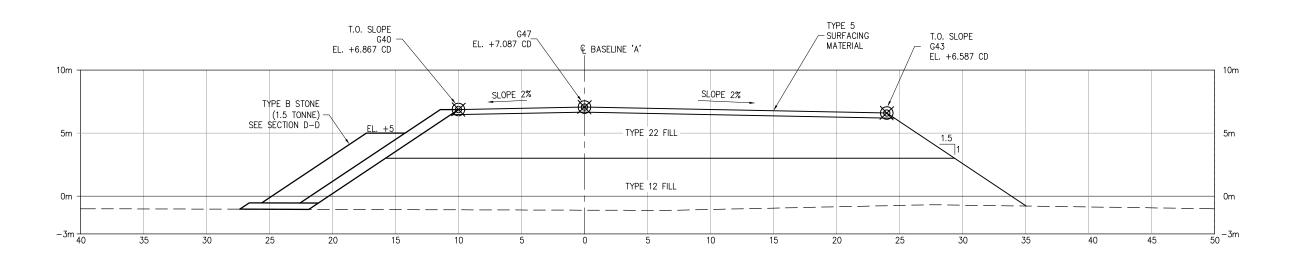


SECTION A-A



SECTION B-B

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" are registered trademarks of PND Engineer The OPEN CELL system is patented. PATENT — US 6,715,964 B2 PATENT — US 7,018,141 B2 PATENT — US 7,488,140 B2 PATENT PENDING — CANADA CA2.714.679







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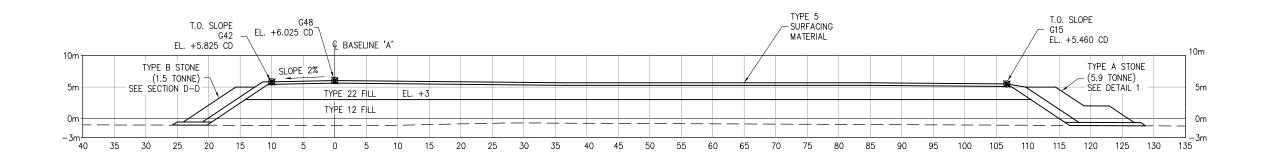
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			THER THAN ITS INTENDED USE, AND FURTHER THAT IT NOT	D
:			Y MANNER THAT WOULD BE DETRIMENTAL TO PND.	D
	ACCE	PTANCE IS	CONSTRUED AS AGREEMENT TO THESE PROVISIONS.	С

REVISIONS

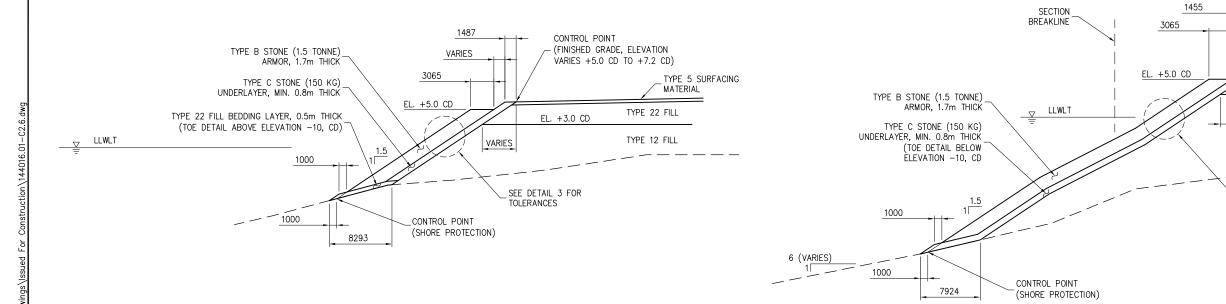
ISSUED FOR CONSTRUCTION

MILNE INLET ORE DOCK TITLE: GRADING **SECTIONS - 1** NJS PROJECT NO: DESIGNED BY: 144016.01 S C2.5

DRAWN BY: DRH DATE: MAY 2014 CHECKED BY: GW SCALE:



SECTION C-C



SECTION E-E

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PATENT - US 7,488,140 B2
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SECTION D-D

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	THIS	DRAWING I	NCLUDING THE PRINCIPLE OF DESIGN IS THE INTELLECTUAL	
	PROP	ERTY OF F	PND ENGINEERS CANADA, INC. AND IS SUBMITTED WITH THE	
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			Y MANNER THAT WOULD BE DETRIMENTAL TO PND.	DRAWN BY:
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REVISIONS

ISSUED FOR CONSTRUCTION

MILNE INLET ORE DOCK

TITLE:		GRADING SECTIONS - 2					
DESIGNED BY:	NJS	PROJECT NO:	144016.01	SHEET NO:			
DRAWN BY:	DRH	DATE:	MAY 2014	l			

(FINISHED GRADE,

TYPE 5 SURFACING

MATERIAL

TYPE 22 FILL

TYPE 12 FILL

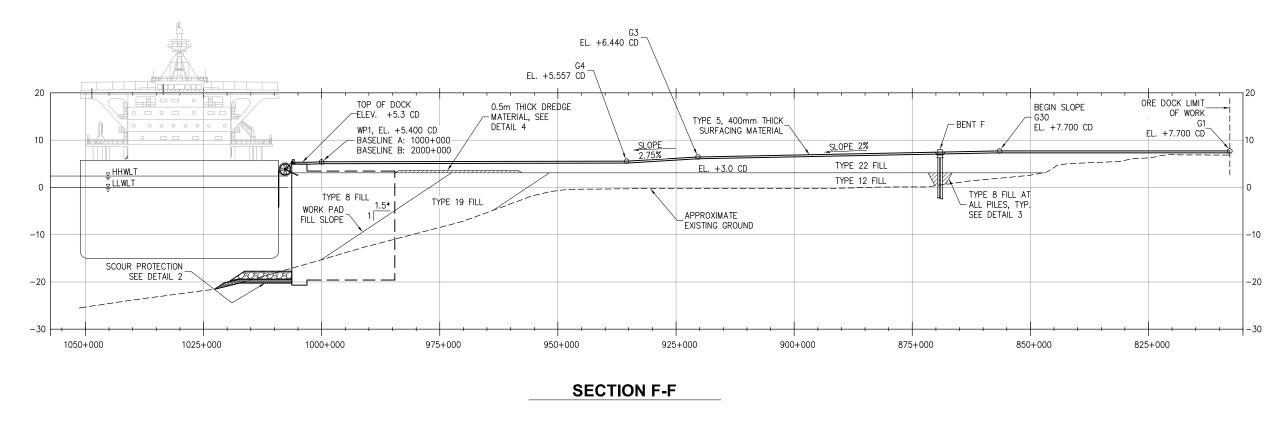
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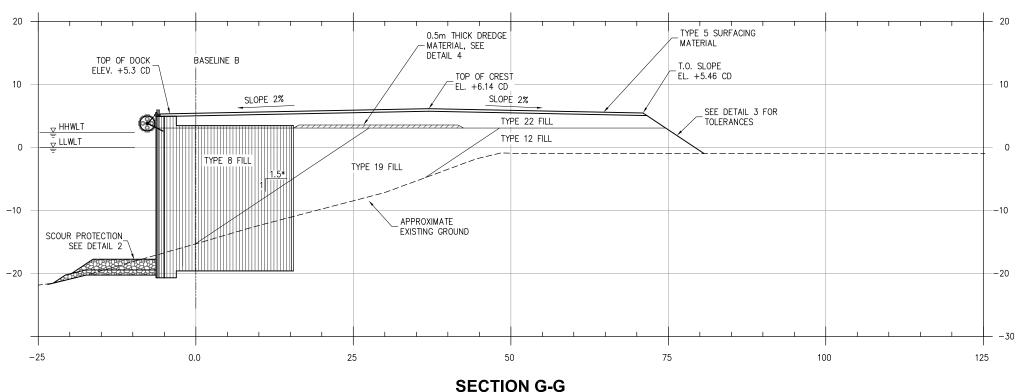
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SEE DETAIL 3 FOR TOLERANCES

C2.6 DRH DATE:

GW SCALE:





* ACTUAL SLOPE MAY VARY. ADJUST AS NECESSARY TO ENSURE TOE OF FILL DOES NOT INTERFERE WITH SHEET PILE DRIVING.

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PATENT PENDING - CANADA CA2.714.679

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DESIGNE	OTHER THAN ITS INTENDED USE, AND FURTHER THAT IT NOT	MANNER C	ANY		
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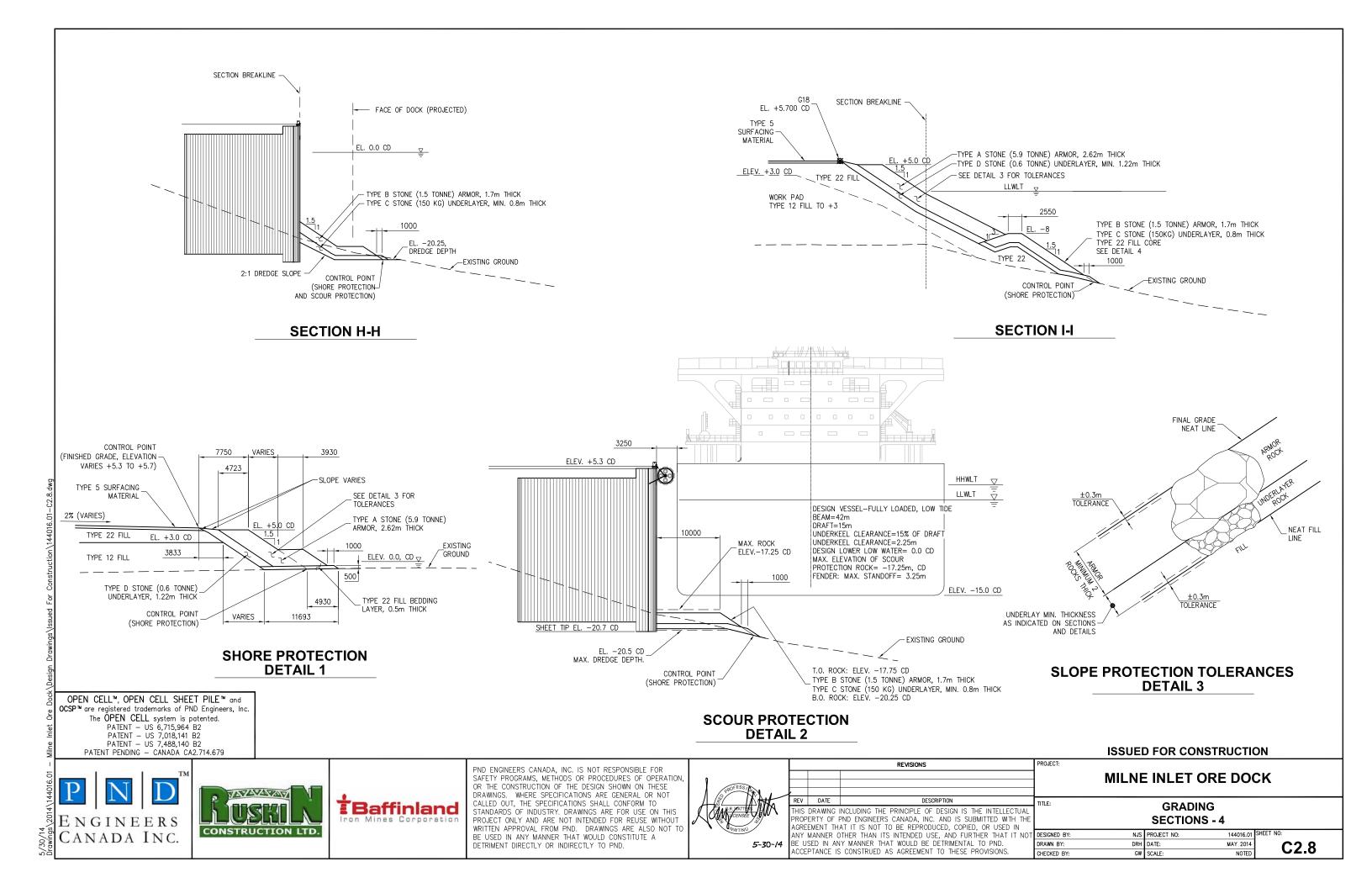
REVISIONS

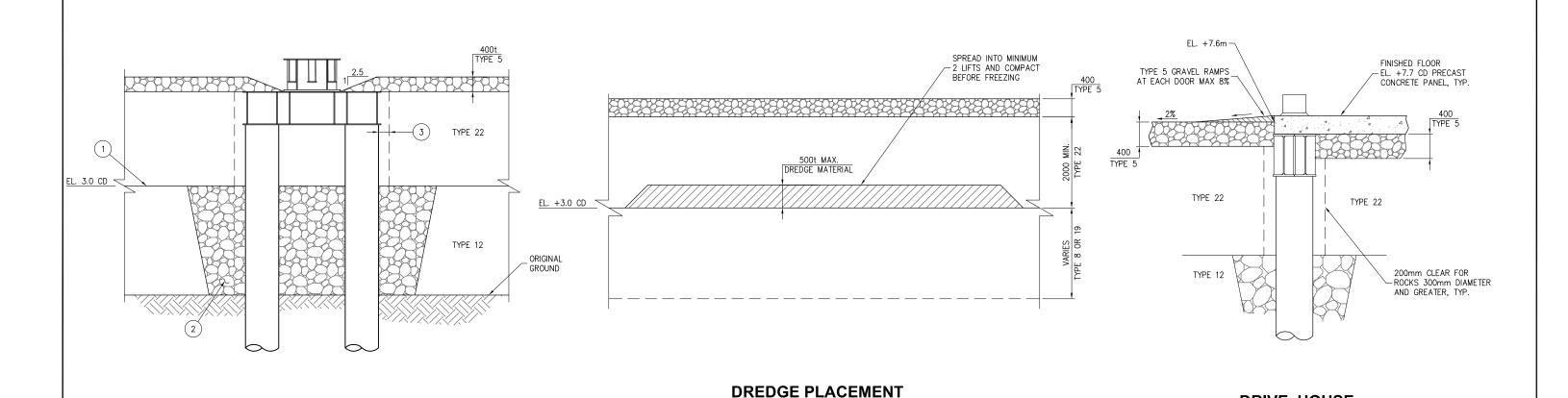
ISSUED FOR CONSTRUCTION

MILNE INLET ORE DOCK GRADING

SECTIONS - 3 ESIGNED BY: NJS PROJECT NO: 144016.01 RAWN BY: DRH DATE: MAY 2014 HECKED BY: GW SCALE:

ENGINEERS CANADA INC.





DETAIL 4

CONSTRUCTION NOTES

PILE BACKFILL

DETAIL 3

- ESTABLISH TOP ELEVATION OF TEMPORARY WORK PAD NO LESS THAN +3m.
- PLACE TYPE 8 MATERIAL AT ALL PILE LOCATIONS BEFORE DRIVING PILES.
- REMOVE ALL ROCK PARTICLES 300mm OR GREATER WITHIN 200mm OF STEEL FOUNDATIONS.
- MAINTAIN 3m MINIMUM SETBACK FROM STEEL FOUNDATIONS WITH ROLLER COMPACTOR.

OPEN CELL™, OPEN CELL SHEET PILE™ and OCSP™ are registered trademarks of PND Engineers, Inc. The OPEN CELL system is patented. PATENT - US 6,715,964 B2 PATENT - US 7,018,141 B2 PATENT - US 7,488,140 B2

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OR THE CONSTRUCTION OF THE DESIGN SHOWN ON THESE
DRAWINGS. WHERE SPECIFICATIONS ARE GENERAL OR NOT
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4	BE U	SED IN AN	Y MANNER THAT WOULD BE DETRIMENTAL TO PND.
	ACCE	PTANCE IS	CONSTRUED AS AGREEMENT TO THESE PROVISIONS.

REVISIONS

ISSUED FOR CONSTRUCTION

MILNE INLET ORE DOCK

GRADING **SECTIONS - 5**

TITLE:

DRIVE HOUSE

DETAIL 5

DESIGNED BY: NJS PROJECT NO: 144016.01 RAWN BY: MAY 2014 CHECKED BY: GW SCALE:

ENGINEERS CANADA INC.

No. NORTHING EASTING S1 7976482.954 503234.203 S2 7976487.639 503226.253 S3 7976492.547 503224.552 S4 7976496.475 503224.552 S5 7976501.298 503223.353 S6 7976505.984 503221.834 S7 7976541.126 503221.000 S8 7976570.857 503220.298 S9 7976577.572 503221.667 S10 7976585.681 503222.258 S11 7976591.393 503217.658 S12 7976591.393 503217.658 S13 7976593.868 503202.255 S14 7976598.009 503209.913 S15 7976610.484 503209.678 S16 7976614.750 503201.031 S17 7976614.750 503201.031 S18 7976622.310 503204.375 S20 7976624.532 503208.682 S21 7976626.805 503208.682 S	5 2 2 7 4 0) 3
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S22 7976630.762 503209.059	
S23 7976641.200 503216.742	
S24 7976646.885 503217.505	
S25 7976650.160 503219.123	
S26 7976653.545 503224.027	
S27 7976656.769 503232.790	
S28 7976660.052 503244.017	
S29 7976665.561 503259.132	
S30 7976672.276 503271.911	
S31 7976675.680 503277.929	
S32 7976680.376 503289.059	
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\$34	
S35 7976689.878 503318.462	
\$36	
S37 7976686.696 503336.474	
\$38	
S39 7976683.643 503342.689	
S40 7976682.477 503349.454	
S41 7976679.048 503355.795	
S42 7976674.735 503359.326	
S43 7976670.291 503360.975	
S44 7976666.261 503361.261	l
S45 7976658.577 503361.338	3
S46 7976649.740 503360.199	
S47 7976648.509 503357.463)
S48 7976643.697 503356.296	
S49 7976639.543 503354.842	3
S50 7976636.870 503354.376	3

SHORE PROTECTION -

SHORE PROTECTION - CONTROL POINTS (CONT.)							
No.	NORTHING	EASTING					
S51	7976632.469	503354.666					
S52	7976625.670	503356.009					
S53	7976611.258	503362.324					
S54	7976606.758	503363.585					
S55	7976601.394	503363.436					
S56	7976595.926	503361.351					
S57	7976591.562	503357.579					
S58	7976588.688	503352.409					
S59	7976587.858	503345.415					
S60	7976588.947	503340.817					
S61	7976598.693	503338.146					

No.	NORTHING	EASTING	ELEVATION
G1	7976444.188	503249.485	7.700
G2	7976465.110	503248.730	7.700
G3	7976556.669	503245.428	6.440
G4	7976588.774	503244.270	5.557
G5	7976587.009	503238.882	5.000
G6	7976603.896	503238.260	5.000
G7	7976616.053	503216.859	5.300
G8	7976637.293	503232.392	5.300
G9	7976655.590	503274.142	5.300
G10	7976673.887	503315.892	5.300
G11	7976670.913	503342.037	5.300
G12	7976626.791	503313.064	6.140
G13	7976607.452	503268.936	6.140
G14	7976576.311	503282.583	5.460
G15	7976595.651	503326.712	5.460
G16	7976604.543	503346.974	5.329
G17	7976635.675	503333.336	5.697
G18	7976644.905	503329.146	5.700
G19	7976649.903	503328.240	5.700
G20	7976646.174	503332.040	5.000
G21	7976648.069	503336.365	5.000
G22	7976650.045	503337.137	5.000
G23	7976649.520	503339.005	5.000
G24	7976660.408	503335.139	5.500
G25	7976652.799	503342.070	5.300
G26	7976604.054	503235.927	5.000
G27	7976614.006	503229.258	5.500
G28	7976603.815	503230.174	5.300
G29	7976611.958	503241.658	5.700
G30	7976492.846	503247.730	7.700
G31	7976500.504	503237.447	7.340
G32	7976500.864	503247.440	7.540
G33	7976501.729	503271.425	7.060
G34	7976445.316	503280.967	7.700
G35	7976443.587	503232.752	7.700
G36	7976492.653	503242.358	7.600
G37	7976493.023	503252.626	7.600
G38	7976465.287	503253.627	7.600
G39	7976464.916	503243.333	7.600
G40	7976524.171	503236.593	6.867
G41	7976556.308	503235.434	6.240
G42		503234.891	5.825
G43	7976525.397	503270.572	6.587
G44	7976557.534	503269.412	5.960
G45	7976561.847	503269.257	5.841
G46	7976573.746	503276.731	5.500
G47	7976524.532	503246.587	7.067
G48	7976571.744	503244.884	6.025
G49	7976580.804	503255.119	5.580
G50	7976458.955	503278.659	7.070
220	7070450047	507077.004	7.070

G51 7976458.643 503233.994 7.365

FINAL GRADE - CONTROL **POINTS**

DREDGING PLAN - CONTROL POINTS						
No.	NORTHING	EASTING				
D1	7976633.159	503228.526				
D2	7976625.616	503211.313				
D3	7976633.939	503207.666				
D4	7976641.449	503213.158				
D5	7976689.795	503335.117				
D6	7976681.471	503338.764				
D7	7976690.700	503327.158				
D8	7976673.928	503321.552				

FI	LL TO +3 - 0	CONTROL	ITROL POINTS		
No.	NORTHING	EASTING	ELEVATION		
T1	7976605.940	503350.189	3.000		
T2	7976638.500	503336.538	3.000		
T3	7976639.107	503335.729	3.000		
T4	7976640.723	503321.523	3.000		
T5	7976640.645	503321.008	3.000		
T6	7976611.001	503253.366	3.000		
T7	7976610.675	503252.961	3.000		
T8	7976587.289	503235.858	3.000		
Т9	7976587.019	503235.718	3.000		
T10	7976572.434	503230.776	3.000		
T11	7976571.231	503230.653	3.000		
T12	7976500.813	503230.936	3.000		
T13	7976489.758	503230.024	3.000		
T14	7976476.645	503281.820	3.000		
T15	7976501.949	503277.521	3.000		
T16	7976562.001	503273.517	3.000		
T17	7976570.367	503278.212	3.000		
T18	7976601.335	503348.385	3.000		

- NOTES:
 1) COORDINATES SHOWN IN UTM (NAD83), ZONE 17, IN METRES.
 2) ELEVATIONS SHOWN IN METRES ABOVE CHART
- DATUM (CD).

