

Second Malta-Italy Interconnector

INTERCONNECT
MALTA

Background

IC1 operational since March 2015

1. Large and flexible energy source
2. Improved stability of provision of electricity to consumers
3. Hit by an anchor twice (Dec 2019, Mar 2022)

IC2 announced in June 2021

1. IC2 will operate in parallel with IC1
2. IC2 connected in existing substations:
 - ✓ to Italian Grid at Ragusa
 - ✓ to Maltese Grid at Maghtab
3. Operating voltage 220kV, 50Hz
4. Power 200MW+, Bidirectional
5. All-cable solution

Introduction

Interconnect Malta

1. Interconnect Malta (ICM) is a 100% government owned company within the Ministry for the Environment, Energy and Enterprise (MEEE)
2. Originally established as Melita Transgas in 2018 and changed name in August 2021
3. ICM is entrusted by the Maltese government to develop and implement energy infrastructure projects to strengthen the islands' interconnectivity whilst contributing to a carbon neutral economy and ensuring a safe and reliable energy supply
4. Projects in hand:
 - 2nd electricity interconnector between Malta and Italy
 - Melita Transgas hydrogen-ready pipeline – PCI 5.19
 - Offshore renewable energy project
 - Battery energy storage systems
5. Website: <https://icm.mt>

Considerations

1. Route for IC2 should have a similar length to IC1
2. Maximise the distance between IC2 and IC1
3. Avoid anthropogenic and natural constraints
4. Follow roads for the onshore parts of the route
5. Study best protection for the offshore and onshore cables
6. Cable sizing and compensation for reactive power
7. Works needed at the terminal stations
8. Permitting and obtaining needed data

Planning

1. Lessons learnt from the IC1 project
2. Desktop studies and routing
3. Preliminary land route considerations
4. Preliminary marine route survey (PMRS)
5. Front-end engineering design (FEED)
6. Environmental impact assessment in Malta
7. Environmental impact assessment in Italy
8. Connection with Terna
9. Reaching out to stakeholders and other entities
10. Preparing specifications and going to tender
11. Implementation

The IC2 project

Principal data

1. Length of offshore section: 99km
2. Length of onshore section Italy: 21km
3. Length of onshore section Malta: 2km
4. Landing areas: Marina di Ragusa (Sicilia) – Maghtab (Malta)
5. Interconnector data: 220kV nominal, 50Hz, Nominal continuous power 200-225MW



The IC2 project

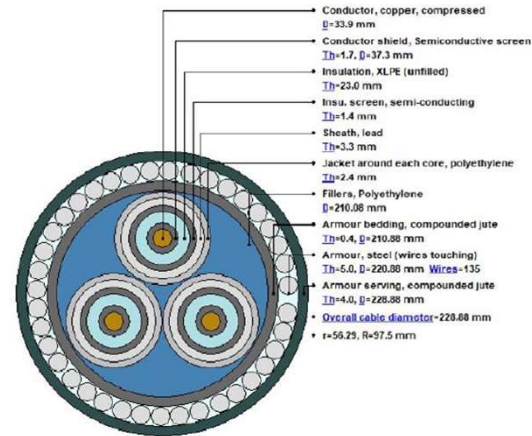
Status

1. Marine surveys and studies have been completed by Fugro Italy and the submarine route has been defined and finalised by SPS-Fano.
2. Surveys and studies for the onshore route have been finalised and the onshore route has been defined by Techfem.
3. Studies for the EIAs for the works in Italy and Malta have been completed by HPC Italia and AIS respectively.
4. The electrical studies and design has been completed by CESI.
5. The EIA in Malta has been approved by the Environmental Resources Authority. It is likely that the planning permit to start works in Malta will be issued in January 2024.
6. The project in Italy has been submitted to the MASE for the Autorizzazione Unica.
7. ICM and its consultants are currently preparing the specifications for the tenders.
8. The objective is to energise the interconnector and place in operation in the first months in 2026.

The IC2 project

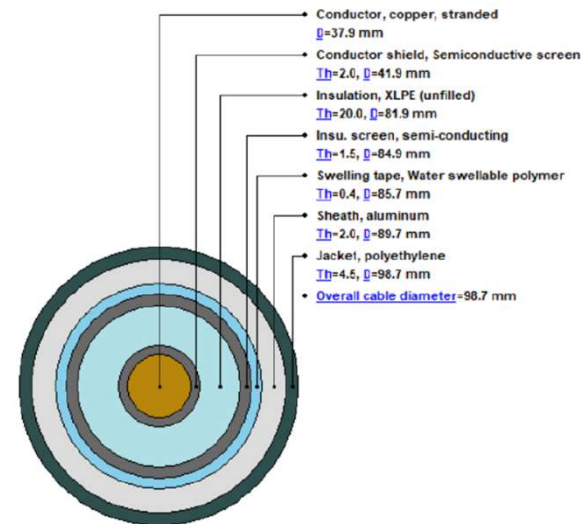
Submarine Cable

1. 3c x 800mm² Cu
2. 2 x FO units
3. Lead sheath
4. GSW armouring + SS armouring in HDD

