

C01	ISSUED FOR TENDER	MAR 18 2016
revisions		date

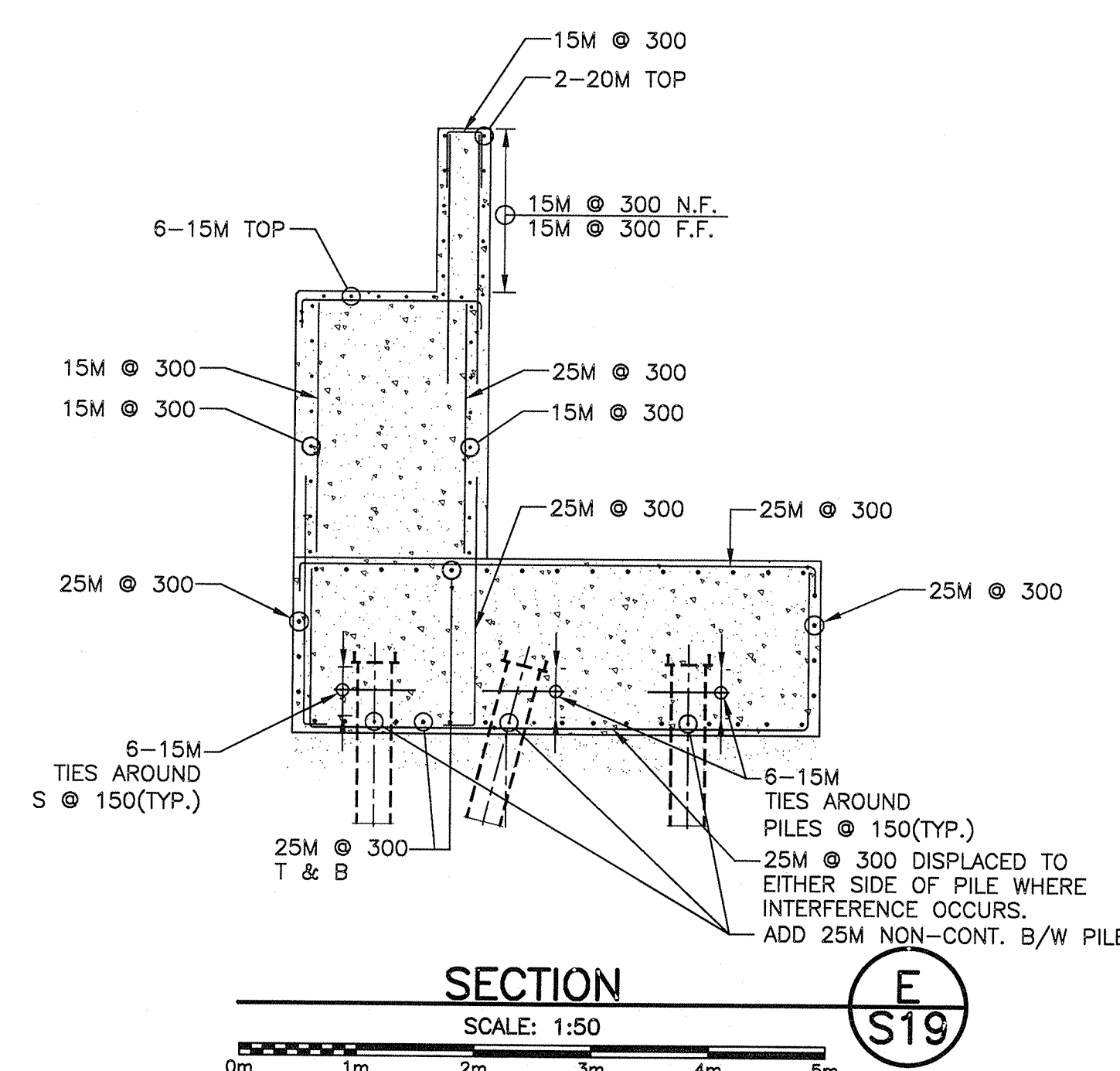
