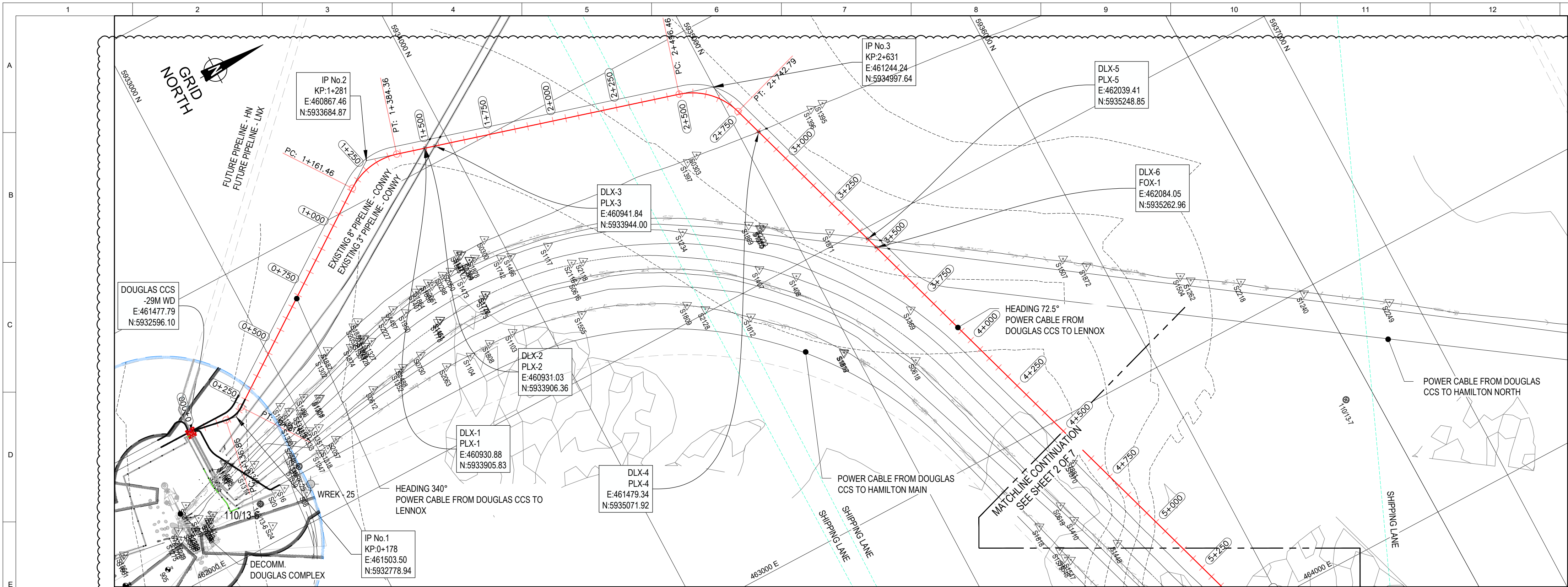
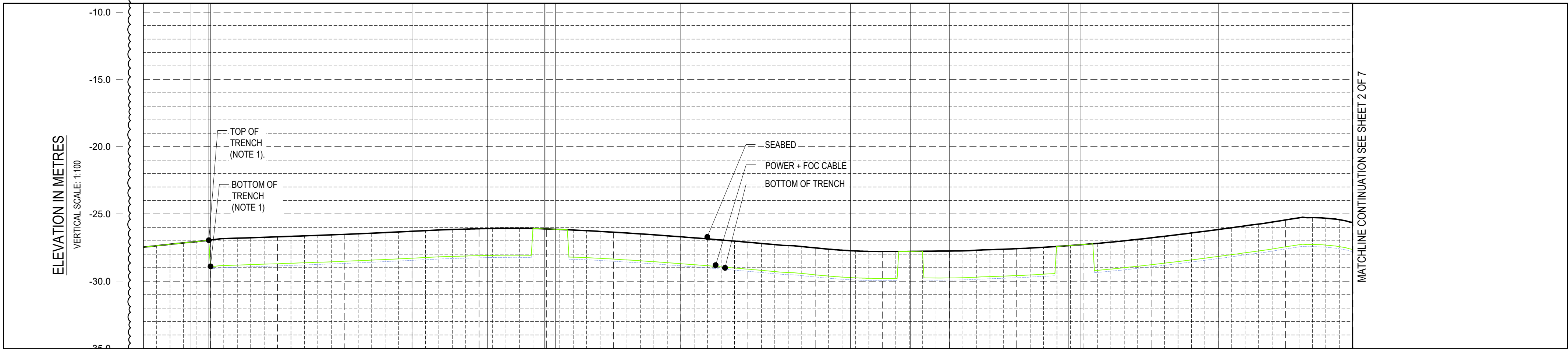




BATHYMETRY & SEABED FEATURES
HORIZONTAL SCALE 1:10,000



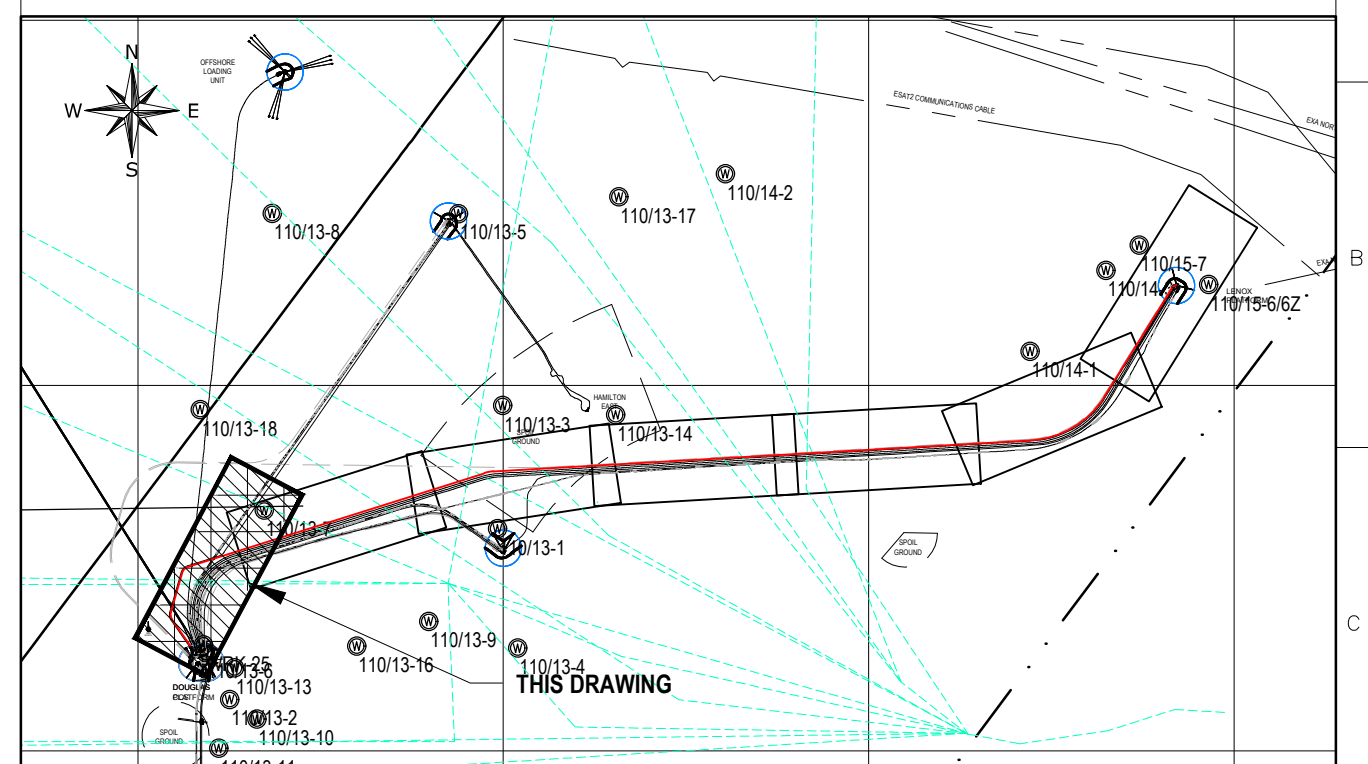
SEABED PROFILE
HORIZONTAL SCALE 1:10,000

COMMENTS	START POINT KP 0.000	IP-01 LHB R100m 19/33(36)kV 19/33(3
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DETAILS
SCALE 1:10,000

REFERENCE DOCUMENTS	
NUMBER	TITLE
1025H0BSDG84104	NEW OFFSHORE POWER CABLE AND FIBRE OPTIC FIELD LAYOUT (OFFSHORE SECTION)
1025H0BSDN84112	OFFSHORE POWER CABLE APPROACH DRAWINGS
105600BSDP84917	TYP. CROSSING GA DRAWING FOR POWER CABLE FROM DOUGLAS CCS - LENNOX (DLX-1-DLX-6)

KEY PLAN



LEGEND

ABBREVIATIONS

KP	- KILOMETRE POINT	DP	- DOUGLAS PLATFORM
IP-XX	- INTERSECTION POINT	HN	- HAMILTON NORTH PLATFORM
TG-XX	- TANGENT POINT OF BEND	LNx	- LENNOX PLATFORM
TOP	- TOP OF PIPE	HM	- HAMILTON MAIN PLATFORM
BTM	- BOTTOM	SHT	- SHEET
BOP	- BOTTOM OF PIPE	XX-PLX-01	- LINE No - PIPELINE CROSSING - No.
FOC	- FIBRE OPTIC CABLE	XX-FLX-01	- LINE No - FAULT LINE CROSSING - No.
NTS	- NOT TO SCALE	XX-FOX-01	- LINE No - FOC / POWER CABLE CROSSING - No.
OD	- OUTSIDE DIAMETER	XX-UX-01	- LINE No - UMBILICAL CROSSING - No.
SP	- START POINT	XX-FEX-01	- LINE No - FENCELINE CROSSING - No.
EP	- END POINT	XX-RDX-01	- LINE No - ROAD CROSSING - No.
PC	- POINT OF CURVATURE (ENTRY)	RHB / LHB	- RIGHT / LEFT HAND BEND
PT	- POINT OF TANGENT (EXIT)	RXXm	- RADIUS No. metres

	EXISTING PROFILE.		SHIP WRECK LOCATION AND ID NUMBER.
	PROPOSED PROFILE.		ABANDONED WELL LOCATION AND ID NUMBER.
	BOTTOM OF TRENCH PROFILE.		

NOTES

- TRENCH TRANSITION HORIZONTAL LENGTH OF 6m 1:3 SLOPE (TOP OF TRENCH = KP 0.244, BOTTOM OF TRENCH = KP 0.250).
- BATHYMETRY HAS BEEN DEVELOPED FROM EMOD 5m CONTOUR ED50 UTM 30N DRAWING SET. BATHYMETRY TO BE CONFIRMED ONCE SURVEY HAS BEEN CONDUCTED.
- FOR CABLE PROTECTION AND SEABED COVER REQUIREMENTS SEE OFFSHORE POWER CABLE PROTECTION REQUIREMENT DOC. No. 1025H0BSRV84107 AND OFFSHORE CABLES PRELIMINARY CROSSING DESIGN REPORT DOC. No. 1025DSBSC284173.
- FOR POWER CABLE INSTALLATION REQUIREMENTS SEE POWER CABLE INSTALLATION SPECIFICATION DOC. No. 1025H0BSA84108.