OPEN CELL™, OPEN CELL SHEET PILE™ and OCSP™ are registered trademarks of PND Engineers, Inc. The OPEN CELL system is patented.

PATENT — US 6,715,964 B2
PATENT — US 7,018,141 B2
PATENT — US 7,488,140 B2
PATENT — US 7,488,140 B2
PATENT PENDING — CANADA CA2.714.679







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	ANY I	MANNER O	THER THAN ITS INTENDED USE, AND FURTHER THAT IT NOT	DESIGNED
4			Y MANNER THAT WOULD BE DETRIMENTAL TO PND.	DRAWN E
	ACCE	PTANCE IS	CONSTRUED AS AGREEMENT TO THESE PROVISIONS.	CHECKED

REVISIONS

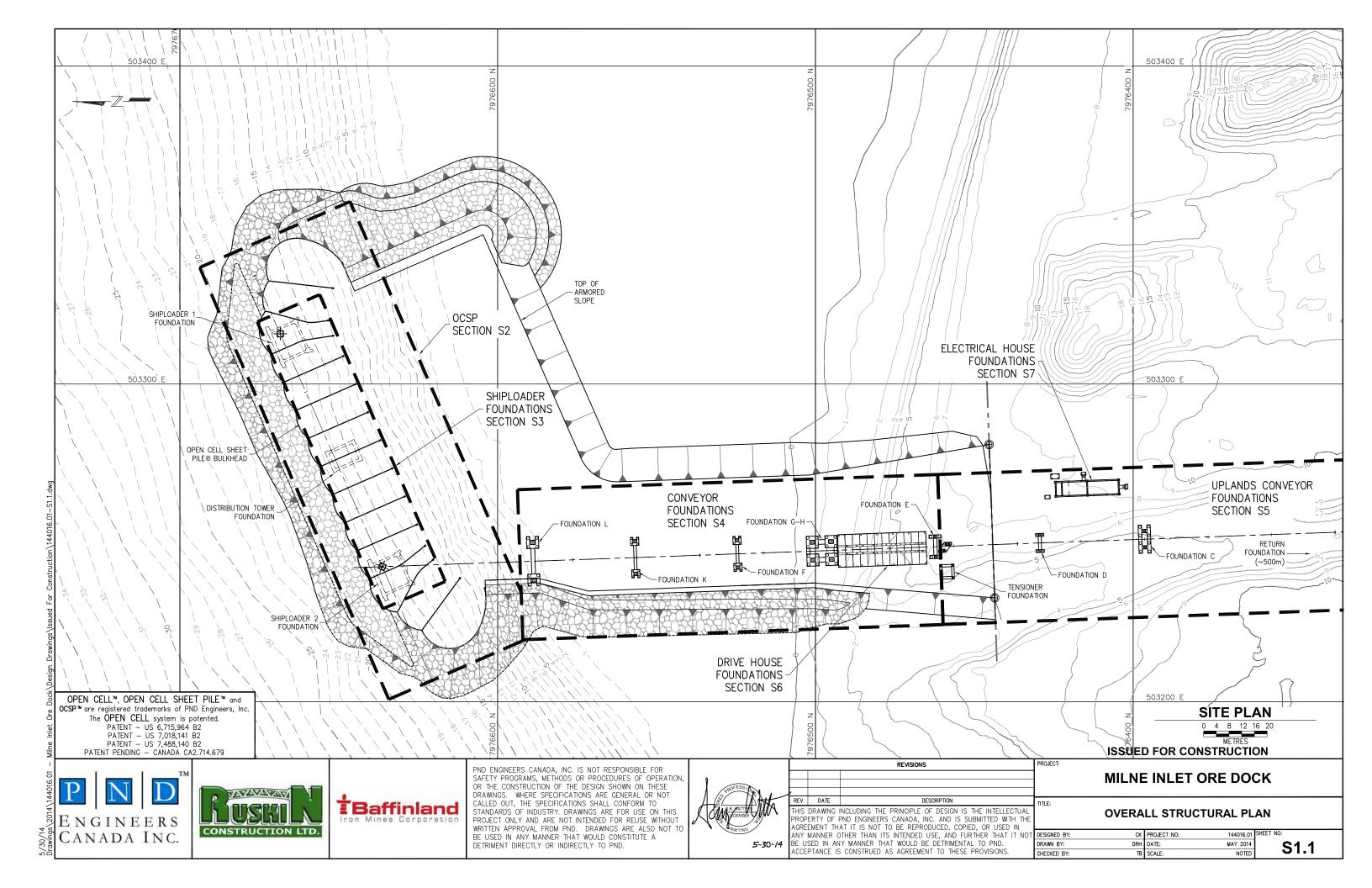
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MILNE INLET ORE DOCK

GRADING - POINTS TABLE

Т	DESIGNED BY:	NJS	PROJECT NO:	144016.01	SHEET NO:
	DRAWN BY:	DRH	DATE:	MAY 2014	C2 10
	CHECKED BY:	GW	SCALE:	NOTED	CZ.10

5-30-14



			PILE	SCHEDUL	 E		
	(SHIPLOAD	ER FOUN	DATIONS	(SHEETS S3.X	X)	
100	A TION	DIAMETER	THICKNESS	DATTED	ESTIMATED TIP	SERVICE LOAD (kN)	
LOCATION		(mm)	(mm)	BATTER	ELEVATION (m)	COMPRESSION	TENSION
	A1	914	19	VERTICAL	-32.0	5300	700
	A2	914	19	VERTICAL	-32.0	5300	700
	B1	914	19	VERTICAL	-32.0	5300	700
CHIDLOADED 0	B2	914	19	VERTICAL	-32.0	5300	700
SHIPLOADER 2	С	610	19	VERTICAL	-32.0	3800	1900
	C-B	610	19	3:1	-32.0	2300	2300
	D	610	19	VERTICAL	-32.0	3800	1900
	D-B	610	19	3:1	-32.0	2300	2300
	E1	914	19	VERTICAL	-32.0	5300	700
	E2	914	19	VERTICAL	-32.0	5300	700
	F1	914	19	VERTICAL	-32.0	5300	700
SHIPLOADER 1	F2	914	19	VERTICAL	-32.0	5300	700
SHIPLOADER I	G	610	19	VERTICAL	-32.0	3800	1900
	G-B	610	19	3:1	-32.0	2300	2300
	Н	610	19	VERTICAL	-32.0	3800	1900
	H-B	610	19	3:1	-32.0	2300	2300
	J	914	19	VERTICAL	-32.0	2500	1800
DISTRIBUTION	K	914	19	VERTICAL	-32.0	2500	1800
TOWER	L-B	914	19	4:1	-32.0	2500	1800
	M-B	914	19	4:1	-32.0	2500	1800
		CONVEYO	R FOUND	DATIONS (SHEETS S4.XX	()	
1.00	A TION	DIAMETER THICK		BATTER	ESTIMATED TIP ELEVATION (m)	SERVICE L	OAD (kN)
LUC	CATION	(mm)				COMPRESSION	TENSION
	L1-NW	914	19	VERTICAL	-24.0	950	550
	L1-NE	914	19	VERTICAL	-24.0	950	550
	L1-SE	914	19	VERTICAL	-24.0	950	550
	L1-SW	914	19	VERTICAL	-24.0	950	550
L	L2-NW	914	19	VERTICAL	-24.0	950	550
	L2-NE	914	19	VERTICAL	-24.0	950	550
	L2-SE	914	19	VERTICAL	-24.0	950	550
	L2-SW	914	19	VERTICAL	-24.0	950	550
		610	19		-24.0 -18.0	650	350
	K1-NW			VERTICAL			
	K1-NE	610	19	VERTICAL	-18.0	650	350
	K1-SE	610	19	VERTICAL	-18.0	650	350
K	K1-SW	610	19	VERTICAL	-18.0	650	350
13	K2-NW	610	19	VERTICAL	-18.0	650	350
	K2-NE	610	19	VERTICAL	-18.0	650	350
	K2-SE	610	19	VERTICAL	-18.0	650	350
	K2-SW	610	19	VERTICAL	-18.0	650	350

	CON	VEYOR F	OUNDAT	IONS, CON	T. (SHEETS S	64.XX)	
1.0	OATION	DIAMETER	THICKNESS	DATTED	ESTIMATED TIP	SERVICE LOAD (kN)	
LOCATION		(mm)	(mm)	BATTER	ELEVATION (m)	COMPRESSION	TENSION
	F1-NW	610	19	VERTICAL	-15.0	600	350
	F1-NE	610	19	VERTICAL	-15.0	600	350
	F1-SE	610	19	VERTICAL	-15.0	600	350
-	F1-SW	610	19	VERTICAL	-15.0	600	350
F	F2-NW	610	19	VERTICAL	-15.0	600	350
	F2-NE	610	19	VERTICAL	-15.0	600	350
	F2-SE	610	19	VERTICAL	-15.0	600	350
	F2-SW	610	19	VERTICAL	-15.0	600	350
	G1-NW	914	19	VERTICAL	-20.0	1400	0
	G1-NE	914	19	VERTICAL	-20.0	1400	0
	G1-SE	914	19	VERTICAL	-20.0	1400	0
	G1-SW	914	19	VERTICAL	-20.0	1400	0
	G2-NW	914	19	VERTICAL	-20.0	1400	0
	G2-NE	914	19	VERTICAL	-20.0	1400	0
	G2-SE	914	19	VERTICAL	-20.0	1400	0
0 11	G2-SW	914	19	VERTICAL	-20.0	1400	0
G-H	H1-NW	914	19	VERTICAL	-20.0	350	900
	H1-NE	914	19	VERTICAL	-20.0	350	900
	H1-SE	914	19	VERTICAL	-20.0	350	900
	H1-SW	914	19	VERTICAL	-20.0	350	900
	H2-NW	914	19	VERTICAL	-20.0	350	900
	H2-NE	914	19	VERTICAL	-20.0	350	900
	H2-SE	914	19	VERTICAL	-20.0	350	900
	H2-SW	914	19	VERTICAL	-20.0	350	900
	E1-N	914	19	VERTICAL	-18.0	850	250
r	E1-S	914	19	VERTICAL	-18.0	850	250
Е	E2-N	914	19	VERTICAL	-18.0	850	250
	E2-S	914	19	VERTICAL	-18.0	850	250

NOTES:

- SHIPLOADER AND FOUNDATIONS L AND K PILES SHALL BE INSTALLED TO MINIMUM TIP ELEVATIONS SHOWN.

 ALL OTHER TIP ELEVATIONS SHALL BE FIELD VERIFIED BY THE ENGINEER BASED ON ADFREEZE STRENGTH AND CREEP PROPERTIES OF THE SOILS ENCOUNTERED.

 SHIPLOADER AND FOUNDATIONS L AND K PILE CAPACITIES SHALL BE VERIFIED BY THE PILE AND FOUNDATIONS CONTENTS OF THE PILE PROPERTY.
- ENGINEER TO MEET THE PILE DRIVING CRITERIA. ALL OTHER LOADS PROVIDED FOR REFERENCE.

ENGINEERS CANADA INC.





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ISSUED FOR CONSTRUCTION

MILNE INLET ORE DOCK

PIPE PILE SCHEDULE - 1 of 2

TITLE:

T	DESIGNED BY:	CK	PROJECT NO:	144016.01	SHEET NO:
	DRAWN BY:	DRH	DATE:	MAY 2014	Q1 2
	CHECKED BY:	TB	SCALE:	NOTED	31.2

			PILE SCH	IEDULE (C	ONT.)		
	UPLA	ANDS CON	IVEYOR F	OUNDATIO	ONS (SHEETS	S5.XX)	
LOC	ATION	DIAMETER (mm)	THICKNESS (mm)	BATTER	ESTIMATED TIP ELEVATION (m)	SERVICE LOAD (kN) COMPRESSION TENSI	
	T3-N	610	19	VERTICAL	-8.0	200	TENSION 0
	T3-S	610	19	VERTICAL	-8.0	200	150
TURNING	T4-N	610	19	VERTICAL	-8.0	200	0
	T4-S	610	19	VERTICAL	-8.0	200	150
	T1-N	610	19	VERTICAL	-8.0	250	0
	T1-S	610	19	VERTICAL	-8.0	250	0
TENSIONER	T2-N	610	19	VERTICAL	-8.0	250	0
	T2-S	610	19	VERTICAL	-8.0	250	0
	D1-N	610	19	VERTICAL	-5.0	500	0
	D1-S	610	19	VERTICAL	-5.0	500	0
D	D1-3 D2-N	610	19	VERTICAL	-5.0	500	100
	D2-N D2-S	610	19	VERTICAL	-5.0	500	100
	C1-NW	914	19	VERTICAL	-5.0	300	0
	C1-NW C1-NE	914	19	VERTICAL	-5.0 -5.0	300	0
	C1-NE C1-SE	914	19		-5.0 -5.0		100
				VERTICAL		100	
С	C1-SW	914	19	VERTICAL	-5.0	100	100
	C2-NW	914	19	VERTICAL	-5.0	300	0
	C2-NE	914	19	VERTICAL	-5.0	300	0
	C2-SE	914	19	VERTICAL	-5.0	100	100
	C2-SW	914	19	VERTICAL	-5.0	100	100
	R-A1	914	19	VERTICAL	-6.0	100	500
	R-A-CTR	914	19	VERTICAL	-6.0	100	500
RETURN	R-A2	914	19	VERTICAL	-6.0	100	500
	R-B1	914	19	VERTICAL	-6.0	650	0
	R-B-CTR	914	19	VERTICAL	-6.0	650	0
	R-B2	914	19	VERTICAL	-6.0	650	0
		DR	IVE HOUS	SE (SHEET	S S6.XX)		
LOC	ATION	DIAMETER (mm)	THICKNESS (mm)	BATTER	ESTIMATED TIP ELEVATION (m)	SERVICE I	LOAD (kN) TENSION
	DH-A1	610	19	VERTICAL	-13.0	900	0
	DH-A2	610	19	VERTICAL	-13.0	900	0
	DH-A3	610	19	VERTICAL	-13.0	900	0
	DH-A4	610	19	VERTICAL	-13.0	900	0
	DH-B2	610	19	VERTICAL	-13.0	1400	0
	DH-B3	610	19	VERTICAL	-13.0	1400	0
ORIVE HOUSE	DH-C1	610	19	VERTICAL	-13.0	900	0
NINE LIOUSE	DH-C4	610	19	VERTICAL	-13.0	900	0
	DH-D2	610	19	VERTICAL	-13.0	900	0
	DH-D3	610	19	VERTICAL	-13.0	900	0
	DH-E1	610	19	VERTICAL	-13.0	900	0
		1	1	VEDTICAL	1 1		1 -

PILE SCHEDULE (CONT.)							
ELECTRICAL HOUSE (SHEETS S7.XX)							
100	NA TION	DIAMETER	R THICKNESS BATTER E	ESTIMATED TIP	SERVICE LOAD (kN)		
LOCATION		(mm) (mm)	BATTER	ELEVATION (m)	COMPRESSION	TENSION	
	EH-A1	610	19	VERTICAL	-7	400	0
	EH-A2	610	19	VERTICAL	-7	400	0
ELECTRICAL	EH-B1	610	19	VERTICAL	-7	400	0
HOUSE	EH-B2	610	19	VERTICAL	-7	400	0
	EH-C1	610	19	VERTICAL	-7	400	0
	EH-C2	610	19	VERTICAL	-7	400	0

NOTES:

- SHIPLOADER AND FOUNDATIONS L AND K PILES SHALL BE INSTALLED TO MINIMUM TIP ELEVATIONS SHOWN.
- ALL OTHER TIP ELEVATIONS SHALL BE FIELD VERIFIED BY THE ENGINEER BASED ON ADFREEZE STRENGTH AND CREEP PROPERTIES OF THE SOILS ENCOUNTERED.
- SHIPLOADER AND FOUNDATIONS L AND K PILE CAPACITIES SHALL BE VERIFIED BY THE ENGINEER TO MEET THE PILE DRIVING CRITERIA.

ENGINEERS CANADA INC.

DH-E2

DH-E3

DH-E4



610

610

610

19

19

19

VERTICAL

VERTICAL

VERTICAL



-13.0

-13.0

-13.0

900

900

900

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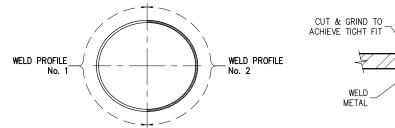
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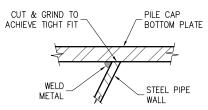
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PIPE PILE SCHEDULE - 2 of 2

IOT	DESIGNED BY:	CK	PROJECT NO:	144016.01	SHEET NO:
	DRAWN BY:	DRH	DATE:	MAY 2014	613
	CHECKED BY:	TB	SCALE:	NOTED	51.5





APF INSIDE FLANGED CUTTING SHOE OR APPROVED EQUIVALENT
BY THE ENGINEER. INSTALL
PER MANUFACTURER'S
RECOMMENDATIONS

PIPE PILE PER

€ PILE & P_-

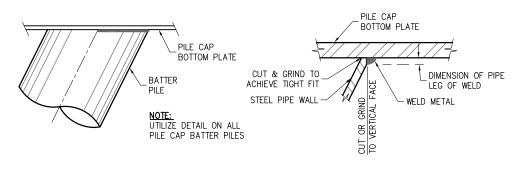
PLAN & SCHEDULE

PLAN

No. 1 WELD PROFILE

OPEN SHOE

- PIPE PILE



SIDE VIEW

No. 2 **WELD PROFILE**

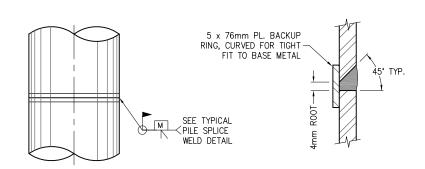
EQUIPMENT SLEEVE SCHEDULE **PLAN** NOTE: OK TO PROVIDE L76x76x6mm C2-NW IN LIEU OF BENT PLATE. D2-NW E2-NW F2-NW G2-NW DH-B2

BENT P 6x76x76mm WITH 25.4mm INSIDE DIAMETER

METAL CONDUIT LOCATED

BATTER PILE WELD

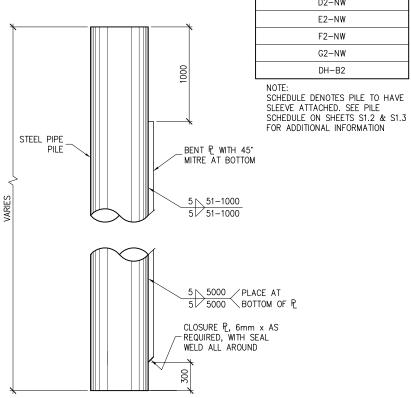
(ALL BATTER PILES)



PILE SPLICE TYPICAL FOR ALL FIELD PIPE PILE SPLICES

(SHOP WELDS, IF REQ'D. SIMILAR)

PILE SPLICE WELD



ELEVATION

EQUIPMENT SLEEVE DETAIL

ENGINEERS CANADA INC.





