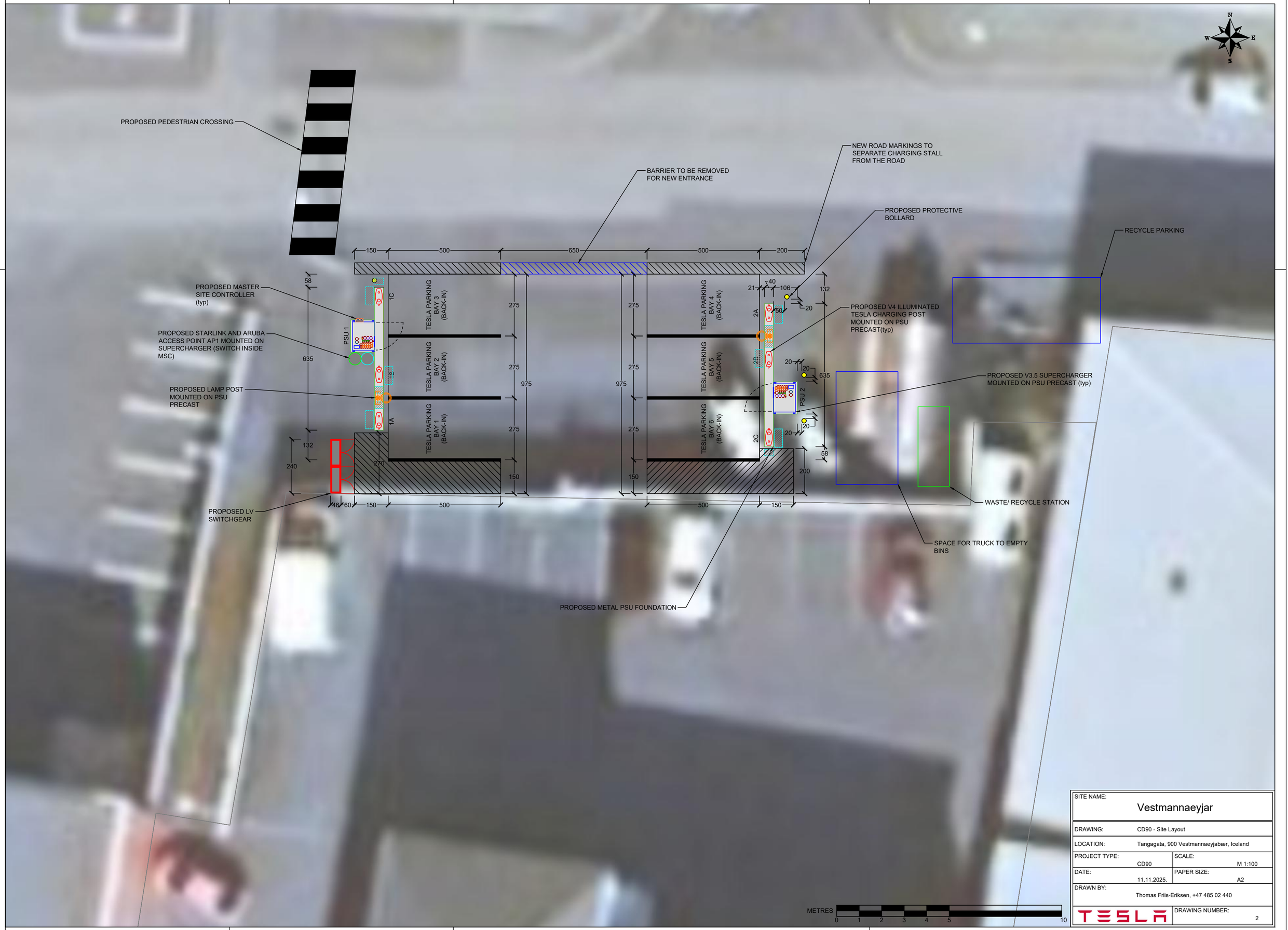
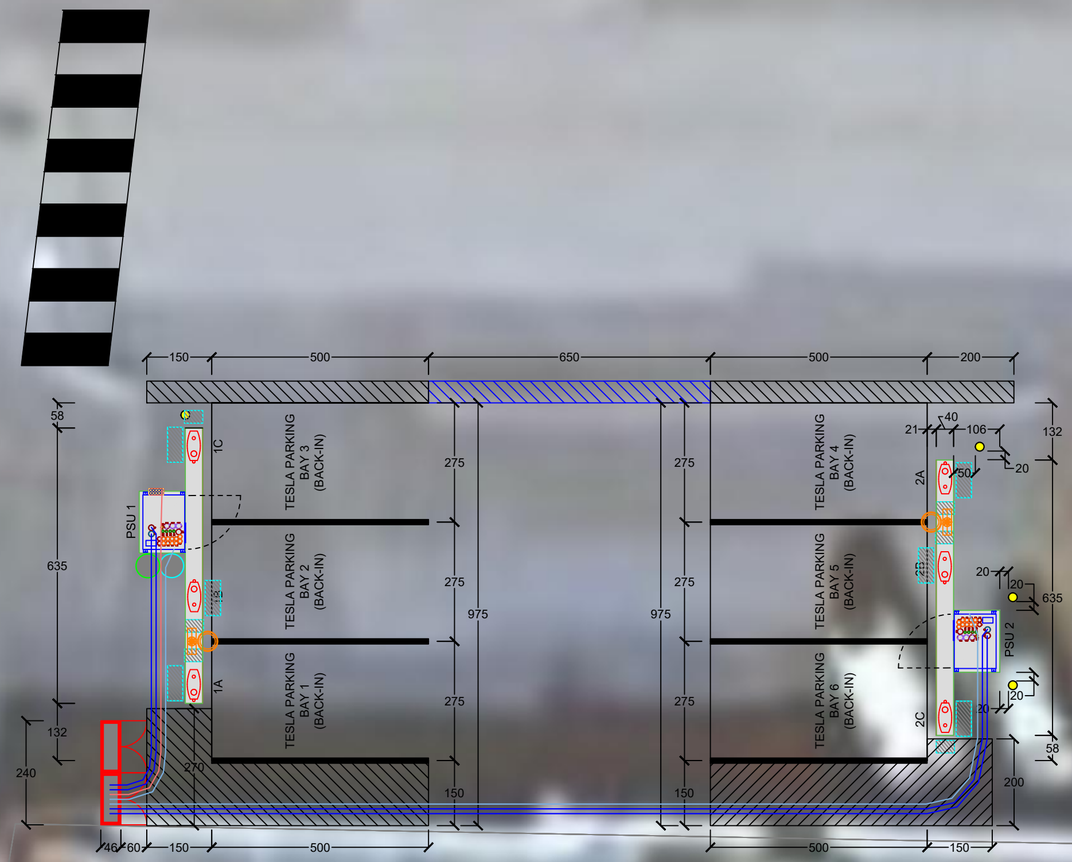
SITE NAME:	Vestmannaeyjar
DRAWING:	CD90 - Site Overview
LOCATION:	Tangagata, 900 Vestmannaeyjabær, Iceland
PROJECT TYPE: CD90	SCALE: M 1:500
DATE: 11.11.2025.	PAPER SIZE: A3
DRAWN BY:	Thomas Friis-Eriksen, +47 485 02 440
TESLA	DRAWING NUMBER: 1