HOLDS

- TO BE CONFIRMED.
- TO BE CONFIRMED.
- TO BE CONFIRMED.

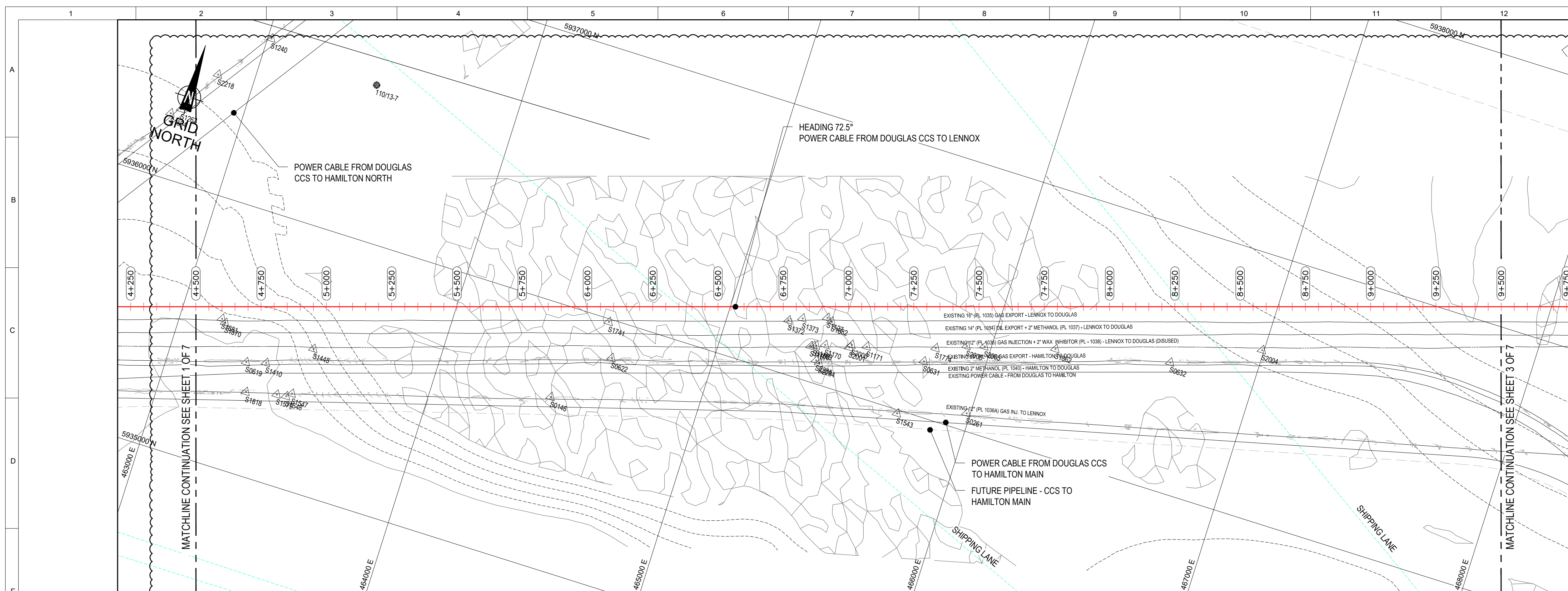
Power Cable Alignment - CCS to LNX (KP 0+000 - KP 32+312.08)				
IP Station	Easting	Northing	Distance (m)	Direction
0+000.00	461,472.53	5,932,603.31	178.345	N0°59'59.52"E
0+178.34	461,503.50	5,932,778.94	1,106.91	N35°04'19.84"W
1+280.93	460,867.46	5,933,684.87	1,365.77	N16°00'50.63"E
2+630.66	461,244.24	5,934,997.64	8,762.86	N72°28'03.45"E
11+371.45	469,600.04	5,937,637.41	16,182.70	N86°40'08.66"E
27+552.87	485,755.40	5,938,577.67	4,899.53	N31°55'28.96"E
32+247.60	488,346.30	5,942,736.12	69.561	N85°03'28.09"E
32+312.08	488,415.60	5,942,742.11		

Power Cable from DOUGLAS CCS to LENNOX (Overall Length = 32.31 Km)				
Tag No.	KP	Easting	Northing	Description of Crossing
DLX-1	1+494	460930.88	5933905.83	8" (PL 2939) Production to CONWY
DLX-2	1+495	460931.03	5933906.36	3" (PL 2941) Condensate PL to CONWY
DLX-3	1+534	460941.84	5933944.00	8" (PL 2940) Water Injection Pipeline to CONWY
DLX-4	2+855	461479.34	5935071.92	14" Oil Export (PL 1031) to OLU
DLX-5	3+442	462039.41	5935248.85	14" Gas Export (PL 1041) + 2" Methanol (PL 1042) from Hamilton North
DLX-6	3+489	462084.05	5935262.96	Existing Power Cable to Hamilton North

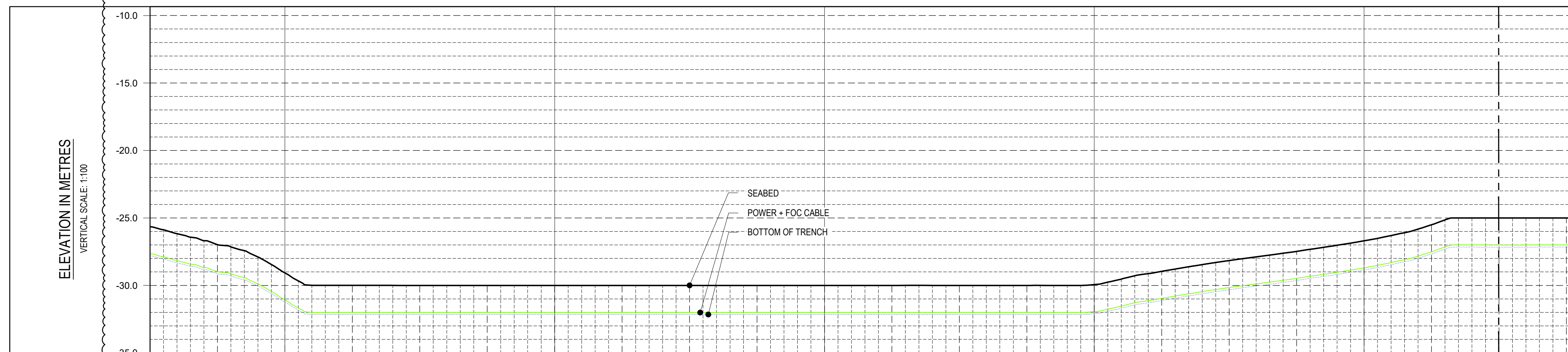
GEODETIC PARAMETERS

ELLIPSOID	: INTERNATIONAL 1924
DATUM	: EUROPEAN 1950 (ED50)
PROJECTION	: UNIVERSAL TRANSVERSE MERCATOR (UTM)
GRID ZONE	: 30N
CENTRAL MERIDIAN	: 3° E
LATITUDE OF ORIGIN	: 0° N
FALSE EASTING	: 500 000 m
FALSE NORTHING	: 0
SCALE FACTOR ON C.M.	: 0.9996

CD-FE	02	22.09.2021	RE-ASSUED FOR COMMENT	N.Z	E.R	S.G				
CD-FE	01	17.11.2022	ISSUED FINAL	N.Z	S.R	S.G				
CD-FE	00	26.10.2022	ISSUED FOR COMMENT	N.Z	S.R	S.G				
Revision Index				Description	Prepared	Checked	Approved	Approved Est UK		
Date										
Company logo and business name										
Facility and Sub Facility Name				Project Name	Scale	Job. N.	Sheet of Sheets			
DOUGLAS SUBSEA				LBA CCS Transport and Storage	1:10K @A1	1025DSBDSG84143	1 / 7			
Document Title				Superseded by N.	Superseded by N.	Plant Area	Plant Unit			
OFFSHORE POWER CABLE - DOUGLAS CCS TO LENNOX						NA	NA			
ALIGNMENT SHEET KP 0+000 - KP 4+500										



BATHYMETRY & SEABED FEATURES



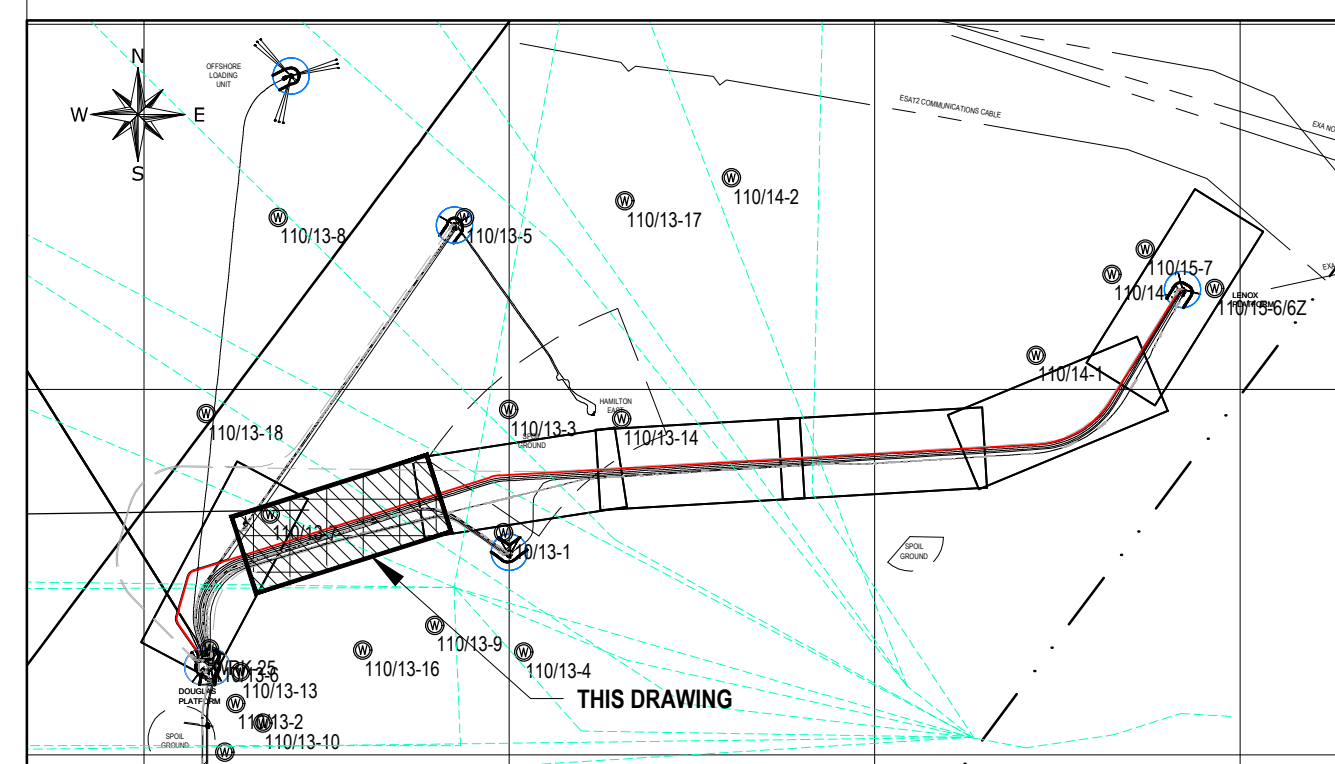
COMMENTS	4.5	5.0	6.0	7.0	8.0	9.0	9.5
KP ALONG ROUTE							
SIZE / NAME / TAG				156.0mm O.D. / SINGLE ARMoured SUBMARINE POWER & TELECOMMUNICATION CABLE / 19/33(36)kV POWER CABLE + 48 CORE FIBRE OPTIC CABLE			
DETAILS				COPPER CONDUCTOR + XLPE + COPPER WIRES + COPPER FOIL BONDED TO PE SHEATH			
MIN BEND RADIUS (OPERATIONAL)				2m (HOLD-1)			
APPROX. WEIGHT (AIR / WATER)				47 kg/m / 30 kg/m (HOLD-2)			
TRENCH DETAILS				BURIED			
COVER REQUIREMENTS				2.0m MIN. COVER TOP OF POWER + FOC CABLE			
LAY TOLERANCE				±10.0m			
CROSSING DETAILS				NONE			
MINIMUM BREAKING LOAD				45.6 kNm² (HOLD-3)			
SOIL TYPE (TOP LAYER)				SAND			

