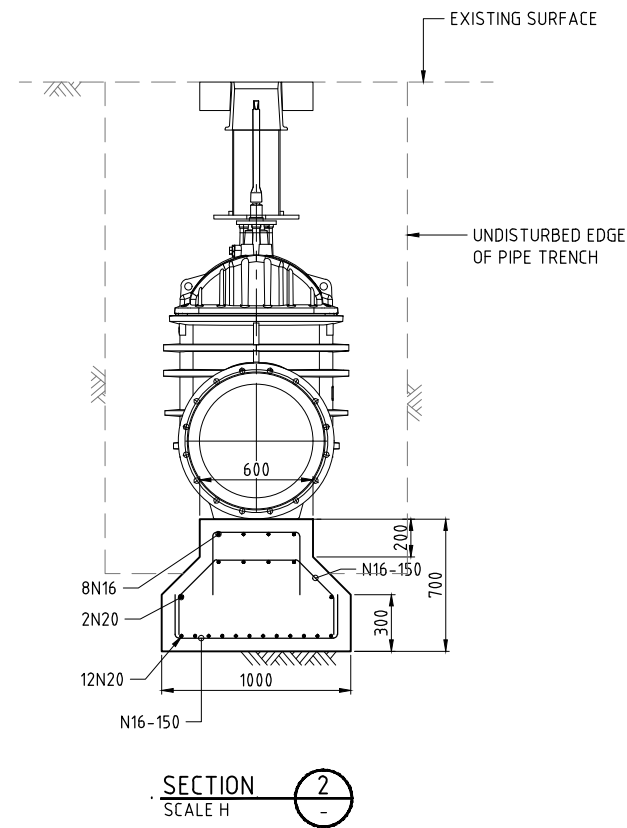
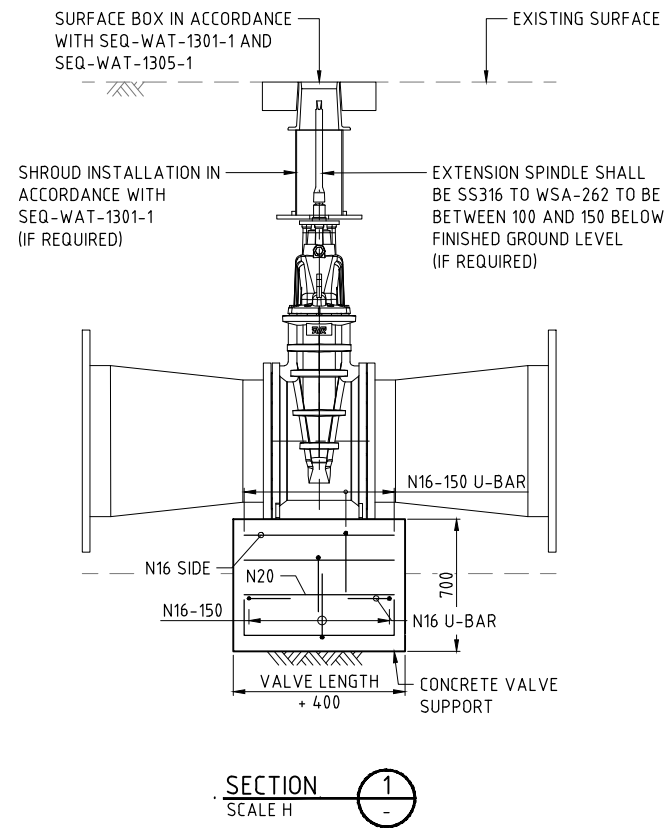
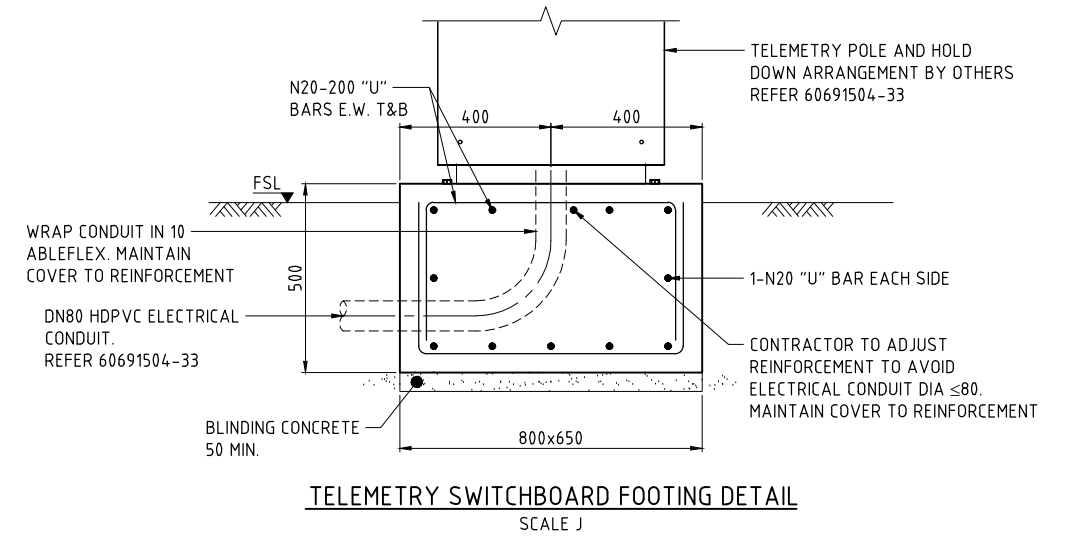
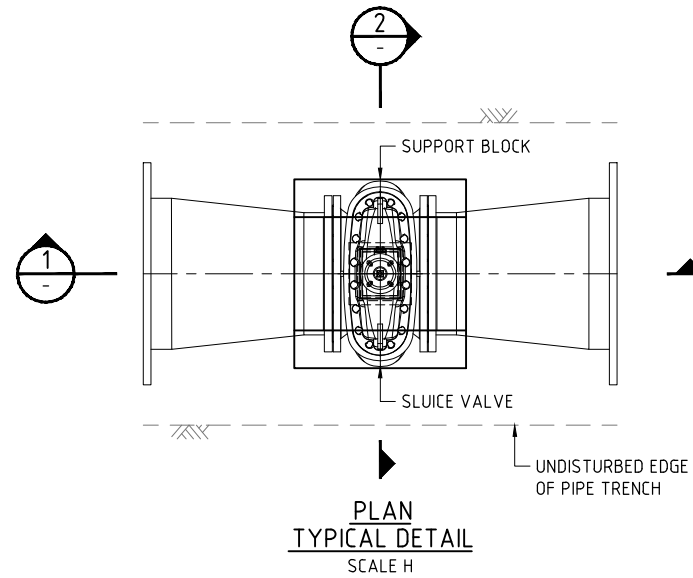
DESIGNED		CHECKED	
DRAWN		CHECKED	
APPROVED		DATE	

AECOM

AECOM Australia Pty Ltd A.B.N. 20 093 846 925

<

NOT FOR CONSTRUCTION



NOTES

• REFER 60691504-02 FOR GENERAL NOTES AND LEGEND.

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REVISIONS				
	A	PSA	30.05.25	CLIENT REVIEW
	No.	BY	DATE	DESCRIPTION
				APPD

Scale

SCALE H

0 200 400 600 800 1000mm

1 : 40 (A3) 1 : 20 (A1)

SCALE J

0 100 200 300 400 500 mm

1 : 20 (A3) 1 : 10 (A1)

THE SIGNING OF THIS TITLE BLOCK CONFIRMS THE DESIGN AND DRAFTING OF THIS PROJECT HAVE BEEN PREPARED AND CHECKED IN ACCORDANCE WITH THE AECOM QUALITY ASSURANCE SYSTEM TO ISO 9001-2000			
DESIGNED		CHECKED	
DRAWN		CHECKED	
APPROVED		DATE	

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EASTERN OUTFALL PRESSURE MAIN REPLACEMENT		
VALVE SUPPORTS		
Status	PRELIMINARY	Dwg No. 60691504-15 Rev. A

