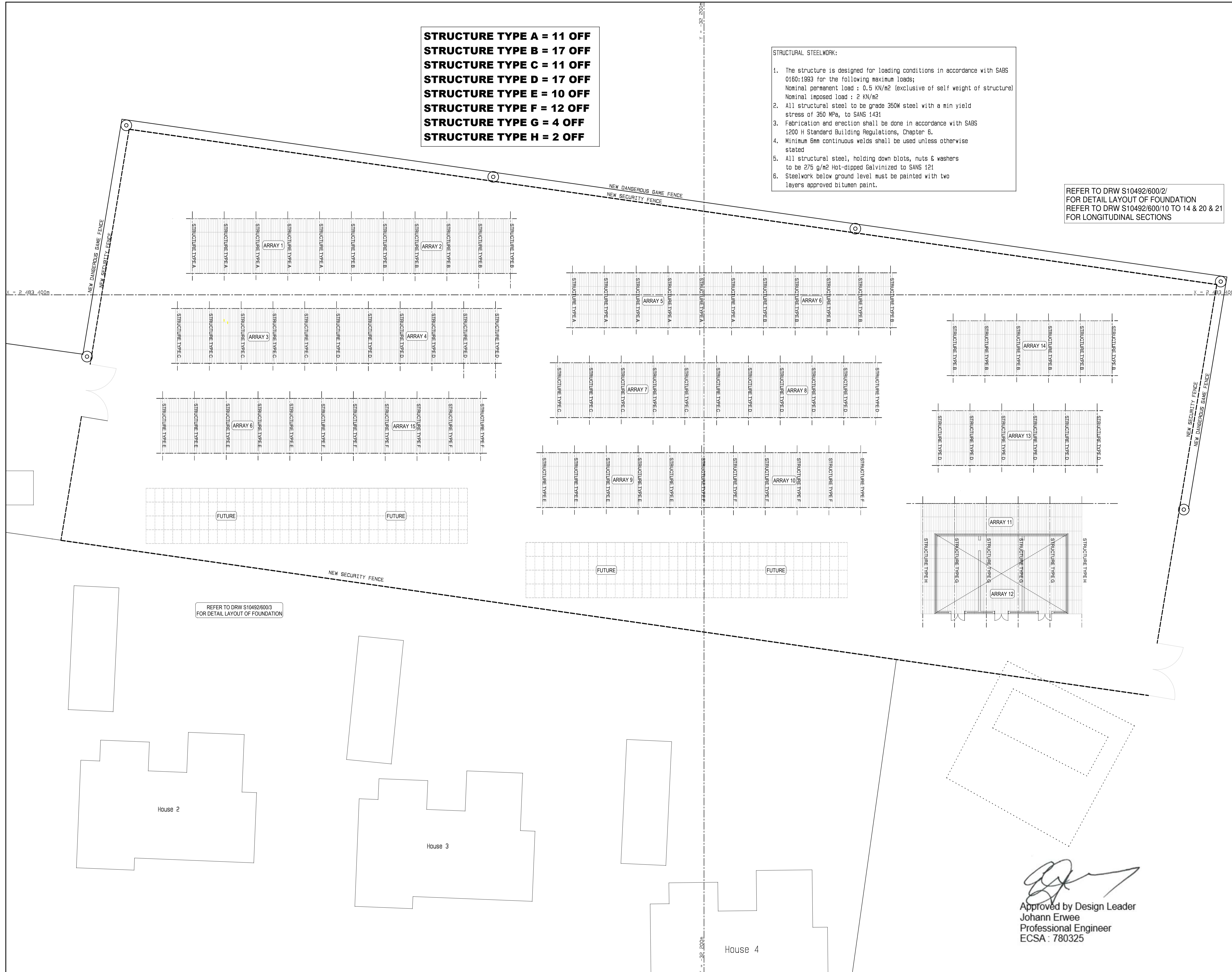


STRUCTURE TYPE A = 11 OFF
STRUCTURE TYPE B = 17 OFF
STRUCTURE TYPE C = 11 OFF
STRUCTURE TYPE D = 17 OFF
STRUCTURE TYPE E = 10 OFF
STRUCTURE TYPE F = 12 OFF
STRUCTURE TYPE G = 4 OFF
STRUCTURE TYPE H = 2 OFF

- STRUCTURAL STEELWORK:**
- The structure is designed for loading conditions in accordance with SABS 0160:1993 for the following maximum loads;
 Nominal permanent load : 0,5 KN/m² (exclusive of self weight of structure)
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 - All structural steel, holding down bolts, nuts & washers to be 275 g/m² Hot-dipped Galvanized to SANS 121
 - Steelwork below ground level must be painted with two layers approved bitumen paint.

REFER TO DRW S10492/600/2/
 FOR DETAIL LAYOUT OF FOUNDATION
 REFER TO DRW S10492/600/10 TO 14 & 20 & 21
 FOR LONGITUDINAL SECTIONS



No.	DATE	AMENDMENT	D.P.W.
A2	06-11-17	STRUCTURE H ADDED GENERAL SITE LAYOUT REVISED	E.E
A3	09-06-19	ARRAY 14, 15 & 16 ADDED	E.E

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public works
 Department:
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 MR. MZIWONKE DLABANTU