MATCHLINE CONTINUATION SEE SHEET 3 OF 7

DETAILS
SCALE 1:10,000

REFERENCE DOCUMENTS	
NUMBER	TITLE
1025H0SDG84104	NEW OFFSHORE POWER CABLE AND FIBRE OPTIC FIELD LAYOUT (OFFSHORE SECTION)
105600SDP84917	TYP. CROSSING GA DRAWING FOR POWER CABLE FROM DOUGLAS CCS - LENNOX (DLX-1-DLX-6)

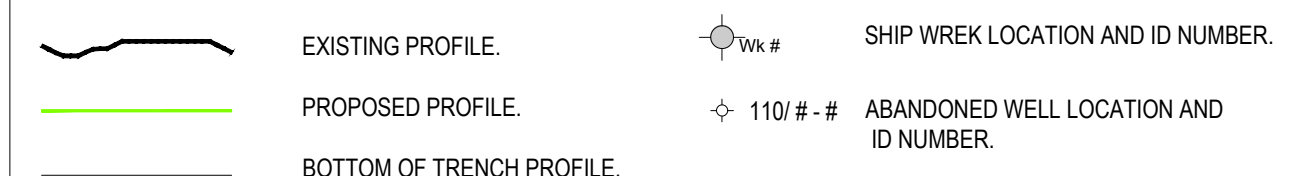
KEY PLAN



LEGEND

ABBREVIATIONS

KP	-	KILOMETRE POINT	DP	-	DOUGLAS PLATFORM
IP-XX	-	INTERSECTION POINT	HN	-	HAMILTON NORTH PLATFORM
TG-XX	-	TANGENT POINT OF BEND	LNx	-	LENNOX PLATFORM
TOP	-	TOP OF PIPE	HM	-	HAMILTON MAIN PLATFORM
BTM	-	BOTTOM	SHT	-	SHEET
BOP	-	BOTTOM OF PIPE	XX-PLX-01	-	LINE No - PIPELINE CROSSING - No.
FOC	-	FIBRE OPTIC CABLE	XX-FLX-01	-	LINE No - FAULT LINE CROSSING - No.
NTS	-	NOT TO SCALE	XX-FOX-01	-	LINE No - FOC / POWER CABLE CROSSING - No.
OD	-	OUTSIDE DIAMETER	XX-UX-01	-	LINE No - UMBILICAL CROSSING - No.
ST	-	START POINT	XX-FEX-01	-	LINE No - FENCE LINE CROSSING - No.
EP	-	END POINT	XX-RDX-01	-	LINE No - ROAD CROSSING - No.
PC	-	POINT OF CURVATURE (ENTRY)	RHB / LHB	-	RIGHT / LEFT HAND BEND
PT	-	POINT OF TANGENT (EXIT)	RXXXm	-	RADIUS No. metres



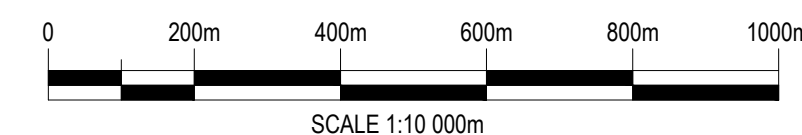
NOTES

1. BATHYMETRY HAS BEEN DEVELOPED FROM EMOD 5m CONTOUR EDS0 UTM 30N DRAWING SET. BATHYMETRY TO BE CONFIRMED ONCE SURVEY HAS BEEN CONDUCTED.
2. FOR CABLE PROTECTION AND SEABED COVER REQUIREMENTS SEE OFFSHORE POWER CABLE PROTECTION REQUIREMENT DOC. No. 1025HOB5RV94107 AND OFFSHORE CABLES PRELIMINARY CROSSING DESIGN REPORT DOC. No. 1025HOBSC284713.
3. FOR POWER CABLE INSTALLATION REQUIREMENTS SEE POWER CABLE INSTALLATION SPECIFICATION DOC. No. 1025HOBSSA84108.

HOLDS

1. TO BE CONFIRMED
2. TO BE CONFIRMED
3. TO BE CONFIRMED

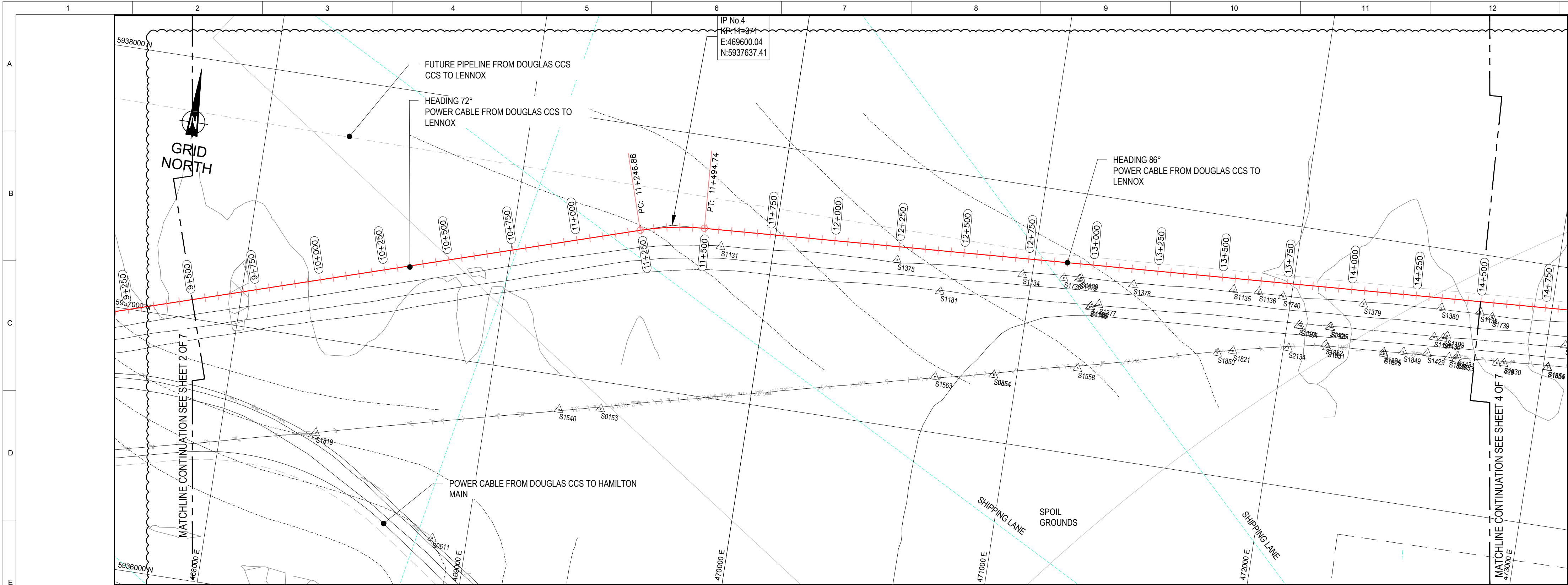
Power Cable Alignment - CCS to LNX (KP 0+000 - KP 32+312.08)				
IP Station	Easting	Northing	Distance (m)	Direction
0+000.00	461,472.53	5,932,603.31		
0+178.34	461,503.50	5,932,778.94	178.345	N0° 59' 59.2"E
1+280.93	460,867.46	5,933,684.87	1,106.91	N35° 04' 19.84"W
2+630.56	461,244.24	5,934,997.66	1,365.77	N16° 00' 50.63"E
11+371.45	469,600.04	5,937,637.41	8,762.86	N07° 28' 03.45"E
27+552.87	485,755.40	5,938,577.67	16,182.70	N86° 40' 08.65"E
32+247.60	488,346.30	5,942,736.12	4,899.53	N31° 55' 28.96"E
32+312.08	488,415.60	5,942,742.11	69.561	N85° 07' 28.09"E



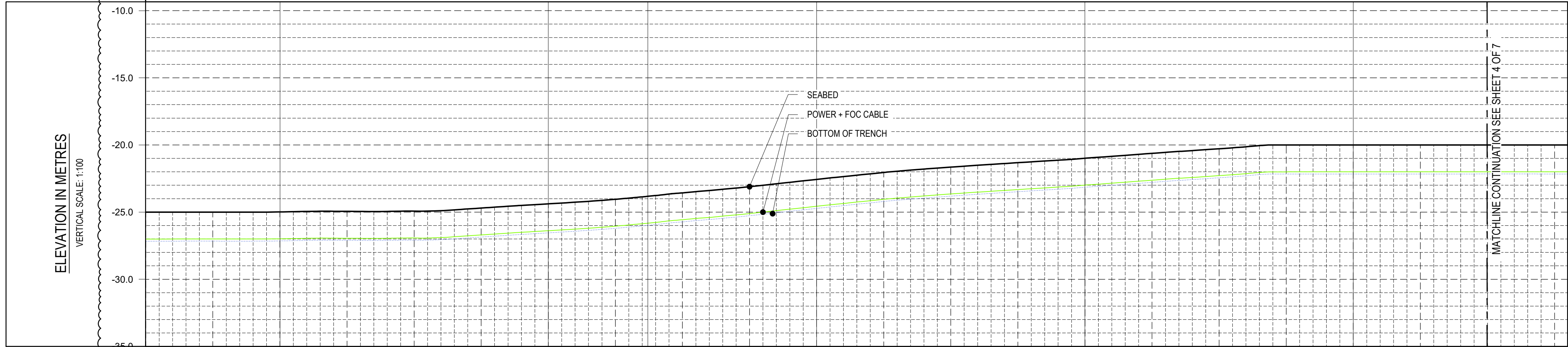
GEODETIC PARAMETERS

ELLIPSOID	: INTERNATIONAL 1924
DATUM	: EUROPEAN 1950 (ED50)
PROJECTION	: UNIVERSAL TRANSVERSE MERCATOR (UTM)
GRID ZONE	: 30N
CENTRAL MERIDIAN	: -3° E
LATITUDE OF ORIGIN	: 0° N
FALSE EASTING	: 500 000 m
FALSE NORTHING	: 0
SCALE FACTOR ON C.M.	: 0.9996