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	ANY	MANNER C	THER THAN ITS INTENDED USE, AND FURTHER THAT IT NOT	DESIGNED
-/4			Y MANNER THAT WOULD BE DETRIMENTAL TO PND.	DRAWN I
	ACCE	PTANCE IS	CONSTRUED AS AGREEMENT TO THESE PROVISIONS.	CHECKET

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PILE DETAILS

DESIGNED BY:	CK	PROJECT NO:	144016.01	SHEET NO:
DRAWN BY:	DRH	DATE:	MAY 2014	Q1 /
CHECKED BY:	TR	SCALE:	NOTED) JI.T





CELL NUMBER

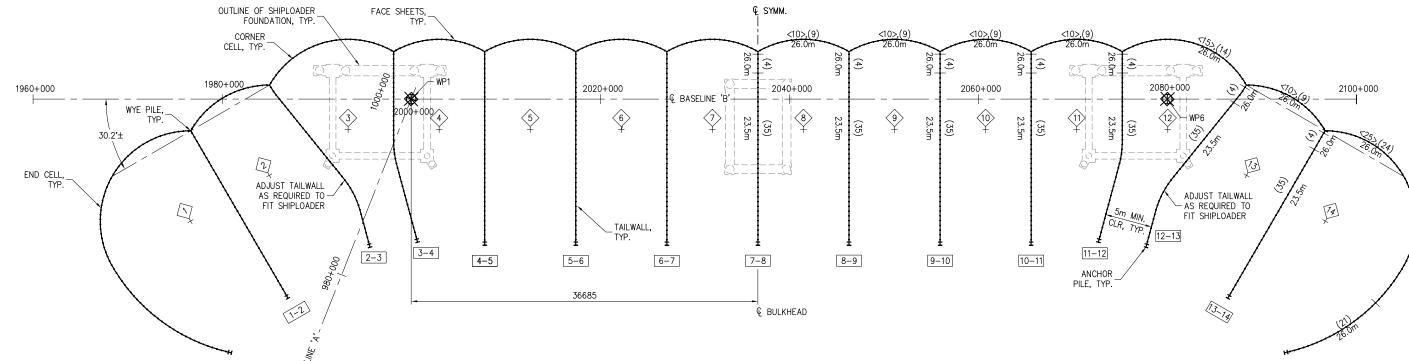
X-X

TAILWALL/WYE NUMBER

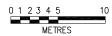
<10>, (9) = NUMBER OF BENT, FLAT SHEETS

26.0m = SHEET LENGTH

- LENGTH OF ANCHOR & WYE PILE NOT SHOWN, SEE SCHEDULE
- FACE SHEETS ALTERNATE BENT AND FLAT



OCSP™ LAYOUT PLAN



WYE L	OCATION	TABLE
WYE	STATION	OFFSET
1-2	1976+681	3.358 RT
2-3	1985+013	1.483 LT
3-4	1998+142	5.020 LT
4-5	2007+778	5.020 LT
5-6	2017+413	5.020 LT
6-7	2027+049	5.020 LT
7–8	2036+685	5.020 LT
8-9	2046+321	5.020 LT
9-10	2055+957	5.020 LT
10-11	2065+592	5.020 LT
11-12	2075+228	5.020 LT
12-13	2088+357	1.483 LT
13–14	2096+689	3.358 RT

OCSP™ are registered trademarks of PND Engineers, Inc. The OPEN CELL system is patented.
PATENT – US 6,715,964 B2
PATENT – US 7,018,141 B2

NOTE: LOCATIONS DENOTE THE CENTRE OF EACH WYE.

ISSUED FOR CONSTRUCTION



OPEN CELL™, OPEN CELL SHEET PILE™ and

PATENT - US 7,488,140 B2

PATENT PENDING - CANADA CA2.714.679





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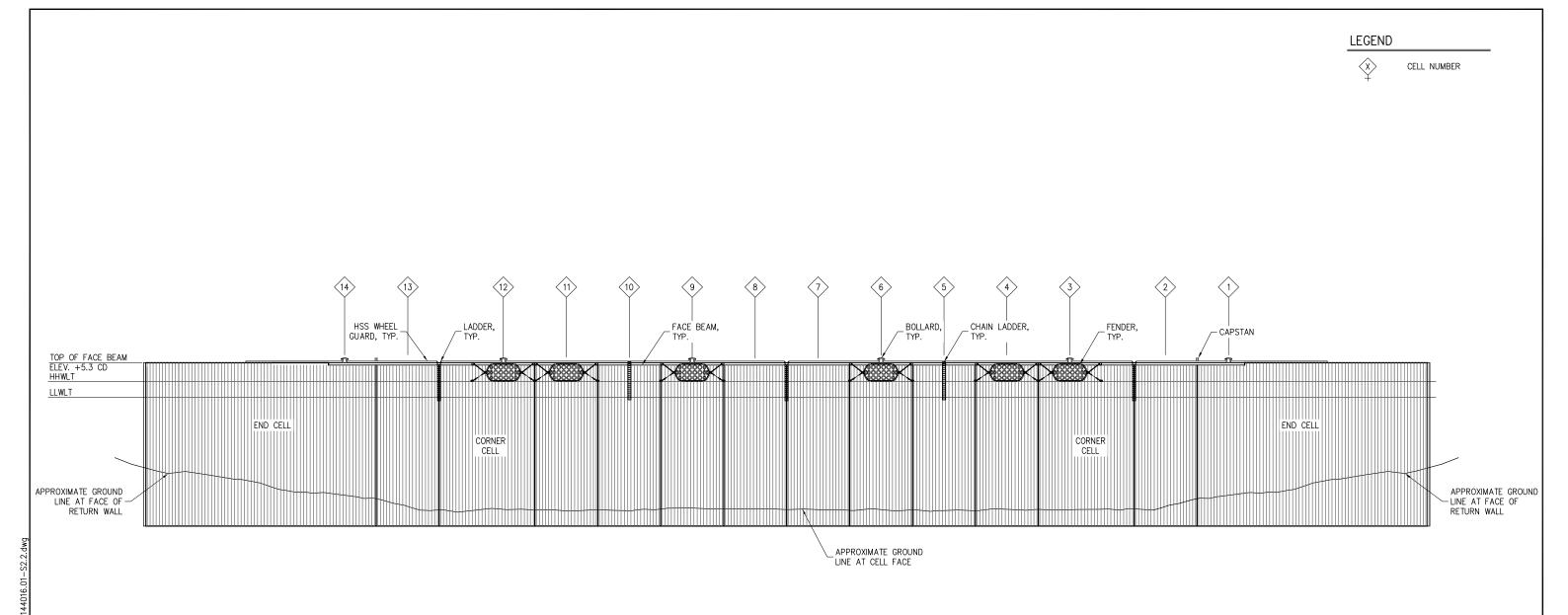
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	REV	DATE	DESCRIPTION	Τı
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			PND ENGINEERS CANADA, INC. AND IS SUBMITTED WITH THE	ı
			AT IT IS NOT TO BE REPRODUCED, COPIED, OR USED IN	╙
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	ACCE	DIAMOE IC	CONCIDUED AC ACREMENT TO THESE PROVISIONS	-

REVISIONS

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ILE:	OCSP [™] - SHEETPILE PLAN
	OCSP - SHEETPILE PLAN

		_			
Т	DESIGNED BY:	Ж	PROJECT NO:	144016.0	SHEET NO:
	DRAWN BY: DF	н	DATE:	MAY 2014	C2 1
	CHECKED BY:	В	SCALE:	NOTED	32.1



FOLD-OUT ELEVATION

LOOKING SOUTH

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The OPEN CELL system is patented.
PATENT – US 6,715,964 B2
PATENT – US 7,018,141 B2
PATENT – US 7,488,140 B2
PATENT PENDING – CANADA CA2.714.679

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ENGINEERS
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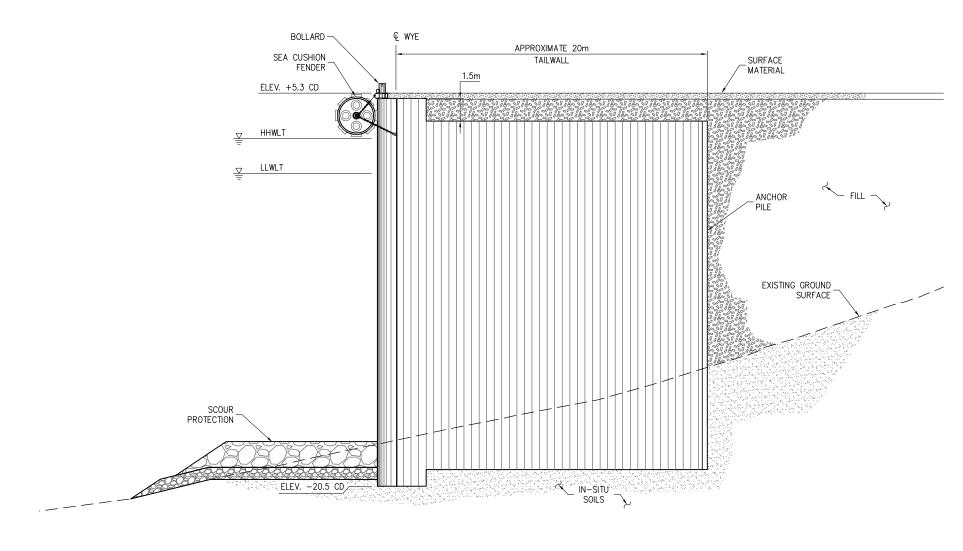
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MILNE INLET ORE DOCK

OCSP[™]- FACE ELEVATION

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	DRAWN BY: DR	DATE:	MAY 2014	62.2
	CHECKED BY:	SCALE:	NOTED	5 2.2

5/30/14 Drawings\2014\144016.01 — Milne Inlet Ora



TYPICAL SECTION

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PATENT - US 6,715,964 B2
PATENT - US 7,018,141 B2
PATENT - US 7,488,140 B2
PATENT PENDING - CANADA CA2.714.679







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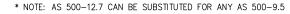
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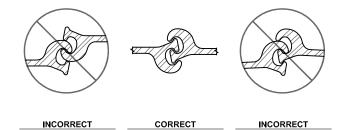
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OCSP - SECTION

ESIGNED BY:	СК	PROJECT NO:	144016.01	SHEET NO:
RAWN BY:	DRH	DATE:	MAY 2014	623
CHECKED BY:	TB	SCALE:	NOTED	32.3

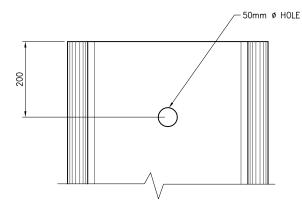




SHEET PILE INTERLOCK TYPICAL DETAIL

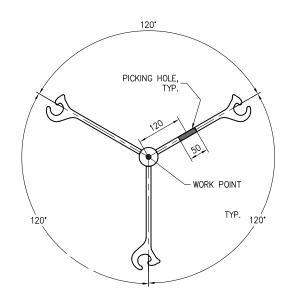
NOTE: ORIENTATION OF INTERLOCKS IS CRITICAL, VIEW SHOWN FROM TOP.

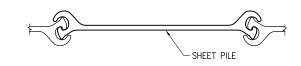
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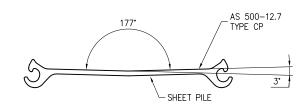
PICKING HOLE

PROVIDE AT EACH FLAT AND BENT SHEET

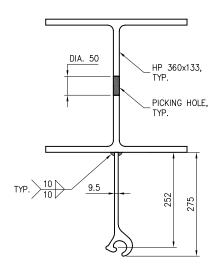




FLAT SHEET PILE



BENT SHEET PILE



ANCHOR PILE

WELDED WYE PILE

ISSUED FOR CONSTRUCTION







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TYPICAL SHEET PILE DIMENSIONS AND

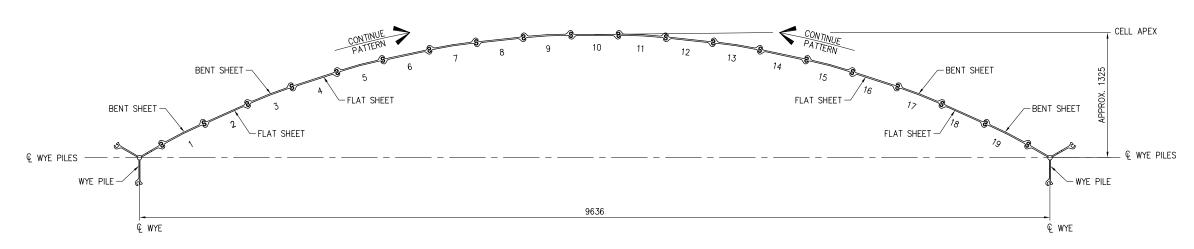
WELDED WYE PILE DETAILS BY SHEET

SUPPLIER Arcelor Mittal.

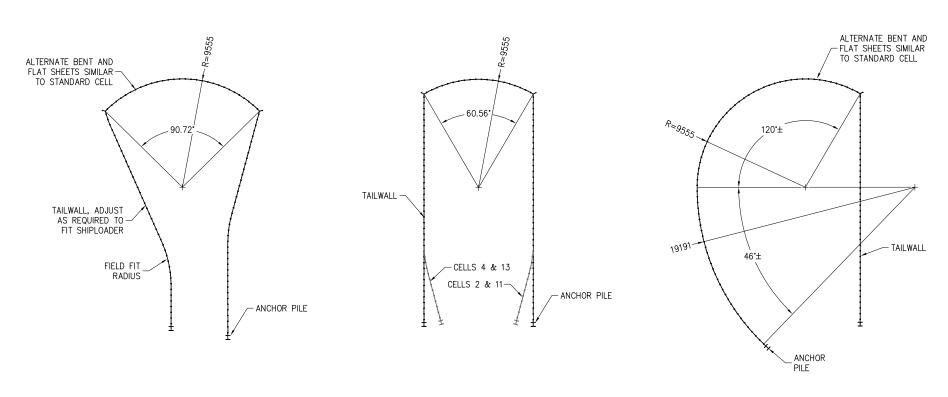
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OCSP[™]- SHEETPILE SCHEDULE AND DETAILS

NOT	DESIGNED BY:	CK	PROJECT NO:	144016.01	SHEET NO:
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	CHECKED BY:	TB	SCALE:	NOTED	32.4



STANDARD CELL SHEETPILE ORIENTATION



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PATENT — US 7,018,141 B2
PATENT — US 7,488,140 B2
PATENT PENDING — CANADA CA2.714.679

CORNER CELL 3 & 12
(CORNER CELL 3 SHOWN, CORNER CELL 12 SIMILAR)

STANDARD CELL (CELLS 2, 4–11, 13) (CELL 1 & 14)

TITLE:

P N D

ENGINEERS
CANADA INC.





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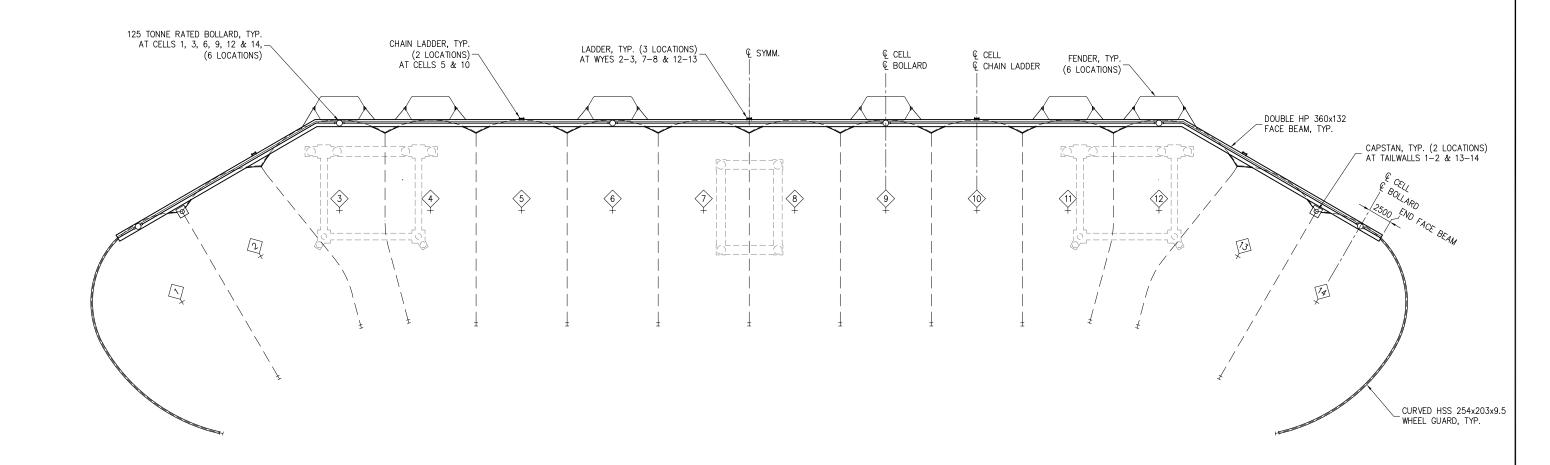
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OCSP^N- SHEETPILE DETAILS

 DESIGNED BY:
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 PROJECT NO:
 144016.01
 SHEET NO:

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 MAY 2014
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PATENT - US 7,018,141 B2

PATENT - US 7,488,140 B2

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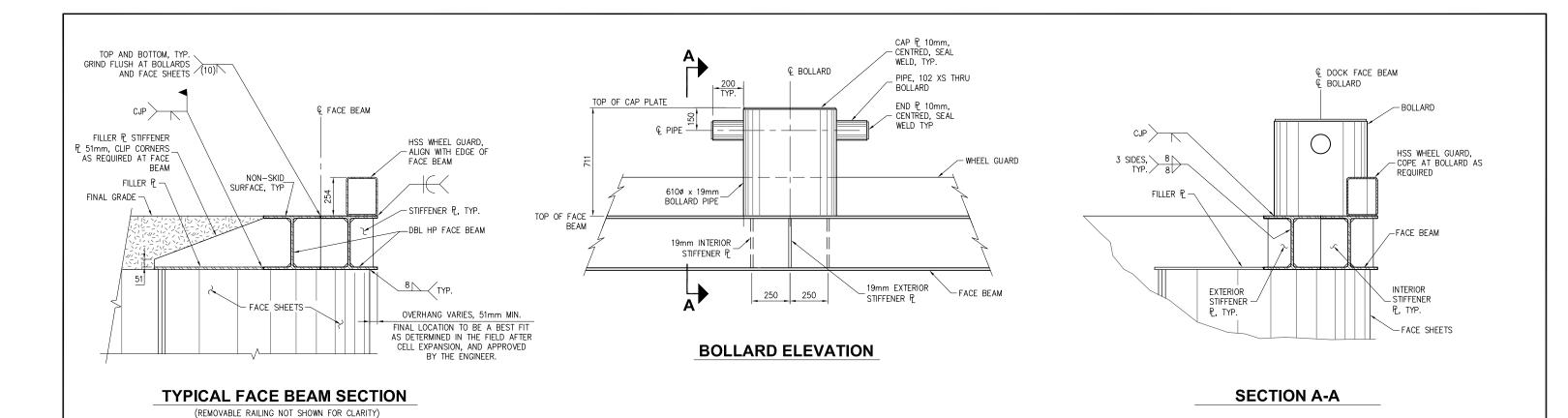
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TITLE:	
OCSP [™] - FACE BEA	M PLAN

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	DRAWN BY:	DRH	DATE:	MAY 2014	626
	CHECKED BY:	TB	SCALE:	NOTED	32.0



/CJP 3 SIDES, 300 FIELD INSTALL 600mm SPLICE WHEEL GUARD WHEEL GUARD -FACE BEAM SPLICE, TYP. — € FACE BEAM CJP, TOP, BOTTOM AND WEB, TYP. /FILLER P TO SHEET PILE √200mm WELD PER SHEET FACE BEAM 16mm FILLER P, PROVIDE OVERSIZED MIN. 300mm AT SPLICE FACE SHEETS, FACE SHEETS, BELOW EACH SHEET PILE FACE, 2/2 FILLER PLATE DIMENSIONS WILL VARY BETWEEN CELLS. © SPLICE MIN. 1000 FROM WYES, BOLLARDS TAILWALL & WYE PILE STIFFENER & CENTRED

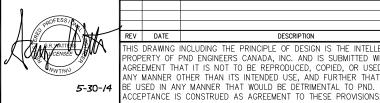
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FILLER PLATE PLAN