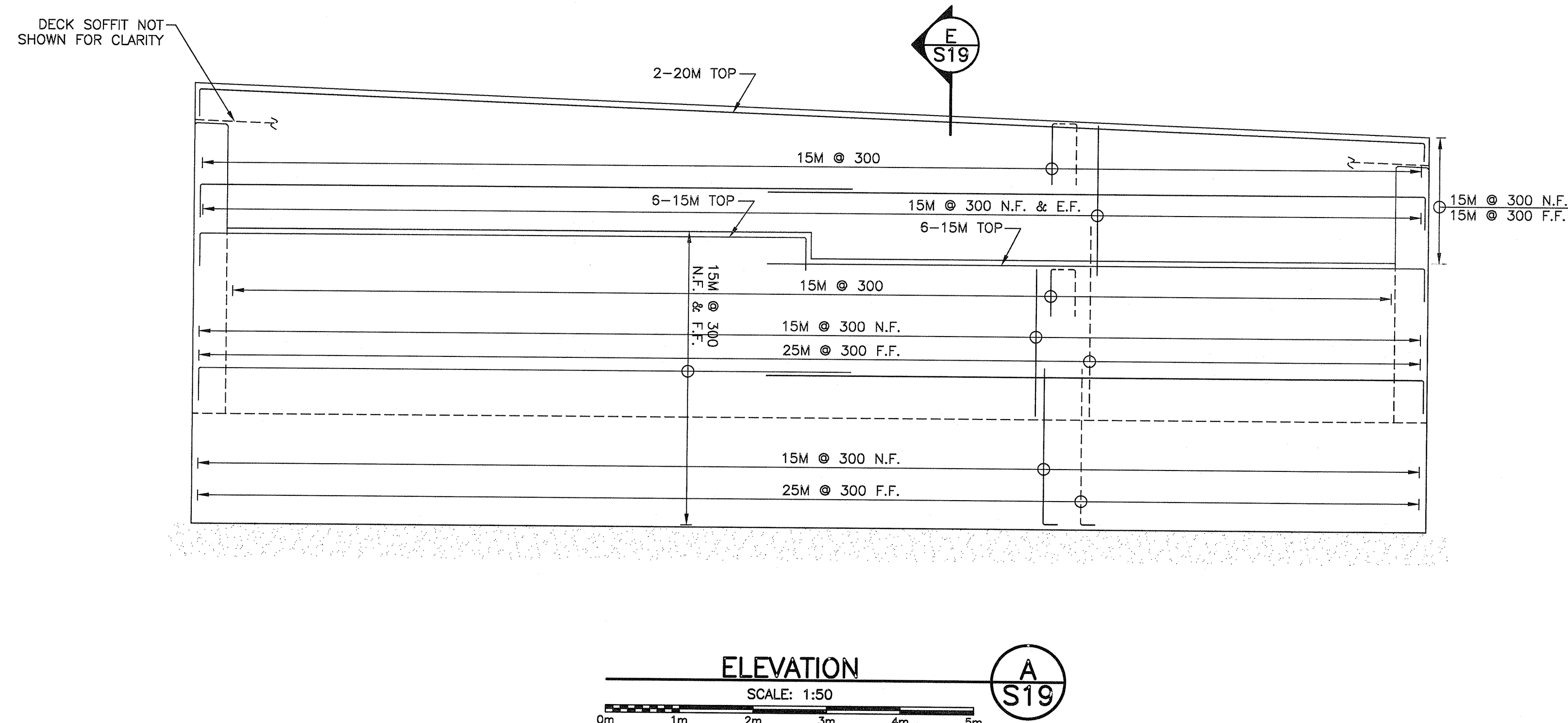
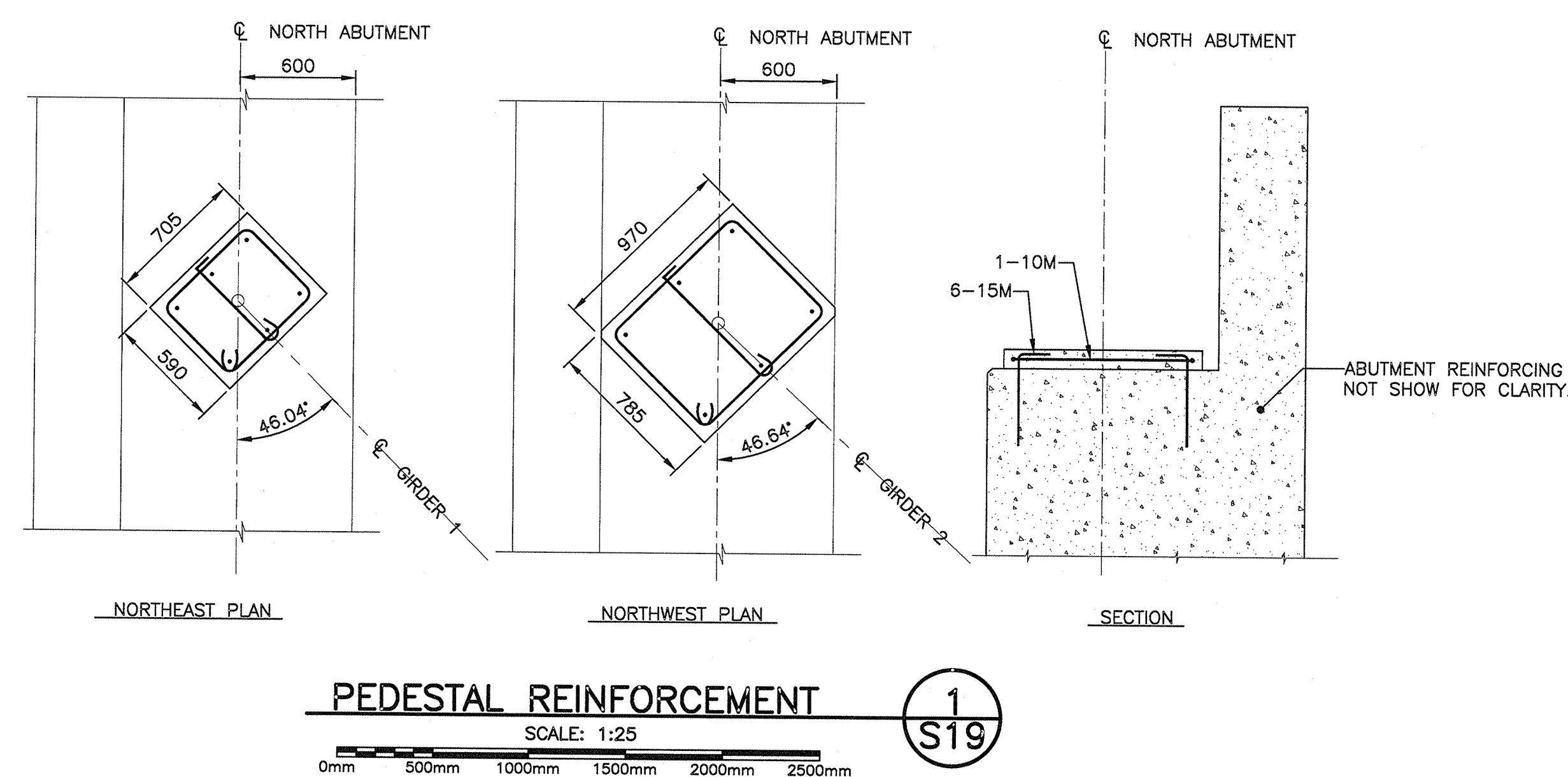
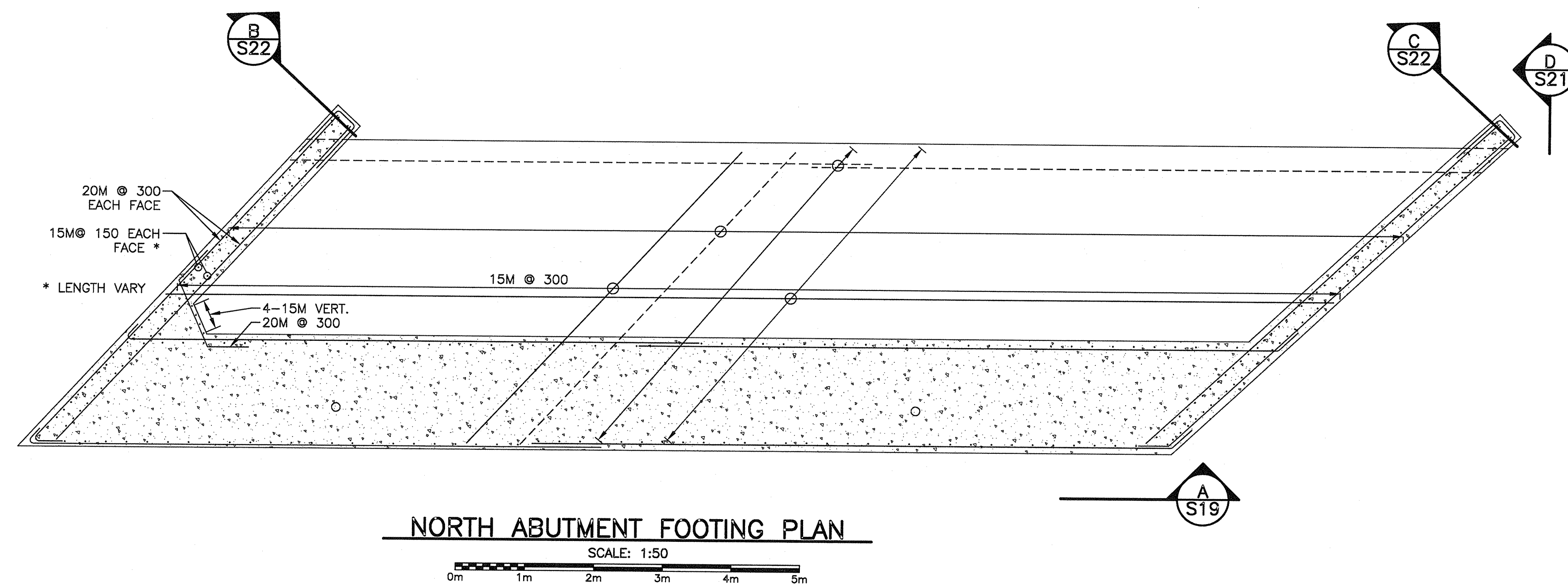
project  
**CLYBURN BROOK  
BRIDGE REPLACEMENT  
CAPE BRETON HIGHLANDS  
NATIONAL PARK,  
NS**