CD-FE	02	22.09.2022	REISSUED FOR COMMENT	N.Z	ER	S.G	
CD-FE	01	17.11.2022	ISSUED FINAL	N.Z	S.R	S.G	
CD-FA	00	26.10.2022	ISSUED FOR COMMENT	N.Z	S.R	S.G	
Validity	Rev	Number	Description	Prepared	Checked	Approved	Approved Eni UK
Revision index							
Company logo and business name				Company Document ID			
   				1025DSB8GD84143			
Facility Sub Facility Name		Project Name		Scale		Sheet of Sheets	
DOUGLAS SUBSEA		LBA CCS Transport and Storage		1:10K @A1		2 / 7	
Document Title				Supersedes N:			
OFFSHORE POWER CABLE - DOUGLAS CCS TO LENNOX				Superseded by N:			
ALIGNMENT SHEET KP 4+500 - KP 9+500				Plant Area		Plant Unit	
				N/A		N/A	



BATHYMETRY & SEABED FEATURES
HORIZONTAL SCALE 1:10,000



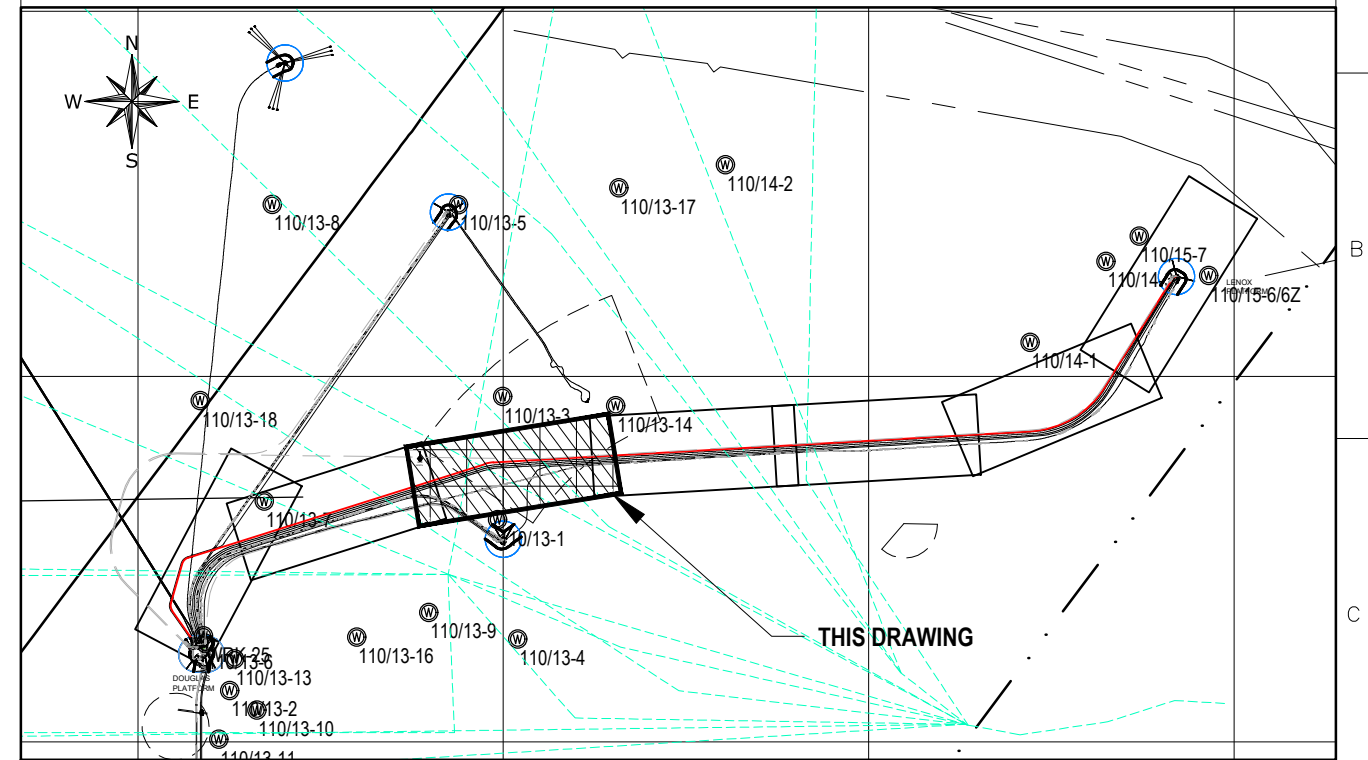
SEABED PROFILE
HORIZONTAL SCALE 1:10,000

COMMENTS	9.5	10.0	11.0	11.37	12.0	13.0	14.0	14.5
KP ALONG ROUTE	9.5	10.0	11.0	11.37	12.0	13.0	14.0	14.5
SIZE / NAME / TAG				156.0mm O.D. / SINGLE ARMoured SUBMARINE POWER & TELECOMMUNICATION CABLE / 19/33/36KV POWER CABLE + 48 CORE FIBRE OPTIC CABLE				
DETAILS				COPPER CONDUCTOR + XLPE + COPPER WIRES + COPPER FOIL BONDED TO PE SHEATH				
MIN BEND RADIUS (OPERATIONAL)				2m (HOLD-1)				
APPROX. WEIGHT (AIR / WATER)				47 kg/m / 30 kg/m (HOLD-2)				
TRENCH DETAILS				BURIED				
COVER REQUIREMENTS				2.0m MIN. COVER TOP OF POWER + FOC CABLE				
LAY TOLERANCE				±10.0m				
CROSSING DETAILS				NONE				
MINIMUM BREAKING LOAD				45.6 kNm² (HOLD-3)				
SOIL TYPE (TOP LAYER)				SAND				

DETAILS
SCALE 1:10,000

REFERENCE DOCUMENTS	
NUMBER	TITLE
1025H0BSDG84104	NEW OFFSHORE POWER CABLE AND FIBRE OPTIC FIELD LAYOUT (OFFSHORE SECTION)
105600BSP84917	TYP. CROSSING GA DRAWING FOR POWER CABLE FROM DOUGLAS CCS - LENNOX (DLX-1-DLX-6)

KEY PLAN



LEGEND

ABBREVIATIONS

KP	-	KILOMETRE POINT	DP	-	DOUGLAS PLATFORM
IP-XX	-	INTERSECTION POINT	HN	-	HAMILTON NORTH PLATFORM
TG-XX	-	TANGENT POINT OF BEND	LNX	-	LENNOX PLATFORM
TOP	-	TOP OF PIPE	HM	-	HAMILTON MAIN PLATFORM
BTM	-	BOTTOM	SHT	-	SHEET
BOP	-	BOTTOM OF PIPE	XX-PLX-01	-	LINE No - PIPELINE CROSSING - No.
FOC	-	FIBRE OPTIC CABLE	XX-FLX-01	-	LINE No - FAULT LINE CROSSING - No.
NTS	-	NOT TO SCALE	XX-FOX-01	-	LINE No - FOC / POWER CABLE CROSSING - No.
OD	-	OUTSIDE DIAMETER	XX-UX-01	-	LINE No - UMBILICAL CROSSING - No.
SP	-	START POINT	XX-FEX-01	-	LINE No - FENCELINE CROSSING - No.
EP	-	END POINT	XX-RDX-01	-	LINE No - ROAD CROSSING - No.
PC	-	POINT OF CURVATURE (ENTRY)	RHB / LHB	-	RIGHT / LEFT HAND BEND
PT	-	POINT OF TANGENT (EXIT)	RXXXm	-	RADIUS No. metres

EXISTING PROFILE.	SHIP WREK LOCATION AND ID NUMBER.
PROPOSED PROFILE.	110/ # - # ABANDONED WELL LOCATION AND ID NUMBER.
BOTTOM OF TRENCH PROFILE.	

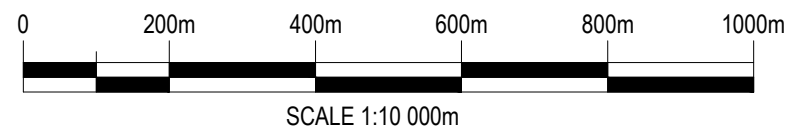
NOTES

- BATHYMETRY HAS BEEN DEVELOPED FROM EMOD 5m CONTOUR ED50 UTM 30N DRAWING SET. BATHYMETRY TO BE CONFIRMED ONCE SURVEY HAS BEEN CONDUCTED.
- FOR CABLE PROTECTION AND SEABED COVER REQUIREMENTS SEE OFFSHORE POWER CABLE PROTECTION REQUIREMENT DOC. No. 1025H0BSRV84107 AND OFFSHORE CABLES PRELIMINARY CROSSING DESIGN REPORT DOC. No. 1025DSBSC284173.
- FOR POWER CABLE INSTALLATION REQUIREMENTS SEE POWER CABLE INSTALLATION SPECIFICATION DOC. No. 1025H0BSSA84108.

HOLDS

- TO BE CONFIRMED.
- TO BE CONFIRMED.
- TO BE CONFIRMED.