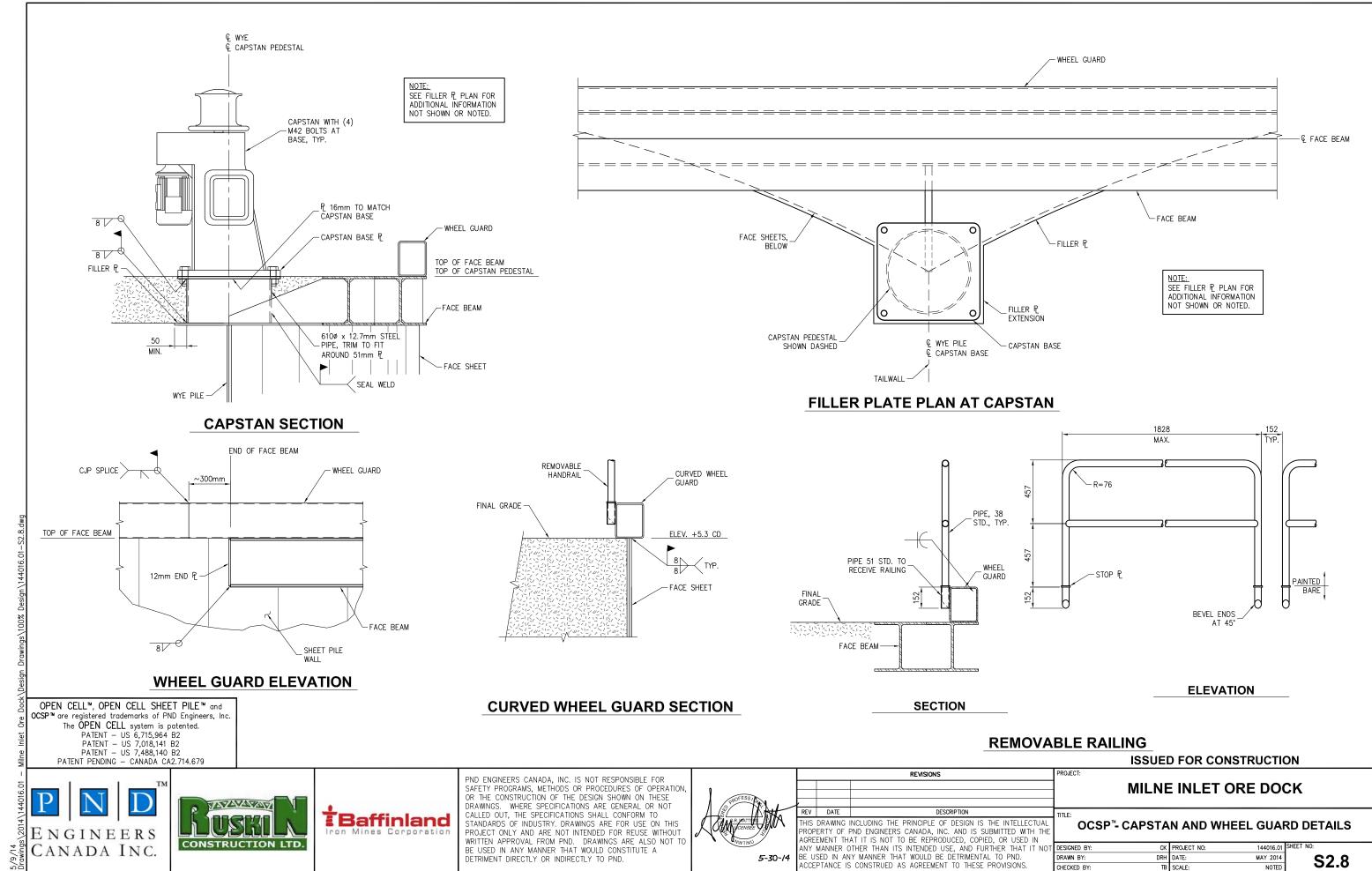
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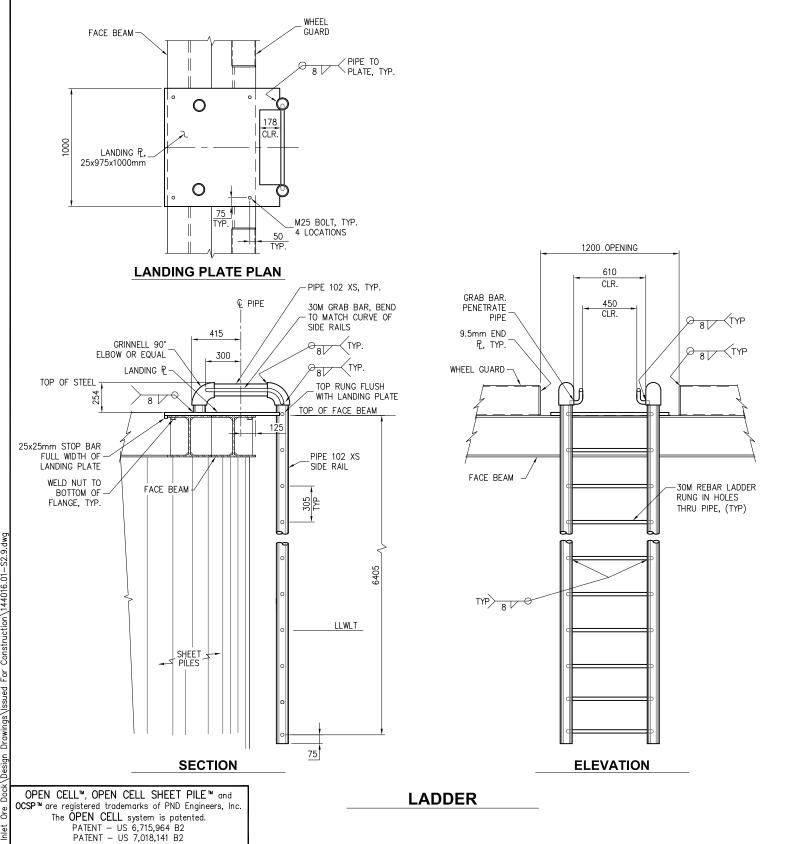
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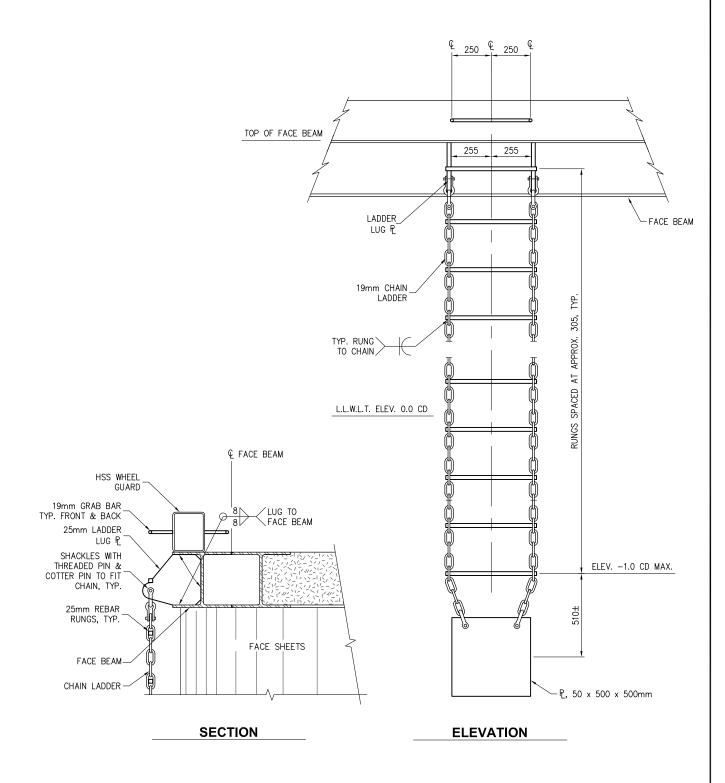
MILNE INLET ORE DOCK

OCSP[™]- FACE BEAM AND BOLLARD DETAILS

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	DRAWN BY:	DRH	DATE:	MAY 2014	927
	CHECKED BY:	TB	SCALE:	NOTED	32.1







CHAIN LADDER

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PATENT - US 7,488,140 B2

PATENT PENDING - CANADA CA2.714.679





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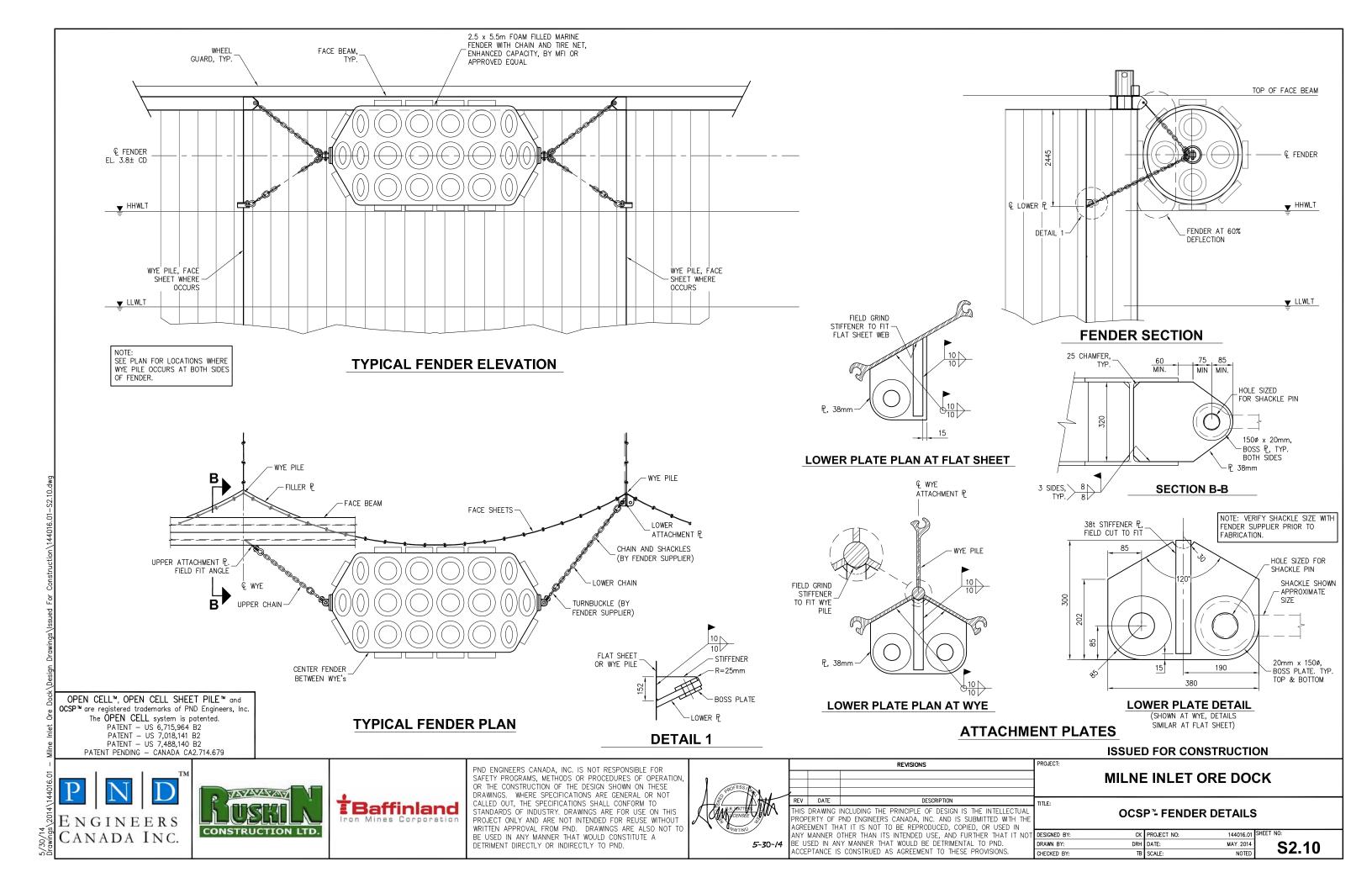
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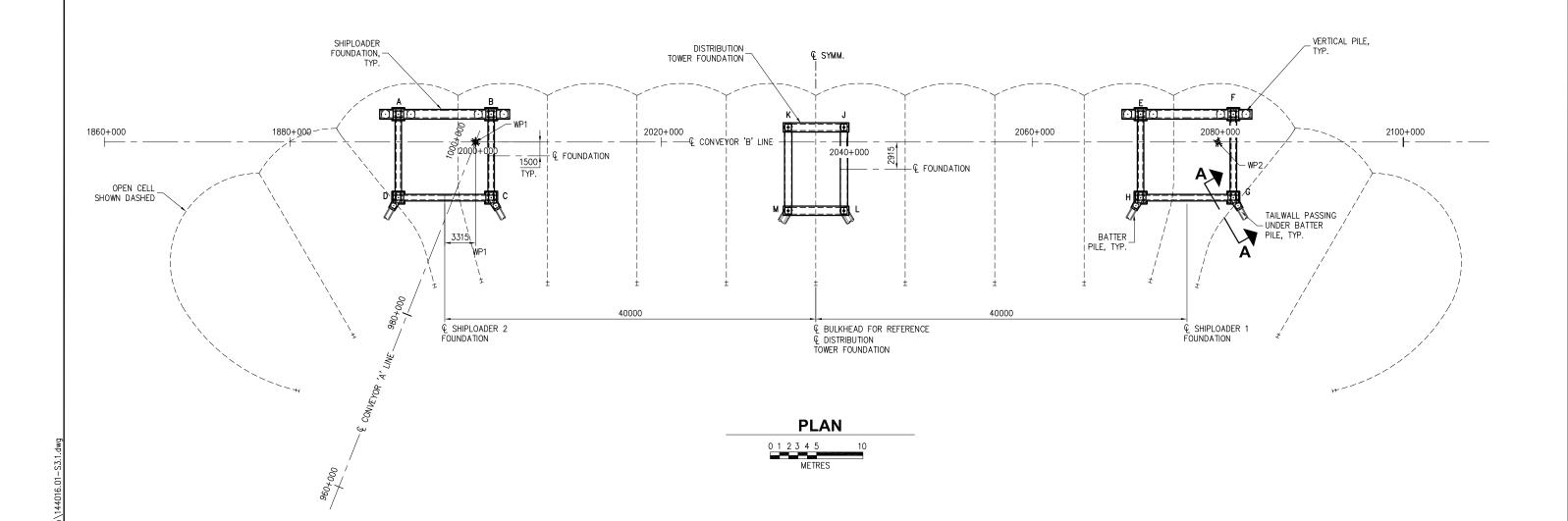
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OCSP[™]- LADDER DETAILS

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PATENT - US 7,018,141 B2

PATENT - US 7,488,140 B2

PATENT PENDING - CANADA CA2.714.679







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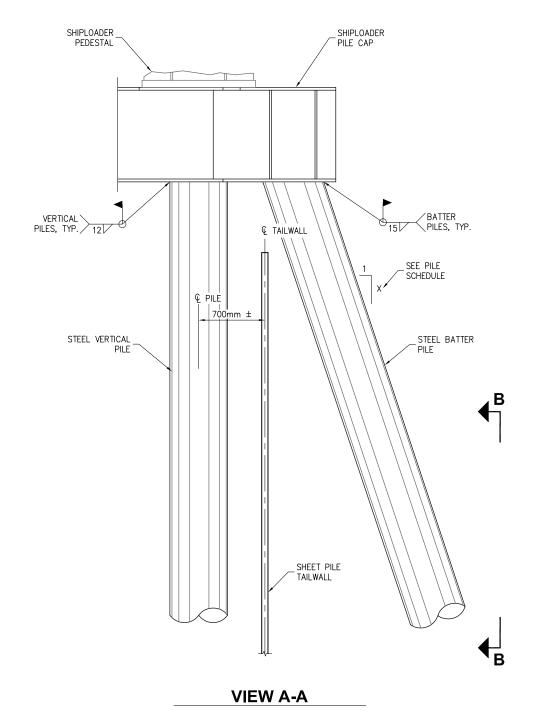
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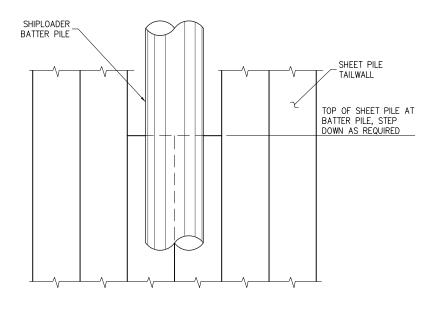
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TITLE: **SHIPLOADER FOUNDATIONS - LAYOUT**

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	DRAWN BY:	DRH	DATE:	MAY 2014	C 2 1
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VIEW B-B







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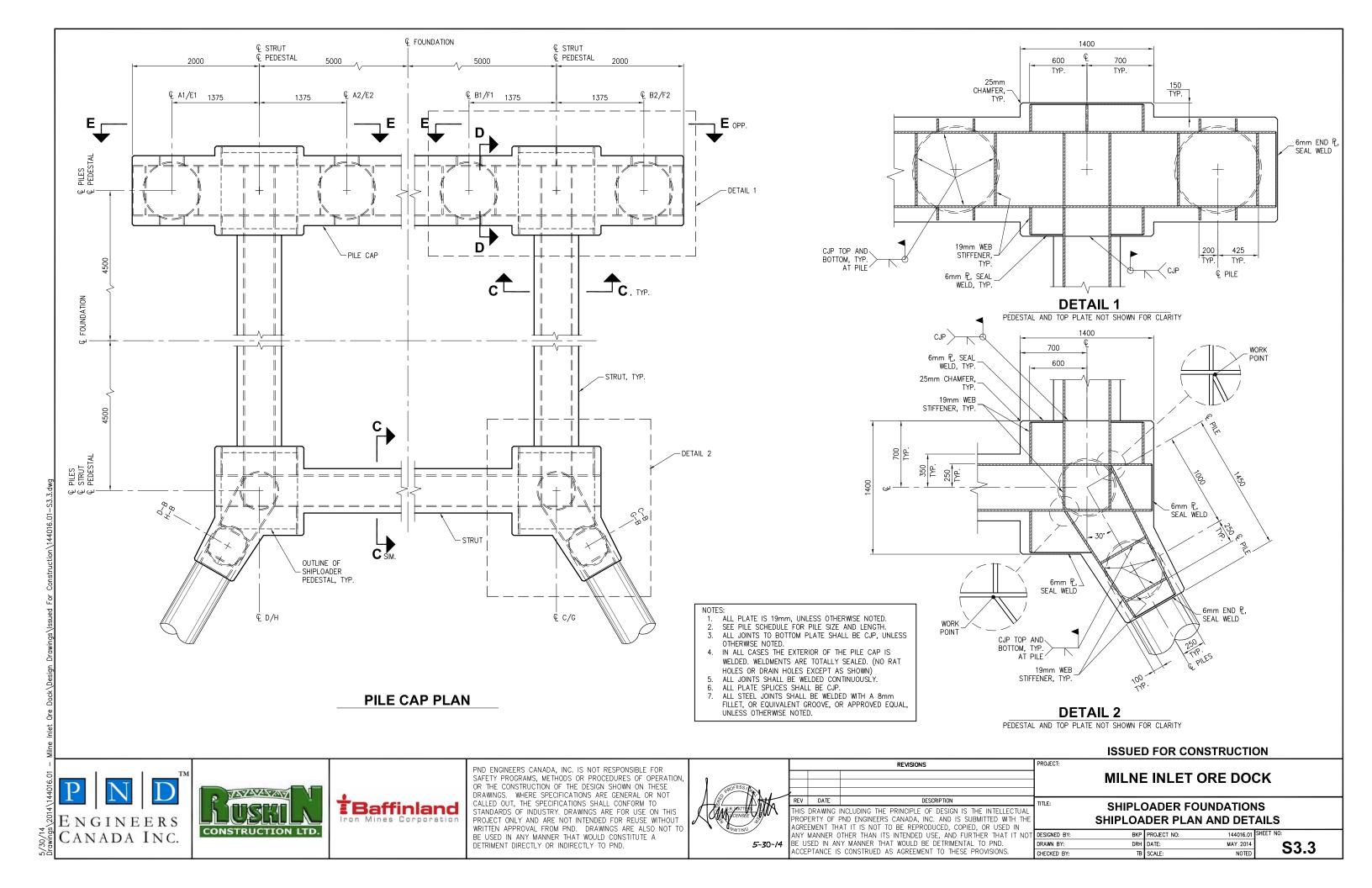
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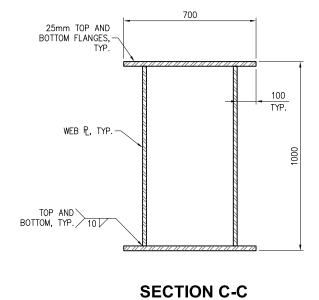
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SHIPLOADER FOUNDATIONS SHIPLOADER SECTIONS

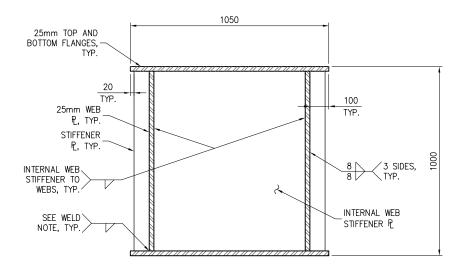
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NOTES:

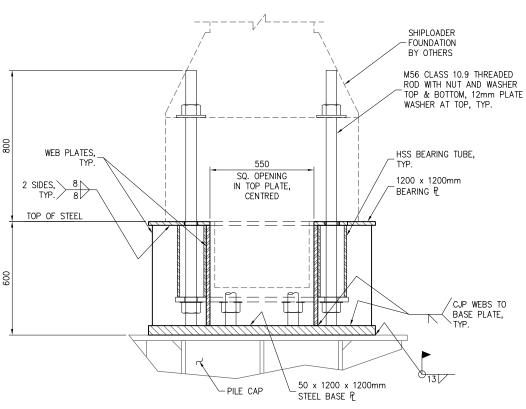
- ALL PLATE IS 19mm, UNLESS OTHERWISE NOTED. SEE PILE SCHEDULE FOR PILE SIZE AND LENGTH.
- ALL JOINTS TO BOTTOM PLATE SHALL BE CJP, UNLESS OTHERWISE NOTED.
- IN ALL CASES THE EXTERIOR OF THE PILE CAP IS WELDED. WELDMENTS ARE TOTALLY SEALED. (NO RAT HOLES OR DRAIN HOLES EXCEPT AS SHOWN)
- ALL JOINTS SHALL BE WELDED CONTINUOUSLY.
- ALL PLATE SPLICES SHALL BE CJP.
- ALL STEEL JOINTS SHALL BE WELDED WITH A 8mm FILLET, OR EQUIVALENT GROOVE, OR APPROVED EQUAL, UNLESS OTHERWISE NOTED.



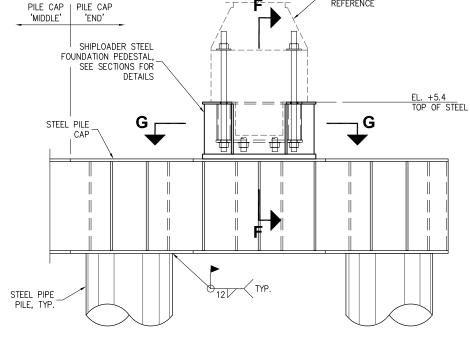
SECTION D-D

(PILE CAP)
PILE CAP WELD NOTE: (ENDS AND MIDDLE AS IN VIEW E-E) PROVIDE 4m OF CJP WELD AT EACH END OF BEAM, TOP & BOTTOM FLANGE TO WEB.

2) MIDDLE: PROVIDE 6m OF 10mm FILLET WELD BETWEEN END WELDS, TOP & BOTTOM FLANGE TO WEB, TYP.



