

- 1. ALL DRAWINGS SHALL BE READ IN CONJUNCTION WITH THE SPECIFICATION AND ANY OTHER WRITTEN INSTRUCTIONS ISSUED.
- 2. WHERE APPROVAL IS REQUIRED, THIS SHALL BE OF THE SUPERINTENDENT OR HIS REPRESENTATIVE.
- 3. ANY AMBIGUITY OR DISCREPANCY SHALL BE REFERRED FOR CLARIFICATION BEFORE WORK PROCEEDS.
- 2. DIMENSIONS ARE IN PRESENTED MILLIMETERS WITH EQUIVALENT INCH VALUE SHOWN IN BRACKETS.
- EXAMPLE: 1000mm (40") 3. FOR SPECIFIC ITEMS AND MEASUREMENTS, DIMENSIONS ARE ALSO PROVIDED IN INCHES TO ASSIST PURCHASING AND CLEARLY LABELED WITH "IDENTIFIER.
- REFER TO THE DRAWING DIMENSIONS FOR SETTING OUT THE WORKS. HOWEVER, ALL EXISTING DIMENSIONS AND LEVELS ARE APPROXIMATE AND SHALL BE CONFIRMED BY THE CONTRACTOR ON SITE.
- UNLESS NOTED OTHERWISE, ALL LEVELS ARE TO OD. SET OUT IS TO BNG 2000.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE STABILITY OF THE STRUCTURE UNTIL ITS COMPLETION AND SHALL ENSURE THAT NO PART OF THE STRUCTURE IS OVERSTRESSED DURING THE WORKS.
- WHERE STANDARDS ARE REFERRED TO, THEY SHALL BE THE LATEST EDITION.
- PROPRIETARY ITEMS, PROPOSED BY THE CONTRACTOR, ARE TO BE REVIEWED AND APPROVED BY THE DESIGNING ENGINEER PRIOR TO USE.
- 9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING WORK AREAS.
- 10. ALL DEMOLITION SHALL BE IN AN ACCEPTABLE MANNER UNDER THE OCCUPATIONAL HEALTH AND SAFETY REGULATIONS 2009. ALL SURPLUS MATERIAL SHALL BE DISPOSED OF OFF SITE IN A LEGAL MANNER.

CONCRETE

- 1. CONCRETE SHALL COMPLY WITH THE FOLLOWING SPECIFICATION:
 - MINIMUM CONCRETE COVER TO REINFORCEMENT

INFILLS

TOP, BOTTOM & SIDES

= 75mm (3")

- MINIMUM CONCRETE STRENGTH AT SERVICE F'c = 25 MPa

 $= 440 \text{ Kg/m}^3 (28 \text{ lb/ft}^3)$

MINIMUM CEMENT CONTENT

- MAXIMUM WATER/CEMENT RATIO = 0.5

- 2. CONCRETE MIX DESIGNS TO BE SUBMITTED TO THE ENGINEER FOR APPROVAL.
- 3. NO ADDITIVES TO BE USED WITHOUT THE PRIOR APPROVAL OF THE ENGINEER. 4. CAST IN ITEMS WITH LESS THAN 25mm (1") COVER TO ATMOSPHERE SHALL BE
- HOT DIPPED GALVANISED IN ACCORDANCE WITH ASTM A153. 5. ALL FORMWORK, SHORING AND RESHORING SHALL BE THE RESPONSIBILITY OF
- AND DESIGNED BY THE CONTRACTOR 4. CONCRETE SHALL BE TESTED FOR SLUMP ON SITE. THE TEST CYLINDERS
- SHALL BE TAKEN FOR 3, 7 AND 28 DAY STRENGTHS. 5. CONCRETE STRENGTH AND SLUMP TO BE AS FOLLOWS