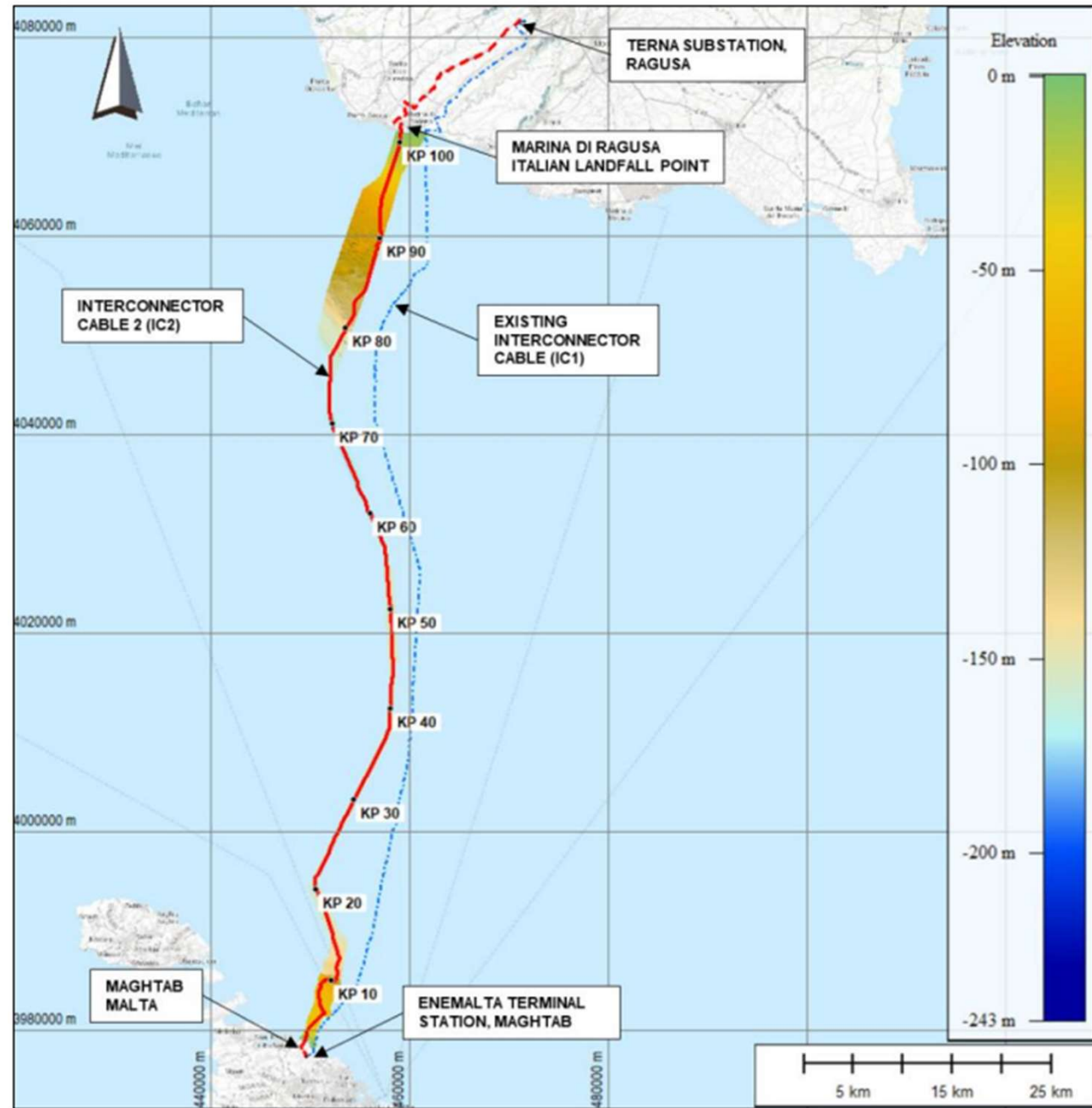


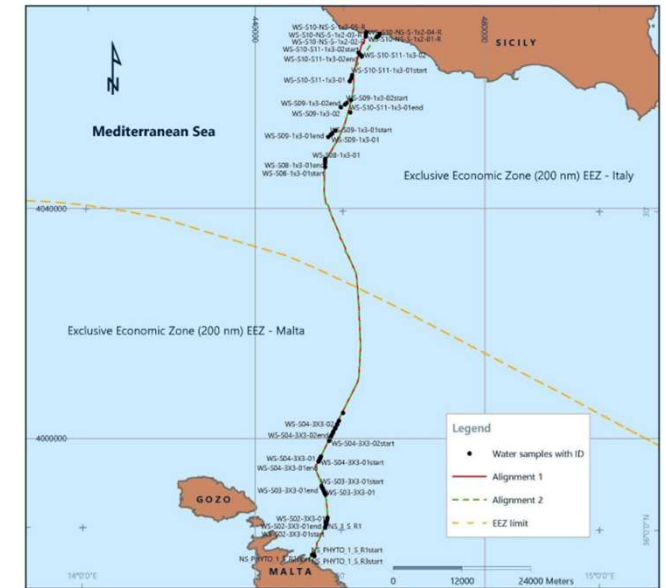
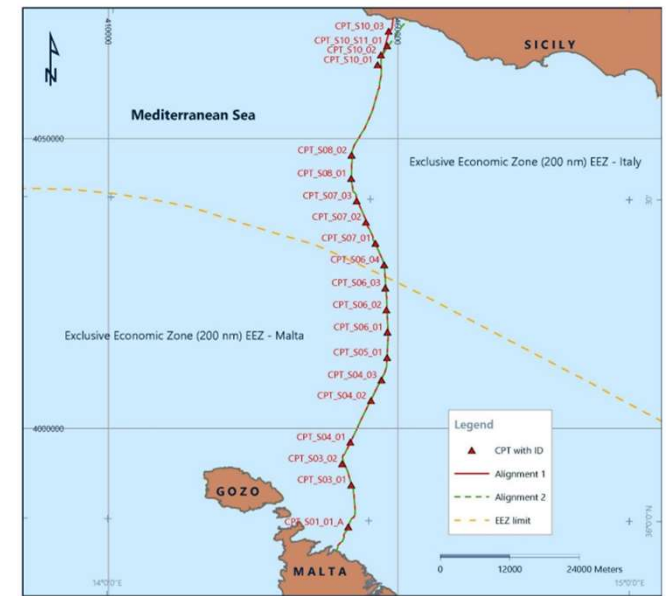
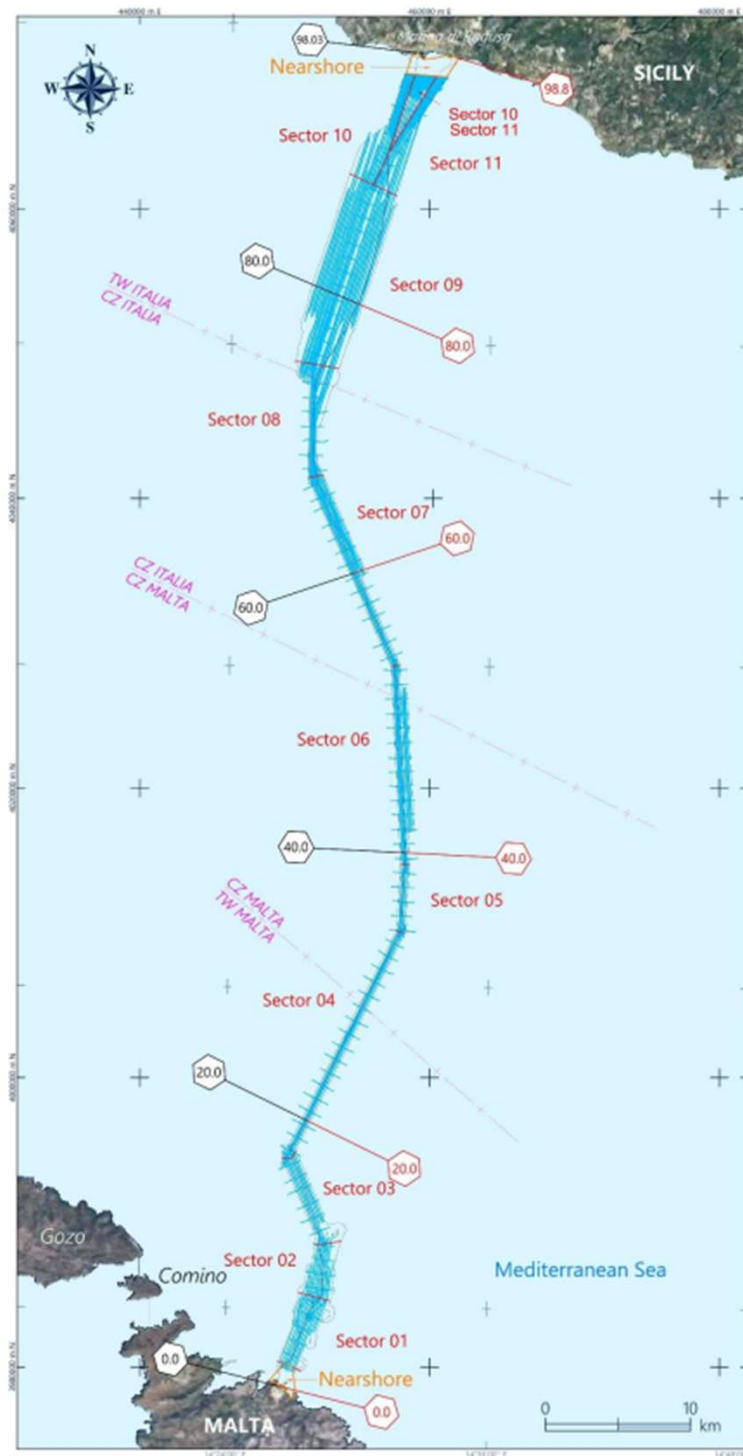
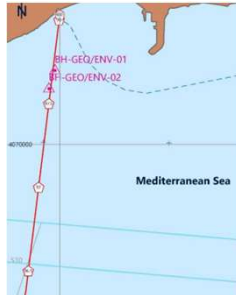
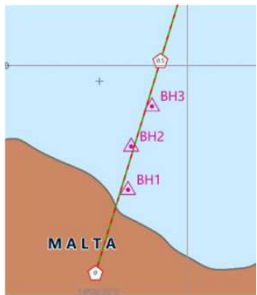
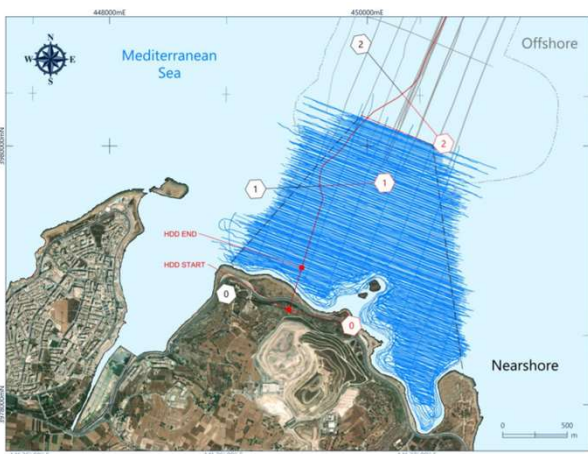
Land Cable

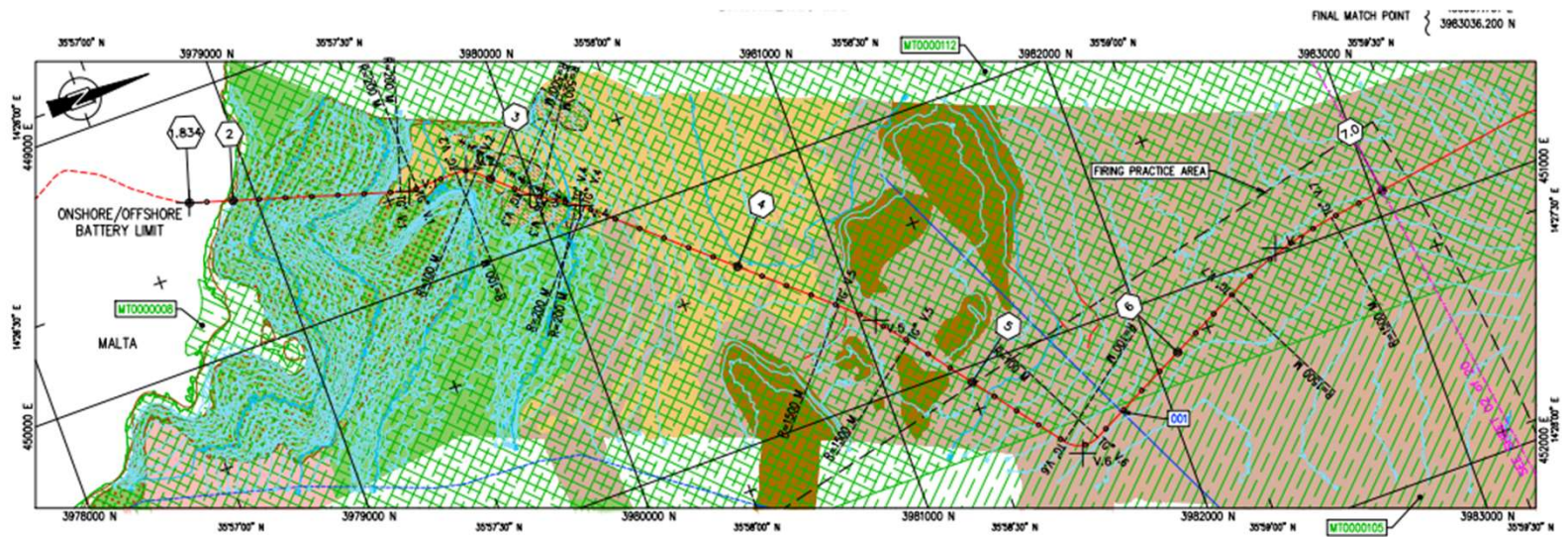
1. 3 x 1c x 1000mm² Cu
2. FO cable + DTS Cable
3. LWA Sheath
4. HDPE oversheath



Offshore







3	ITALY LINEAR APPROACH DRAWING	CT30332_I2_I_FINAL_003
4	ITALY ONSHORE CABLE ROUTE MAP (1:10K SCALE)	CT30332_I2_I_FINAL_030
5	MALTA ONSHORE CABLE ROUTE MAP (1:10K SCALE)	CT30332_I2_I_FINAL_071
6	OFFSHORE CABLE ROUTE SELECTION REPORT	CT30332_I2_I_GEN_REP_088
7	OFFSHORE CABLE GENERAL ROUTE AND PROFILE	CT30332_I2_I_GEN_REP_099
8	OFFSHORE CABLE ON-BOTTOM STABILITY CALCULATION	CT30332_I2_I_GEN_REP_100
9	MAXIMUM ALLOWABLE FREE SPAN ANALYSIS	CT30332_I2_I_GEN_REP_101
10	PROTECTOR STUDY REPORT	CT30332_I2_I_GEN_REP_102
11	INTERVENTION WORK DESIGN REPORT	CT30332_I2_I_GEN_REP_103
12	SUBSEA INTERVENTION WORKS DESIGN DRAWINGS	CT30332_I2_I_GEN_REP_104
13	CABLE LABILITY ANALYSIS REPORT	CT30332_I2_I_GEN_REP_105
14	EXISTING CABLE CROSSING ASSESSMENT REPORT	CT30332_I2_I_FINAL_111
15	EXISTING SUBSEA CABLE CROSSING DRAWINGS	CT30332_I2_I_FINAL_112
16	CABLE AMPACITY CALCULATOR	CT30332_I2_I_GEN_REP_203

INTERCONNECTOR CABLE 2 - CROSSING DATA							
ID	LINE TO BE CROSSED	EASTING [m]	NORTHING [m]	KP [m]	MD [m]	ANGLE [°]	STATUS
001	00-1 Mediterranean Cable System	451360.123	398187.532	5688.9	-54.6	90	In service

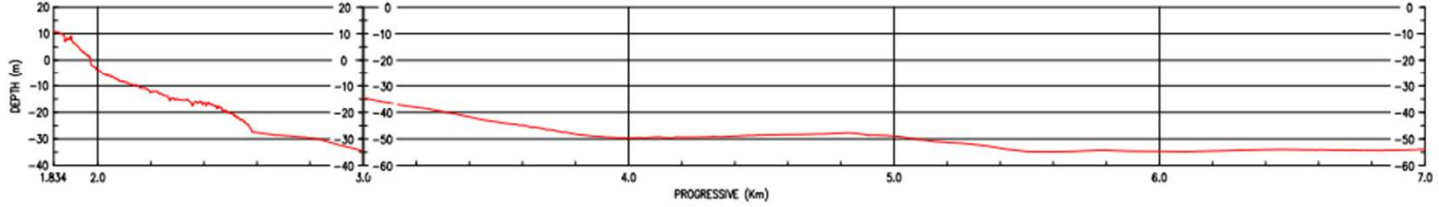
ABBREVIATIONS		N/A	NOT APPLICABLE
AUV	AUTONOMOUS UNDERWATER VEHICLE	ROV	REMOTELY OPERATED VEHICLE
CS	CAST IRON SHELL	SSS	SEAC SCAM SCARAP
CZ	CONTIGUOUS ZONES	TW	TERRITORIAL WATERS
EZZ	EXCLUSIVE ECONOMIC ZONE	UTM	UNIVERSAL TRANSVERSE OF MERCATOR
HDD	HORIZONTAL DIRECTIONAL DRILLING	LUD	LINE-UP DIRECTION
HP	KILOMETER POST	WGS	WORLD GEODETIC SYSTEM
LAT	LOWEST ASTRONOMICAL TIDE		

