
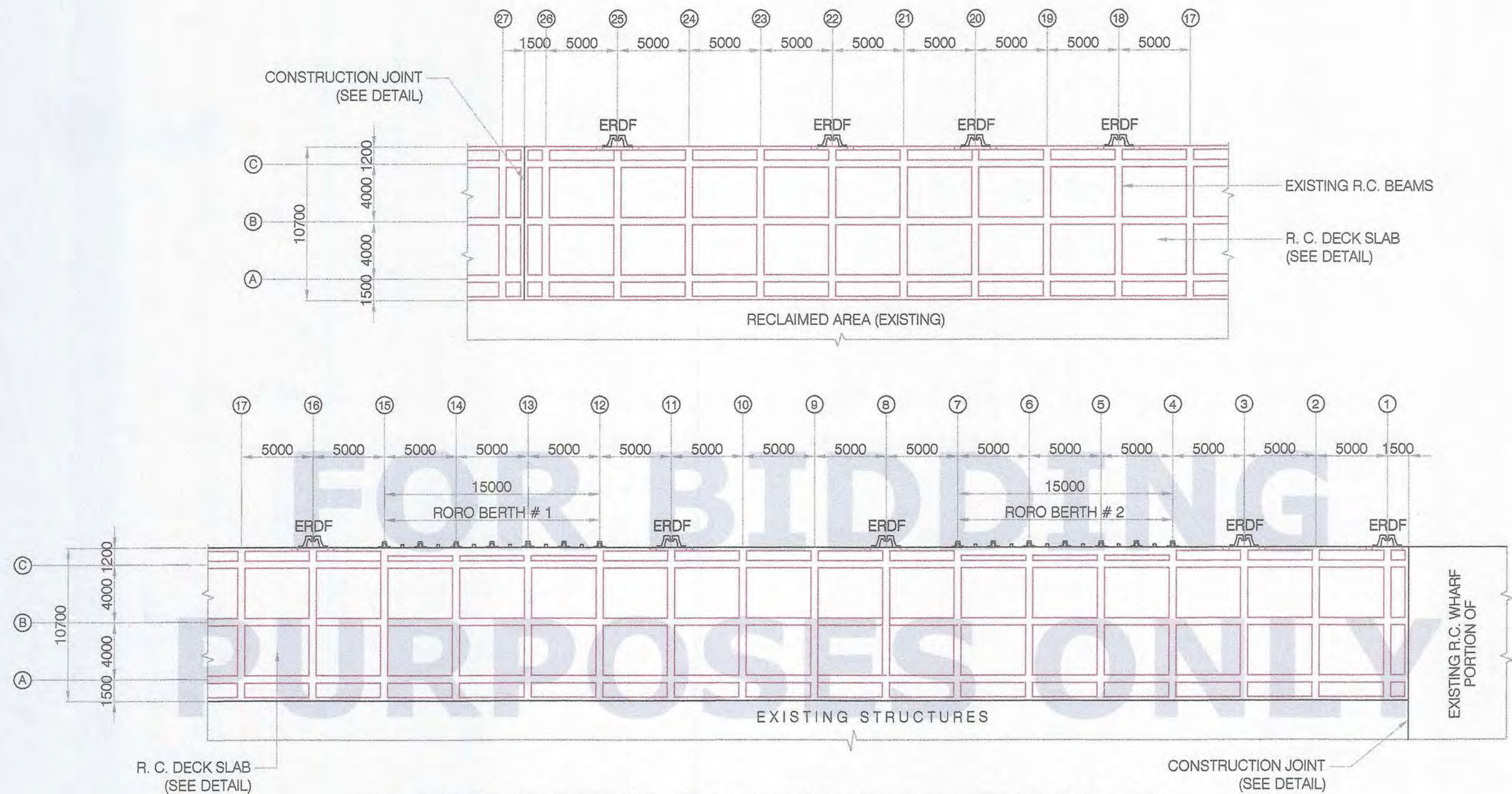


LEGEND:  
ERDF - EXISTING RUBBER DOCK FENDER M-TYPE  
EMB - EXISTING M-TYPE BOLLARD

 **R. C. DECK PLAN**  
SCALE: 1:400


<div><p>PHILIPPINE PORTS AUTHORITY</p></div> <div>PORT OF CAGAYAN DE ORO MISAMIS ORIENTAL</div>	TITLE:		REPAIR OF DAMAGED 128LM. R.C. DECK AND 2 UNITS RORO BERTH ALONG BERTH 3-5				CIVIL WORKS	SHEET NO. <div>2</div> <div>9</div>	
	LOCATION:		PORT OF CAGAYAN DE ORO				SHEET CONTENTS		
	PREPARED BY:		CHECKED & SUBMITTED BY:		RECOMMENDED BY:		APPROVED:		
	ORIGINAL SIGNED KAREL T. SUMICAD Engineering Assistant A		ORIGINAL SIGNED LEXTER-LOU V. SEVILLA Supervising Engineer A		ORIGINAL SIGNED CLARO SAMUEL P. FONTANILLA ESD Manager		ORIGINAL SIGNED ISIDRO V. BUTASLAC, JR. Port Manager		
						R.C. DECK PLAN			