MIN. SPECIFIED 28 DAY STRENGTH	SLUMP
25 MPa	75mm ± 25mm

- 1. WELDING OF REINFORCEMENT SHALL NOT BE PERMITTED UNLESS SHOWN ON THE STRUCTURAL DRAWINGS. IF SHOWN/PERMITTED. WELDS SHALL DEVELOP THE FULL STRENGTH OF THE REINFORCING ELEMENT.
- 2. ALL REINFORCING STEEL TO HAVE A MINIMUM YIELD STRENGTH OF 410 MPa AND SHALL BE TYPE 2 DEFORMED BARS
- 3. ALL REINFORCING STEEL SHALL BE CLASS II GALVANISED IN ACCORDANCE WITH ASTM A767. TIE WIRE SHALL ALSO BE GALVANISED.
- 4. REINFORCEMENT SPACING NOT SHOWN SHALL BE TAKEN AS EQUAL.
- 5. REINFORCING CHAIRS ARE TO BE CONCRETE AND AS SMALL AS PRACTICABLE. PROPRIETARY PLASTIC COVER SUPPORTS MAY BE USED WITH THE APPROVAL OF THE ENGINEER.
- 6. REINFORCING BARS SHOWN ON THESE DRAWINGS ARE DIAGRAMMATIC ONLY.
- 7. BARS SHOWN MAY REPRESENT MORE THAN ONE LENGTH AND/OR PROFILE. 8. BARS MAY NOT BE SHOWN IN TRUE POSITION FOR CLARITY. ALL HOOKS, BENDS AND COGS
- ARE STANDARD AND SHALL BE IN ACCORDANCE WITH ACI 318 UNLESS NOTED OTHERWISE. 9. LAP SPLICES TO ALTERNATE AND NO MORE THAN 50% OF SPLICES SHALL BE IN ANY ONE SECTION.
- 10. BARS SHALL NOT BE CUT NOR BENT ON SITE WITHOUT THE PRIOR APPROVAL OF THE **ENGINEER**
- 11. BARS SHALL BE BENT COLD BY MACHINE OR OTHER APPROVED MEANS PRODUCING A GRADUAL AND EVEN MOTION. BARS INCORRECTLY BENT SHALL NOT BE RE-BENT AND INCORPORATED IN THE WORKS AND NO REINFORCEMENT SHALL BE BENT WHEN IN POSITION IN THE WORKS, WHETHER OR NOT IT IS PARTIALLY EMBEDDED IN HARDENED CONCRETE.
- 12. CONTRACTOR TO PROVIDE 24 HOURS NOTICE FOR THE INSPECTION OF ALL REINFORCING PRIOR TO POURING CONCRETE.
- 10. LAP LENGTHS SHALL BE AS TABULATED (SHOWN TO THE RIGHT) UNLESS SHOWN OTHERWISE ON THE DRAWINGS.

MINIMUM ALLOWABLE LAP LENGTHS			
BAR DIAMETER	MIN LAP LENGTH		
T10	460mm [18"]		
T12	600mm [24"]		
T16	760mm [30"]		
T20	900mm [36"]		
T25	1500mm [60'']		

ALTERNATIVE BAR SIZES				
METRIC BAR SIZE (mm) IMPERIAL EQUIVALENT (")		FORMER IMPERIAL DESIGNATION		
T10	3/8"	#3		
T12	1/2"	#4		
T16	5/8"	#5		
T20	3/4"	#6		
T25	1"	#8		

THE MINISTRY OF PUBLIC WORKS P.O. Box HM525 Hamilton HMCX Bermuda Phone: (441) 295-5151