LEGEND	
NEW INTERCONNECTOR CABLE 2 (IC2)	OFFSHORE SECTION
EXISTING INTERCONNECTOR CABLE 1 (IC1)	ONSHORE SECTION
EXISTING CABLES (SEE NOTES 8 AND 12)	COASTLINE
FISHING AREAS (MALTA)	CONTOUR LINES
NATURA 2000 SITE	WARTIME BOUNDARIES
SSS CONTACTS FROM AUV SURVEY (SEE NOTE 6)	FRINGE PRACTICE AREA - MALTA
WEIGHING BENCH (W-BENCH) POINTS	CROSSING LOCATION (SEE CROSSING DATA TABLE)

GEODETIC PARAMETERS			
Datum:	WGS84	Projection:	UTM Zone 33 North
Spheroid:	WGS84	Central Meridian:	19° 00' 00.00" E
Semi-major axis:	6 378 137.0 m	Latitude of Origin:	0° 00' 00.00" N
Semi-minor axis:	6 356 752.314245 m	Fake Easting:	500 000 m
Inverse Flattening:	298.257 223 563	Fake Northing:	0.000 m
		Scale Factor:	0.9996

KEY PLAN			
3	20/04/2023	FI - FINAL ISSUE	CAPOCALO (RELO) PARNIAN
2	16/06/2023	IFA - ISSUED FOR APPROVAL	CAPOCALO (RELO) PARNIAN

NATURAL PROFILE
VERTICAL SCALE 1:1000

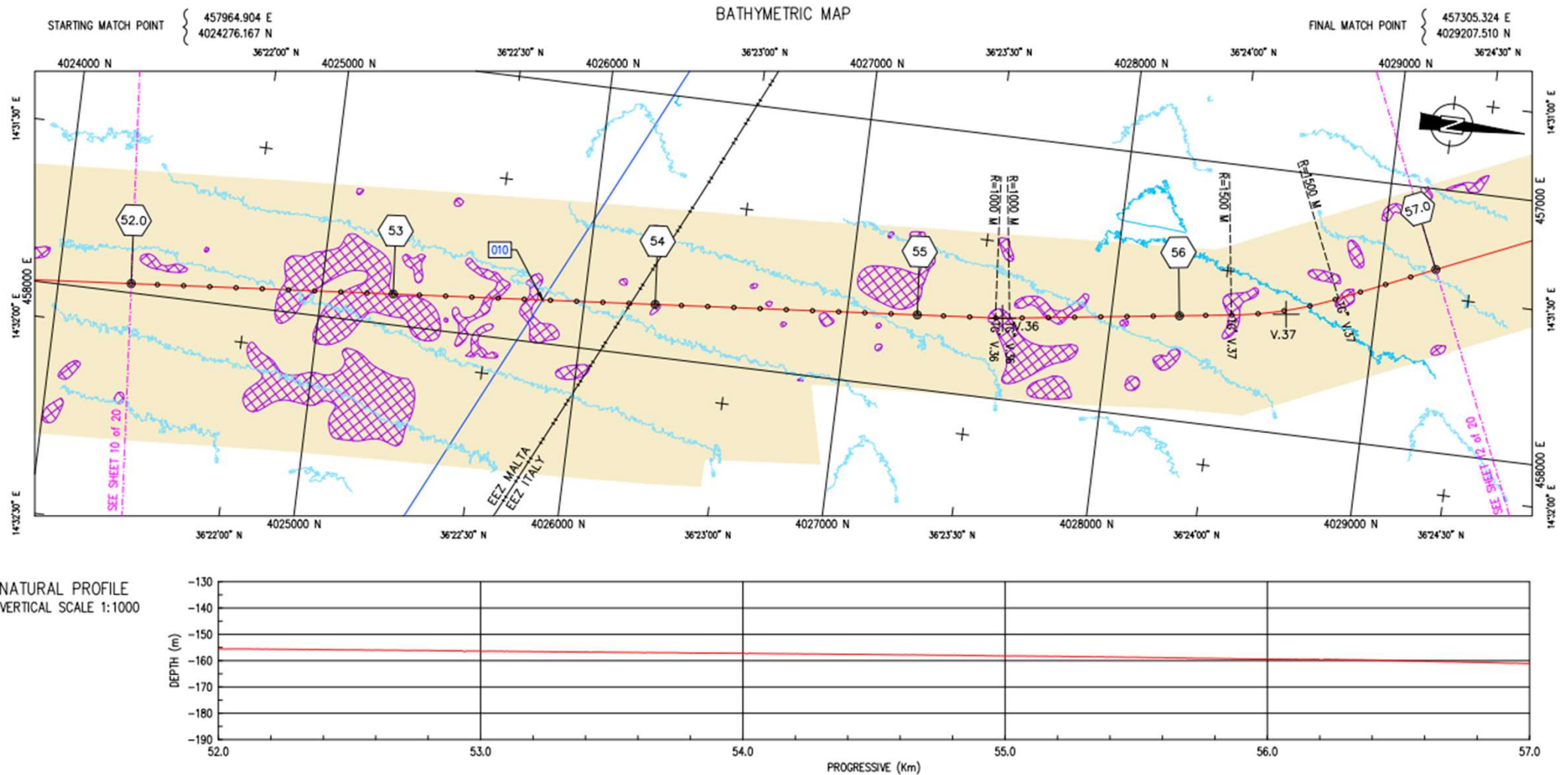


ROUTE ITEM	DEPTH (m)	PROGRESSIVE (km)	ROUTE ITEM	DEPTH (m)	PROGRESSIVE (km)
SURFACE SEALED SOIL CROSSING	17.97	1.834	00-1 Mediterranean Cable System	52.1	5.000
POGDONIA OCEANICA ABOVE ROCK	358.1	2.040		100	5.417
	100	2.240		333.0	6.300
	42.1	2.440		1500	6.702
	500	2.640			
	31.1	2.840			
	200	3.040			
	3.5	3.240			
	200	3.440			
	41.1	3.640			
	1500	3.840			
	52.1	4.040			
	100	4.240			
	333.0	4.440			
	1500	4.640			
	1500	4.840			
	1500	5.040			
	1500	5.240			
	1500	5.440			
	1500	5.640			
	1500	5.840			
	1500	6.040			
	1500	6.240			
	1500	6.440			
	1500	6.640			
	1500	6.840			
	1500	7.040			

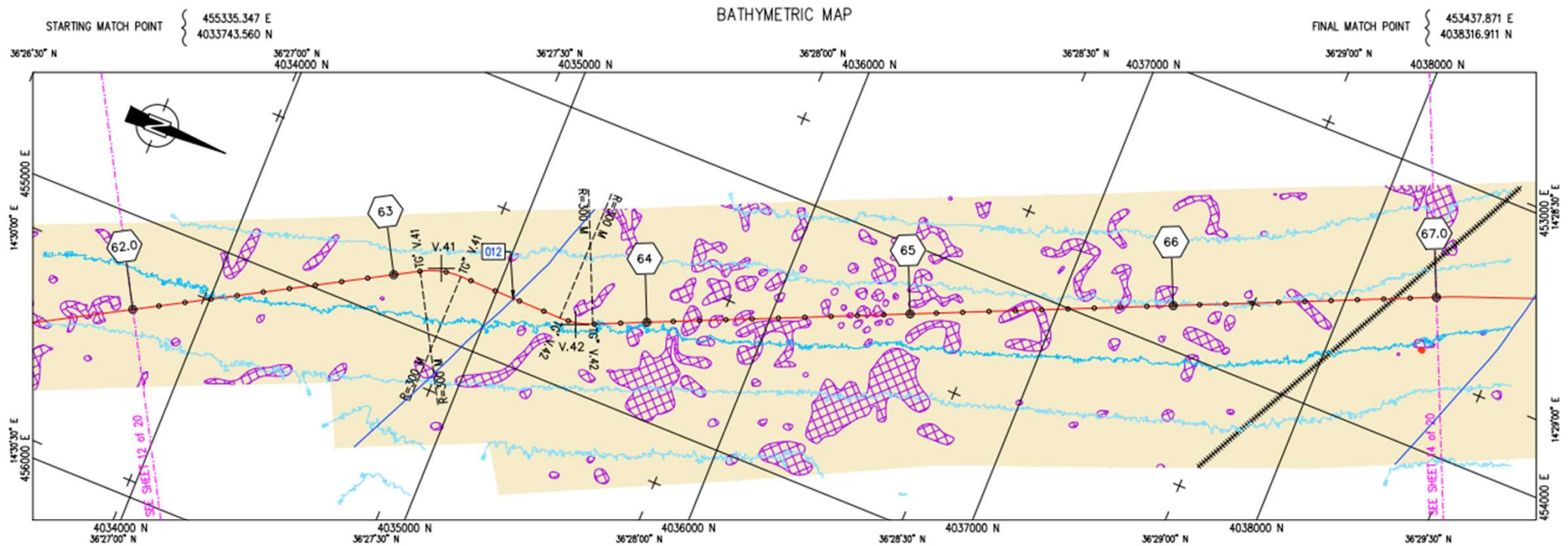
INTERCONNECTOR CABLE 2 - ROUTE ALIGNMENT DATA						
POINTS	COORDINATES (m)		DISTANCE (m)		AZIMUTH	RADIUS (m)
	EASTING	NORTHING	PARTIAL	CUMULATIVE		
ENTRY MALTA	449399.171	3978755.072	804.777	1833.910	1702°45'	200
TG V.1	449635.080	3979524.495		2638.687		
TG V.1	449644.770	3979556.098	65.517	2704.204	358°16'36"	100
TG V.2	449638.963	3979748.424	159.359	2863.563		
TG V.2	449637.774	3979788.679	76.451	2940.013	42°04'47"	500
TG V.2	449664.716	3979818.448		3206.100		
TG V.3	449783.698	3979950.222	177.542	3117.555		
TG V.3	449813.446	3979983.168	88.545	3206.100		
TG V.3	449816.974	3980020.830	135.248	3341.348	31°55'59"	200
TG V.4	449908.461	398035.819		3341.348		
TG V.4	449917.062	3980149.420	32.452	3373.800	41°13'47"	200
TG V.4	449917.780	3980161.850		3373.800		
TG V.5	450612.873	3980943.405	1039.468	4413.268		

- NOTES
- GEODETIC PARAMETERS ARE REPORTED IN THE GEODETIC PARAMETER TABLE.
 - ELEVATIONS ARE IN METERS AND THEY ARE REFERRED TO LAT.
 - BATHYMETRIC DATA ARE ACCORDING TO REF. 1.
 - CABLE LANDFALL IN MALTA AND ITALY WILL BE CARRIED OUT BY TRENCHLESS TECHNOLOGY. SELECTED METHODOLOGY FOR BOTH LANDFALL IS HDD. FOR DETAIL ON SHORE APPROACH SEE REF. 2 AND REF. 3.
 - ONSHORE ROUTE SECTIONS ARE SHOWN IN REF. 4 AND REF. 5.
 - KP SYSTEM IS BASED ON THE OVERALL ROUTE INCLUDING ONSHORE SECTIONS. BATTERY LIMITS FOR THE OFFSHORE SECTION ARE THE HDD ENTRY POINTS AT BOTH LANDFALLS CORRESPONDING TO KP 1.834 IN MALTA AND KP 101.361 IN ITALY.
 - THE SELECTED ROUTE IS BASED ON THE RESULT OF THE SURVEY PERFORMED ALONG THE PROPOSED CORRIDOR (REF. 1). SEALED FEATURES, UXOs, WRECKS AND EXISTING CABLES POSITION ARE BASED ON FINAL SURVEY DATA.
 - THE UNIVERSITY OF MALTA HAS PERFORMED AN AUV SSS SURVEY IN THE ESCARPMENT AREA TO IDENTIFY POSSIBLE OBSTACLES OR UXOs. CONTACTS IDENTIFIED IN A CORRIDOR OF ±50m RESPECT TO THE SELECTED ROUTE ARE SHOWN IN THE DRAWING.