EXISTING FRAMING PLAN OF R. C. DECK SLAB  
SCALE: 1:300

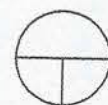
LEGEND:  
ERDF - EXISTING RUBBER DOCK FENDER M-TYPE

<div><p>PHILIPPINE PORTS AUTHORITY</p></div> <div>PORT OF CAGAYAN DE ORO MISAMIS ORIENTAL</div>	TITLE:		REPAIR OF DAMAGED 128LM. R.C. DECK AND 2 UNITS RORO BERTH ALONG BERTH 3-5				CIVIL WORKS	SHEET NO. <div>3 9</div>		
	LOCATION:		PORT OF CAGAYAN DE ORO				SHEET CONTENTS			
	PREPARED BY:		CHECKED & SUBMITTED BY:		RECOMMENDED BY:		APPROVED:		EXISTING FRAMING PLAN OF R.C. DECK SLAB	
	ORIGINAL SIGNED KAREL T. SUMICAD Engineering Assistant A		ORIGINAL SIGNED LEXTER-LOU V. SEVILLA Supervising Engineer A		ORIGINAL SIGNED CLARO SAMUEL P. FONTANILLA ESD Manager		ORIGINAL SIGNED ISIDRO V. BUTASLAC, JR. Port Manager			





THICKNESS OF SLAB = 300 MM



# TYPICAL REINFORCEMENT OF R. C. DECK

SCALE:

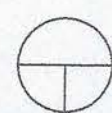
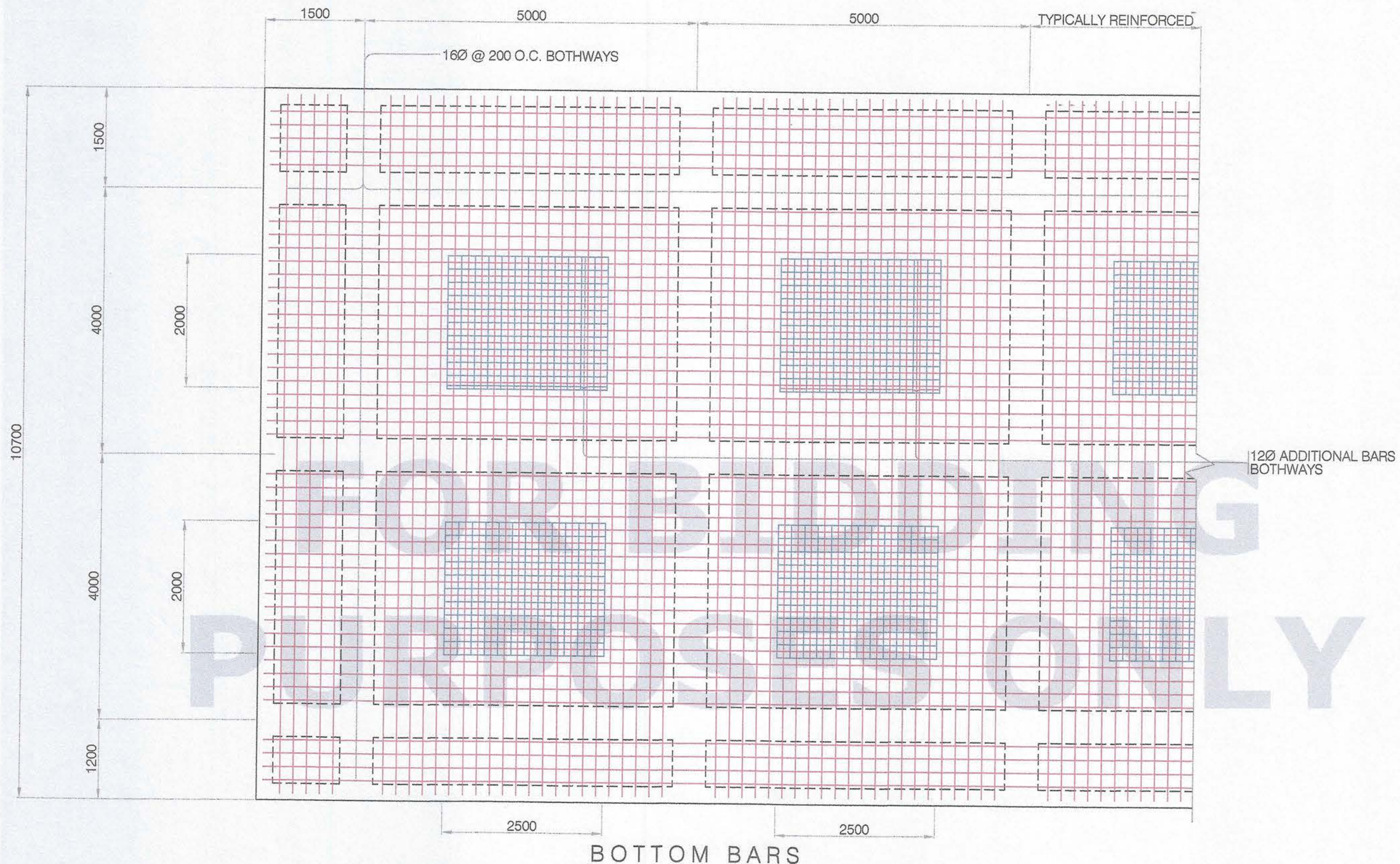
1:300