3. ALL DIMENSIONS IN MILLIMETRES AND LEVELS ARE IN METRES UNLESS OTHERWISE STATED.
2. DRAWINGS NOT TO BE SCALED.
3. EXTENT OF WORKS TO BE CONFIRMED ON SITE BY THE CONTRACT ADMINISTRATOR BEFORE COMMENCING ANY WORK.
4. CONTRACTOR SHALL ENSURE ADEQUATE DRAINAGE, EROSION AND SEDIMENTATION CONTROL MEASURES ARE IN PLACE PRIOR TO COMMENCEMENT OF WORKS AND SUBMIT WORK METHOD STATEMENTS FOR APPROVAL BY THE CONTRACT ADMINISTRATOR.
5. VERIFY ALL SETTING OUT DIMENSIONS WITH THE CONTRACT ADMINISTRATOR.
6. WORKS SHALL BE CARRIED OUT IN ACCORDANCE WITH ALL WORKCOVER REQUIREMENTS AND THE WORK HEALTH AND SAFETY ACT AND THE WORK HEALTH AND SAFETY REGULATION.
7. ALL PROPRIETARY PRODUCTS ARE TO BE INSTALLED STRICTLY IN ACCORDANCE WITH MANUFACTURER'S WRITTEN RECOMMENDATIONS UNLESS NOTED OTHERWISE.
8. ALL PENETRATIONS THROUGH SLABS AND BEAMS SHALL BE APPROVED BY THE CONTRACT ADMINISTRATOR PRIOR TO COMMENCEMENT OF WORK.
9. FOR GENERAL USE ABBREVIATIONS REFER TO AS 1100.101, AS 1100.301 AND AS 1100.401 UNLESS NOTED OTHERWISE. FOR STRUCTURAL AND REINFORCEMENT ABBREVIATIONS REFER TO AS 1100.501.
10. COMPACTION EFFORTS AROUND PIT SHALL BE LIMITED TO LIGHT COMPACTION EQUIPMENT SUCH AS VIBRATORY PLATE COMPACTORS WHICH INDUCE COMPACTION PRESSURES OF UP TO 12kPa.
11. MINIMUM 3.0m EXCLUSION ZONE AROUND PIT FOR ALL TRAFFIC, CONSTRUCTION VEHICLES OR PLANT DURING PRESSURE TESTING OF PIPEWORK.
12. THE AECOM PROJECT DRAWINGS SHALL BE READ IN CONJUNCTION WITH THE PRINCIPAL'S OTHER PROJECT DOCUMENTS NOMINATED IN THE CONTRACT, INCLUDING DRAWINGS AND DOCUMENTS FROM OTHER ENGINEERS, AND OTHER PROFESSIONAL ENTITIES AS NOMINATED BY THE PRINCIPAL.
13. IN LIEU OF ANY WRITTEN ADVICE FROM THE PRINCIPAL, THE AECOM PROJECT DRAWINGS SHALL TAKE PRECEDENCE OVER SPECIFICATIONS OR OTHER DOCUMENTS.
14. ALL DIMENSIONS SHALL BE CHECKED FOR AGREEMENT WITH PROJECT DOCUMENTS SUPPLIED BY OTHERS.
15. MATERIALS AND WORKMANSHIP SHALL COMPLY WITH THE CURRENT EDITIONS OF THE RELEVANT AUSTRALIAN STANDARDS, CODES OF PRACTICE, STATUTORY AND OTHER REQUIREMENTS EXCEPT WHERE VARIED BY WRITTEN INSTRUCTION BY THE PRINCIPAL.
16. DURING CONSTRUCTION, STRUCTURES AND EXCAVATIONS SHALL BE MAINTAINED IN A SAFE AND STABLE CONDITION AT ALL TIMES AND NO PART SHALL BE OVERSTRESSED. THE CONTRACTOR WILL PLAN FOR AND PROVIDE TEMPORARY WORKS INCLUDING PROPPING, BRACING AND SHORING TO PROVIDE A SAFE WORKING ENVIRONMENT. WHERE NECESSARY, THE CONTRACTOR SHALL ENGAGE A STRUCTURAL ENGINEER TO DESIGN AND CERTIFY TEMPORARY WORKS.
17. TRENCHES OR OTHER EXCAVATIONS DEEMED TO BE CONFINED SPACES SHALL BE SHORED IN ACCORDANCE WITH RELEVANT REGULATIONS
18. ALL LEVELS SHALL BE TO THE PROJECT HEIGHT DATUM UNO.
19. ALL DIMENSIONS OF EXISTING STRUCTURES SHALL BE CHECKED BY THE CONTRACTOR PRIOR TO FABRICATION AND ERECTION.
20. EXISTING SERVICES SHOWN ON AECOM PROJECT DRAWINGS ARE INDICATIVE ONLY. PRIOR TO THE COMMENCEMENT OF WORKS, THE CONTRACTOR SHALL IDENTIFY ALL EXISTING SERVICES. ANY DAMAGE TO EXISTING SERVICES SHALL BE RECTIFIED AT THE CONTRACTORS EXPENSE.
21. ALL DISTURBED AREAS NOT SUBJECT TO NEW WORKS SHALL BE REINSTATED TO THEIR ORIGINAL CONDITION BY THE CONTRACTOR AT THE COMPLETION OF WORKS.
22. THE SITE WILL BE MAINTAINED IN A CLEAN CONDITION AT ALL TIMES, FREE OF RUBBISH AND DEBRIS. AT THE COMPLETION OF WORKS, THE CONTRACTOR SHALL REMOVE ALL UNUSED CONSTRUCTION MATERIALS AND DEBRIS.
23. WHERE STRUCTURAL CERTIFICATION IS REQUIRED, THE INSPECTIONS SHALL BE PERFORMED BY THE PRINCIPAL'S ENGINEER. THESE INSPECTIONS SHALL BE PERFORMED IN ACCORDANCE WITH THE INSPECTION AND TEST PLANS APPROVED BY THE PRINCIPAL.
24. A MINIMUM OF 48 HOURS NOTICE IS REQUIRED FOR INSPECTION. ALL WORKS TO BE INSPECTED MUST BE COMPLETED PRIOR TO THE AGREED TIME FOR INSPECTION. THE CONTRACTOR IS TO ALLOW TIME AND ACCESS FOR THE INSPECTIONS TO TAKE PLACE. A CONTRACTOR SUPERVISOR WILL BE AVAILABLE DURING THE INSPECTION TO RECEIVE COMMENT OR DIRECTION.
25. INSPECTIONS DO NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY FOR COMPLETENESS AND CORRECTNESS OF WORK.

CONCRETE UNIT WEIGHT (INCLUDING STEEL REINFORCEMENT):	25kN/m ³ (IN-SITU)
EARTH PRESSURE:	SOIL UNIT WEIGHT = 18kN/m ³
INTERNAL FRICTION ANGLE:	EXISTING SOILS = 30°
AT REST COEFFICIENT (Ko):	EXISTING SOILS = 0.5
DESIGN LIVE LOAD FROM AS 3996 W80 CLASS D	
COMPACTION SURCHARGE:	12kPa
PIPE TEST PRESSURE:	374.4kN
PIPE OPERATING PRESSURE:	124.8kN

1. PIT HAS BEEN DESIGNED FOR AN ALLOWABLE BEARING PRESSURE OF 80kPa AT UNDERSIDE OF FOOTING.
2. EXCAVATION SHALL BE INSPECTED BY AN RPEQ GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT OF CONCRETE, TO CONFIRM CONDITIONS ARE CONSISTENT WITH THOSE ASSUMED IN DESIGN.
3. ROCK FILL MATERIAL SHALL BE IN ACCORDANCE WITH MRTS04 Cl. 14.2.3.
4. GEOTEXTILE TO BE FILTRATION CLASS VI AND STRENGTH CLASS D IN ACCORDANCE WITH MRTS27, UNO.

1. LOCATION AND LEVEL OF ALL EXISTING PUPS MUST BE OBTAINED PRIOR TO CONSTRUCTION. ALL LEVELS SHALL BE CHECKED FOR CONFLICT WITH ANY SERVICES AND ANY IDENTIFIED CONFLICTS RESOLVED WITH THE CONTRACT ADMINISTRATOR.