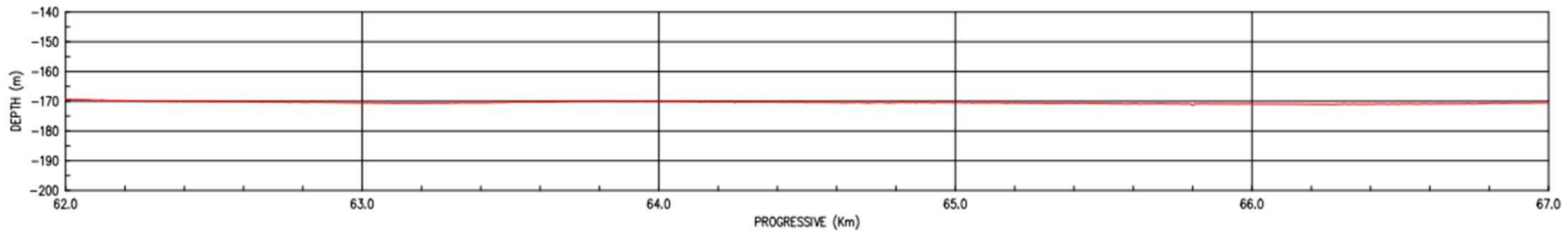
Offshore



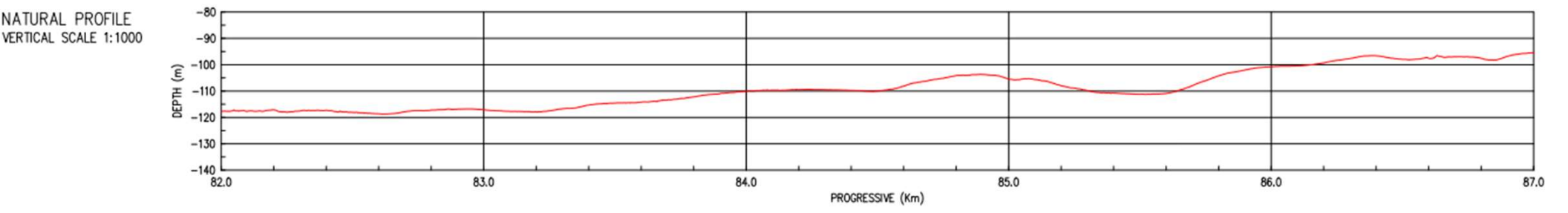
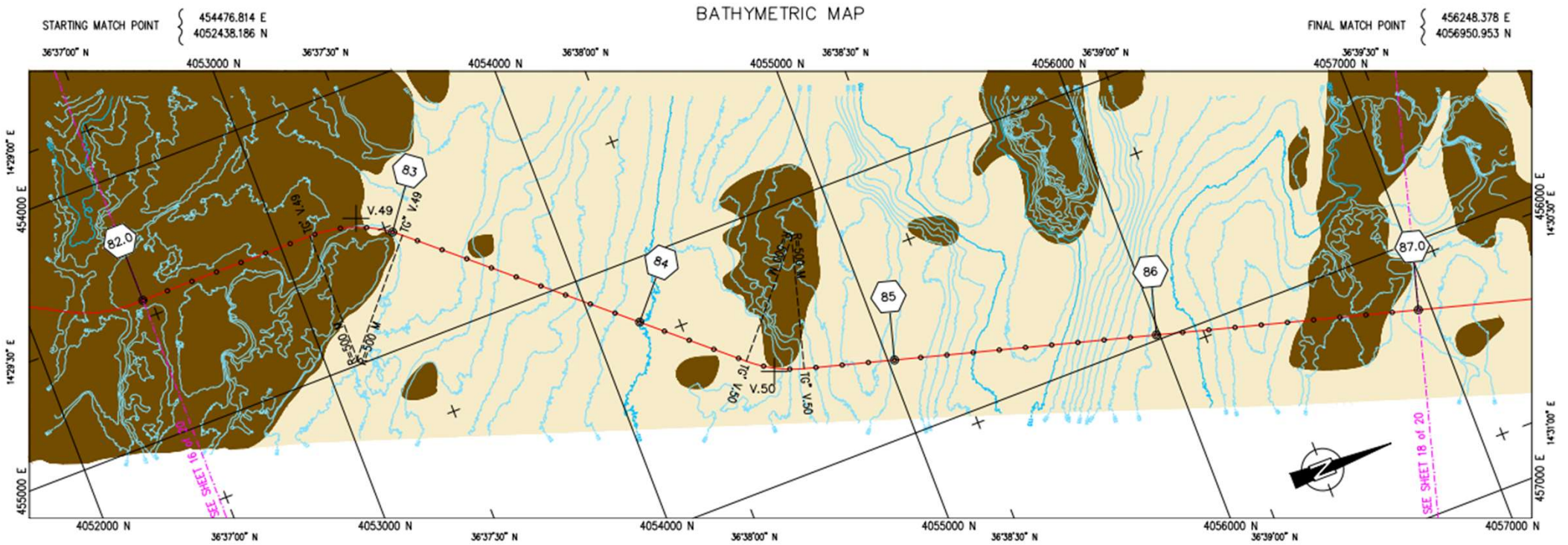
Offshore