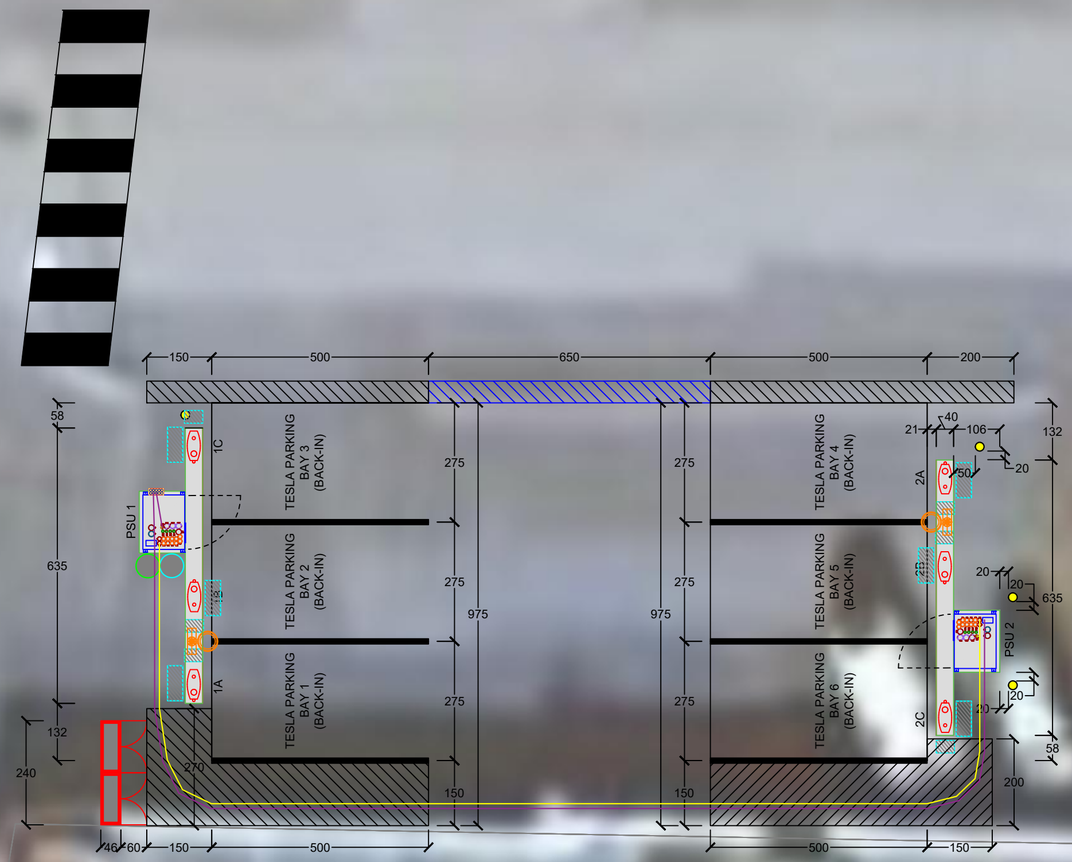


SITE NAME:	Vestmannaeyjar
DRAWING:	CD90 - Site Layout
LOCATION:	Tangagata, 900 Vestmannaeyjabær, Iceland
PROJECT TYPE: CD90	SCALE: M 1:100
DATE: 11.11.2025.	PAPER SIZE: A2
DRAWN BY: Thomas Friis-Eriksen, +47 485 02 440	
TESLA	DRAWING NUMBER: 2



METRES 0 1 2 3 4 5 10

SITE NAME:	Vestmannaeyjar
DRAWING:	CD90 - AC and DC Cable Ducting
LOCATION:	Tangagata, 900 Vestmannaeyjabær, Iceland
PROJECT TYPE: CD90	SCALE: M 1:100
DATE: 11.11.2025.	PAPER SIZE: A2
DRAWN BY: Thomas Friis-Eriksen, +47 485 02 440	
TESLA	DRAWING NUMBER: 3.1



METRES 0 1 2 3 4 5 10

SITE NAME:	Vestmannaeyjar
DRAWING:	CD90 - Comm. and HV DC Bus Cable Duct.
LOCATION:	Tangagata, 900 Vestmannaeyjabær, Iceland
PROJECT TYPE: CD90	SCALE: M 1:100
DATE: 11.11.2025.	PAPER SIZE: A2
DRAWN BY:	Thomas Friis-Eriksen, +47 485 02 440
TESLA	DRAWING NUMBER: 3.2

DC CIRCUIT SCHEDULE

FROM	TO	RUN LENGTH CONDUITS (m)	RUN LENGTH CONDUCT. (m)	CONDUIT DESCRIPTION (QUANTITY, SIZE, TYPE)	CONDUCTORS DESCRIPTION (PURPOSE: QUANTITY, QUANTITY PER CONDUIT, MATERIAL, TYPE)

CONTRACTOR TO VERIFY ACTUAL LENGTHS AND ENSURE ALL CONDUIT ROUTES DO NOT EXCEED MIN. RECOMMENDED BEND RADIUS ON SITE!

AC CIRCUIT SCHEDULE

FROM	TO	RUN LENGTH CONDUITS (m)	RUN LENGTH CONDUCT. (m)	CONDUIT DESCRIPTION (QUANTITY, SIZE, TYPE)	CONDUCTORS DESCRIPTION (PURPOSE: QUANTITY, QUANTITY PER CONDUIT, MATERIAL, TYPE)
LV SWITCHGEAR	SC 1 (SUPERCHARGER)		14	Buried in cable sand	AC: 2x, 1x, Al, IFSI 1kV 4x240mm² + Cu 1x72mm²
LV SWITCHGEAR	SC 2 (SUPERCHARGER)		31	Buried in cable sand	AC: 2x, 1x, Al, IFSI 1kV 4x240mm² + Cu 1x72mm²
LV SWITCHGEAR	MSC		15	Buried in cable sand	AC: 1x, 1x, Cu, NYY-J 3x4mm²
LV SWITCHGEAR	LAMP POSTS	40	45	1x, 50mm, Flex.HDPE Cl.3	AC: 1x, 1x, Cu, NYY-J 3x2.5mm²

COMMUNICATION CABLE CIRCUIT SCHEDULE

MSC	SC 1 (SUPERCHARGER)	3	8	1x, 50mm, Flex.HDPE Cl.3	2x, 2x, CAT.7 (PRE-WIRED)
MSC	SC 2 (SUPERCHARGER)	33	38	1x, 50mm, Flex.HDPE Cl.3	2x, 2x, CAT.7 (PRE-WIRED)

HV DC BUS CIRCUIT SCHEDULE

SC 2 (SUPERCHARGER)	SC 1 (SUPERCHARGER)		34	Buried in cable sand	1x, Al, IFSI 1kV 4x240mm² + Cu 1x72mm²

