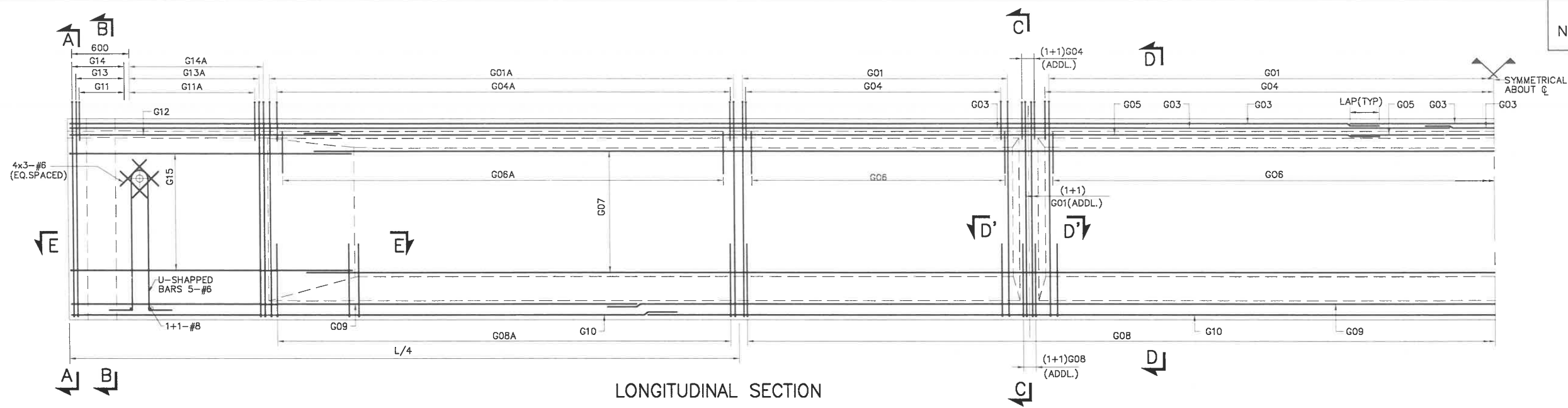
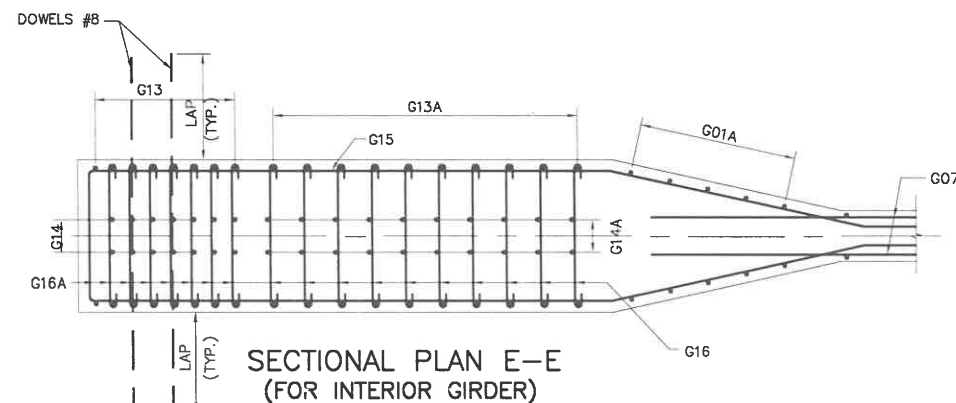
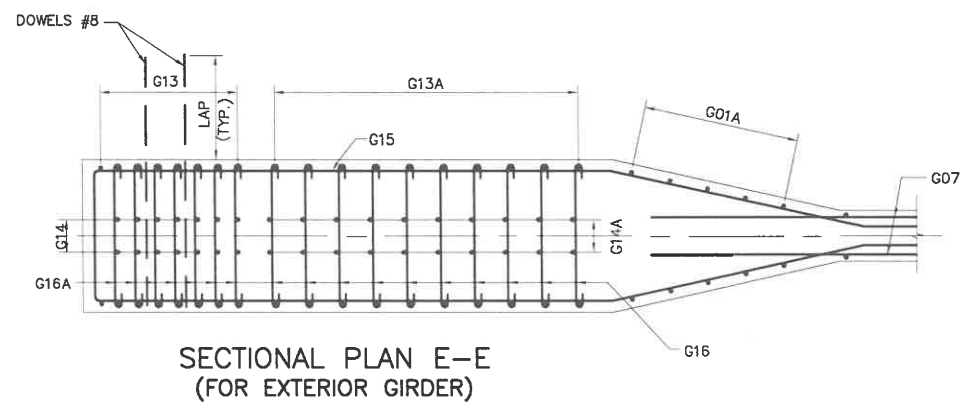
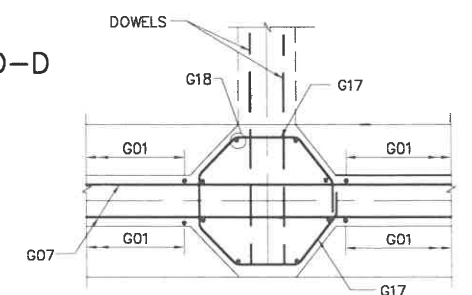
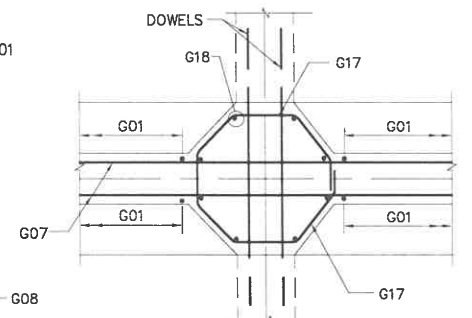
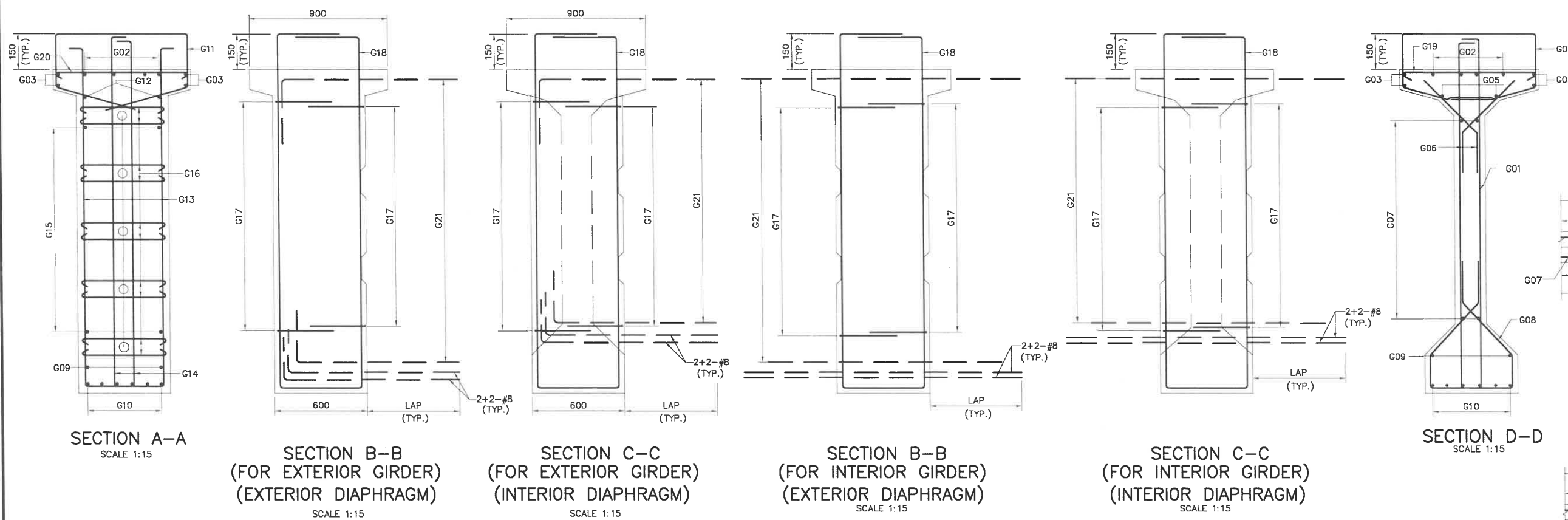




REINFORCEMENT
SCHEDULE

MARK	BAR DIA. @ SPACING
G01	#4@300
G01A	#4@150
G02	4-#4
G03	2#4(E.F)
G04	#4@300
G04A	#4@150
G05	#4(E.F)
G06	#4@300
G06A	#4@150
G07	4-#4(E.F)
G08	#4@300
G08A	#4@150
G09	#4(E.F)
G10	6-#6
G11	#4@80
G11A	#4@150
G12	#4(E.F)
G13	#4@80
G13A	#4@150
G14	#4@80
G14A	#4@150
G15	4-#4(E.F)
G16	10x10-#4
G16A	10x7-#4
G17	#4@150
G18	8-#4
G19	#4@300
G20	#4@80/150
G21	#4@200



NOTES:

- FOR GENERAL NOTES REFER DWG. NO. P1G001.
- ALL PRESTRESSED CONCRETE SHALL BE 5000 psi CYLINDER STRENGTH.
- CONCRETE REINFORCEMENT SHALL BE DEFORMED ROUND BARS OF (GRADE 60) CONFORMING TO AASHTO M-31(ASTM A-615) WITH MINIMUM YIELD STRENGTH OF 4200 Kg/Sq.Cm (60,000psi).

CLIENT



WATER AND POWER
DEVELOPMENT AUTHORITY
(WAPDA)

CONSULTANT



NATIONAL ENGINEERING SERVICES
PAKISTAN (PVT.) LTD.

HEAD OFFICE:- NESPAK HOUSE, I.C. BLOCK-N,
MODEL TOWN EXTENSION, LAHORE, PAKISTAN.

04

03

02

01

REV.

DATE

DESCRIPTION

APPROVED

APPROVED

CHD/VER.

RECOMMENDED

SUBMITTED

DRAWN

WARIS

PROJECT

DETAILED DESIGN AND CONSTRUCTION SUPERVISION /
IMPLEMENTATIONS OF LOCAL AREA DEVELOPMENT PROGRAM
(LADP) PUBLIC HEALTH, LIVELIHOOD DEVELOPMENT AND
DOWNSTREAM FISHERIES PLANS;
NAMELY LADP IMPLEMENTATION CONSULTANTS (LADP-ICS)

30.0m PRESTRESSED GIRDER
REINFORCEMENT
BRIDGE AT CH. 1+990 km

DATE

JULY, 2026

DRAWING No.