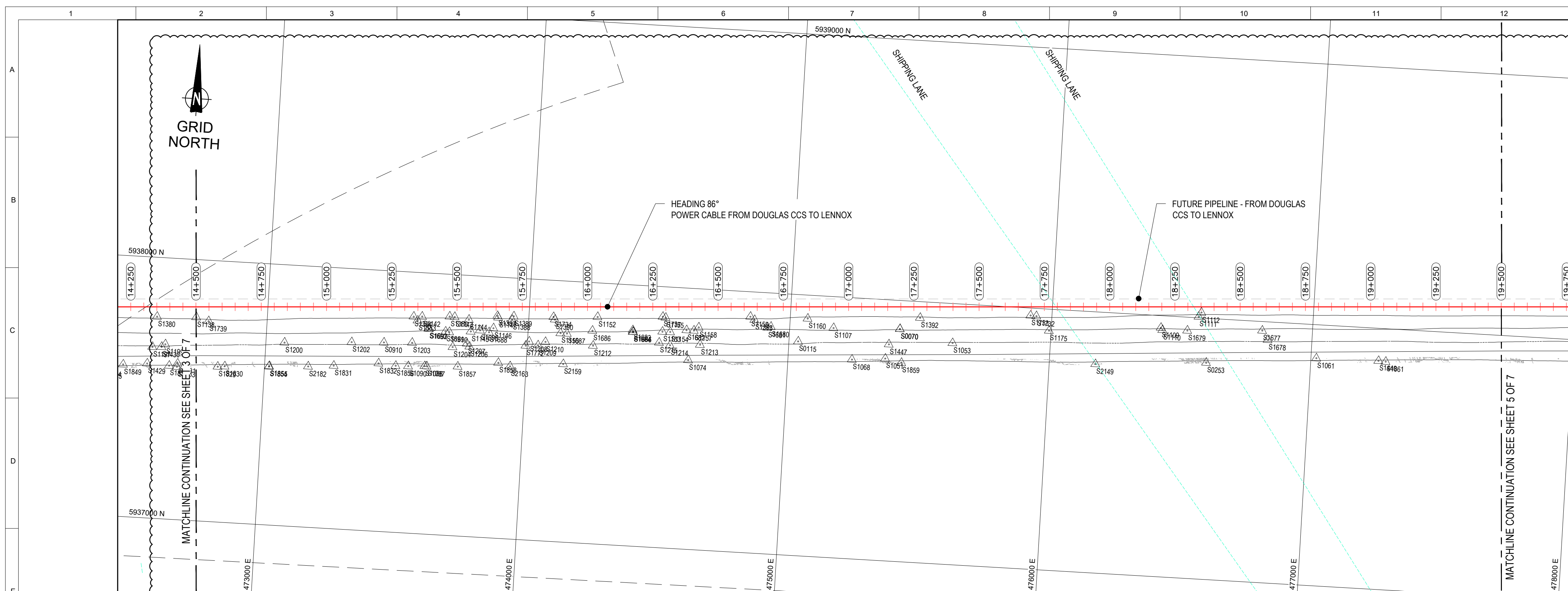
Power Cable Alignment - CCS to LNX (KP 0+000 - KP 32+312.08)				
IP Station	Easting	Northing	Distance (m)	Direction
0+000.00	461,472.53	5,932,603.31	178.345	N0° 59' 59.52"E
0+178.34	461,503.50	5,932,778.94	1,106.91	N35° 04' 19.84"W
1+280.93	460,867.46	5,933,684.87	1,365.77	N16° 00' 50.63"E
2+630.66	461,244.24	5,934,997.64	8,762.86	N72° 28' 03.45"E
11+371.45	469,600.04	5,937,637.41	16,182.70	N86° 40' 08.66"E
27+552.87	485,755.40	5,938,577.67	4,899.53	N31° 55' 28.96"E
32+247.60	488,346.30	5,942,736.12	69.561	N85° 03' 28.09"E
32+312.08	488,415.60	5,942,742.11		



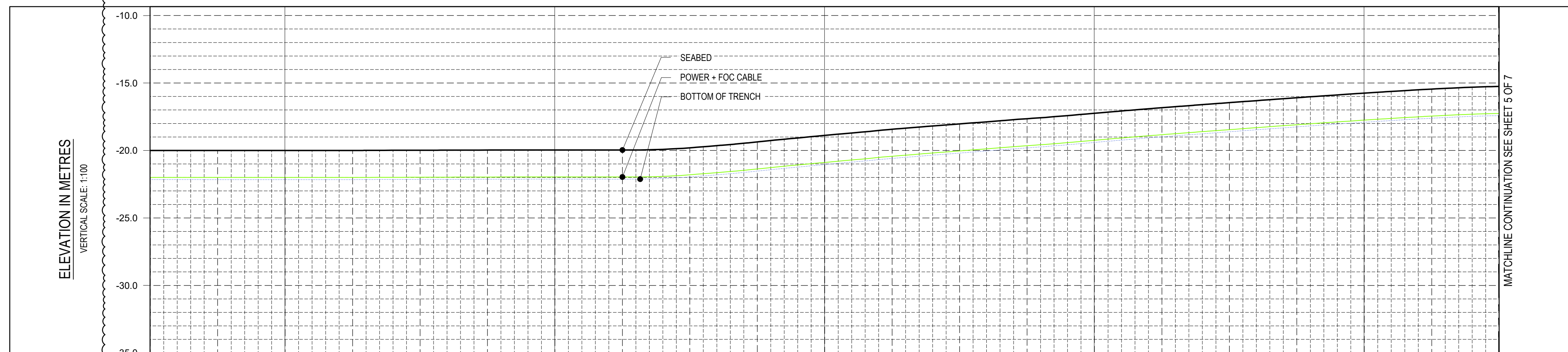
GEODETIC PARAMETERS

ELLIPSOID	: INTERNATIONAL 1924
DATUM	: EUROPEAN 1950 (ED50)
PROJECTION	: UNIVERSAL TRANSVERSE MERCATOR (UTM)
GRID ZONE	: 30N
CENTRAL MERIDIAN	: 3° E
LATITUDE OF ORIGIN	: 0° N
FALSE EASTING	: 500 000 m
FALSE NORTHING	: 0
SCALE FACTOR ON C.M.	: 0.9996

CD-FE	02	22.09.2021	RE-ASSUED FOR COMMENT	N.Z	E.R	S.G	
CD-FE	01	17.11.2022	ISSUED FINAL	N.Z	S.R	S.G	
CD-FE	00	26.10.2022	ISSUED FOR COMMENT	N.Z	S.R	S.G	
Revision Index	Date	Description	Prepared	Checked	Approved	Approved	Enr UK
Company logo and business name				Company Document ID			
Facility and Sub Facility Name				Job. N. JA0614			
DOUGLAS SUBSEA				1025DSBDSG84143			
Project Name				Scale			
LBA CCS Transport and Storage				1:10K @A1			
Document Title				Supersedes N.			
OFFSHORE POWER CABLE - DOUGLAS CCS TO LENNOX				Superseded by N.			
ALIGNMENT SHEET KP 9+500 - KP 14+500				Plant Area			
				NA			
				Plant Unit			
				NA			



BATHYMETRY & SEABED FEATURES



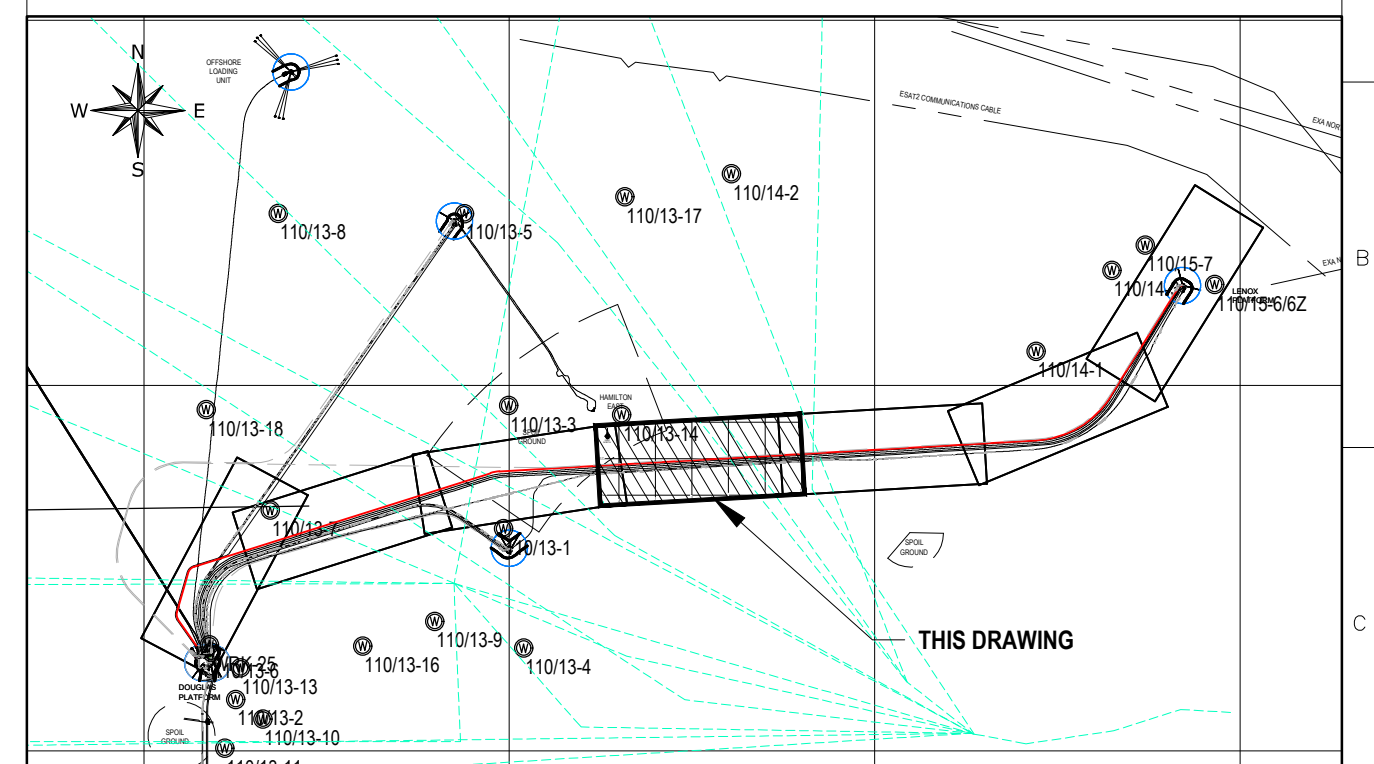
SEABED PROFILE
HORIZONTAL SCALE 1:10,000

COMMENTS	
KP ALONG ROUTE	14.5 15.0 16.0 17.0 18.0 19.0 19.5
SIZE / NAME / TAG	156.0mm O.D. / SINGLE ARMoured SUBMARINE POWER & TELECOMMUNICATION CABLE / 19/33/36kV POWER CABLE + 48 CORE FIBRE OPTIC CABLE
DETAILS	COPPER CONDUCTOR + XLPE + COPPER WIRES + COPPER FOIL BONDED TO PE SHEATH
MIN BEND RADIUS (OPERATIONAL)	2m (HOLD-1)
APPROX. WEIGHT (AIR / WATER)	47 kg/m / 30 kg/m (HOLD-2)
TRENCH DETAILS	BURIED
COVER REQUIREMENTS	2.0m MIN. COVER TOP OF POWER + FOC CABLE
LAY TOLERANCE	±10.0m
CROSSING DETAILS	NONE
MINIMUM BREAKING LOAD	45.6 kNm² (HOLD-3)
SOIL TYPE (TOP LAYER)	SAND

DETAILS
SCALE 1:10,000

13	14	15	16
REFERENCE DOCUMENTS			
NUMBER		TITLE	
1025H0SDG84104	NEW OFFSHORE POWER CABLE AND FIBRE OPTIC FIELD LAYOUT (OFFSHORE SECTION)		

KEY PLAN



LEGEND

ABBREVIATIONS

XP	-	KILOMETRE POINT	DN	-	DOUGLAS PLATFORM	
IP-XX	-	INTERSECTION POINT	HP	-	HAMILTON NORTH PLATFORM	
TG-XX	-	TANGENT POINT OF BEND	LNx	-	LENNOX PLATFORM	
TOP	-	TOP OF PIPE	HM	-	HAMILTON MAIN PLATFORM	
BTM	-	BOTTOM	SHT	-	SHEET	
BOP	-	BOTTOM OF PIPE	XX-PLX-01	-	LINE No - PIPELINE CROSSING - No.	
FOC	-	FIBRE OPTIC CABLE	XX-FLX-01	-	LINE No - FAULT LINE CROSSING - No.	
NTS	-	NOT TO SCALE	XX-FOX-01	-	LINE No - FOC / POWER CABLE CROSSING - No.	
OD	-	OUTSIDE DIAMETER	XX-UX-01	-	LINE No - UTILITY CROSSING - No.	
SP	-	START POINT	XX-FEX-01	-	LINE No - FENCELINE CROSSING - No.	
EP	-	END POINT	XX-RD-01	-	LINE No - ROAD CROSSING - No.	
PC	-	POINT OF CURVATURE (ENTRY)	RHB / LHB	-	RIGHT / LEFT HAND BEND	
PT	-	POINT OF TANGENT (EXIT)	R00X-m	-	RADIUS No. metres	

	EXISTING PROFILE.	 Wk #	SHIP WRECK LOCATION AND ID NUMBER.
	PROPOSED PROFILE.	 110/ # - #	ABANDONED WELL LOCATION AND ID NUMBER.

