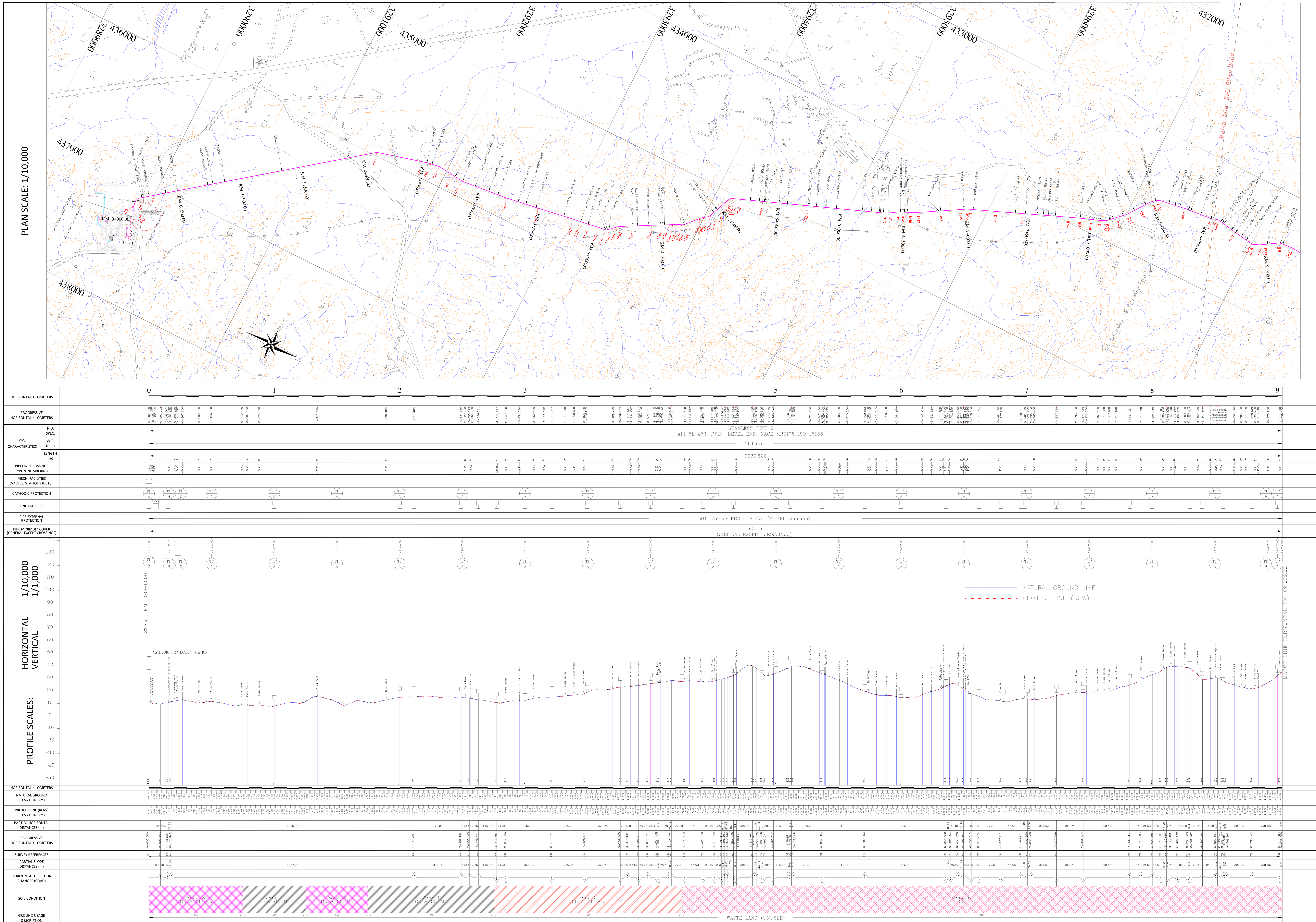


REFERENCE DOCUMENTS

	TITLE	DOC. No.
1	GEOTECHNICAL INVESTIGATION REPORT FOR PIPELINES	BK-PPL-PEDCO-320-GT-RT-0001
2	PIPELINE STANDARD DRAWING FOR LINE MARKER	BK-GNRAL-PEDCO-000-PL-DW-0001
3	STANDARD DRAWING FOR UNDER GROUND PIPELINE CONSTRUCTION R.O.W	BK-GNRAL-PEDCO-000-PL-DW-0003
4	STANDARD DRAWING FOR A/G PIPELINE ROAD CROSSING	BK-GNRAL-PEDCO-000-PL-DW-0005
5	STANDARD DRAWING FOR EXISTING PIPELINE CROSSING	BK-GNRAL-PEDCO-000-PL-DW-0006
6	PIPELINE STANDARD DRAWING FOR WATER - WAY CROSSING	BK-GNRAL-PEDC0-000-PL-DW-0008
7	PIPELINE STANDARD DRAWING FOR RIVER CROSSING	BK-GNRAL-PEDCO-000-PL-DW-0014
8	TYPICAL DRAWING FOR MAJOR FLOODWAY CROSSING	BK-GNRAL-PEDCO-000-CV-DW-0012
9	LAYOUT FOR CATHODIC PROTECTION SYSTEM FOR SIAHMAKAN GAS INJECTION	BK-PPL-PEDCO-320-EL-PY-0003
10	INSTALLATION DETAILS & NOTES FOR CATHODIC PROTECTION SYSTEMS	BK-GNRAL-PEDCO-000-EL-DW-0005
11	CIVIL LAYOUT FOR PIG RECEIVER AREA (IN SIAHMAKAN G.I. STATION)	BK-PPL-PEDCO-320-CV-PY-0001
12	CIVIL LAYOUT FOR LBV STATIONS	BK-PPL-PEDCO-320-CV-PY-0002
13	PIPE COLD BENDING DETAIL	151-GEN-000-PL-DWG-0003
14	UNIT PLOT PLAN FOR LBV	BK-PPL-PEDCO-320-PI-PY-0003
15	SPECIFICATION FOR COATING OF UNDERGROUND PIPING	BK-GNRAL-PEDCO-000-PI-SP-0013
16	UNIT PLOT PLAN DRAWING	BK-GCS-PEDCO-120-PI-PY-0001

NOTES:

1- THE LATEST IPS STANDARD No. IPS-C-PI-140 IS THE PROJECT SPECIFICATION FOR PIPELINE CONSTRUCTION AND IT SHALL BE FULLY FOLLOWED.
2- ALL DATA (COORDINATES, KIMOMETERS, DISTANCES, CROSSINGS TYPE&LOCATION AND ETC.) SHALL BE CHECKED BY THE CONTRACTOR BEFORE CONSTRUCTION AND DISCREPANCIES (IF ANY) SHALL BE REPORTED TO THE CLIENT REPRESENTATIVE FOR PROPER DECISION.
3- THE PIPE MINIMUM COVER (EXCEPT AT CROSSINGS) SHALL BE AS FOLLOWS:
 - 90cm FOR UNUSED (WASTE LAND) SOIL, WHERE BLASTING OR JACK HAMMER IS NOT REQUIRED FOR TRENCHING AND HEAVY TRENCHERS ARE ADEQUATE
 - 60cm FOR ROCKY LANDS, WHERE BLASTING OR JACK HAMMER IS REQUIRED FOR TRENCHING (HEAVY TRENCHERS ARE NOT SUITABLE FOR EXCAVATION)
 - 120cm FOR CULTIVATED LANDS
4- THE PIPELINE CROSSINGS INCLUDING TRACK, UNSURFACED, SECONDARY ASPHALT ROADS, WATER COURSES, FLOODWAYS, EXISTING UNDERGROUND PIPES/CABLES, RIVER AND ETC. TO BE EXECUTED AS PER THE PROJECT PIPELINE TYPICAL DRAWINGS.
5- THE TOTAL WIDTH OF RIGHT OF WAY IS 11m (3m+8m)
6- GEODETIC PARAMETERS FOR COORDINATES ARE AS BELOW:
HORIZONTAL COORDINATE SYSTEM: WGS84/UTM ZONE 39
ELLIPSOID: WORLD GEODETIC SYSTEM 1984 (WGS84)
MAP PROJECTION: UNIVERSAL TRANSVERSE MERCATOR (UTM)
VERTICAL DATUM: MEAN SEA LEVEL

COORDINATES OF INTERSECTION POINTS (IP)

NAME	UTM COORDINATE	LOCAL COORDINATE (BASED ON UNIT PLOT PLAN) (BK-GCS-PEDCO-120-PI-PY-0001)
EDGE OF PIG LAUNCHER (PL-3201) (IP0)	E=437323.474 N=3289936.663	X=529.370 Y=706.000

D02

PI Lable	PI Station	Northing	Easting
IP1	0+000.00	3289935.490	437321.047
IP2	0+093.49	3289894.825	437236.862
IP3	0+151.51	3289889.311	437179.110
IP4	0+178.44	3289899.347	437154.117
IP5	2+115.40	3291434.983	435973.593
IP6	2+491.49	3291798.300	435876.402
IP7	2+555.64	3291860.688	435861.465
IP8	2+628.00	3291932.366	435851.568
IP9	2+773.36	3292076.879	435867.202
IP10	2+847.67	3292150.892	435873.810
IP11	3+213.78	3292515.070	435836.230
IP12	3+480.11	3292778.326	435795.861
IP13	3+759.86	3293054.430	435750.813
IP14	3+818.52	3293112.328	435741.393
IP15	3+905.62	3293198.770	435730.770
IP16	3+978.87	3293270.820	435717.524
IP17	4+054.27	3293345.698	435708.715
IP18	4+068.21	3293356.605	435700.036
IP19	4+146.71	3293413.585	435646.036
IP20	4+167.18	3293430.436	435634.419
IP21	4+274.41	3293524.302	435582.573
IP22	4+420.32	3293652.109	435512.175
IP23	4+513.78	3293734.505	435468.074
IP24	4+567.11	3293781.394	435442.658
IP25	4+591.26	3293801.918	435429.933
IP26	4+615.52	3293822.959	435417.860
IP27	4+662.23	3293866.157	435400.079
IP28	4+673.94	3293876.738	435395.081
IP29	4+685.10	3293885.043	435387.619
IP30	4+813.76	3293971.411	435292.257
IP31	4+826.87	3293980.734	435283.035
IP32	4+844.13	3293994.194	435272.241
IP33	4+888.97	3294030.058	435245.331
IP34	4+899.58	3294035.587	435236.273
IP35	4+980.37	3294066.785	435161.745
IP36	5+096.05	3294110.798	435054.766
IP37	5+111.69	3294118.882	435041.378
IP38	5+124.48	3294129.710	435034.569
IP39	5+137.75	3294141.656	435028.797
IP40	5+367.83	3294356.199	434945.667
IP41	5+709.15	3294674.407	434822.213
IP42	6+355.52	3295277.132	434588.727
IP43	6+394.16	3295310.473	434569.194
IP44	6+453.98	3295361.040	434537.246
IP45	6+496.40	3295399.018	434518.332
IP46	6+558.52	3295455.552	434492.603
IP47	6+619.87	3295510.474	434465.248
IP48	6+797.12	3295663.417	434375.676
IP49	6+953.76	3295797.867	434295.296
IP50	7+006.85	3295843.571	434268.284
IP51	7+036.37	3295870.749	434256.772
IP52	7+237.89	3296057.866	434181.949
IP53	7+451.64	3296255.989	434101.709
IP54	7+821.19	3296598.296	433962.466
IP55	7+912.83	3296683.430	433928.537
IP56	8+004.47	3296769.426	433896.894
IP57	8+071.10	3296832.003	433873.985
IP58	8+115.09	3296871.559	433854.744
IP59	8+129.47	3296883.465	433846.687
IP60	8+203.88	3296938.013	433796.076
IP61	8+288.08	3296999.141	433738.165
IP62	8+301.57	3297007.932	433727.940
IP63	8+402.11	3297066.267	433646.056
IP64	8+507.41	3297128.138	433560.848
IP65	8+521.74	3297138.382	433550.824
IP66	8+566.37	3297173.813	433523.691
IP67	8+579.24	3297185.633	433518.582
IP68	8+591.26	3297197.245	433515.483
IP69	8+798.15	3297401.717	433483.962
IP70	9+019.70	3297622.250	433462.773

CROSSINGS LIST

Name	Station	CROSSING NUMBER(#)	Ref. TYP. DWG
WATER COURSE	0+219.36	4	6
WATER COURSE	0+267.76	5	6
WATER COURSE	0+399.60	6	6
WATER COURSE	0+495.81	7	6
WATER COURSE	0+740.83	8	6
WATER COURSE	0+784.83	9	6
WATER COURSE	0+879.07	10	6
WATER COURSE	2+565.93	14	6
WATER COURSE	2+847.67	16	6
WATER COURSE	3+069.50	18	6
WATER COURSE	3+148.34	19	6
WATER COURSE	3+319.20	20	6
WATER COURSE	3+468.68	22	6
WATER COURSE	3+698.79	23	6
WATER COURSE	3+841.50	24	6
WATER COURSE	3+905.62	25	6
WATER COURSE	4+078.47	28	6
WATER COURSE	4+274.41	29	6
WATER COURSE	4+311.68	30	6
WATER COURSE	4+401.26	31	6
WATER COURSE	4+491.16	32	6
WATER COURSE	4+513.78	33	6
WATER COURSE	4+526.38	34	6
WATER COURSE	4+685.10	35	6
WATER COURSE	4+943.46	36	6
WATER COURSE	4+980.37	37	6
WATER COURSE	5+274.96	38	6
WATER COURSE	5+347.40	39	6
WATER COURSE	5+387.03	40	6
WATER COURSE	5+570.95	43	6
WATER COURSE	5+734.80	44	6
WATER COURSE	5+734.80	45	6
WATER COURSE	5+742.39	46	6
WATER COURSE	5+801.81	47	6
WATER COURSE	5+962.15	48	6
WATER COURSE	6+168.77	49	6
WATER COURSE	6+241.32	50	6
WATER COURSE	6+310.48	51	6
WATER COURSE	6+984.96	61	6
WATER COURSE	7+060.92	62	6
WATER COURSE	7+394.68	63	6
WATER COURSE	7+476.60	64	6
WATER COURSE	7+567.50	65	6
WATER COURSE	7+616.98	66	6
WATER COURSE	7+657.18	67	6
WATER COURSE	7+713.44	68	6
WATER COURSE	7+912.83	69	6
WATER COURSE	8+088.78	70	6
WATER COURSE	8+150.54	71	6
WATER COURSE	8+262.60	73	6
WATER COURSE	8+364.02	74	6
WATER COURSE	8+465.49	75	6
WATER COURSE	8+547.39	77	6
WATER COURSE	8+709.98	79	6
WATER COURSE	8+747.60	80	6
WATER COURSE	8+820.77	81	6
WATER COURSE	9+019.70	84	6