TOTAL CONDUITS AMOUNT

CONDUIT	AMOUNT (m)
50mm, Flex.HDPE Cl.3	76

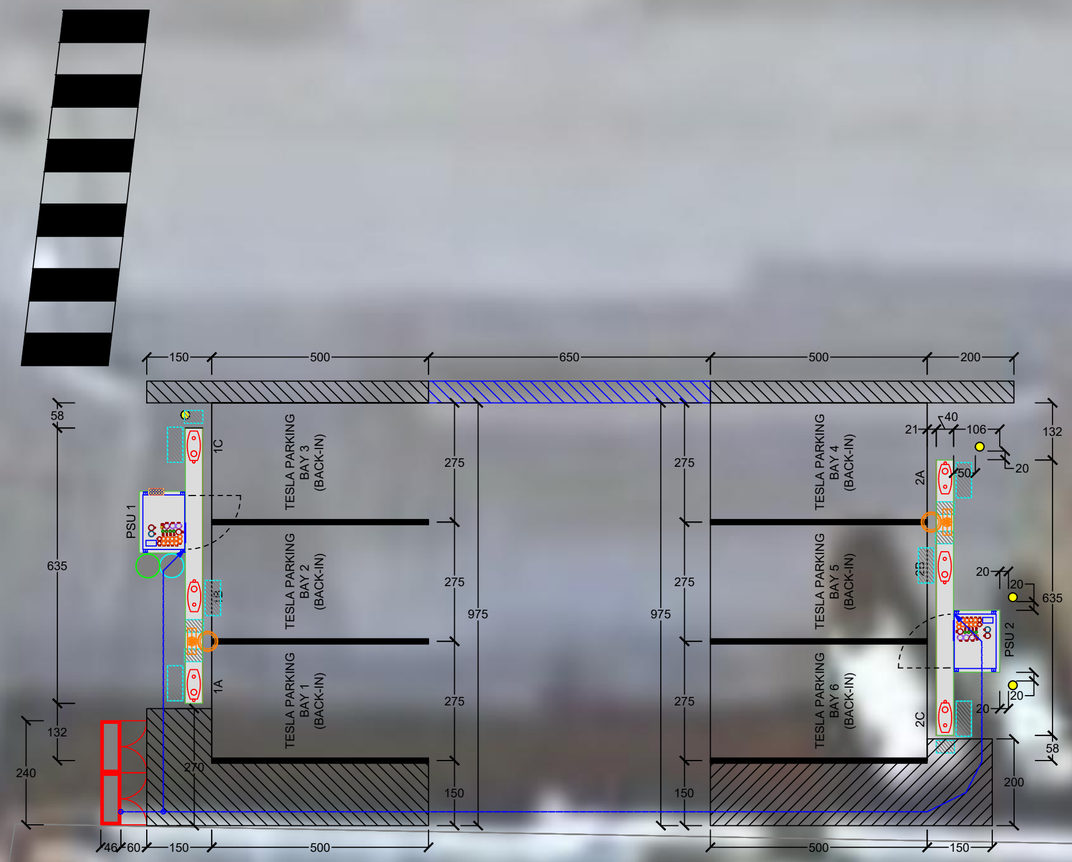
TOTAL CONDUCTORS AMOUNT

CONDUCTORS	AMOUNT (m)
IFSI 1kV 4x240mm² + Cu 1x72mm²	124
CAT.7 (PRE-WIRED)	92
NYY-J 3x2.5mm²	45
NYY-J 3x4mm²	15
Cover tape 200mm	120

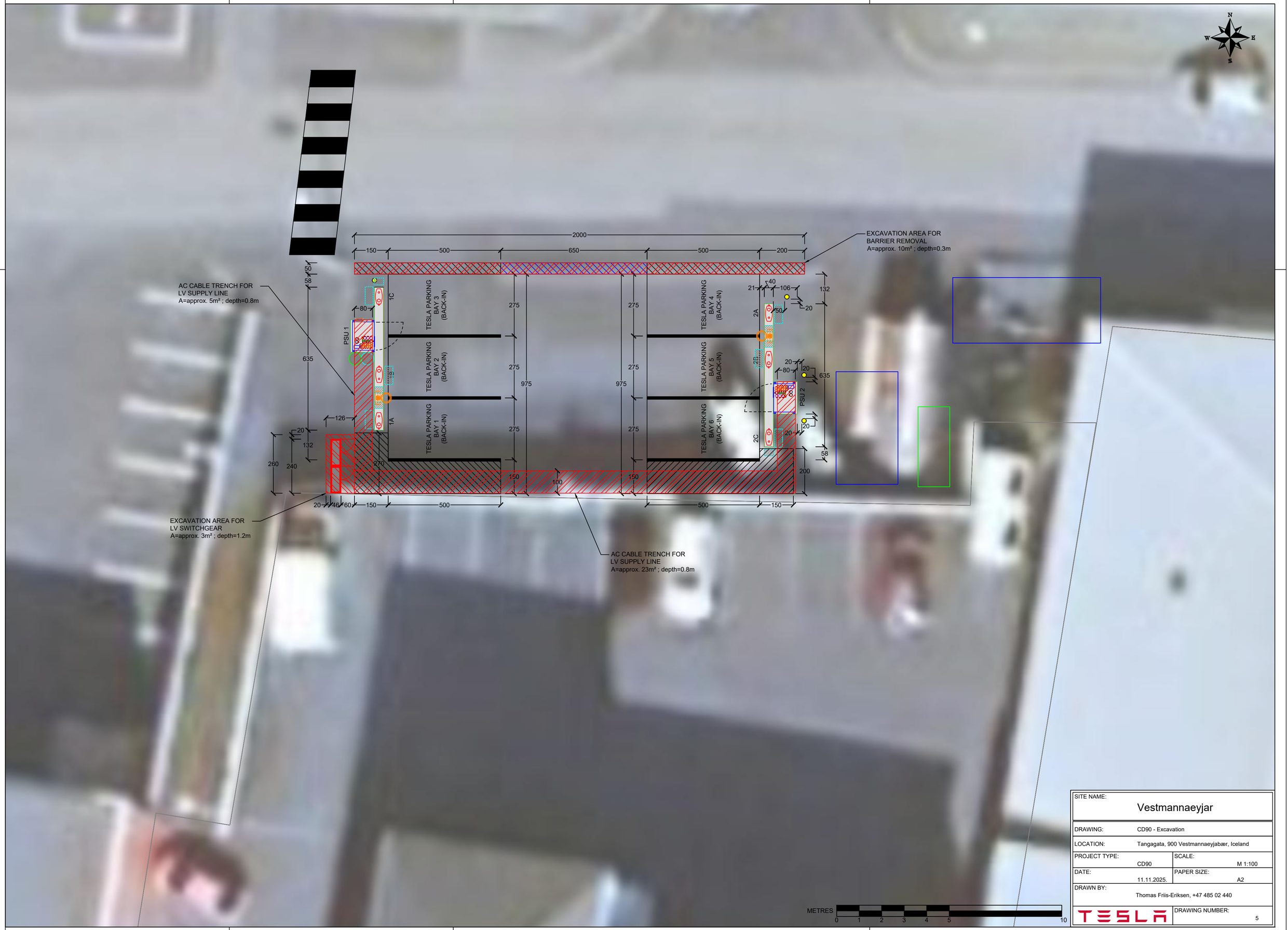
PSU´s internal DC and Communication cabling between cabinets and charge posts are done at the factory!

SITE NAME: Vestmannaeyjar

DRAWING:	CD90 - Cable List
LOCATION:	Tangagata, 900 Vestmannaeyjabær, Iceland
PROJECT TYPE: CD90	SCALE: -
DATE: 11.11.2025.	PAPER SIZE: A3
DRAWN BY:	Thomas Friis-Eriksen, +47 485 02 440
TESLA	DRAWING NUMBER: 3.3