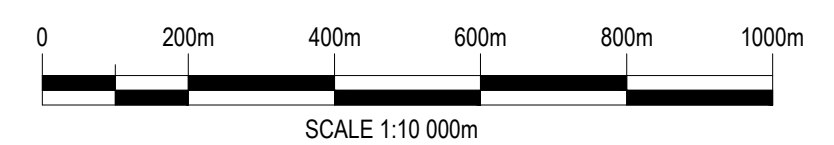
NOTES

1. BATHYMETRY HAS BEEN DEVELOPED FROM EMOD 5m CONTOUR ED50 UTM 30N DRAWING SET. BATHYMETRY TO BE CONFIRMED ONCE SURVEY HAS BEEN CONDUCTED.
2. CABLE PROTECTION TO CONFORM TO 1025H0BSRV84107, OFFSHORE POWER CABLE PROTECTION REQUIREMENT.
3. INSTALLATION REQUIREMENTS TO CONFORM TO 1025H0BS8A84108, POWER CABLE INSTALLATION SPECIFICATION.

HOLDS

1. TO BE CONFIRMED.
2. TO BE CONFIRMED.
3. TO BE CONFIRMED.

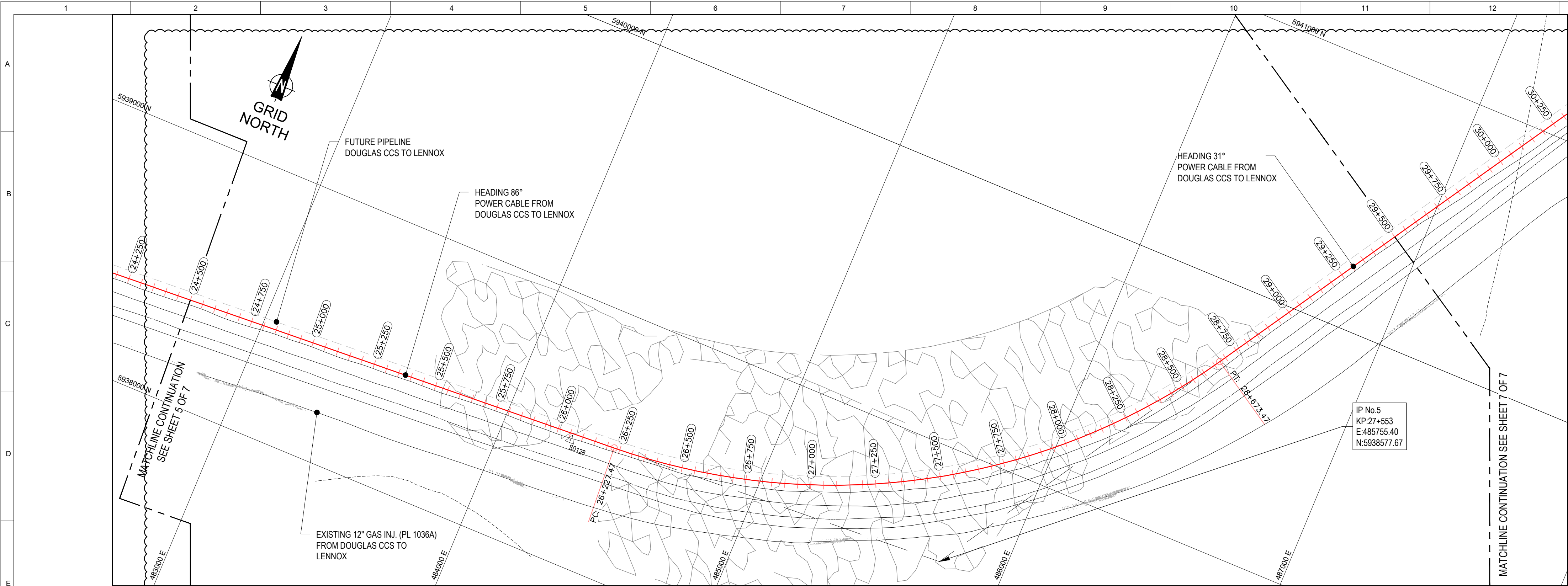
Power Cable Alignment - CCS to LNX (IP 0+000 - IP 32+312.08)				
IP Station	Easting	Northing	Distance (m)	Direction
0+000.00	461,472.53	5,932,603.31		
0+178.34	461,503.50	5,932,778.94	178.345	N0° 59' 59.52"E
1+280.93	460,867.46	5,933,684.87	1,106.91	N35° 04' 19.84"W
2+630.66	461,244.24	5,934,997.64	1,365.77	N16° 00' 50.63"E
3+171.45	469,600.04	5,937,637.41	8,762.86	N07° 28' 03.45"E
27+552.87	485,755.40	5,938,577.67	16,182.70	N86° 40' 08.66"E
32+247.60	488,346.30	5,942,736.12	4,899.53	N31° 55' 28.96"E
32+312.08	488,415.60	5,942,742.11	69.561	N05° 07' 28.09"E



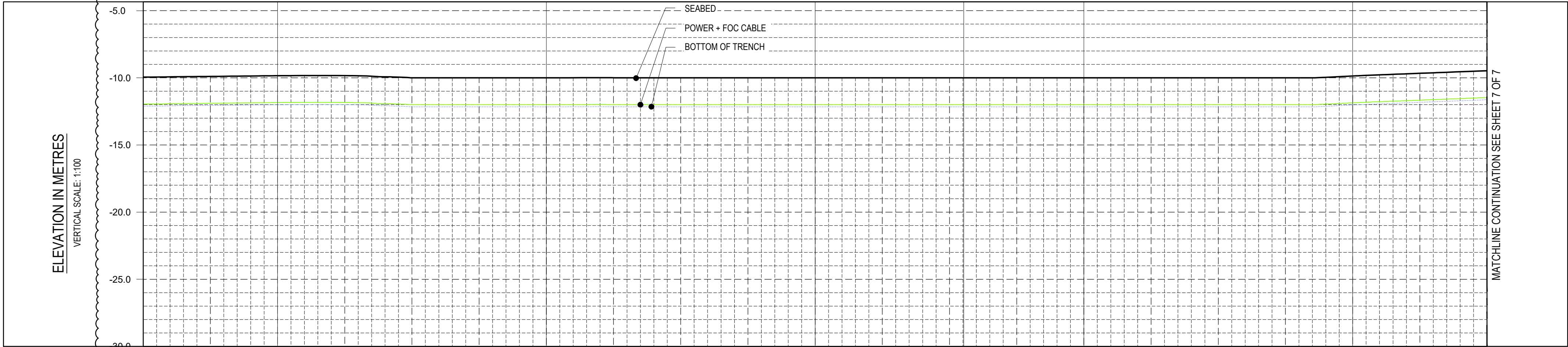
GEODETIC PARAMETERS

ELLIPSOID	: INTERNATIONAL 1924
DATUM	: EUROPEAN 1950 (ED50)
PROJECTION	: UNIVERSAL TRANSVERSE MERCATOR (UTM)
GRID ZONE	: 30N
CENTRAL MERIDIAN	: -3° E
LATITUDE OF ORIGIN	: 0° N
FALSE EASTING	: 500 000 m
FALSE NORTHING	: 0
SCALE FACTOR ON C.M.	: 0.9996

CD-DE	02	22.09.2023	RE-ISSUED FOR COMMENT	N.Z	E.R	S.G	
CD-DE	01	17.11.2022	ISSUED FINAL	N.Z	S.R	S.G	
CD-DE	00	26.10.2022	ISSUED FOR COMMENT	N.Z	S.R	S.G	
Validity Status	Rev. Number	Date	Description	Prepared	Checked	Approved	Approved EU UK
Company logo and business name				  uk progetti			
Facility and Sub-Facility Name DOUGLAS SUBSEA				Company Document ID 1025DSBSDG84143			
Project Name LBA CCS Transport and Storage				Scale 1:1K @A1		Sheet of Sheets 4 / 7	
Document Title OFFSHORE POWER CABLE - LBA DOUGLAS CCS TO LENNOX ALIGNMENT SHEET KP 14+500 - KP 19+500				Supersedes N: Plant Area Plant Unit			
				Superseded by N: Plant Area Plant Unit			