Name	Station	CROSSING NUMBER(#)	Ref. TYP. DWG
ASPHALT ROAD	0+015.89	1	4
ASPHALT ROAD	0+205.72	3	4

Name	Station	CROSSING NUMBER(#)	Ref. TYP. DWG
TRACK ROAD	1+343.64	11	4
TRACK ROAD	1+891.43	12	4
TRACK ROAD	2+522.28	13	4
TRACK ROAD	4+053.82	26	4
TRACK ROAD	4+068.21	27	4
TRACK ROAD	6+314.17	52	4
TRACK ROAD	6+384.84	54	4
TRACK ROAD	8+179.45	72	4
TRACK ROAD	8+656.49	78	4

Name	Station	CROSSING NUMBER(#)	Ref. TYP. DWG
FLOODWAY	2+774.66	15	8
FLOODWAY	5+390.43	41	8
FLOODWAY	5+503.07	42	8
FLOODWAY	5+878.71	47	8
FLOODWAY	6+529.26	58	8
FLOODWAY	6+784.40	59	8
FLOODWAY	6+797.12	8	8
FLOODWAY	8+843.24	8	8

Name	Station	CROSSING NUMBER(#)	Ref. TYP. DWG
ABOVEGROUND PIPELINE	2+954.88	17	5
ABOVEGROUND PIPELINE	3+381.95	21	5
ABOVEGROUND PIPELINE	6+477.03	55	5
ABOVEGROUND PIPELINE	6+508.38	57	5
ABOVEGROUND PIPELINE	8+521.74	76	5

Name	Station	CROSSING NUMBER(#)	Ref. TYP. DWG
UNDERGROUND PIPELINE	0+158.78	2	5
UNDERGROUND PIPELINE	6+337.80	53	5
UNDERGROUND PIPELINE	6+496.40	56	5
UNDERGROUND PIPELINE	8+926.70	83	5

BILL OF MATERIALS

ITEM	DESCRIPTION	QTY.	ITEM	DESCRIPTION	QTY.
1	CATHODIC PROTECTION TRANSFORMER/RECTIFIER WITH AC SUPPLY BOX	1 Set	17		
2	LINE MARKER TEST POINT TYPE-A	19 No.	18		
3	LINE MARKER TEST POINT TYPE-B	1 No.	19		
4	LINE MARKER TEST POINT TYPE-C	1 No.	20		
5	NORMAL LINE MARKER	36 No.	21		
6	SEAMLESS PIPE 8" API 5L X52, PSL2, BEVEL END, NACE MR0175/ISO 15156	9039.520	22		
7			23		
8			24		
9			25		
10			26		
11			27		
12			28		
13			29		
14			30		
15			31		
16			32		

SYMBOLS AND ABBREVIATIONS

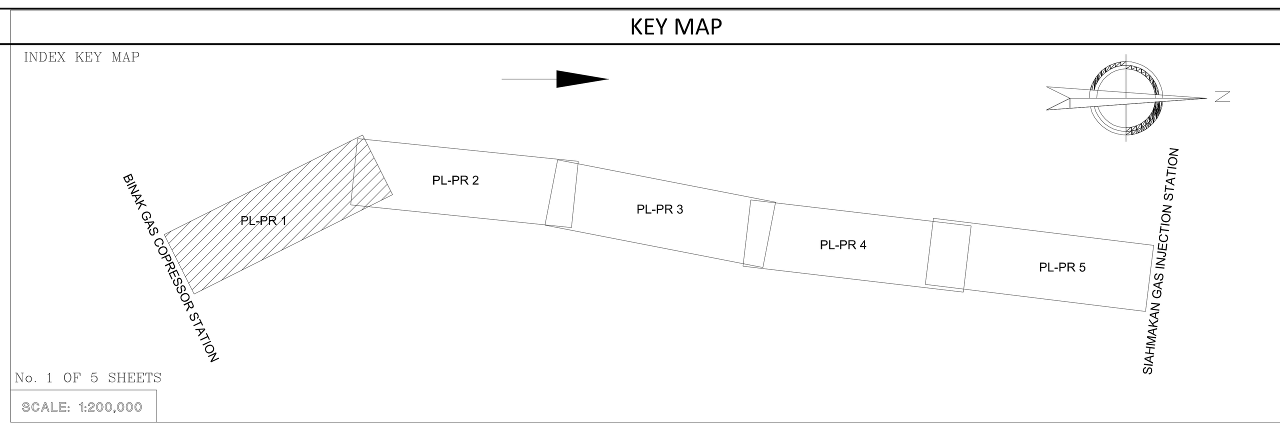
- PIPE LINE ROUTE AND SURVEY REFERENCES
- DIRECTION CHANGE
- DRAWING REFERENCE
- TRANSITION PIECE
- LINE BREAK VALVE
- INSULATING JOINT
- PIPE LINE MARKER
- ON-PLOT STATION
- CHECK VALVE
- BLOCK VALVE

C	CASING PIPE
RC	REINFORCED COATING
CCW	CONTINUOUS CONCRETE WEIGHT
BOW	BOLT ON CONCRETE WEIGHT
SOW	SET ON CONCRETE WEIGHT
RCP	ROCKSHIELD COATING PROTECTION
PG	PLASTIC GRATING
PRCS	PRECAST REINFORCED CONCRETE SLAB
G	GABIONS
CC	CASING FOR CABLE
PFB	PREFABRICATED BEND

CATHODIC PROTECTION SYSTEM

- CATHODIC PROTECTION STATION (C.P.S.)
- SINGLE PIPE POTENTIAL TEST POINT
- BOND BOX AT FOREIGN PIPE CROSSING
- ENCASED PIPE TEST POINT
- INSULATING JOINT TEST POINT
- COMBINED CURRENT-POTENTIAL TEST POINT
- SACRIFICAL ANODE

KEY MAP



No. 1 OF 5 SHEETS
SCALE: 1:200,000

LEGEND

- PIPE LINE
- V-LIMIT
- FREE WAY
- ASPHALTED ROAD
- TRACK ROAD
- UNSURFACED ROAD
- RAILWAY
- BRIDGE
- BOUNDRY
- TRIBE CAMP - MINE
- SCHOOL - BUILDING
- RELIGOUS BUILDING
- POLE - POWER POLE
- PYLON
- CITY-VILLAGE
- POWER LINE
- CONTOURS
- SPOT HEIGHT .1742
- WATER PUMP - WELL
- WATER STORAGE - POOL
- QANAT
- CANAL
- DYKE - SWAMP
- FLOOD WAY - RIVER
- CULTIVATED LAND
- BUSH
- GARDEN - TREES
- PALM GROVE
- WIRE FENCE
- WATER COURSE

CROSSINGS ABBREVIATIONS

C.P.S.	CATHODIC PROTECTION STATION
W.C.	WATER COURSE
F.W.	FLOODWAY
RIV.	RIVER
I.D.	IRRIGATION DITCH (CANAL)
T.R.	TRACK ROAD
U.R.	UNSURFACED ROAD
M.A.R.	MAIN ASPHALT ROAD
S.A.R.	SECONDARY ASPHALT ROAD
U.P.	UNDER GROUND PIPE
U.C.	UNDER GROUND CABLE
A.P.	ABOVE GROUND PIPE
O.P.L.	OVERHEAD POWER LINE

SOIL CONDITION INFORMATION

CL	Low Plasticity Clay
ML	Low Plasticity Silt
SM	Non-Plastic Fines Sand
SC	Plastic Fines Sand

Zone 1, Zone 2, Zone 3, Zone 4, Zone 5, Zone 6 (REFER TO GEOTECHNICAL STUDY)

REV.	DATE	P.O.I.S	PREP.	CHK.	APP.	AUT.
D02	OCT.2023	IFA	R.BERLOUIE	M.FAKHARIAN	S.PARAMARZPOUR	** **
D01	DEC.2022	IFA	R.BERLOUIE	M.FAKHARIAN	M.MEHRSHAD	** **
D00	AUG.2022	IFC	R.BERLOUIE	M.FAKHARIAN	M.MEHRSHAD	** **

REV.	DESCRIPTION	CHECKED BY	CHECKED DATE	REV. APPR. BY	REV. APPR. DATE
***	**********	** **	***.****	** **	***.****

اصل و کلیه نسخ این نقشه و حق اقتباس متعلق به شرکت ملی مناطق نفت خیز جنوب میباشد.

THE ORIGINAL AND ALL COPIES OF THIS DRAWING TOGETHER WITH THE COPYRIGHT THEREIN ARE THE SOLE PROPERTY OF N.I.S.O.C./ FIELDS

PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SURFACE FACILITIES GAS & GAS-CONDENSATE PIPELINES
PROJECT NO.: 971020
EPC CONTRACTOR: HIRGAN ENERGY - DESIGN & INSPECTION COMPANIES
EPD/EPC CONTRACTOR (GC): PEDCO PETROIRAN DEVELOPMENT COMPANY

BINAK OILFIELD DEVELOPMENT SURFACE FACILITIES
GAS & GAS-CONDENSATE PIPELINES

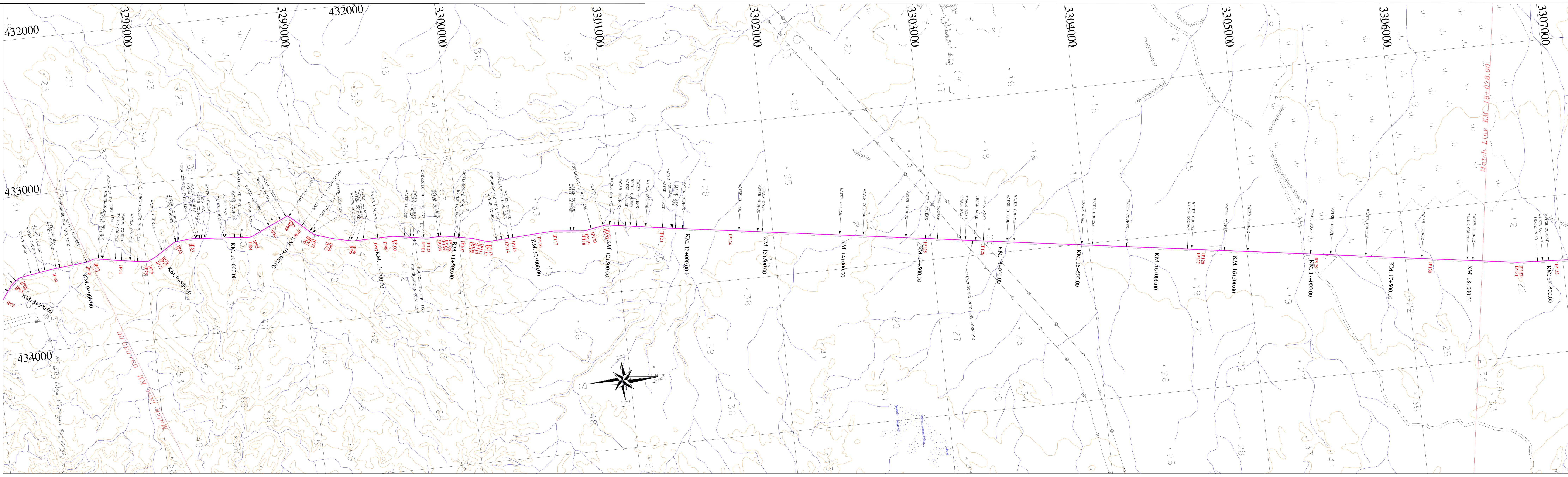
DATE	SCALE	DRAWING BY	CHECKED BY	PROJECT ENG.

NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED
APPROVED FOR CONSTRUCTION BY: DATE:

DRAWING TITLE: Plan & Profile Drawings For Gas Pipeline (to Siahmakan) from 0+000 to 9+039

SCALE	SIZE	DRAWING NO.	SHEET NO.	REV.	BUDGET REF.	LOCATION	SIZE	CLASS	SERIAL NO.	SHEET	REVISION
H=1:10000 V=1:1000	A0	BK-PPL-PEDCO-320-SU-DW-0001	1 OF 5	D02	053-073-9184	F	4	A	708656	01	D02

PLAN SCALE: 1/10,000



HORIZONTAL KILOMETERS	10	11	12	13	14	15	16	17	18

PIPE CHARACTERISTICS
- N.D. SPEC.: SEAMLESS PIPE 8" API 5L X52, PSL2, BEVEL END, NACE MR0175/ISO 15156
- W.T. (mm): 11.1mm
- LENGTH (m): 9039.396

PIPELINE CROSSINGS TYPE & NUMBERING

MECH. FACILITIES (VALVES, STATIONS & ETC.)

