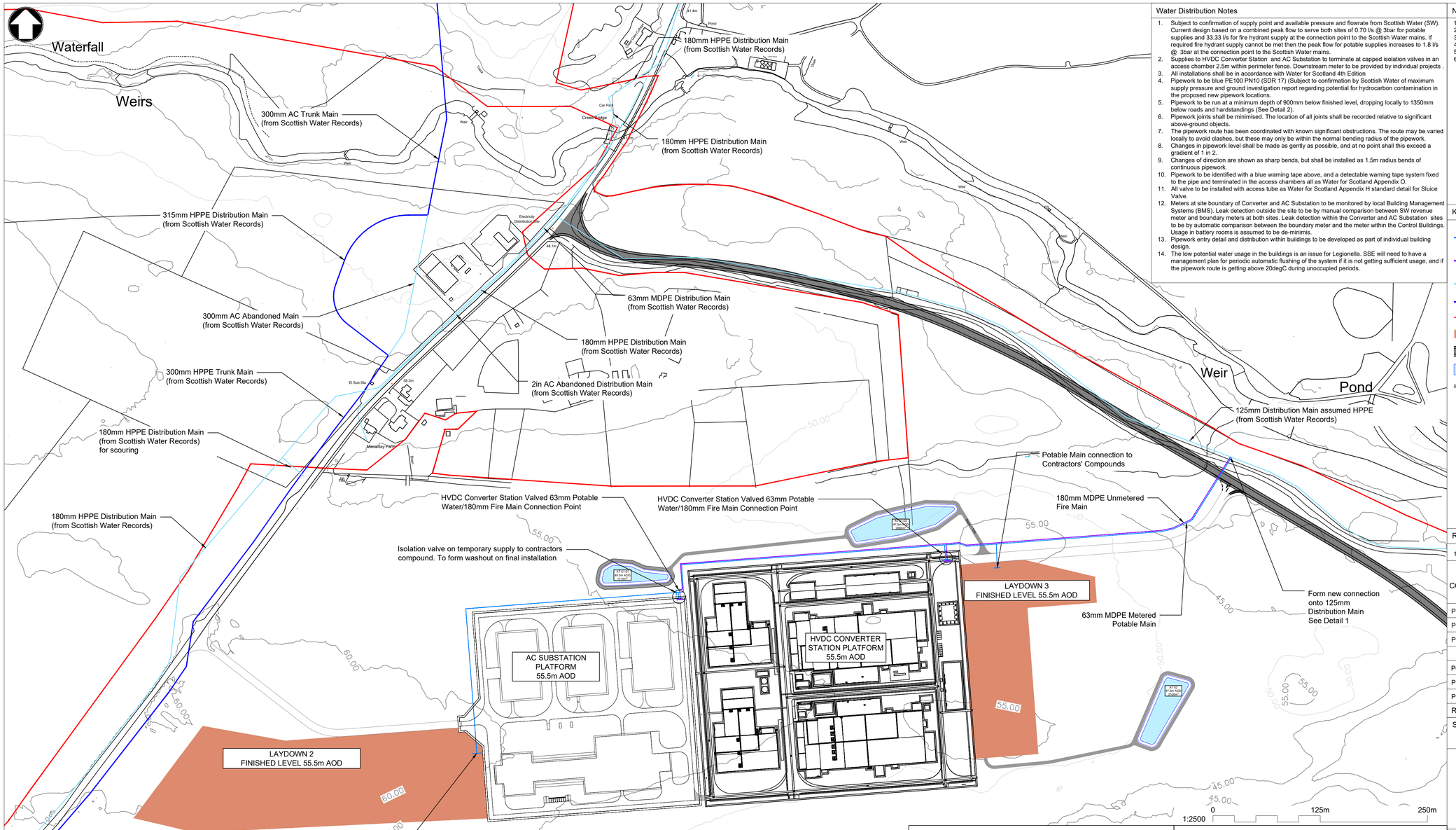

Water Distribution Notes

1. Subject to confirmation of supply point and available pressure and flowrate from Scottish Water (SW). Current design based on a combined peak flow to serve both sites of 0.70 l/s @ 3bar for potable supplies and 33.33 l/s for fire hydrant supply at the connection point to the Scottish Water mains. If required fire hydrant supply cannot be met then the peak flow for potable supplies increases to 1.8 l/s @ 3bar at the connection point to the Scottish Water mains.
2. Supplies to HVDC Converter Station and AC Substation to terminate at capped isolation valves in an access chamber 2.5m within perimeter fence. Downstream meter to be provided by individual projects .
3. All installations shall be in accordance with Water for Scotland 4th Edition
4. Pipework to be blue PE100 PN10 (SDR 17) (Subject to confirmation by Scottish Water of maximum supply pressure and ground investigation report regarding potential for hydrocarbon contamination in the proposed new pipework locations.
5. Pipework to be run at a minimum depth of 900mm below finished level, dropping locally to 1350mm below roads and hardstandings (See Detail 2).
6. Pipework joints shall be minimised. The location of all joints shall be recorded relative to significant above-ground objects.
7. The pipework route has been coordinated with known significant obstructions. The route may be varied locally to avoid clashes, but these may only be within the normal bending radius of the pipework.
8. Changes in pipework level shall be made as gently as possible, and at no point shall this exceed a gradient of 1 in 2.
9. Changes of direction are shown as sharp bends, but shall be installed as 1.5m radius bends of continuous pipework.
10. Pipework to be identified with a blue warning tape above, and a detectable warning tape system fixed to the pipe and terminated in the access chambers all as Water for Scotland Appendix O.
11. All valve to be installed with access tube as Water for Scotland Appendix H standard detail for Sluice Valve.
12. Meters at site boundary of Converter and AC Substation to be monitored by local Building Management Systems (BMS). Leak detection outside the site to be by manual comparison between SW revenue meter and boundary meters at both sites. Leak detection within the Converter and AC Substation sites to be by automatic comparison between the boundary meter and the meter within the Control Buildings. Usage in battery rooms is assumed to be de-minimis.
13. Pipework entry detail and distribution within buildings to be developed as part of individual building design.
14. The low potential water usage in the buildings is an issue for Legionella. SSE will need to have a management plan for periodic automatic flushing of the system if it is not getting sufficient usage, and if the pipework route is getting above 20degC during unoccupied periods.