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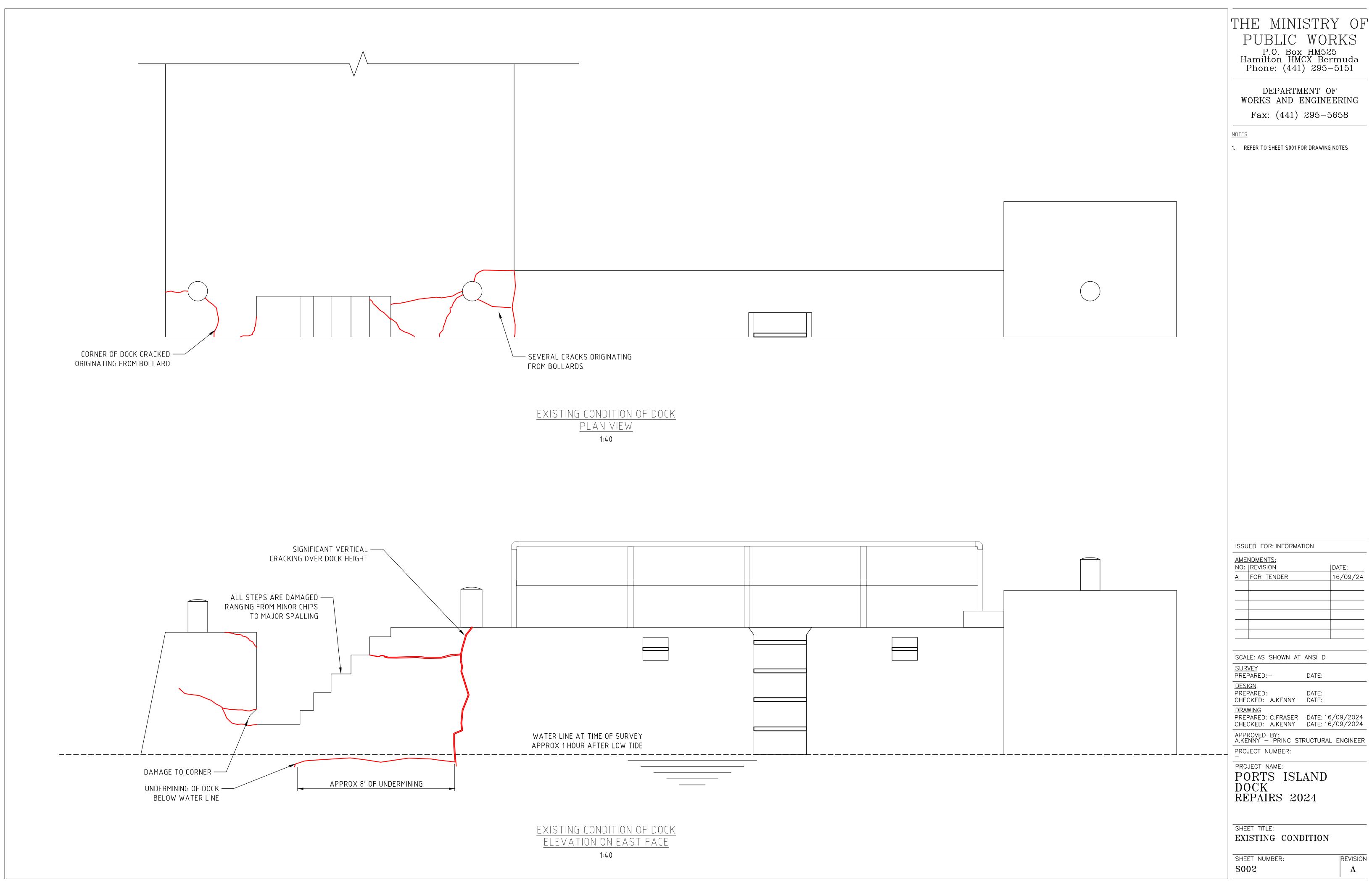
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