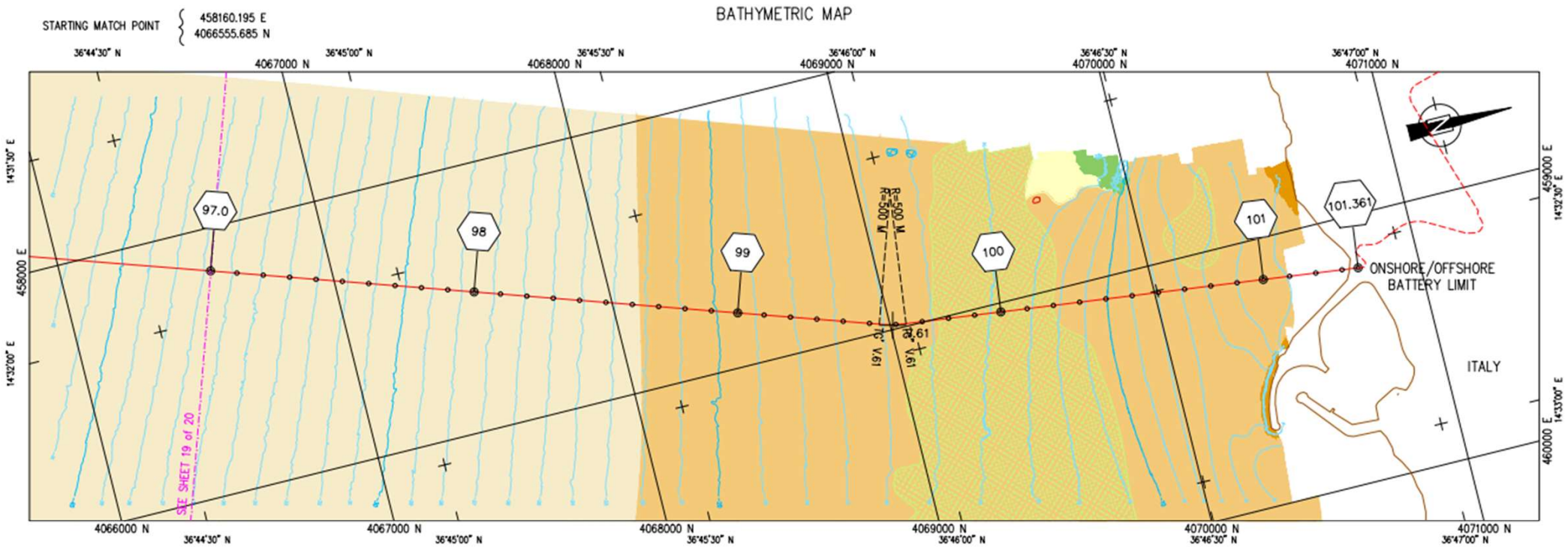
NATURAL PROFILE
VERTICAL SCALE 1:1000



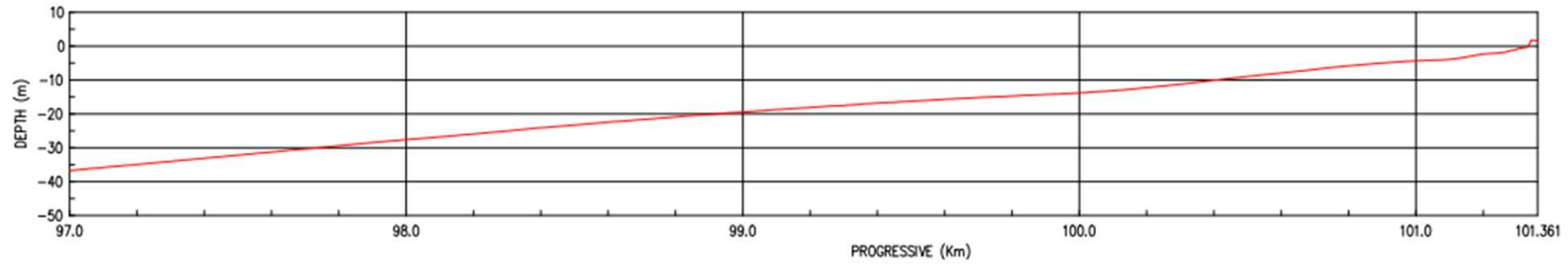
Offshore



Offshore

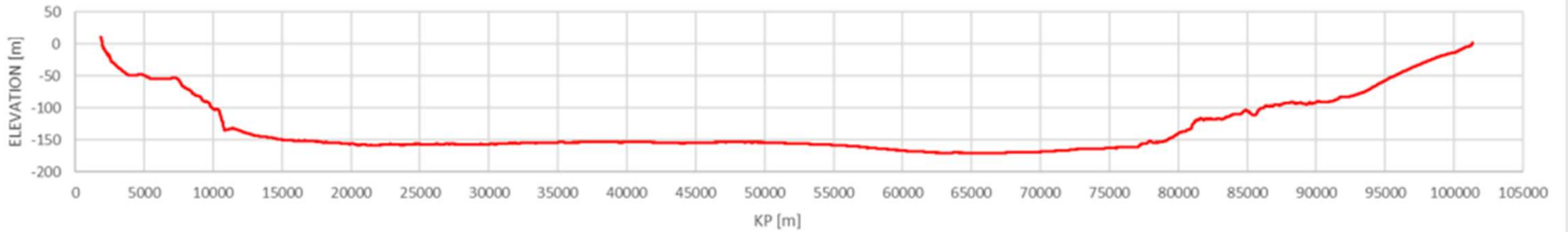


NATURAL PROFILE
VERTICAL SCALE 1:1000

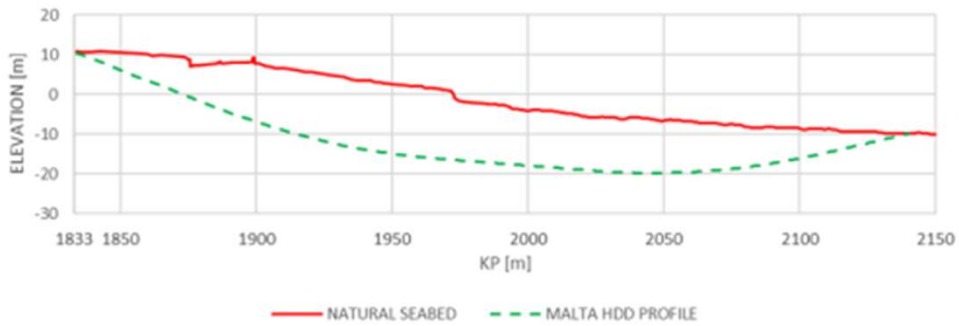


Offshore

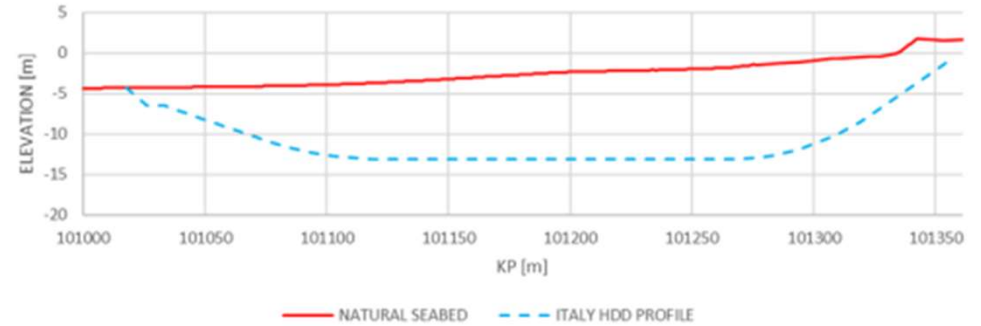
IC2 Offshore Section - Natural Profile



IC2 - Malta HDD Profile

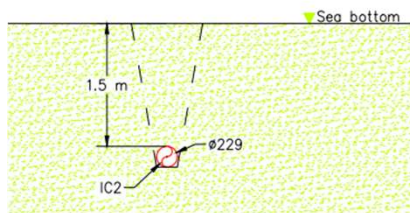


IC2 - Italy HDD Profile

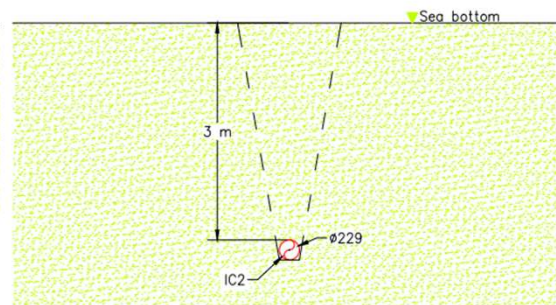


Offshore

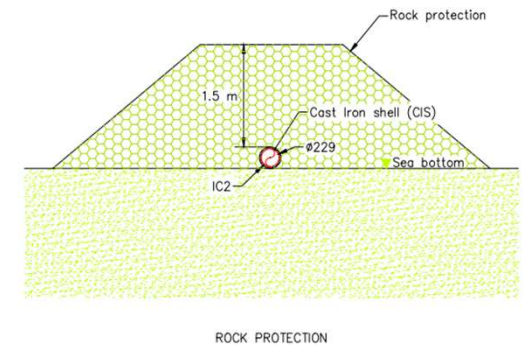
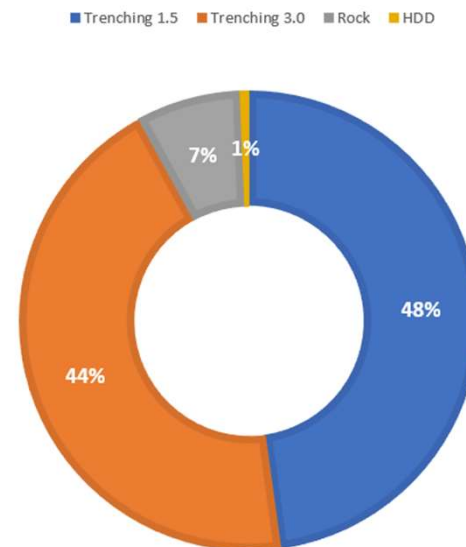
from KP	to KP	Length	Cable Protection Type	Estimated Depth of Burial		HDD	CIS	Rock Protection	Post Trenching
1833.910	2139.000	305.090	HDD		2 km from landfall	X			
2139.000	3456.266	1317.266	CIS + Rock Protection				X	X	
3456.266	3833.910	377.644	CIS + Post Trenching				X		X
3833.910	8271.266	4437.356	Post Trenching	1.5m Cover					X
8271.266	10400.000	2128.734	Rock Protection		Slopes			X	
10400.000	10756.266	356.266	CIS + Rock Protection				X	X	
10756.266	30000.000	19243.734	Post Trenching	1.5m Cover					X
30000.000	74000.000	44000.000	Post Trenching	3m Cover					X
74000.000	80931.266	6931.266	Post Trenching	1.5m Cover					X
80931.266	82896.266	1965.000	Rock Protection					X	
82896.266	86561.266	3665.000	Post Trenching	1.5m Cover					X
86561.266	86891.266	330.000	Rock Protection					X	
86891.266	88421.266	1530.000	Post Trenching	1.5m Cover					X
88421.266	89626.266	1205.000	Rock Protection					X	
89626.266	99361.266	9735.000	Post Trenching	1.5m Cover					X
99361.266	101031.000	1669.734	CIS + Post Trenching	1.5m Cover	2 km from landfall		X		X
101031.000	101361.266	330.266	HDD			X			



POST TRENCHING – DEPTH 1.5 m



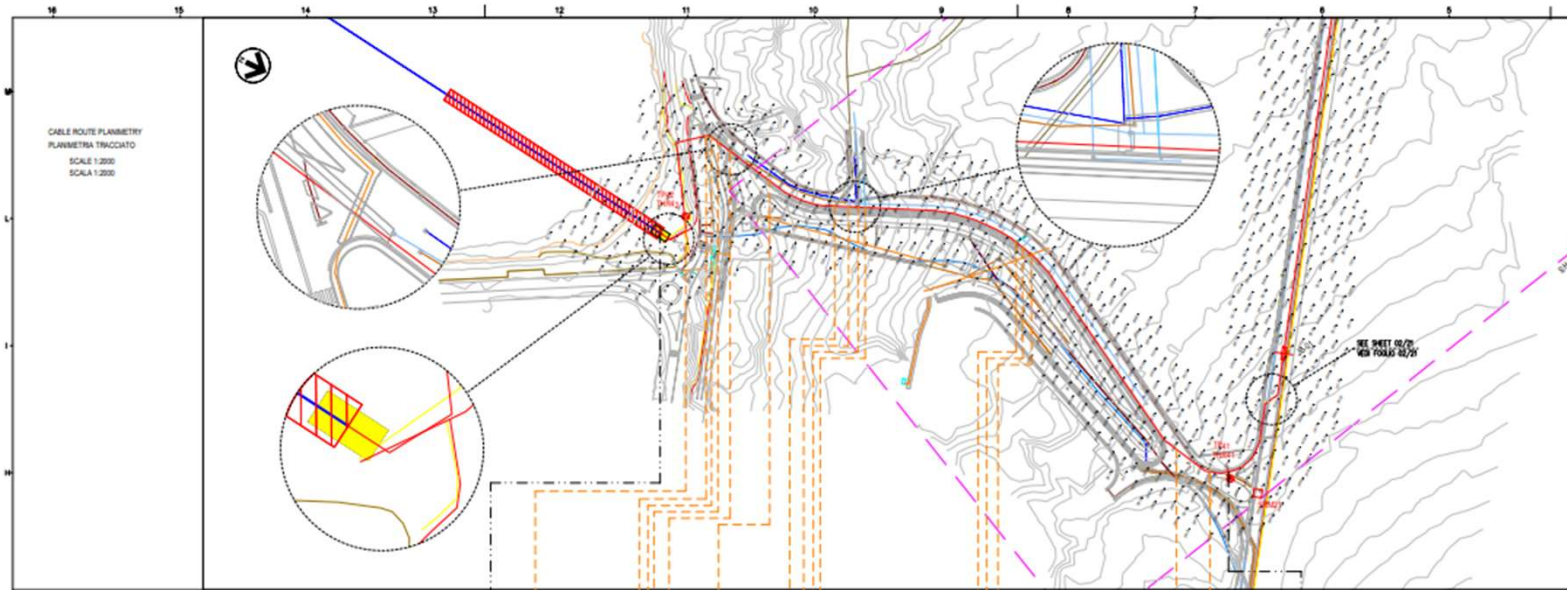
POST TRENCHING – DEPTH 3 m



ROCK PROTECTION

Approach at Ragusa





REFERENCE DOCUMENTS / DOCUMENTI DI RIFERIMENTO	N.
TYPICAL DRAWING FOR ROW / TIPOCO AREA DI LAVORO	CT301322_IJ2_GEN_DWG_040
TYPICAL DRAWING FOR TRENCH / TIPOCO TRINCEA DI SCAVO	CT301322_IJ2_GEN_DWG_041
TYPICAL DRAWING FOR ROAD CROSSING / TIPOCO ATRAVVERSAMENTO STRADA	CT301322_IJ2_GEN_DWG_042
TYPICAL DRAWING FOR ROAD CABLE PARALLELISM / TIPOCO PER PARALLELISMO CON STRADA-CRUS	CT301322_IJ2_GEN_DWG_046
TYPICAL DRAWING FOR UNDERROAD CROSSING / TIPOCO PER ATRAVVERSAMENTO SOTTERRANEO	CT301322_IJ2_GEN_DWG_047
TYPICAL DRAWING FOR JOINT BAYS / TIPOCO PER SEGNALETICA CAVODOTTO	CT301322_IJ2_GEN_DWG_048
TYPICAL FOR JOINT BAYS / TIPOCO PER BUCHE GIUNTI	CT301322_IJ2_GEN_DWG_092
TYPICAL FOR TRANSITION JOINT BAYS / TIPOCO PER BUCHE GIUNTI DI TRANSIZIONE	CT301322_IJ2_GEN_DWG_093