1. THE SLOPE OF EXCAVATION BATTERS ARE TO BE DESIGNED BY THE CONTRACTOR AND THE STABILITY CONFIRMED.
2. WHERE CONCRETE FOUNDATIONS ARE FOUNDED ON SOIL, ALL VEGETATION AND TOPSOIL SHALL BE REMOVED FROM THE BEARING AREA. THE EXPOSED SOIL SHALL BE EXCAVATED DOWN TO COMPETENT MATERIAL CAPABLE OF ACHIEVING THE BEARING PRESSURES SHOWN ON THE PROJECT DRAWINGS.
3. FOUNDATION MATERIAL FOR FOOTINGS SHALL BE APPROVED BY AN EXPERIENCED GEOTECHNICAL ENGINEER, ENGAGED BY THE CONTRACTOR, PRIOR TO THE CONSTRUCTION OF FOOTINGS. THE GEOTECHNICAL ENGINEER SHALL SUPPLY A WRITTEN REPORT FOR THE PRINCIPAL'S APPROVAL PRIOR TO COMMENCEMENT OF SUBSEQUENT WORK.
4. EXCAVATION FOR FOOTINGS WILL BE TO THE LINES AND LEVELS SHOWN ON THE AECOM PROJECT DRAWINGS. ANY LOOSE MATERIAL AND PONDING WATER SHALL BE REMOVED PRIOR TO FURTHER CONSTRUCTION.
5. ANY BACKFILL, INCLUDING FOR OVER EXCAVATION, SHALL BE SELECT GRANULAR FILL, CBR15 OR GREATER, PLACED IN LAYERS NOT EXCEEDING 200mm IN THICKNESS AND COMPACTED TO A DRY DENSITY RATIO OF NOT LESS THAN 98% STANDARD COMPACTION.
6. RETAINING WALLS SHALL NOT BE BACKFILLED FOR AT LEAST 7 DAYS FOLLOWING PLACEMENT OF CONCRETE/GROUT. BACKFILLING AND COMPACTION METHODS WILL BE SELECTED TO ENSURE THE WALL IS NOT OVERSTRESSED OR DESTABILISED.
7. ALL PIPES, RETAINING WALLS AND EXCAVATIONS SHALL BE LOCATED OUTSIDE OF A 1:1 V:H ZONE OF INFLUENCE THAT EXTENDS FROM THE BOTTOM EDGE OF THE FOOTINGS.
8. A 50mm THICK BLINDING LAYER (CONCRETE GRADE N15) SHALL BE PLACED UNDER ALL FOOTINGS ON THE EXPOSED FOUNDATION MATERIAL IMMEDIATELY AFTER APPROVAL BY THE GEOTECHNICAL ENGINEER UNO. EXCAVATION DEPTH SHALL ALLOW FOR THE BLINDING THICKNESS.
9. THE CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL AND DISPOSAL OF EXCESS MATERIAL INCLUDING ANY UNSUITABLE MATERIALS ENCOUNTERED.

1. ALL FORMWORK SHALL COMPLY WITH AS3610.
2. THE DESIGN, CERTIFICATION, CONSTRUCTION AND PERFORMANCE OF THE FORMWORK, FALSEWORK AND BACKPROPPING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
3. STRIPPING OF FORMWORK SHALL BE IN ACCORDANCE WITH AS 3600 SECTION 17.6.
4. ALL HOLES LEFT BY FORM, TIE BOLTS SHALL BE FILLED WITH MORTAR MATCHING THE SURFACE COLOUR OF THE FINISHED SURFACE.
5. ALL FORMWORK SHALL BE CLEANED OUT PRIOR TO PLACING CONCRETE.

1. ALL WORKSMANSHIP AND MATERIALS SHALL COMPLY WITH AS 3600, AS 5100 AND AS 3735.
2. CONCRETE THICKNESSES SHOWN ON DRAWINGS ARE MINIMUM AND NO REDUCTION BY DUCTS, PIPES, ETC SHALL BE MADE WITHOUT THE APPROVAL OF THE CONTRACT ADMINISTRATOR.
3. LOAD APPLICATION ON NEWLY POURED SURFACES SHALL COMPLY WITH AS 3610. NO LOADING OF NEWLY POURED SURFACES IS PERMITTED WITHOUT PRIOR APPROVAL OF THE CONTRACT ADMINISTRATOR.
4. NO HOLES OR CHASES OTHER THAN THOSE SHOWN ON THE DRAWINGS SHALL BE MADE IN THE CONCRETE MEMBERS WITHOUT THE PRIOR APPROVAL OF THE CONTRACT ADMINISTRATOR.
5. CONCRETE QUALITY AND REQUIRED PROPERTIES OF CONCRETE SHALL BE IN ACCORDANCE TO AS 1379.
6. CONCRETE REQUIREMENTS AS SHOWN IN THE TABLE BELOW UNLESS NOTES OTHERWISE ON THE DRAWINGS. NO "BRECCIA" TYPE AGGREGATE IS TO BE USED.

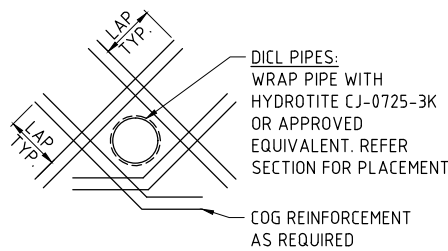
MEMBER LOCATIONS	EXPOSURE CLASSIFICATION	CONCRETE STRENGTH F_c (MPa) AT 28 DAYS	CONCRETE CLASS	SLUMP AT SITE +/- 15mm	Nom. MAX AGGREGATE SIZE (mm)	REQUIRED COVER (mm)
FLOWMETER PIT	C2	50	N	80	20	CAST AGAINST GROUND - 90mm ALL OTHER SURFACES - 80mm
BLINDING	-	15	N	80	20	-

1. REINFORCEMENT MAY BE DISPLACED SLIGHTLY WHERE NECESSARY TO CLEAR STEEL DOWEL, DRAINAGE PIPES, FORMED HOLES AND RECESSES.
2. COVER TO REINFORCEMENT SHALL BE OBTAINED BY USING CHAIRS THAT ARE SUFFICIENTLY ROBUST TO ENSURE THE REINFORCEMENT REMAINS IN PLACE WHEN OPERATORS WALK ON THE REINFORCEMENT AND DURING THE CONCRETE POUR. CHAIRS SHALL BE SPACED AT MAXIMUM 750mm CENTRES
3. REINFORCEMENT SHALL NOT BE PULLED INTO POSITION THROUGH WET CONCRETE
4. REINFORCEMENT IS SHOWN DIAGRAMMATICALLY ON THE DRAWINGS AND THEREFORE DOES NOT DEPICT THE PRECISE POSITION OF THE BARS.
5. SYMBOLS ON DRAWINGS FOR GRADE AND STRENGTH OF REINFORCEMENT ARE:
N - DENOTES GRADE, 500N HOT ROLLED DEFORMED REINFORCEMENT BAR TO AS/NZS 4671
6. BAR NOTATION GIVES THE FOLLOWING INFORMATION IN THIS ORDER :
No OF BARS:
GRADE BAR SIZE (mm):
SPACING (mm, IF REQUIRED):
PLACING INFORMATION EG: 20-N16-200 BTM
7. REINFORCEMENT DIMENSIONS SHALL NOT BE SCALED.
8. SPLICE REINFORCEMENT SHOWN AT LOCATIONS SHOWN ON THE DRAWINGS. REINFORCEMENT SHALL NOT BE SPLICED EXCEPT WHERE ONLY IN THE DRAWINGS. IF SPLICES ARE NOT INDICATED IN THE DRAWINGS , SUITABLE LOCATIONS SHALL BE PROPOSED FOR WRITTEN APPROVAL BY STRUCTURAL ENGINEER. THE SPLICE LENGTH OF BARS SHALL BE AS GIVEN IN THE FOLLOWING TABLE, EXCEPT WHERE OTHER DIMENSIONS ARE STATED ON THE ACTUAL DETAIL:

TYPE OF MEMBER	TENSILE LAP LENGTH (mm) FOR GRADE 500N DEFORMED BARS							
	N10	N12	N16	N20	N24	N28	N32	N36
SLAB OR WALL (WITH 300mm OR LESS DEPTH OF CONCRETE BELOW THE BAR AND ALL VERTICAL BARS)	400	500	750	1000	1250	1500	1800	2200
SLAB OR WALL (WITH GREATER THAN 300mm OF CONCRETE BELOW THE BAR)	500	650	1000	1300	1600	1950	2300	2800

9. REINFORCEMENT SHALL BE BENT COLD IN ACCORDANCE WITH AS 3600 EXCEPT WHERE APPROVED BY THE CONTRACT ADMINISTRATOR. NO REBENDING SHALL BE PERMITTED UNLESS APPROVED BY THE CONTRACT ADMINISTRATOR.
10. REINFORCEMENT SHALL NOT BE CUT, BENT OR HEATED ON SITE WITHOUT THE CONTRACT ADMINISTRATOR'S PRIOR APPROVAL. DO NOT CUT REINFORCEMENT ON SITE TO CLEAR PENETRATIONS. DISPLACE REINFORCEMENT SLIGHTLY AS NECESSARY. MAINTAIN COVER DURING POUR.
11. REFER TO THE CONCRETE NOTES FOR THE COVER TO REINFORCEMENT NEAREST THE CONCRETE SURFACE. UNLESS NOTES OTHERWISE ON DRAWINGS.
12. THE REQUIRED COVER SHALL BE MAINTAINED TO ALL PIPES, CONDUITS, REGLETS, DRIP GROOVES ET.
13. WELDING OF REINFORCEMENT, INCLUDING TACK WELDING FOR FIXING PURPOSES, SHALL COMPLY WITH AS 3600 AND AS/NZS 1554.3. WELDING IS ONLY PERMITTED WHERE SHOWN IN THE AECOM PROJECT DRAWINGS OR WHERE OTHERWISE APPROVED. ALL COGS AND HOOKS SHALL BE IN ACCORDANCE WITH AS 3600 UNO ON THE AECOM PROJECT DRAWINGS.
14. ALL OPENING AND RE-ENTRANT CORNERS IN THE CONCRETE SHALL HAVE 2-N12 BARS x 1200 LONG TOP & BOTTOM DIAGONALLY ACROSS THE CORNER. COG AS REQUIRED.