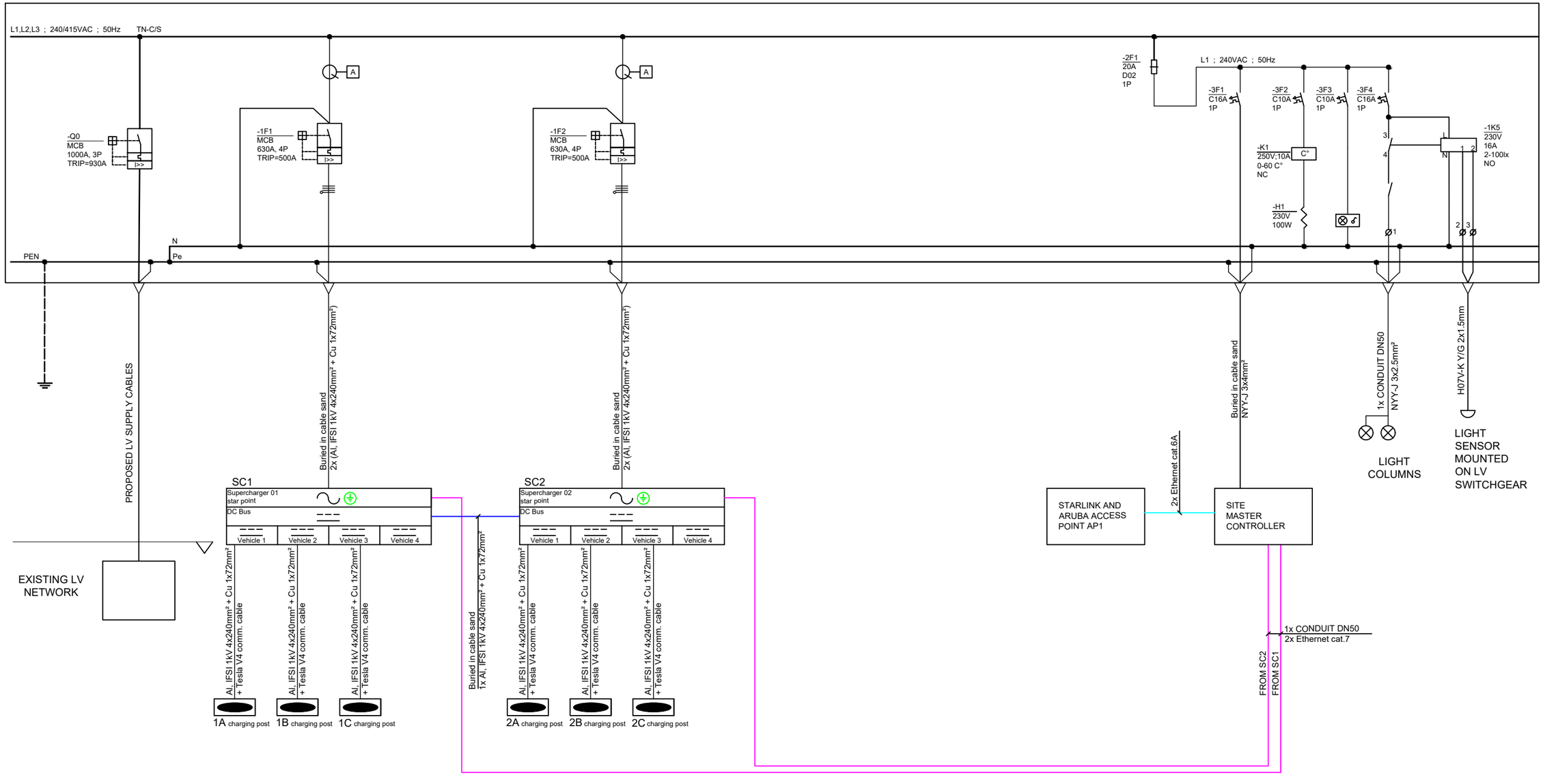


SITE NAME:	Vestmannaeyjar
DRAWING:	CD90 - Earthing
LOCATION:	Tangagata, 900 Vestmannaeyjabær, Iceland
PROJECT TYPE: CD90	SCALE: M 1:100
DATE: 11.11.2025.	PAPER SIZE: A2
DRAWN BY: Thomas Friis-Eriksen, +47 485 02 440	
TESLA	DRAWING NUMBER: 4



SITE NAME:	Vestmannaeyjar
DRAWING:	CD90 - Excavation
LOCATION:	Tangagata, 900 Vestmannaeyjabær, Iceland
PROJECT TYPE: CD90	SCALE: M 1:100
DATE: 11.11.2025.	PAPER SIZE: A2
DRAWN BY: Thomas Friis-Eriksen, +47 485 02 440	
TESLA	DRAWING NUMBER: 5

LV SWITCHGEAR



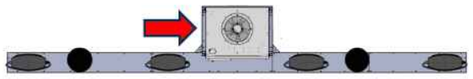
SWITCHGEAR CIRCUIT SCHEDULE

EQUIPMENT		EQUIPMENT FED	RATING	TRIP SETTING	# OF POLES
Main Breaker	-Q0	All Branch Breakers	1000A	930A	3
Branch Breaker	-1F1	Supercharger 1	630A	500A	4
Branch Breaker	-1F2	Supercharger 2	630A	500A	4
Branch Fuse	-2F1	Auxiliary circuits	20A		1
Branch Fuse	-3F1	Site Master Controller	16A		1
Branch Fuse	-3F2	Heater	10A		1
Branch Fuse	-3F3	Cabinet Service Lighting	10A		1
Branch Fuse	-3F4	Light Column & Luxomat	16A		1

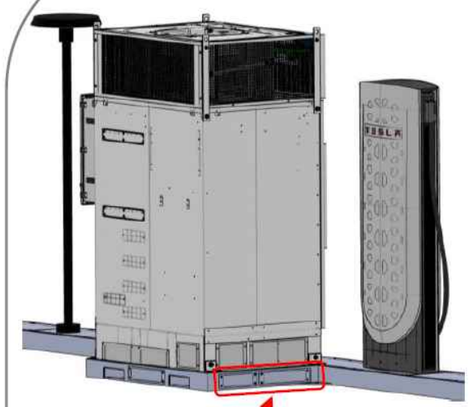
SITE NAME: Vestmannaeyjar

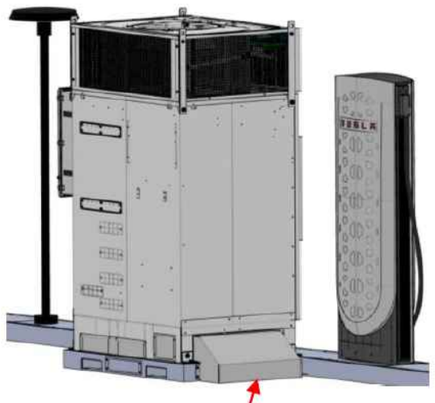
DRAWING:	CD90 - Electrical Diagram
LOCATION:	Tangagata, 900 Vestmannaeyjabær, Iceland
PROJECT TYPE: CD90	SCALE: -
DATE: 11.11.2025.	PAPER SIZE: A3
DRAWN BY: Thomas Friis-Eriksen, +47 485 02 440	
TESLA	DRAWING NUMBER: 6

PSU Cable Entrance

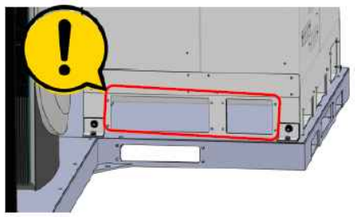


All cable entrance from the left

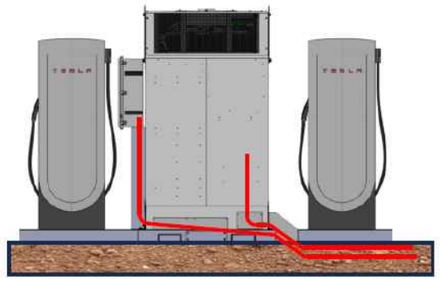




Install the cable wireway 2092516-00-A after cable installation.