- NOTES / NOTE
1. ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE INDICATED.
 2. A RADIUS DI CURVATURA DELLE CURVE DOWNS' ESSERE 6.00 m MIN.
 3. ALL BURRED SERVICES TO BE SURVICED BEFORE THE START OF THE CONSTRUCTION.
 4. CABLE MARKERS SHALL BE INSTALLED AT LEAST EVERY 1000 m, IN COMPLIANCE WITH AUTHORITY REQUIREMENT IN FORCE IN THE PLACE OF INSTALLATION, IN A SAFE BAY IN ORDER TO NOT INTERFERE WITH ANY ISSUE. IN CASE OF PROBLEMS ON INSTALLATION DUE TO UNFAVOURABLE LOCATION OF THE MARKER ALONG THE CABLE ROUTE, A STEEL PLATE HAS BEEN FORESEEN (EVERY 100 m) IMBEDDED ON THE ASPHALT IN ORDER TO SIGN THE PRESENCE OF THE CABLE IN PROJECT. EPC CONTRACTOR SHALL EVALUATE THE BEST LOCATION INSTALLATION.
 5. EPC CONTRACTOR SHALL EVALUATE THE BEST SOLUTION TO CROSS THE EXISTING UNDERGROUND INFRASTRUCTURE AS PER TYPICAL DRAWING IJ2_GEN_DWG_118.
- TUTTE LE DIMENSIONI SONO IN METRI, SE NON SPECIFICAMENTE INDICATO.
 IL RAGGIO DI CURVATURA DELLE CURVE DOWNS' ESSERE 6.00 m MINIMO.
 TUTTI I SOTTERRANEO INTERRATI DEVONO ESSERE INDICATI PRIMA DELL'INIZIO DEI LAVORI.
 I CABELLI SEGNALETICI DEVONO ESSERE INSTALLATI ALMENO OGNI 1000 m, IN ACCORDO CON GLI ENTI COMPETENTI NEL LUOGO DI INSTALLAZIONE, IN UNA POSIZIONE SICURA AL FINE DI NON INTERFERIRE IN ALCUN MODO CON L'AREA CIRCOSTANTE. NEL CASO DI PROBLEMI DI INSTALLAZIONE DOWNS' ALLA SICUREZZA, E' PREVISTA LA POSA IN UNA PIASTRA IN ACCIAIO AFFISSA ALL'ASFALTO (OGNI 100 m), AL FINE DI SEGNALE L'ELETTRICITA' L'APPALTATORE DOWNS' SELEZIONARE LA MIGLIORE SOLUZIONE.
 L'APPALTATORE DOWNS' SELEZIONARE LA MIGLIORE SOLUZIONE PER ATRAVVERSARE LE INFRASTRUTTURE SOTTERRANEE ESISTENTI COME DA DISEGNO TIPOCO IJ2_GEN_DWG_118.

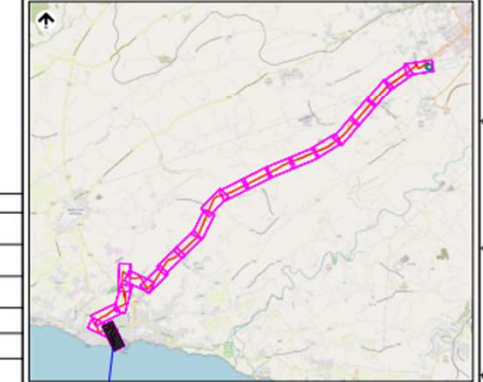
ABBREVIATION LIST / ABBREVIAZIONI

KP	Kilometre Progressive / Progressiva chilometrica
HDD	Horizontal Directional Drilling / Trivellazione orizzontale controllata
JB	Joint Bay / Buca GiunTI
FOC	Fiber Optical Cable / Cavo di fibra ottica
TR	Thermal resistivity value / Valore thermal resistivity
TP	Triad pit test point / Punto sondaggio
THR	Thermal resistivity test point / Punto sondaggio thermal resistivity
SRM	Soil resistivity measurement point / Punto sondaggio soil resistivity

PROJECT GEODETIC PARAMETERS / RIFERIMENTI GEOGRAFICI

COORDINATE SYSTEM : UTM-33N	SOURCE: SPKDER, J.P. 1987
DESCRIPTION: WGS1984 UTM ZONE 33 NORTH	MAP PROJECTIONS - A WORKING MANUAL
PROJECTION: UNIVERSAL TRANSVERSE MERCATOR	DATE: 1905 04
UNIT: METERS	DESCRIPTION: WORLD GEODETIC SYSTEM OF 1984
UTM ZONE: 33	SOURCE: U.S. DEFENSE MAPPING AGENCY,
HEMISPHERE: NORTHERN	TR-8550.2-B, DECEMBER 1987
MINIMUM LONGITUDE: 12° 00' 00"	ELLIPSOID: 1905 04
MAXIMUM LONGITUDE: 18° 00' 00"	EQUATORIAL RADIUS: 6378137 m
MINIMUM LATITUDE: 00° 00' 00"	POLAR RADIUS: 6356752.3142 m
MAXIMUM LATITUDE: 04° 00' 00"	ECCENTRICITY: 0.08181190920928904743 m

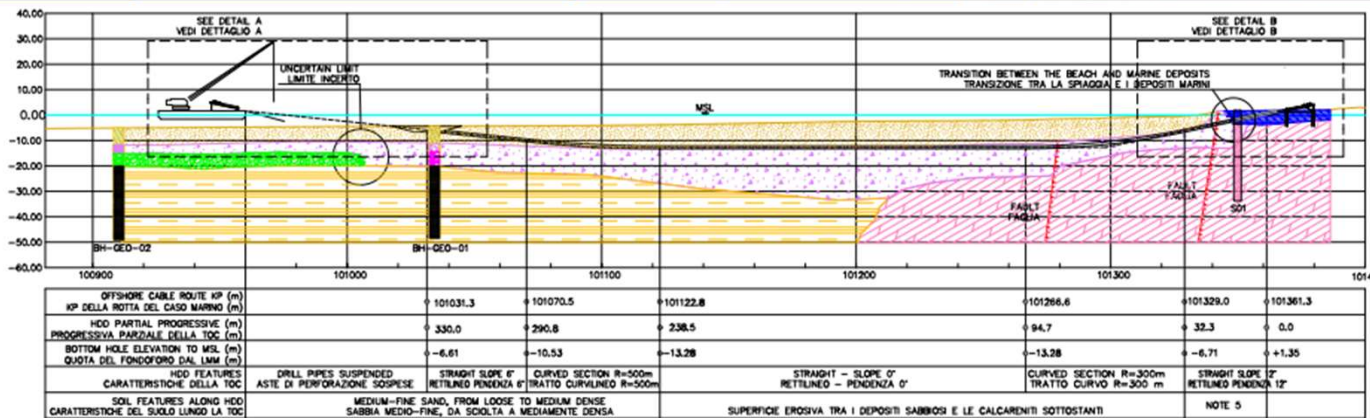
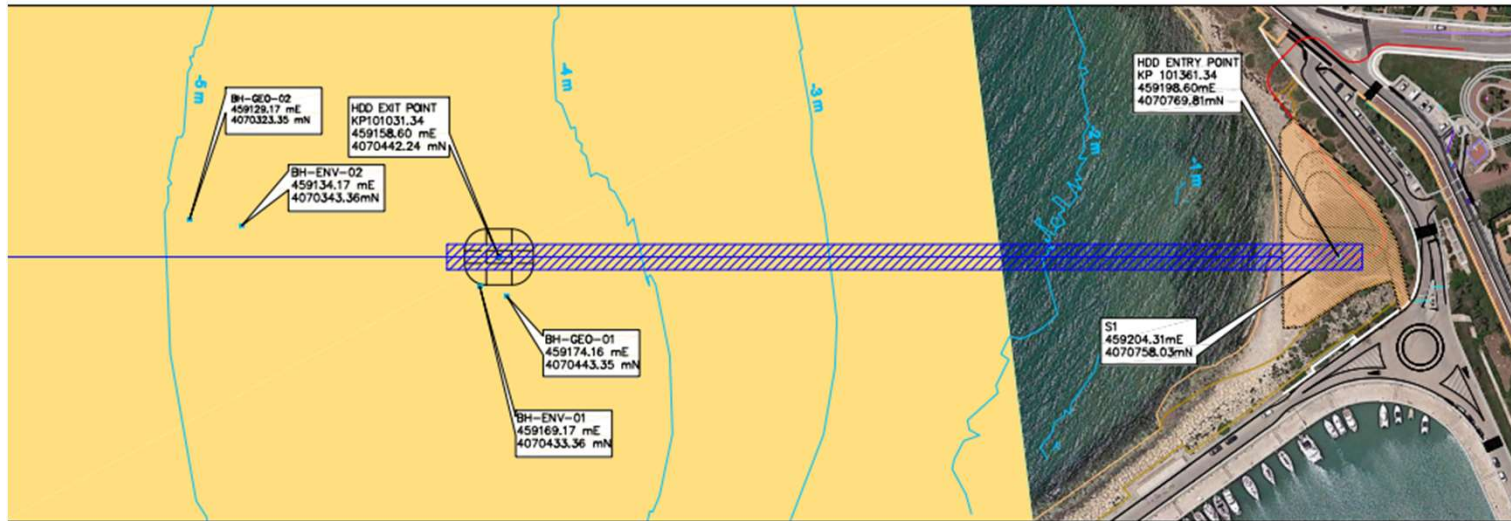
KEY MAP / COROGRAFIA



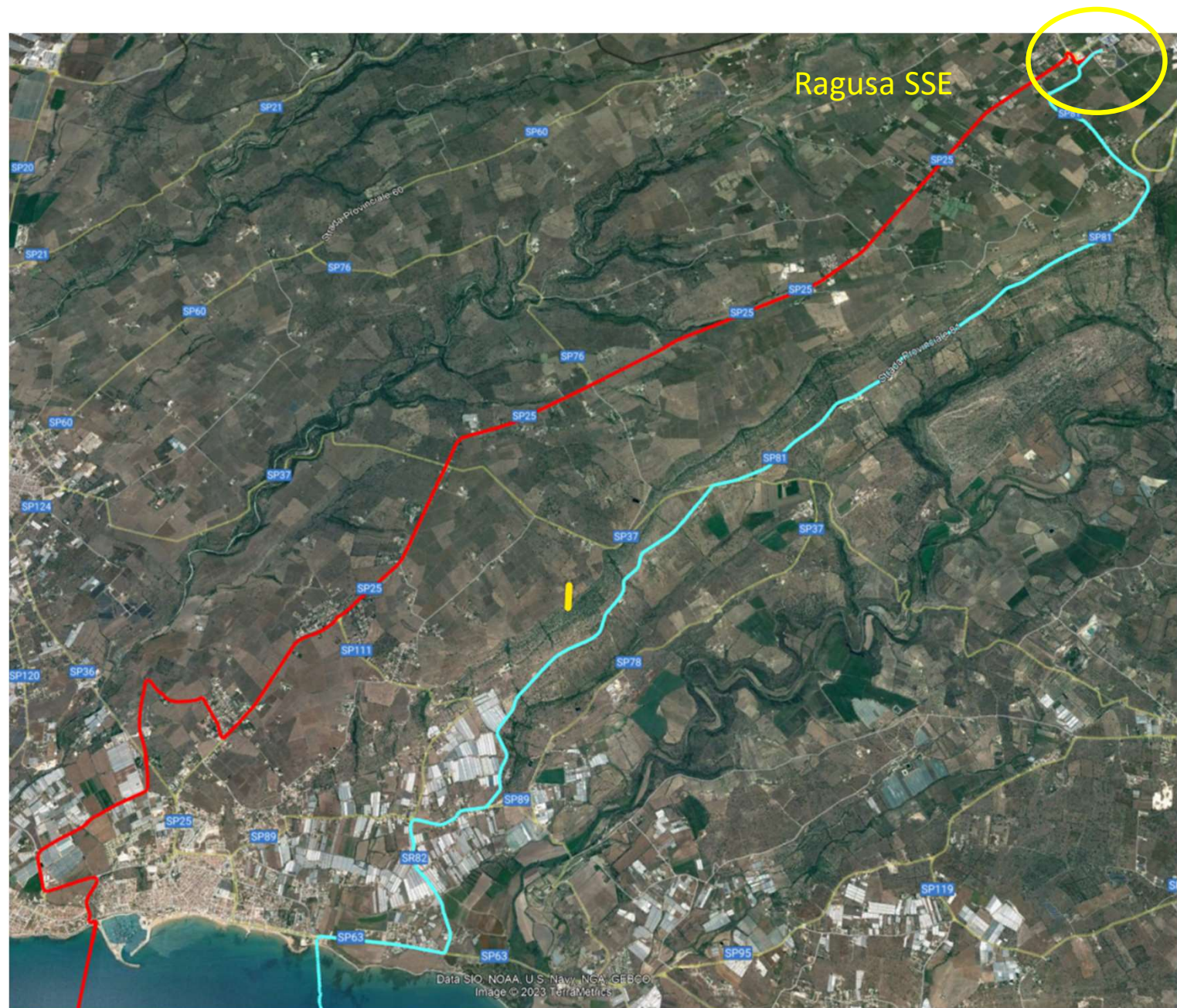
REFERENCE DRAWING / DISEGNI DI RIFERIMENTO	IC2_GEN_DWG_040	IC2_GEN_DWG_041	IC2_GEN_DWG_042	IC2_GEN_DWG_044	IC2_GEN_DWG_047	IC2_GEN_DWG_047	IC2_GEN_DWG_047	IC2_GEN_DWG_047	IC2_GEN_DWG_047	IC2_GEN_DWG_047
PROFILE SCALE	Horizontal 1:2000 Vertical 1:200									
PROFILE SCALE	Orizzontale 1:2000 Verticale 1:200									
QUORUM (m) / QUOTA DI RIFERIMENTO (m)	0.00									
CABLE LENGTH (km) / LUNGHEZZA CAVO (km)	0.00									
GROUND ELEVATION (m) / ALTITUDINE (m)	0.00									
PARTIAL HORIZONTAL DISTANCES (m) / DISTANZE PARZIALI (m)	0.00									
PROGRESSIVE HORIZONTAL DISTANCES (m) / DISTANZE PROGRESSIVE ORIZZONTALI (m)	0.00									
INSTALLATION METHODOLOGY / TIPO DI POSA	SEE DRAWING FOR DETAILS									
CABLE PROTECTION / PROTEZIONE CAVO	SEE DRAWING FOR DETAILS									
JOINT BAY ID AND SECTION LENGTH (m) / ID E LUNGHEZZA PEZZATURA BUCHE GIUNTI (m)	SEE DRAWING FOR DETAILS									
TEST POINT / POSIZIONE SONDAGGIO	SEE DRAWING FOR DETAILS									