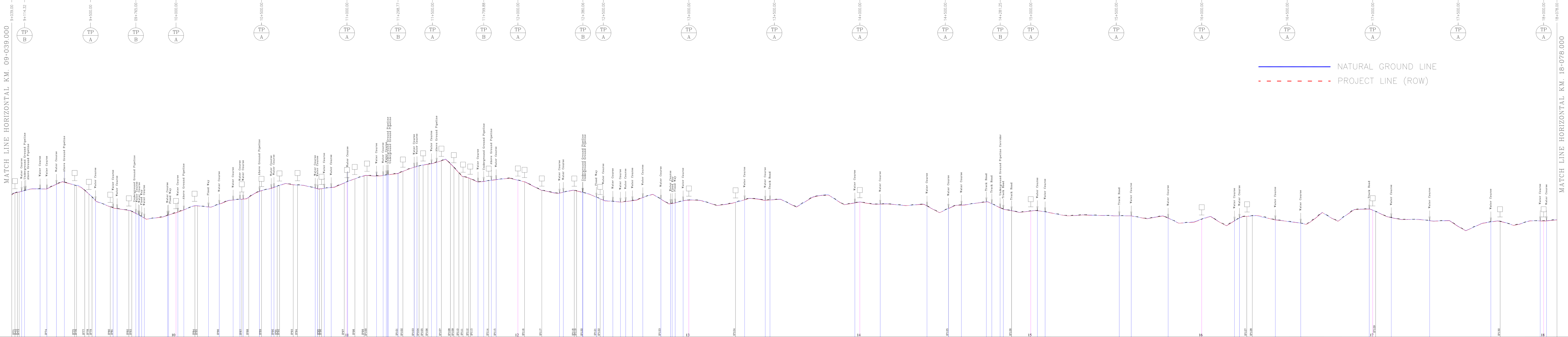
CATHODIC PROTECTION

LINE MARKERS

PIPE EXTERNAL PROTECTION: TWO LAYERS FBE COATING (2x400 microns)

PIPE MINIMUM COVER (GENERAL EXCEPT CROSSINGS): 90cm (GENERAL EXCEPT CROSSINGS)

PROFILE SCALES: HORIZONTAL 1/10,000 VERTICAL 1/1,000



HORIZONTAL KILOMETERS

NATURAL GROUND ELEVATIONS (m)

PROJECT LINE (ROW) ELEVATIONS (m)

PARTIAL HORIZONTAL DISTANCES (m)

PROGRESSIVE HORIZONTAL KILOMETERS

SURVEY REFERENCES

PARTIAL SLOPE DISTANCES (m)

HORIZONTAL DIRECTION CHANGES (GRAD)

SOIL CONDITION: Zone 6 CL | Zone 4 SM, SC-SM & ML | Zone 6 CL | Zone 2 CL & CL-ML | Zone 6 CL | Zone 2 CL & CL-ML | Zone 3 CL & CL-ML

GROUND USAGE DESCRIPTION: WASTE LAND (UNUSED)

REFERENCE DOCUMENTS

	TITLE	DOC. No.
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11	CIVIL LAYOUT FOR PIG RECEIVER AREA (IN SIAHMAKAN G.I. STATION)	BK-PPL-PEDCO-320-CV-PY-0001
12	CIVIL LAYOUT FOR LBV STATIONS	BK-PPL-PEDCO-320-CV-PY-0002
13	PIPE COLD BENDING DETAIL	151-GEN-000-PL-DWG-0003
14	UNIT PLOT PLAN FOR LBV	BK-PPL-PEDCO-320-PI-PY-0003
15	SPECIFICATION FOR COATING OF UNDERGROUND PIPING	BK-GNRAL-PEDCO-000-PI-SP-0013
16	UNIT PLOT PLAN DRAWING	BK-GCS-PEDCO-120-PI-PY-0001

NOTES:

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- 60cm FOR ROCKY LANDS, WHERE BLASTING OR JACK HAMMER IS REQUIRED FOR TRENCHING (HEAVY TRENCHERS ARE NOT SUITABLE FOR EXCAVATION)
- 120cm FOR CULTIVATED LANDS

4- THE PIPELINE CROSSINGS INCLUDING TRACK, UNSURFACED, SECONDARY ASPHALT ROADS, WATER COURSES, FLOODWAYS, EXISTING UNDERGROUND PIPES/CABLES, RIVER AND ETC. TO BE EXECUTED AS PER THE PROJECT PIPELINE TYPICAL DRAWINGS.

5- THE TOTAL WIDTH OF RIGHT OF WAY IS 11m (3m+8m)

6- GEODETIC PARAMETERS FOR COORDINATES ARE AS BELOW:
HORIZONTAL COORDINATE SYSTEM: WGS84/UTM ZONE 39
ELLIPSOID: WORLD GEODETIC SYSTEM 1984 (WGS84)
MAP PROJECTION: UNIVERSAL TRANSVERSE MERCATOR (UTM)
VERTICAL DATUM: MEAN SEA LEVEL

COORDINATES OF INTERSECTION POINTS (IP)

PI Lable	PI Station	Northing	Easting
IP71	9+057.74	3297658.064	433449.943
IP72	9+071.88	3297671.821	433446.671
IP73	9+082.84	3297682.767	433447.098
IP74	9+244.61	3297842.010	433475.597
IP75	9+407.10	3298002.796	433499.068
IP76	9+418.32	3298013.730	433496.527
IP77	9+466.17	3298057.444	433477.073
IP78	9+490.63	3298078.658	433464.903
IP79	9+508.60	3298093.702	433455.079
IP80	9+615.66	3298184.090	433397.698
IP81	9+632.25	3298199.158	433390.767
IP82	9+724.35	3298290.903	433382.588
IP83	9+741.44	3298307.986	433383.037
IP84	10+110.86	3298676.378	433410.605
IP85	10+125.87	3298690.737	433406.237
IP86	10+253.16	3298806.689	433353.728
IP87	10+384.98	3298927.196	433300.310
IP88	10+425.70	3298958.741	433326.067
IP89	10+500.20	3299014.880	433375.043
IP90	10+573.05	3299068.987	433423.820
IP91	10+592.06	3299083.771	433435.775
IP92	10+605.91	3299096.672	433440.801
IP93	10+685.49	3299172.471	433465.042
IP94	10+710.95	3299196.517	433473.419
IP95	10+839.58	3299322.062	433501.407
IP96	10+851.47	3299333.926	433502.205
IP97	10+984.24	3299466.671	433499.720
IP98	11+046.40	3299528.823	433498.757
IP99	11+100.19	3299582.611	433498.437
IP100	11+117.22	3299599.478	433500.815
IP101	11+298.77	3299778.639	433530.164
IP102	11+327.28	3299807.051	433532.513
IP103	11+393.44	3299873.183	433530.385
IP104	11+421.89	3299901.618	433529.631
IP105	11+445.50	3299924.951	433533.270
IP106	11+474.16	3299953.057	433538.853
IP107	11+552.64	3300030.160	433553.508
IP108	11+605.31	3300081.895	433563.395
IP109	11+625.85	3300101.643	433569.018
IP110	11+654.86	3300129.275	433577.876
IP111	11+679.16	3300152.391	433585.369
IP112	11+711.82	3300183.736	433594.523
IP113	11+721.80	3300193.714	433594.211
IP114	11+829.42	3300301.128	433587.568
IP115	11+872.65	3300344.295	433585.328
IP116	12+038.73	3300510.087	433575.443
IP117	12+139.76	3300610.986	433570.338
IP118	12+329.87	3300800.184	433588.887
IP119	12+343.47	3300813.748	433587.782
IP120	12+380.06	3300849.802	433581.552
IP121	12+459.15	3300927.764	433568.243
IP122	12+481.00	3300949.499	433566.047
IP123	12+836.63	3301300.848	433621.084
IP124	13+272.58	3301732.359	433683.150
IP125	14+518.93	3302965.961	433860.908
IP126	14+887.87	3303331.007	433914.399
IP127	16+263.44	3304692.669	434109.486
IP128	16+295.71	3304724.548	434114.530
IP129	17+016.99	3305438.540	434216.774
IP130	17+745.92	3306159.998	434320.919

CROSSINGS LIST

Name	Station	CROSSING NUMBER(#)	Ref. TYP. DWG
WATER COURSE	9+097.14	85	6
WATER COURSE	9+204.92	88	6
WATER COURSE	9+244.61	89	6
WATER COURSE	9+300.61	90	6
WATER COURSE	9+529.29	92	6
WATER COURSE	9+632.25	93	6
WATER COURSE	9+655.43	94	6
WATER COURSE	9+771.01	96	6
WATER COURSE	9+780.09	97	6
WATER COURSE	9+785.64	98	6
WATER COURSE	9+814.47	100	6
WATER COURSE	9+950.12	101	6
WATER COURSE	10+010.77	103	6
WATER COURSE	10+253.16	106	6
WATER COURSE	10+334.12	107	6
WATER COURSE	10+374.28	108	6
WATER COURSE	10+393.20	109	6
WATER COURSE	10+557.18	111	6
WATER COURSE	10+573.05	112	6
WATER COURSE	10+814.51	113	6
WATER COURSE	10+828.08	114	6
WATER COURSE	10+867.35	115	6
WATER COURSE	10+908.03	116	6
WATER COURSE	11+003.93	117	6
WATER COURSE	11+173.23	118	6
WATER COURSE	11+211.52	119	6
WATER COURSE	11+230.40	120	6
WATER COURSE	11+393.44	124	6
WATER COURSE	11+409.38	125	6
WATER COURSE	11+494.64	126	6
WATER COURSE	11+766.66	129	6
WATER COURSE	11+872.65	132	6
WATER COURSE	12+243.46	133	6
WATER COURSE	12+265.76	134	6
WATER COURSE	12+499.86	138	6
WATER COURSE	12+555.49	139	6
WATER COURSE	12+599.81	140	6
WATER COURSE	12+630.28	141	6
WATER COURSE	12+670.16	142	6
WATER COURSE	12+730.64	143	6
WATER COURSE	12+836.63	144	6
WATER COURSE	12+892.99	145	6
WATER COURSE	12+966.49	148	6
WATER COURSE	13+326.04	149	6
WATER COURSE	13+446.81	150	6
WATER COURSE	13+970.87	152	6
WATER COURSE	14+119.46	153	6
WATER COURSE	14+393.09	154	6
WATER COURSE	14+518.93	155	6
WATER COURSE	14+594.42	156	6
WATER COURSE	15+038.83	162	6
WATER COURSE	15+084.00	163	6
WATER COURSE	15+587.69	165	6
WATER COURSE	15+803.77	166	6
WATER COURSE	16+191.65	167	6
WATER COURSE	16+220.89	168	6
WATER COURSE	16+430.61	169	6
WATER COURSE	16+579.09	170	6
WATER COURSE	17+108.97	172	6
WATER COURSE	17+333.20	173	6
WATER COURSE	17+691.15	174	6
WATER COURSE	17+979.92	175	6
WATER COURSE	18+016.98	176	6

Name	Station	CROSSING NUMBER(#)	Ref. TYP. DWG
TRACK ROAD	13+474.38	151	4
TRACK ROAD	14+740.21	157	4
TRACK ROAD	14+771.96	158	4
TRACK ROAD	14+839.67	160	4
TRACK ROAD	14+887.87	161	4
TRACK ROAD	15+518.00	164	4
TRACK ROAD	16+979.88	171	4

Name	Station	CROSSING NUMBER(#)	Ref. TYP. DWG
FLOODWAY	9+799.41	99	8
FLOODWAY	9+956.44	102	8
FLOODWAY	10+189.82	105	8
FLOODWAY	12+459.15	137	8
FLOODWAY	12+902.50	146	8
FLOODWAY	12+919.85	147	8

Name	Station	CROSSING NUMBER(#)	Ref. TYP. DWG
ABOVEGROUND PIPELINE	9+121.21	87	5
ABOVEGROUND PIPELINE	9+349.47	91	5
ABOVEGROUND PIPELINE	10+049.14	104	5
ABOVEGROUND PIPELINE	10+494.66	110	5
ABOVEGROUND PIPELINE	11+523.07	127	5
ABOVEGROUND PIPELINE	11+844.87	131	5

Name	Station	CROSSING NUMBER(#)	Ref. TYP. DWG
UNDERGROUND PIPELINE	9+114.32	86	5
UNDERGROUND PIPELINE	9+765.06	95	5
UNDERGROUND PIPELINE	11+238.30	121	5
UNDERGROUND PIPELINE	11+240.99	122	5
UNDERGROUND PIPELINE	11+298.77	123	5
UNDERGROUND PIPELINE	11+799.88	130	5
UNDERGROUND PIPELINE	12+378.30	135	5
UNDERGROUND PIPELINE	12+380.06	136	5
UNDERGROUND PIPELINE CORRIDOR	14+821.90	159	5

BILL OF MATERIALS

ITEM	DESCRIPTION	QTY.	ITEM	DESCRIPTION	QTY.
1	LINE MARKER TEST POINT TYPE-A	18 No.	17		
2	LINE MARKER TEST POINT TYPE-B	6 No.	18		
3	NORMAL LINE MARKER	36 No.	19		
4	SEAMLESS PIPE 8" API 5L X52, PSL2, BEVEL END, NACE MR0175/ISO 15156	9039.396	20		
5			21		
6			22		
7			23		
8			24		
9			25		
10			26		
11			27		
12			28		
13			29		
14			30		
15			31		
16			32		

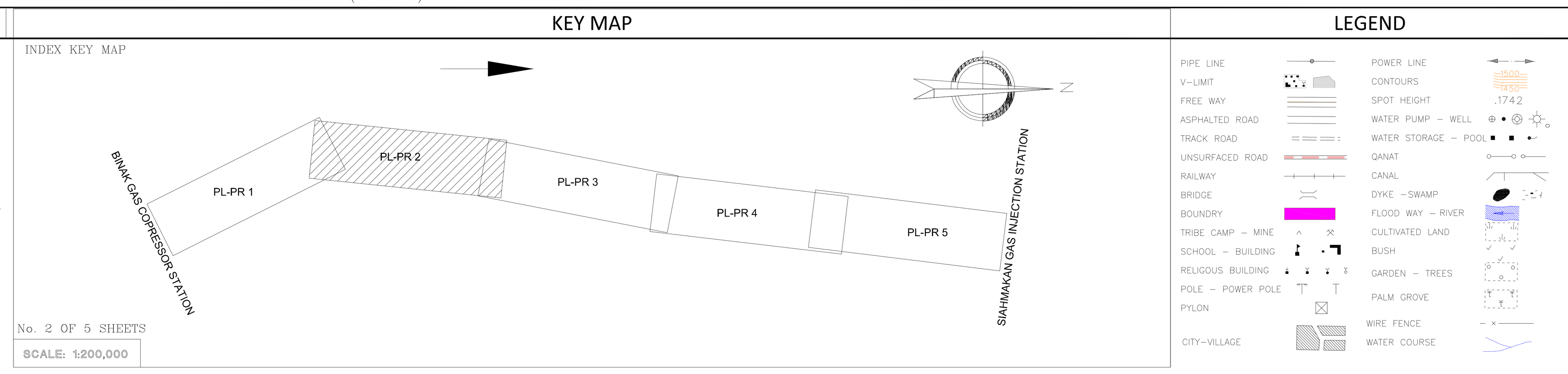
SYMBOLS AND ABBREVIATIONS

- PIPE LINE ROUTE AND SURVEY REFERENCES
- DIRECTION CHANGE
- DRAWING REFERENCE
- TRANSITION PIECE
- LINE BREAK VALVE
- INSULATING JOINT
- PIPE LINE MARKER
- ON-PLOT STATION
- CHECK VALVE
- BLOCK VALVE