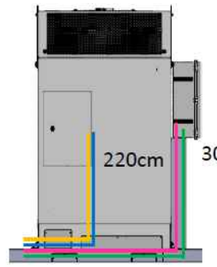


- Entering from the right side could be possible but only through the cabinet openings.
- This option has not been validated

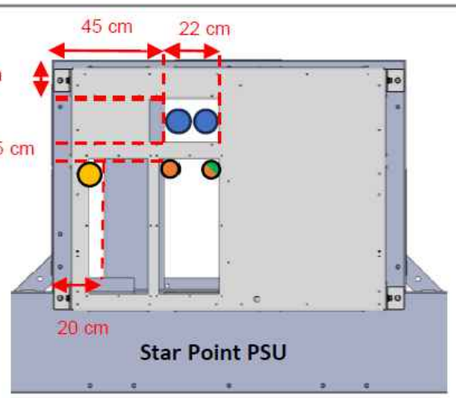


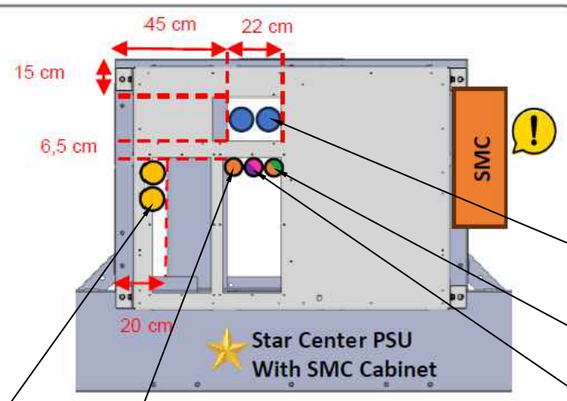
- Cable run through PSU Frame and Supercharger Cabinet

HVDC
AC
SMC AC
SMC Ethernet



- These lenghts are only for reference
- Don't cut any cables before double checking the local conditions





AC CABLE - TRANSFORMER STATION TO PSU

ETHERNET CABLE SUPERCHARGER DN50 - PSU TO PSU

POWER MANAGEMENT SMC

HV DC BUS CABLE - PSU STAR POINT TO PSU STAR CENTER

AC CABLE STREET LAMP POST DN50 - TRANSFORMER STATION TO PSU

SITE NAME:	Vestmannaeyjar
DRAWING:	CD90 - PSU Cable Entrance Details
LOCATION:	Tangagata, 900 Vestmannaeyjabær, Iceland
PROJECT TYPE: CD90	SCALE: -
DATE: 11.11.2025.	PAPER SIZE: A3
DRAWN BY:	Thomas Friis-Eriksen, +47 485 02 440
TESLA	DRAWING NUMBER: 7.1

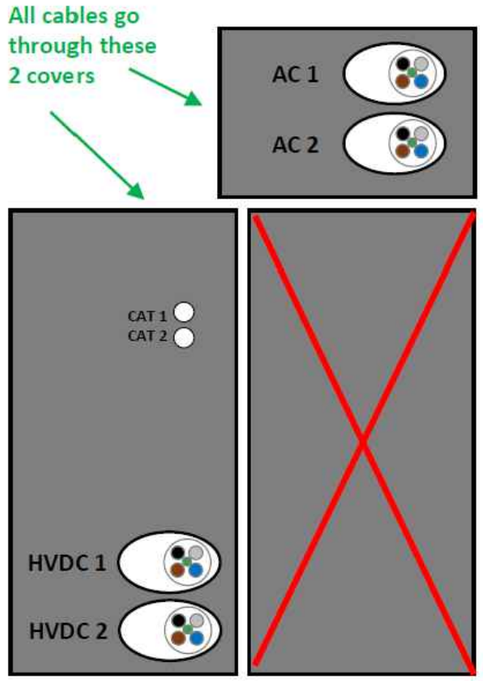
AC & HVDC Connection

AC Cable Supercharger
Transformer Station=> PSU

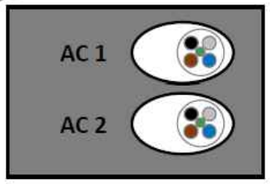
HVDC Busbar Cables Supercharger
PSU Star Point => PSU Star Center

- A max of 3 PSU can be connected to each other

Use plastic fermit to seal any gaps not sealed by the cable sealing covers



Cable Sealing Covers

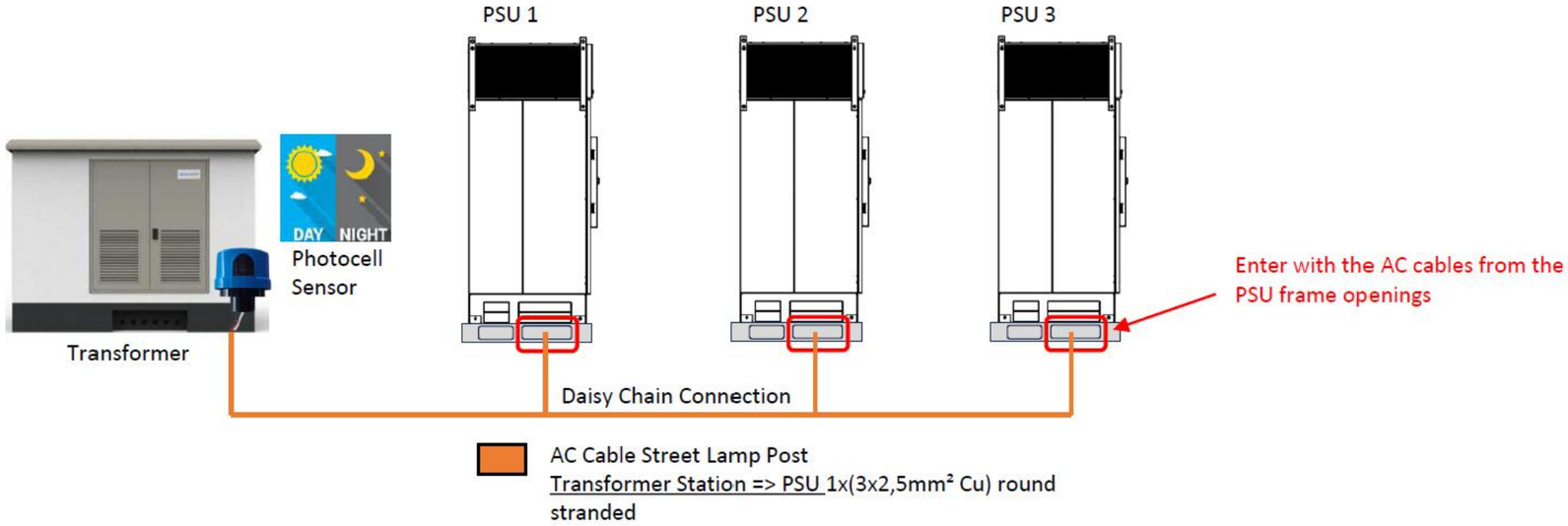


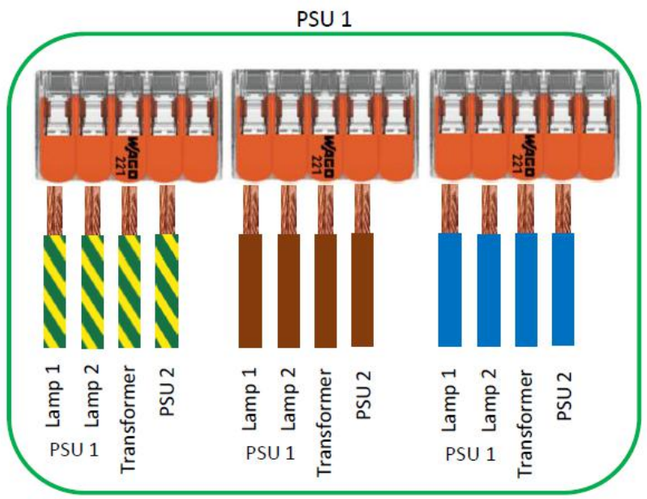
Drill 2 oval holes to the acrylic covers to pull in the AC & HVDC cables.