consultant

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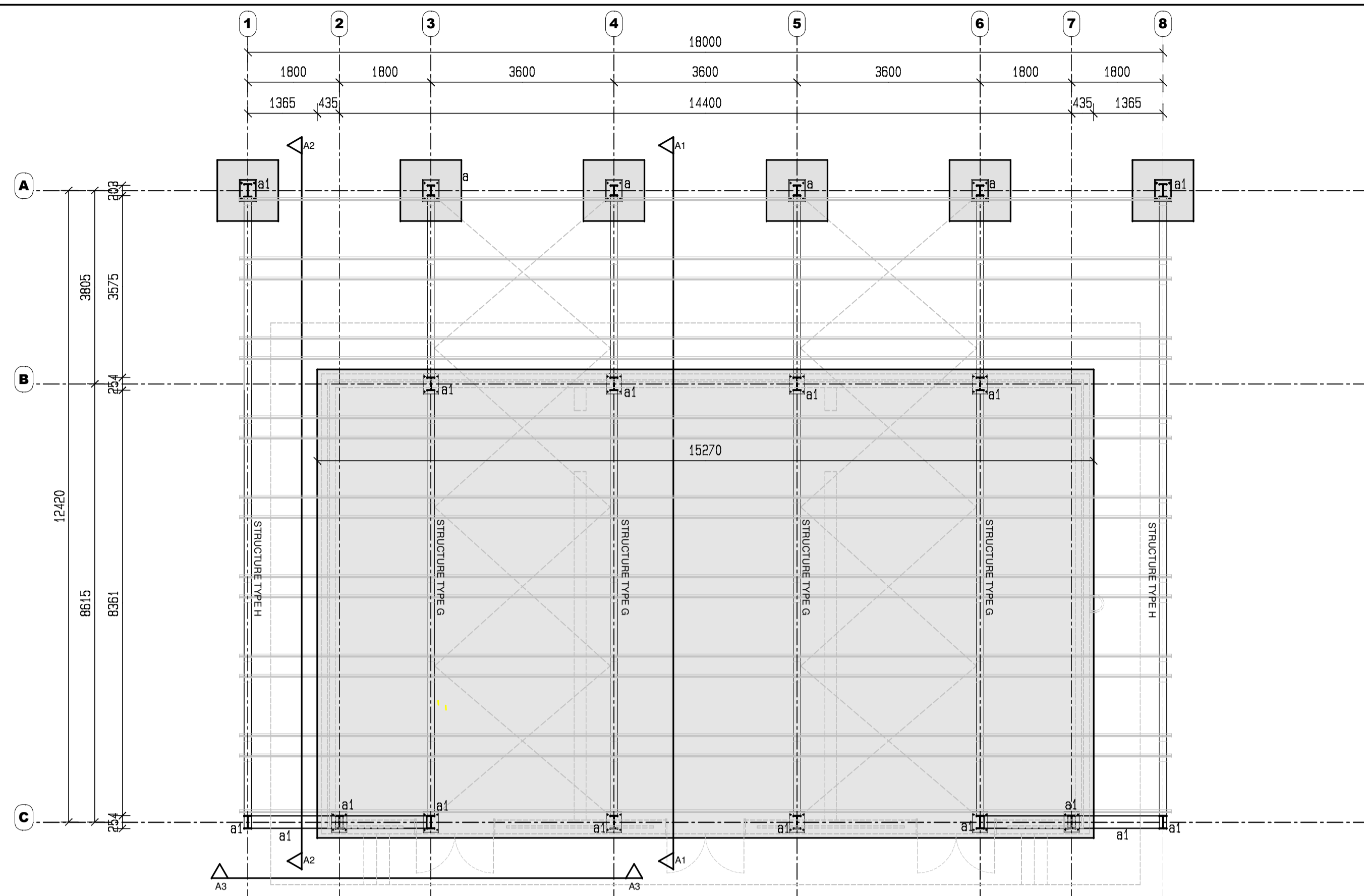
service
**PAFURI LAND PORT OF ENTRY (LPOE):
 SUPPLY AND INSTALLATION OF
 SOLAR PANEL AND WASTE WATER
 FACILITY**

WCS number
052476

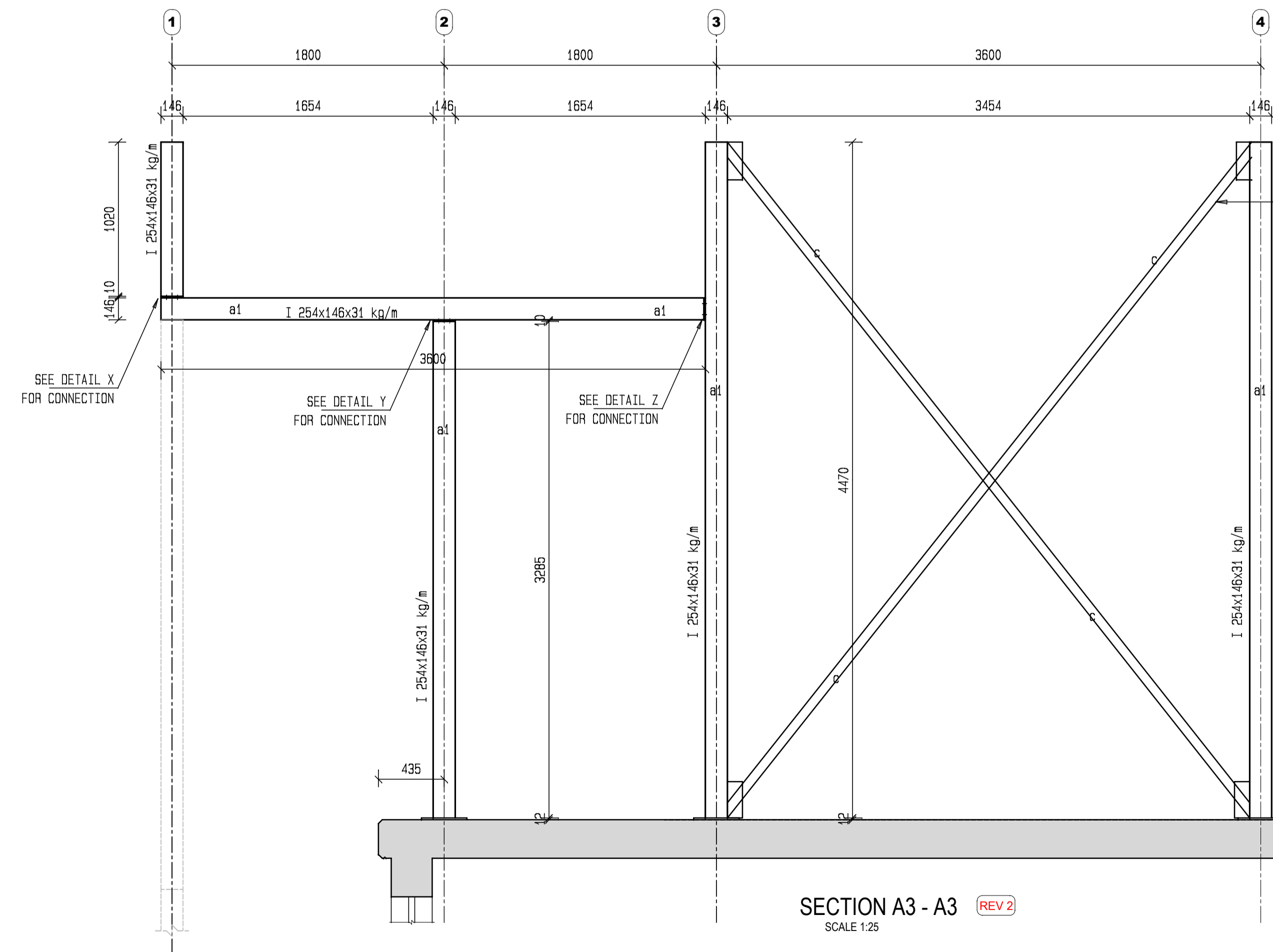
drawing title
**STRUCTURES A-G POSITIONING
 LAYOUT**

ref.no. 6022/0079/20B designed J.P
 scale 1:200 drawn E.E
 date 06 / 11 / 2017 checked J.P
 DPW drawing number
S10492/600/17/A3