C	CASING PIPE
RC	REINFORCED COATING
CCW	CONTINUOUS CONCRETE WEIGHT
BOW	BOLT ON CONCRETE WEIGHT
SOW	SET ON CONCRETE WEIGHT
RCP	ROCKSHIELD COATING PROTECTION
PG	PLASTIC GRATING
PRCS	PRECAST REINFORCED CONCRETE SLAB
G	GABIONS
CC	CASING FOR CABLE
PFB	PREFABRICATED BEND

CATHODIC PROTECTION SYSTEM
- CATHODIC PROTECTION STATION (C.P.S.)
- SINGLE PIPE POTENTIAL TEST POINT
- BOND BOX AT FOREIGN PIPE CROSSING
- ENCASED PIPE TEST POINT
- INSULATING JOINT TEST POINT
- COMBINED CURRENT-POTENTIAL TEST POINT
- SACRIFICAL ANODE

KEY MAP



No. 2 OF 5 SHEETS

SCALE: 1:200,000

LEGEND

PIPE LINE, V-LIMIT, FREE WAY, ASPHALTED ROAD, TRACK ROAD, UNSURFACED ROAD, RAILWAY, BRIDGE, BOUNDRY, TRIBE CAMP - MINE, SCHOOL - BUILDING, RELIGOUS BUILDING, POLE - POWER POLE, PYLON, CITY-VILLAGE, POWER LINE, CONTOURS, SPOT HEIGHT, WATER PUMP - WELL, WATER STORAGE - POOL, QANAT, CANAL, DYKE - SWAMP, FLOOD WAY - RIVER, CULTIVATED LAND, BUSH, GARDEN - TREES, PALM GROVE, WIRE FENCE, WATER COURSE

CROSSINGS ABBREVIATIONS

C.P.S.	CATHODIC PROTECTION STATION
W.C.	WATER COURSE
F.W.	FLOODWAY
RIV.	RIVER
I.D.	IRRIGATION DITCH (CANAL)
T.R.	TRACK ROAD
U.R.	UNSURFACED ROAD
M.A.R.	MAIN ASPHALT ROAD
S.A.R.	SECONDARY ASPHALT ROAD
U.P.	UNDER GROUND PIPE
U.C.	UNDER GROUND CABLE
A.P.	ABOVE GROUND PIPE
O.P.L.	OVERHEAD POWER LINE

SOIL CONDITION INFORMATION

CL	Low Plasticity Clay
ML	Low Plasticity Silt
SM	Non-Plastic Fines Sand
SC	Plastic Fines Sand

Zone 1, Zone 2, Zone 3, Zone 4, Zone 5, Zone 6

REV.	DATE	P.O.I.S	PREP.	CHK.	APP.	AUT.
D02	OCT.2023	IFA	R.BERLOUIE	M.FAKHARIAN	S.PARAMARZPOUR	** **
D01	DEC.2022	IFA	R.BERLOUIE	M.FAKHARIAN	M.MEHRSHAD	** **
D00	AUG.2022	IFC	R.BERLOUIE	M.FAKHARIAN	M.MEHRSHAD	** **

REV.	DESCRIPTION	CHECKED BY	CHECKED DATE	REV. APPR. BY	REV. APPR. DATE
***	**********	** **	*** ****	** **	*** ****

PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SURFACE FACILITIES GAS & GAS-CONDENSATE PIPELINES

PROJECT NO.: 971020

EPC CONTRACTOR: HIRGAN ENERGY - DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR (GC): PEDCO PETROIRAN DEVELOPMENT COMPANY

اصل و کلیه نسخ این نقشه و حق اقتباس متعلق به شرکت ملی مناطق نفت خیز جنوب میباشد.

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BINAK OILFIELD DEVELOPMENT SURFACE FACILITIES GAS & GAS-CONDENSATE PIPELINES

DATE	SCALE	DRAWING BY	CHECKED BY	PROJECT ENG.

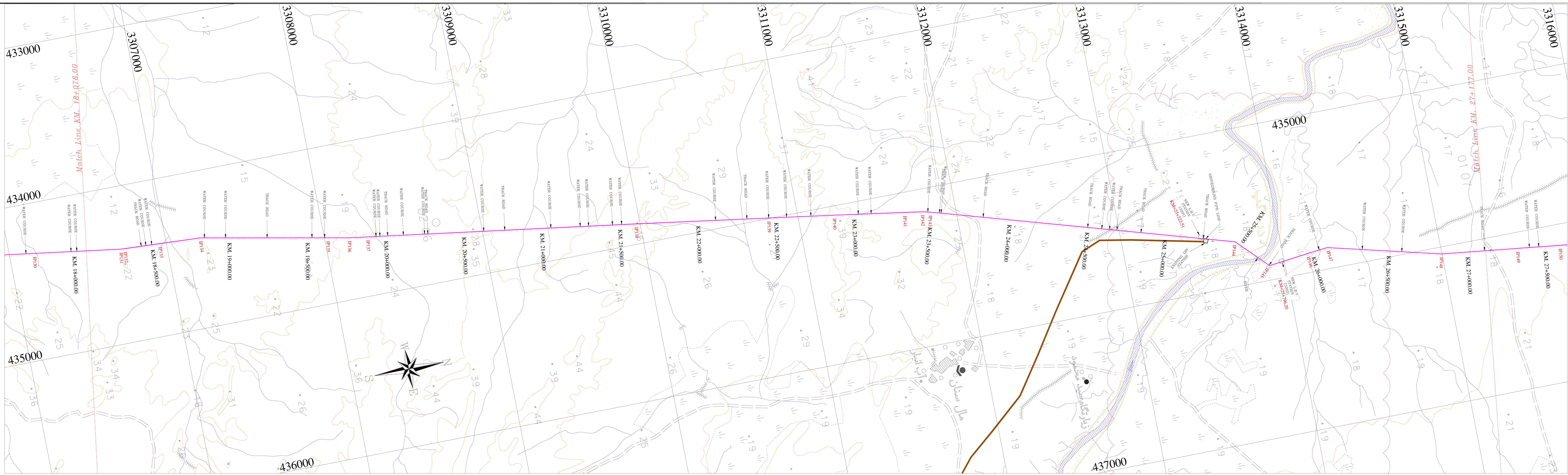
NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

APPROVED FOR CONSTRUCTION BY: DATE:

DRAWING TITLE: Plan & Profile Drawings For Gas Pipeline (to Siahmakan) from 9+039 to 18+078

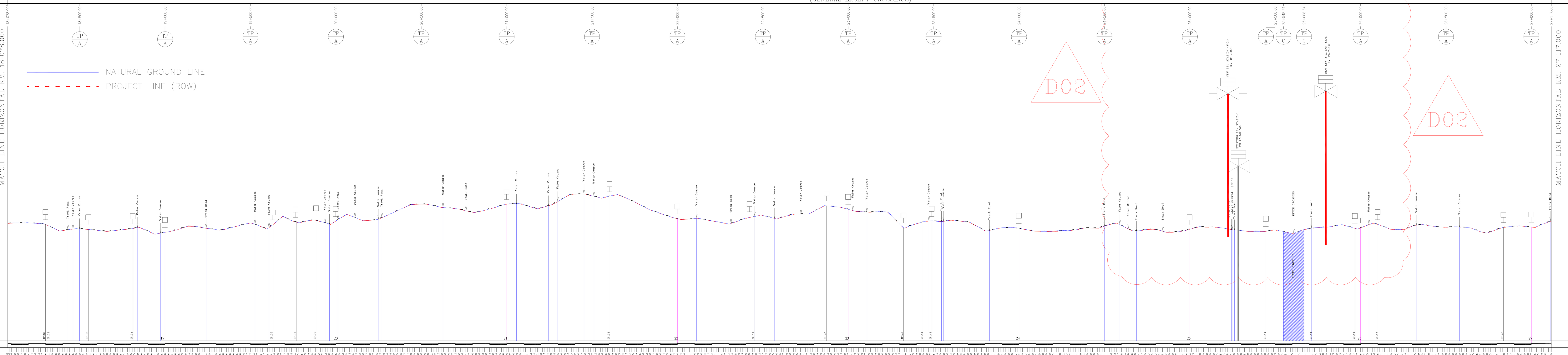
SCALE	SIZE	DRAWING NO.	SHEET NO.	REV.	BUDGET REF.	LOCATION	SIZE	CLASS	SERIAL NO.	SHEET	REVISION
H=1:10000 V=1:1000	A0	BK-PPL-PEDCO-320-SU-DW-0001	2 OF 5	D02	053-073-9184	F	4	A	708656	02	D02

PLAN SCALE: 1/10,000



	HORIZONTAL KILOMETERS	19 – 27
	PIPE CHARACTERISTICS – N.D. SPEC.	SEAMLESS PIPE 8" API 5L X52, PSL2, BEVEL END, NACE MR0175/ISO 15156
	PIPE CHARACTERISTICS – W.T. (mm)	11.1mm
	PIPE CHARACTERISTICS – LENGTH (m)	9039.409
	PIPE EXTERNAL PROTECTION	TWO LAYERS FBE COATING (2x400 microns)
	PIPE MINIMUM COVER (GENERAL EXCEPT CROSSINGS)	90cm (GENERAL EXCEPT CROSSINGS)

PROFILE SCALES: HORIZONTAL 1/10,000 VERTICAL 1/1,000



PARTIAL HORIZONTAL DISTANCES (m)	221.705	25.19	225.82	260.90	819.48	137.03	116.55	1719.68	848.39	420.30	450.97	113.53	52.15	1956.75	269.18	251.96	134.01	734.77	280.624
PROGRESSIVE HORIZONTAL KILOMETERS	18+078.000	18+299.705 / 18+324.897	18+550.721	18+811.619	19+631.101	19+768.128	19+884.682	21+604.359	22+452.748	22+873.051	23+324.022	23+437.552	23+489.702	25+446.454	25+715.638	25+967.594	26+101.605	26+836.376	
SURVEY REFERENCES		IP131 / IP132	IP133	IP134	IP135	IP136	IP137	IP138	IP139	IP140	IP141	IP142	IP143	IP144	IP145	IP146	IP147	IP148	
PARTIAL SLOPE DISTANCES (m)	221.705	25.19	225.83	260.91	819.52	137.03	116.56	1719.76	848.43	420.32	450.99	113.54	52.15	1956.85	269.20	251.97	134.02	734.81	280.624

SOIL CONDITION: Zone 3 CL & CL-ML | Zone 2 CL & CL-ML | Zone 3 CL & CL-ML | Zone 5 SM, SC, SC-SM & ML | Zone 1 CL & CL-ML | Zone 3 CL & CL-ML

GROUND USAGE DESCRIPTION: WASTE LAND (UNUSED) | CULTIVATION AREA | WASTE LAND (UNUSED)

REFERENCE DOCUMENTS

	TITLE	DOC. No.
1	GEOTECHNICAL INVESTIGATION REPORT FOR PIPELINES	BK-PPL-PEDCO-320-GT-RT-0001
2	PIPELINE STANDARD DRAWING FOR LINE MARKER	BK-GNRAL-PEDCO-000-PL-DW-0001
3	STANDARD DRAWING FOR UNDER GROUND PIPELINE CONSTRUCTION R.O.W	BK-GNRAL-PEDCO-000-PL-DW-0003
4	STANDARD DRAWING FOR A/G PIPELINE ROAD CROSSING	BK-GNRAL-PEDCO-000-PL-DW-0005
5	STANDARD DRAWING FOR EXISTING PIPELINE CROSSING	BK-GNRAL-PEDCO-000-PL-DW-0006
6	PIPELINE STANDARD DRAWING FOR WATER - WAY CROSSING	BK-GNRAL-PEDCO-000-PL-DW-0008
7	PIPELINE STANDARD DRAWING FOR RIVER CROSSING	BK-GNRAL-PEDCO-000-PL-DW-0014
8	TYPICAL DRAWING FOR MAJOR FLOODWAY CROSSING	BK-GNRAL-PEDCO-000-CV-DW-0012
9	LAYOUT FOR CATHODIC PROTECTION SYSTEM FOR SIAHMAKAN GAS INJECTION	BK-PPL-PEDCO-320-EL-PY-0003
10	INSTALLATION DETAILS & NOTES FOR CATHODIC PROTECTION SYSTEMS	BK-GNRAL-PEDCO-000-EL-DW-0005
11	CIVIL LAYOUT FOR PIG RECEIVER AREA (IN SIAHMAKAN G.I. STATION)	BK-PPL-PEDCO-320-CV-PY-0001
12	CIVIL LAYOUT FOR LBV STATIONS	BK-PPL-PEDCO-320-CV-PY-0002
13	PIPE COLD BENDING DETAIL	151-GEN-000-PL-DWG-0003
14	UNIT PLOT PLAN FOR LBV	BK-PPL-PEDCO-320-PI-PY-0003
15	SPECIFICATION FOR COATING OF UNDERGROUND PIPING	BK-GNRAL-PEDCO-000-PI-SP-0013
16	UNIT PLOT PLAN DRAWING	BK-GCS-PEDCO-120-PI-PY-0001

NOTES:

1- THE LATEST IPS STANDARD No. IPS-C-PI-140 IS THE PROJECT SPECIFICATION FOR PIPELINE CONSTRUCTION AND IT SHALL BE FULLY FOLLOWED.
2- ALL DATA (COORDINATES, KIMOMETERS, DISTANCES, CROSSINGS TYPE&LOCATION AND ETC.) SHALL BE CHECKED BY THE CONTRACTOR BEFORE CONSTRUCTION AND DISCREPANCIES (IF ANY) SHALL BE REPORTED TO THE CLIENT REPRESENTATIVE FOR PROPER DECISION.
3- THE PIPE MINIMUM COVER (EXCEPT AT CROSSINGS) SHALL BE AS FOLLOWS:
 - 90cm FOR UNUSED (WASTE LAND) SOIL, WHERE BLASTING OR JACK HAMMER IS NOT REQUIRED FOR TRENCHING AND HEAVY TRENCHERS ARE ADEQUATE
 - 60cm FOR ROCKY LANDS, WHERE BLASTING OR JACK HAMMER IS REQUIRED FOR TRENCHING (HEAVY TRENCHERS ARE NOT SUITABLE FOR EXCAVATION)
 - 120cm FOR CULTIVATED LANDS
4- THE PIPELINE CROSSINGS INCLUDING TRACK, UNSURFACED, SECONDARY ASPHALT ROADS, WATER COURSES, FLOODWAYS, EXISTING UNDERGROUND PIPES/CABLES, RIVER AND ETC. TO BE EXECUTED AS PER THE PROJECT PIPELINE TYPICAL DRAWINGS.
5- THE TOTAL WIDTH OF RIGHT OF WAY IS 11m (3m+8m)
6-GEODETIC PARAMETERS FOR COORDINATES ARE AS BELOW:
HORIZONTAL COORDINATE SYSTEM: WGS84/UTM ZONE 39
ELLIPSOID : WORLD GEODETIC SYSTEM 1984 (WGS84)
MAP PROJECTION: UNIVERSAL TRANSVERSE MERCATOR (UTM)
VERTICAL DATUM: MEAN SEA LEVEL

COORDINATES OF INTERSECTION POINTS (IP)

PI Lable	PI Station	Northing	Easting
IP131	18+299.70	3306708.159	434399.608
IP132	18+324.90	3306733.295	434401.294
IP133	18+550.72	3306958.839	434412.528
IP134	18+811.62	3307219.381	434426.152
IP135	19+631.10	3308023.938	434581.842
IP136	19+768.13	3308158.447	434607.988
IP137	19+884.68	3308273.768	434624.900
IP138	21+604.36	3309975.744	434871.001
IP139	22+452.75	3310814.819	434996.369
IP140	22+873.05	3311230.517	435058.416
IP141	23+324.02	3311676.163	435127.513
IP142	23+437.55	3311788.332	435145.040
IP143	23+489.70	3311839.032	435157.252
IP144	25+446.45	3313714.510	435715.340
IP145	25+715.64	3313903.307	435907.214
IP146	25+967.59	3314153.548	435877.859
IP147	26+101.60	3314286.871	435864.298
IP148	26+836.38	3314999.274	436044.215

L.B.V. STATION SPECIFICATION

L.B.V. 3201	E=435652.158 N=3313502.184	KM=25+222.51
L.B.V. 3202	E=435897.999 N=3313981.863	KM=25+796.20

D02

CROSSINGS LIST

Name	Station	CROSSING NUMBER(#)	Ref. TYP. DWG
WATER COURSE	18+460.84	178	6
WATER COURSE	18+499.36	179	6
WATER COURSE	18+838.96	180	6
WATER COURSE	18+973.87	181	6
WATER COURSE	19+526.91	183	6
WATER COURSE	19+607.94	184	6
WATER COURSE	19+937.26	185	6
WATER COURSE	19+962.56	186	6
WATER COURSE	20+112.48	188	6
WATER COURSE	20+248.37	189	6
WATER COURSE	20+627.38	191	6
WATER COURSE	21+057.32	193	6
WATER COURSE	21+245.33	194	6
WATER COURSE	21+299.14	195	6
WATER COURSE	21+452.09	196	6
WATER COURSE	21+510.48	197	6
WATER COURSE	22+112.35	198	6
WATER COURSE	22+452.75	200	6
WATER COURSE	22+567.42	201	6
WATER COURSE	22+723.30	202	6
WATER COURSE	23+026.88	203	6
WATER COURSE	23+109.10	204	6
WATER COURSE	23+471.94	205	6
WATER COURSE	23+557.06	207	6
WATER COURSE	24+590.24	210	6
WATER COURSE	24+639.65	211	6
WATER COURSE	26+048.37	218	6
WATER COURSE	26+326.06	219	6
WATER COURSE	26+579.35	220	6

Name	Station	CROSSING NUMBER(#)	Ref. TYP. DWG
TRACK ROAD	18+430.56	177	4
TRACK ROAD	19+240.34	182	4
TRACK ROAD	20+012.13	187	4
TRACK ROAD	20+268.91	190	4
TRACK ROAD	20+762.30	192	4
TRACK ROAD	22+313.42	199	4
TRACK ROAD	23+545.90	206	4
TRACK ROAD	23+827.24	208	4
TRACK ROAD	24+499.73	209	4
TRACK ROAD	24+687.51	212	4
TRACK ROAD	24+842.17	213	4
TRACK ROAD	25+243.70	214	4
TRACK ROAD	25+711.29	217	4
TRACK ROAD	27+110.58	221	4

Name	Station	CROSSING NUMBER(#)	Ref. TYP. DWG
RIVER	25+608.64	216	7

Name	Station	CROSSING NUMBER(#)	Ref. TYP. DWG
ABOVEGROUND PIPELINE	25+256.94	215	5

BILL OF MATERIALS

ITEM	DESCRIPTION	QTY.	ITEM	DESCRIPTION	QTY.
1	LINE MARKER TEST POINT TYPE-A	18 No.	17		
2	LINE MARKER TEST POINT TYPE-C	2 No.	18		
3	NORMAL LINE MARKER	24 No.	19		
4	SEAMLESS PIPE 8" API 5L X52, PSL2, BEVEL END, NACE MR0175/ISO 15156	9039.409	20		
5	LINE BREAK VALVE 8"	2 Set	21		
6			22		
7			23		
8			24		
9			25		
10			26		
11			27		
12			28		
13			29		
14			30		
15			31		
16			32		

SYMBOLS AND ABBREVIATIONS

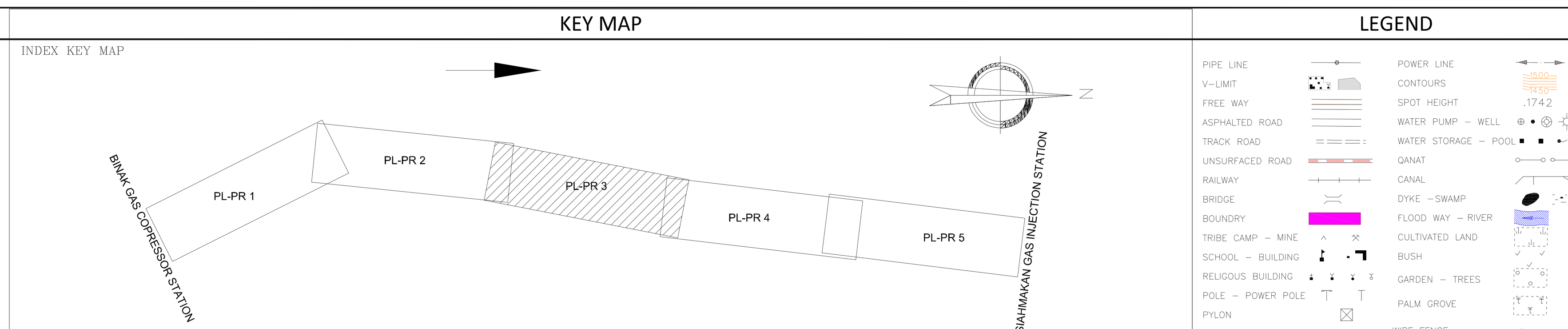
- PIPE LINE ROUTE AND SURVEY REFERENCES
- DIRECTION CHANGE
- DRAWING REFERENCE
- TRANSITION PIECE
- LINE BREAK VALVE
- INSULATING JOINT
- PIPE LINE MARKER
- ON-PLOT STATION
- CHECK VALVE
- BLOCK VALVE

C	CASING PIPE
RC	REINFORCED COATING
CCW	CONTINUOUS CONCRETE WEIGHT
BOW	BOLT ON CONCRETE WEIGHT
SOW	SET ON CONCRETE WEIGHT
RCP	ROCKSHIELD COATING PROTECTION
PG	PLASTIC GRATING
PRCS	PRECAST REINFORCED CONCRETE SLAB
G	GABIONS
CC	CASING FOR CABLE
PFB	PREFABRICATED BEND

CATHODIC PROTECTION SYSTEM
- CATHODIC PROTECTION STATION (C.P.S.)
- SINGLE PIPE POTENTIAL TEST POINT
- BOND BOX AT FOREIGN PIPE CROSSING
- ENCASED PIPE TEST POINT
- INSULATING JOINT TEST POINT
- COMBINED CURRENT-POTENTIAL TEST POINT
- SACRIFICAL ANODE

KEY MAP

INDEX KEY MAP



No. 3 OF 5 SHEETS

SCALE: 1:200,000

LEGEND

PIPE LINE; V-LIMIT; FREE WAY; ASPHALTED ROAD; TRACK ROAD; UNSURFACED ROAD; RAILWAY; BRIDGE; BOUNDRY; TRIBE CAMP - MINE; SCHOOL - BUILDING; RELIGOUS BUILDING; POLE - POWER POLE; PYLON; CITY-VILLAGE; POWER LINE; CONTOURS; SPOT HEIGHT .1742; WATER PUMP - WELL; WATER STORAGE - POOL; QANAT; CANAL; DYKE - SWAMP; FLOOD WAY - RIVER; CULTIVATED LAND; BUSH; GARDEN - TREES; PALM GROVE; WIRE FENCE; WATER COURSE

CROSSINGS ABBREVIATIONS

C.P.S.	CATHODIC PROTECTION STATION
W.C.	WATER COURSE
F.W.	FLOODWAY
RIV.	RIVER
I.D.	IRRIGATION DITCH (CANAL)
T.R.	TRACK ROAD
U.R.	UNSURFACED ROAD
M.A.R.	MAIN ASPHALT ROAD
S.A.R.	SECONDARY ASPHALT ROAD
U.P.	UNDER GROUND PIPE
U.C.	UNDER GROUND CABLE
A.P.	ABOVE GROUND PIPE
O.P.L.	OVERHEAD POWER LINE

SOIL CONDITION INFORMATION

CL	Low Plasticity Clay
ML	Low Plasticity Silt
SM	Non-Plastic Fines Sand
SC	Plastic Fines Sand

Zone 1, Zone 2, Zone 3, Zone 4, Zone 5, Zone 6

REV.	DATE	P.O.I.S	PREP.	CHK.	APP.	AUT.
D02	OCT.2023	IFA	R.BERLOUIE	M.FAKHARIAN	S.FARAMARZPOUR	**.**
D01	DEC.2022	IFA	R.BERLOUIE	M.FAKHARIAN	M.MEHRSHAD	**.**
D00	AUG.2022	IFC	R.BERLOUIE	M.FAKHARIAN	M.MEHRSHAD	**.**

REV.	DESCRIPTION	BY	DATE	BY	DATE
***	**********	**.**	***.****	**.**	***.****
		CHECKED		REV. APPR.	

PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SURFACE FACILITIES GAS & GAS-CONDENSATE PIPELINES

PROJECT NO.: 971020

EPC CONTRACTOR: HIRGAN ENERGY - DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR (GC): PEDCO PETROIRAN DEVELOPMENT COMPANY

اصل و کلیه نسخ این نقشه و حق اقتباس متعلق به شرکت ملی مناطق نفت خیز جنوب میباشد.

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BINAK OILFIELD DEVELOPMENT SURFACE FACILITIES
GAS & GAS-CONDENSATE PIPELINES

DATE	SCALE	DRAWING BY	CHECKED BY	PROJECT ENG.

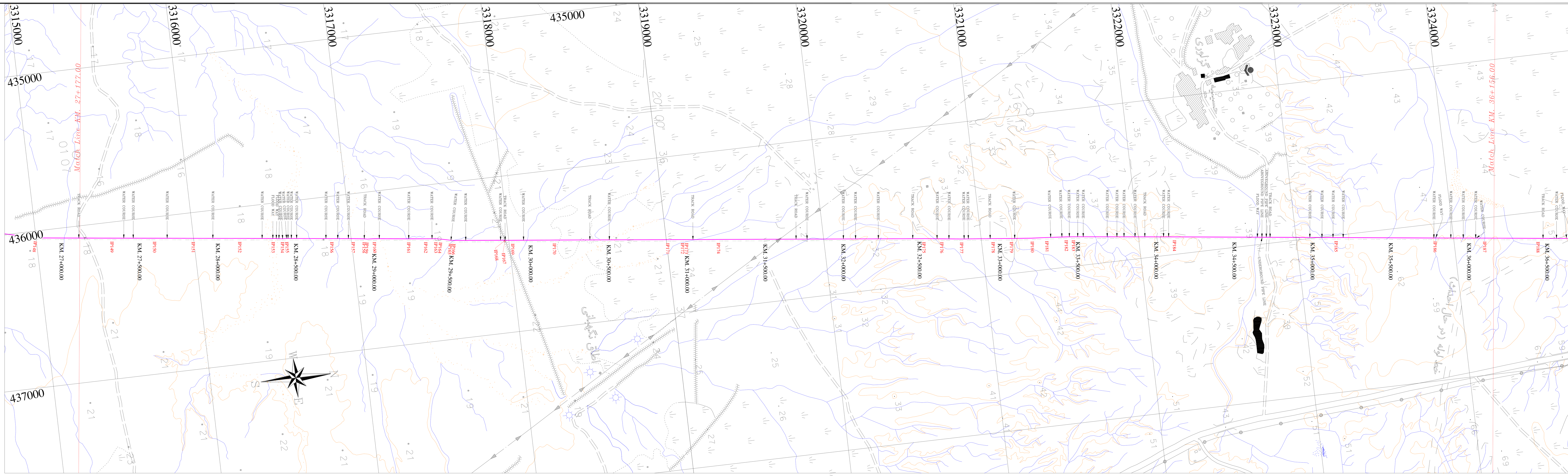
NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