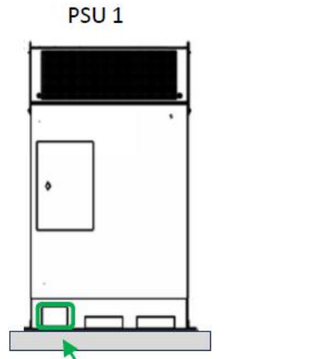
Use plastic fermit to seal any gaps not sealed by the cable sealing covers

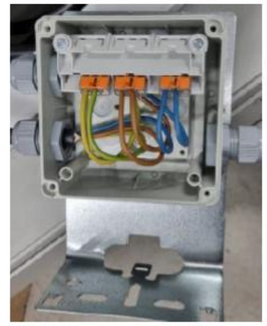
SITE NAME:	Vestmannaeyjar
DRAWING:	CD90 - AC and HVDC Bus Connection Details
LOCATION:	Tangagata, 900 Vestmannaeyjabær, Iceland
PROJECT TYPE: CD90	SCALE: -
DATE: 11.11.2025.	PAPER SIZE: A3
DRAWN BY: Thomas Friis-Eriksen, +47 485 02 440	
TESLA	DRAWING NUMBER: 7.2

Street Lamp Connection



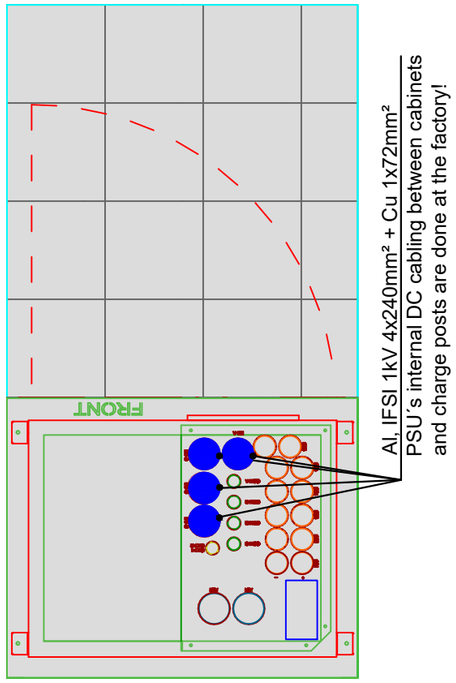




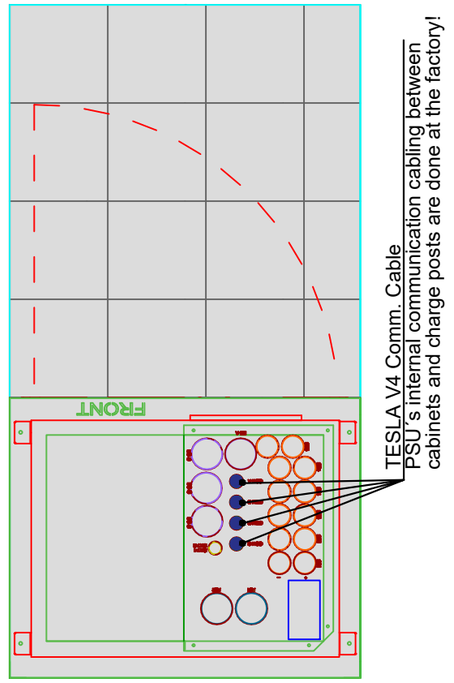


SITE NAME:	Vestmannaeyjar
DRAWING:	CD90 - Street Light and MSC Connection Details
LOCATION:	Tangagata, 900 Vestmannaeyjabær, Iceland
PROJECT TYPE: CD90	SCALE: -
DATE: 11.11.2025.	PAPER SIZE: A3
DRAWN BY: Thomas Friis-Eriksen, +47 485 02 440	
TESLA	DRAWING NUMBER: 7.3

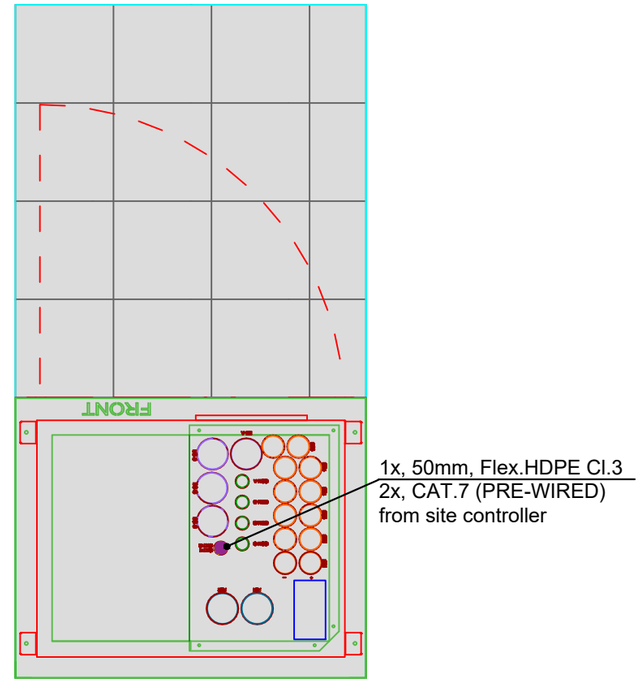
DC CABLES TO CHARGE POSTS



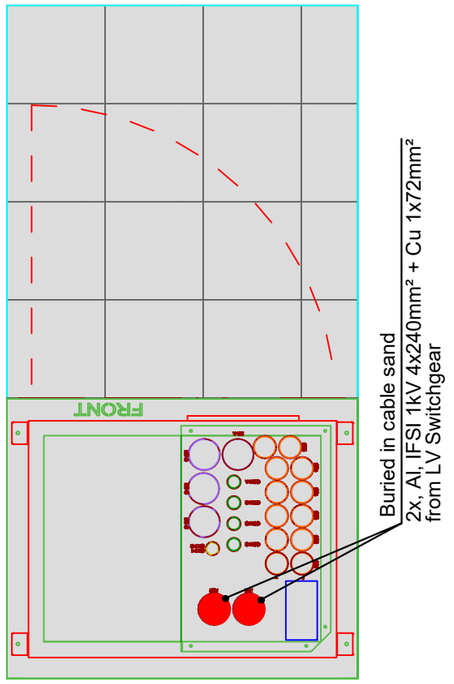
TESLA COMM CABLES TO CHARGE POSTS



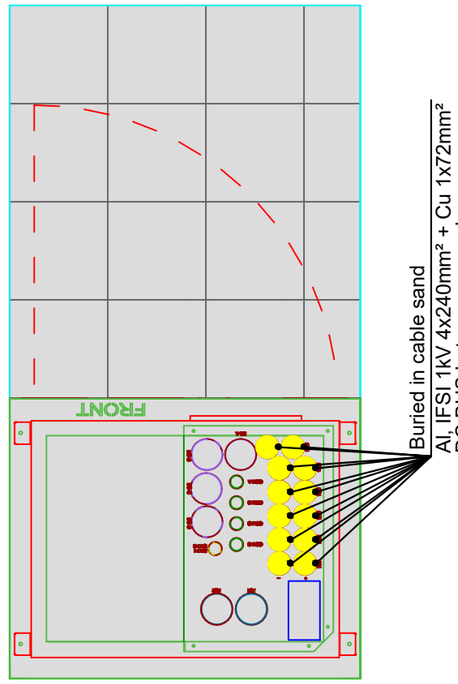
COMMUNICATION CABLE TO MASTER CONTROL.