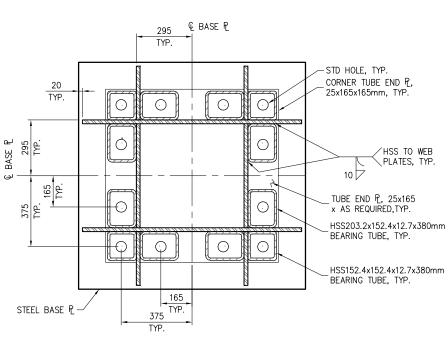
SECTION F-F



VIEW E-E

SHIPLOADER FOUNDATION

SHOWN DASHED FOR



SECTION G-G

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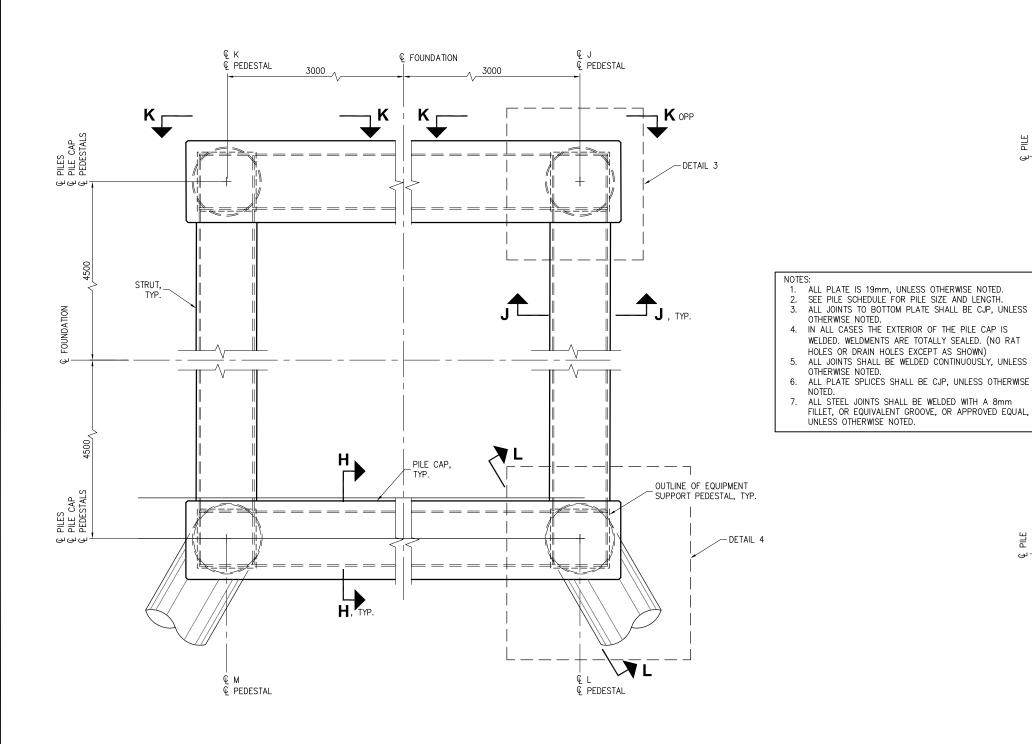
REVISIONS

MILNE INLET ORE DOCK

SHIPLOADER FOUNDATIONS SHIPLOADER SECTIONS

S3.4

DESIGNED BY:	BKP	PROJECT NO:	144016.01	SHEET N
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CHECKED BY:	TB	SCALE:	NOTED	



© PILE

540

TYP.

365

TYP.

CJP TOP AND
BOTTOM, TYP.

AT 4 PILES

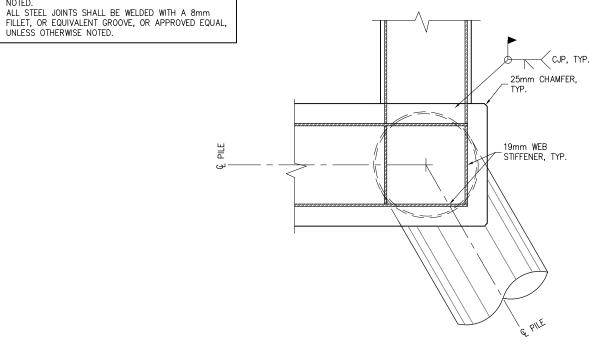
19mm WEB
STIFFENER, TYP.

25mm CHAMFER,
TYP.

CJP, TYP.

DETAIL 3

NOTE: PILE 'J' SHOWN, PILE 'K' SIMILAR.
TOP PLATE NOT SHOWN FOR CLARITY



DISTRIBUTION FOUNDATION PILE CAP PLAN

DETAIL 4

NOTE: PILE 'L' SHOWN, PILE 'M' SIMILAR.
TOP PLATE NOT SHOWN FOR CLARITY

ISSUED FOR CONSTRUCTION







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$\overline{}$	REV	DATE	DESCRIPTION	ľ
\	THIS	DRAWING I	NCLUDING THE PRINCIPLE OF DESIGN IS THE INTELLECTUAL	l
			PND ENGINEERS CANADA, INC. AND IS SUBMITTED WITH THE	l
			AT IT IS NOT TO BE REPRODUCED, COPIED, OR USED IN	L
			THER THAN ITS INTENDED USE, AND FURTHER THAT IT NOT	L
14	BE U	SED IN AN	Y MANNER THAT WOULD BE DETRIMENTAL TO PND.	l
	ACCE	PTANCE IS	CONSTRUED AS AGREEMENT TO THESE PROVISIONS.	r

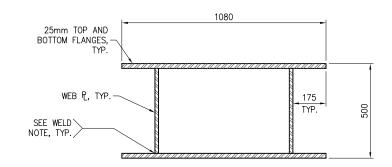
REVISIONS

MILNE INLET ORE DOCK

SHIPLOADER FOUNDATIONS
DISTRIBUTION TOWER PLANS

DESIGNED BY:	BKP	PROJECT NO:	144016.01	SHEET NO:
DRAWN BY:	DRH	DATE:	MAY 2014	63
CHECKED BY:	TB	SCALE:	NOTED	J 33

5/30/14 Drawings\2014\144016.01 — Milne Inlet Ore Dock\Design



SECTION H-H

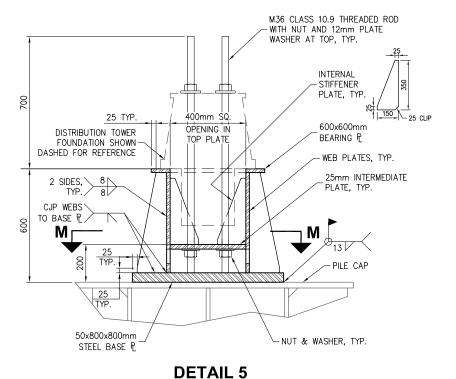
(PILE CAP)

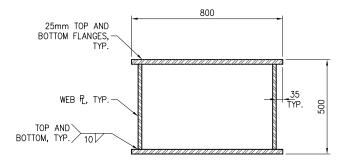
PILE CAP WELD NOTE:

1) ENDS: PROVIDE 1.5m OF CJP WELD AT EACH END OF

BEAM, TOP & BOTTOM FLANGE TO WEB.

2) MIDDLE: PROVIDE 6m OF 10mm FILLET WELD BETWEEN END WELDS, TOP & BOTTOM FLANGE TO WEB, TYP.

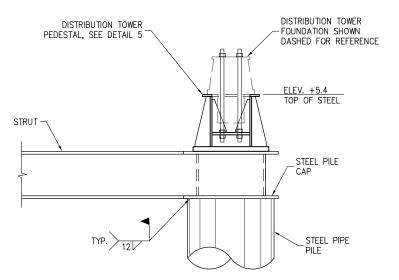




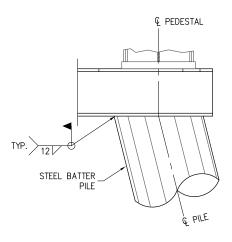
SECTION J-J

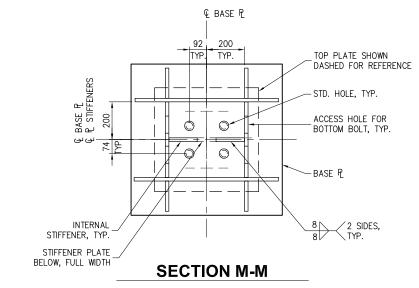
(STRUT)

- ALL PLATE IS 19mm, UNLESS OTHERWISE NOTED.
 SEE PILE SCHEDULE FOR PILE SIZE AND LENGTH.
- ALL JOINTS TO BOTTOM PLATE SHALL BE CJP, UNLESS OTHERWISE NOTED.
- 4. IN ALL CASES THE EXTERIOR OF THE PILE CAP IS
 WELDED. WELDMENTS ARE TOTALLY SEALED. (NO RAT HOLES OR DRAIN HOLES EXCEPT AS SHOWN)
- ALL JOINTS SHALL BE WELDED CONTINUOUSLY, UNLESS OTHERWISE NOTED.
- ALL PLATE SPLICES SHALL BE CJP, UNLESS OTHERWISE
- ALL STEEL JOINTS SHALL BE WELDED WITH A 8mm FILLET, OR EQUIVALENT GROOVE, OR APPROVED EQUAL, UNLESS OTHERWISE NOTED.



VIEW K-K





ISSUED FOR CONSTRUCTION







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SECTION L-L

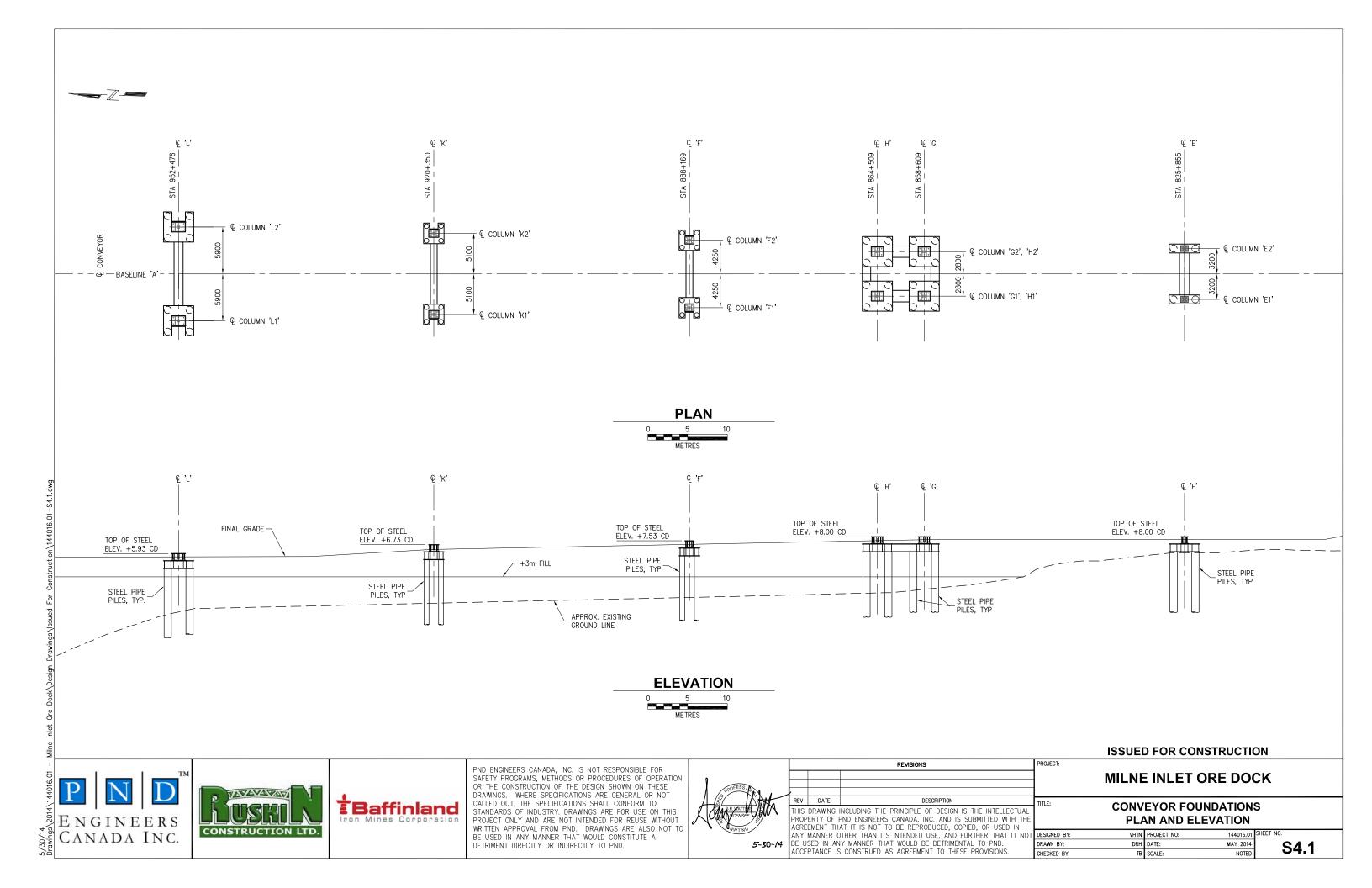
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THIS	DRAWING I	NCLUDING THE PRINCIPLE OF DESIGN IS THE INTELLECTUAL	
PROP	ERTY OF F	PND ENGINEERS CANADA, INC. AND IS SUBMITTED WITH THE	
AGRE	EMENT TH	AT IT IS NOT TO BE REPRODUCED, COPIED, OR USED IN	
ANY	MANNER C	THER THAN ITS INTENDED USE, AND FURTHER THAT IT NOT	DESIG
		Y MANNER THAT WOULD BE DETRIMENTAL TO PND.	DRAW
ACCE	PTANCE IS	CONSTRUED AS AGREEMENT TO THESE PROVISIONS.	CHEC

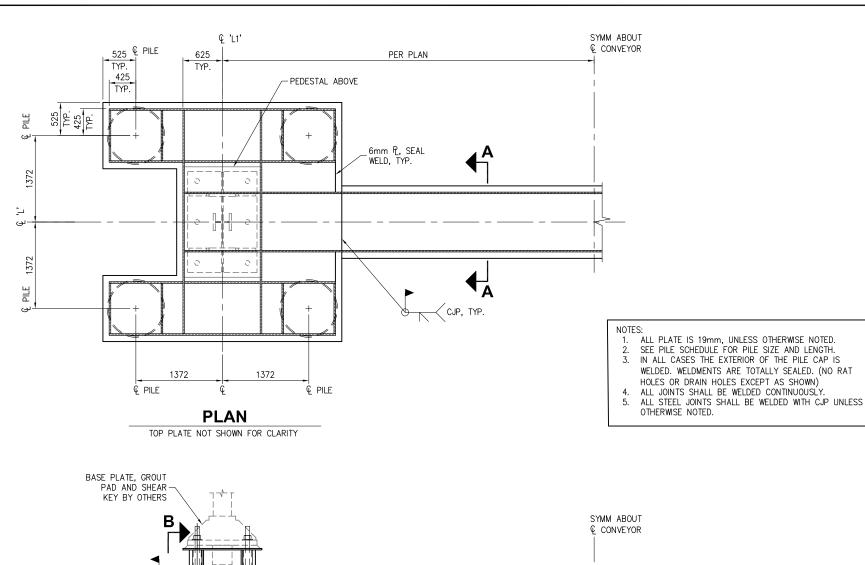
REVISIONS

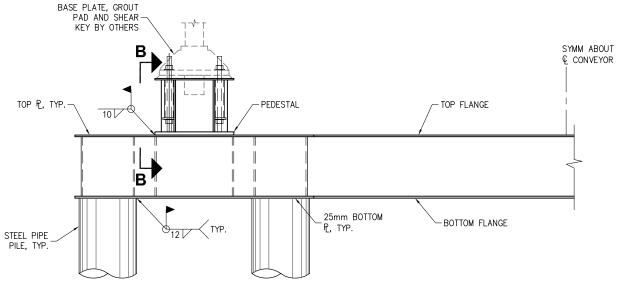
MILNE INLET ORE DOCK

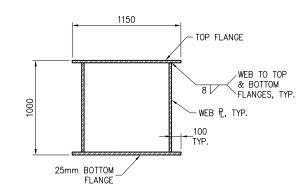
SHIPLOADER FOUNDATIONS **DISTRIBUTION TOWER SECTIONS**

NOT	DESIGNED BY:	BKP	PROJECT NO:	144016.01	SHEET NO:
	DRAWN BY:	DRH	DATE:	MAY 2014	63 6
	CHECKED BY:	TB	SCALE:	NOTED	3

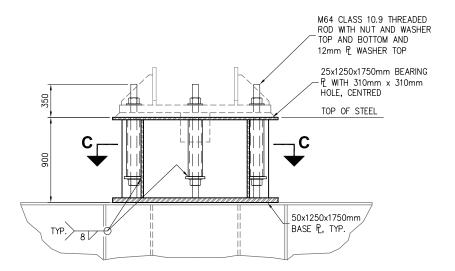




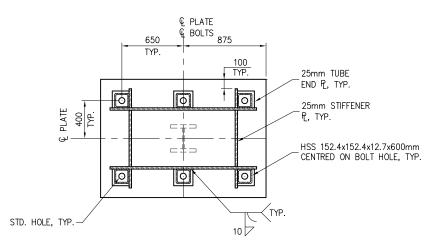




SECTION A-A



SECTION B-B



SECTION C-C

ISSUED FOR CONSTRUCTION





ELEVATION



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# Y	9/10	PROP	ERTY OF F	PND ENGINEERS CANADA, INC. AND IS SUBMITTED WITH THE	
ú/	/	AGRE	EMENT TH.	AT IT IS NOT TO BE REPRODUCED, COPIED, OR USED IN	
		ANY	MANNER C	THER THAN ITS INTENDED USE, AND FURTHER THAT IT NOT	DESIGNE
5	-30-/4			Y MANNER THAT WOULD BE DETRIMENTAL TO PND.	DRAWN
		ACCE	PTANCE IS	CONSTRUED AS AGREEMENT TO THESE PROVISIONS.	CHECKE

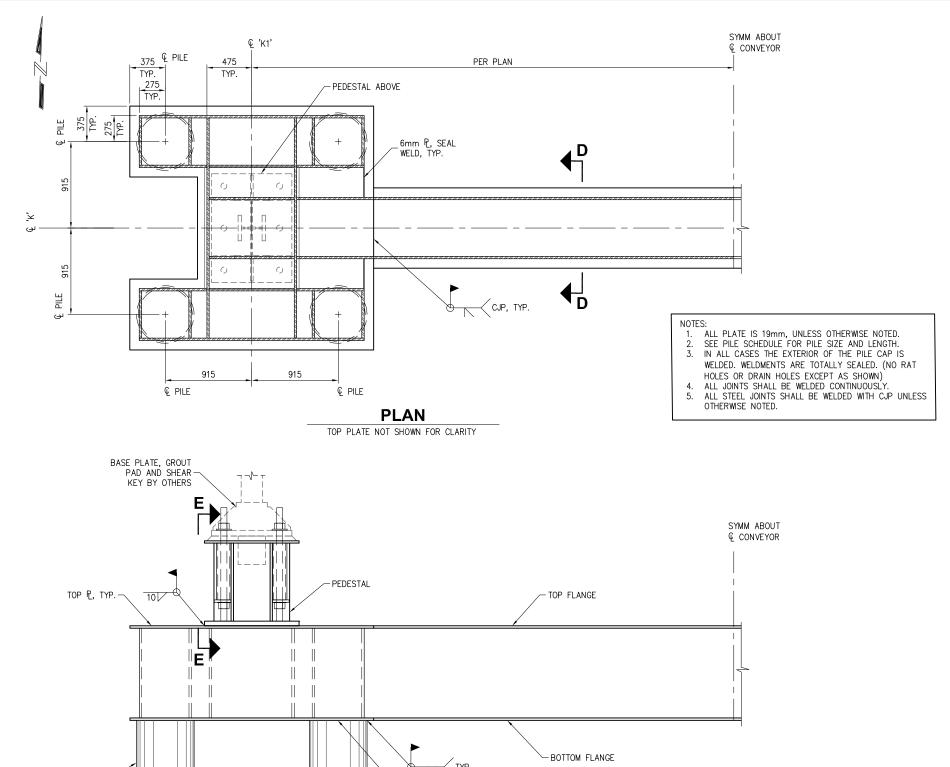
REVISIONS

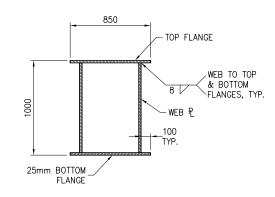
MILNE INLET ORE DOCK

CONVEYOR FOUNDATIONS FOUNDATION L DETAILS

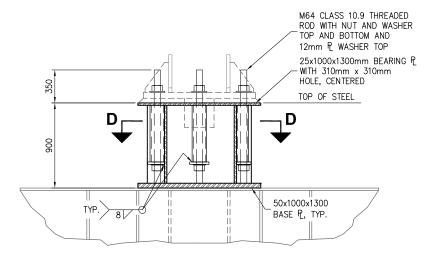
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	DRAWN BY: DR	Н	DATE:	MAY 2014	6/12
	CHECKED BY:	В	SCALE:	NOTED	34.2

-\144016.01 — Milne Inlet Ore Dock\Design Drawings\Issued For Construction\144016.01-

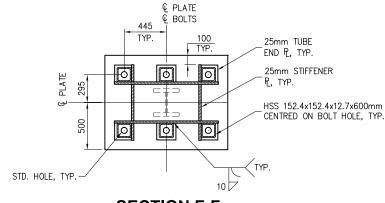




SECTION D-D



SECTION E-E



SECTION F-F

ISSUED FOR CONSTRUCTION



STEEL PIPE

PILE, TYP.