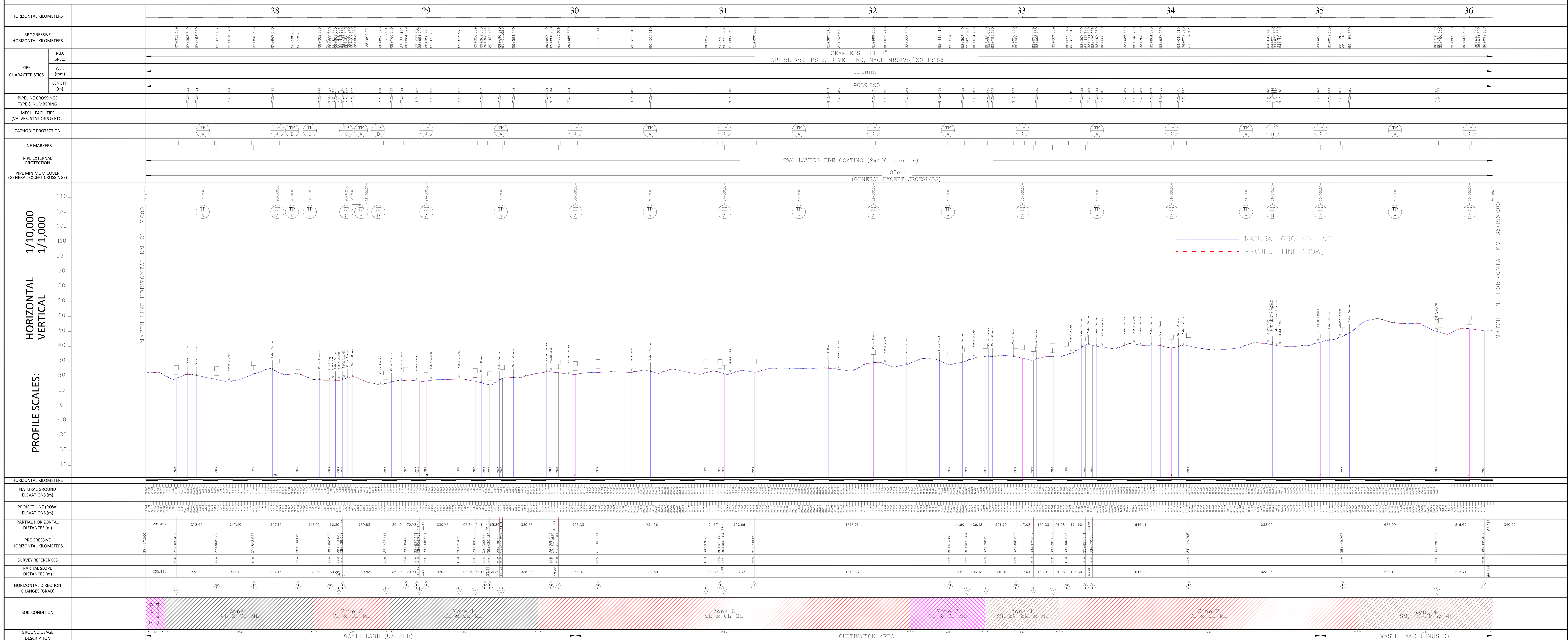
APPROVED FOR CONSTRUCTION BY: DATE:

DRAWING TITLE: Plan & Profile Drawings For Gas Pipeline (to Siahmakan) from 18+078 to 27+117

SCALE	SIZE	DRAWING NO.	SHEET NO.	REV.	BUDGET REF.	LOCATION	SIZE	CLASS	SERIAL NO.	SHEET	REVISION
H=1:10000 V=1:1000		BK-PPL-PEDCO-320-SU-DW-0001	3 OF 5	D02	053-073-9184	F	4	A	708656	03	D02

PLAN SCALE: 1/10,000





REFERENCE DOCUMENTS

	TITLE	DOC. No.
1	GEOTECHNICAL INVESTIGATION REPORT FOR PIPELINES	BK-PPL-PEDCO-320-GT-RT-0001
2	PIPELINE STANDARD DRAWING FOR LINE MARKER	BK-GNRAL-PEDCO-000-PL-DW-0001
3	STANDARD DRAWING FOR UNDER GROUND PIPELINE CONSTRUCTION R.O.W	BK-GNRAL-PEDCO-000-PL-DW-0003
4	STANDARD DRAWING FOR A/G PIPELINE ROAD CROSSING	BK-GNRAL-PEDCO-000-PL-DW-0005
5	STANDARD DRAWING FOR EXISTING PIPELINE CROSSING	BK-GNRAL-PEDCO-000-PL-DW-0006
6	PIPELINE STANDARD DRAWING FOR WATER - WAY CROSSING	BK-GNRAL-PEDCO-000-PL-DW-0008
7	PIPELINE STANDARD DRAWING FOR RIVER CROSSING	BK-GNRAL-PEDCO-000-PL-DW-0014
8	TYPICAL DRAWING FOR MAJOR FLOODWAY CROSSING	BK-GNRAL-PEDCO-000-CV-DW-0012
9	LAYOUT FOR CATHODIC PROTECTION SYSTEM FOR SIAHMAKAN GAS INJECTION	BK-PPL-PEDCO-320-EL-PY-0003
10	INSTALLATION DETAILS & NOTES FOR CATHODIC PROTECTION SYSTEMS	BK-GNRAL-PEDCO-000-EL-DW-0005
11	CIVIL LAYOUT FOR PIG RECEIVER AREA (IN SIAHMAKAN G.I. STATION)	BK-PPL-PEDCO-320-CV-PY-0001
12	CIVIL LAYOUT FOR LBV STATIONS	BK-PPL-PEDCO-320-CV-PY-0002
13	PIPE COLD BENDING DETAIL	151-GEN-000-PL-DWG-0003
14	UNIT PLOT PLAN FOR LBV	BK-PPL-PEDCO-320-PI-PY-0003
15	SPECIFICATION FOR COATING OF UNDERGROUND PIPING	BK-GNRAL-PEDCO-000-PI-SP-0013
16	UNIT PLOT PLAN DRAWING	BK-GCS-PEDCO-120-PI-PY-0001

NOTES:

1- THE LATEST IPS STANDARD No. IPS-C-PI-140 IS THE PROJECT SPECIFICATION FOR PIPELINE CONSTRUCTION AND IT SHALL BE FULLY FOLLOWED.

2- ALL DATA (COORDINATES, KIMOMETERS, DISTANCES, CROSSINGS TYPES&LOCATION AND ETC.) SHALL BE CHECKED BY THE CONTRACTOR BEFORE CONSTRUCTION AND DISCREPANCIES (IF ANY) SHALL BE REPORTED TO THE CLIENT REPRESENTATIVE FOR PROPER DECISION.

3- THE PIPE MINIMUM COVER (EXCEPT AT CROSSINGS) SHALL BE AS FOLLOWS:
- 90cm FOR UNUSED (WASTE LAND) SOIL, WHERE BLASTING OR JACK HAMMER IS NOT REQUIRED FOR TRENCHING AND HEAVY TRENCHERS ARE ADEQUATE
- 60cm FOR ROCKY LANDS, WHERE BLASTING OR JACK HAMMER IS REQUIRED FOR TRENCHING (HEAVY TRENCHERS ARE NOT SUITABLE FOR EXCAVATION)
- 120cm FOR CULTIVATED LANDS

4- THE PIPELINE CROSSINGS INCLUDING TRACK, UNSURFACED, SECONDARY ASPHALT ROADS, WATER COURSES, FLOODWAYS, EXISTING UNDERGROUND PIPES/CABLES, RIVER AND ETC. TO BE EXECUTED AS PER THE PROJECT PIPELINE TYPICAL DRAWINGS.

5- THE TOTAL WIDTH OF RIGHT OF WAY IS 11m (3m+8m)

6- GEODETIC PARAMETERS FOR COORDINATES ARE AS BELOW:

HORIZONTAL COORDINATE SYSTEM: WGS84/UTM ZONE 39
ELLIPSOID: WORLD GEODETIC SYSTEM 1984 (WGS84)
MAP PROJECTION: UNIVERSAL TRANSVERSE MERCATOR (UTM)
VERTICAL DATUM: MEAN SEA LEVEL

COORDINATES OF INTERSECTION POINTS (IP)

PI Lable	PI Station	Northing	Easting
IP149	27+322.44	3315481.859	436102.260
IP150	27+595.13	3315752.617	436134.646
IP151	27+842.52	3315998.260	436164.042
IP152	28+139.66	3316293.286	436199.365
IP153	28+353.59	3316505.688	436224.915
IP154	28+413.94	3316565.440	436233.369
IP155	28+438.59	3316590.066	436234.574
IP156	28+728.41	3316877.801	436269.265
IP157	28+864.90	3317013.315	436285.540
IP158	28+935.63	3317083.398	436295.107
IP159	28+954.80	3317102.221	436298.715
IP160	28+998.99	3317146.322	436301.637
IP161	29+219.77	3317365.494	436328.225
IP162	29+328.61	3317473.603	436340.780
IP163	29+392.74	3317537.343	436347.889
IP164	29+425.12	3317569.093	436354.248
IP165	29+490.32	3317632.640	436368.834
IP166	29+511.03	3317653.005	436372.568
IP167	29+836.90	3317976.808	436409.270
IP168	29+837.63	3317976.727	436409.990
IP169	29+886.01	3318024.819	436415.269
IP170	30+152.34	3318289.487	436444.980
IP171	30+876.90	3319009.383	436527.028
IP172	30+971.57	3319103.450	436537.695
IP173	30+998.16	3319129.804	436541.281
IP174	31+200.82	3319331.221	436563.680
IP175	32+514.58	3320636.554	436712.245
IP176	32+629.18	3320750.254	436726.588
IP177	32+755.61	3320875.689	436742.370
IP178	32+956.81	3321075.775	436763.514
IP179	33+073.84	3321192.084	436776.493
IP180	33+207.07	3321324.634	436789.927
IP181	33+299.05	3321416.360	436796.710
IP182	33+423.64	3321540.522	436807.097
IP183	33+470.57	3321587.182	436812.083
IP184	34+116.71	3322228.831	436888.122
IP185	35+149.71	3323254.242	437013.128
IP186	35+782.79	3323882.627	437090.143
IP187	36+099.49	3324197.075	437127.785

CROSSINGS LIST

Name	Station	CROSSING NUMBER(#)	Ref. TYP. DWG
WATER COURSE	27+398.34	222	6
WATER COURSE	27+458.53	223	6
WATER COURSE	27+675.37	224	6
WATER COURSE	27+967.64	225	6
WATER COURSE	28+282.48	226	6
WATER COURSE	28+389.98	229-1	6
WATER COURSE	28+413.94	229-2	6
WATER COURSE	28+438.59	230	6
WATER COURSE	28+448.02	231	6
WATER COURSE	28+469.45	232	6
WATER COURSE	28+503.28	233	6
WATER COURSE	28+690.57	234	6
WATER COURSE	28+765.94	235	6
WATER COURSE	28+834.11	236	6
WATER COURSE	29+031.65	238	6
WATER COURSE	29+219.77	239	6
WATER COURSE	29+369.04	240	6
WATER COURSE	29+490.32	241	6
WATER COURSE	29+584.98	242	6
WATER COURSE	29+807.44	243	6
WATER COURSE	29+955.33	245	6
WATER COURSE	30+503.91	247	6
WATER COURSE	31+767.64	250	6
WATER COURSE	31+999.86	251	6
WATER COURSE	32+077.74	252	6
WATER COURSE	32+223.35	253	6
WATER COURSE	32+598.44	255	6
WATER COURSE	32+674.48	256	6
WATER COURSE	32+771.60	257	6
WATER COURSE	32+798.59	258	6
WATER COURSE	33+095.20	260	6
WATER COURSE	33+325.31	261	6
WATER COURSE	33+397.09	262	6
WATER COURSE	33+444.82	263	6
WATER COURSE	33+497.98	264	6
WATER COURSE	33+533.29	265	6
WATER COURSE	33+686.55	266	6
WATER COURSE	33+748.72	267	6
WATER COURSE	33+793.98	268	6
WATER COURSE	33+864.52	269	6
WATER COURSE	34+046.81	271	6
WATER COURSE	34+079.37	272	6
WATER COURSE	34+982.02	278	6
WATER COURSE	35+059.43	279	6
WATER COURSE	35+130.20	280	6
WATER COURSE	35+194.83	281	6
WATER COURSE	35+775.09	282	6

Name	Station	CROSSING NUMBER(#)	Ref. TYP. DWG
TRACK ROAD	28+935.63	237	4
TRACK ROAD	29+836.90	244	4
TRACK ROAD	30+379.21	246	4
TRACK ROAD	31+038.19	248	4
TRACK ROAD	31+697.37	249	4
TRACK ROAD	32+443.41	254	4
TRACK ROAD	32+938.34	259	4
TRACK ROAD	33+927.06	270	4
TRACK ROAD	34+728.09	277	4

Name	Station	CROSSING NUMBER(#)	Ref. TYP. DWG
FLOODWAY	28+351.28	227	8
FLOODWAY	28+373.17	228	8
FLOODWAY	34+647.14	273	8
FLOODWAY	35+786.95	283	8

Name	Station	CROSSING NUMBER(#)	Ref. TYP. DWG
ABOVEGROUND PIPELINE	34+675.83	274	5
ABOVEGROUND PIPELINE	34+703.36	276	5

Name	Station	CROSSING NUMBER(#)	Ref. TYP. DWG
UNDERGROUND PIPELINE	34+677.39	275	5