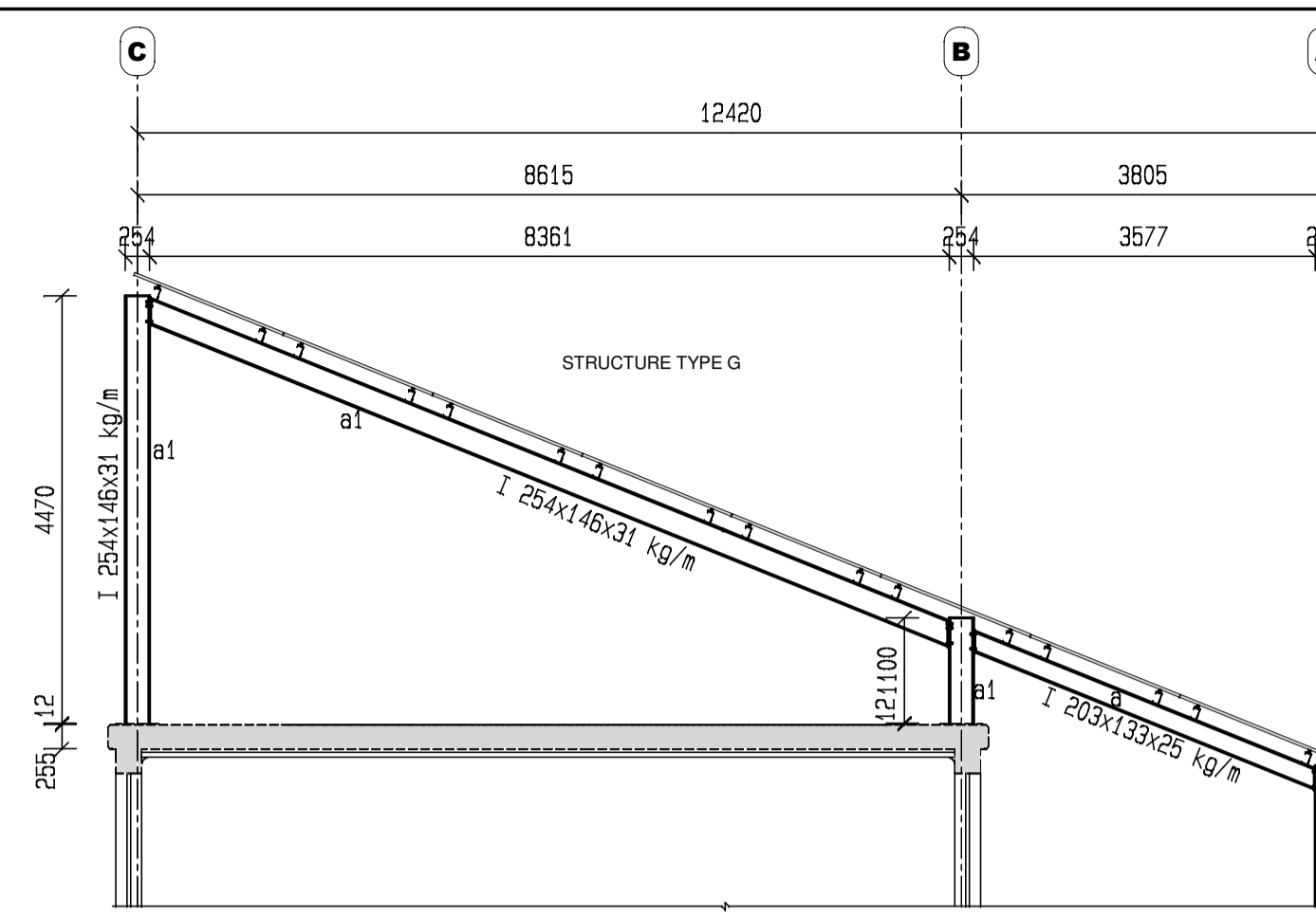
[Signature]
 Approved by Design Leader
 Johann Erwee
 Professional Engineer
 ECSA : 780325



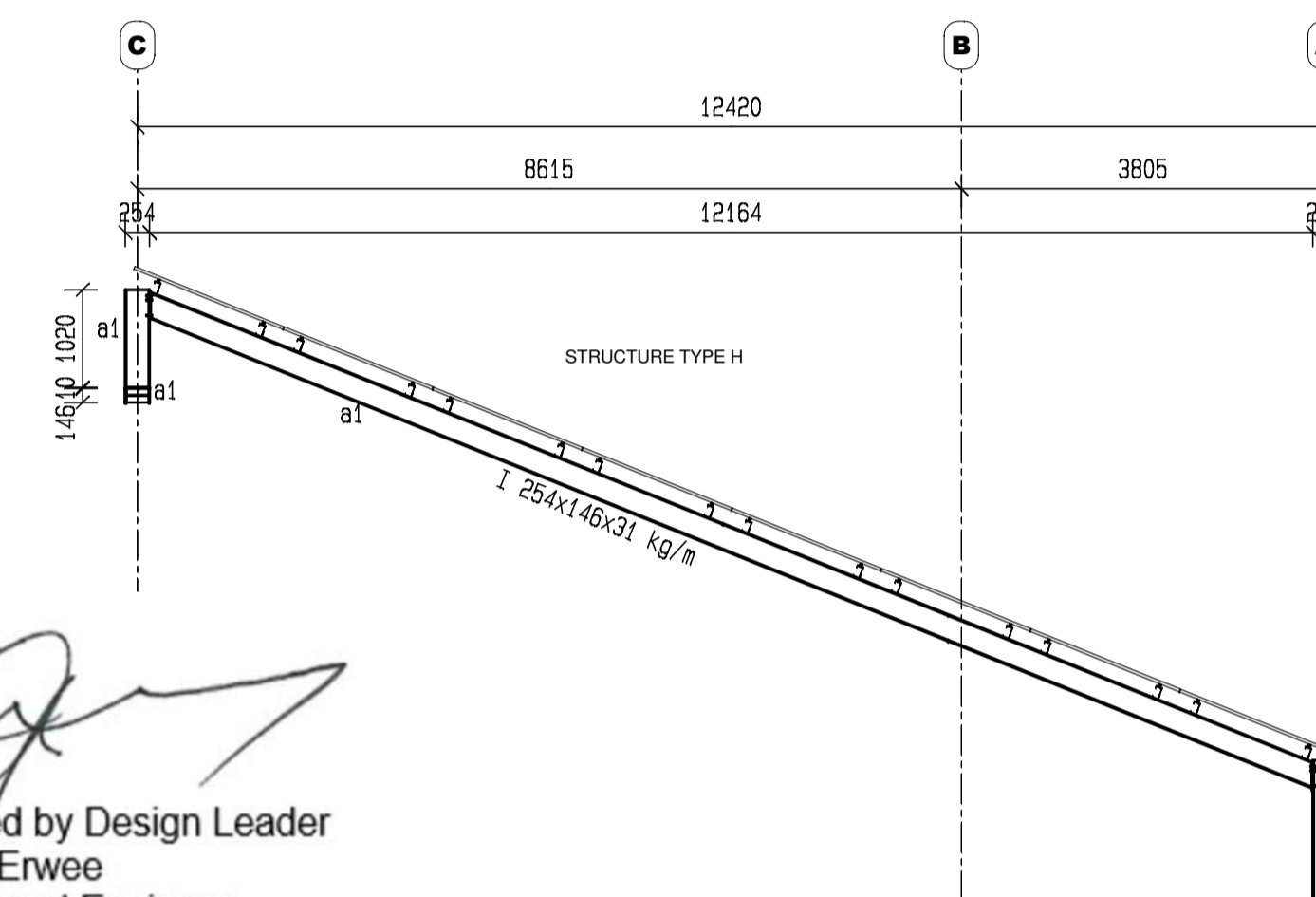
ENERGY STORAGE & EQUIPMENT ROOM
ROOF STRUCTURE LAYOUT
SCALE 1:75