1. FOR PIPE PENETRATIONS LESS THAN 300 DIA. BARS TO BE REARRANGED AROUND HOLE WITHOUT CUTTING
2. FOR HOLES GREATER THAN 300 DIA. BUT LESS THAN 1000 DIA. USE DETAILS AS FOLLOWS
 - A. VERTICAL BARS: FOR EVERY BAR STOPPED BY THE PENETRATION, ADD ONE BAR EACH SIDE OF SAME GRADE & SIZE
 - B. HORIZONTAL BARS: FOR EVERY TWO BARS STOPPED BY HOLE, ADD ONE BAR EACH SIDE OF SAME GRADE & SIZE
3. PIPE PENETRATIONS 300 DIA. OR GREATER TO BE PERPENDICULAR TO WALL



1. TOP SLAB IS ASSUMED TO BE EXECUTED OFF SITE AS A PRECAST ELEMENT.
2. TOTAL WEIGHT OF THE SLAB: 7374kg
3. LIFTING POINT SETOUT TO BE DETERMINED BY CONTRACTOR
4. TOTAL WEIGHT OF THE SLAB DOES NOT INCLUDE THE WEIGHT OF THE OPENING COVERS.
5. DYNAMIC LOAD ALLOWANCE SHALL BE MADE ADEQUATE FOR THE LIFTING OPERATION TYPE.
6. AT LEAST FOUR LIFTING POINTS SHALL BE ASSUMED TO LIFT THE SLAB. ODD NUMBER OF LIFTING POINTS ARE NOT RECOMMENDED.
7. THE SLING ANGLE (MEASURED TO HORIZONTAL SLAB SURFACE) IS RECOMMENDED TO BE MORE THAN 45°.
8. THE LIFTING POINTS TO BE DESIGNED CONSIDERING ONLY 50% OF THE POINTS ARE SUPPORTING THE SLAB AT THE SAME TIME.
9. ADDITIONAL SLAB REINFORCEMENT, ACCORDINGLY TO THE LIFTING POINT TYPE, SHALL BE DESIGNED FOR THE PUNCHING SHEAR BY THE SLAB MANUFACTURER.
10. THE SLAB SHOULD BE LIFTED FROM A POINT DIRECTLY OVER THE CENTRE OF GRAVITY OF THE SLAB.
11. THE AXIS OF RECOMMENDED LIFTING POINT SHOULD BE LOCATED SYMMETRICALLY TO SLAB CENTER OF GRAVITY.
12. THE LIFTING POINTS SHOULD NOT BE LOCATED CLOSER TO THE SLAB EDGE THEN 500mm AND 400mm TO THE OPENING EDGE.
13. LIFTING POINTS SHOULD BE INSTALLED IN THE RECESSES. NO PROTRUDING ELEMENTS FROM THE TOP SURFACE OF THE SLAB ARE ALLOWED.
14. WHEN LID IS REMOVED AND REINSTATED, ALL ISOLATION JOINTS SHALL BE REINSTATED TO THEIR ORIGINAL CONDITION.
15. WHEN THE LID IS REMOVED, BUTYL MASTIC SEALANT SHALL BE REMOVED AS PER MANUFACTURER'S RECOMMENDATIONS AND REINSTATED UPON REINSTALLATION OF THE LID.

NOT FOR CONSTRUCTION

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REVISIONS					
A	JC	30.05.25	CLIENT REVIEW		
No.	BY	DATE	DESCRIPTION		APPD

Scale

0 500 1000 1250mm

SCALE G

1: 50 (A3) 1: 25 (A1)

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DRAWN		CHECKED	
APPROVED		DATE	