PORT OF  
CAGAYAN DE ORO  
MISAMIS ORIENTAL

TITLE:		REPAIR OF DAMAGED 128LM. R.C. DECK AND 2 UNITS RORO BERTH ALONG BERTH 3-5			CIVIL WORKS	SHEET NO.
LOCATION:		PORT OF CAGAYAN DE ORO			SHEET CONTENTS	
PREPARED BY:		CHECKED & SUBMITTED BY:	RECOMMENDED BY:	APPROVED:	TYP. REINF. OF R.C. DECK (TOP BARS)	4 9
ORIGINAL SIGNED KAREL T. SUMICAD Engineering Assistant A		ORIGINAL SIGNED LEXTER-LOU V. SEVILLA Supervising Engineer A	ORIGINAL SIGNED CLARO SAMUEL P. FONTANILLA ESD Manager	ORIGINAL SIGNED ISIDRO V. BUTASLAC, JR. Port Manager		





# TYPICAL REINFORCEMENT OF R. C. DECK

SCALE:

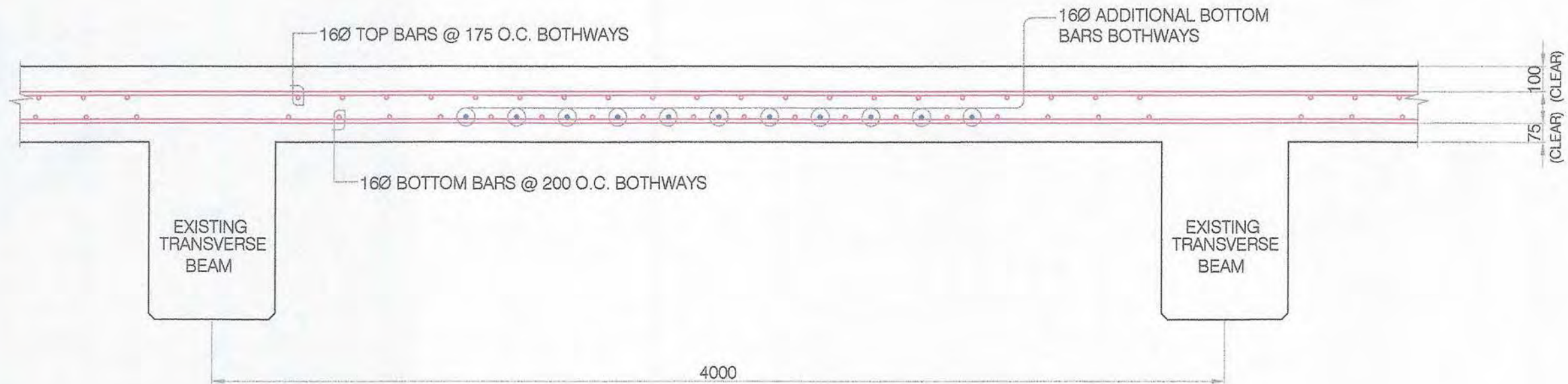
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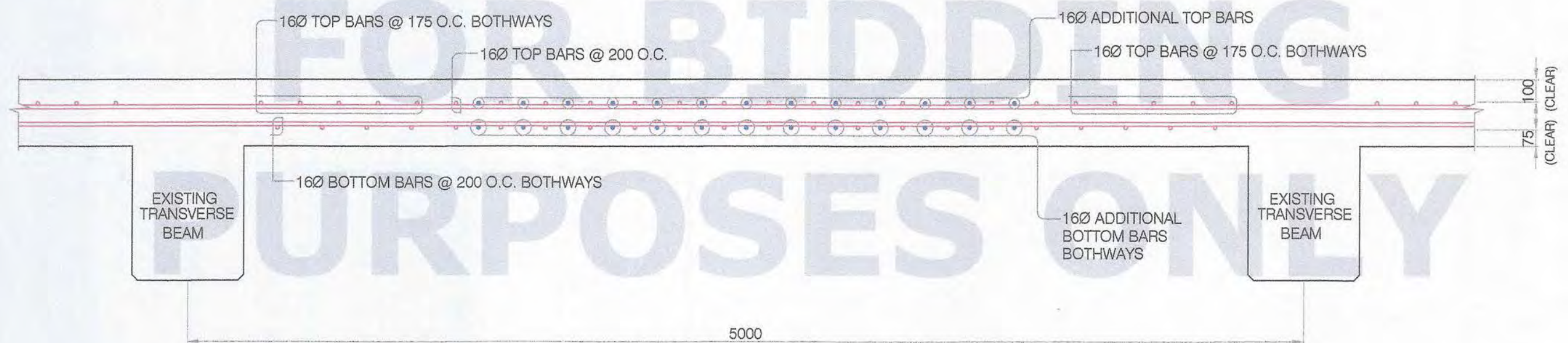
PORT OF  
CAGAYAN DE ORO  
MISAMIS ORIENTAL