SECTION A3 - A3 (REV 2)
SCALE 1:25



SECTION A1 - A1
SCALE 1:75

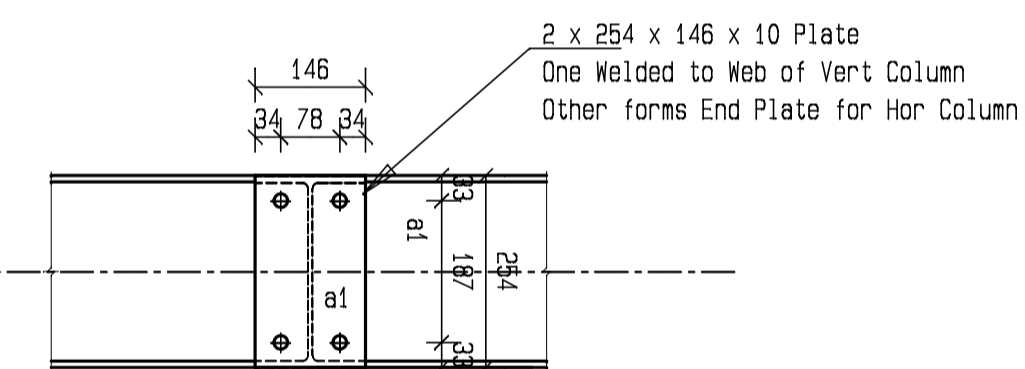


SECTION A2 - A2
SCALE 1:75

Approved by Design Leader
Johann Erwee
Professional Engineer
ECSPA : 780325

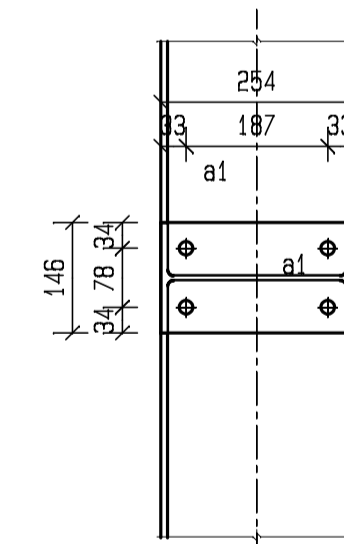
REFER TO DRW S104192/600/16/A1
FOR TYPICAL ROOF LAYOUT & ELEVATION
DISPLAYING CROSS BRACING POSITION

- A1 - 1200x1200x400 THICK CLASS 25/19 R.C BASE CASTED ON A 50mm THICK 15MPa BLINDING LAYER
- A2 - 430x330 STUB COLUMN
- a = I 203x133x25 kg/m
- a1 = I 254x146x31 kg/m
- b = 125x65x20x2,5 thk COILED FORM LIPPED CHANNEL ROOF PURLIN.
- CLEAT: ANGLE 90x65x6 thk WITH 2xM10 BOLT THROUGH 2x12mm HOLE WELDED TO COLUMN.
- c = L 60x60x6 thk
- d = PL 220x100mm WIDEx10mm THK CONNECTOR PLATE WITH 2x12mm HOLE FOR 2xM10 BOLTS.
- e = PL 244x60mm WIDEx10mm THK CONNECTOR PLATE WITH 2x12mm HOLE FOR 2xM10 BOLTS.
- f = PL 240x100x 10 thk CONNECTOR PLATE WITH 2x12mm HOLE FOR 2xM10 BOLT
- g = PL 250x100x 10 thk CONNECTOR PLATE WITH 2x12mm HOLE FOR 2xM10 BOLT
- h = PL 247x60mm WIDEx10mm THK CONNECTOR PLATE WITH 2x12mm HOLE FOR 2xM10 BOLTS.



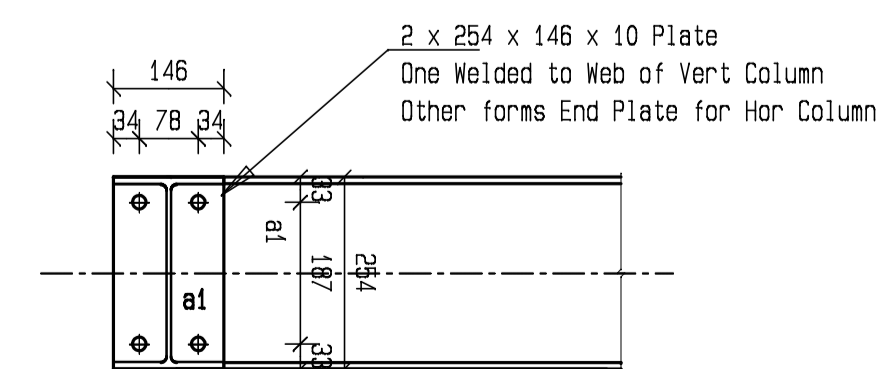
DETAIL Y
SCALE 1:10

All welds are Both Sides unless otherwise indicated
All bolts are of Grade 8.8
All bolt diameters are 16 mm



DETAIL Z
SCALE 1:10

All welds are Both Sides unless otherwise indicated
All bolts are of Grade 8.8
All bolt diameters are 16 mm



DETAIL X
SCALE 1:10

All welds are Both Sides unless otherwise indicated
All bolts are of Grade 8.8
All bolt diameters are 16 mm