BILL OF MATERIALS

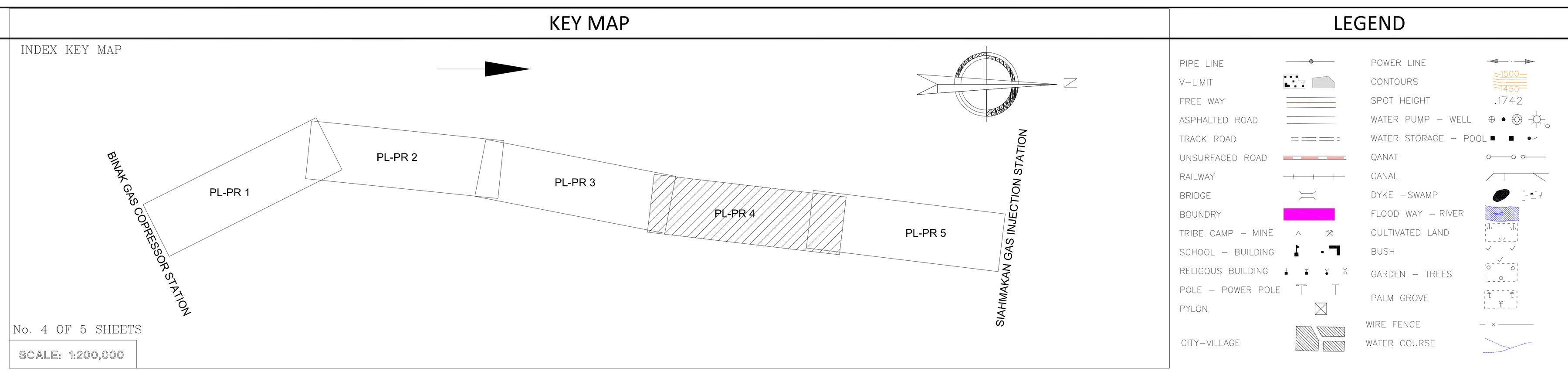
ITEM	DESCRIPTION	QTY.	ITEM	DESCRIPTION	QTY.
1	LINE MARKER TEST POINT TYPE-A	18 No.	17		
2	LINE MARKER TEST POINT TYPE-B	1 No.	18		
3	LINE MARKER TEST POINT TYPE-C	2 No.	19		
4	LINE MARKER TEST POINT TYPE-D	4 No.	20		
5	NORMAL LINE MARKER	34 No.	21		
6	SEAMLESS PIPE 8" API 5L X52, PSL2, BEVEL END, NACE MR0175/ISO 15156	9039.390	22		
7			23		
8			24		
9			25		
10			26		
11			27		
12			28		
13			29		
14			30		
15			31		
16			32		

SYMBOLS AND ABBREVIATIONS

PIPE LINE ROUTE AND SURVEY REFERENCES	C — CASING PIPE
DIRECTION CHANGE	RC — REINFORCED COATING
DRAWING REFERENCE	CCW — CONTINUOUS CONCRETE WEIGHT
TRANSITION PIECE	BOW — BOLT ON CONCRETE WEIGHT
LINE BREAK VALVE	SOW — SET ON CONCRETE WEIGHT
INSULATING JOINT	RCP — ROCKSHIELD COATING PROTECTION
PIPE LINE MARKER	PG — PLASTIC GRATING
ON-PLOT STATION	PRCS — PRECAST REINFORCED CONCRETE SLAB
CHECK VALVE	G — GABIONS
BLOCK VALVE	CC — CASING FOR CABLE
	PFB — PREFABRICATED BEND

CATHODIC PROTECTION SYSTEM
- CATHODIC PROTECTION STATION (C.P.S.)
- TP A — SINGLE PIPE POTENTIAL TEST POINT
- TP B — BOND BOX AT FOREIGN PIPE CROSSING
- TP C — ENCASED PIPE TEST POINT
- TP D — INSULATING JOINT TEST POINT
- TP E — COMBINED CURRENT-POTENTIAL TEST POINT
- TP F — SACRIFICAL ANODE

KEY MAP



No. 4 OF 5 SHEETS

SCALE: 1:200,000

LEGEND

PIPE LINE, V-LIMIT, FREE WAY, ASPHALTED ROAD, TRACK ROAD, UNSURFACED ROAD, RAILWAY, BRIDGE, BOUNDRY, TRIBE CAMP – MINE, SCHOOL – BUILDING, RELIGOUS BUILDING, POLE – POWER POLE, PYLON, CITY–VILLAGE, POWER LINE, CONTOURS, SPOT HEIGHT .1742, WATER PUMP – WELL, WATER STORAGE – POOL, QANAT, CANAL, DYKE – SWAMP, FLOOD WAY – RIVER, CULTIVATED LAND, BUSH, GARDEN – TREES, PALM GROVE, WIRE FENCE, WATER COURSE

CROSSINGS ABBREVIATIONS
- C.P.S. CATHODIC PROTECTION STATION
- W.C. WATER COURSE
- F.W. FLOODWAY
- RIV. RIVER
- I.D. IRRIGATION DITCH (CANAL)
- T.R. TRACK ROAD
- U.R. UNSURFACED ROAD
- M.A.R. MAIN ASPHALT ROAD
- S.A.R. SECONDARY ASPHALT ROAD
- U.P. UNDER GROUND PIPE
- U.C. UNDER GROUND CABLE
- A.P. ABOVE GROUND PIPE
- O.P.L. OVERHEAD POWER LINE

SOIL CONDITION INFORMATION
- CL Low Plasticity Clay
- ML Low Plasticity Silt
- SM Non-Plastic Fines Sand
- SC Plastic Fines Sand

Zone 1, Zone 2, Zone 3, Zone 4, Zone 5, Zone 6

REV.	DATE			PREP.	CHK.	APP.	AUT.
D02	OCT.2023	IFA		R.BERLOUIE	M.FAKHARIAN	S.FARAMARZPOUR	**.**
D01	DEC.2022	IFA		R.BERLOUIE	M.FAKHARIAN	M.MEHRSHAD	**.**
D00	AUG.2022	IFC		R.BERLOUIE	M.FAKHARIAN	M.MEHRSHAD	**.**
REV.	DATE	P.O.I.S		PREP.	CHK.	APP.	AUT.

REV.	DESCRIPTION	BY	DATE	BY	DATE
***	**********	**.**	***.****	**.**	***.****
		CHECKED		REV. APPR.	

اصل و کلیه نسخ این نقشه و حق اقتباس متعلق به شرکت ملی مناطق نفت خیز جنوب میباشد.

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PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SURFACE FACILITIES GAS & GAS-CONDENSATE PIPELINES

PROJECT NO.: 971020

EPC CONTRACTOR: HIRGAN ENERGY - DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR (GC): PEDCO — PETROIRAN DEVELOPMENT COMPANY

BINAK OILFIELD DEVELOPMENT SURFACE FACILITIES

GAS & GAS-CONDENSATE PIPELINES

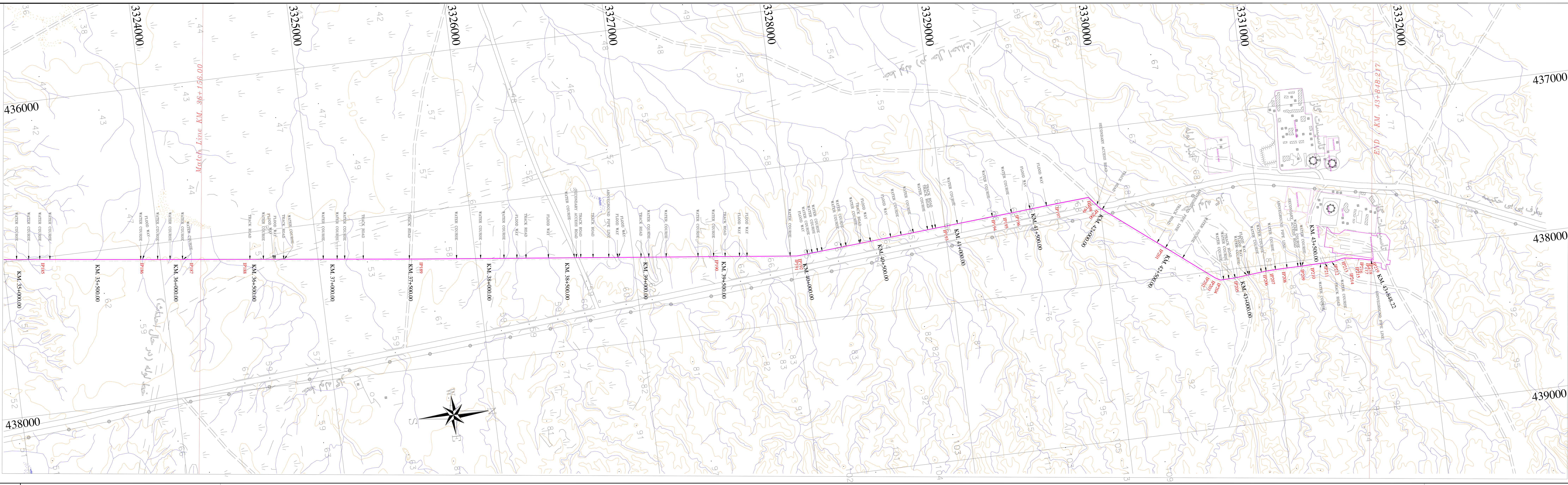
DATE	SCALE	DRAWING BY	CHECKED BY	PROJECT ENG.

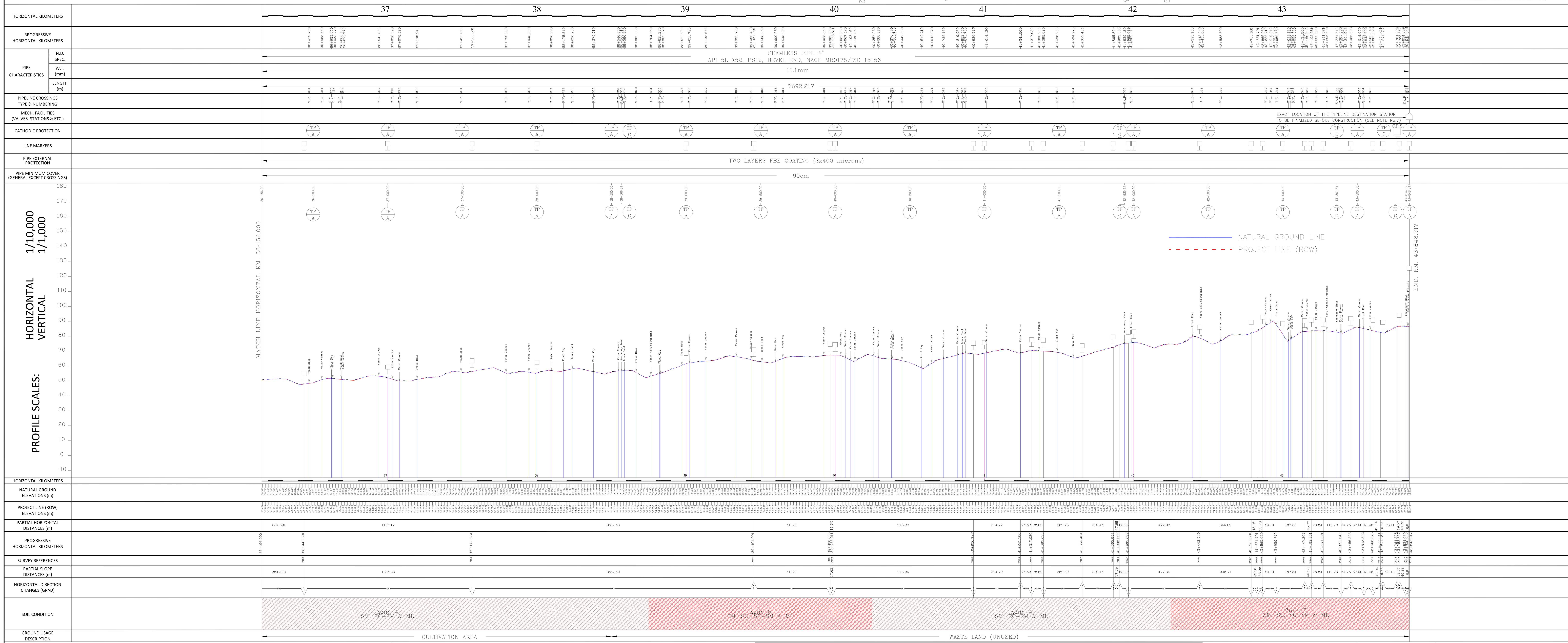
NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

APPROVED FOR CONSTRUCTION BY: DATE:

DRAWING TITLE: Plan & Profile Drawings For Gas Pipeline (to Siahmakan) from 27+117 to 36+156

SCALE	SIZE	DRAWING NO.	SHEET NO.	REV.	BUDGET REF.	LOCATION	SIZE	CLASS	SERIAL NO.	SHEET	REVISION
H=1:10000 V=1:1000		BK-PPL-PEDCO-320-SU-DW-0001	4 OF 5	D02	053-073-9184	F	4	A	708656	04	D02





REFERENCE DOCUMENTS

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9	LAYOUT FOR CATHODIC PROTECTION SYSTEM FOR SIAHMAKAN GAS INJECTION	BK-PPL-PEDCO-320-EL-PY-0003
10	INSTALLATION DETAILS & NOTES FOR CATHODIC PROTECTION SYSTEMS	BK-GNRAL-PEDCO-000-EL-DW-0005
11	CIVIL LAYOUT FOR PIG RECEIVER AREA (IN SIAHMAKAN G.I. STATION)	BK-PPL-PEDCO-320-CV-PY-0001
12	CIVIL LAYOUT FOR LBV STATIONS	BK-PPL-PEDCO-320-CV-PY-0002
13	PIPE COLD BENDING DETAIL	151-GEN-000-PL-DWG-0003
14	UNIT PLOT PLAN FOR LBV	BK-PPL-PEDCO-320-PI-PY-0003
15	SPECIFICATION FOR COATING OF UNDERGROUND PIPING	BK-GNRAL-PEDCO-000-PI-SP-0013
16	UNIT PLOT PLAN DRAWING	BK-GCS-PEDCO-120-PI-PY-0001

NOTES:

1- THE LATEST IPS STANDARD No. IPS-C-PI-140 IS THE PROJECT SPECIFICATION FOR PIPELINE CONSTRUCTION AND IT SHALL BE FULLY FOLLOWED.
2- ALL DATA (COORDINATES, KIMOMETERS, DISTANCES, CROSSINGS TYPE&LOCATION AND ETC.) SHALL BE CHECKED BY THE CONTRACTOR BEFORE CONSTRUCTION AND DISCREPANCIES (IF ANY) SHALL BE REPORTED TO THE CLIENT REPRESENTATIVE FOR PROPER DECISION.
3- THE PIPE MINIMUM COVER (EXCEPT AT CROSSINGS) SHALL BE AS FOLLOWS:
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- 60cm FOR ROCKY LANDS, WHERE BLASTING OR JACK HAMMER IS REQUIRED FOR TRENCHING (HEAVY TRENCHERS ARE NOT SUITABLE FOR EXCAVATION)
- 120cm FOR CULTIVATED LANDS
4- THE PIPELINE CROSSINGS INCLUDING TRACK, UNSURFACED, SECONDARY ASPHALT ROADS, WATER COURSES, FLOODWAYS, EXISTING UNDERGROUND PIPES/CABLES, RIVER AND ETC. TO BE EXECUTED AS PER THE PROJECT PIPELINE TYPICAL DRAWINGS.
5- THE TOTAL WIDTH OF RIGHT OF WAY IS 11m (3m+8m)
6- GEODETIC PARAMETERS FOR COORDINATES ARE AS BELOW:
HORIZONTAL COORDINATE SYSTEM: WGS84/UTM ZONE 39
ELLIPSOID: WORLD GEODETIC SYSTEM 1984 (WGS84)
MAP PROJECTION: UNIVERSAL TRANSVERSE MERCATOR (UTM)
VERTICAL DATUM: MEAN SEA LEVEL
7- THE PIPELINE END POINT AND PIG RECEIVING STATION SHALL BE LOCATED IN SITE AREA OF THE ONGOING PROJECT. THEREFORE THE FINAL SECTION OF THE PIPELINE ROUTE AND THE EXACT LOCATION OF THE RECEIVER AND TIE-IN POINT SHALL BE COORDINATED WITH THE ABOVE MENTIONED PROJECT AND TO BE APPROVED BY THE CLIENT BEFORE CONSTRUCTION OF THE LAST KILOMETER OF PIPELINE AS PER THIS DRAWING.