BATHYMETRY & SEABED FEATURES
HORIZONTAL SCALE 1:10,000



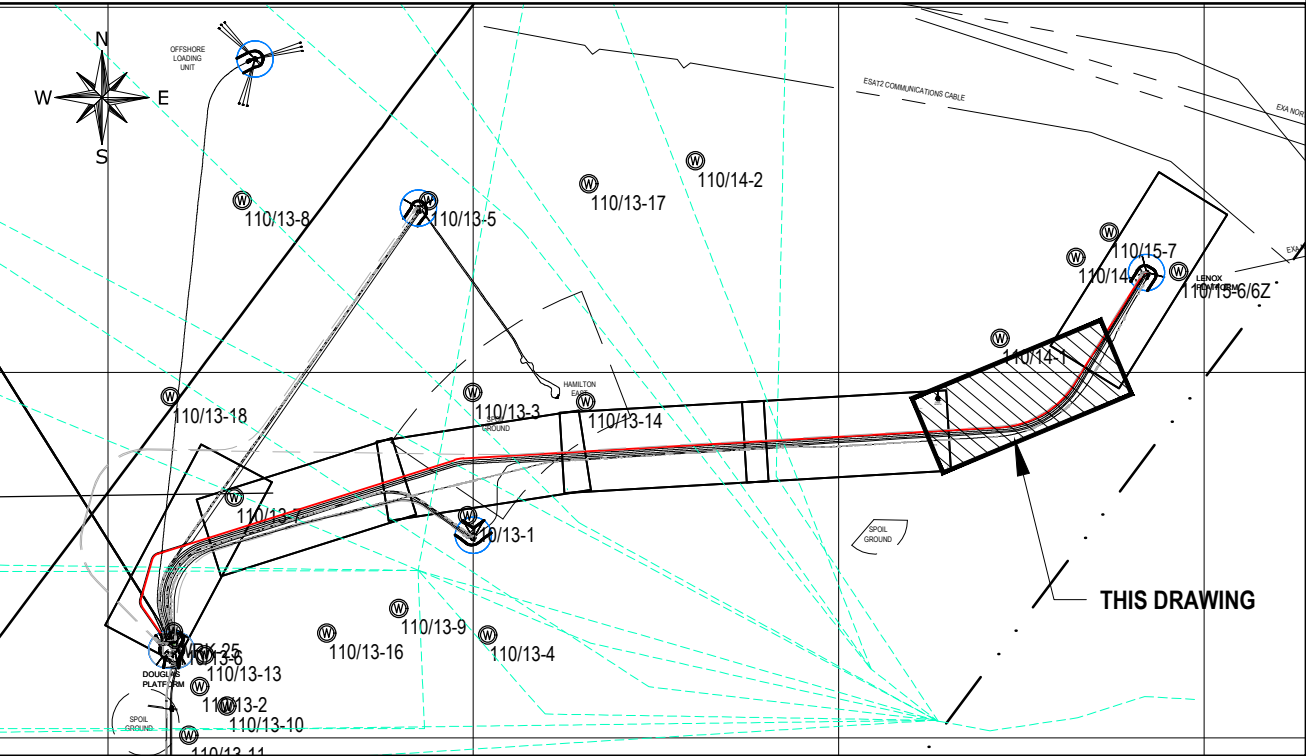
SEABED PROFILE
HORIZONTAL SCALE 1:10,000

COMMENTS	
KP ALONG ROUTE	24.5 25.0 26.0 27.0 27.55 28.0 29.0 29.5
SIZE / NAME / TAG	156.0mm O.D. / SINGLE ARMoured SUBMARINE POWER & TELECOMMUNICATION CABLE / 19/33/36KV POWER CABLE + 48 CORE FIBRE OPTIC CABLE
DETAILS	COPPER CONDUCTOR + XLPE + COPPER WIRES + COPPER FOIL BONDED TO PE SHEATH
MIN BEND RADIUS (OPERATIONAL)	2m (HOLD-1)
APPROX. WEIGHT (AIR / WATER)	47 kg/m / 30 kg/m (HOLD-2)
TRENCH DETAILS	BURIED
COVER REQUIREMENTS	2.0m MIN. COVER TOP OF POWER + FOC CABLE
LAY TOLERANCE	±10.0m
CROSSING DETAILS	NONE
MINIMUM BREAKING LOAD	45.6 kNm² (HOLD-3)
SOIL TYPE (TOP LAYER)	SAND

DETAILS
SCALE 1:10,000

REFERENCE DOCUMENTS	
NUMBER	TITLE
1025H0BSGD84104	NEW OFFSHORE POWER CABLE AND FIBRE OPTIC FIELD LAYOUT (OFFSHORE SECTION)

KEY PLAN



LEGEND

ABBREVIATIONS

KP - KILOMETRE POINT	DP - DOUGLAS PLATFORM
IP-XX - INTERSECTION POINT	HN - HAMILTON NORTH PLATFORM
TG-XX - TANGENT POINT OF BEND	LNx - LENNOX PLATFORM
TOP - TOP OF PIPE	HM - HAMILTON MAIN PLATFORM
BTM - BOTTOM	SHT - SHEET
BOP - BOTTOM OF PIPE	XX-PLX-01 - LINE No - PIPELINE CROSSING - No.
FOC - FIBRE OPTIC CABLE	XX-FLX-01 - LINE No - FAULT LINE CROSSING - No.
NTS - NOT TO SCALE	XX-FOX-01 - LINE No - FOC / POWER CABLE CROSSING - No.
OD - OUTSIDE DIAMETER	XX-UX-01 - LINE No - UMBILICAL CROSSING - No.
SP - START POINT	XX-FEX-01 - LINE No - FENCELINE CROSSING - No.
EP - END POINT	XX-RDX-01 - LINE No - ROAD CROSSING - No.
PC - POINT OF CURVATURE (ENTRY)	RHB / LHB - RIGHT / LEFT HAND BEND
PT - POINT OF TANGENT (EXIT)	RXXxm - RADIUS No. metres

EXISTING PROFILE.	SHIP WREK LOCATION AND ID NUMBER.
PROPOSED PROFILE.	110/ # - # ABANDONED WELL LOCATION AND ID NUMBER.
BOTTOM OF TRENCH PROFILE.	

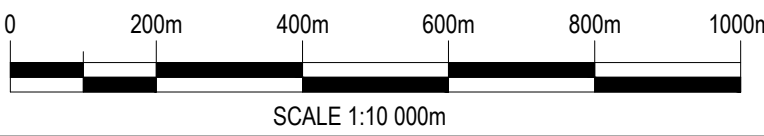
NOTES

- BATHYMETRY HAS BEEN DEVELOPED FROM EMOD 5m CONTOUR ED50 UTM 30N DRAWING SET, BATHYMETRY TO BE CONFIRMED ONCE SURVEY HAS BEEN CONDUCTED.
- CABLE PROTECTION TO CONFORM 1025H0BSRV84107, OFFSHORE POWER CABLE PROTECTION REQUIREMENT.
- INSTALLATION REQUIREMENTS TO CONFORM 1025H0BSA84108, POWER CABLE INSTALLATION SPECIFICATION.

HOLDS

- TO BE CONFIRMED.
- TO BE CONFIRMED.
- TO BE CONFIRMED.

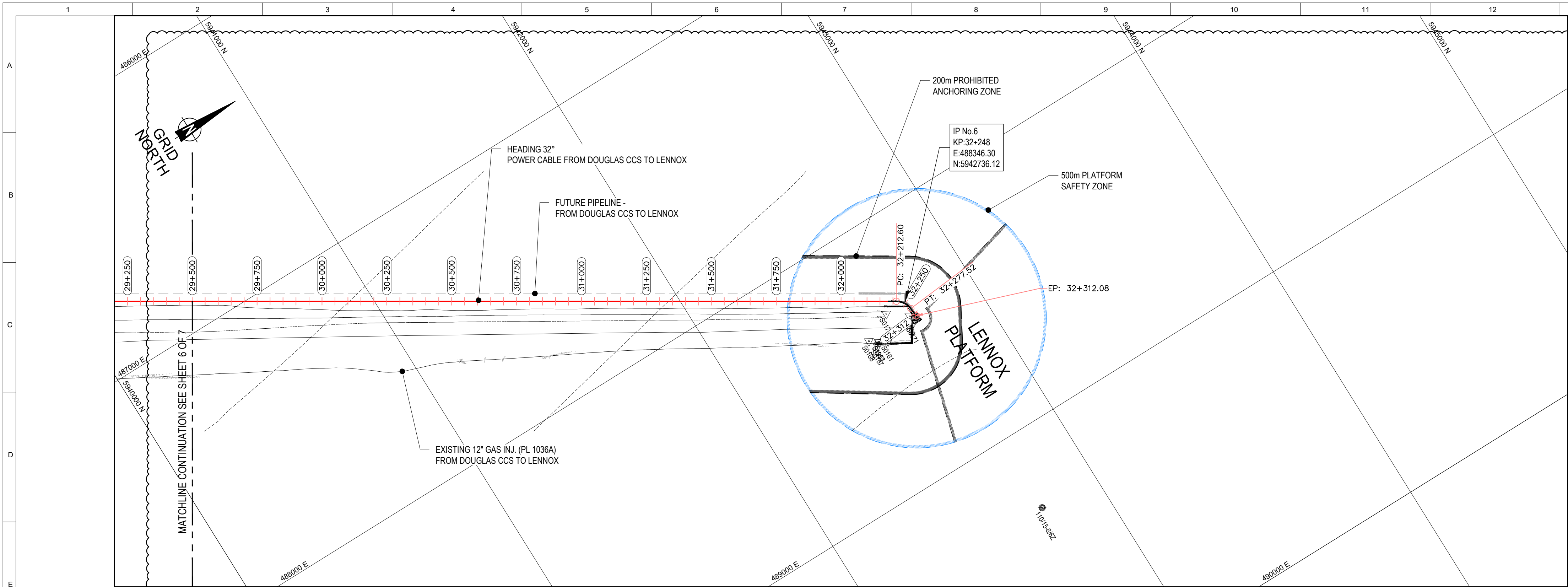
Power Cable Alignment - CCS to LNX (KP 0+000 - KP 32+312.08)				
IP Station	Easting	Northing	Distance (m)	Direction
0+000.00	461,472.53	5,932,603.31	178.345	N0° 59' 59.52"E
0+178.34	461,503.50	5,932,778.94	1,106.91	N35° 04' 19.84"W
1+280.93	460,867.46	5,933,684.87	1,365.77	N16° 00' 50.63"E
2+630.66	461,244.24	5,934,997.64	8,762.86	N72° 28' 03.45"E
11+371.45	469,600.04	5,937,637.41	16,182.70	N86° 40' 08.66"E
27+552.87	485,755.40	5,938,577.67	4,899.53	N31° 55' 28.96"E
32+247.60	488,346.30	5,942,736.12	69.561	N85° 03' 28.09"E
32+312.08	488,415.60	5,942,742.11		



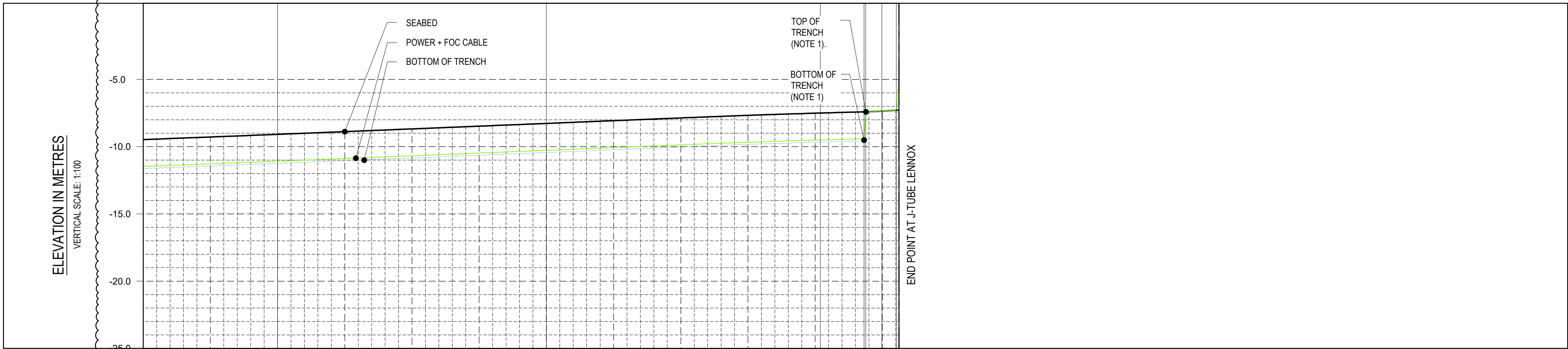
GEODETIC PARAMETERS

ELLIPSOID	: INTERNATIONAL 1924
DATUM	: EUROPEAN 1950 (ED50)
PROJECTION	: UNIVERSAL TRANSVERSE MERCATOR (UTM)
GRID ZONE	: 30N
CENTRAL MERIDIAN	: 3° E
LATITUDE OF ORIGIN	: 0° N
FALSE EASTING	: 500 000 m
FALSE NORTHING	: 0
SCALE FACTOR ON C.M.	: 0.9996