TITLE:	REPAIR OF DAMAGED 128LM. R.C. DECK AND 2 UNITS RORO BERTH ALONG BERTH 3-5				CIVIL WORKS	SHEET NO. <div>5 9</div>
LOCATION:	PORT OF CAGAYAN DE ORO				SHEET CONTENTS	
PREPARED BY:		CHECKED & SUBMITTED BY:	RECOMMENDED BY:	APPROVED:	TYP. REINF. OF R.C. DECK (BOTTOM BARS)	
ORIGINAL SIGNED KAREL T. SUMICAD Engineering Assistant A		ORIGINAL SIGNED LEXTER-LOU V. SEVILLA Supervising Engineer A	ORIGINAL SIGNED CLARO SAMUEL P. FONTANILLA ESD Manager	ORIGINAL SIGNED ISIDRO V. BUTASLAC, JR. Port Manager		





SECTION "A" - TRANSVERSE DIRECTION




SECTION "B" - LONGITUDINAL DIRECTION



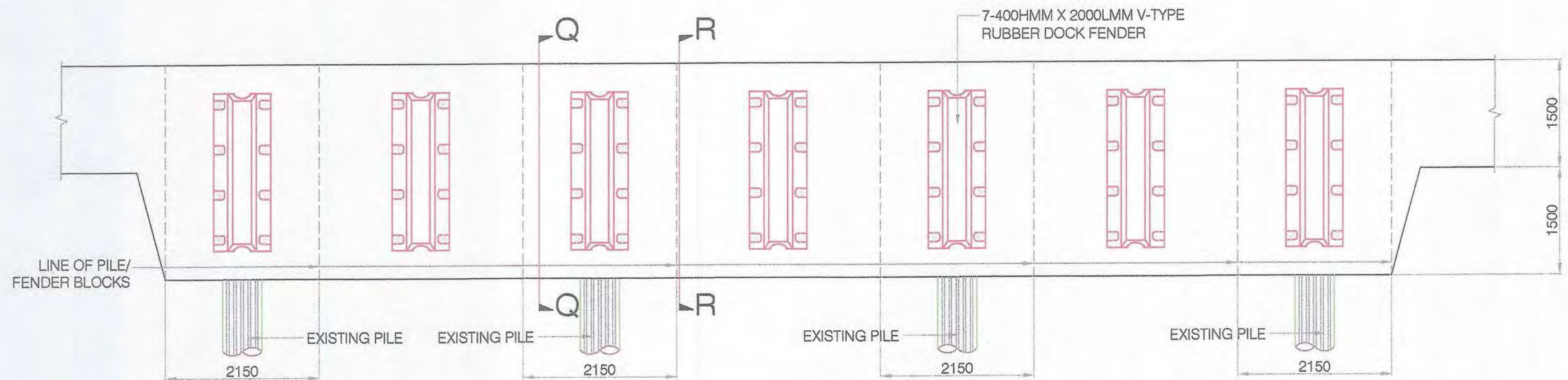
SECTIONAL ELEVATION SHOWING BAR ARRANGEMENT OF SLAB

SCALE:

1:20

<div><p>PHILIPPINE PORTS AUTHORITY</p></div> <div>PORT OF CAGAYAN DE ORO MISAMIS ORIENTAL</div>	TITLE:		REPAIR OF DAMAGED 128LM. R.C. DECK AND 2 UNITS RORO BERTH ALONG BERTH 3-5				CIVIL WORKS	<div>SHEET NO.</div> <div><div>6</div><div>9</div></div>	
	LOCATION:		PORT OF CAGAYAN DE ORO				SHEET CONTENTS		
	PREPARED BY:		CHECKED & SUBMITTED BY:		RECOMMENDED BY:		APPROVED:		
	ORIGINAL SIGNED KAREL T. SUMICAD Engineering Assistant A		ORIGINAL SIGNED LEXTER-LOU V. SEVILLA Supervising Engineer A		ORIGINAL SIGNED CLARO SAMUEL P. FONTANILLA ESD Manager		ORIGINAL SIGNED ISIDRO V. BUTASLAC, JR. Port Manager		
								SECTIONAL ELEVATION SHOWING BAR ARRANGEMENT OF SLAB	