Landing area in Ragusa

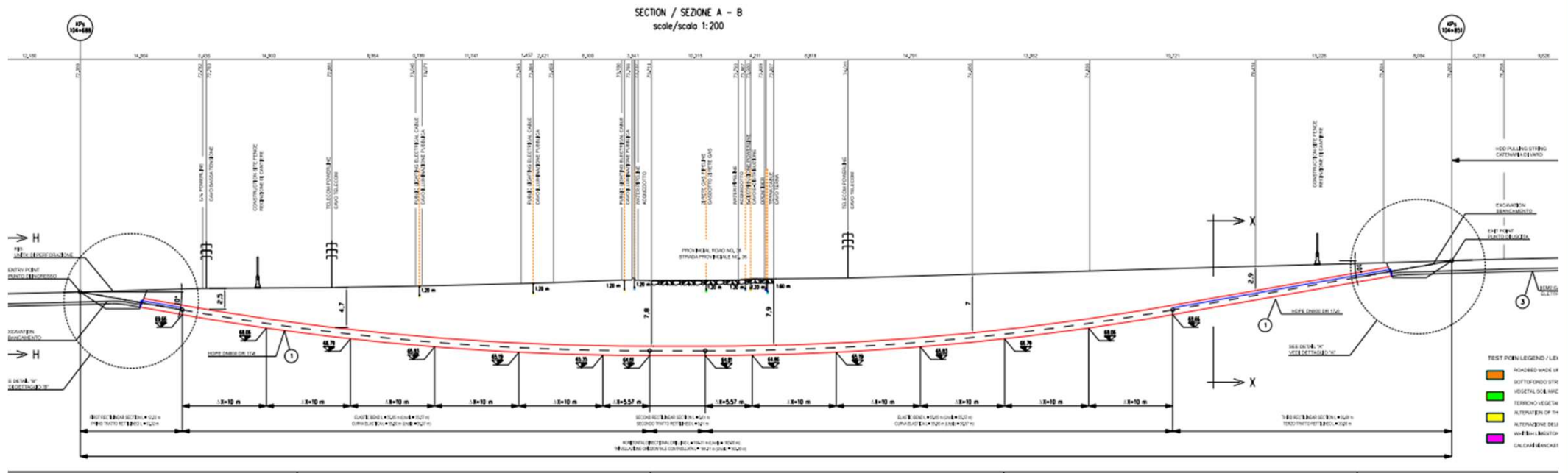
Trenchless installation - HDD



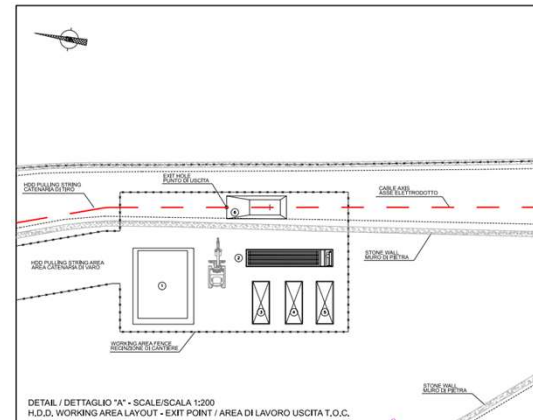
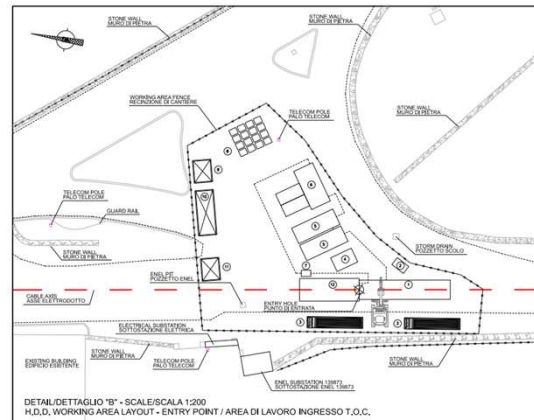
Onshore



Onshore

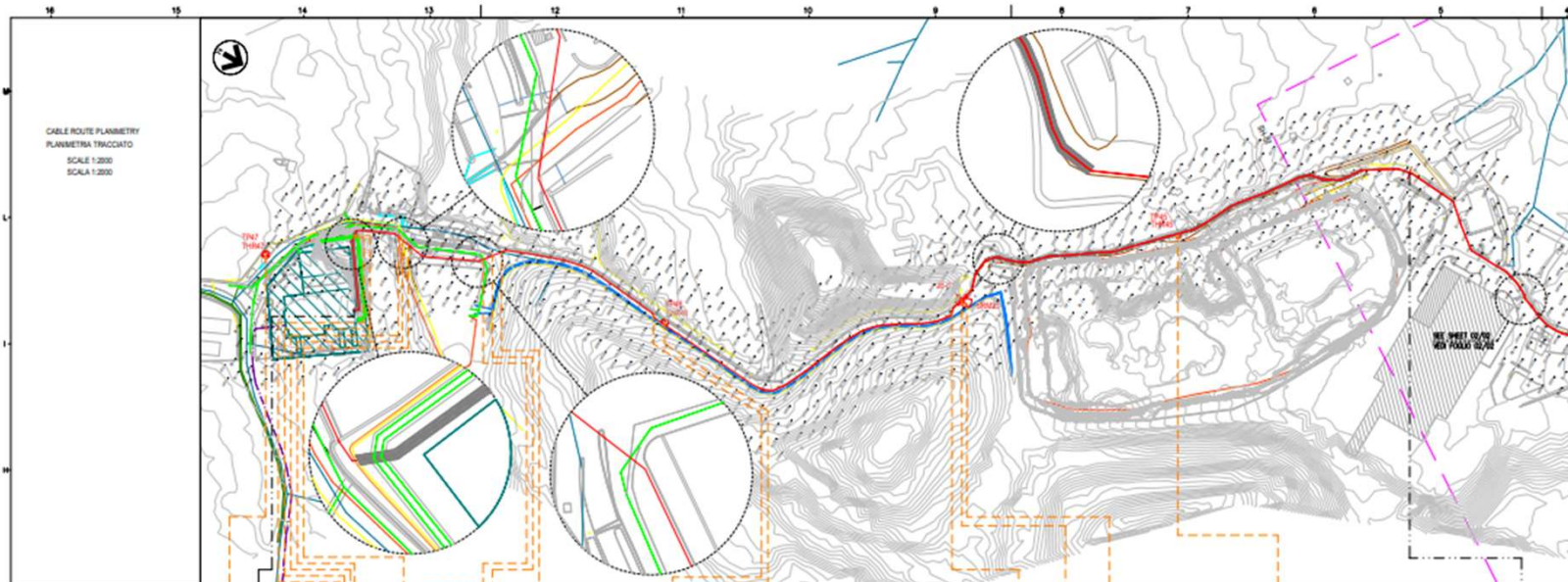


Crossing design for HDD with the SP36



Onshore





REFERENCE DOCUMENTS / DOCUMENTI DI RIFERIMENTO	N.
TYPICAL DRAWING FOR ROW / TIPICO AREA DI LAVORO	CT301322_IC2_GDN_DWG_040
TYPICAL DRAWING FOR TRENCH / TIPICO TRINCEA DI SCAVO	CT301322_IC2_GDN_DWG_041
TYPICAL DRAWING FOR ROAD CROSSING / TIPICO ATTRAVERSAMENTO STRADA	CT301322_IC2_GDN_DWG_044
TYPICAL DRAWING FOR ROAD CABLE PARALLELISM / TIPICO PER PARALLELISMO CON STRADA/CAVO	CT301322_IC2_GDN_DWG_046
TYPICAL DRAWING FOR UNDERROAD CROSSING / TIPICO PER ATTRAVERSAMENTO SOTTOSERVITO	CT301322_IC2_GDN_DWG_047
TYPICAL DRAWING FOR MARKER SIGNS / TIPICO PER SEGNALETICA CAMBITTO	CT301322_IC2_GDN_DWG_048
TYPICAL FOR JOINT BAYS / TIPICO PER BUOIE GIUNTI	CT301322_IC2_GDN_DWG_092
TYPICAL FOR TRANSITION JOINT BAYS / TIPICO PER BUOIE GIUNTI DI TRANSIZIONE	CT301322_IC2_GDN_DWG_093

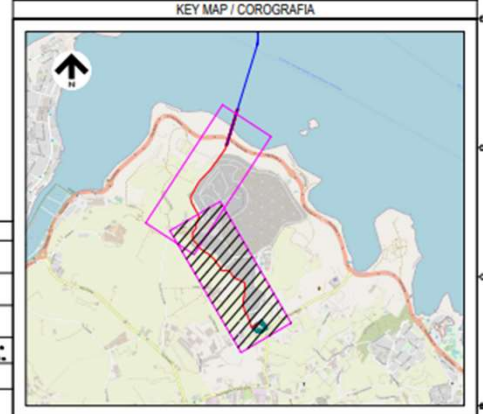
- NOTES / NOTE**
1. ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE INDICATED.
 2. BENDS RADIUS SHALL BE 8.00 m MIN.
 3. ALL BURIED SERVICES TO BE SURVEYED BEFORE THE START OF THE CONSTRUCTION.
 4. CABLE MARKERS SHALL BE INSTALLED AT LEAST EVERY 1000 m.
1. TUTTE LE DIMENSIONI SONO IN METRI, SE NON SPECIFICAMENTE INDICATO.
 2. IL RAGGIO DI CURVATURA DELLE CURVE DOVRA' ESSERE 8.00 m MINIMO.
 3. TUTTI I SOTTOSERVIZI INTRERRATI DEVONO ESSERE INDIVIDUATI PRIMA DELL'INIZIO DEI LAVORI.
 4. I CARTELLI SEGNALETORI DEVONO ESSERE INSTALLATI ALMENO OGGI 1000 m.