No.	DATE	AMENDMENT	D.P.W.
A2	14-06-19	SECTION A1-A1 & A3-A3 REVISED	E.E

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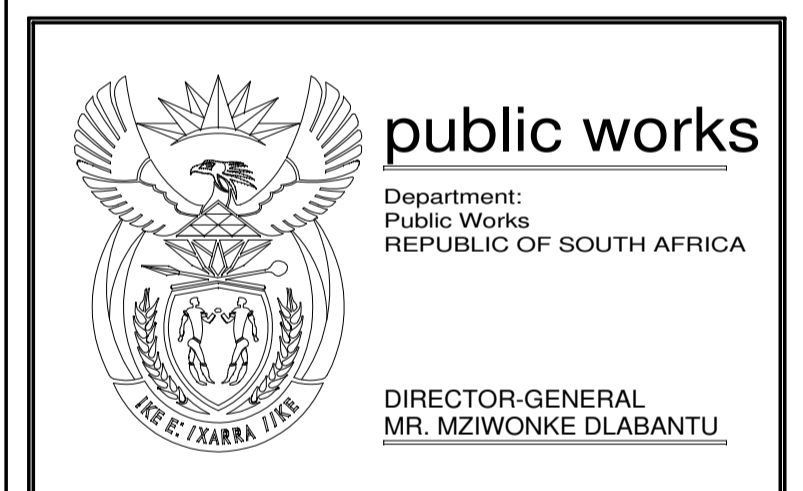
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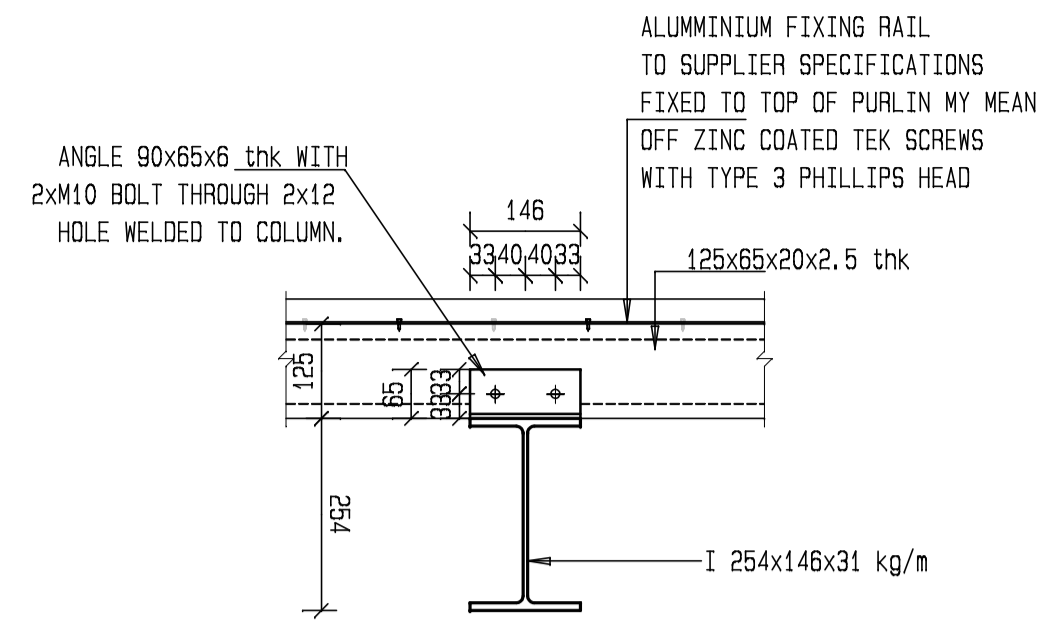
service
**PAFURI LAND PORT OF ENTRY (LPOE):
SUPPLY AND INSTALLATION OF
SOLAR PANEL AND WASTE WATER
FACILITY**

WCS number
052476

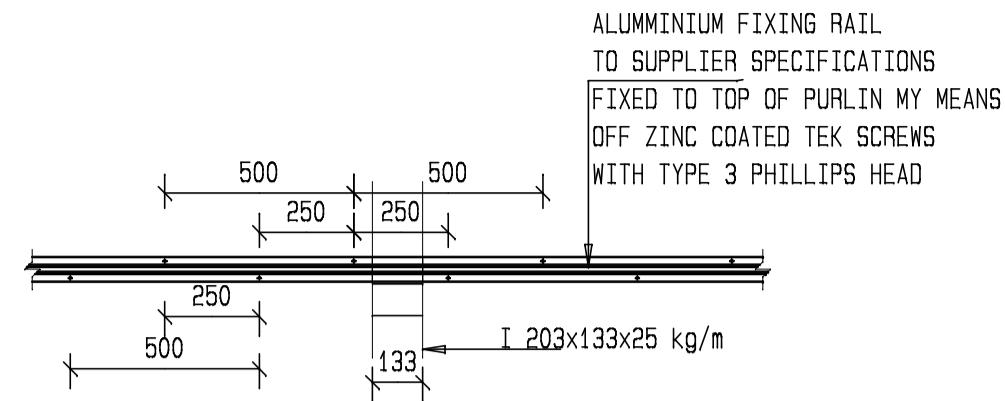
drawing title
**ENERGY STORAGE &
EQUIPMENT ROOM:
ARRAY 11 & 12 STRUCTURE LAYOUT
& DETAILS**

ref.no. 6022/0079/20B designed J.P
scale AS SHOWN drawn E.E
date 06 / 11 / 2017 checked J.P

DPW drawing number
S10492/600/18/A2

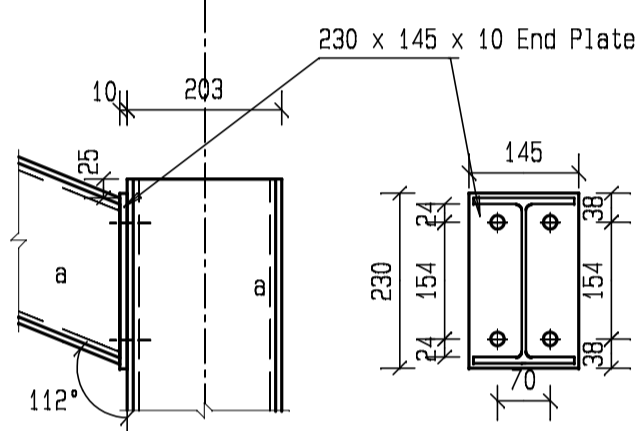


DETAIL H
SCALE 1:10



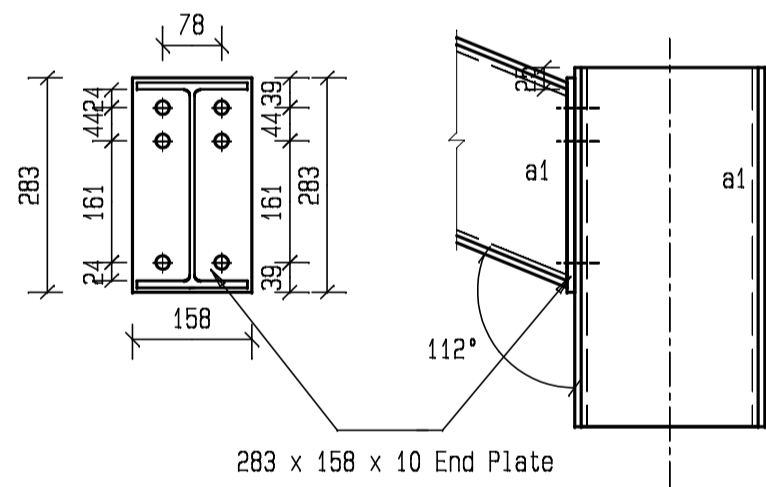
ALUMINIUM FIXING RAIL
FIXING DETAIL
SCALE 1:20