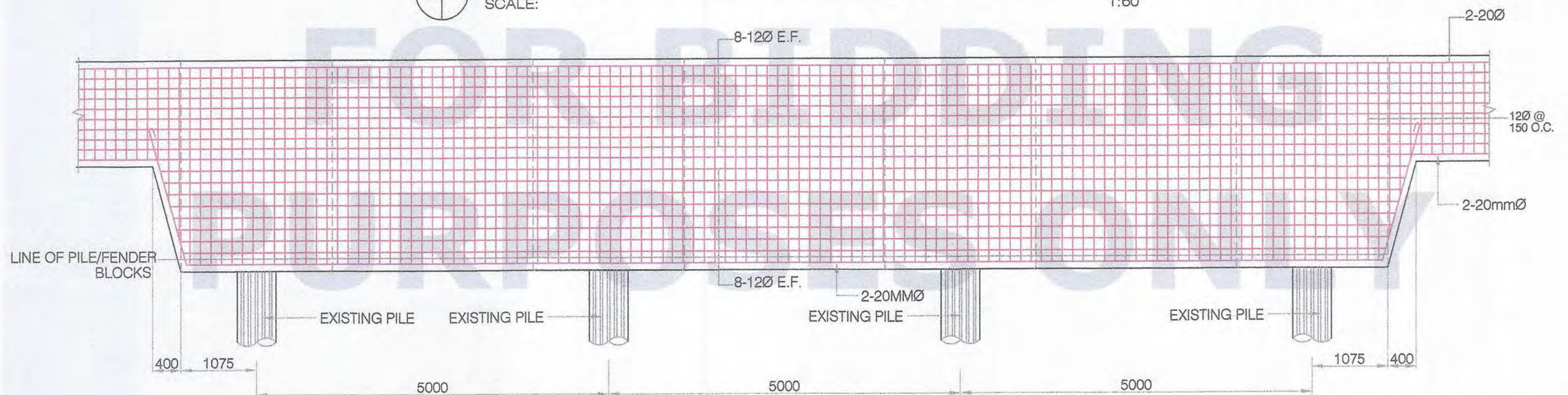


TYPICAL ELEVATION OF RORO BERTHS

SCALE:

1:60


NOTE :  
REFER TO THE NEXT SHEET (11 OF 15)  
FOR TYPICAL DETAIL OF SECTIONS Q-Q and R-R.



TYPICAL REINFORCEMENT OF FENDER BLOCK FOR RORO BERTHS

SCALE:

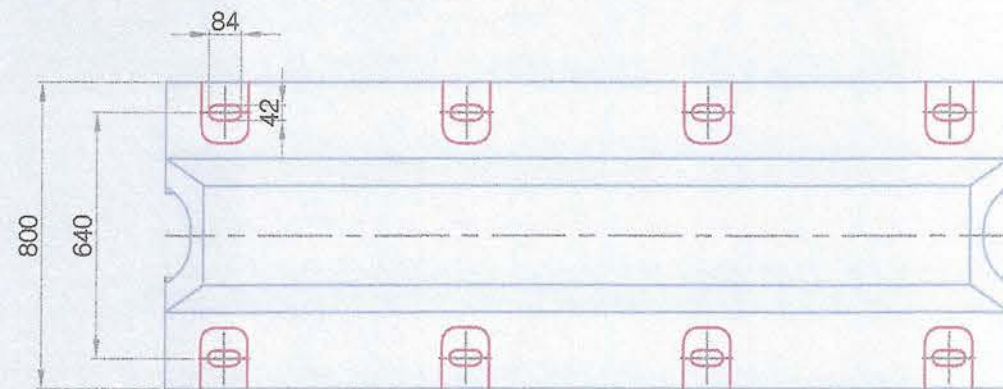
1:60

<div><p>PHILIPPINE PORTS AUTHORITY</p></div> <div>PORT OF CAGAYAN DE ORO MISAMIS ORIENTAL</div>	TITLE:		REPAIR OF DAMAGED 128LM. R.C. DECK AND 2 UNITS RORO BERTH ALONG BERTH 3-5				CIVIL WORKS	SHEET NO.	
	LOCATION:		PORT OF CAGAYAN DE ORO				SHEET CONTENTS	<div><div>7</div><div>9</div></div>	
	PREPARED BY:		CHECKED & SUBMITTED BY:		RECOMMENDED BY:		APPROVED:		
	ORIGINAL SIGNED KAREL T. SUMICAD Engineering Assistant A		ORIGINAL SIGNED LEXTER-LOU V. SEVILLA Supervising Engineer A		ORIGINAL SIGNED CLARO SAMUEL P. FONTANILLA ESD Manager		ORIGINAL SIGNED ISIDRO V. BUTASLAC, JR. Port Manager		
TYP. REINFORCEMENT OF FENDER BLOCK FOR RORO BERTHS									

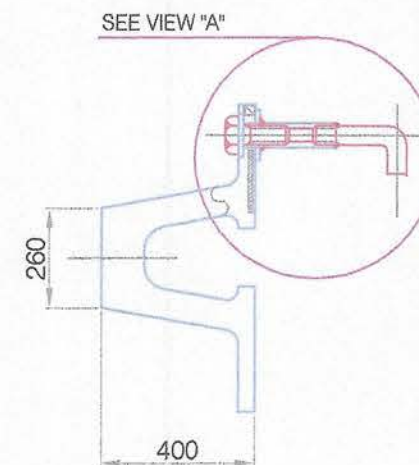


# PERFORMANCE CHARACTERISTIC OF SV400x2000 (V-Type)

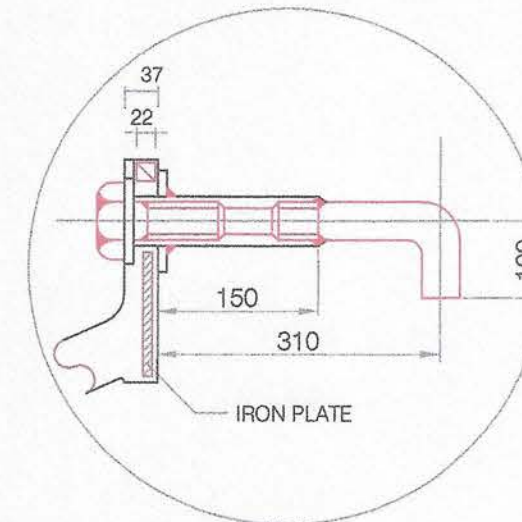
AT RATED DEFLECTION OF FENDER (45%)		
HULL PRESSURE	REACTION FORCE	ENERGY ABSORPTION
TON / M	TON	TON - M
96	60	8.00