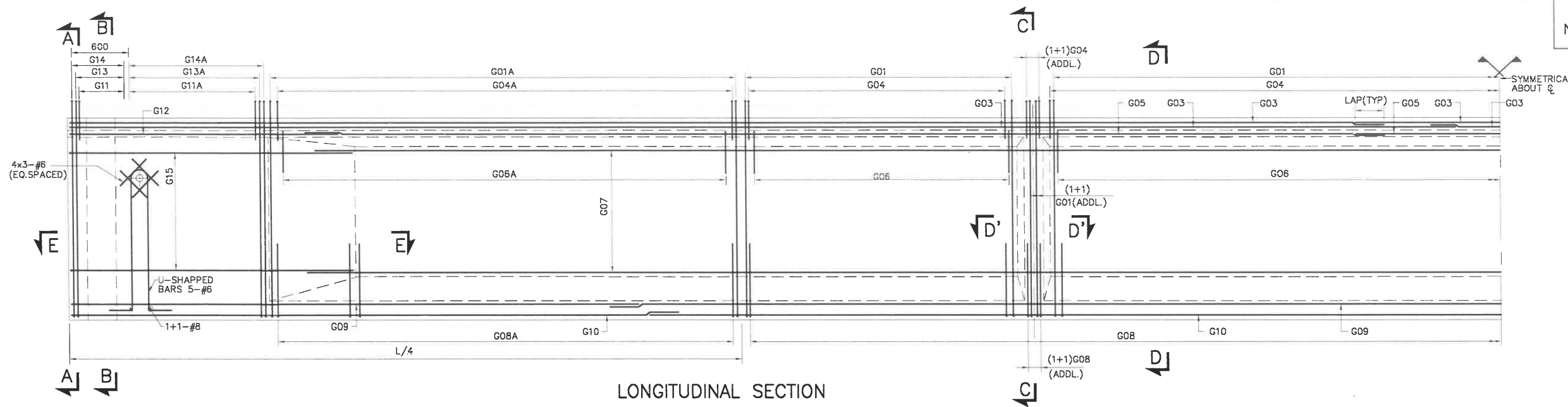
4520/102/TD/P1G103

SCALE

1:15

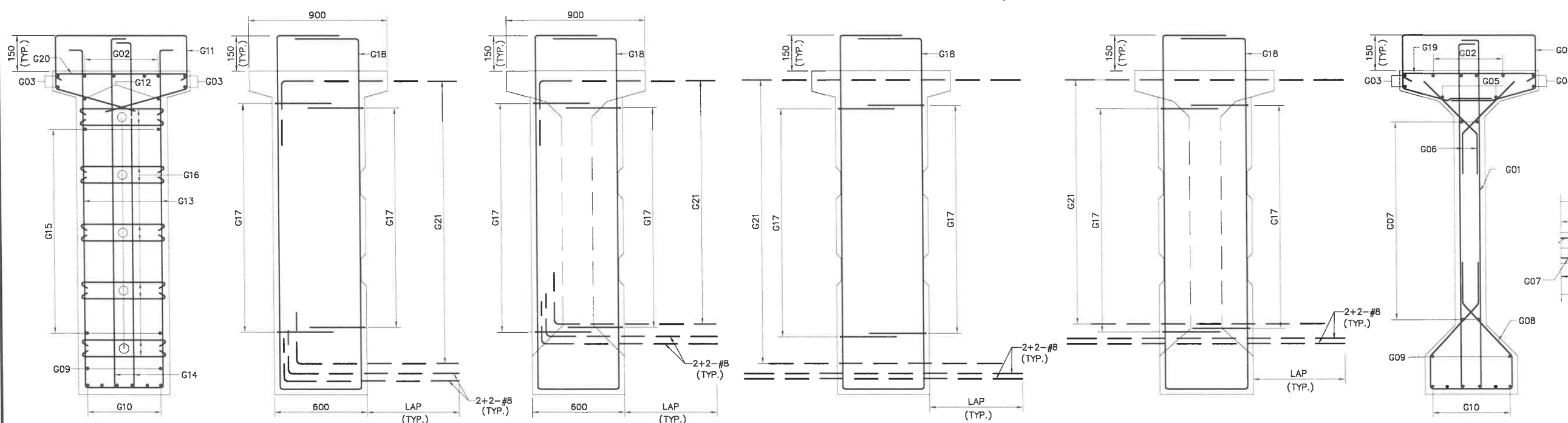
REV.

0



REINFORCEMENT SCHEDULE

MARK	BAR DIA. @ SPACING
G01	#4@300
G01A	#4@150
G02	4-#4
G03	2#4(E.F)
G04	#4@300
G04A	#4@150
G05	#4(E.F)
G06	#4@300
G06A	#4@150
G07	4-#4(E.F)
G08	#4@300
G08A	#4@150
G09	#4(E.F)
G10	6-#6
G11	#4@80
G11A	#4@150
G12	#4(E.F)
G13	#4@80
G13A	#4@150
G14	#4@80
G14A	#4@150
G15	4-#4(E.F)
G16	10x10-#4
G16A	10x7-#4
G17	#4@150
G18	8-#4
G19	#4@300
G20	#4@80/150
G21	#4@200



SECTION A-A
SCALE 1:15

SECTION B-B
(FOR EXTERIOR GIRDER)
(EXTERIOR DIAPHRAGM)
SCALE 1:15

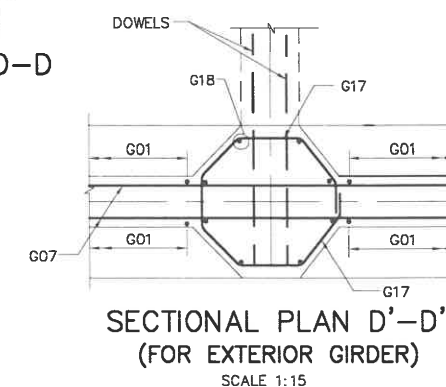
SECTION C-C
(FOR EXTERIOR GIRDER)
(INTERIOR DIAPHRAGM)
SCALE 1:15

SECTION B-B
(FOR INTERIOR GIRDER)
(EXTERIOR DIAPHRAGM)
SCALE 1:15

SECTION C-C
(FOR INTERIOR GIRDER)
(INTERIOR DIAPHRAGM)
SCALE 1:15

SECTION D-D
SCALE 1:15

SECTIONAL PLAN D'-D'
(FOR INTERIOR GIRDER)
SCALE 1:15



SECTIONAL PLAN D'-D'
(FOR EXTERIOR GIRDER)
SCALE 1:15

NOTES:

- FOR GENERAL NOTES REFER DWG. NO. P1G001.
- ALL PRESTRESSED CONCRETE SHALL BE 5000 psi CYLINDER STRENGTH.
- CONCRETE REINFORCEMENT SHALL BE DEFORMED ROUND BARS OF (GRADE 60) CONFORMING TO AASHTO M-31(ASTM A-615) WITH MINIMUM YIELD STRENGTH OF 4200 Kg/Sq.Cm (60,000psi).

CLIENT



WATER AND POWER
DEVELOPMENT AUTHORITY
(WAPDA)

CONSULTANT



NATIONAL ENGINEERING SERVICES
PAKISTAN (PVT.) LTD.

HEAD OFFICE:- NESPAK HOUSE, I-C, BLOCK-N,
MODEL TOWN EXTENSION, LAHORE, PAKISTAN.

04

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DESCRIPTION

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APPROVED

CHD/VER.

APPROVED

APPROVED

APPROVED

DRAWN

WARIS

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DETAILED DESIGN AND CONSTRUCTION SUPERVISION /
IMPLEMENTATIONS OF LOCAL AREA DEVELOPMENT PROGRAM
(LADP) PUBLIC HEALTH, LIVELIHOOD DEVELOPMENT AND
DOWNSTREAM FISHERIES PLANS;
NAMELY LADP IMPLEMENTATION CONSULTANTS (LADP-ICS)

30.0m PRESTRESSED GIRDER
REINFORCEMENT
BRIDGE AT CH. 1+990 km

DATE

JULY, 2026

DRAWING No.

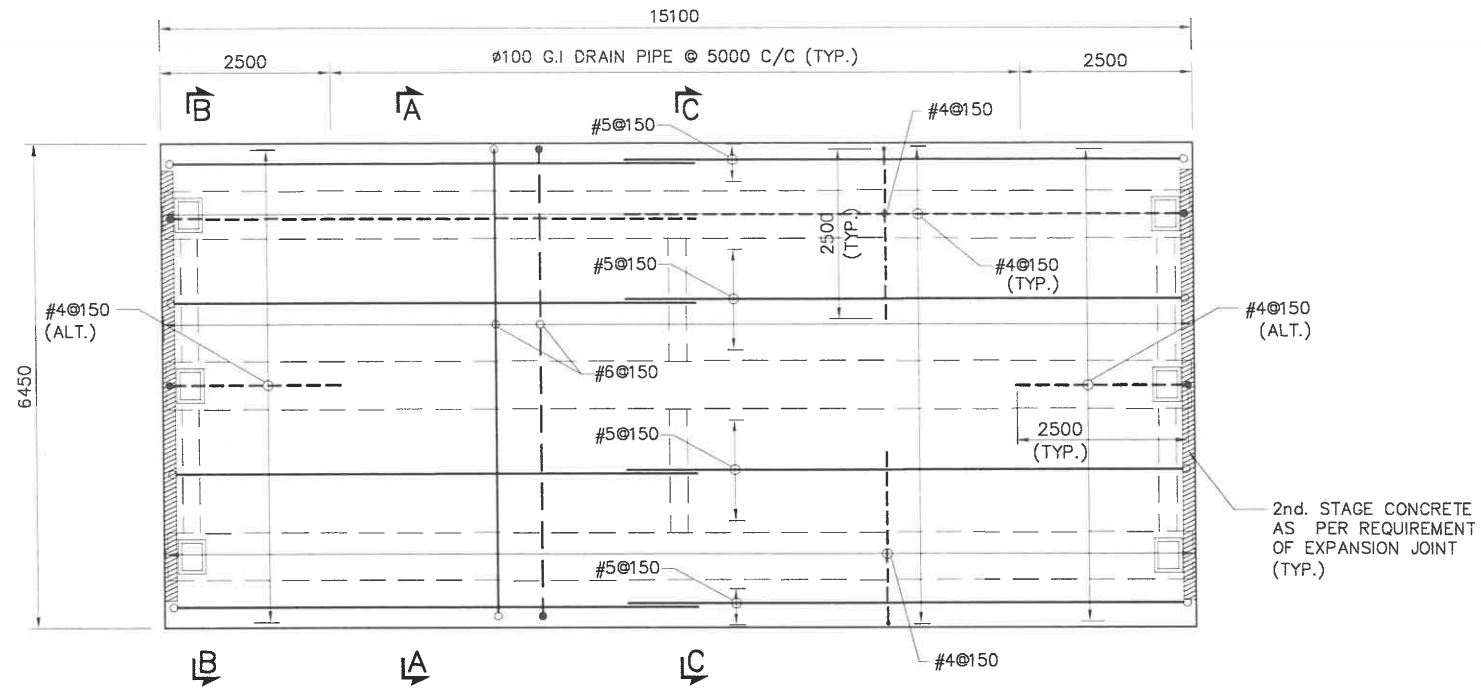
4520/102/TD/P1G104

SCALE

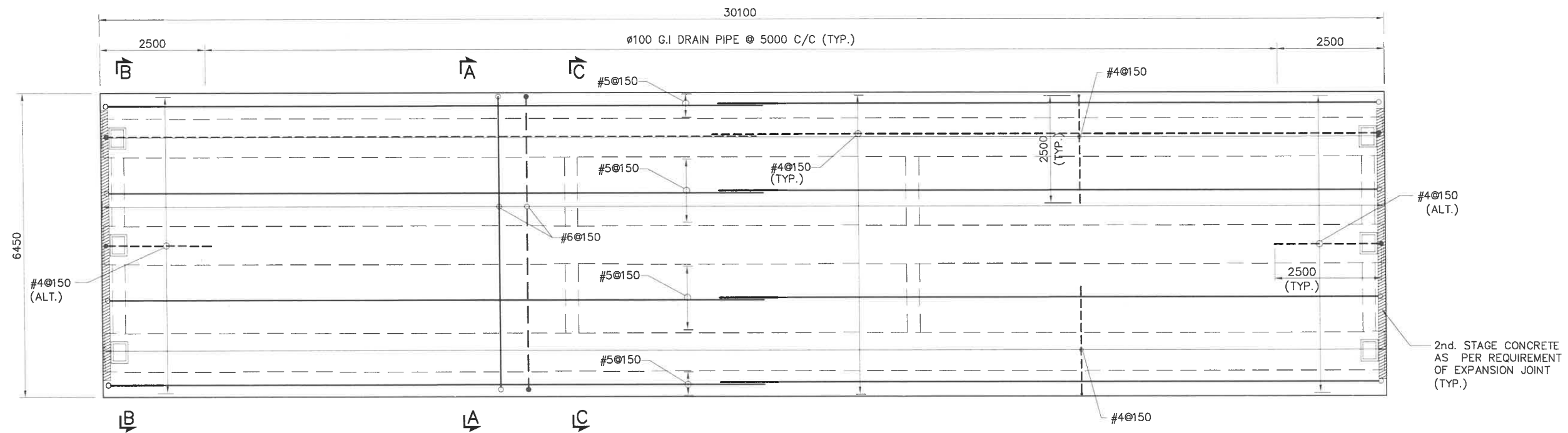
1:15

REV.

0



PLAN
(N.J BARRIER NOT SHOWN)



PLAN
(N.J BARRIER NOT SHOWN)

NOTE:

1. FOR GENERAL NOTES REFER DWG. NO. P1G001.
2. WORK THIS DRAWING IN CONJUNCTION WITH OTHER RELEVANT DRAWINGS.

CLIENT



WATER AND POWER
DEVELOPMENT AUTHORITY
(WAPDA)

CONSULTANT



NATIONAL ENGINEERING SERVICES
PAKISTAN (PVT.) LTD.

HEAD OFFICE:- NESPAK HOUSE, I-C, BLOCK-N,
MODEL TOWN EXTENSION, LAHORE, PAKISTAN.

04

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CHD/VER.

APPROVED

WARIS

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DETAILED DESIGN AND CONSTRUCTION SUPERVISION /
IMPLEMENTATIONS OF LOCAL AREA DEVELOPMENT PROGRAM
(LADP) PUBLIC HEALTH, LIVELIHOOD DEVELOPMENT AND
DOWNSTREAM FISHERIES PLANS;
NAMELY LADP IMPLEMENTATION CONSULTANTS (LADP-ICS)

DECK SLAB FOR 15.1m & 30.1m SPAN
REINFORCEMENT
BRIDGE AT CH. 1+990 km.

DATE

JULY, 2026

DRAWING No.