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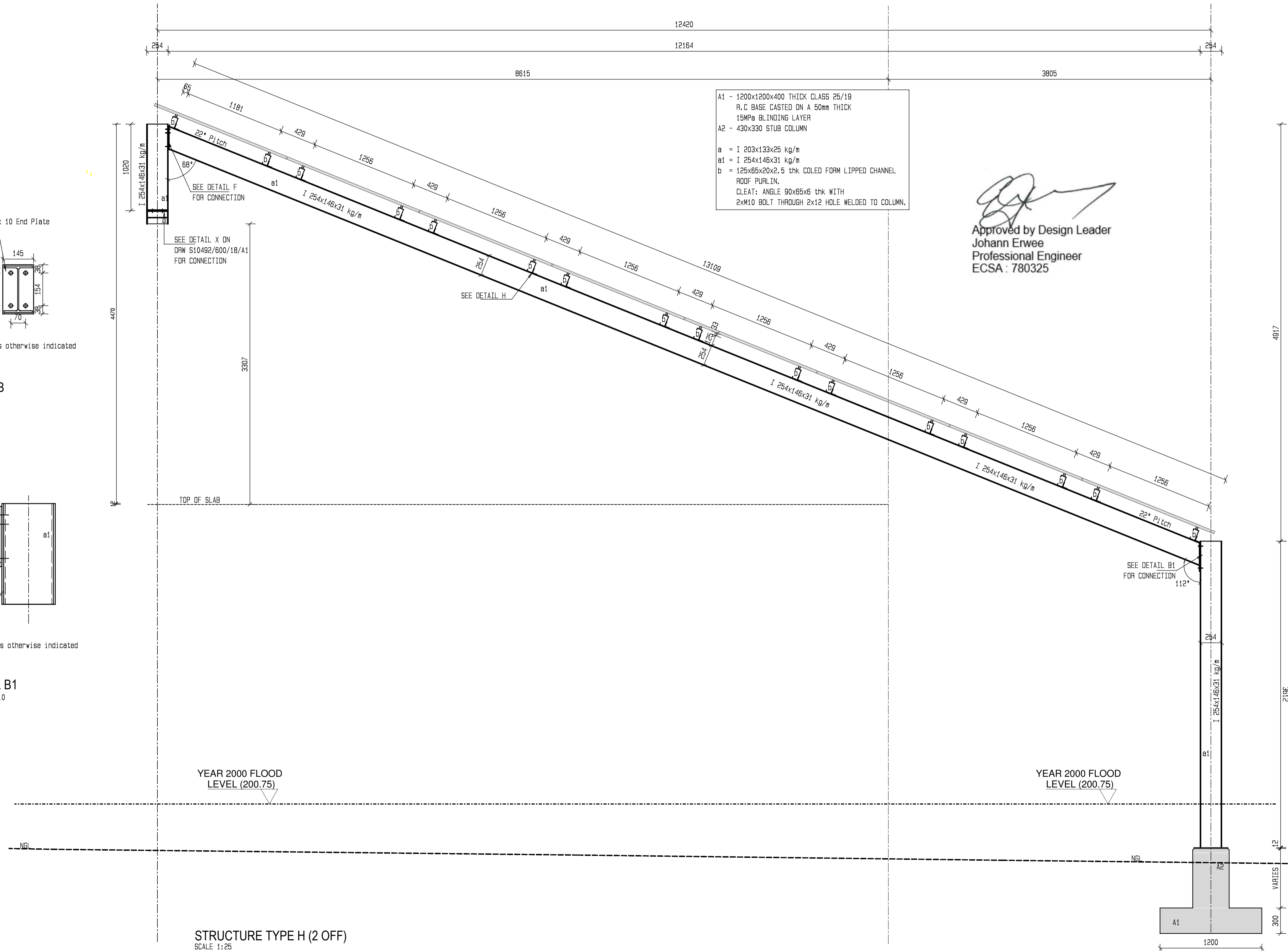
All welds are Both Sides unless otherwise indicated
All bolts are of Grade 8.8
All bolt diameters are 16 mm

DETAIL B
SCALE 1:10



All welds are Both Sides unless otherwise indicated
All bolts are of Grade 8.8
All bolt diameters are 16 mm

DETAIL B1
SCALE 1:10



- A1 - 1200x1200x400 THICK CLASS 25/19
R.C. BASE CASTED ON A 50mm THICK
15MPa BLINDING LAYER
A2 - 430x330 STUB COLUMN
- a = I 203x133x25 kg/m
a1 = I 254x146x31 kg/m
b = 125x65x20x2.5 thk COILED FORM LIPPED CHANNEL
ROOF PURLIN.
CLEAT: ANGLE 90x65x6 thk WITH
2xM10 BOLT THROUGH 2x12 HOLE WELDED TO COLUMN.

Approved by Design Leader
Johann Erwee
Professional Engineer
ECSA : 780325

No.	DATE	AMENDMENT	D.P.W.
A2	14-06-19	STRUCTURE H REVISED	E.E

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MR. MZIWONKE DLABANTU

consultant
PIENAAR & ERWEE
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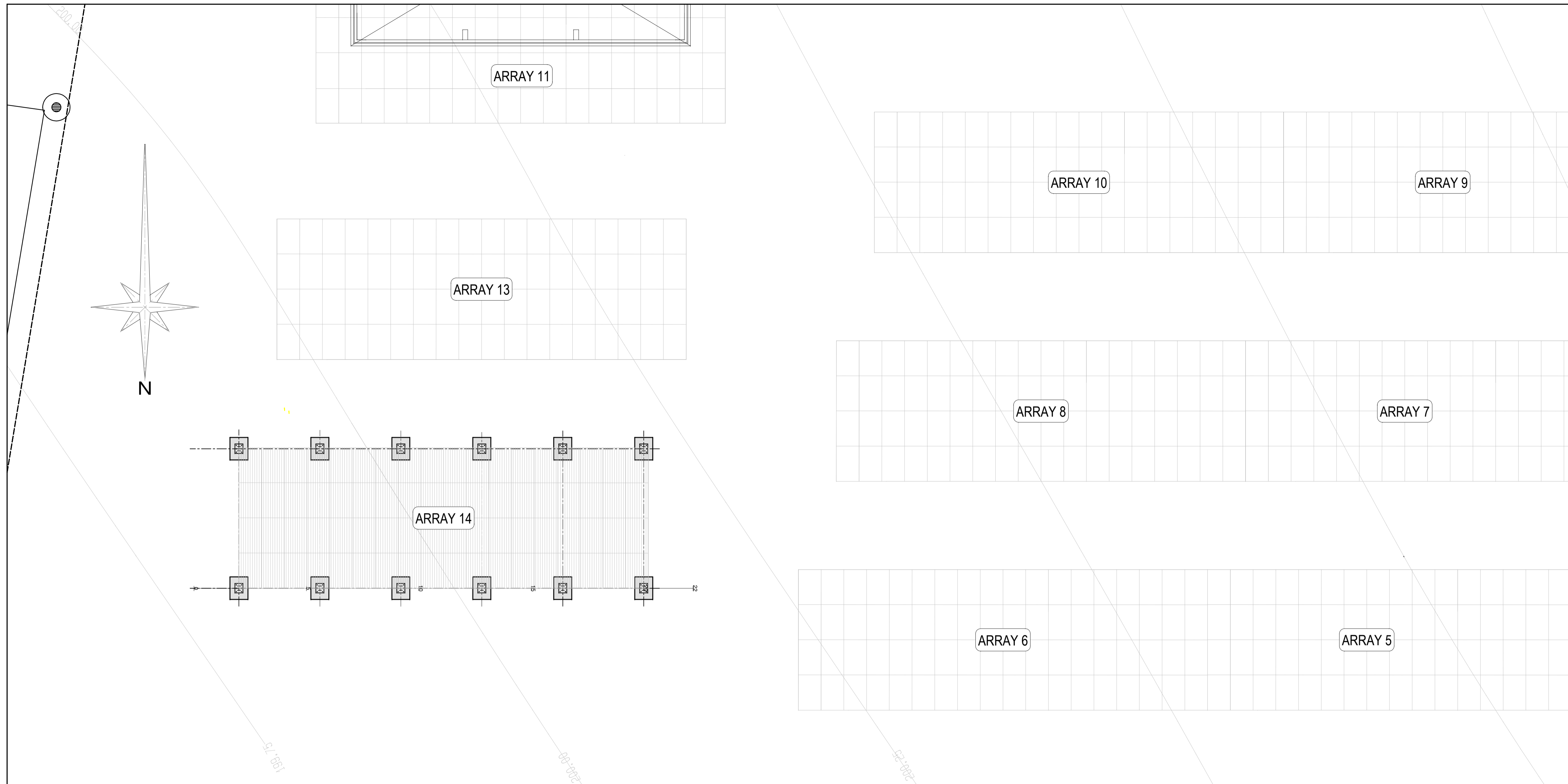
discipline
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service
PAFURI LAND PORT OF ENTRY (LPOE):
SUPPLY AND INSTALLATION OF
SOLAR PANEL AND WASTE WATER
FACILITY