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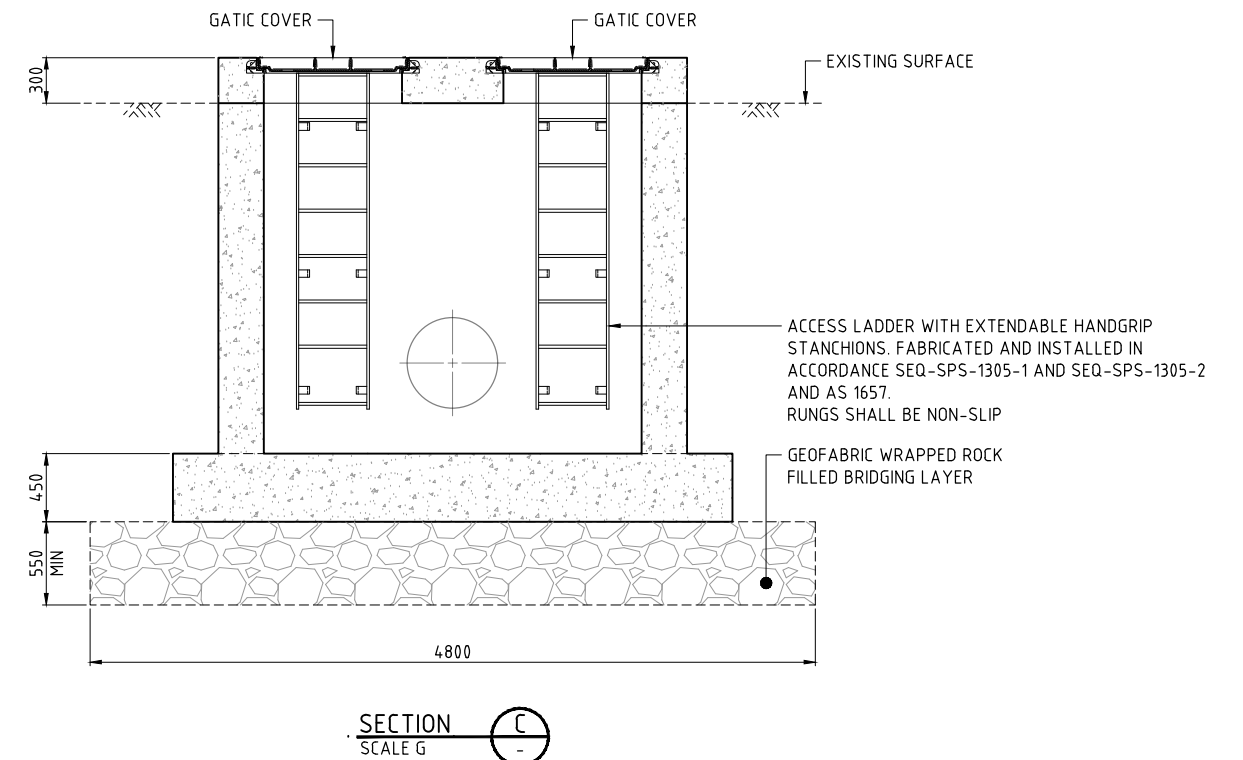
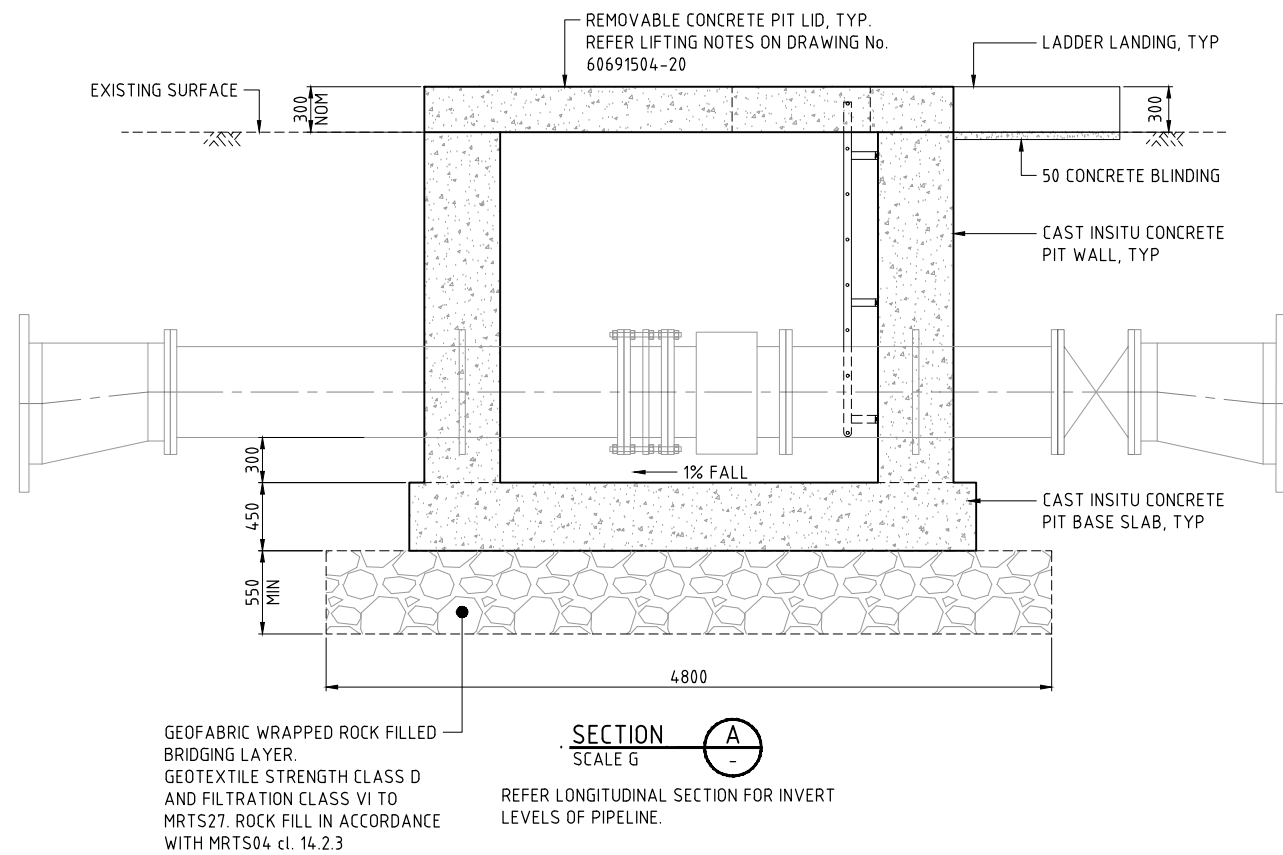
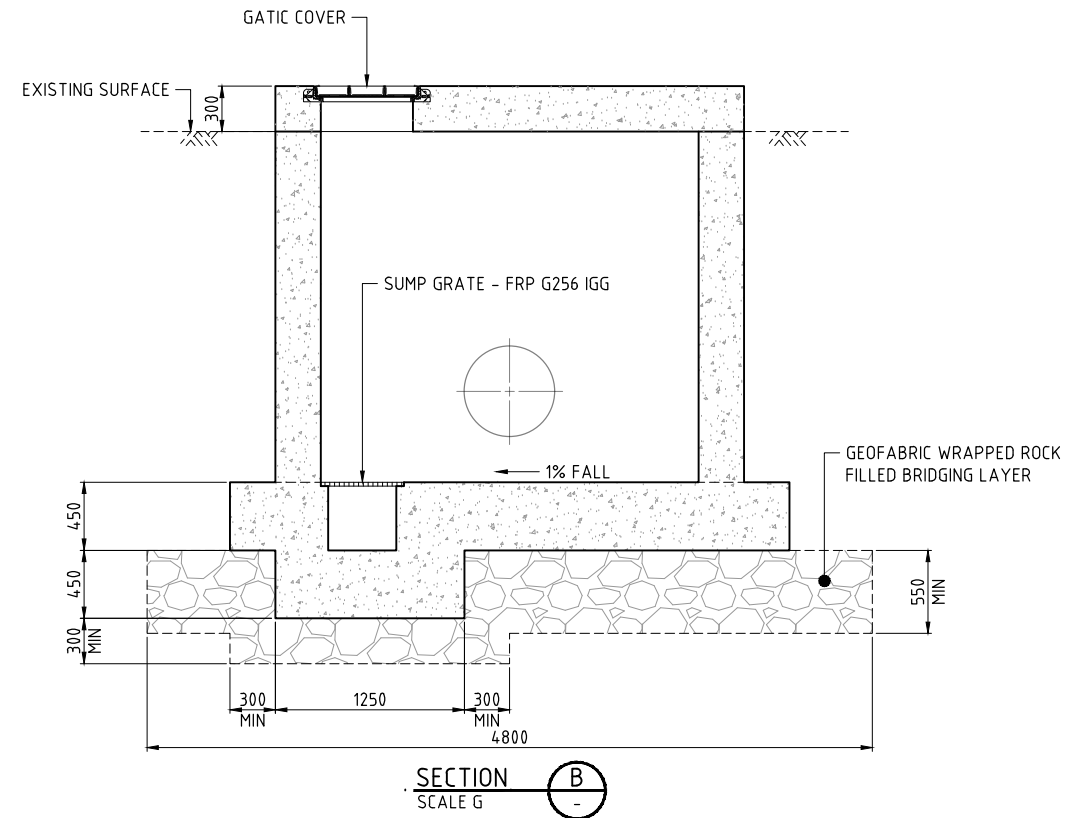
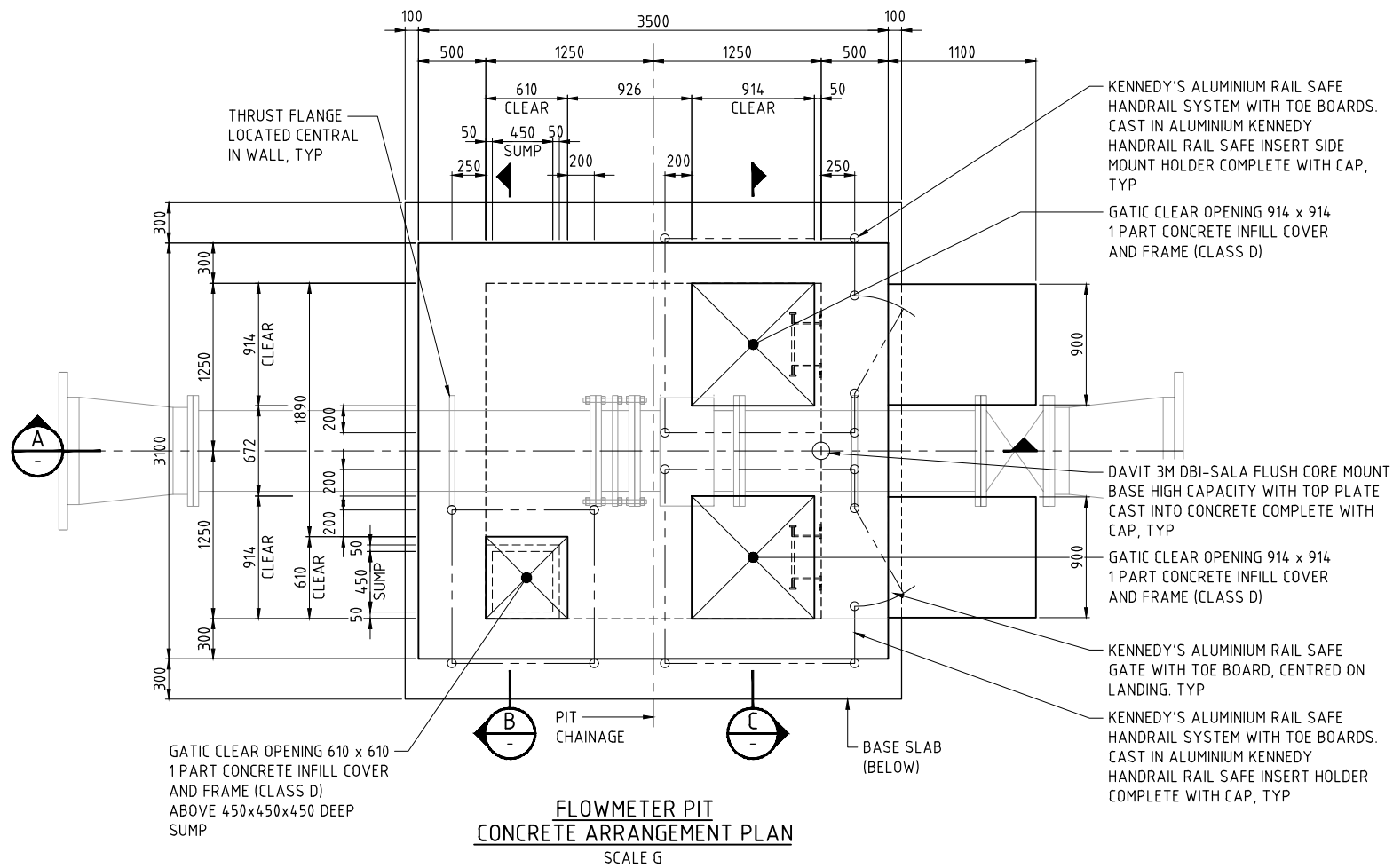
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EASTERN OUTFALL PRESSURE MAIN REPLACEMENT			
FLOW METER CHAMBER STRUCTURAL NOTES			
Status	PRELIMINARY	Dwg No.	60691504-20
			Rev. A

NOTES

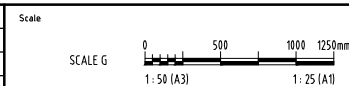
- FOR STRUCTURAL NOTES REFER DRAWING No. 60691504-20
- FOR PIT SETOUT & PIPEWORK DETAILS REFER PIPEWORK DRAWINGS.
- LADDER TOP RUNG IS NOT LEVEL WITH TOP LANDING AND DOES NOT COMPLY WITH AS 1657.
- VERTICAL LADDER FOR VALVE CHAMBER. 750 mm CLEARANCE IS NOT PROVIDED BETWEEN LADDER AND EDGE OF LID AND DOES NOT COMPLY WITH AS 1657.