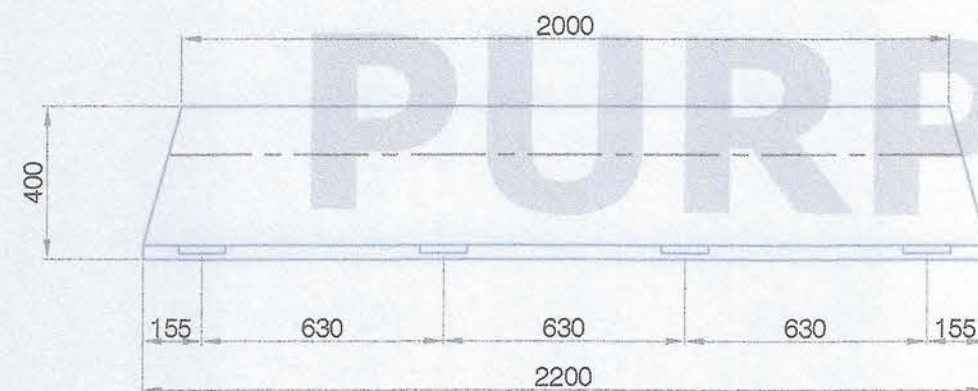
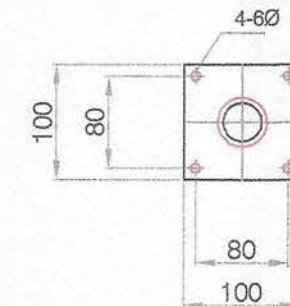
PLAN



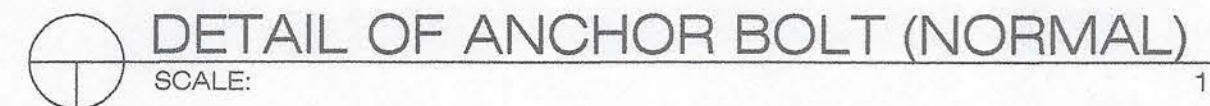
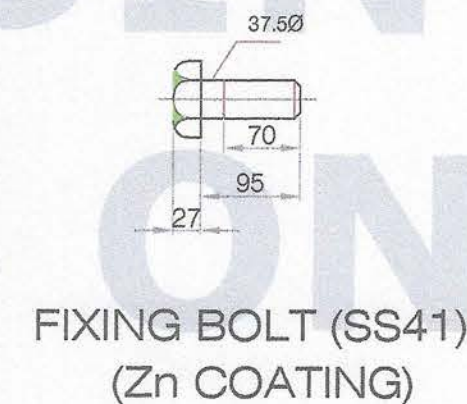
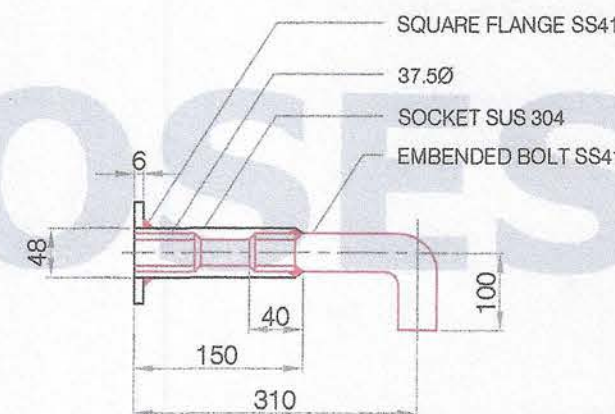
SIDE ELEVATION



VIEW "A"

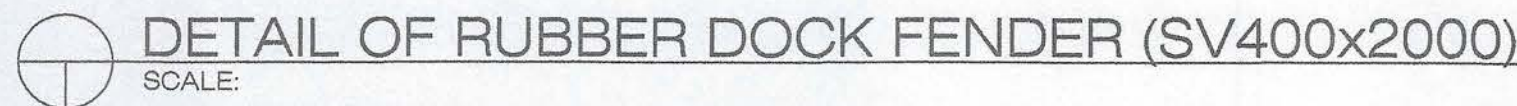


ELEVATION



SCALE:

1:10



SCALE:

