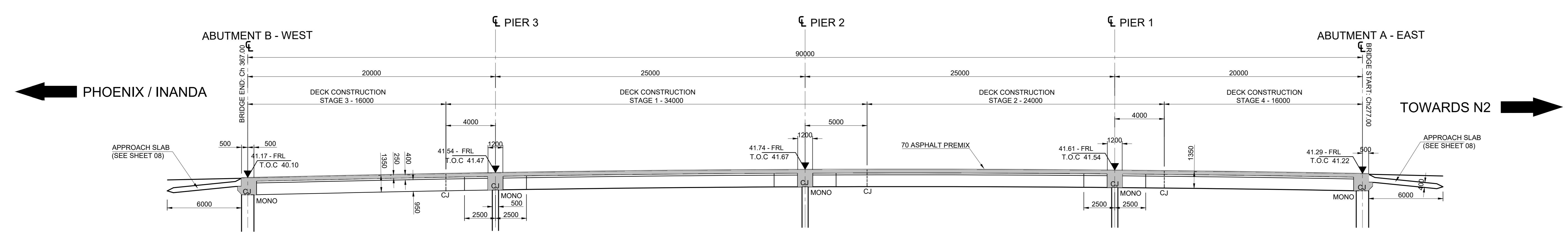
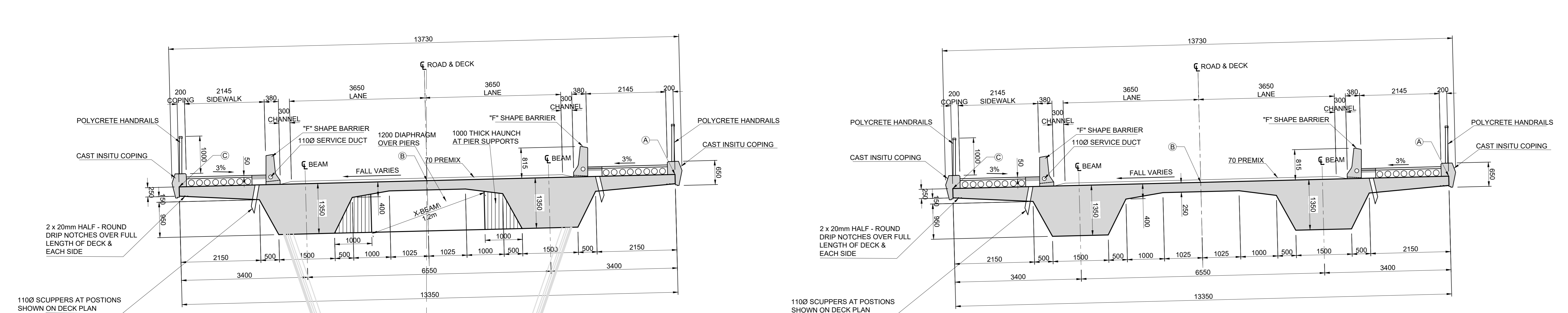


PLAN OF DECK
SCALE 1:150



LONGITUDINAL SECTION ALONG CENTER LINE OF BRIDGE
SCALE 1:150



TYPICAL CROSS SECTION OF DECK
SCALE 1:50

* SEE SHEET 8 (MISCELLANEOUS DETAILS) - FOR SCUPPER AND DRAINAGE DETAIL FOR DECK

TOP OF CONCRETE DECK LEVELS (M)			
STAKELINE	A	B	C
270	41.312	41.178	41.045
275	41.417	41.283	41.150
280	41.509	41.376	41.242
285	41.589	41.456	41.322
290	41.657	41.523	41.390
295	41.711	41.578	41.444
300	41.753	41.620	41.486
305	41.783	41.649	41.516
310	41.800	41.666	41.533
315	41.804	41.670	41.537
320	41.795	41.662	41.528
325	41.774	41.641	41.507
330	41.741	41.607	41.474
335	41.695	41.561	41.428
340	41.636	41.502	41.369
345	41.564	41.431	41.297
350	41.564	41.347	41.213
355	41.383	41.250	41.116
360	41.276	41.143	41.009
365	41.167	41.034	40.900

BRIDGE NIGHT POUR

- THE DECK SHALL BE POURED/ CAST IN 4 CONSTRUCTION STAGES OR CONCRETE POURS DURING THE NIGHT AT LOW TEMPERATURES WHEN THE FORMWORK & TEMPERATURE IS RELATIVELY COOL. THE FINAL 2 STAGES THAT CONNECT THE DECK TO ABUTMENTS SHALL ONLY BE CAST AT A SPECIFIC TEMPERATURE (AMBIENT TEMPERATURE MEASURED AT THE SITE LOCATION) SPECIFIED BY THE ENGINEER. THIS WILL PREVENT ANY UNWANTED THERMAL STRESS LOCKED INTO THE BRIDGE SYSTEM.
- DETAILED HOURS OF NIGHT POUR SHALL BE CONFIRMED WITH THE ENGINEER DURING CONSTRUCTION AS THIS DEPENDS ON SEASONAL TEMPERATURES AT THAT SPECIFIC TIME OF THE SEASON AND EXACT LOCATION ETC.
- THE CONTRACTOR SHALL ENSURE ALL PROVISIONS FOR THE NIGHT POURS OR EARLY MORNINGS ARE IN ORDER.