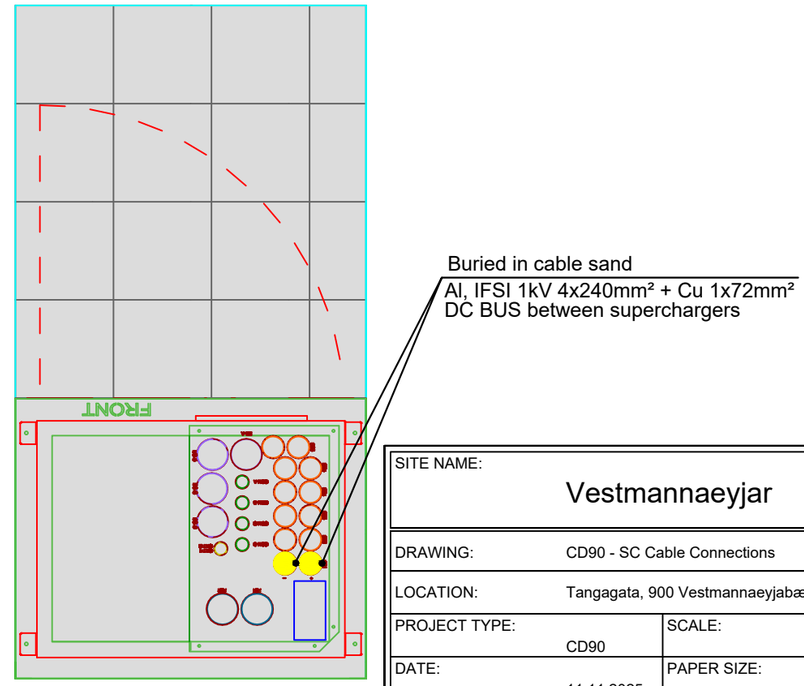
LV SUPPLY LINE FROM LV SWITCHGEAR



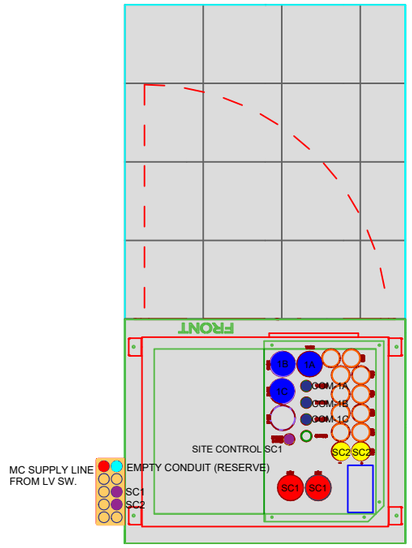
STAR-CENTER CABINET - HV DC BUS



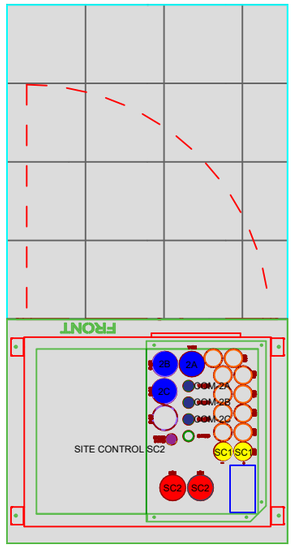
STAR-POINT CABINET - HV DC BUS



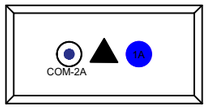
SITE NAME:	Vestmannaeyjar
DRAWING:	CD90 - SC Cable Connections
LOCATION:	Tangagata, 900 Vestmannaeyjabær, Iceland
PROJECT TYPE: CD90	SCALE: -
DATE: 11.11.2025.	PAPER SIZE: A3
DRAWN BY: Thomas Friis-Eriksen, +47 485 02 440	
TESLA	DRAWING NUMBER: 7.4



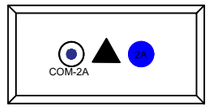
SUPERCHARGER SC1
STAR-POINT



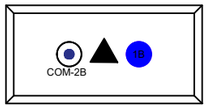
SUPERCHARGER SC2
STAR-POIINT



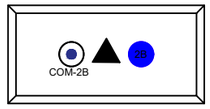
CHARGE POST 1A



CHARGE POST 2A



CHARGE POST 1B



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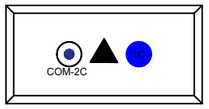
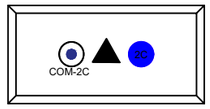
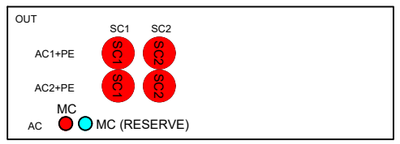


CHARGE POST 1C



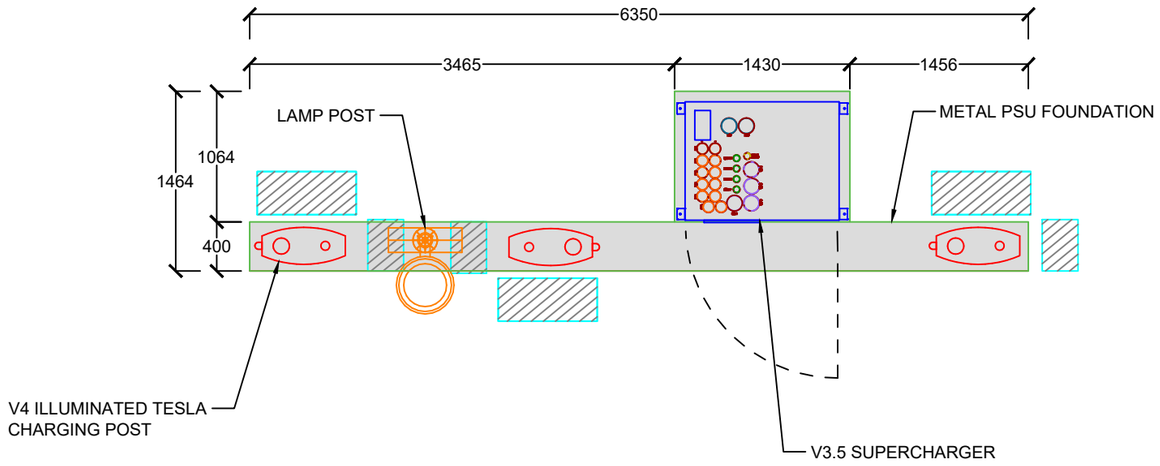
CHARGE POST 2C



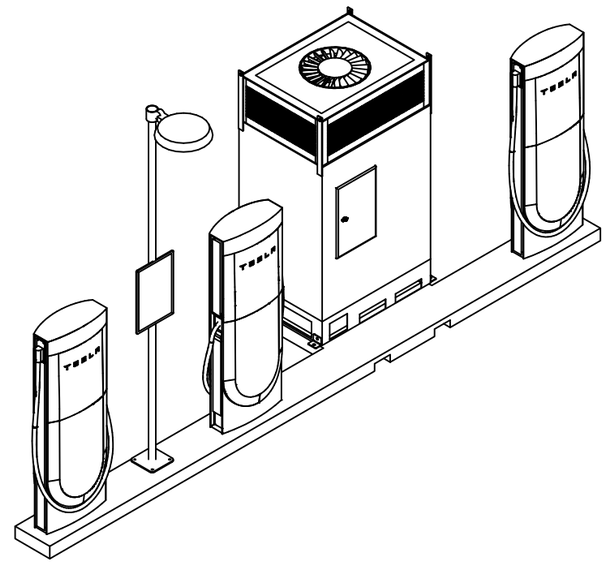
LV SWITCHGEAR

SITE NAME: Vestmannaeyjar	
DRAWING: CD90 - SC and CP Cable Connections	
LOCATION: Tangagata, 900 Vestmannaeyjabær, Iceland	
PROJECT TYPE: CD90	SCALE: -
DATE: 11.11.2025.	PAPER SIZE: A3
DRAWN BY: Thomas Friis-Eriksen, +47 485 02 440	
TESLA	DRAWING NUMBER: 7.5