ABBREVIATION LIST / ABBREVIAZIONI

KP	Kilometre Progressive / Progressiva chilometrica
HDD	Horizontal Directional Drilling / Trivellazione orizzontale controllata
JB	Joint Bay / Buca Giunti
FOC	Fiber Optical Cable / Cavo di fibra ottica
TP	Trial pit test point
THR	Thermal resistivity test point
SRM	Soil resistivity measurement point

PROJECT GEODETIC PARAMETERS / RIFERIMENTI GEOGRAFICI

COORDINATE SYSTEM : UTM84-33N	SOURCE : SWISER, J.P. 1987
DESCRIPTION : WGS1984 UTM, ZONE 33 NORTH	MAP PROJECTIONS - A WORKING MANUAL
PROJECTION : UNIVERSAL TRANSVERSE MERCATOR	DATUM : WGS 84
UNIT : METERS	DESCRIPTION : WORLD GEODETIC SYSTEM OF 1984
UTM ZONE : 33	SOURCE : U.S. DEFENSE MAPPING AGENCY
HEMISPHERE : NORTHERN	TR-8350.2-B, DECEMBER 1987
MINIMUM LONGITUDE : 12° 00' 00"	ELLIPSOID : WGS 84
MAXIMUM LONGITUDE : 18° 00' 00"	EQUATORIAL RADIUS : 6378137 m
MINIMUM LATITUDE : 00° 00' 00"	POLAR RADIUS : 6356732.3143 m
MAXIMUM LATITUDE : 84° 00' 00"	ECCENTRICITY : 0.081818180920828906743 m



REFERENCE DRAWING / DISEGNI DI RIFERIMENTO

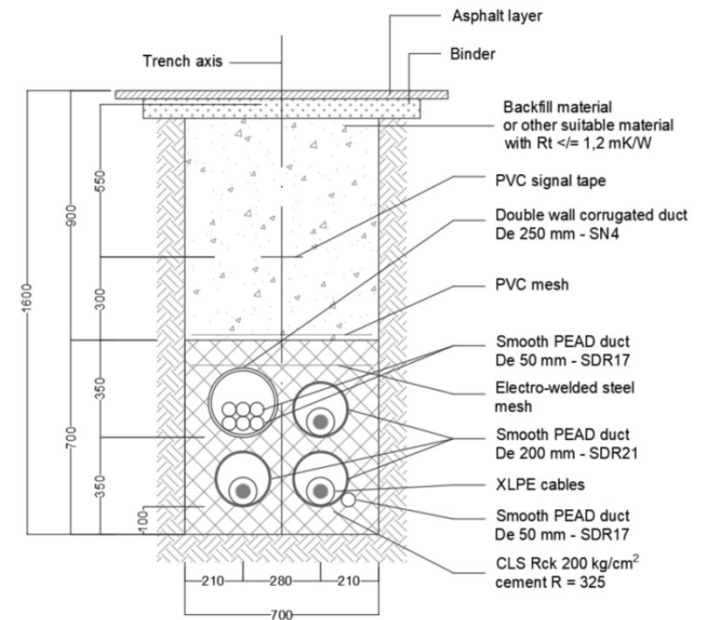
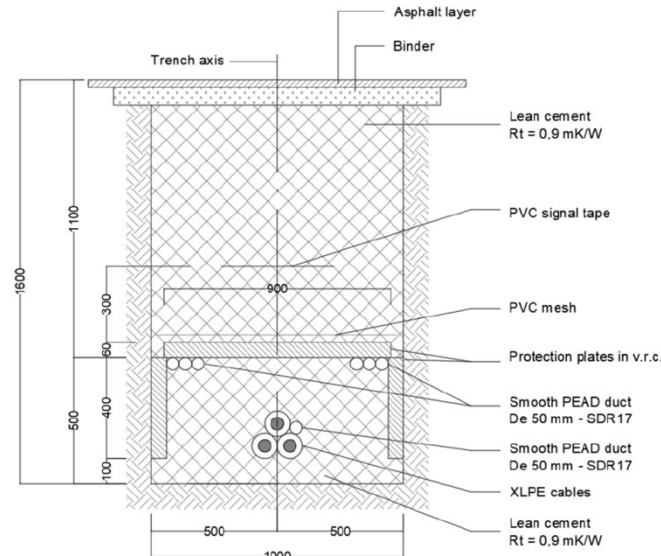
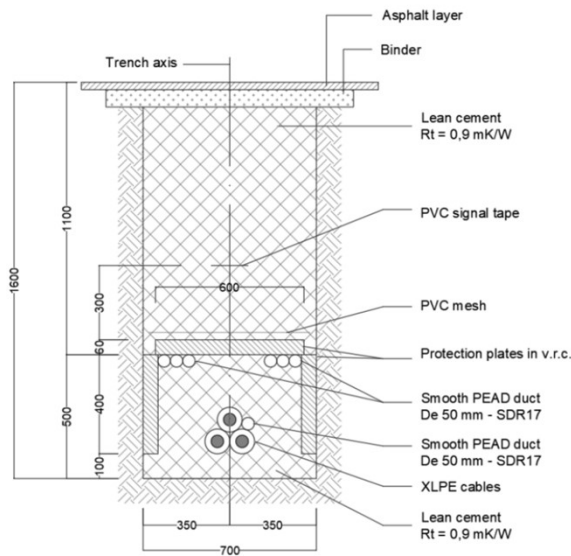
PROFILE SCALE: Horizontal 1:2000, Vertical 1:200
 PROFILO SCALA: Orizzontale 1:2000, Verticale 1:200

QUOTUM (m) / QUOTA DI RIFERIMENTO (m)	0.00	20.00	30.00
CABLE LENGTH (m) / LUNGHEZZA CAVO (m)	0.00	100.00	200.00
GROUND ELEVATION (m) / ALTITUDINE (m)	0.00	10.00	20.00
PARTIAL HORIZONTAL DISTANCES (m) / DISTANZE PARZIALI (m)	0.00	10.00	20.00
PROGRESSIVE HORIZONTAL DISTANCES (m) / DISTANZE PROGRESSIVE ORIZZONTALI (m)	0.00	10.00	20.00
INSTALLATION METHODOLOGY / TIPO DI POSA	OPEN CUT - TRINCEA - TRINCEA SENZA SCAVO - SCAVO SENZA SCAVO	OPEN CUT - TRINCEA - TRINCEA SENZA SCAVO - SCAVO SENZA SCAVO	OPEN CUT - TRINCEA - TRINCEA SENZA SCAVO - SCAVO SENZA SCAVO
CABLE PROTECTION / PROTEZIONE CAVO	CONCRETE PROTECTION (EXCEPT UNDER ROAD)	CONCRETE PROTECTION (EXCEPT UNDER ROAD)	CONCRETE PROTECTION (EXCEPT UNDER ROAD)
JOINT BAY ID AND SECTION LENGTH (m) / ID E LUNGHEZZA PREZZATURA BUCA GIUNTI (m)	0.00	10.00	20.00

Onshore

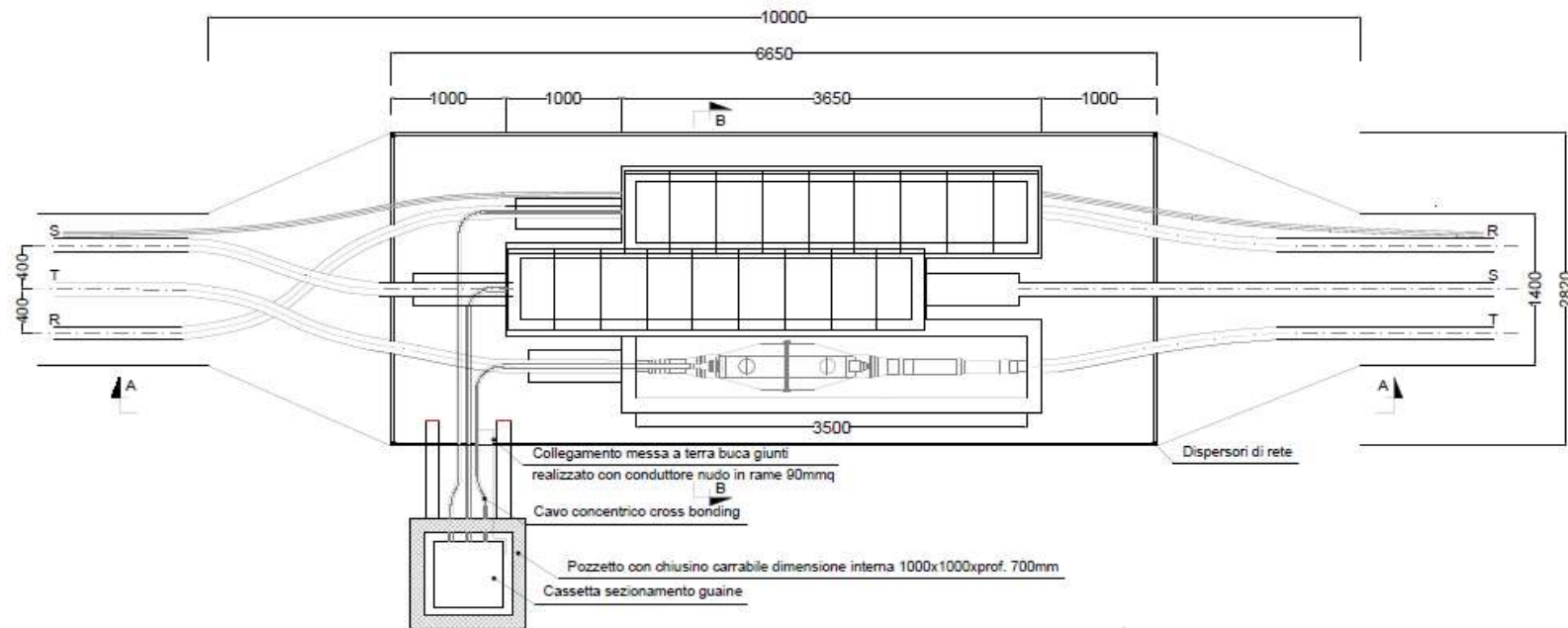
Open cut trenching

The interconnector will be installed in trenches for almost the entire route
Typical trench cross-sections are shown below:



Onshore

Joint bays



THANK YOU

WE'RE PLEASED TO ANSWER QUESTIONS

INTERCONNECT
MALTA