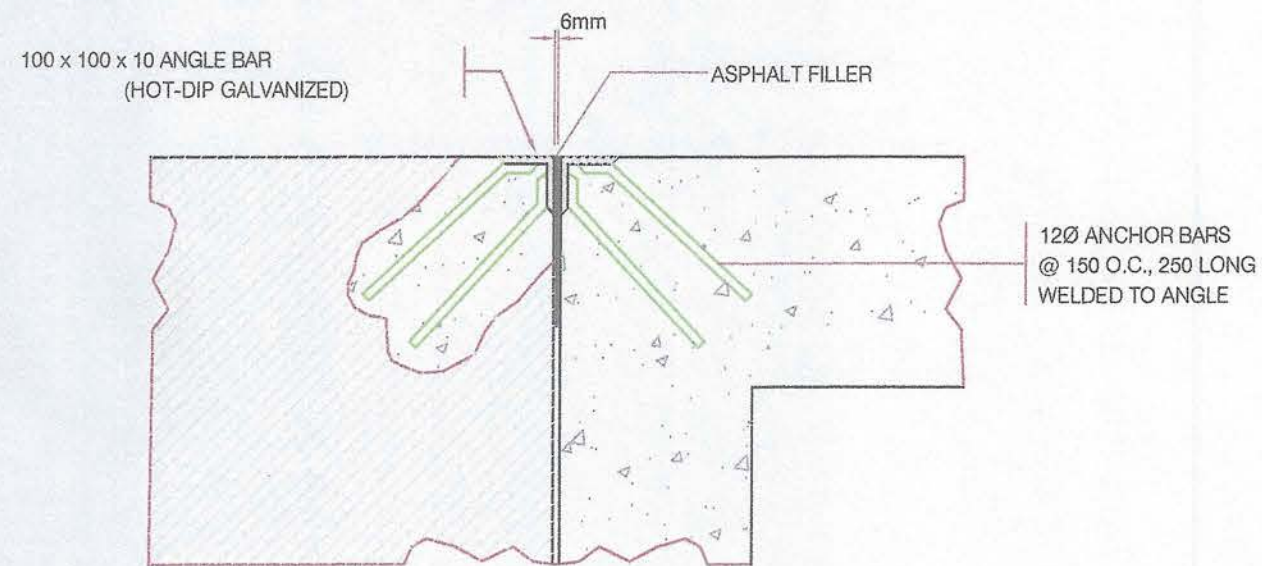
1:20



PORT OF  
CAGAYAN DE ORO  
MISAMIS ORIENTAL

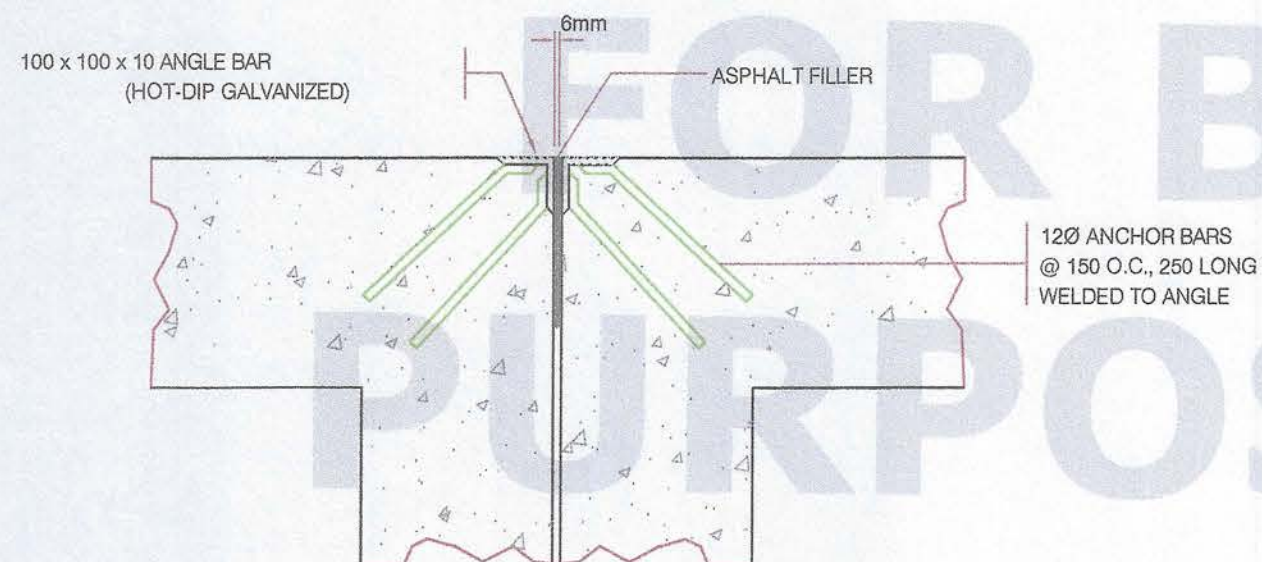
TITLE:		REPAIR OF DAMAGED 128LM. R.C. DECK AND 2 UNITS RORO BERTH ALONG BERTH 3-5				CIVIL WORKS	SHEET NO.
LOCATION:		PORT OF CAGAYAN DE ORO				SHEET CONTENTS	<div>8</div> <div>9</div>
PREPARED BY:		CHECKED & SUBMITTED BY:	RECOMMENDED BY:	APPROVED:		DETAIL OF RUBBER DOCK FENDER (SV400X200) DETAIL OF ANCHOR BOLT (NORMAL)	
ORIGINAL SIGNED KAREL T. SUMICAD Engineering Assistant A		ORIGINAL SIGNED LEXTER-LOU V. SEVILLA Supervising Engineer A	ORIGINAL SIGNED CLARO SAMUEL P. FONTANILLA ESD Manager	ORIGINAL SIGNED ISIDRO V. BUTASLAC, JR. Port Manager			