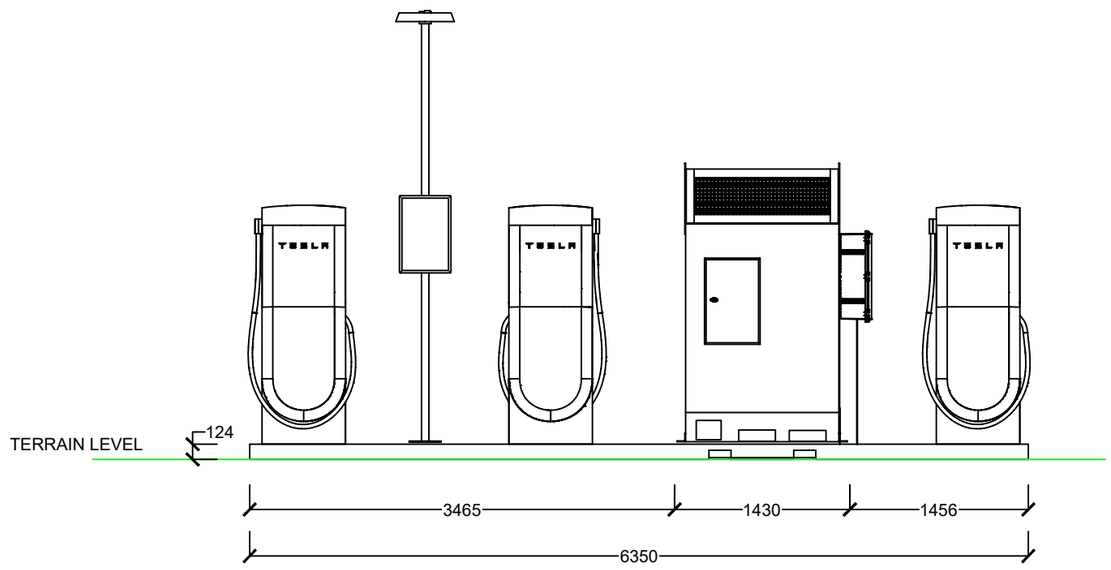
TOP VIEW



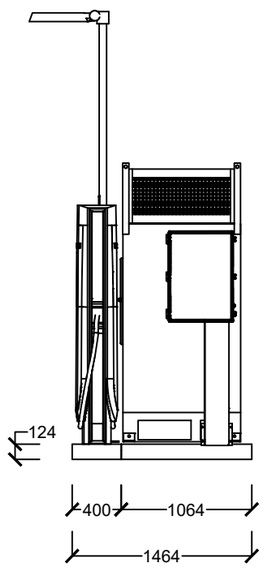
3D VIEW



FRONT VIEW



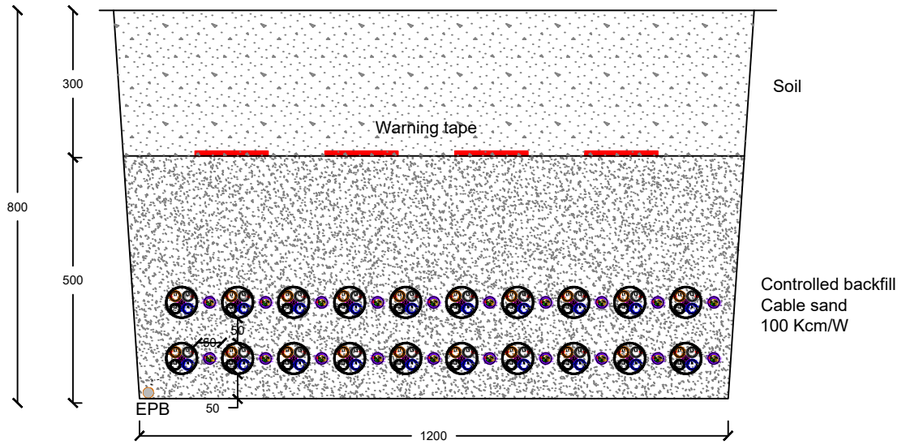
SIDE VIEW



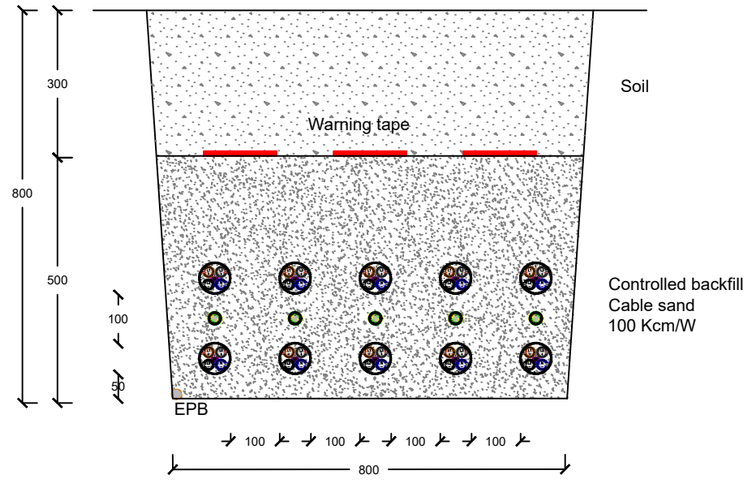
SITE NAME:	Vestmannaeyjar
DRAWING:	CD90 - 3 Post Metal PSU Details
LOCATION:	Tangagata, 900 Vestmannaeyjabær, Iceland
PROJECT TYPE: CD90	SCALE: M 1:50
DATE: 11.11.2025.	PAPER SIZE: A3
DRAWN BY: Thomas Friis-Eriksen, +47 485 02 440	
TESLA	DRAWING NUMBER: 8

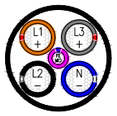
Tesla Supercharger V3.5/V4, electrical design - Unified cable

Cable trench profile
DC cabling



Cable trench profile
AC cabling



Cable						
Cable	AC/DC/HVDC bus UNIFIED CABLE	PE cable	Auxilary power	V4 Communication	Ethernet	EPB – Equipotential bonding
Cross–section	4x240mm² + 1x50mm²	1x240mm²	3x4mm²	2x10mm², 2x1mm², 2x2x0.5mm²	4x2x0.3mm², UTP, CAT6	1x50mm²
Core definition	Round, Class 2	Round, Class 2	Round, Class 1	Round, Class 5	Round, Class 5	Round, Class 2
Material	Aluminum	Aluminum	Cooper	Cooper, tinned	Cooper, tinned	Cooper, tinned
Insulation	XLPE	XLPE	PVC	PVC	PE	NA
Sheathing	PVC	PVC	PVC	Halogenfree Polymer	PE	NA
Permitted temperature	90°C	90°C	70°C	90°C	70°C	NA
Voltage rating	>1kV	>1kV	>1kV	1kV	NA	NA
Reaction to fire	Eca	Eca	Eca	B2ca	Fca	NA
Colour coding	Black / Light blue, Brown / Red Grey / Red, Blue / Light blue	Green–Yellow	Brown, Blue, Green–Yellow	Multiple	Black, Brown, Grey, Green–Yellow	NA
Drawing						

Unified cable coloring				
Wire colour	Cross section	AC	DC	HVDC
Brown / Red stripes	240mm²	2 x L1	+ Pole	+ Pole
Black / Light blue stripes	240mm²	2 x L2	– Pole	– Pole
Grey / Red stripes	240mm²	2 x L3	+ Pole	+ Pole
Blue / Light blue stripes	240mm²	2 x N	– Pole	– Pole
Green	50mm²	Not used	FE (Functional Earth)	Mid

SITE NAME:	Vestmannaeyjar
DRAWING:	CD90 - Cable and Trench Details
LOCATION:	Tangagata, 900 Vestmannaeyjabær, Iceland
PROJECT TYPE: CD90	SCALE: -
DATE: 11.11.2025.	PAPER SIZE: A3
DRAWN BY:	Thomas Friis-Eriksen, +47 485 02 440
TESLA	DRAWING NUMBER: 9