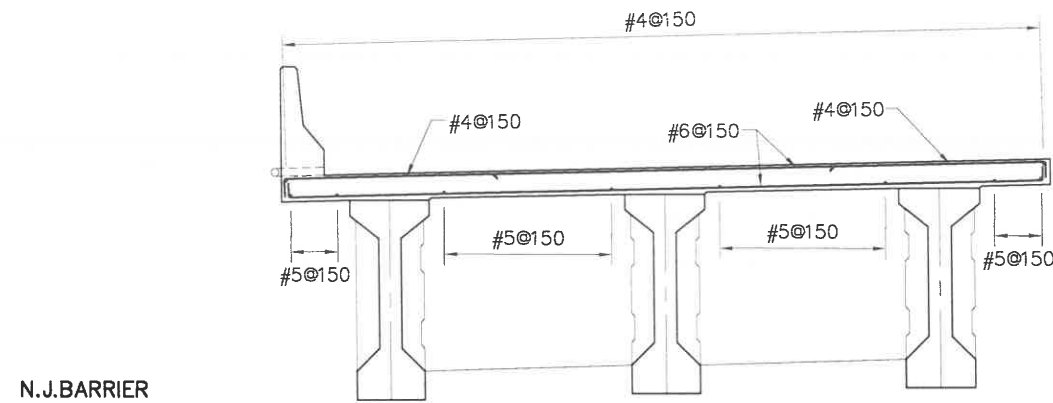
4520/102/TD/P1G105

SCALE

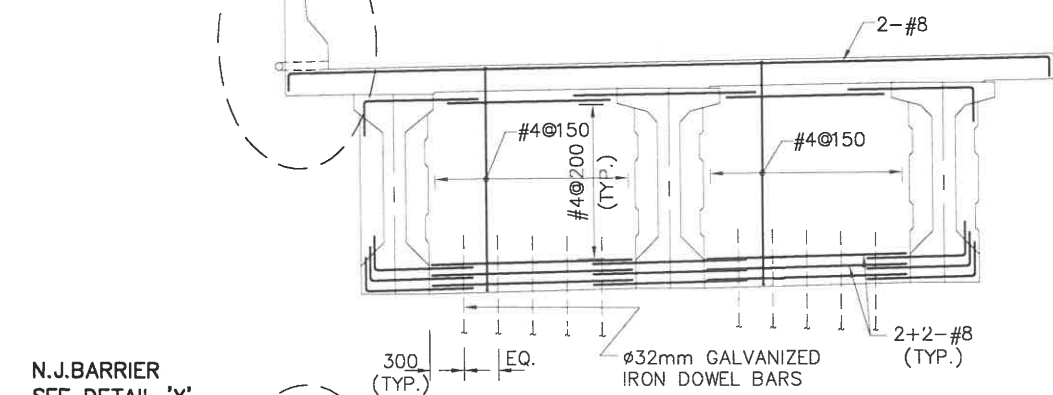
1 : 200

REV.

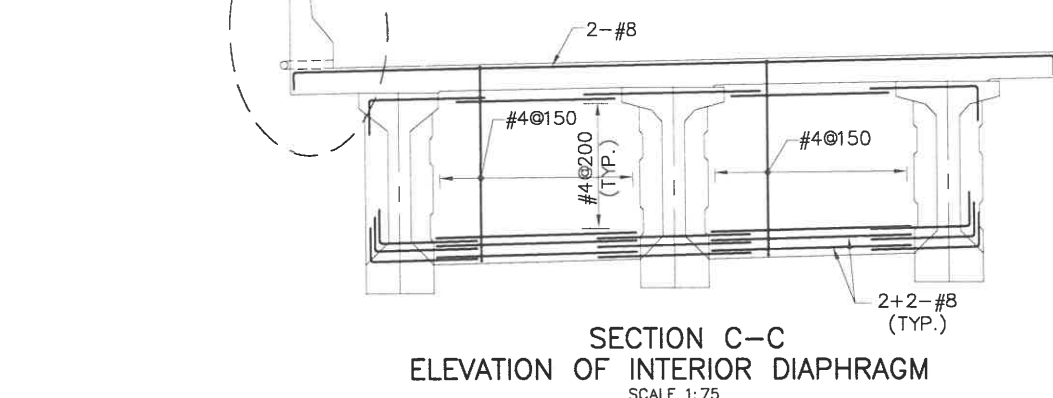
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SECTION A-A
SCALE 1:75

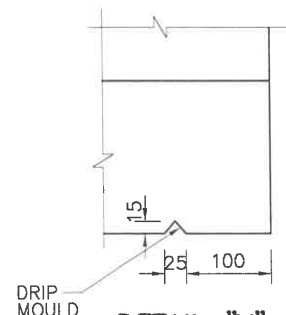


SECTION B-B
ELEVATION OF EXTERIOR DIAPHRAGM
SCALE 1:75

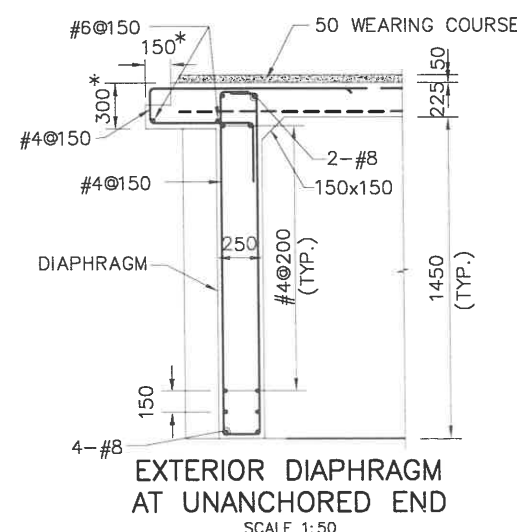


SECTION C-C
ELEVATION OF INTERIOR DIAPHRAGM
SCALE 1:75

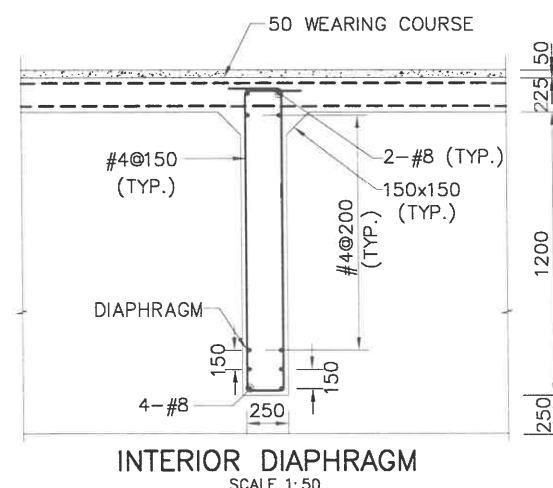
* TO BE ADJUSTED AS PER
EXPANSION JOINT VENDOR
DRAWINGS.



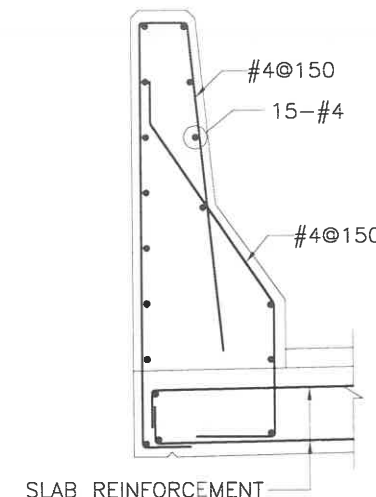
DETAIL "Y"
SCALE 1:5



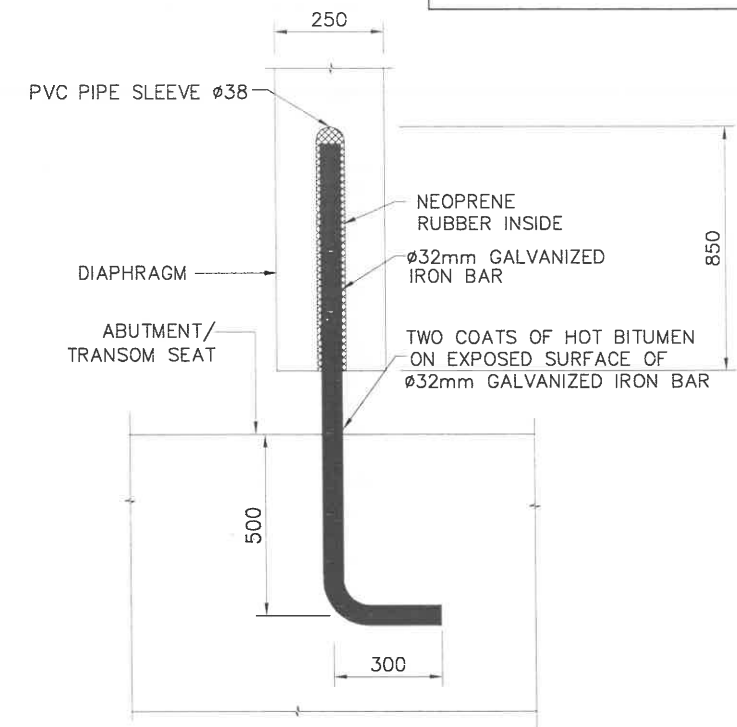
EXTERIOR DIAPHRAGM
AT UNANCHORED END
SCALE 1:50



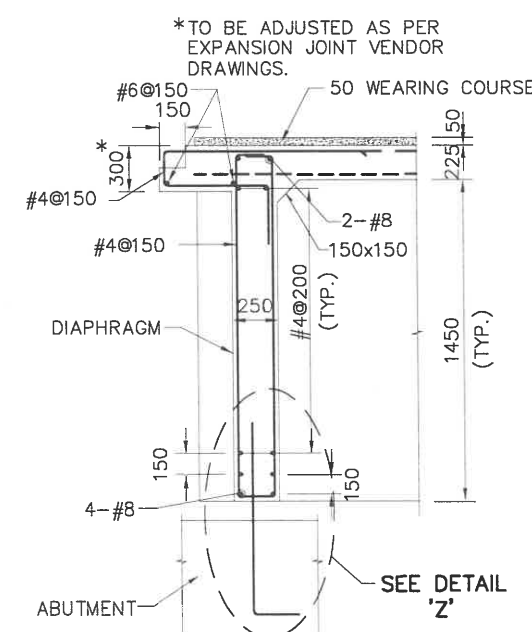
INTERIOR DIAPHRAGM
SCALE 1:50



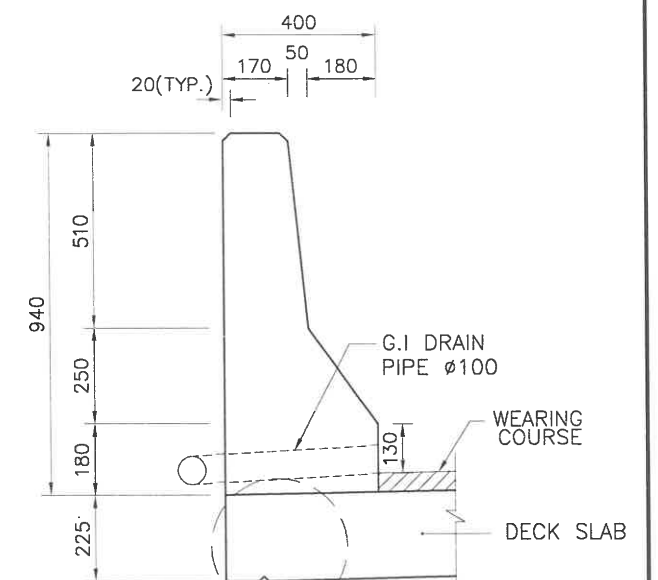
DETAIL "X"
(REINFORCEMENT)



DETAIL "Z"
(FOR ANCHORED END ONLY)



EXTERIOR DIAPHRAGM
AT ANCHORED END



DETAIL "X"
(CONCRETE OUTLINE)
SCALE 1:15

NOTES:

- FOR GENERAL NOTES REFER DWG. NO. P1G001.
- WORK THIS DRAWING IN CONJUNCTION WITH OTHER RELEVANT DRAWINGS.
- THE GALVANIZED DOWELS SHALL BE PLAIN BARS HAVING MINIMUM YIELD STRENGTH OF 4200 Kg/Sq. Cm.

SHEET 1 OF 2

CLIENT



WATER AND POWER
DEVELOPMENT AUTHORITY
(WAPDA)

CONSULTANT



NATIONAL ENGINEERING SERVICES
PAKISTAN (PVT.) LTD.

HEAD OFFICE:- NESPAK HOUSE, I-C, BLOCK-N,
MODEL TOWN EXTENSION, LAHORE, PAKISTAN.

04

03

02

01

REV.

DATE

DESCRIPTION

APPROVED

DRAWN

SUBMITTED

RECOMMENDED

CHD/VER.

