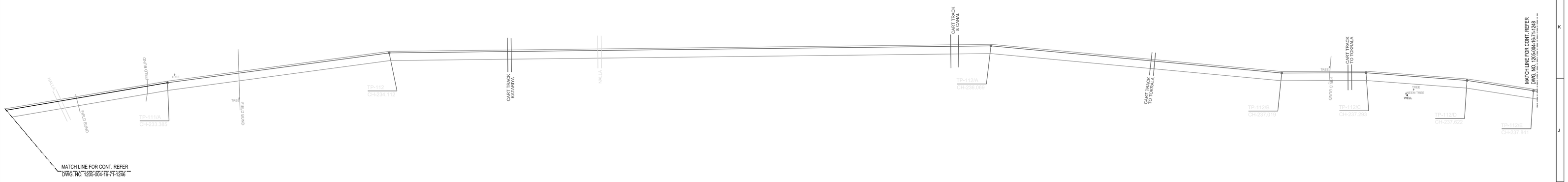
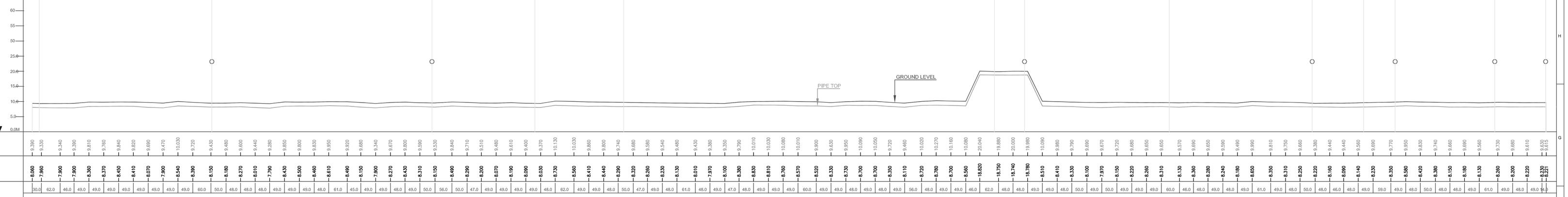
TURNING POINT (TP)		TP-111/A		TP-112				TP-112/A			TP-112/B	TP-112/C		TP-112/D		TP-112/E
DEFLECTION ANGLE (°_ ' _")		2°00'00"R		7°00'00"R				6°00'00"R			5°30'00"L	4°30'00"R		4°30'00"R		10°00'00"L
DISTANCE BETWEEN TP's (m)	532.248		727.085		1956.700				949.840		274.040		329.230		218.415	37.232
STATE & DISTRICT		GUJARAT								SURENDRA NAGAR						



PLANIMETRY

SCALE :-

ALONG LINE 1:5000
ACROSS LINE 1:5000



GROUND PROFILE

SCALE :-

HORIZONTAL 1:5000
VERTICAL 1:500

REFERENCE DATUM

GROUND LEVELS(m)

PIPE TOP LEVELS(m)

DISTANCE BETWEEN LEVEL

POINTS (IN METRES)

SURFACE /TERRAIN DETAILS: NALLA, CULTIVATION, NALLA, CULTIVATION

CLASS/ZONE LOCATION: NOT APPLICABLE

DESIGN FACTOR: 0.72

LINE PIPE DETAILS — MATERIAL: API 5L Gr. X-70, HSAW

LINE PIPE DETAILS — O.D.X. WALL THICKNESS (mm x mm): 610, 7.1

CUMULATIVE CHAINAGE (KM METRES) (000 + 000): 232.853KM, 233.0KM, 234.0KM, 235.0KM, 236.0KM, 237.0KM, 237.853KM

SPECIAL PROVISIONS

PIPE LINE COVER MINIMUM (METRES): 1.5, 1.0, 1.2, 1.0, 1.5, 1.0, 1.2, 1.0, 1.2, 1.0, 1.2, 1.0

CROSSINGS: NALLA 232853; CART TRACK KAVARIYA 234.473/234.522; NALLA 234.728/234.832; CART TRACK & CANAL 236.026/236.072; CART TRACK TO TORDALA 236.502/236.544; CART TRACK TO TORDALA 237.234/237.286

FITTING/MARKERS

COATING SCHEME: LINE PIPE: THREE LAYER POLYETHYLENE COATING (3LPE) (MIN. 2.5 mm THK) AS PER SPEC. No. 6-71-0041 AND FIELD JOINT COATING HEAT SHRINK SLEEVE AS PER SPEC. NO. 6-71-0044

CATHODIC PROTECTION INSTALLATIONS: REFER GENERAL NOTE-4

SOIL RESISTIVITY (OHM-M): 8.35, 4.20, 4.1, 5.01, 5.55, 4.93, 5.11, 4.60, 1.44, 1.25

SOIL STRATIFICATION DEPTH IN (m): 6.68, 8.04 (0.2, 0.8, 2.0), 7.73, 3.75 (0.5, 2.5), 5.33, 3.62 (3.0), 5.01, 4.95 (3.0), 1.57, 1.51 (3.0)