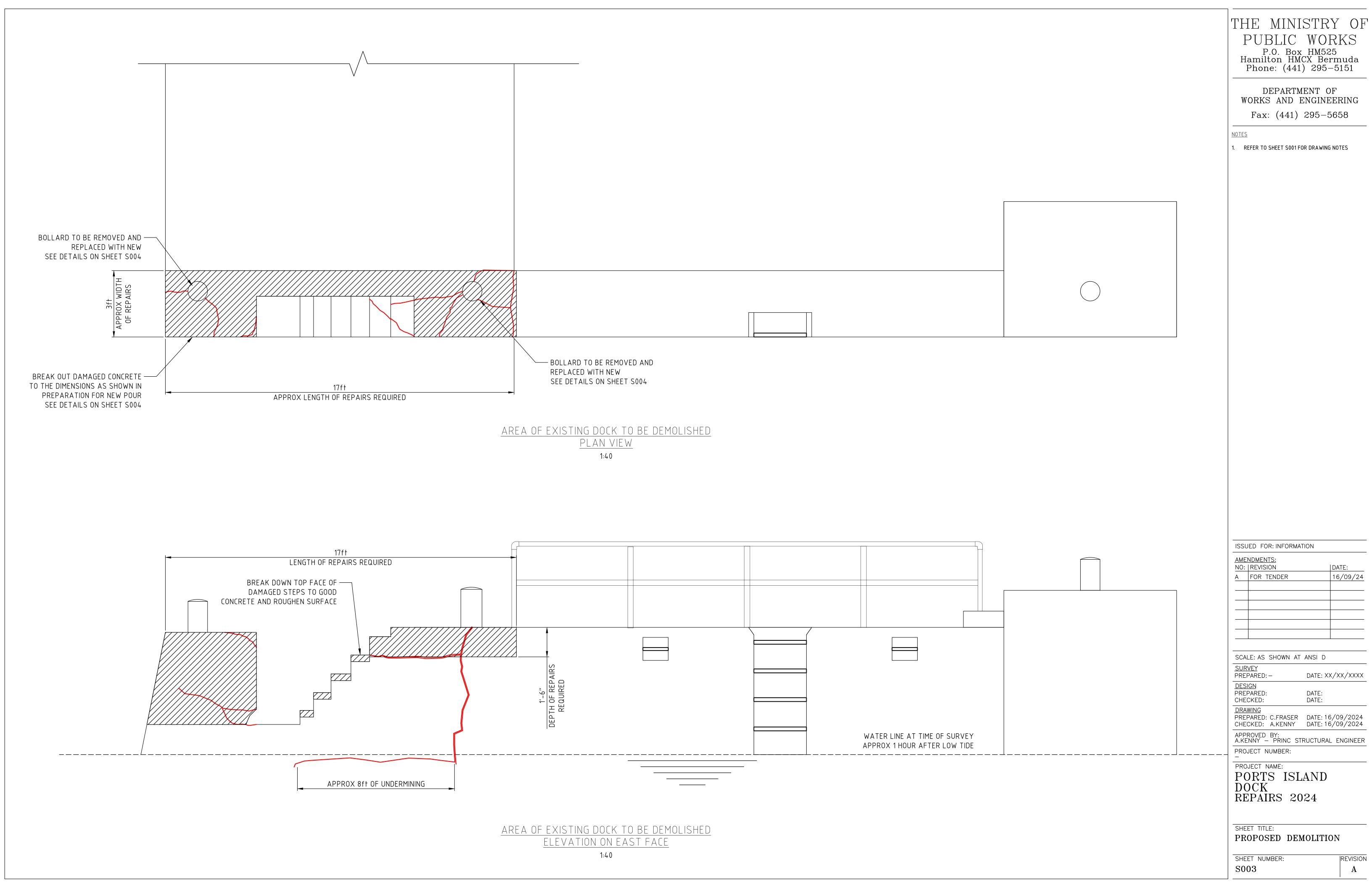
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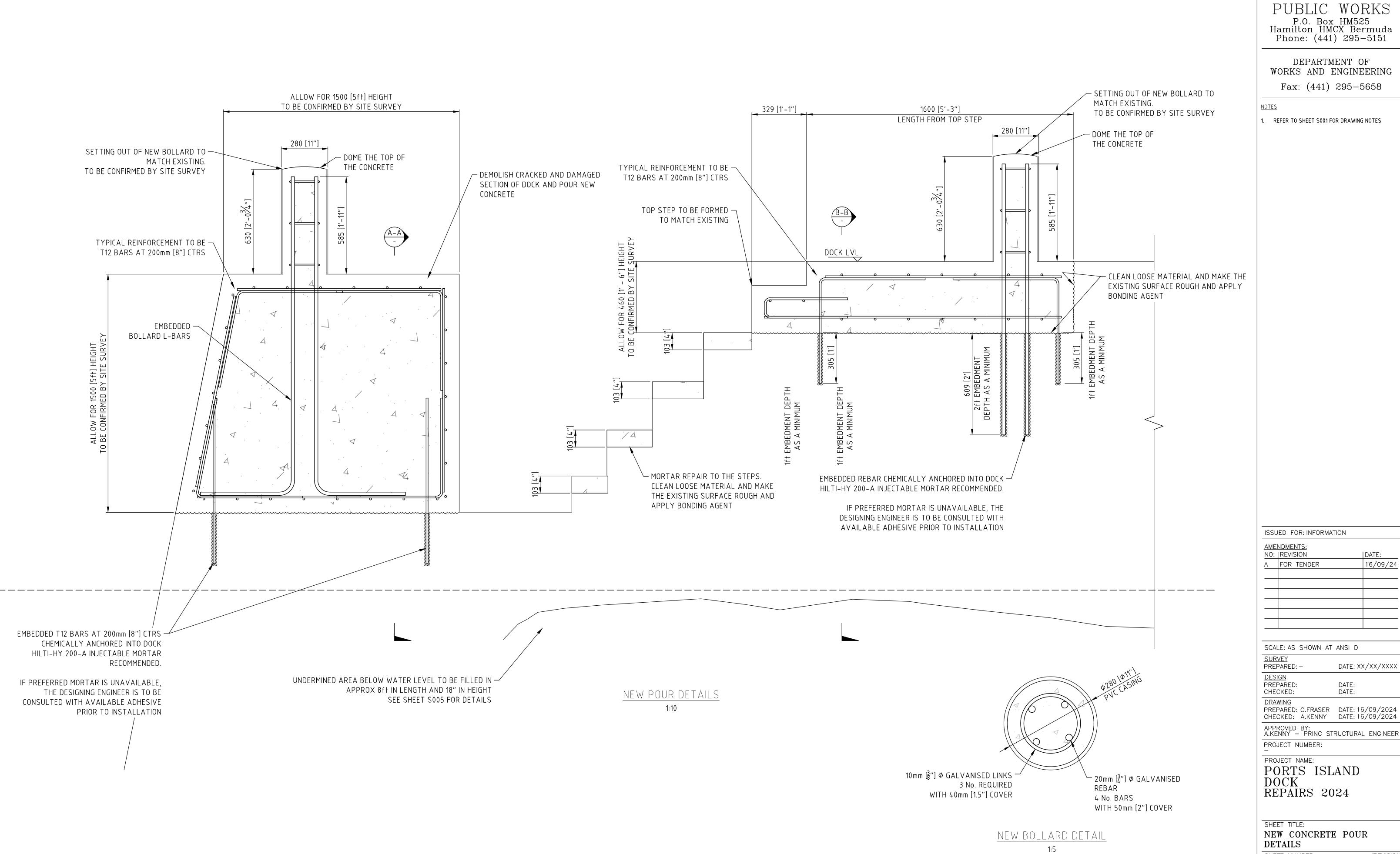
	PREPARED: CHECKED:	DATE: DATE:
	DRAWING PREPARED: C.FRASER CHECKED: A.KENNY	DATE: 16/09/2024 DATE: 16/09/2024
	APPROVED BY: A.KENNY – PRINC ST	RUCTURAL ENGINEE
	PROJECT NUMBER:	
-	PROJECT NAME:	