APPROVED

WARIS

PROJECT

DETAILED DESIGN AND CONSTRUCTION SUPERVISION /
IMPLEMENTATIONS OF LOCAL AREA DEVELOPMENT PROGRAM
(LADP) PUBLIC HEALTH, LIVELIHOOD DEVELOPMENT AND
DOWNSTREAM FISHERIES PLANS;
NAMELY LADP IMPLEMENTATION CONSULTANTS (LADP-ICS)

DIAPHRAGM REINFORCEMENT DETAILS
FOR 15.0m SPAN GIRDER
BRIDGE AT CH. 1+990 km

DATE
JULY, 2026

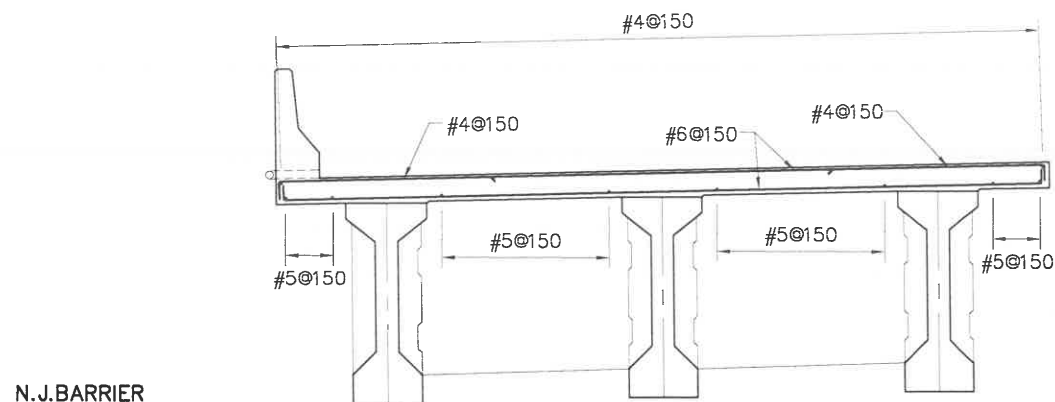
DRAWING No.
4520/102/TD/P1G106

SCALE

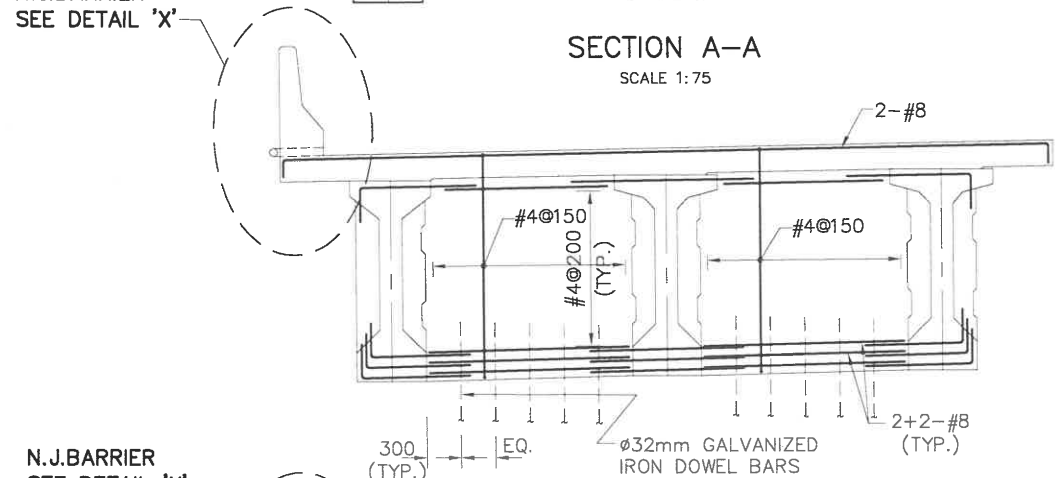
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REV.

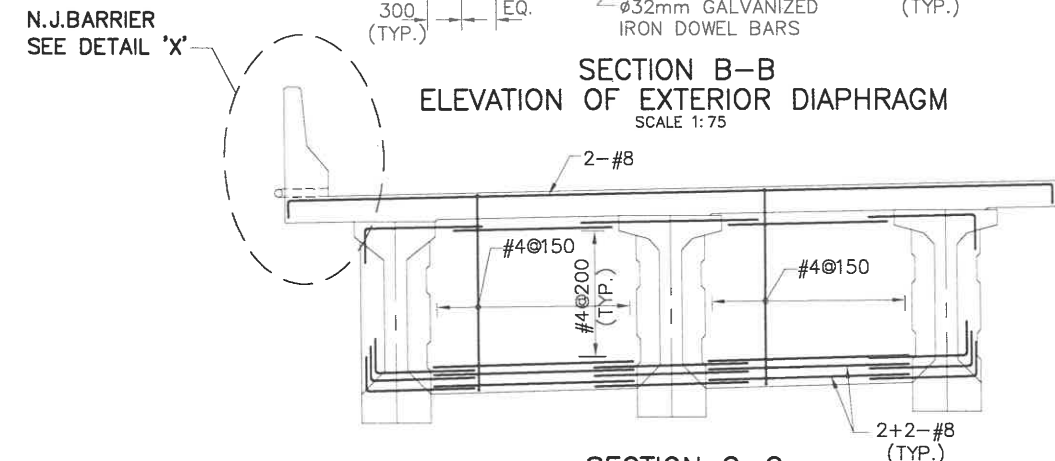
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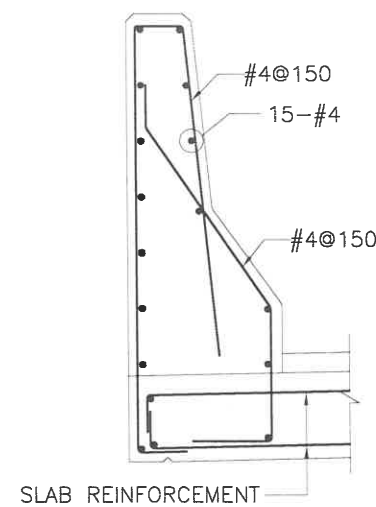
SECTION A-A
SCALE 1:75



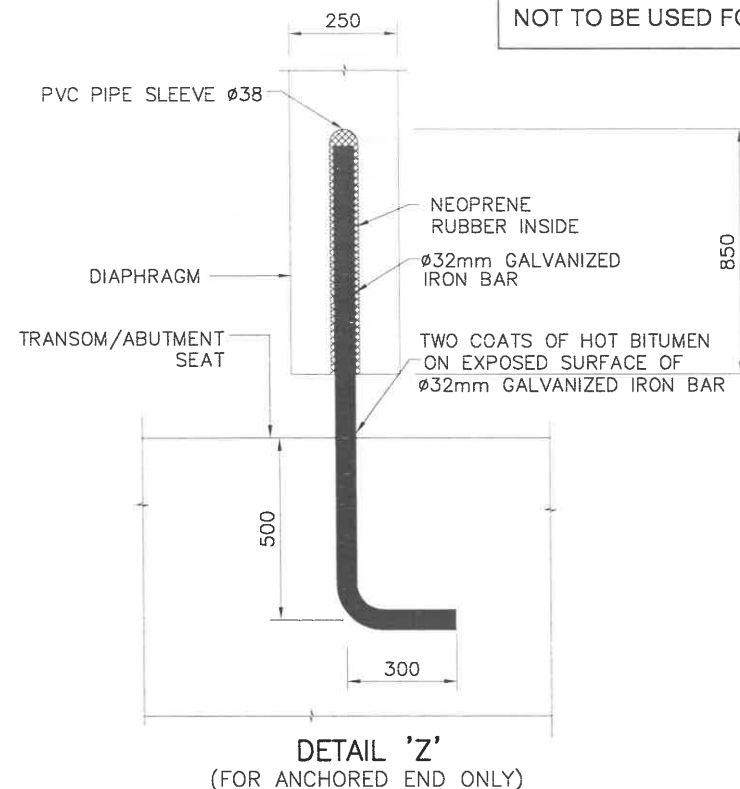
SECTION B-B
ELEVATION OF EXTERIOR DIAPHRAGM
SCALE 1:75



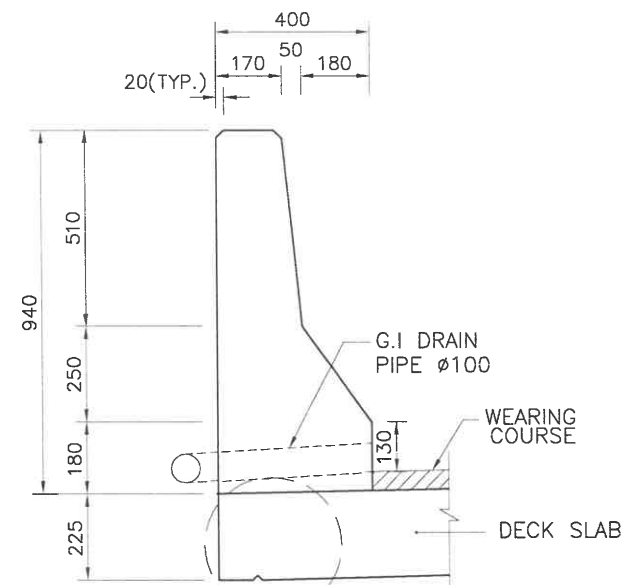
SECTION C-C
ELEVATION OF INTERIOR DIAPHRAGM
SCALE 1:75



DETAIL 'X'
(REINFORCEMENT)

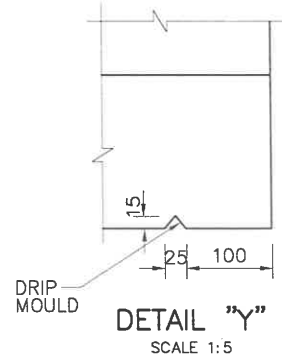


DETAIL 'Z'
(FOR ANCHORED END ONLY)

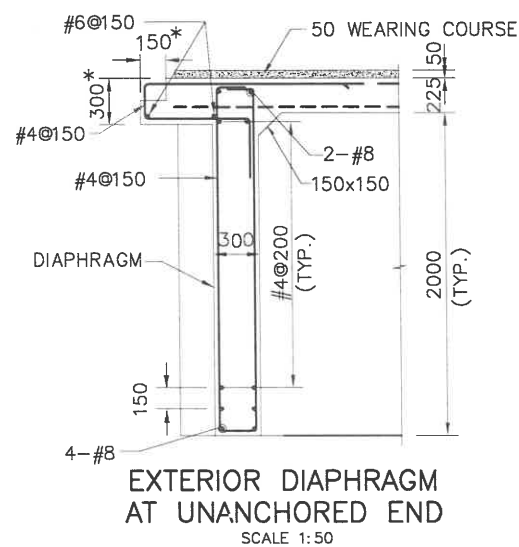


DETAIL 'Y'
(CONCRETE OUTLINE)
SCALE 1:15

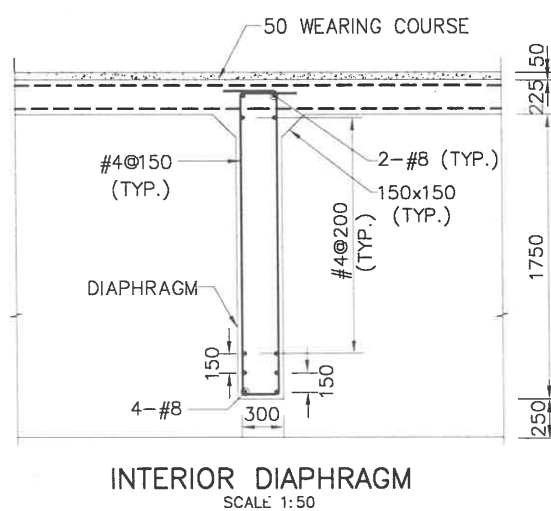
* TO BE ADJUSTED AS PER
EXPANSION JOINT VENDOR
DRAWINGS.