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A JC 30.05.25 CLIENT REVIEW
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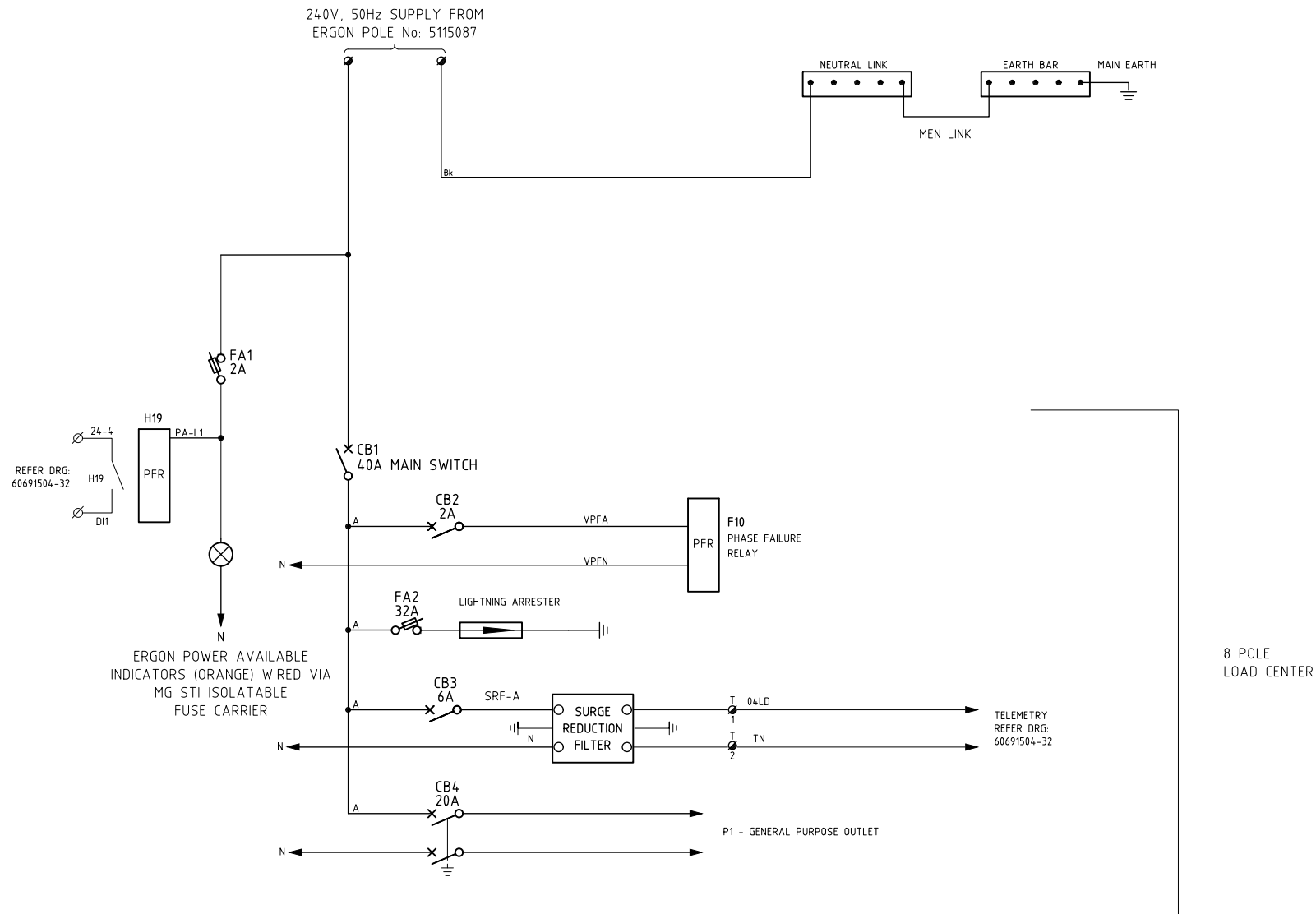
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EASTERN OUTFALL PRESSURE MAIN REPLACEMENT

FLOW METER CHAMBER
CONCRETE ARRANGEMENT
PLAN & SECTIONS

Status	PRELIMINARY	Dwg No.	60691504-21	Rev.	A
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- NOTES
1. REFER CABLE SCHEDULE 60691504-34 FOR DETAILS AND QUANTITY OF CABLES.
 2. DRAWING BASED ON NATIVE FILES AND PHOTOGRAPHIC EVIDENCE PROVIDED BY TCC ONLY. CONTRACTOR TO RE-CONFIRM CONNECTIONS AND WIRING AS PART OF INSTALLATION WORKS.

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CAD REF: \\WA-AECOMNET\CONFILES\APAC\TOWNSVILLE-AUTSVILLE\GATV\PROJECTS\60691504\60691504_V001_CAD_GS\918_CAD\08_SHEETS\60691504-30.DWG

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DESIGNED	R.ROY	CHECKED	D.PEREIRA
DRAWN	M.DANN	CHECKED	R.ROY
APPROVED		DATE	