PROJECT NAME:
PORTS ISLAND
DOCK
REPAIRS 2024

SHEET TITLE:	
LOCATION PLAN	
SHEET NUMBER:	REVISION
S001	A







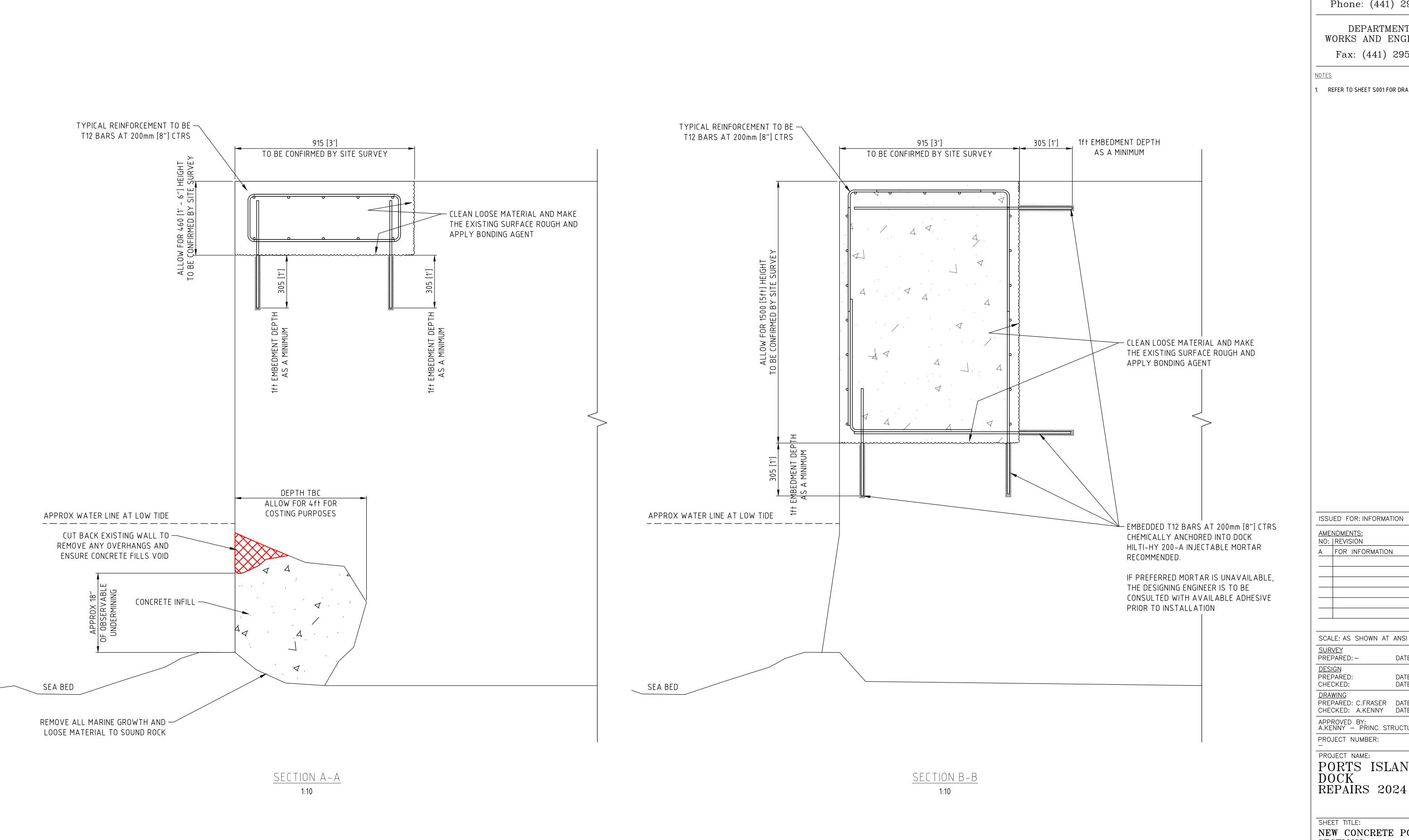
PROJECT NUMBER: PROJECT NAME: PORTS ISLAND REPAIRS 2024 SHEET TITLE: NEW CONCRETE POUR DETAILS SHEET NUMBER: REVISION S004

16/09/24

DATE: XX/XX/XXXX

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REFER TO SHEET S001 FOR DRAWING NOTES

AMENDMENTS: NO: | REVISION A FOR INFORMATION 16/09/24

SCALE: AS SHOWN AT ANSI D

DATE: DATE:

PREPARED: C.FRASER DATE: 16/09/2024 CHECKED: A.KENNY DATE: 16/09/2024

APPROVED BY: A.KENNY – PRINC STRUCTURAL ENGINEER

DATE: XX/XX/XXXX

PROJECT NUMBER:

PORTS ISLAND

NEW CONCRETE POUR SECTIONS REVISION

SHEET NUMBER: S005