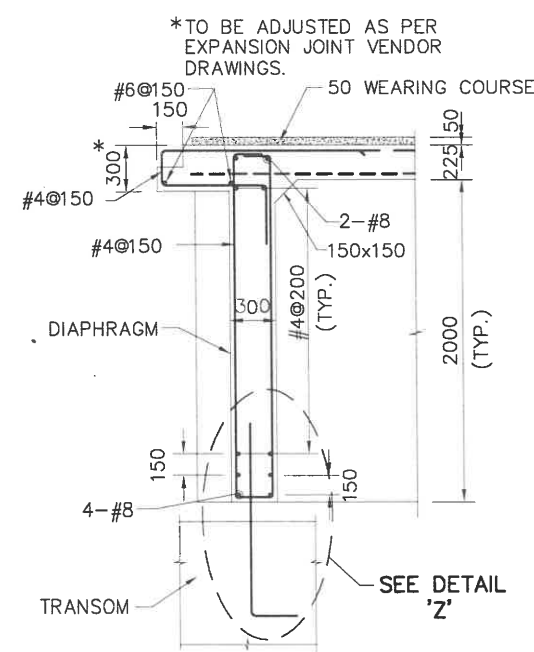
DETAIL 'Y'
SCALE 1:5



EXTERIOR DIAPHRAGM
AT UNANCHORED END
SCALE 1:50



INTERIOR DIAPHRAGM
SCALE 1:50



EXTERIOR DIAPHRAGM
AT ANCHORED END

NOTES:

1. FOR GENERAL NOTES REFER DWG. NO. P1G001.
2. WORK THIS DRAWING IN CONJUNCTION WITH OTHER RELEVANT DRAWINGS.
3. THE GALVANIZED DOWELS SHALL BE PLAIN BARS HAVING MINIMUM YIELD STRENGTH OF 4200 Kg/Sq. Cm.

SHEET 2 OF 2

CLIENT



WATER AND POWER
DEVELOPMENT AUTHORITY
(WAPDA)

CONSULTANT

NATIONAL ENGINEERING SERVICES
PAKISTAN (PVT.) LTD.

HEAD OFFICE:- NESPAK HOUSE, I-C, BLOCK-N,
MODEL TOWN EXTENSION, LAHORE, PAKISTAN.

04

03

02

01

REV

DATE

DESCRIPTION

APPROVED

DRAWN

SUBMITTED

RECOMMENDED

CHD/VER.

APPROVED

WARIS

PROJECT

DETAILED DESIGN AND CONSTRUCTION SUPERVISION /
IMPLEMENTATIONS OF LOCAL AREA DEVELOPMENT PROGRAM
(LADP) PUBLIC HEALTH, LIVELIHOOD DEVELOPMENT AND
DOWNSTREAM FISHERIES PLANS;
NAMESLY LADP IMPLEMENTATION CONSULTANTS (LADP-ICS)

DIAPHRAGM REINFORCEMENT DETAILS
FOR 30.0m SPAN GIRDER
BRIDGE AT CH. 1+990 km

DATE
JULY, 2026

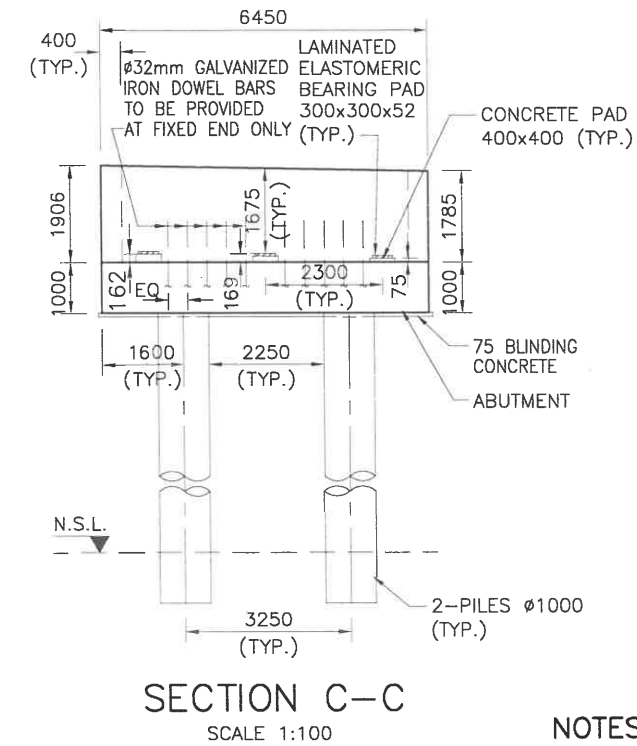
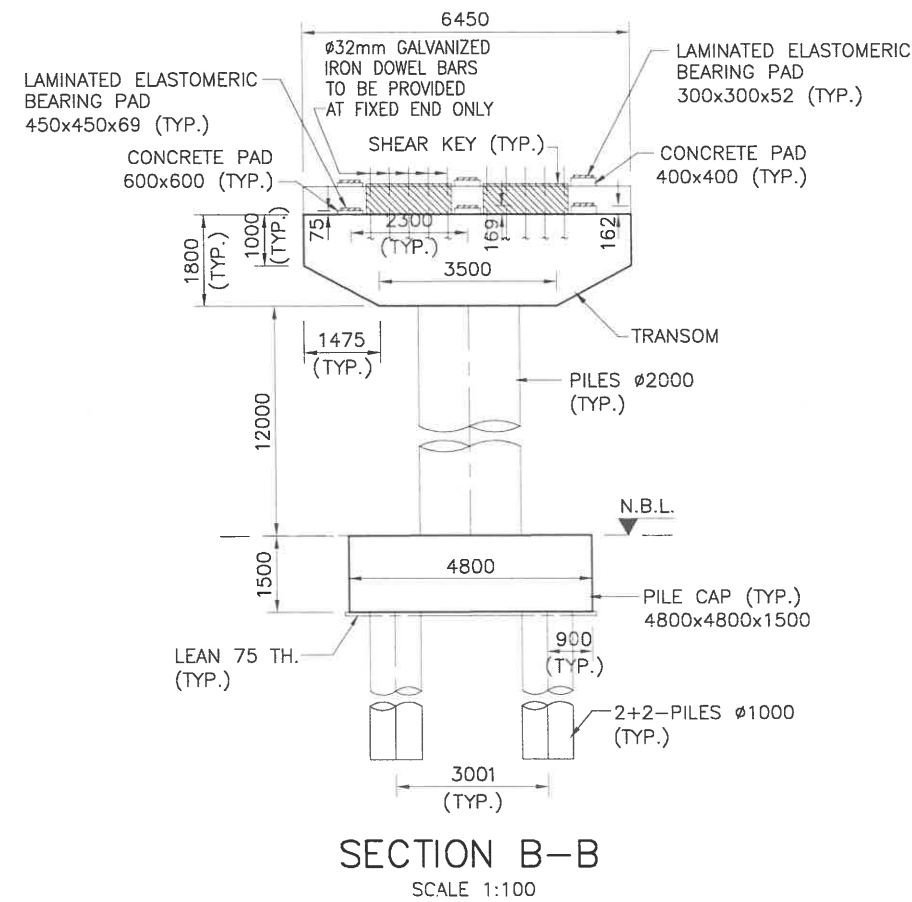
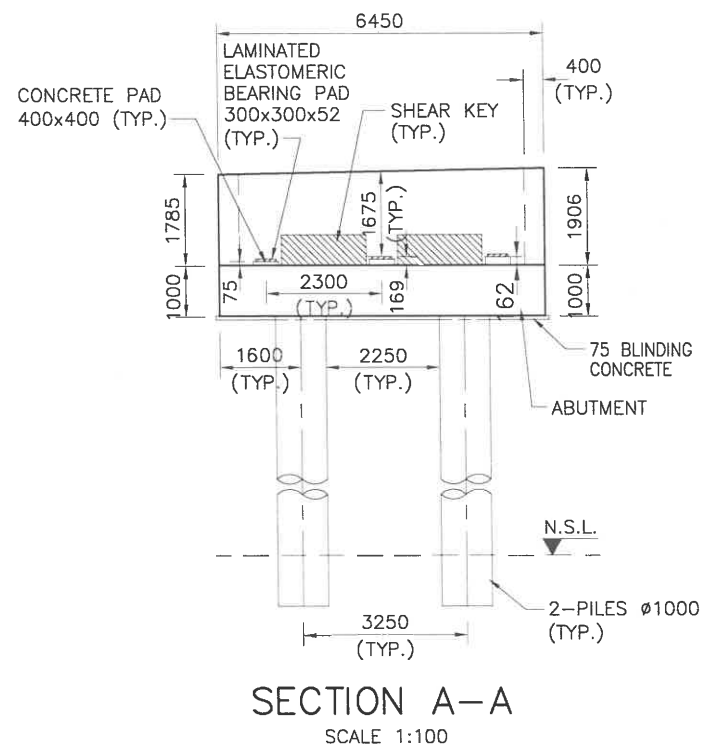
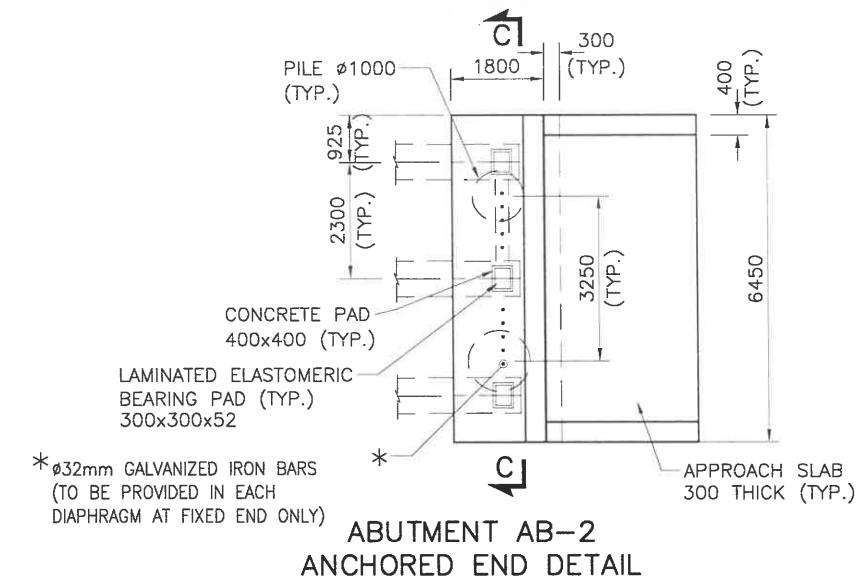
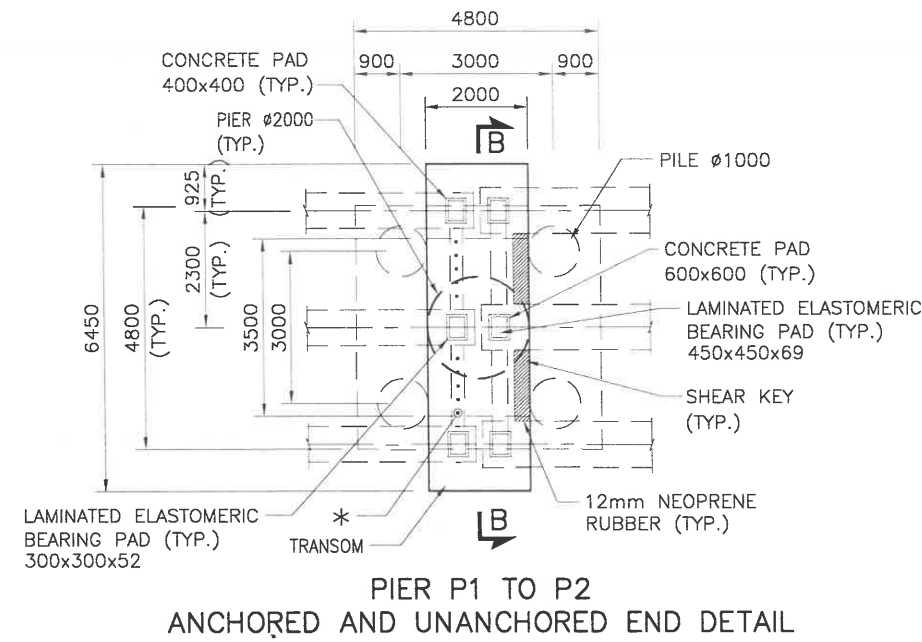
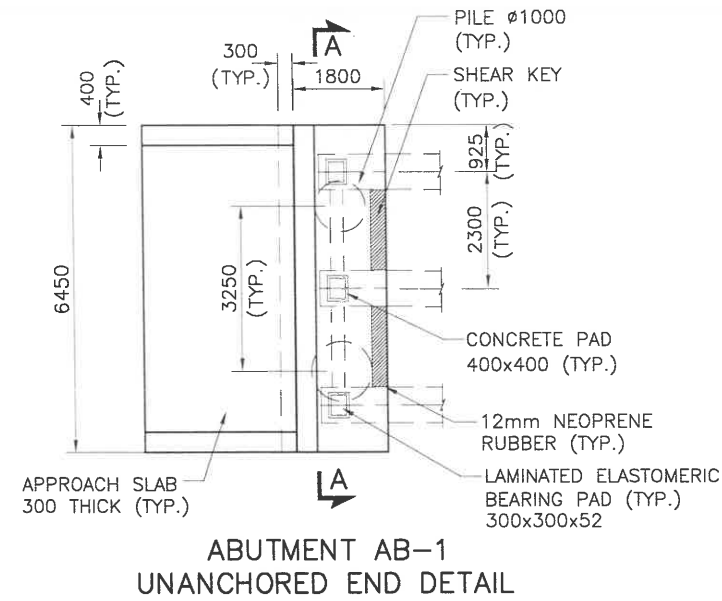
DRAWING No.
4520/102/TD/P1G106A

SCALE

1 : 200

REV.