Notes

1. This drawing is for information only and should not be used for construction.
2. No unauthorised disclosure, storage or copying.
3. All spatial coordinates relate to the Ordnance Survey, British National Grid (OSGB36).
4. Levels are in metres and have been obtained from the Cyberhawk topographical survey.
5. This drawing is to be read in conjunction with all relevant documents and drawings.
6. The site civils design has been completed in line with the requirements of the standardised HVDC Converter Station and AC Substation compound design defined by SSEN. The site drainage and earthworks design, including the platform levels, may be optimised further following completion of the ground investigation and design development of the HVDC Converter Station and AC Substation.

Key to symbols

- NEW PRIVATE POTABLE WATER MAIN TYPICALLY 750-1250MM DEEP
- NEW PRIVATE FIRE MAIN TYPICALLY 750-1250MM DEEP
- EXISTING SCOTTISH WATER DISTRIBUTION MAIN
- EXISTING SCOTTISH WATER TRUNK MAIN
- RED LINE BOUNDARY
- TEMPORARY LAYDOWN AREAS
- NEW STORNOWAY PORT AUTHORITY ROAD
- ATTENUATION BASIN
- TRACK FOR MAINTENANCE

Reference drawings

109647-MMD-ARNI-XX-DR-CE-0003 - PERMANENT DRAINAGE LAYOUT

Rev	Date	Drawn	Description	Ch'k'd	App'd
P06	14/02/2025	OGL	FOR PLANNING SUBMISSION	ARD	AN
P05	04/02/2025	OGL	FOR PLANNING SUBMISSION	ARD	AN
P04	11/11/2024	OGL	CLIENT COMMENT UPDATE AND CHANGE IN LAYDOWN AREA 3 PLAN AREA	ARD	RMcG
P03	11/10/2024	OGL	SECOND ISSUE	ARD	RMcG
P02	14/09/2024	OGL	FIRST ISSUE	ARD	AN
P01	30/08/24	OGL	PRELIMINARY ISSUE	ARD	AN

Status Stamp

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Client

Scottish & Southern Electricity Networks

Project Name

LT14 Western Isles HVDC

Site Name

Arnish Moor

Title

Site Water Supply Layout

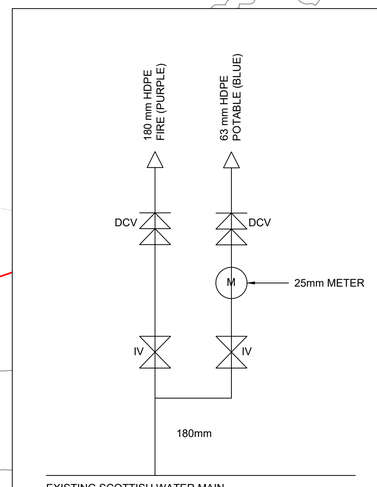
Designed	Alex Nightingale	AL	Eng check	Anabel Ruiz Diaz	ARD
Drawn	Oscar Gomez Lopez	OGL	Coordination	Anabel Ruiz Diaz	ARD
Dwg check	Anabel Ruiz Diaz	ARD	Approved	Alex Nighingale	AN

MMD Project Number	Scale at A1	Security
109647	1:2500	STD

MML Drawing Number	Revision
109647-MMD-ARNI-XX-DR-CE-0006	P06

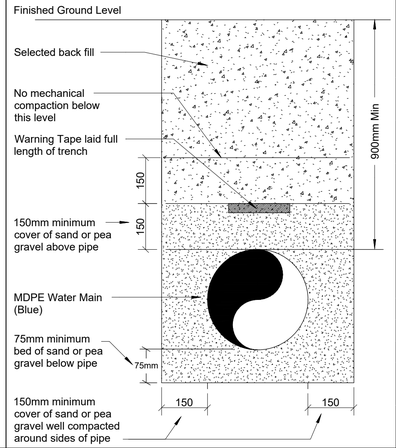
SSEN Drawing Number

TBC



Detail 1 - 180mm Distrubution Main to New Connection

Note:
No part of the pipe or fitting shall be less than 750mm, or more than 1350mm below the finished ground level



Detail 2 - Typical Detail of Mains Water Trench

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