WCS number
052476

drawing title
**STRUCTURE TYPE H
DETAILS**

ref.no. 6022/0079/20B designed J.P
scale AS SHOWN drawn E.E
date 25 / 03 / 2014 checked J.P
DPW drawing number
S10492/600/19 A2



No.	DATE	AMENDMENT	D.P.W.

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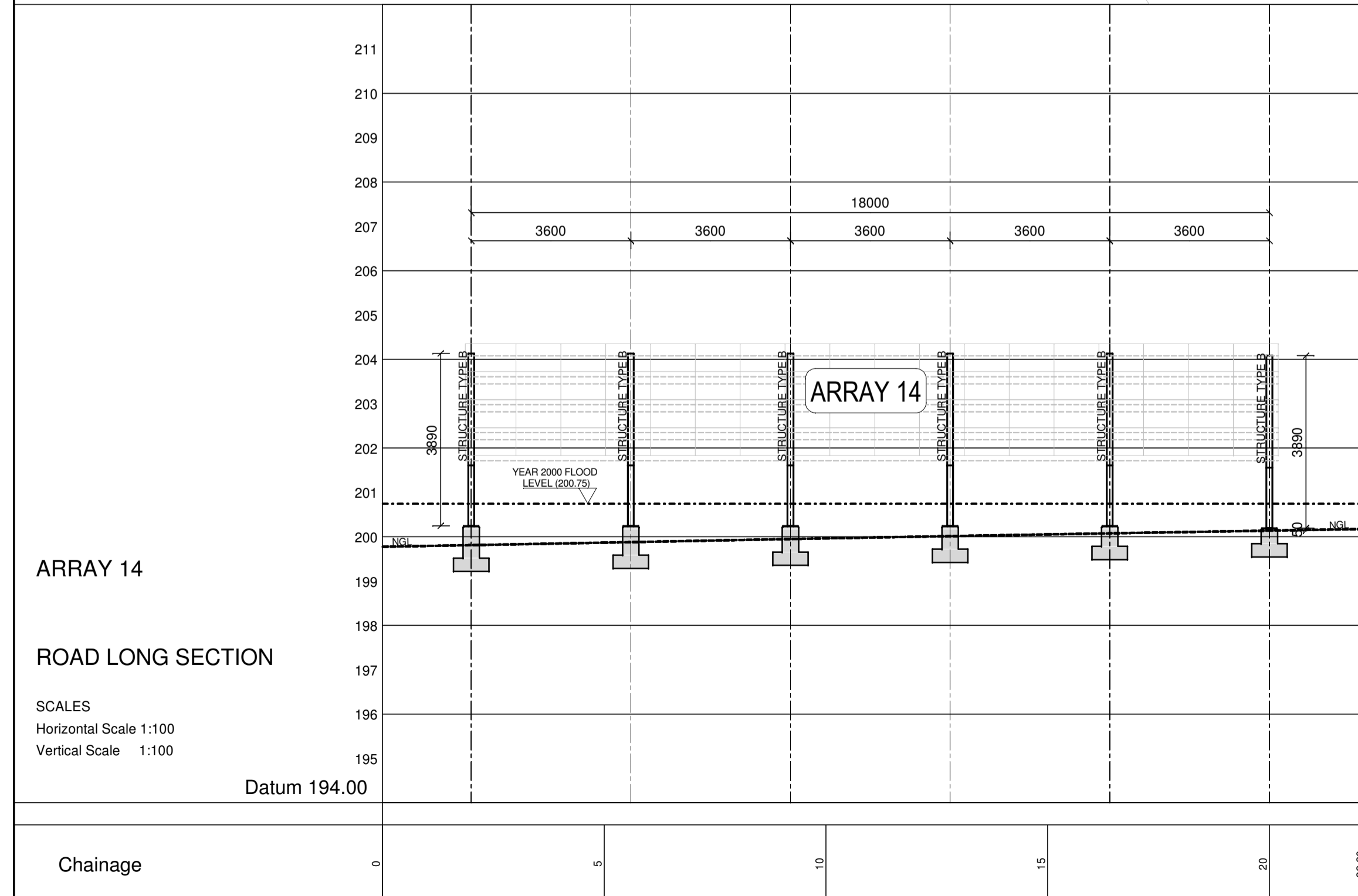
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professional registration no.: _____

cad file name: S10492/600/20/A1 page type: A 1

public works
 Department: Public Works
 REPUBLIC OF SOUTH AFRICA

DIRECTOR-GENERAL
 MR. MZIWONKE DLABANTU



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 - Steelwork below ground level must be painted with two layers approved bitumen paint.