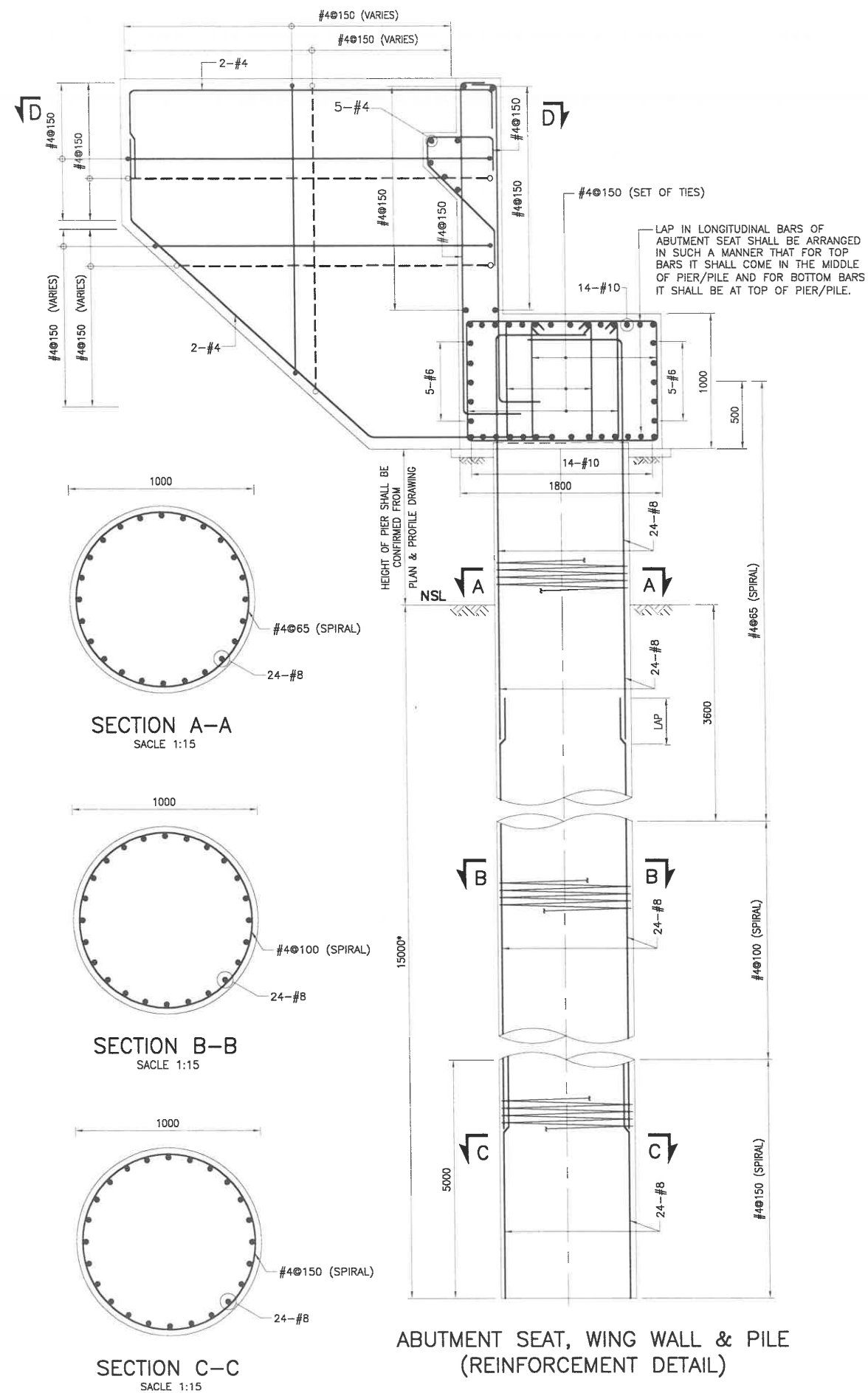
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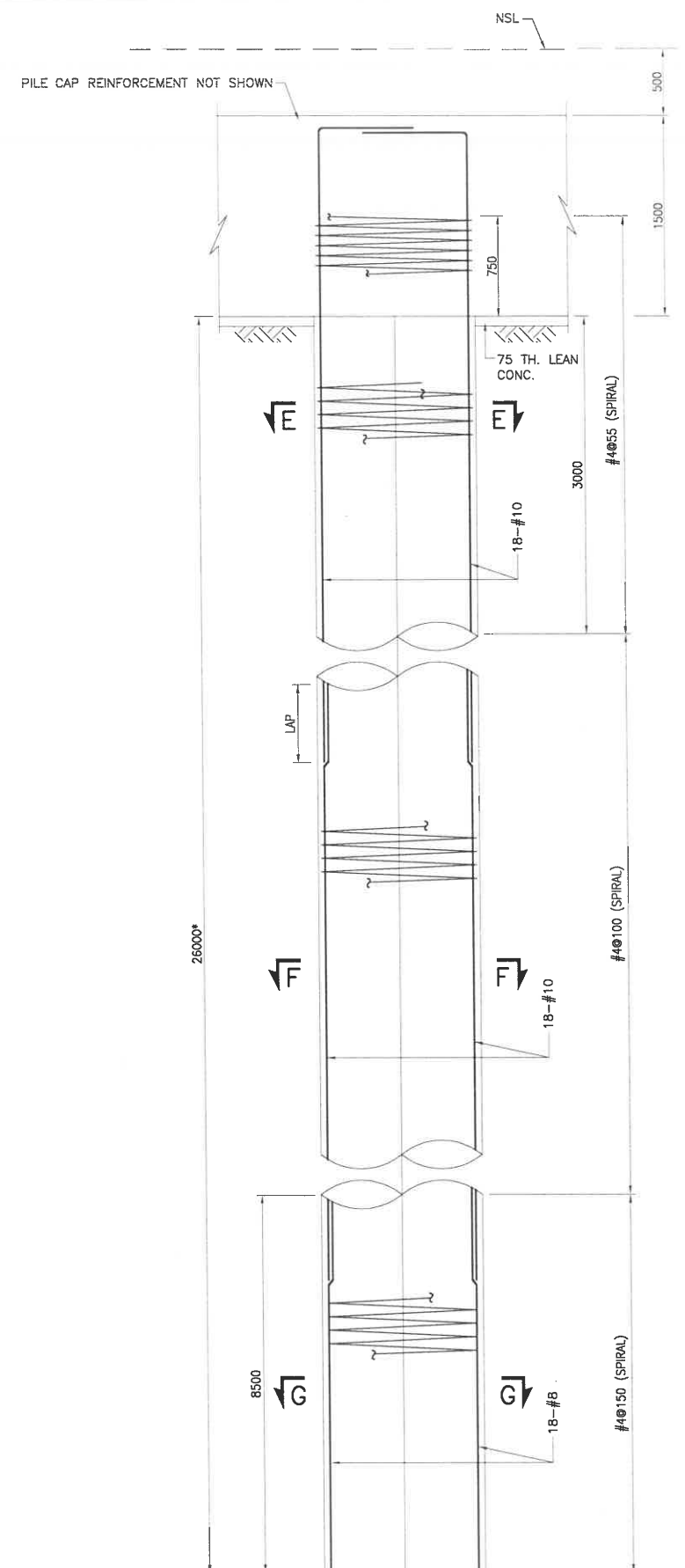
NOTES:

1. FOR GENERAL NOTES REFER DWG. NO. P1G001.
2. WORK THIS DRAWING IN CONJUNCTION WITH OTHER RELEVANT DRAWINGS.
3. THE LENGTH OF TEST PILE IS BASED ON THE GEOTECHNICAL INVESTIGATION REPORT PROVIDED BY M/S XINJANG BEIXIN ROAD & BRIDGE GROUP CO. LTD.

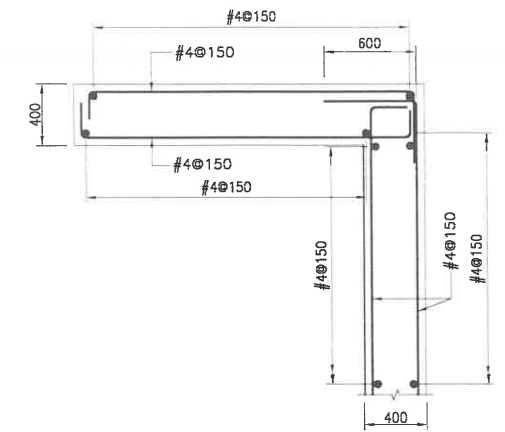
CLIENT  WATER AND POWER DEVELOPMENT AUTHORITY (WAPDA)	CONSULTANT  NATIONAL ENGINEERING SERVICES PAKISTAN (PVT.) LTD. HEAD OFFICE:- NESPAK HOUSE, I-C, BLOCK-N, MODEL TOWN EXTENSION, LAHORE, PAKISTAN.	04				DRAWN	WARIS	PROJECT DETAILED DESIGN AND CONSTRUCTION SUPERVISION / IMPLEMENTATIONS OF LOCAL AREA DEVELOPMENT PROGRAM (LADP) PUBLIC HEALTH, LIVELIHOOD DEVELOPMENT AND DOWNSTREAM FISHERIES PLANS; NAMELY LADP IMPLEMENTATION CONSULTANTS (LADP-ICS)	ABUTMENT AB-1, AB-2, PIER P-1 TO P-2 CONCRETE OUTLINE BRIDGE AT CH. 1+990 km.		SCALE
		03				SUBMITTED			1 : 75		
		02				RECOMMENDED					
		01				CHD/VER.					
		REV.	DATE	DESCRIPTION	APPROVED	APPROVED			REV.		
							DATE	DRAWING No.			
							JULY, 2026	4520/102/TD/P1G107	0		



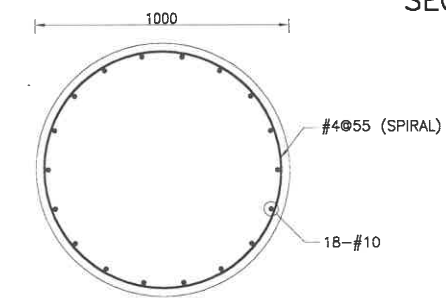
ABUTMENT SEAT, WING WALL & PILE
(REINFORCEMENT DETAIL)



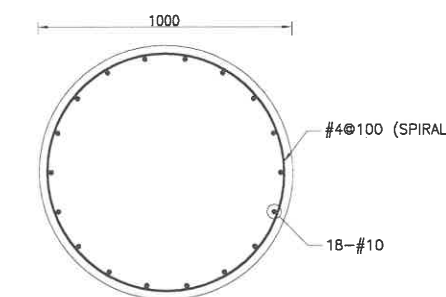
PILE AT PIER P1 TO P2
REINFORCEMENT DETAIL