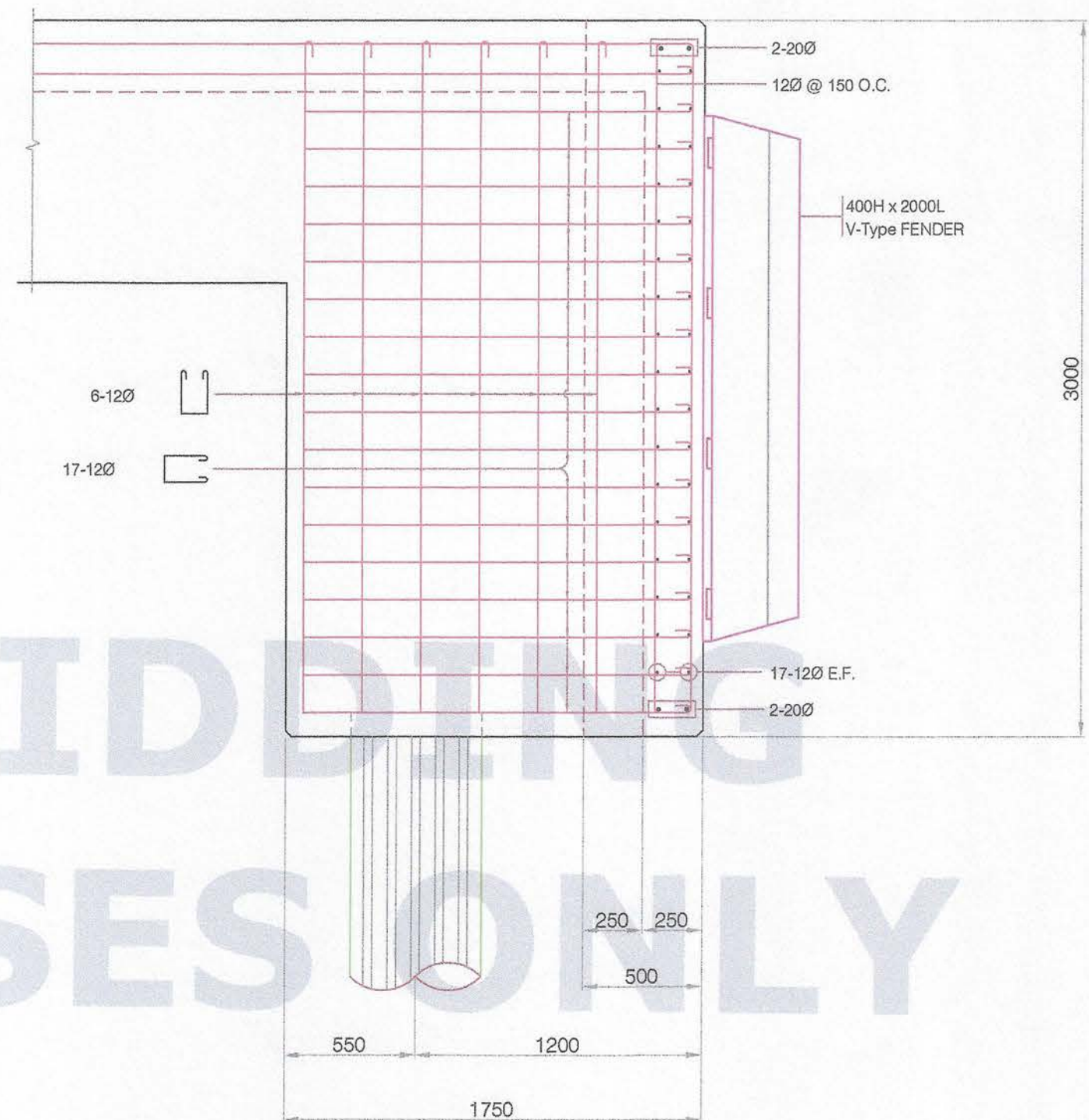
JOINT DETAIL

DETAIL OF CONSTRUCTION JOINT  
SCALE: 1:10



JOINT DETAIL

DETAIL OF EXPANSION JOINT  
SCALE: 1:10



SECTION Q-Q  
SCALE: 1:25



PORT OF  
CAGAYAN DE ORO  
MISAMIS ORIENTAL

TITLE:	REPAIR OF DAMAGED 128LM. R.C. DECK AND 2 UNITS RORO BERTH ALONG BERTH 3-5				CIVIL WORKS	SHEET NO. <div>9 9</div>
LOCATION:	PORT OF CAGAYAN DE ORO				SHEET CONTENTS	
PREPARED BY:	CHECKED & SUBMITTED BY:	RECOMMENDED BY:	APPROVED:		DETAIL OF CONSTRUCTION JOINT DETAIL OF EXPANSION JOINT SECTION Q-Q	
ORIGINAL SIGNED KAREL T. SUMICAD Engineering Assistant A	ORIGINAL SIGNED LEXTER-LOU V. SEVILLA Supervising Engineer A	ORIGINAL SIGNED CLARO SAMUEL P. FONTANILLA ESD Manager	ORIGINAL SIGNED ISIDRO V. BUTASLAC, JR. Port Manager			