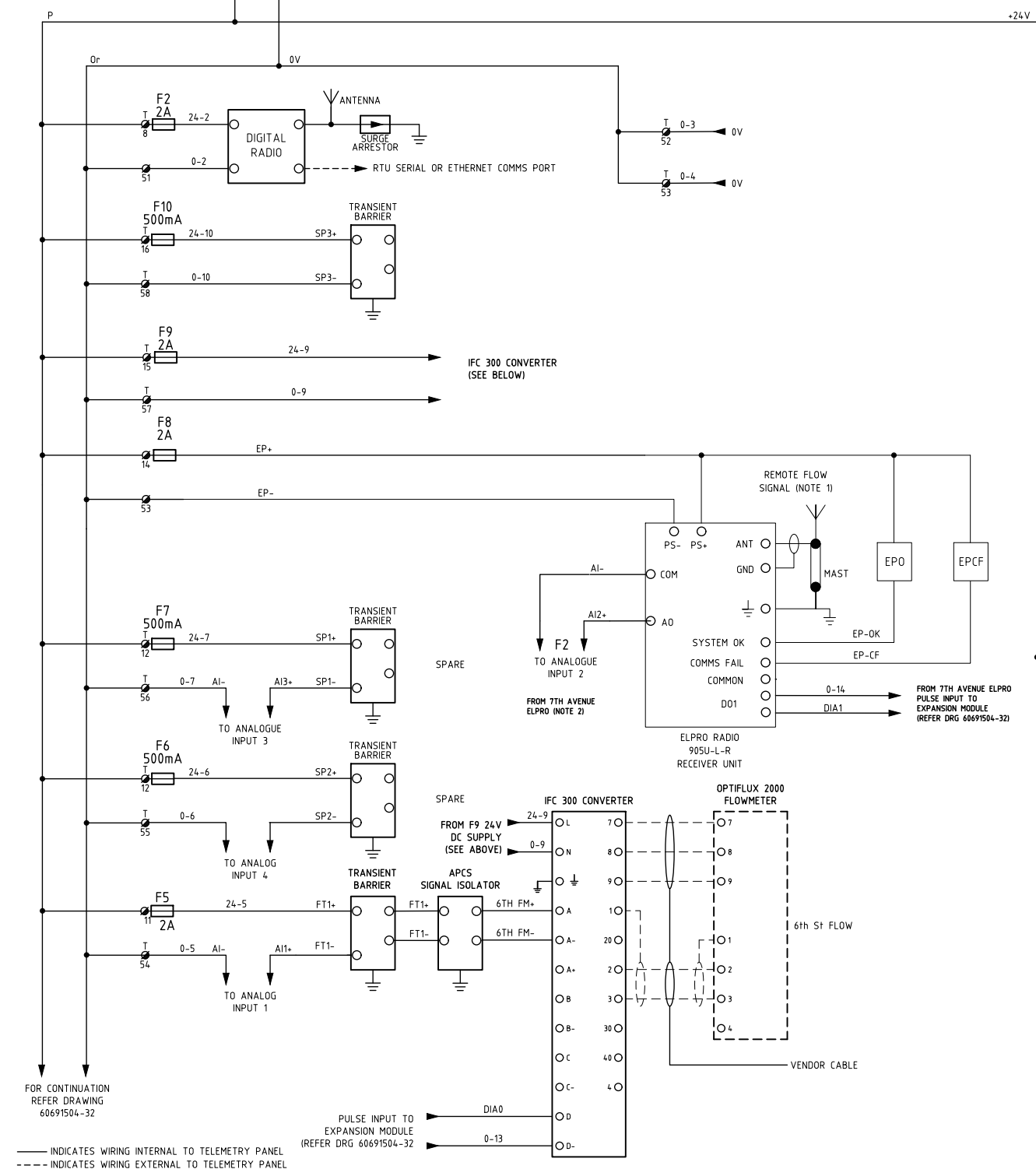
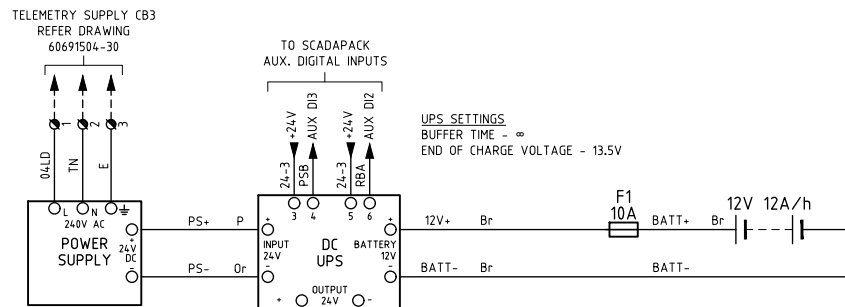
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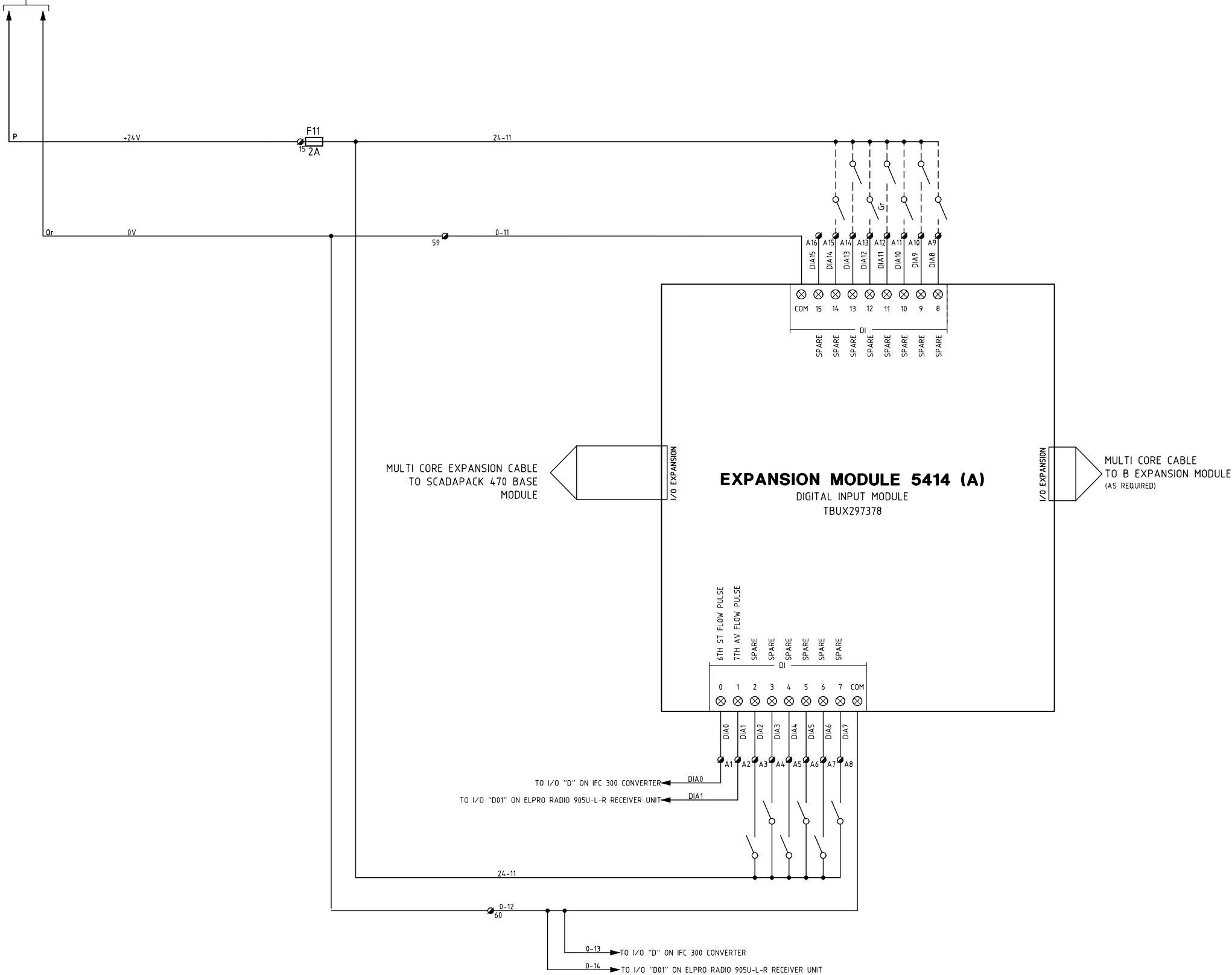
EASTERN OUTFALL PRESSURE MAIN REPLACEMENT		
FLOWMETER MAIN SWITCHBOARD POWER SCHEMATIC		
Status	PRELIMINARY	Rev. A
Dwg No.	60691504-30	

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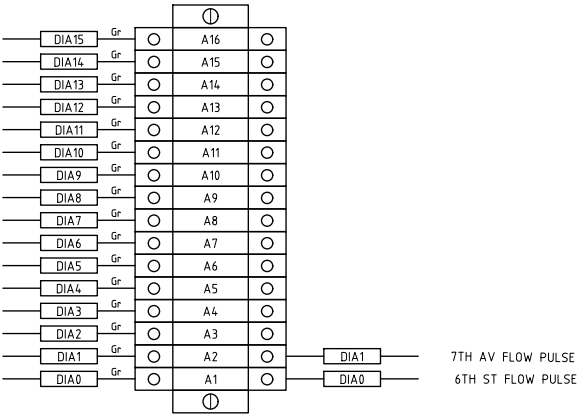


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SUPPLY FROM 24VDC
POWER SUPPLY
FOR CONTINUATION
REFER DRG
60691504-31



TERMINATION DIAGRAM



WIRE COLOURS
P - PURPLE
Or - ORANGE
Gr - GREY
W - WHITE
Bk - BLACK
R - RED
G/Y - EARTH

NOTES:
1. DRAWING BASED ON NATIVE FILES AND PHOTOGRAPHIC EVIDENCE PROVIDED NY
TCC ONLY. CONTRACTOR TO RE-CONFIRM CONNECTIONS AND WIRING AS PART OF
INSTALLATION WORKS.

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DRAWN	M.DANN	CHECKED	R.ROY
APPROVED		DATE	