CD-FE	02	22.09.2021	RE-ASSUED FOR COMMENT	N.Z	E.R	S.G	
CD-FE	01	17.11.2021	ISSUED FINAL	N.Z	S.R	S.G	
CD-FE	00	26.10.2021	ISSUED FOR COMMENT	N.Z	S.R	S.G	
Revision Index	Date	Description	Prepared	Checked	Approved	Approved	Enr UK
Company logo and business name				Company Document ID			
Facility and Sub Facility Name				Job. N. JA0614			
DOUGLAS SUBSEA				1025DSBSDG84143			
Document Title				Superseded by N.			
OFFSHORE POWER CABLE - DOUGLAS CCS TO LENNOX ALIGNMENT SHEET KP 24+500 - KP 29+500				Superseded by N.			
				Plant Unit			
				NA			



BATHYMETRY & SEABED FEATURES
HORIZONTAL SCALE 1:10,000



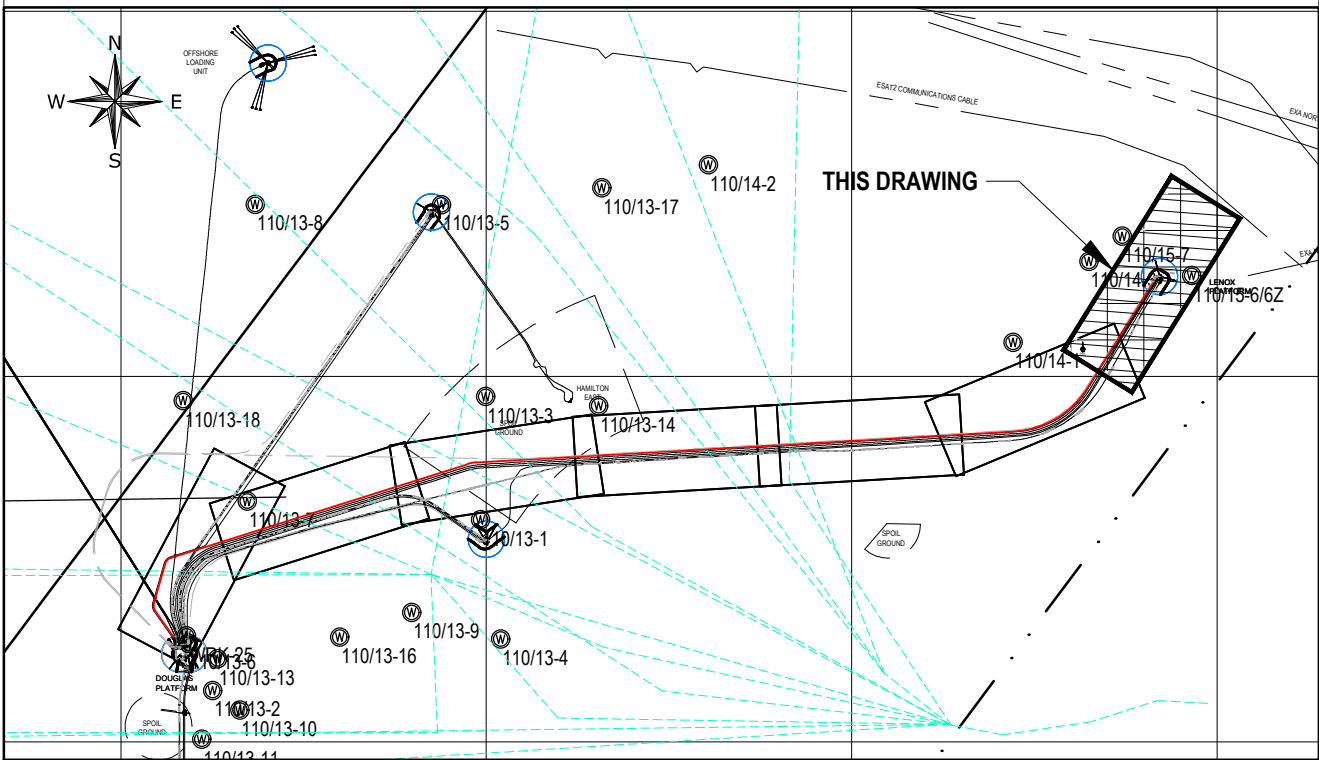
SEABED PROFILE
HORIZONTAL SCALE 1:10,000

COMMENTS	
KP ALONG ROUTE	29.5 30.0 31.0 32.0 32.19 32.18 32.25 32.31
SIZE / NAME / TAG	156.0mm O.D. / SINGLE ARMoured SUBMARINE POWER & TELECOMMUNICATION CABLE / 19/33/36kV POWER CABLE + 48 CORE FIBRE OPTIC CABLE
DETAILS	COPPER CONDUCTOR + XLPE + COPPER WIRES + COPPER FOIL BONDED TO PE SHEATH
MIN BEND RADIUS (OPERATIONAL)	2m (HOLD-1)
APPROX. WEIGHT (AIR / WATER)	47 kg/m / 30 kg/m (HOLD-2)
TRENCH DETAILS	BURIED
COVER REQUIREMENTS	2.0m MIN. COVER TOP OF POWER + FOC CABLE
LAY TOLERANCE	±10.0m ±5.0m ±1.5m
CROSSING DETAILS	NONE
MINIMUM BREAKING LOAD	45.6 kNm² (HOLD-3)
SOIL TYPE (TOP LAYER)	SAND

DETAILS
SCALE 1:10,000

REFERENCE DOCUMENTS	
NUMBER	TITLE
1025H0BSDG84104	NEW OFFSHORE POWER CABLE AND FIBRE OPTIC FIELD LAYOUT (OFFSHORE SECTION)

KEY PLAN



LEGEND

ABBREVIATIONS

KP - KILOMETRE POINT	DP - DOUGLAS PLATFORM
IP-XX - INTERSECTION POINT	HN - HAMILTON NORTH PLATFORM
TG-XX - TANGENT POINT OF BEND	LNX - LENNOX PLATFORM
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BTM - BOTTOM	SHT - SHEET
BOP - BOTTOM OF PIPE	XX-PLX-01 - LINE No - PIPELINE CROSSING - No.
FOC - FIBRE OPTIC CABLE	XX-FLX-01 - LINE No - FAULT LINE CROSSING - No.
NTS - NOT TO SCALE	XX-FOX-01 - LINE No - FOC / POWER CABLE CROSSING - No.
OD - OUTSIDE DIAMETER	XX-UX-01 - LINE No - UMBILICAL CROSSING - No.
SP - START POINT	XX-FEX-01 - LINE No - FENCELINE CROSSING - No.
EP - END POINT	XX-RDX-01 - LINE No - ROAD CROSSING - No.
PC - POINT OF CURVATURE (ENTRY)	RHB / LHB - RIGHT / LEFT HAND BEND
PT - POINT OF TANGENT (EXIT)	RXXm - RADIUS No. metres

	EXISTING PROFILE.		SHIP WRECK LOCATION AND ID NUMBER.
	PROPOSED PROFILE.		110/ # - # ABANDONED WELL LOCATION AND ID NUMBER.
	BOTTOM OF TRENCH PROFILE.		

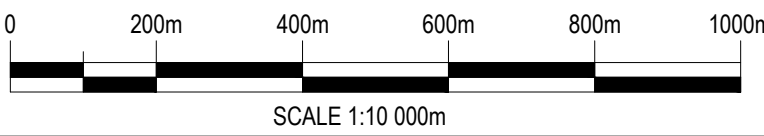
NOTES

- TRENCH TRANSITION HORIZONTAL LENGTH OF 6m 1:3 SLOPE (BOTTOM OF TRENCH = KP 32.182, TOP OF TRENCH = KP 32.188).
- BATHYMETRY HAS BEEN DEVELOPED FROM EMOD 5m CONTOUR ED50 UTM 30N DRAWING SET. BATHYMETRY TO BE CONFIRMED ONCE SURVEY HAS BEEN CONDUCTED.
- FOR CABLE PROTECTION AND SEABED COVER REQUIREMENTS SEE OFFSHORE POWER CABLE PROTECTION REQUIREMENT DOC. No. 1025H0BSRV84107 AND OFFSHORE CABLES PRELIMINARY CROSSING DESIGN REPORT DOC. No. 1025DSBSC284173.
- FOR POWER CABLE INSTALLATION REQUIREMENTS SEE POWER CABLE INSTALLATION SPECIFICATION DOC. No. 1025H0BSSA84108.

HOLDS

- TO BE CONFIRMED.
- TO BE CONFIRMED.
- TO BE CONFIRMED.

Power Cable Alignment - CCS to LNX (KP 0+000 - KP 32+312.08)				
IP Station	Easting	Northing	Distance (m)	Direction
0+000.00	461,472.53	5,932,603.31	178.345	N0° 59' 59.52"E
0+178.34	461,503.50	5,932,778.94	1,106.91	N35° 04' 19.84"W
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27+552.87	485,755.40	5,938,577.67	4,899.53	N31° 55' 28.96"E
32+247.60	488,346.30	5,942,736.12	69.561	N85° 03' 28.09"E
32+312.08	488,415.60	5,942,742.11		



GEODETIC PARAMETERS

ELLIPSOID	: INTERNATIONAL 1924
DATUM	: EUROPEAN 1950 (ED50)
PROJECTION	: UNIVERSAL TRANSVERSE MERCATOR (UTM)
GRID ZONE	: 30N
CENTRAL MERIDIAN	: 3° E
LATITUDE OF ORIGIN	: 0° N
FALSE EASTING	: 500 000 m
FALSE NORTHING	: 0
SCALE FACTOR ON C.M.	: 0.9996

CD-FE	02	22.09.2023	RE-ASSUED FOR COMMENT	N.Z	E.R	S.G	
CD-FE	01	17.11.2022	ISSUED FINAL	N.Z	S.R	S.G	
CD-FE	00	26.10.2022	ISSUED FOR COMMENT	N.Z	S.R	S.G	
Revision Index	Date	Description	Prepared	Checked	Approved	Approved	Eni UK
Company logo and business name				Company Document ID			
Facility and Sub Facility Name				Job. N. JA0614			
DOUGLAS SUBSEA				1025DSBSDG84143			
Project Name				Scale			
LBA CCS Transport and Storage				1:10K @A1			
Document Title				Supersedes N.			
OFFSHORE POWER CABLE - DOUGLAS CCS TO LENNOX ALIGNMENT SHEET KP 29+500 - KP 32+312				Superseded by N.			
				Plant Unit			
				NA			