Johann Erwee
 Approved by Design Leader
 Johann Erwee
 Professional Engineer
 ECSA : 780325

consultant

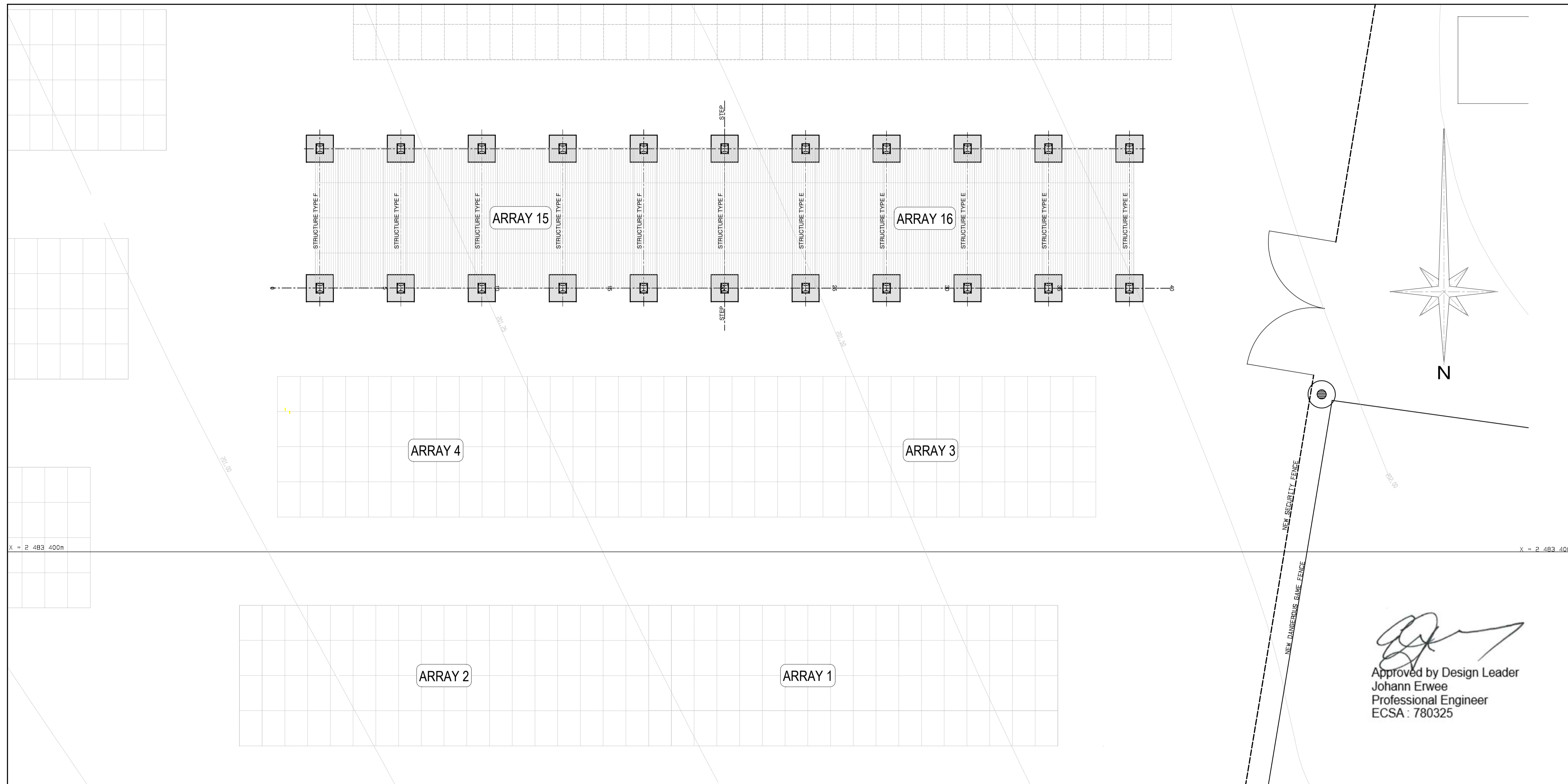
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service
**PAFURI LAND PORT OF ENTRY (LPOE):
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 SOLAR PANEL AND WASTE WATER
 FACILITY**

WCS number: 052476

drawing title
**ARRAY 14
 LONGITUDINAL SECTION**

ref.no: 6022/0079/20B designed J.P
 scale AS SHOWN drawn E.E
 date 06 / 11 / 2017 checked J.P
 DPW drawing number
S10492/600/20/A1



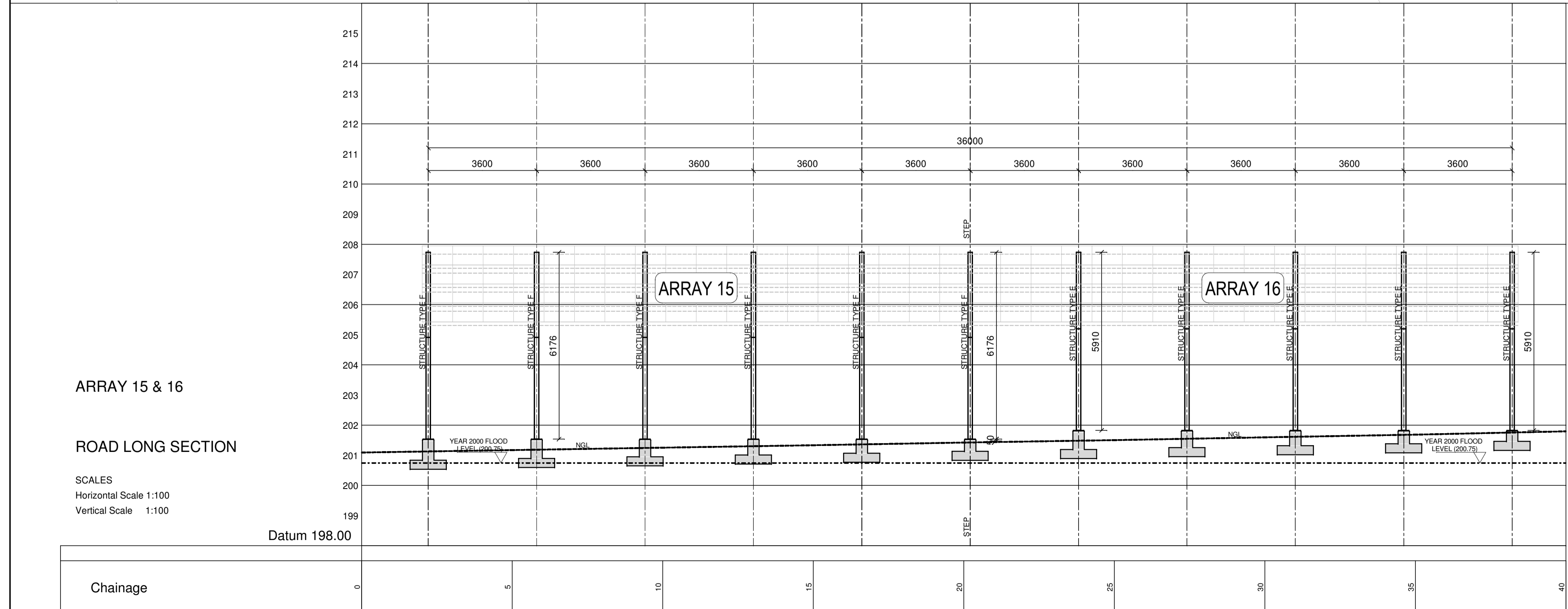
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 Professional Engineer
 ECSA : 780325

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 MR. MZIWONKE DLABANTU



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consultant
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 SOLAR PANEL AND WASTE WATER
 FACILITY**

WCS number
052476

drawing title
**ARRAY 15 & 16
 LONGITUDINAL SECTION**

ref.no. 6022/0079/20B designed J.P.
 scale AS SHOWN drawn E.E.
 date 25 / 03 / 2014 checked J.P.
 DPW drawing number
S10492/600/21/A1