ELEVATION

25mm BOTTOM

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	THIS	DRAWING I	NCLUDING THE PRINCIPLE OF DESIGN IS THE INTELLECTUAL	
	PROP	ERTY OF F	PND ENGINEERS CANADA, INC. AND IS SUBMITTED WITH THE	
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4	BE U	SED IN AN	Y MANNER THAT WOULD BE DETRIMENTAL TO PND.	DRAWN
	ACCE	PTANCE IS	CONSTRUED AS AGREEMENT TO THESE PROVISIONS.	CHECKE

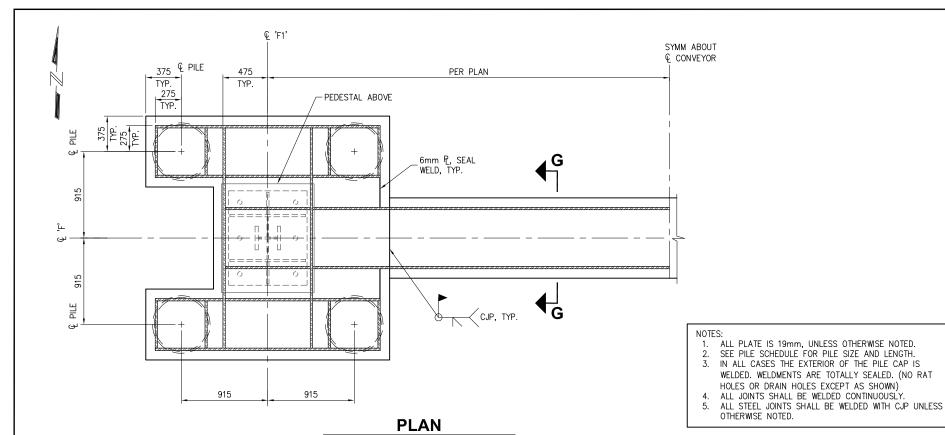
REVISIONS

MILNE INLET ORE DOCK

CONVEYOR FOUNDATIONS FOUNDATION K DETAILS

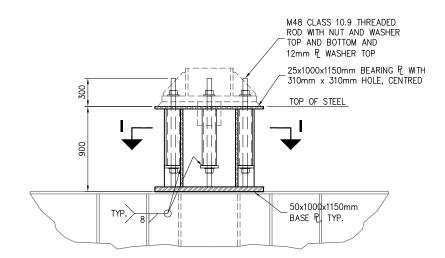
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	DRAWN BY:	DRH	DATE:	MAY 2014	6/3
	CHECKED BY:	TB	SCALE:	NOTED	34.3

Milne Inlet Ure Dock\Design Drawings\Issued For Construction\14401

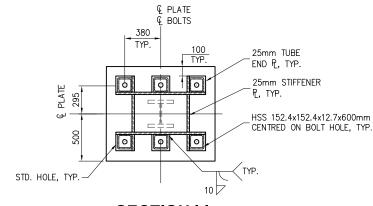


- TOP FLANGE WEB TO TOP & BOTTOM FLANGES, TYP. -WEB ₽, TYP. 25mm BOTTOM FLANGE

SECTION E-E



SECTION H-H



SECTION I-I

ISSUED FOR CONSTRUCTION







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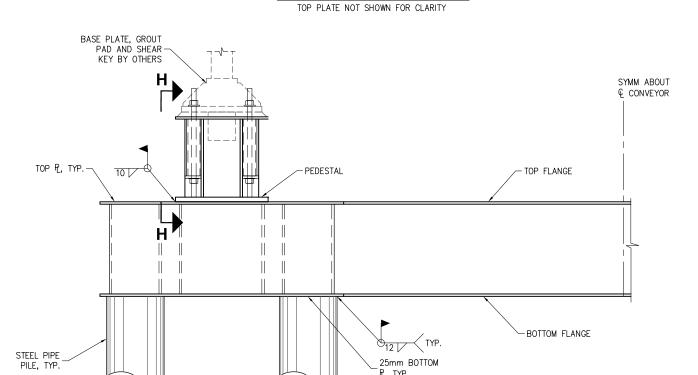
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		Y MANNER THAT WOULD BE DETRIMENTAL TO PND.	DRA
ACCE	PTANCE IS	CONSTRUED AS AGREEMENT TO THESE PROVISIONS.	CHE

REVISIONS

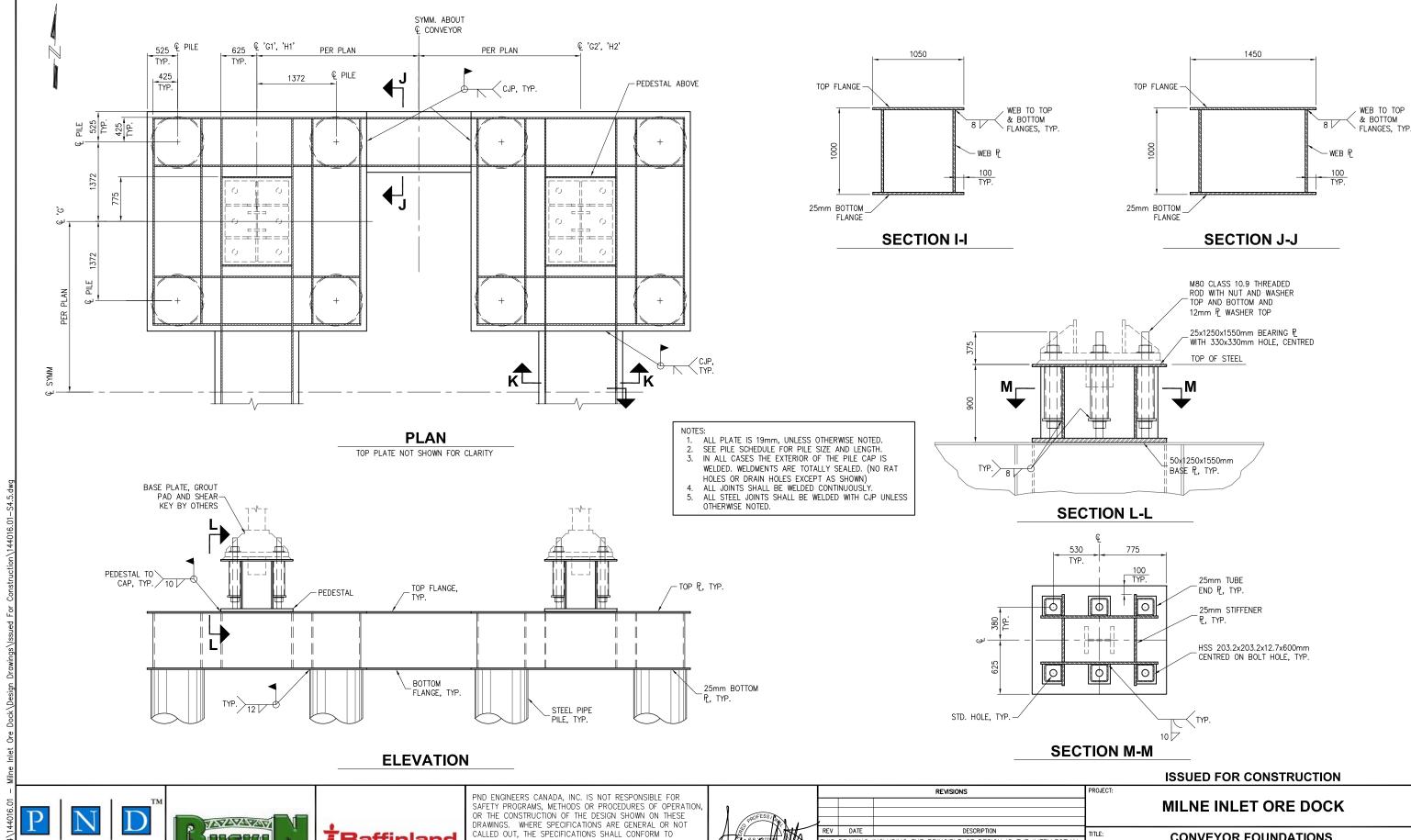
MILNE INLET ORE DOCK

CONVEYOR FOUNDATIONS FOUNDATION F DETAILS

Γ	DESIGNED BY:	VHTN	PROJECT NO:	144016.01	SHEET NO:
	DRAWN BY:	DRH	DATE:	MAY 2014	611
	CHECKED BY:	TB	SCALE:	NOTED	34.4



ELEVATION



DESCRIPTION

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ANY MANNER OTHER THAN ITS INTENDED USE, AND FURTHER THAT IT NOT

BE USED IN ANY MANNER THAT WOULD BE DETRIMENTAL TO PND.

ACCEPTANCE IS CONSTRUED AS AGREEMENT TO THESE PROVISIONS.

TITLE:

DESIGNED BY:

RAWN BY:

CONVEYOR FOUNDATIONS

FOUNDATION G-H PLAN AND ELEVATION

MAY 2014

S4.5

VHTN PROJECT NO:

DRH DATE:

TB SCALE:

REV DATE

ENGINEERS

CANADA INC.

IBaffinland

CONSTRUCTION LTD.

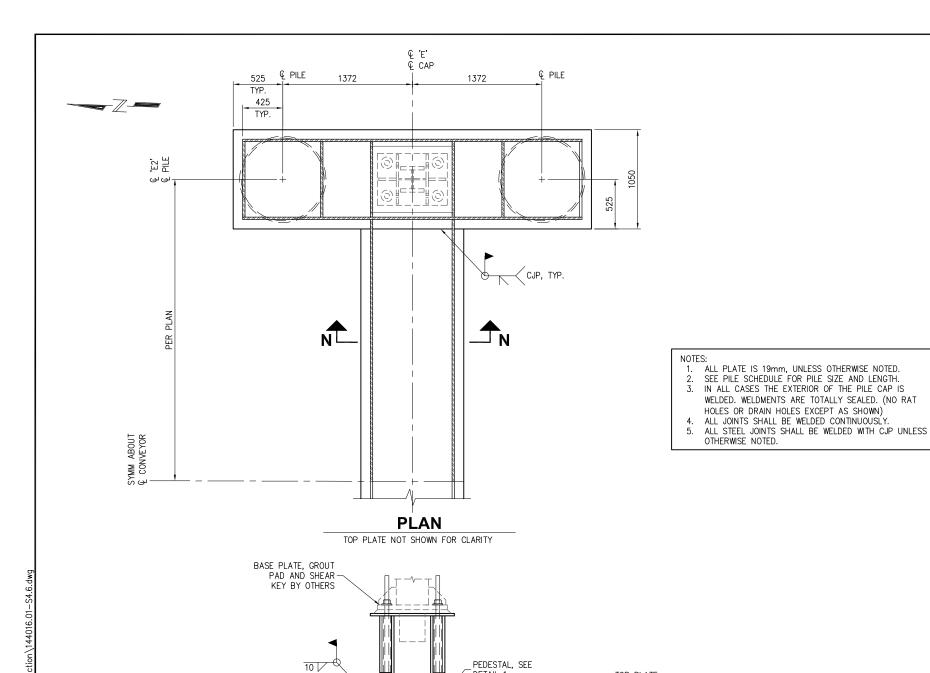
STANDARDS OF INDUSTRY. DRAWINGS ARE FOR USE ON THIS

PROJECT ONLY AND ARE NOT INTENDED FOR REUSE WITHOUT

WRITTEN APPROVAL FROM PND. DRAWINGS ARE ALSO NOT TO

BE USED IN ANY MANNER THAT WOULD CONSTITUTE A

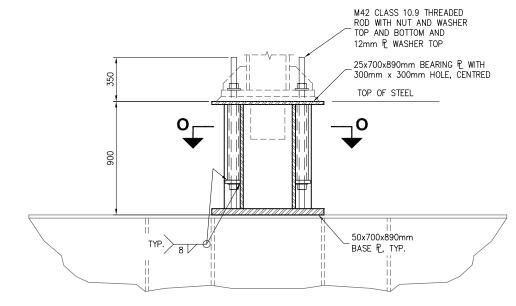
DETRIMENT DIRECTLY OR INDIRECTLY TO PND.



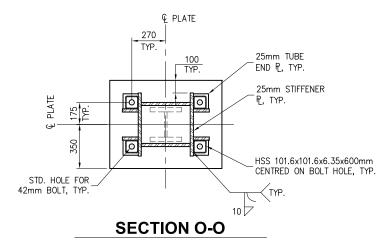
- TOP FLANGE WEB TO TOP & BOTTOM FLANGES, TYP. — WEB ₽ _100 TYP. 25mm BOTTOM FLANGE

1090

SECTION N-N



DETAIL 1



ISSUED FOR CONSTRUCTION



STEEL PIPE





ELEVATION

DETAIL 1

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TOP PLATE

25mm BOTTOM

¯₽, TYP.



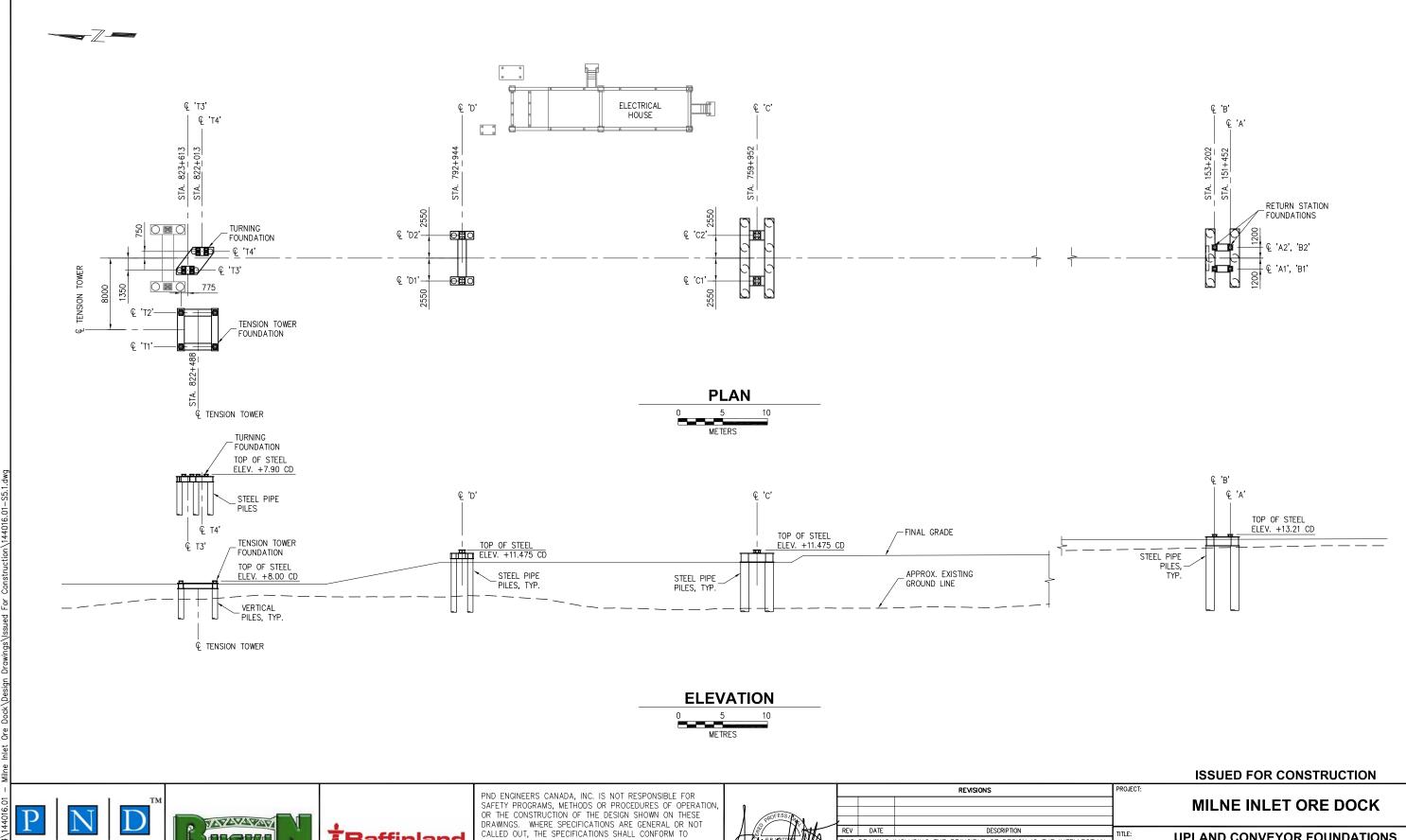
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	PROP	ERTY OF F	PND ENGINEERS CANADA, INC. AND IS SUBMITTED WITH THE	
	AGRE	EMENT TH	AT IT IS NOT TO BE REPRODUCED, COPIED, OR USED IN	
	ANY	MANNER O	THER THAN ITS INTENDED USE, AND FURTHER THAT IT NOT	DESIGNE
	BE U	SED IN AN	Y MANNER THAT WOULD BE DETRIMENTAL TO PND.	DRAWN
	ACCE	PTANCE IS	CONSTRUED AS AGREEMENT TO THESE PROVISIONS.	CHECKE

REVISIONS

MILNE INLET ORE DOCK

CONVEYOR FOUNDATIONS FOUNDATION E DETAILS

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	DRAWN BY:	DRH	DATE:	MAY 2014	919
	CHECKED BY:	TB	SCALE:	NOTED	34.0



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DETRIMENT DIRECTLY OR INDIRECTLY TO PND.

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UPLAND CONVEYOR FOUNDATIONS

PLAN AND ELEVATION

144016.01

S5.1

MAY 2014

KB PROJECT NO:

DRH DATE:

TB SCALE:

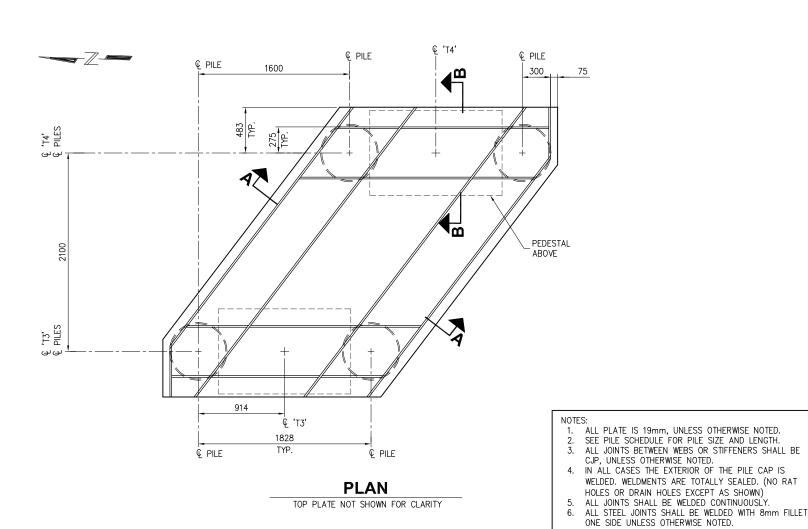
DESIGNED BY:

DRAWN BY:

ENGINEERS CANADA INC.

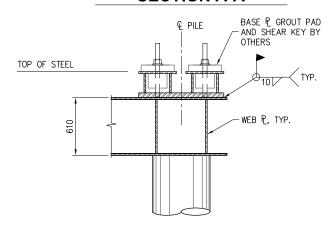
EBaffinland

CONSTRUCTION LTD.

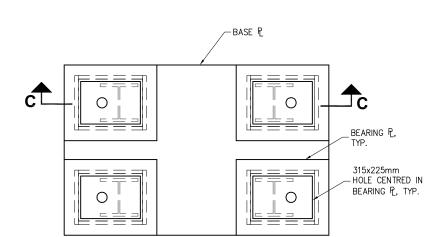


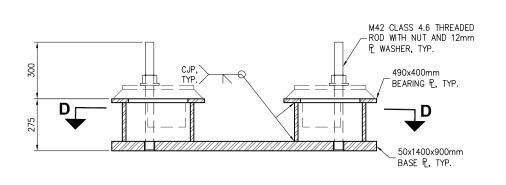
€ PILE 375 TYP. TOP PL WEB PL, TYP. воттом Р STEEL PIPE PILE, TYP.