NOTES:	
THE DECK CONCRETE SHALL INCORPORATE A CRYSTALLINE PERMEABILITY REDUCING ADDITIVE, SUCH AS PENETRON, OR AN ALTERNATIVE TECHNOLOGY WITH PROVEN EFFECTIVENESS AGAINST HYDROSTATIC PRESSURE. APPROVED BY THE ENGINEER. THE INTEGRAL PERMEABILITY REDUCING TECHNOLOGY SHALL HAVE DEMONSTRABLE BENEFITS PROVING SELF-HEALING CAPABILITY, IMPROVED CHEMICAL RESISTANCE TO SULPHURIC ACID EXPOSURE, IMPROVED COMPRESSIVE STRENGTH, AND CERTIFIED APPROVAL FOR USE ON STRUCTURES HOLDING POTABLE WATER. THE DOSAGE OF THE INTEGRAL PERMEABILITY REDUCING TECHNOLOGY SHALL BE RECOMMENDED BY THE PRODUCT MANUFACTURER BUT SHALL NOT BE LESS THAN THE FOLLOWING:	
WATER-CEMENT RATIO	MINIMUM DOSAGE OF INTEGRAL PERMEABILITY REDUCING TECHNOLOGY (% WEIGHT OF CEMENT)
LESS THAN 0.40	0.8%
0.40 - 0.49	1.0%
0.50 - 0.54	1.5%
0.55 - 0.59	2.0%
0.60 - OR GREATER	3.0%

CONSTRUCTION STAGE NOTES:

- CONSTRUCTION SEQUENCE SHALL FOLLOW THE CONSTRUCTION STAGE 1 TO CONSTRUCTION STAGE 4 SEQUENCE AS INDICATED
- THERE SHALL BE A MAXIMUM 21 DAY TURNAROUND BETWEEN DECK STAGE CONCRETE POURS
- IN ORDER TO ACHIEVE THIS IT IS EXPECTED THAT 2 SETS OF FALSEWORK & FORMWORK ETC WILL BE REQUIRED TO BE INSTALLED CONCURRENTLY
- ALL CONSTRUCTION JOINTS SHALL BE THOROUGHLY SCABBLED TO THE SATISFACTION OF THE ENGINEER AND KEPT MOIST MIN. 24 HOURS PRIOR TO NEXT CASTING

NOTES:

- CONCRETE GRADE: (MPa/mm) DECK: 40/19
- CHAMFERS: ALL SHARP EDGES TO BE CHAMFERED 25mm X 25mm
- CONCRETE SURFACE FINISHES DECK SURFACES: CLASS 3(a) TOP OF DECK: F1 SCREED FINISH INTERNAL DECK SURFACES: CLASS 1
- COVER: DECK: 40mm

ISSUED FOR TENDER

eTHEKWINI MUNICIPALITY
PROCUREMENT AND INFRASTRUCTURE CLUSTER
ENGINEERING UNIT
ROADS PROVISION DEPARTMENT
STRUCTURES BRANCH

REDUCED PLAN USE SCALE BELOW

70mm ON ORIGINAL PLAN

V1	01-06-2023	FOR TENDER PURPOSES
Revision	Date	Description
		NOTE: No construction work to commence until land and servitude acquisitions have been completed
		Acquisitions completed
Date	Engineer	UNDERGROUND SERVICES CHECKED
		SERVICE DATE SIGNATURE
		S.W DRAINS
		SEWERS
		WATER MAINS
		G.P.O CABLES
		ELECTRIC CABLES
		S.A.R. CABLES
		E.B.C. CABLES
		ON PIPE LINE
		NOTE: Only underground services affected by new construction work are shown. Care must be taken during excavations for road foundations, trenches etc. to avoid damage to underground services such as sewers, drains, cables, water mains and connections. Whenever possible these must be located before work proceeds.
Contract No.	1R - 24551	
Project Title	FLOOD DAMAGE REMEDIATION - STREET 120183, PHOENIX INDUSTRIAL PARK, ROADWORKS AND BRIDGE SUPERSTRUCTURE WARD 46 AND 48, WP 2	
Drawing Title	DECK CONCRETE DETAILS	
SCALES	AS SHOWN	Date: 01-06-2023
Designed: J.HARRIPERSHAD	Checked: P.G. FENTON	
Drawn: J.HARRIPERSHAD	Surveyed: -	
Manager: Structures P.G. Fenton		
Deputy Head: Roads Provision		
HEAD: ENGINEERING		
Drawing No.	49152	Sheet of 13
		Rev. V1