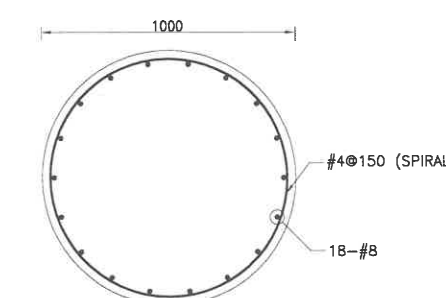
SECTIONAL PLAN D-D



SECTION E-E
SCALE 1:15



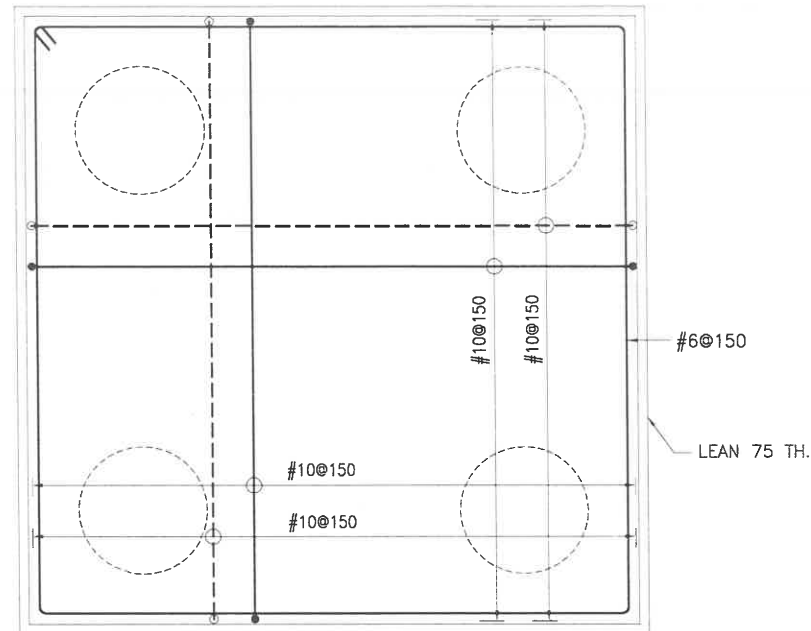
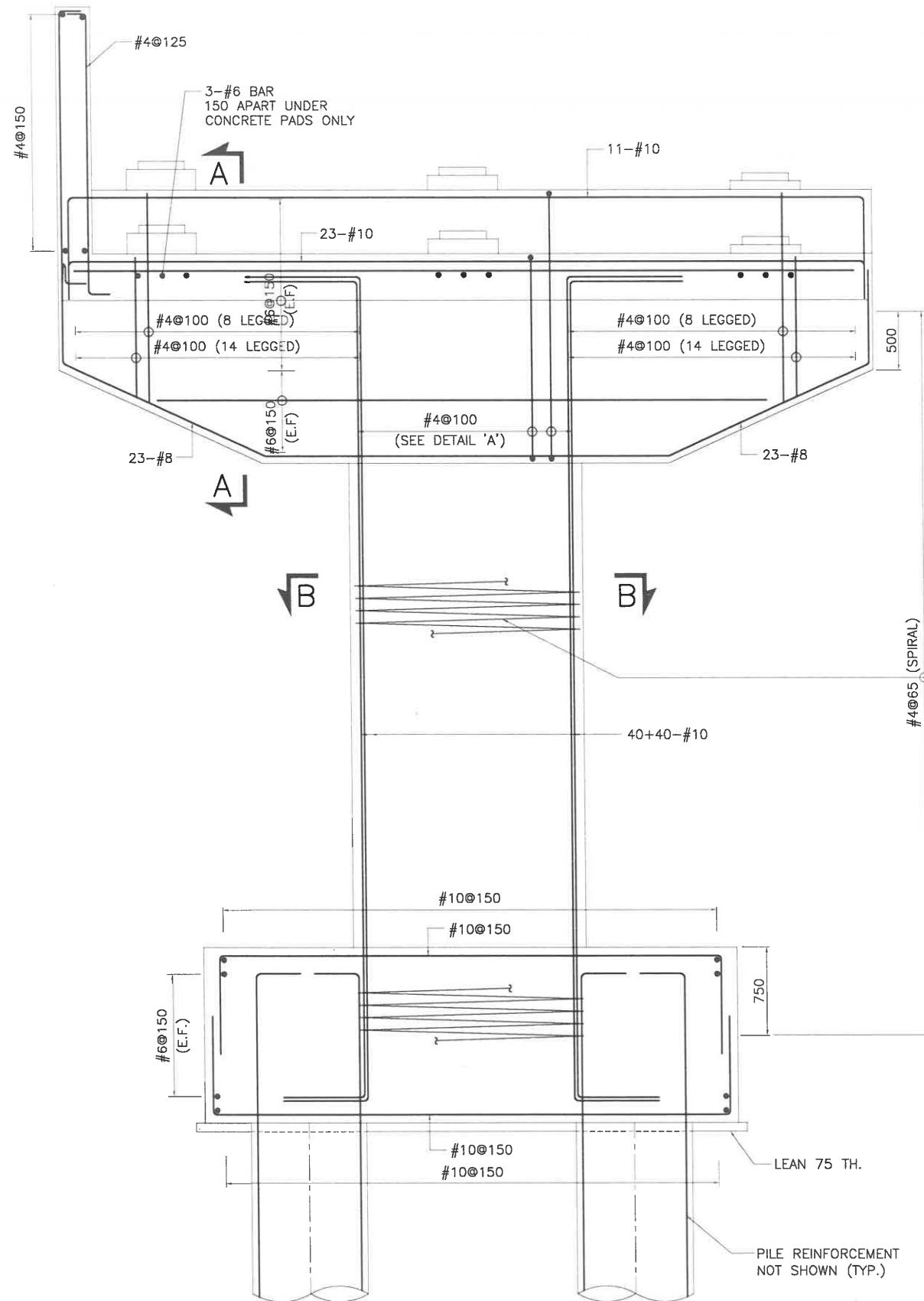
SECTION F-F
SCALE 1:15



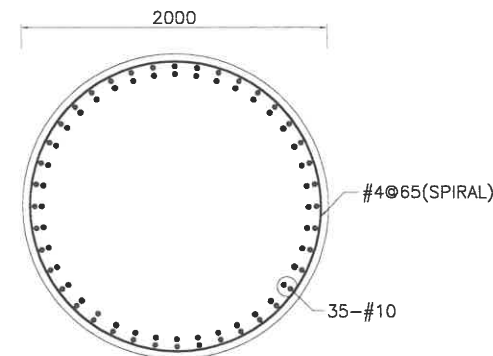
SECTION G-G
SCALE 1:15

- NOTE:
- FOR GENERAL NOTES REFER DWG. NO. P1G001.
 - READ THIS DRAWING IN CONJUNCTION WITH OTHER RELEVANT DRGS.
 - PROVIDE ONE AND HALF 1½ EXTRA TURNS OF SPIRAL AT THE TOP AND BOTTOM OF EACH PILE & AT EACH SEGMENT OF REINFORCEMENT CAGE OR SPLICE OF MAIN REINFORCEMENT.
 - * LENGTH OF PILE SHALL BE FINALIZED FROM DETAILED GEOTECHNICAL INVESTIGATIONS AND FULL SCALE PILE LOAD TEST.

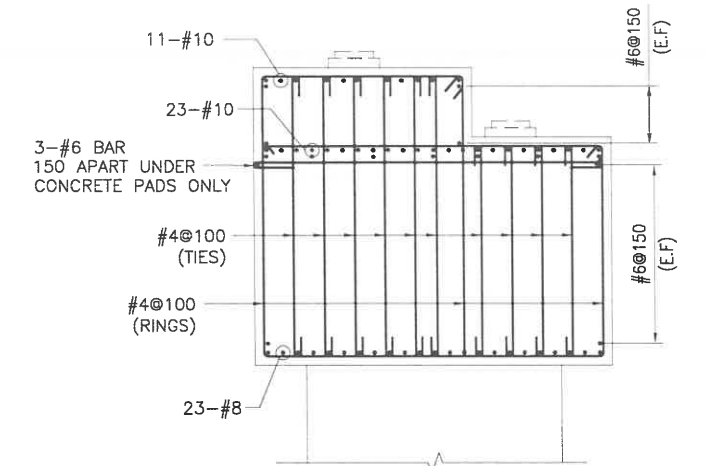
CLIENT  WATER AND POWER DEVELOPMENT AUTHORITY (WAPDA)	CONSULTANT  NATIONAL ENGINEERING SERVICES PAKISTAN (PVT.) LTD.		04				DRAWN	WARIS	PROJECT DETAILED DESIGN AND CONSTRUCTION SUPERVISION / IMPLEMENTATIONS OF LOCAL AREA DEVELOPMENT PROGRAM (LADP) PUBLIC HEALTH, LIVELIHOOD DEVELOPMENT AND DOWNSTREAM FISHERIES PLANS; NAMELY LADP IMPLEMENTATION CONSULTANTS (LADP-ICS)	ABUTMENT SEAT, BACK WALL AB1, AB2 & PIER (P1 TO P2) REINFORCEMENT DETAILS BRIDGE AT CH. 1+990 km.		SCALE	
			03				SUBMITTED			AS SHOWN			
			02				RECOMMENDED						
			01				CHD./VER.						
	HEAD OFFICE:- NESPAK HOUSE, I-C, BLOCK-N, MODEL TOWN EXTENSION, LAHORE, PAKISTAN.		REV.	DATE	DESCRIPTION	APPROVED	APPROVED						
DATE JULY, 2026												DRAWING No. 4520/102/TD/P1G108	REV.



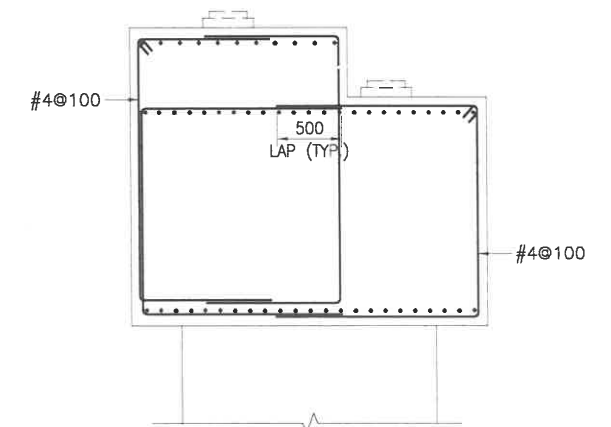
PILECAP PLAN AT PIER (P1 & P2)
(REINFORCEMENT)
SCALE 1:30



SECTION B-B
SCALE 1:25



SECTION A-A
SCALE 1:30



DETAIL 'A'
SCALE 1:30

NOTE:

1. FOR GENERAL NOTES REFER DWG. NO. P1G001.
2. READ THIS DRAWING IN CONJUNCTION WITH RELEVANT DRAWINGS.
3. ALL REINFORCING STEEL SHALL BE DEFORMED ROUND BARS OF GRADE 60 CONFORMING TO AASHTO M-31 (ASTM A-615) WITH MINIMUM YIELD STRENGTH OF 4,200 Kg/Sq.Cm (60,000psi).

CLIENT



WATER AND POWER
DEVELOPMENT AUTHORITY
(WAPDA)

CONSULTANT



NATIONAL ENGINEERING SERVICES
PAKISTAN (PVT.) LTD.

HEAD OFFICE:- NESPAK HOUSE, I-C, BLOCK-N,
MODEL TOWN EXTENSION, LAHORE, PAKISTAN.

04				DRAWN	WARIS
03				SUBMITTED	
02				RECOMMENDED	
01				CHD./VER.	
REV.	DATE	DESCRIPTION	APPROVED	APPROVED	

PROJECT

DETAILED DESIGN AND CONSTRUCTION SUPERVISION /
IMPLEMENTATIONS OF LOCAL AREA DEVELOPMENT PROGRAM
(LADP) PUBLIC HEALTH, LIVELIHOOD DEVELOPMENT AND
DOWNSTREAM FISHERIES PLANS;
NAMELY LADP IMPLEMENTATION CONSULTANTS (LADP-ICS)

PIER (P1 & P2) AND PILE CAP
REINFORCEMENT DETAILS
BRIDGE AT CH. 1+990 km.

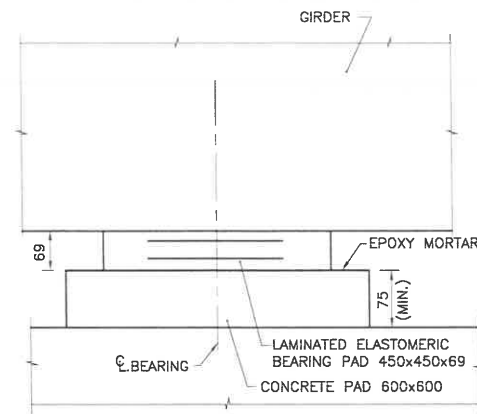
SCALE

1 : 150

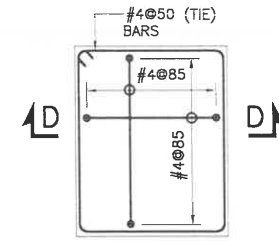
DATE
JULY, 2026

DRAWING No.
4520/102/TD/P1G109

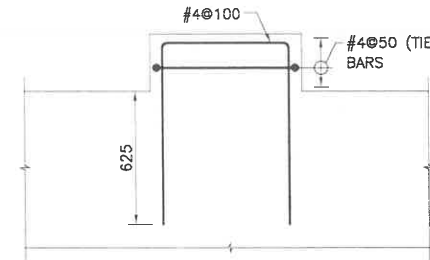
REV.
0



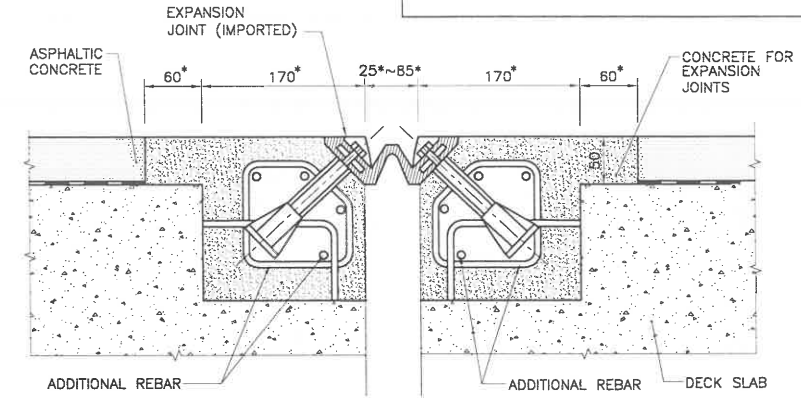
BEARING PAD & CONCRETE PAD
DETAIL FOR 30.0m GIRDER
SCALE 1:5