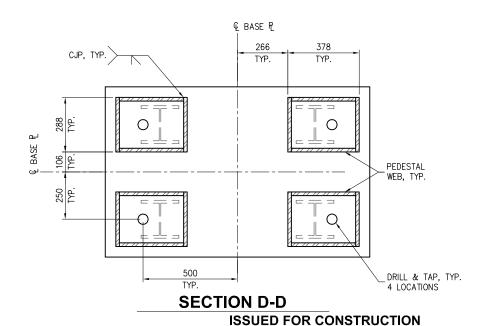
SECTION A-A



SECTION B-B







PEDESTAL DETAIL

SECTION C-C

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	ANY	MANNER O	THER THAN ITS INTENDED USE, AND FURTHER THAT IT NOT	DESI
	BE U	SED IN AN	Y MANNER THAT WOULD BE DETRIMENTAL TO PND.	DRAV
	ACCF	PTANCE IS	CONSTRUED AS AGREEMENT TO THESE PROVISIONS.	CHEC

REVISIONS

MILNE INLET ORE DOCK

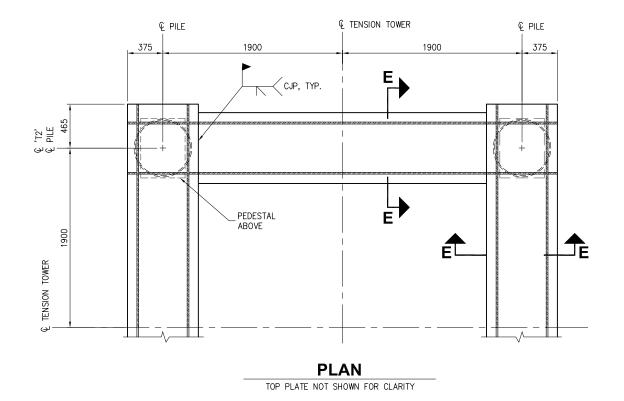
UPLAND CONVEYOR FOUNDATIONS TURNING FOUNDATION DETAILS

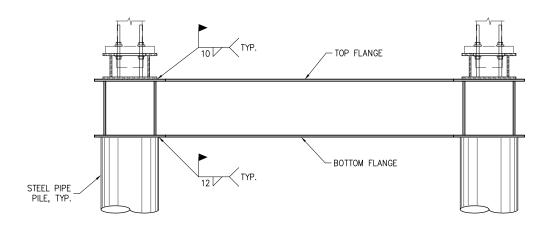
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	DRAWN BY:	DRH	DATE:	MAY 2014	95.2
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ENGINEERS CANADA INC.

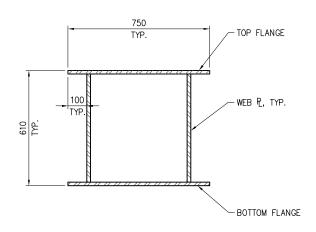






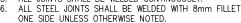


ELEVATION

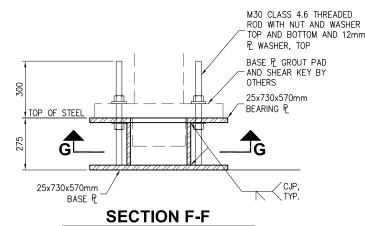


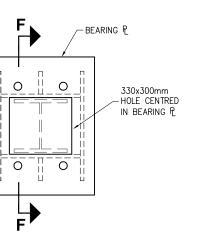
SECTION E-E

- ALL PLATE IS 19mm, UNLESS OTHERWISE NOTED.
 SEE PILE SCHEDULE FOR PILE SIZE AND LENGTH.
 ALL JOINTS BETWEEN WEBS OR STIFFENERS SHALL BE
- CJP, UNLESS OTHERWISE NOTED. 4. IN ALL CASES THE EXTERIOR OF THE PILE CAP IS
- HOLES OR DRAIN HOLES EXCEPT AS SHOWN) ALL JOINTS SHALL BE WELDED CONTINUOUSLY.

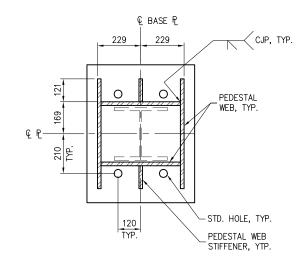


WELDED. WELDMENTS ARE TOTALLY SEALED. (NO RAT





PEDESTAL DETAIL



SECTION G-G

ISSUED FOR CONSTRUCTION







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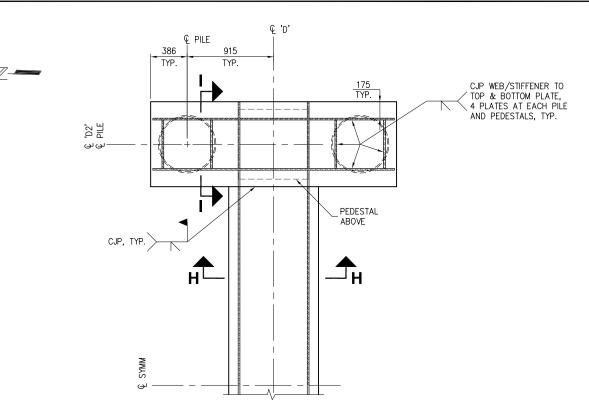
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			PND ENGINEERS CANADA, INC. AND IS SUBMITTED WITH TH	<u> </u>
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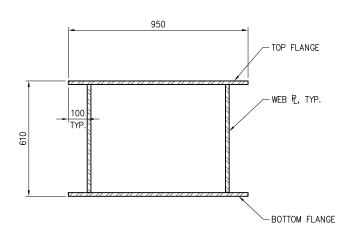
UPLAND CONVEYOR FOUNDATIONS TENSIONER FOUNDATION DETAILS

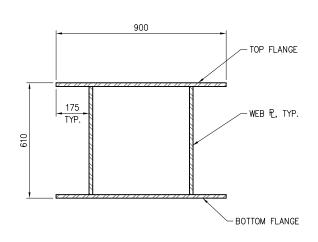
DESIGNED BY:	CK	PROJECT NO:	144016.01	SHEET NO:
DRAWN BY:	DRH	DATE:	MAY 2014	623
CHECKED BY:	TB	SCALE:	NOTED	33.3
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PLAN

TOP PLATE NOT SHOWN FOR CLARITY

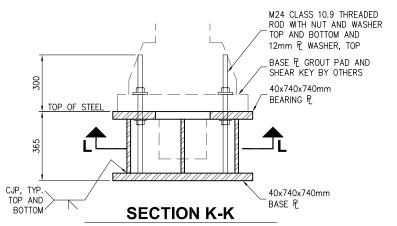


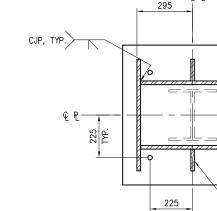


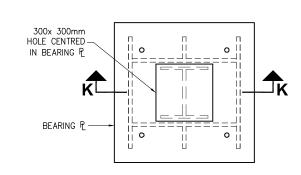
SECTION H-H

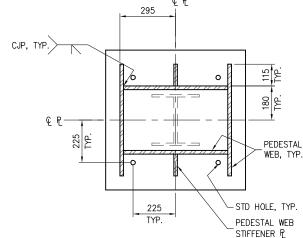
- ALL PLATE IS 19mm, UNLESS OTHERWISE NOTED.
 SEE PILE SCHEDULE FOR PILE SIZE AND LENGTH.
 ALL JOINTS BETWEEN WEBS OR STIFFENERS SHALL BE
- CJP, UNLESS OTHERWISE NOTED. 4. IN ALL CASES THE EXTERIOR OF THE PILE CAP IS WELDED. WELDMENTS ARE TOTALLY SEALED. (NO RAT
- HOLES OR DRAIN HOLES EXCEPT AS SHOWN)
- ALL JOINTS SHALL BE WELDED CONTINUOUSLY.
- ALL STEEL JOINTS SHALL BE WELDED WITH 8mm FILLET ONE SIDE UNLESS OTHERWISE NOTED.

SECTION I-I









ELEVATION

✓ TYP.

PEDESTAL DETAIL

SECTION L-L

ISSUED FOR CONSTRUCTION





VERTICAL STEEL PIPE PILE, TYP.



PND ENGINEERS CANADA, INC. IS NOT RESPONSIBLE FOR PND ENGINEERS CANADA, INC. IS NOT RESPONSIBLE FOR
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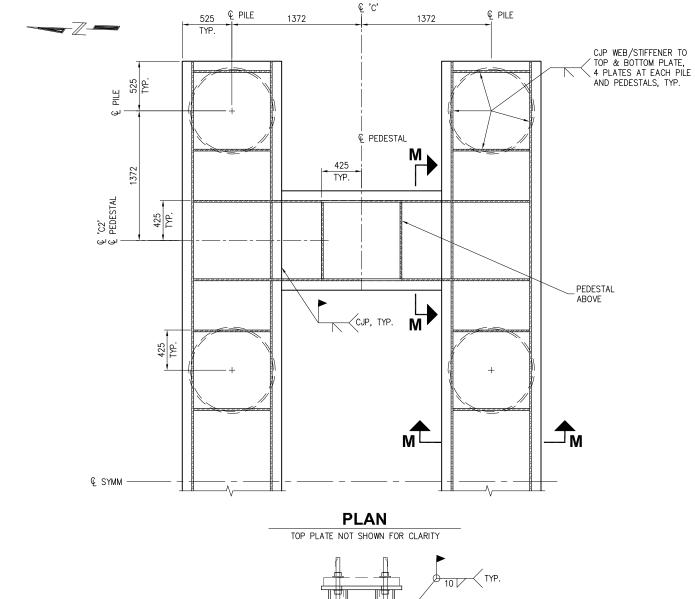
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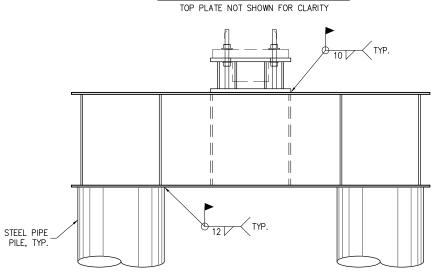
REVISIONS

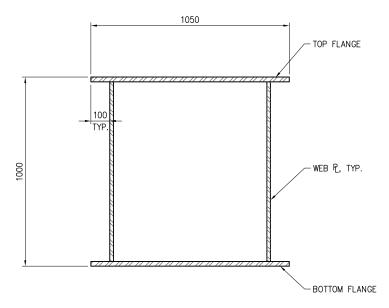
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UPLAND CONVEYOR FOUNDATIONS FOUNDATION D DETAILS

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	DRAWN BY:	DRH	DATE:	MAY 2014	Q5 /
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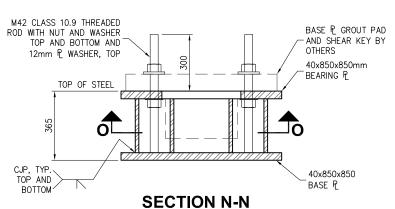


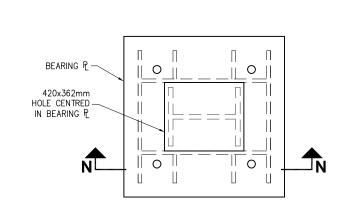


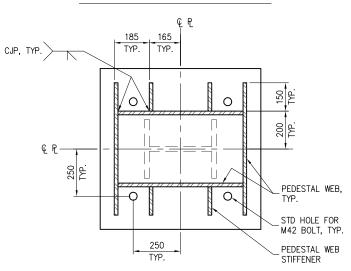
SECTION M-M

NOTES:

- ALL PLATE IS 19mm, UNLESS OTHERWISE NOTED.
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PEDESTAL DETAIL

SECTION 0-0

ISSUED FOR CONSTRUCTION







ELEVATION

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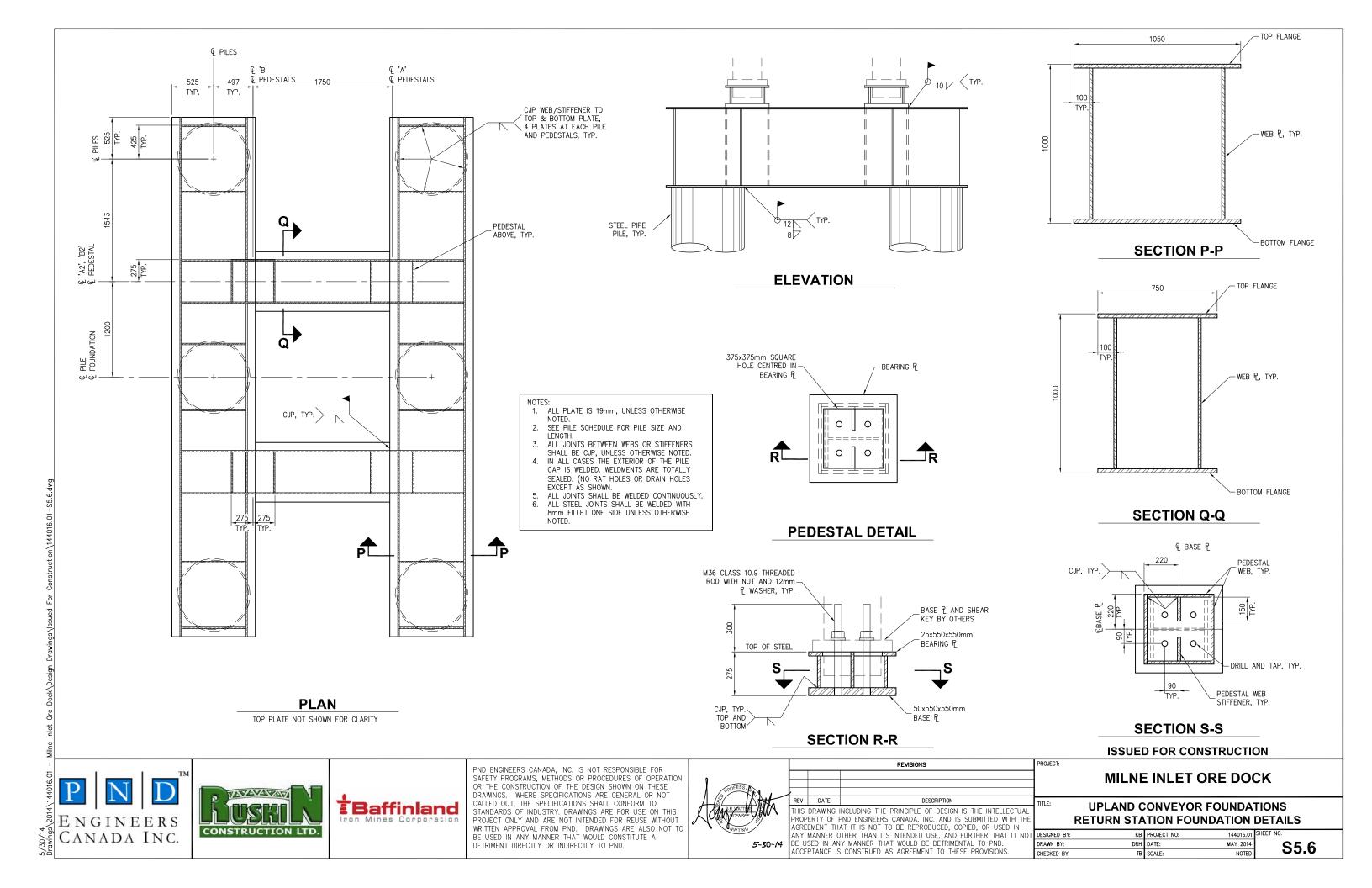


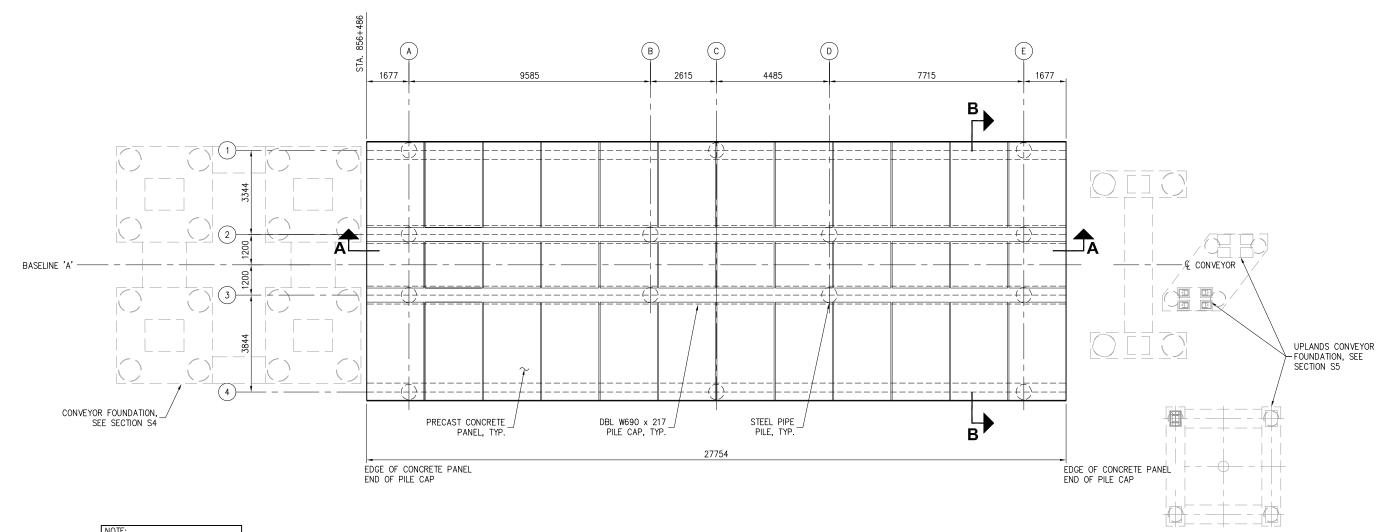
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DESIGNED BY:	KB	PROJECT NO:	144016.01	SHEET NO:
DRAWN BY:	DRH	DATE:	MAY 2014	955
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NOTE:
GRID LINES DENOTE CENRES OF PILES AND CENTERLINES OF PILE CAPS.

DRIVE HOUSE PLAN



OPEN CELL™, OPEN CELL SHEET PILE™ and

OCSP™ are registered trademarks of PND Engineers, Inc. The OPEN CELL system is patented.

PATENT — US 6,715,964 B2
PATENT — US 7,018,141 B2
PATENT — US 7,488,140 B2
PATENT — US 7,488,140 B2
PATENT PENDING — CANADA CA2.714.679







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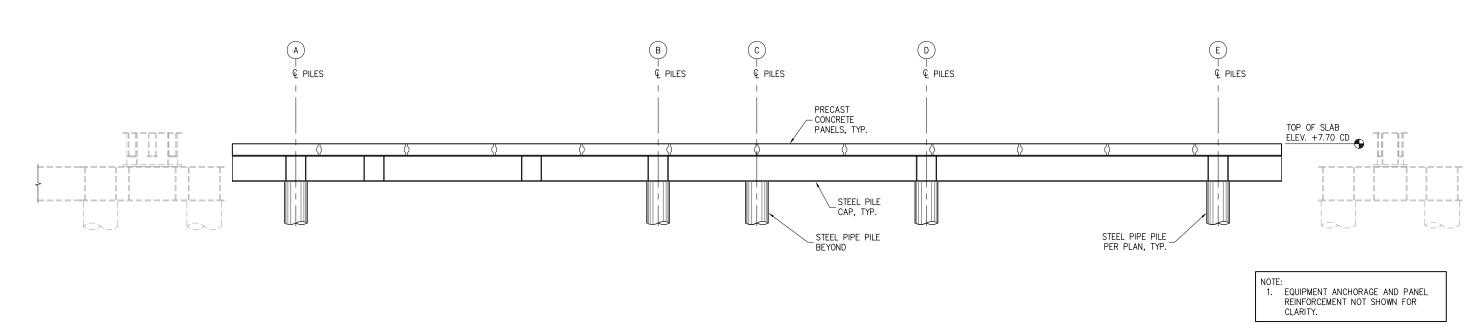
REVISIONS

ISSUED FOR CONSTRUCTION

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TLE:	DRIVE HOUSE FOUNDATION
	PLAN

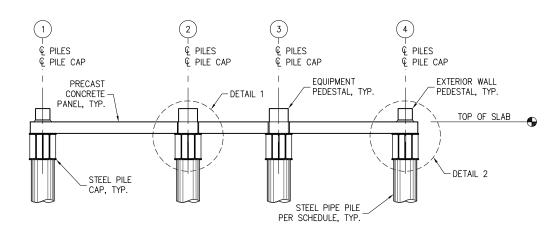
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DRAWN BY:	DRH	DATE:	MAY 2014	96 1
CHECKED BY:	TB	SCALE:	NOTED	30.1



SECTION A-A

0 1 2

METRES



NOTE: 1. PANEL REINFORCEMENT NOT SHOWN FOR CLARITY.



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PND ENGINEERS CANADA, INC. IS NOT RESPONSIBLE FOR SAFETY PROGRAMS, METHODS OR PROCEDURES OF OPERATION, OR THE CONSTRUCTION OF THE DESIGN SHOWN ON THESE DRAWINGS. WHERE SPECIFICATIONS ARE GENERAL OR NOT CALLED OUT, THE SPECIFICATIONS SHALL CONFORM TO STANDARDS OF INDUSTRY. DRAWINGS ARE FOR USE ON THIS PROJECT ONLY AND ARE NOT INTENDED FOR REUSE WITHOUT WRITTEN APPROVAL FROM PND. DRAWINGS ARE ALSO NOT TO BE USED IN ANY MANNER THAT WOULD CONSTITUTE A DETRIMENT DIRECTLY OR INDIRECTLY TO PND.