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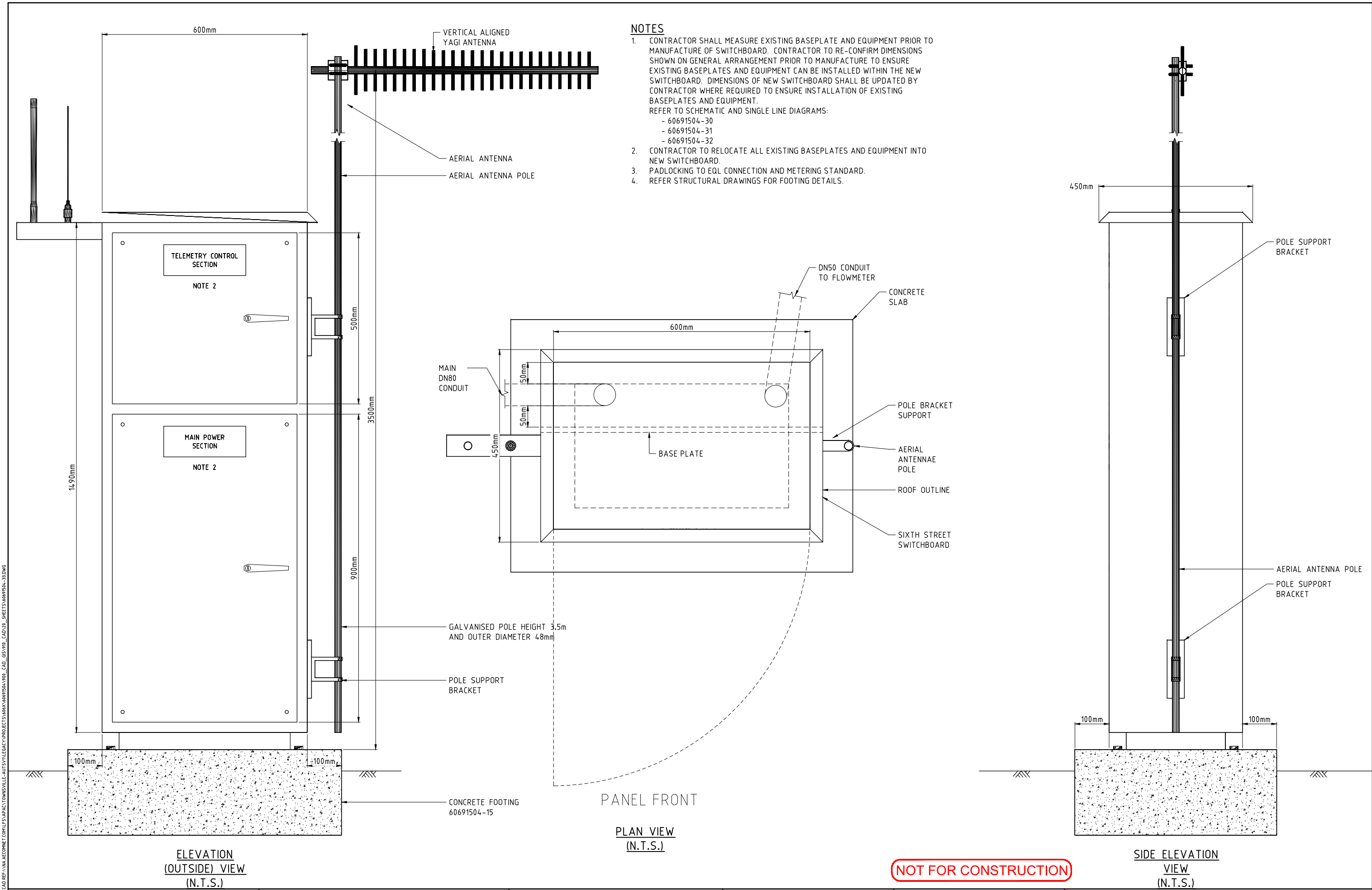


EASTERN OUTFALL PRESSURE MAIN REPLACEMENT

FLOWMETER
MAIN SWITCHBOARD
TELEMETRY SCHEMATIC (SHEET 2)

Status	PRELIMINARY	Dwg No.	60691504-32	Rev.	A
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LAST MODIFIED: 22/02/2025 5:31 PM
REVISIONS



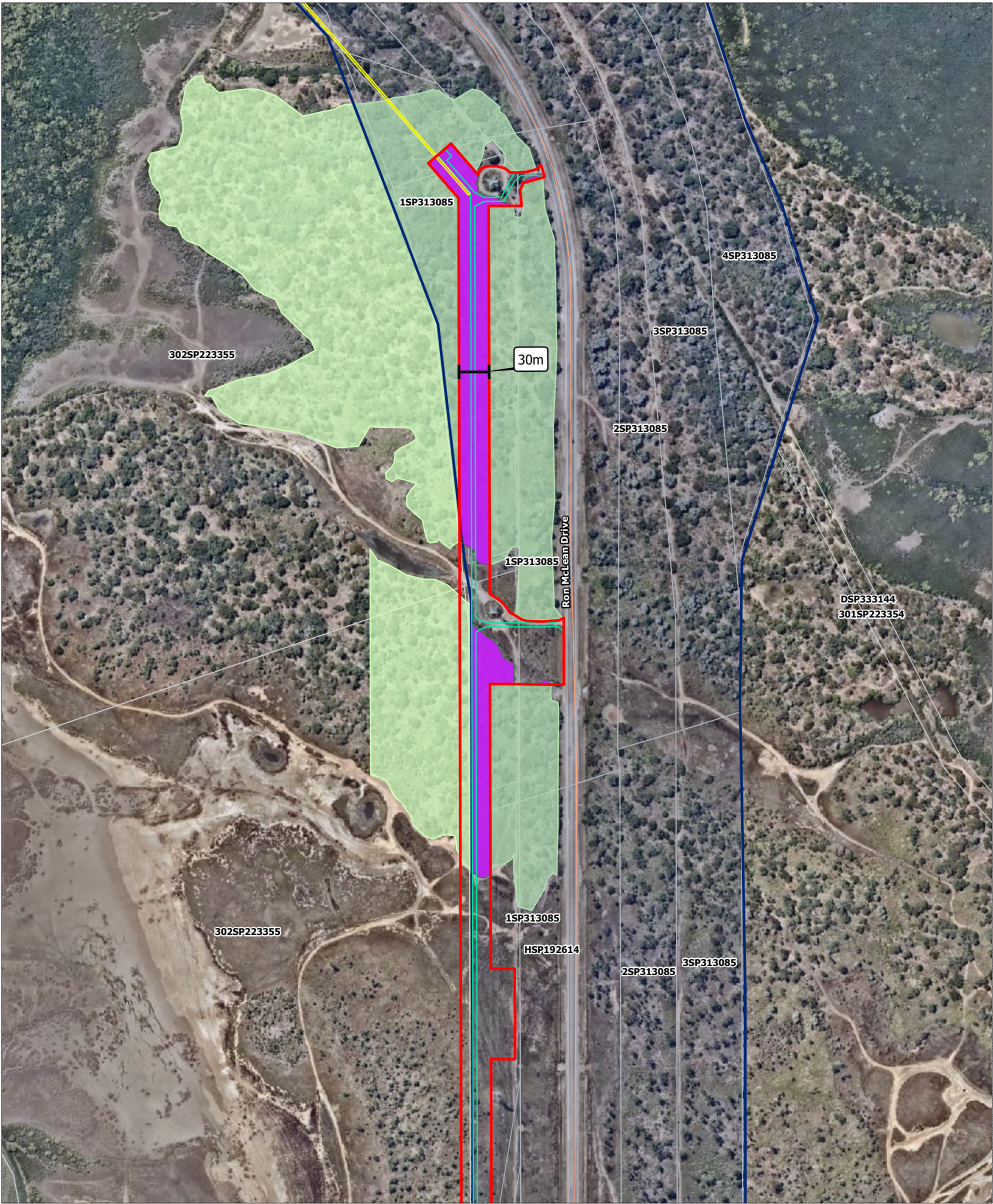
- NOTES**
1. CONTRACTOR SHALL MEASURE EXISTING BASEPLATE AND EQUIPMENT PRIOR TO MANUFACTURE OF SWITCHBOARD. CONTRACTOR TO RE-CONFIRM DIMENSIONS SHOWN ON GENERAL ARRANGEMENT PRIOR TO MANUFACTURE TO ENSURE EXISTING BASEPLATES AND EQUIPMENT CAN BE INSTALLED WITHIN THE NEW SWITCHBOARD. DIMENSIONS OF NEW SWITCHBOARD SHALL BE UPDATED BY CONTRACTOR WHERE REQUIRED TO ENSURE INSTALLATION OF EXISTING BASEPLATES AND EQUIPMENT. REFER TO SCHEMATIC AND SINGLE LINE DIAGRAMS:
 - 60691504-30
 - 60691504-31
 - 60691504-32
 2. CONTRACTOR TO RELOCATE ALL EXISTING BASEPLATES AND EQUIPMENT INTO NEW SWITCHBOARD.
 3. PADLOCKING TO EQL CONNECTION AND METERING STANDARD.
 4. REFER STRUCTURAL DRAWINGS FOR FOOTING DETAILS.

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DESIGNED					R.ROY		CHECKED		D.PEREIRA				FLOWMETER	
DRAWN					M.DANN		CHECKED		R.ROY				MAIN SWITCHBOARD	
APPROVED							DATE						PANEL GA	
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													PRELIMINARY	
													Dwg No.	
													60691504-33	
													Rev.	
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Appendix H

Assessable Development Plan

Appendix H Assessable Development Plan



**EOPM Replacement Project - SDA Development Application – Operational Work
(Clearing of Native Vegetation)**

Figure 5: Operational Work for clearing native vegetation within the TSDA

Legend

- Disturbance Area
- Under-boring
- Permanent access tracks
- Lot parcels
- Roads
- Townsville SDA
- Ground-truthed Regional Ecosystem 11.2.5

Intersecting Disturbance Area
Clearing Native Vegetation
(17,674m²)



A separate Development Approval for Clearing Native Vegetation is being sought for the Project's proposed vegetation clearing outside the TSDA in accordance with the Planning Act 2016. Only the vegetation clearing that is proposed within the TSDA area forms part of this Development Application

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