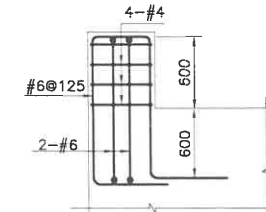
CONCRETE PAD
REINFORCEMENT
SCALE 1:10



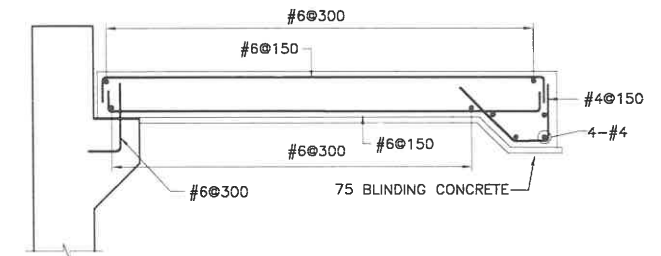
SECTION D-D
SCALE 1:10



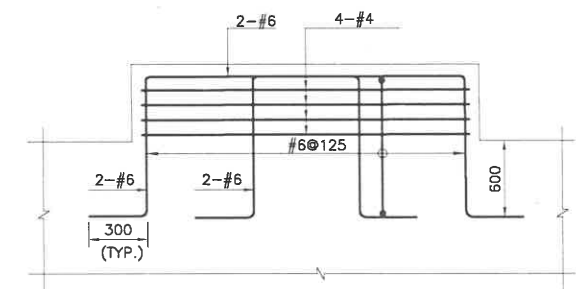
EXPANSION JOINT
SCALE 1:4



SECTION B-B
SCALE 1:20



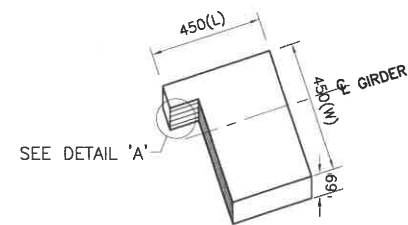
REINFORCEMENT - APPROACH SLAB
SCALE 1:25



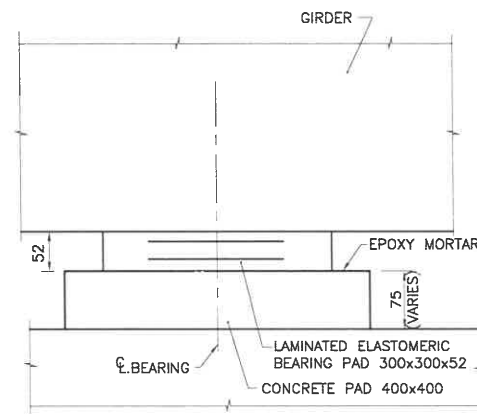
SECTION C-C
SCALE 1:20

NOTES:-

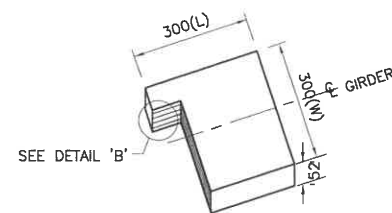
1. FOR GENERAL NOTES REFER DWG. NO. P1G001.
2. WORK THIS DRAWING IN CONJUNCTION WITH OTHER RELEVANT DRAWINGS.
3. ALL REINFORCING STEEL SHALL BE DEFORMED ROUND BARS AND CONFORMING TO AASHTO M-31 OR ASTM A-615 GRADE 60 WITH MINIMUM YIELD STRENGTH OF 4,200 Kg/Sq.Cm (60,000 Psi).
4. * THE DIMENSIONS OF EXPANSION JOINT ARE TENTATIVE AND WILL BE FINALIZED ON RECEIPT OF VENDOR'S DRAWINGS.



LAMINATED ELASTOMERIC BEARING PAD
FOR 30.0m GIRDER
SCALE 1:10



BEARING PAD & CONCRETE PAD
DETAIL FOR 15.0m GIRDER
SCALE 1:5

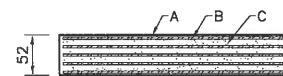


LAMINATED ELASTOMERIC BEARING PAD
FOR 15.0m GIRDER
SCALE 1:10



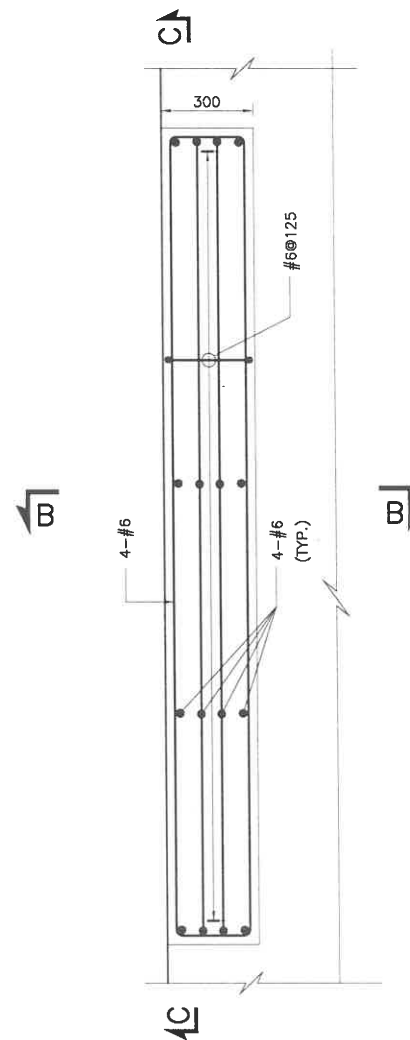
A = ELASTOMER LAYER 2.5mm THICK
B = STEEL PLATE LAYER 4mm THICK
C = ELASTOMER LAYER 11mm THICK

DETAIL 'A'
SCALE 1:20



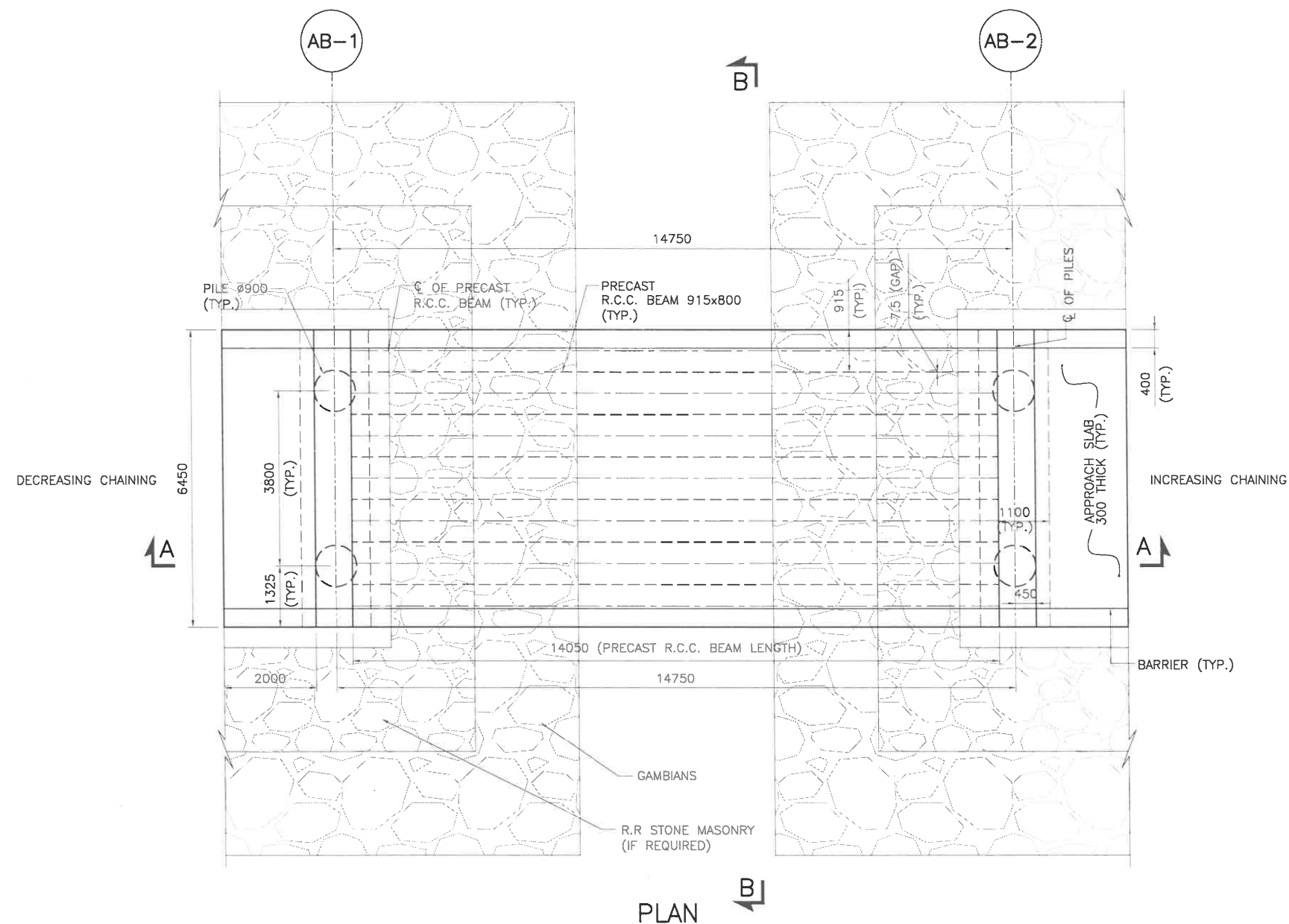
A = ELASTOMER LAYER 2.5mm THICK
B = STEEL PLATE LAYER 3mm THICK
C = ELASTOMER LAYER 8mm THICK

DETAIL 'B'
SCALE 1:20



PLAN OF SHEAR BLOCK
SCALE 1:20

CLIENT WATER AND POWER DEVELOPMENT AUTHORITY (WAPDA)	CONSULTANT NATIONAL ENGINEERING SERVICES PAKISTAN (PVT.) LTD. HEAD OFFICE:- NESPAK HOUSE, I-C, BLOCK-N, MODEL TOWN EXTENSION, LAHORE, PAKISTAN.	04				DRAWN	WARIS	PROJECT DETAILED DESIGN AND CONSTRUCTION SUPERVISION / IMPLEMENTATIONS OF LOCAL AREA DEVELOPMENT PROGRAM (LADP) PUBLIC HEALTH, LIVELIHOOD DEVELOPMENT AND DOWNSTREAM FISHERIES PLANS; NAMELY LADP IMPLEMENTATION CONSULTANTS (LADP-ICS)	APPROACH SLAB, BEARING PAD, SHEAR BLOCK, AND EXPANSION JOINT DETAILS BRIDGE AT CH. 1+990 km.		SCALE
		03				SUBMITTED					1:50
		02				RECOMMENDED			DATE	DRAWING No.	REV.
		01				CHD./VER.					
		REV.	DATE	DESCRIPTION	APPROVED	APPROVED			JULY, 2026	4520/102/TD/P1G1011	



NOTES:

1. FOR GENERAL NOTES REFER DWG NO. PG001.
2. WORK THIS DRAWING IN CONJUNCTION WITH OTHER RELEVANT DRAWINGS.
3. FOR SECTIONS REFER DWG NO. P1G101A.

CLIENT  WATER AND POWER DEVELOPMENT AUTHORITY (WAPDA)	CONSULTANT  NATIONAL ENGINEERING SERVICES PAKISTAN (PVT.) LTD. HEAD OFFICE:- NESPAK HOUSE, I-C, BLOCK-N, MODEL TOWN EXTENSION, LAHORE, PAKISTAN.	04				DRAWN	RASHID AZIZ	PROJECT DETAILED DESIGN AND CONSTRUCTION SUPERVISION / IMPLEMENTATIONS OF LOCAL AREA DEVELOPMENT PROGRAM (LADP) PUBLIC HEALTH, LIVELIHOOD DEVELOPMENT AND DOWNSTREAM FISHERIES PLANS; NAMELY LADP IMPLEMENTATION CONSULTANTS (LADP-ICS)	BRIDGE GENERAL ARRANGEMENT PLAN		SCALE
		03				SUBMITTED					1:60
		02				RECOMMENDED					
		01				CHD./VER.			DATE	DRAWING No.	REV.
				REV.	DATE	DESCRIPTION	APPROVED		APPROVED	JULY 2026	4520/102/TD/P1G101