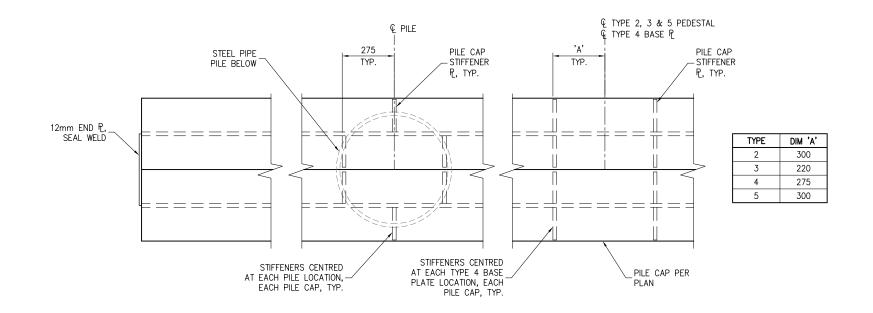
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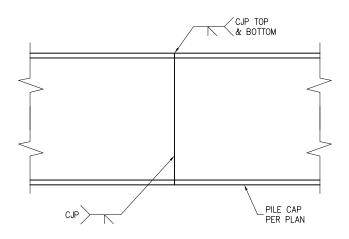
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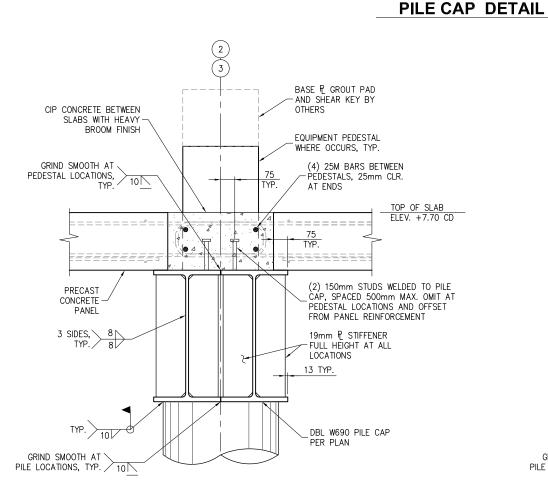
ITLE:	DRIVE HOUSE FOUNDATION
	SECTIONS

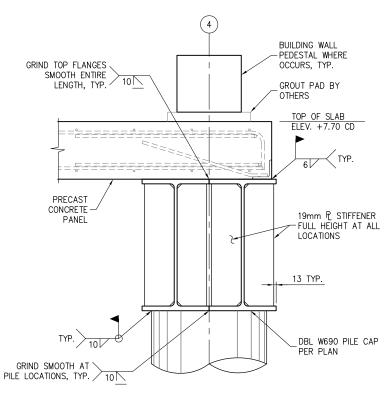
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	DRAWN BY:	DRH	DATE:	MAY 2014	96 2
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PILE CAP SPLICE





DETAIL 1

DETAIL 2





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MILNE INLET ORE DOCK

ITLE:	DRIVE HOUSE FOUNDATION
	PILE CAP DETAILS

DESIGNED BY:	CK	PROJECT NO:	144016.01	SHEET
DRAWN BY:	DRH	DATE:	MAY 2014	
CHECKED BY:	TB	SCALE:	NOTED	

S6.3

PLAN NOTES:



INDICATES PANEL TYPE, SEE PANEL DETAILS.









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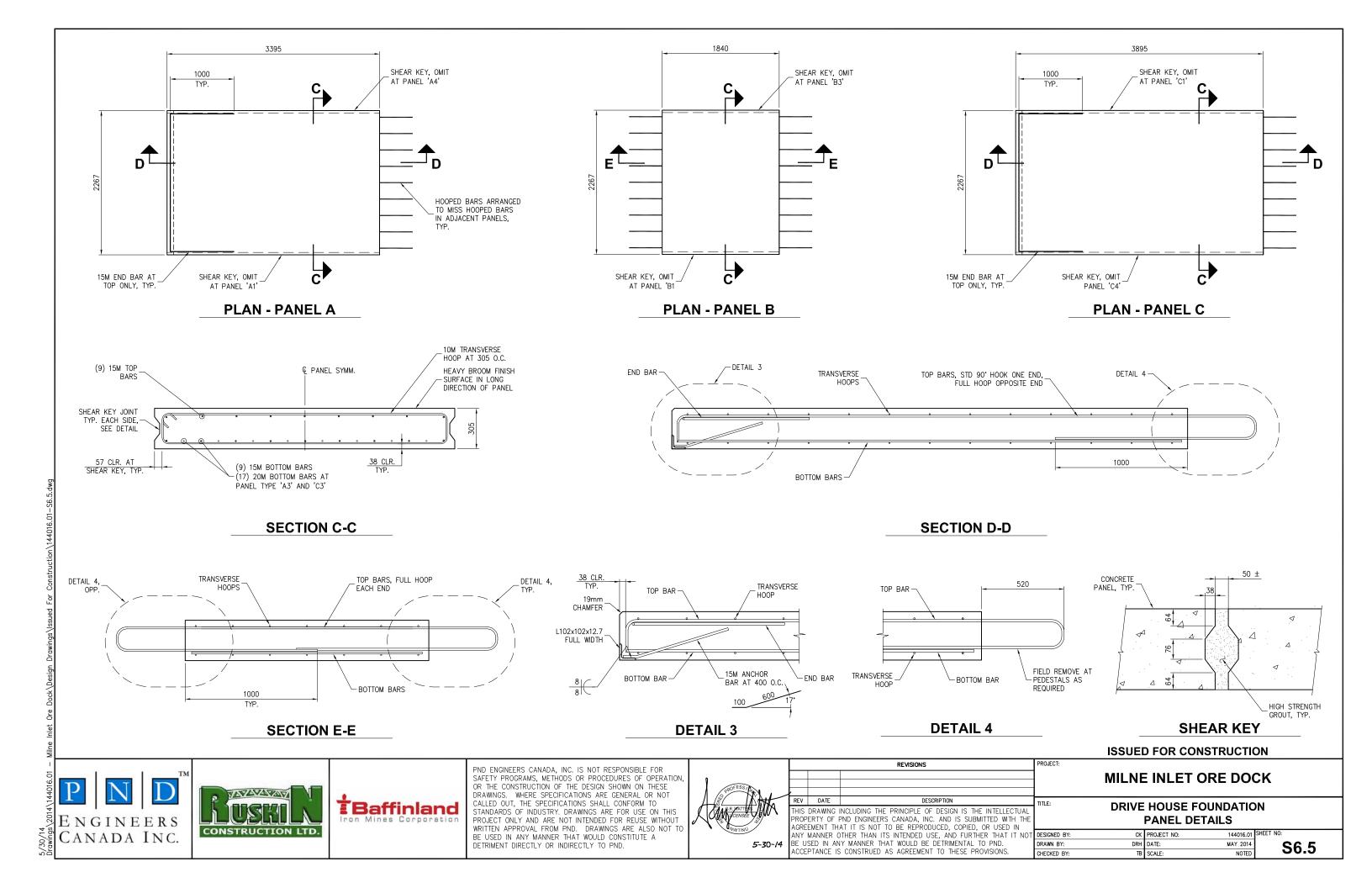
REVISIONS

ISSUED FOR CONSTRUCTION

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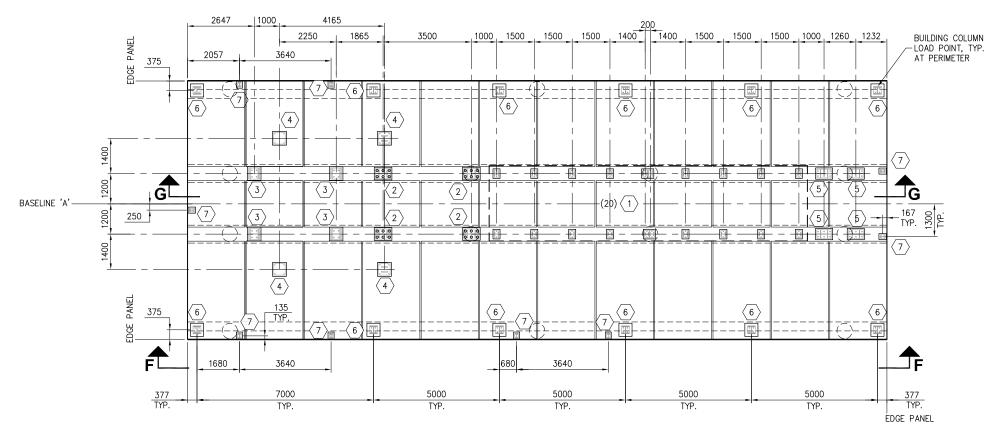
DRIVE HOUSE FOUNDATION PANEL LAYOUT

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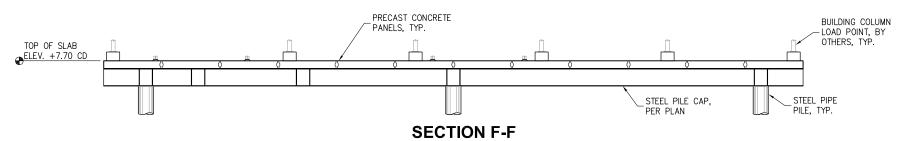


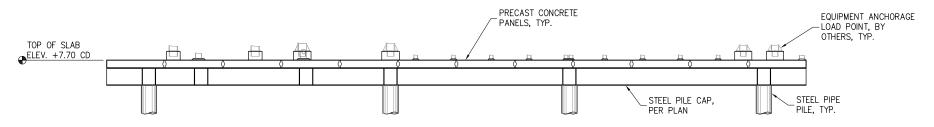
- 1. X INDICATES EQUIPMENT/
 BUILDING CONNECTION,
 SEE SHEET \$7.9
- DIMENSIONS NOTED ARE TO CENTRELINE OF BASE PLATE UNLESS OTHERWISE NOTED.



FOUNDATION LOAD PLAN







SECTION G-G

ISSUED FOR CONSTRUCTION







PND ENGINEERS CANADA, INC. IS NOT RESPONSIBLE FOR SAFETY PROGRAMS, METHODS OR PROCEDURES OF OPERATION, OR THE CONSTRUCTION OF THE DESIGN SHOWN ON THESE DRAWINGS. WHERE SPECIFICATIONS ARE GENERAL OR NOT CALLED OUT, THE SPECIFICATIONS SHALL CONFORM TO STANDARDS OF INDUSTRY. DRAWINGS ARE FOR USE ON THIS PROJECT ONLY AND ARE NOT INTENDED FOR REUSE WITHOUT WRITTEN APPROVAL FROM PND. DRAWINGS ARE ALSO NOT TO BE USED IN ANY MANNER THAT WOULD CONSTITUTE A DETRIMENT DIRECTLY OR INDIRECTLY TO PND.



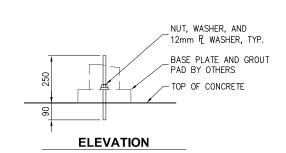
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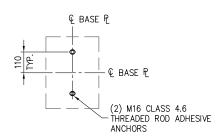
REVISIONS

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DRIVE HOUSE FOUNDATION LOAD POINTS PLAN AND SECTIONS

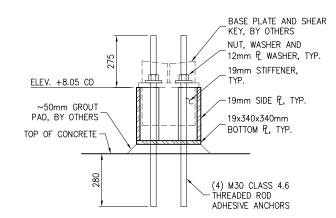
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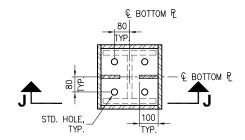


TYPE(1) **BASE PLATE**

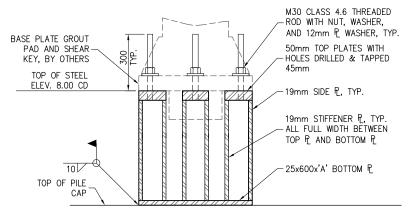
PLAN



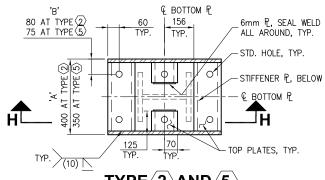
SECTION J-J



TYPE(6) PEDESTAL PLAN



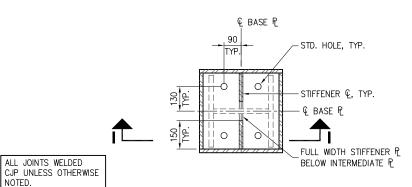
SECTION H-H



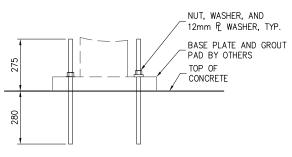
 $\mathsf{TYPE}\langle \mathsf{2}\rangle \mathsf{AND}\langle \mathsf{5}\rangle$ PEDESTAL PLAN

M30 CLASS 4.6 THREADED ROD WITH NUT, WASHER, AND 12mm P WASHER, TYP. BASE PLATE GROUT PAD AND SHEAR KEY, BY OTHERS TOP OF STEEL ELEV. 8.00 CD 50x440x440mm INTERMEDIATE P WITH HOLES DRILLED & TAPPED 45mm -19mm SIDE P., TYP. -19mm STIFFENER ₽, TYP. 10 TOP OF PILE -25x440x440 BOTTOM ₽

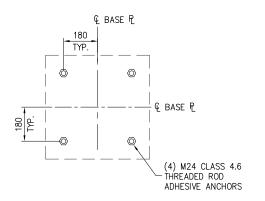
SECTION I-I



TYPE(3) PEDESTAL PLAN

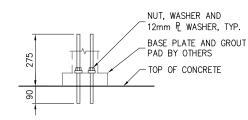


ELEVATION



PLAN

TYPE(4) **BASE PLATE**



NOTED.

ELEVATION € BASE € & BASE P (4) M16 CLASS 4.6 THREADED ROD ADHESIVE ANCHORS

PLAN $\mathsf{TYPE}\langle \mathsf{7}\rangle$ **BASE PLATE**

ISSUED FOR CONSTRUCTION







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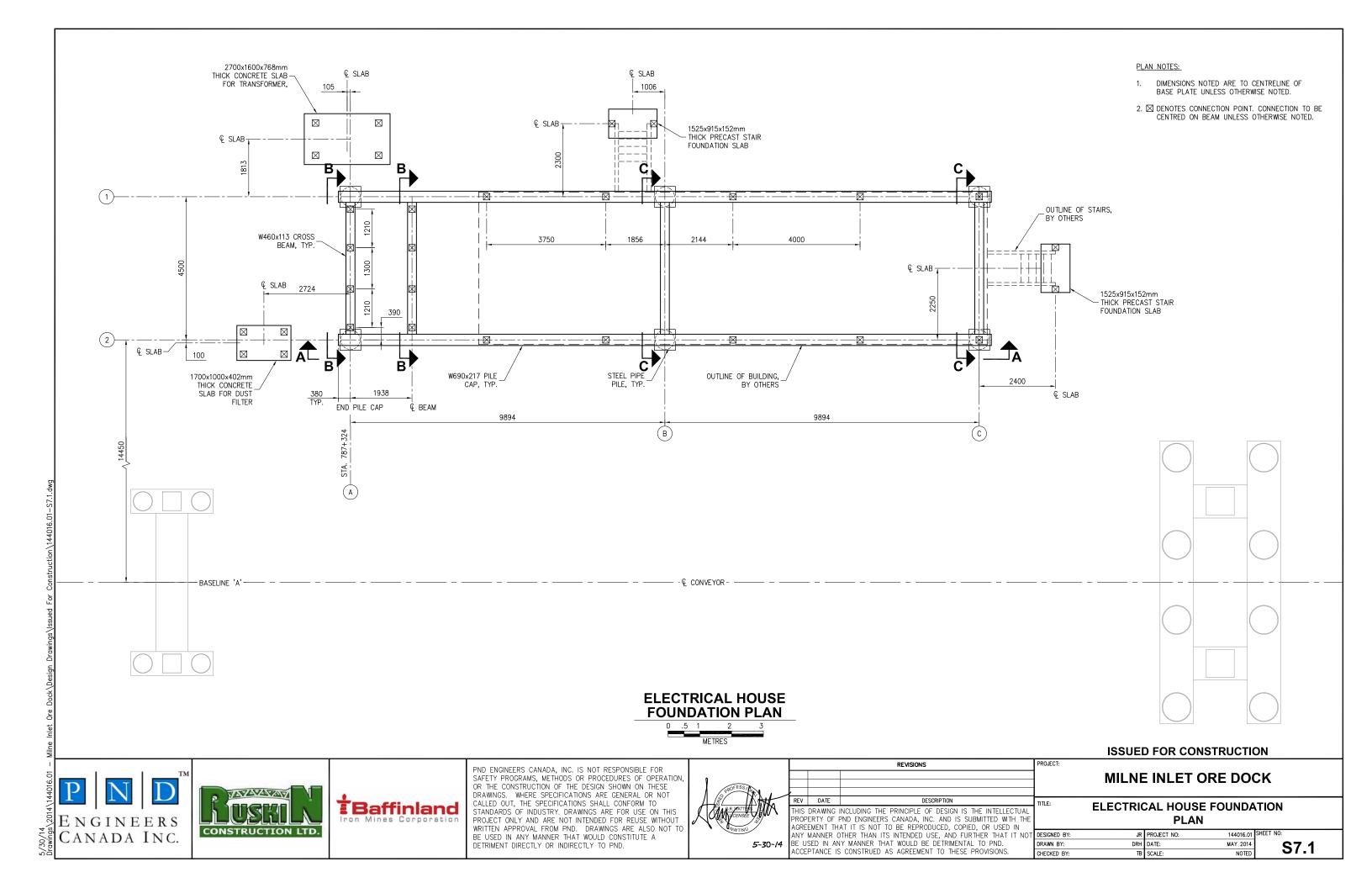
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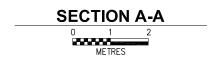
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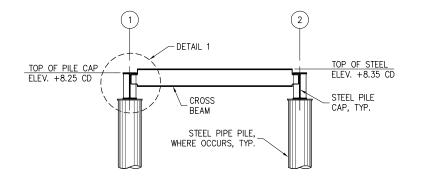
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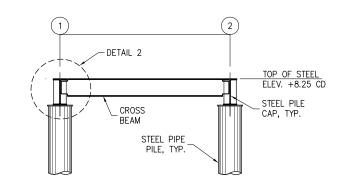
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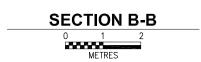
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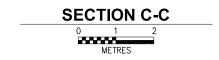


















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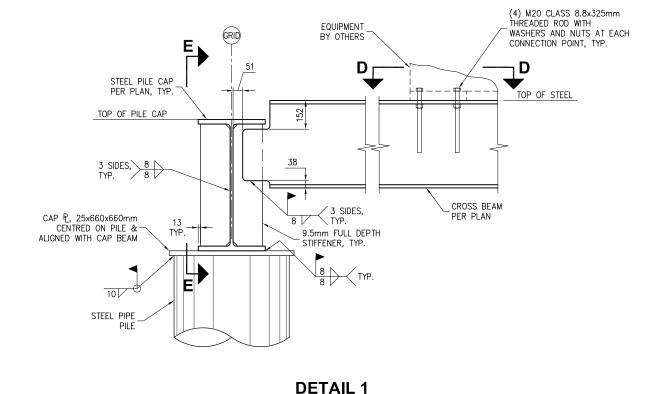
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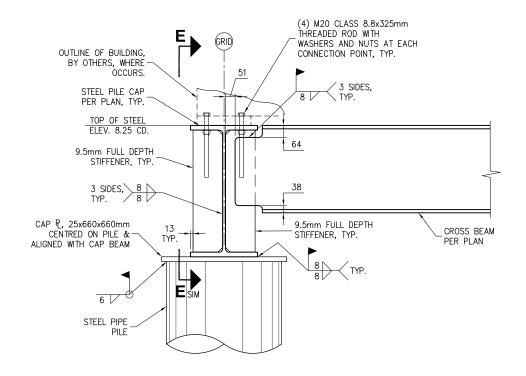
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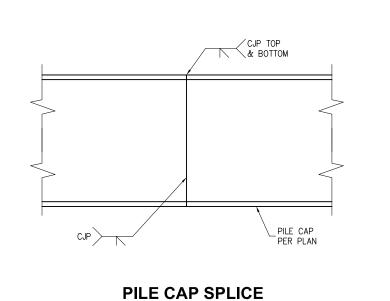
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Γ	DESIGNED BY:	JR	PROJECT NO:	144016.01	SHEET NO:
	DRAWN BY:	DRH	DATE:	MAY 2014	S7.2
	CHECKED BY:	TB	SCALE:	NOTED	37.2

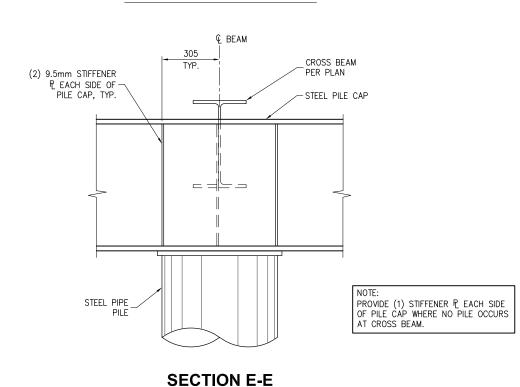
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DETAIL 2





SECTION D-D

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NOTE: SEE PLAN FOR CONNECTION LOCATION

ENGINEERS CANADA INC.



OUTLINE OF EQUIPMENT, -BY OTHERS

CROSS BEAM_ PER PLAN



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4			Y MANNER THAT WOULD BE DETRIMENTAL TO PND.	DRAWN
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ELECTRICAL HOUSE FOUNDATION DETAILS

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Г	DESIGNED BY:	JR	PROJECT NO:	144016.01	SHEET NO:
ſ	DRAWN BY:	DRH	DATE:	MAY 2014	C7 2
	CHECKED BY:	TB	SCALE:	NOTED	5