drawing  
**NORTH ABUTMENT  
REINFORCING**

designed	TDB	conçu
date		
drawn	TMB	dessiné
date		
approved	NDL	approuvé
date		
Tender	2016-03-09	Soumission
PWOSC Project Manager	Administrateur de projets TPSGC	
project number	R.072239.001	no. du projet
drawing no.		no. du dessin

S19

F  
S21



#### REINFORCING NOTES:

- REINFORCING STEEL: 400W TO CAN/CSA G30.18-09, BAR BENDS: TO RSIC MANUAL OF STANDARD PRACTICE.  
- PRESTRESSED GIRDERS: NOT GALVANIZED  
- CAST-IN-PLACE CONCRETE: HOT DIP GALVANIZE TO CAN/CSA G164-M9 (R2003)
- GFRP REINFORCING: GFRP TO CSA S806-12, CAN/CSA S807-10 GRADE III AND TO ASTM D790. MINIMUM BOND DEPENDENT COEFFICIENT, K = 0.8. ADDITIONAL PROPERTIES, AS FOLLOWS.

	15#	20#	25#	15# BENT	20# BENT
AWOM	199mm <sup>2</sup>	284mm <sup>2</sup>	510mm <sup>2</sup>	199mm <sup>2</sup>	284mm <sup>2</sup>
A <sub>r</sub>	62.6 GPa	63.7 GPa	66.4 GPa	50.0 GPa	50.0 GPa
f <sub>FRP</sub>	>1000 MPa	>1000 MPa	1000 MPa	1000 MPa	1000 MPa
f <sub>FRP BENT</sub>				400 MPa	400 MPa
E <sub>FRP</sub> (MAXIMUM)	1.89%	1.73%	1.51%		

\*\*\* "15# WITH HEAD", WHERE SPECIFIED SHALL HAVE PROPRIETARY FACTORY-INSTALLED HEAD WITH MINIMUM 120kN PULL-OUT STRENGTH. A TRANSVERSE CONTINUOUS BAR SHALL BE INSTALLED ACROSS THE MID-HEIGHT OF THE HEAD.