COORDINATES OF INTERSECTION POINTS (IP)

PI Lable	PI Station	Northing	Easting
IP188	36+440.39	3324535.467	437169.089
IP189	37+566.56	3325653.502	437304.210
IP190	39+454.09	3327528.807	437518.688
IP191	39+965.89	3328037.245	437577.225
IP192	39+983.51	3328054.864	437576.860
IP193	40+926.73	3328995.291	437504.374
IP194	41+241.50	3329309.127	437480.106
IP195	41+317.02	3329384.457	437474.760
IP196	41+395.62	3329462.831	437468.800
IP197	41+655.40	3329721.803	437448.274
IP198	41+865.85	3329931.698	437432.987
IP199	41+903.54	3329956.825	437461.070
IP200	41+965.62	3329996.830	437508.548
IP201	42+442.94	3330372.033	437803.599
IP202	42+788.63	3330643.455	438017.683
IP203	42+831.79	3330677.527	438044.175
IP204	42+865.07	3330706.789	438060.025
IP205	42+959.38	3330801.063	438057.563
IP206	43+147.21	3330988.055	438039.819
IP207	43+192.98	3331033.734	438036.876
IP208	43+271.82	3331112.559	438035.376
IP209	43+391.54	3331232.280	438034.854
IP210	43+456.29	3331296.995	438032.723
IP211	43+543.89	3331384.590	438031.820
IP212	43+605.37	3331445.999	438028.845
IP213	43+654.41	3331493.824	438018.008
IP214	43+671.19	3331510.494	438016.127
IP215	43+764.30	3331602.162	438032.456
IP216	43+783.87	3331621.353	438036.288
IP217	43+824.09	3331660.214	438046.665
IP218	43+840.97	3331676.928	438049.002
IP219	43+848.22	3331683.811	438046.723

CROSSINGS LIST

Name	Station	CROSSING NUMBER(#)	Ref. TYP. DWG
WATER COURSE	36+558.66	285	6
WATER COURSE	36+691.77	289	6
WATER COURSE	36+941.22	290	6
WATER COURSE	37+030.29	291	6
WATER COURSE	37+078.52	292	6
WATER COURSE	37+793.20	295	6
WATER COURSE	37+946.89	296	6
WATER COURSE	38+096.22	297	6
WATER COURSE	38+546.30	301	6
WATER COURSE	39+021.72	308	6
WATER COURSE	39+132.66	309	6
WATER COURSE	39+335.72	310	6
WATER COURSE	39+435.46	311	6
WATER COURSE	39+923.85	315	6
WATER COURSE	40+067.42	316-2	6
WATER COURSE	40+103.15	317	6
WATER COURSE	40+132.05	318	6
WATER COURSE	40+257.53	319	6
WATER COURSE	40+288.67	320	6
WATER COURSE	40+376.39	321	6
WATER COURSE	40+647.27	325	6
WATER COURSE	40+726.16	326	6
WATER COURSE	40+819.98	327	6
WATER COURSE	41+014.13	330	6
WATER COURSE	41+241.50	331	6
WATER COURSE	41+365.93	332	6
WATER COURSE	42+583.69	339	6
WATER COURSE	42+885.71	340	6
WATER COURSE	42+919.21	341	6
WATER COURSE	43+038.18	343	6
WATER COURSE	43+131.55	346	6
WATER COURSE	43+162.58	347	6
WATER COURSE	43+222.59	348	6
WATER COURSE	43+385.65	351	6
WATER COURSE	43+391.54	352	6
WATER COURSE	43+514.05	353	6
WATER COURSE	43+585.54	355	6

Name	Station	CROSSING NUMBER(#)	Ref. TYP. DWG
ASPHALT ROAD	38+558.52	302	4
ASPHALT ROAD	41+939.12	335	4
ASPHALT ROAD	43+361.50	350	4
ASPHALT ROAD	43+840.97	356	4

Name	Station	CROSSING NUMBER(#)	Ref. TYP. DWG
TRACK ROAD	36+472.72	284	4
TRACK ROAD	36+688.10	288	4
TRACK ROAD	37+196.94	293	4
TRACK ROAD	37+491.59	294	4
TRACK ROAD	38+236.96	299	4
TRACK ROAD	38+586.90	303-1	4
TRACK ROAD	38+665.05	303-2	4
TRACK ROAD	38+971.79	307	4
TRACK ROAD	39+508.95	312	4
TRACK ROAD	40+381.76	322	4
TRACK ROAD	40+852.56	328	4
TRACK ROAD	40+871.75	329	4
TRACK ROAD	41+983.81	336	4
TRACK ROAD	42+393.18	337	4
TRACK ROAD	42+959.38	342	4
TRACK ROAD	43+539.66	354	4

Name	Station	CROSSING NUMBER(#)	Ref. TYP. DWG
FLOODWAY	36+623.05	286	8
FLOODWAY	36+632.77	287	8
FLOODWAY	38+178.84	298	8
FLOODWAY	38+379.71	300	8
FLOODWAY	38+821.28	305	8
FLOODWAY	38+827.07	306	8
FLOODWAY	39+600.53	313	8
FLOODWAY	39+648.99	314	8
FLOODWAY	40+037.88	316-1	8
FLOODWAY	40+447.36	323	8
FLOODWAY	40+579.21	324	8
FLOODWAY	41+486.96	333	8
FLOODWAY	41+594.97	334	8
FLOODWAY	43+050.27	344	8
FLOODWAY	43+055.48	345	8

Name	Station	CROSSING NUMBER(#)	Ref. TYP. DWG
ABOVEGROUND PIPELINE	38+765.81	304	5
ABOVEGROUND PIPELINE	42+456.26	338	5
ABOVEGROUND PIPELINE	43+297.23	349	5
ABOVEGROUND PIPELINE	43+840.22	357	5

BILL OF MATERIALS

ITEM	DESCRIPTION	QTY.	ITEM	DESCRIPTION	QTY.
1	CATHODIC PROTECTION TRANSFORMER/RECTIFIER WITH AC SUPPLY BOX	1 Set	17		
2	LINE MARKER TEST POINT TYPE-A	16 No.	18		
3	LINE MARKER TEST POINT TYPE-A	4 No.	19		
4	NORMAL LINE MARKER	28 No.	20		
5	LINE PIPE 8"	7692.217m	21		
6			22		
7			23		
8			24		
9			25		
10			26		
11			27		
12			28		
13			29		
14			30		
15			31		
16			32		

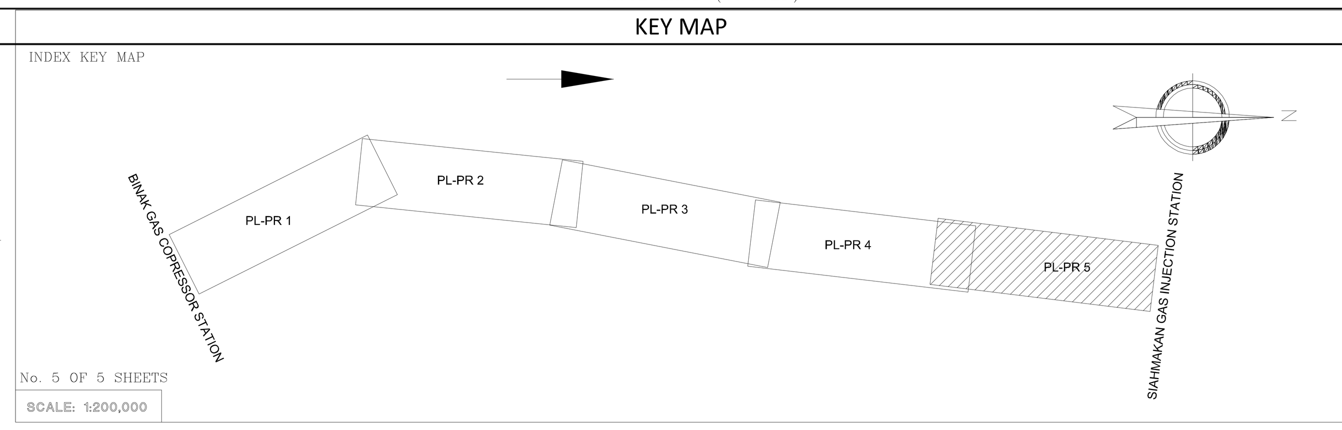
SYMBOLS AND ABBREVIATIONS

PIPE LINE ROUTE AND SURVEY REFERENCES
DIRECTION CHANGE
DRAWING REFERENCE
TRANSITION PIECE
LINE BREAK VALVE
INSULATING JOINT
PIPE LINE MARKER
ON-PLOT STATION
CHECK VALVE
BLOCK VALVE

C	CASING PIPE
RC	REINFORCED COATING
CCW	CONTINUOUS CONCRETE WEIGHT
BOW	BOLT ON CONCRETE WEIGHT
SOW	SET ON CONCRETE WEIGHT
RCP	ROCKSHIELD COATING PROTECTION
PG	PLASTIC GRATING
PRCS	PRECAST REINFORCED CONCRETE SLAB
G	GABIONS
CC	CASING FOR CABLE
PFB	PREFABRICATED BEND

CATHODIC PROTECTION SYSTEM
CATHODIC PROTECTION STATION
SINGLE PIPE POTENTIAL TEST POINT
BOND BOX AT FOREIGN PIPE CROSSING
ENCASED PIPE TEST POINT
INSULATING JOINT TEST POINT
COMBINED CURRENT-POTENTIAL TEST POINT
SACRIFICAL ANODE

KEY MAP



LEGEND

PIPE LINE
V-LIMIT
FREE WAY
ASPHALTED ROAD
TRACK ROAD
UNSURFACED ROAD
RAILWAY
BRIDGE
BOUNDRY
TRIBE CAMP - MINE
SCHOOL - BUILDING
RELIGOUS BUILDING
POLE - POWER POLE
PYLON
CITY-VILLAGE
POWER LINE
CONTOURS
SPOT HEIGHT .1742
WATER PUMP - WELL
WATER STORAGE - POOL
QANAT
CANAL
DYKE - SWAMP
FLOOD WAY - RIVER
CULTIVATED LAND
BUSH
GARDEN - TREES
PALM GROVE
WIRE FENCE
WATER COURSE

CROSSINGS ABBREVIATIONS

W.C.	WATER COURSE
F.W.	FLOODWAY
RIV.	RIVER
I.D.	IRRIGATION DITCH (CANAL)
T.R.	TRACK ROAD
U.R.	UNSURFACED ROAD
M.A.R.	MAIN ASPHALT ROAD
S.A.R.	SECONDARY ASPHALT ROAD
U.P.	UNDER GROUND PIPE
U.C.	UNDER GROUND CABLE
A.P.	ABOVE GROUND PIPE
O.P.L.	OVERHEAD POWER LINE

SOIL CONDITION INFORMATION

CL	Low Plasticity Clay
ML	Low Plasticity Silt
SM	Non-Plastic Fines Sand
SC	Plastic Fines Sand

Zone 1
Zone 2
Zone 3
Zone 4
Zone 5
Zone 6

REV.	DATE	P.O.I.S	PREP.	CHK.	APP.	AUT.
D02	OCT.2023	IFA	R.BERLOUIE	M.FAKHARIAN	S.FARAMARZPOUR	** **
D01	DEC.2022	IFA	R.BERLOUIE	M.FAKHARIAN	M.MEHRSHAD	** **
D00	AUG.2022	IFC	R.BERLOUIE	M.FAKHARIAN	M.MEHRSHAD	** **

REV.	DESCRIPTION	CHECKED BY	CHECKED DATE	REV. APPR. BY	REV. APPR. DATE
***	**********	** **	*** ****	** **	*** ****

PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SURFACE FACILITIES GAS & GAS-CONDENSATE PIPELINES
PROJECT NO.: 971020
EPC CONTRACTOR: HIRGAN ENERGY - DESIGN & INSPECTION COMPANIES
EPD/EPC CONTRACTOR (GC): PETROIRAN DEVELOPMENT COMPANY (PEDCO)

اصل و کلیه نسخ این نقشه و حق اقتباس متعلق به شرکت ملی مناطق نفت خیز جنوب میباشد.
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BINAK OILFIELD DEVELOPMENT SURFACE FACILITIES
GAS & GAS-CONDENSATE PIPELINES

DATE	SCALE	DRAWING BY	CHECKED BY	PROJECT ENG.

NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED
APPROVED FOR CONSTRUCTION BY: DATE:

DRAWING TITLE: Plan & Profile Drawings For Gas Pipeline (to Siahmakan) from 36+156 to 43+848.217

SCALE	SIZE	DRAWING NO.	SHEET NO.	REV.	BUDGET REF.	LOCATION	SIZE	CLASS	SERIAL NO.	SHEET	REVISION
H=1:10000 V=1:1000		BK-PPL-PEDCO-320-SU-DW-0001	5 OF 5	D02	053-073-9184	F	4	A	708656	05	D02