REFER GENERAL NOTE-5

TOPOGRAPHIC SYMBOLS

PROPOSED PIPE LINE; EXISTING PIPE LINE; TURNING POINT; INTERMEDIATE POINT; METALLED ROAD; UNMETALLED ROAD; RAILWAY LINE; STREAM > 5m WIDTH; STREAM <5m WIDTH (DRY); STREAM (PERENNIAL) > 5 m; CANAL (DESCRIBED); BRIDGE; POWER LINE; TELEPHONE LINE; FENCES; GROUND PROFILE; DAM (DESCRIBED); WATER TANK, LAKE OR RESERVOIR; QUARRY; SWAMP OR MARSH; MUD; WELL (DESCRIBED)/TUBEWELL; PLACE OF WORSHIP; MONUMENT; HUTS (TEMPORARY); HUTS (PERMANENT); GRAVES; TREE

PIPELINE SYMBOLS

CATHODIC PROTECTION TEST STATION; POTENTIAL GRADIENT CONTROL MAT (PGCM); TRANSFORMER RECTIFIER; AC INTERFERANCE MITIGATION Zn RIBBON PARALLEL TO PIPE; ANODE GROUND BED; EXISTING CABLE/ PIPELINE CROSSING; HOT BEND (R=6D); CS CODUIT FOR OFC; OFC PULLING PIT; UNCASED CROSSING; CASED CROSSING; CONTINUOUS CONCERETE WEIGHTING; GEOTEXTILE BAGS; INTERMEDIATE SCRAPER STATION; INSULATING JOINT; SCRAPER TRAP; KM MARKER; PIPE LINE WARNING SIGN; AERIAL MARKER; NAVIGABLE WATER WAY PIPE LINE WARNING SIGN; DIRECTION MARKER; HDPE DUCT FOR OFC; SECTIONALISING VALVES; ZINC GROUNDING CELL; SLOPE BREAKER

SOIL SYMBOLS

GENERAL NOTES :-

1. ALL DIMENSIONS ARE EXACT AS PER FIELD SURVEY.
2. FOR ALL CROSSINGS, THE THICKNESS OF CASING PIPES PROVIDED AS PER SPECIFIC REQUIREMENTS & THE SAME IS TABULATED IN B.O.M. ALL THE CROSSINGS EXECUTED AS PER RELEVANT OIB STANDARD/DRAWINGS.
3. LOCATION OF SLOPE BREAKERS ARE PROVIDED AS PER STANDARD & AS PER INSTRUCTIONS OF ENGINEER-IN-CHARGE.
4. INSTALLATION OF CATHODIC PROTECTION FACILITES PROVIDED AS PER DRAWINGS/ DOCUMENTS SUBMITTED BY CONTRACTOR AND APPROVED BY COMPANY.
5. FOR DETAILS REGARDING SOIL STRATIFICATION AND SOIL RESISTIVITY ALONG THE ROUTE, REFER M/S. PETRO IT'S SOIL INVESTIGATION & RESISTIVITY REPORT.
6. ANTI BUOYANCY CONTROL (CONCRETE WEIGHT COATING) AND GEOTEXTILE BAGS, IF REQUIRE, SHALL BE DECIDED AT SITE (BESIDE THE LOCATION AS SHOWN IN ALIGNMENT SHEET) CASE TO CASE BASIS AND AS PER INSTRUCTION OF ENGINEER-IN-CHARGE.

NOTES :-

1. ALL DIMENSIONS ARE IN "METERS" AND CORRESPOND TO MEAN SEA LEVEL (MSL).
2. 0.00 CHAINAGE CORRESPONDS TO INSULATING JOINT AT VADINAR.
3. ANTI BUOYANCY MEASURES, IF REQUIRED, SHALL BE DECIDED AT SITE IN CONSULTATION WITH ENGINEER-IN-CHARGE.
4. THE EXTENT OF CASED CROSSING PROVIDED AS PER INSTRUCTION OF ENGINEER-IN-CHARGE.

BILL OF MATERIAL FOR THIS DRAWING

610	7.1	3LPE	3000	K.M. POST	2
				DIRECTION MARKER	1
				AERIAL MARKER	1
				INSULATING JOINTS	1
			5000	HOT BENDS	2
				NAVIGABLE WATERWAY WARNING MARKER	2
				OFC PIT	3
				CP TEST STATION	5

REFERENCE DRAWINGS

TITLE	NUMBER
CROSSING	CHAINAGE(m)
NALLA	232867
CART TRACK	234503
NALLA	234796
CART TRACK	236020
CART TRACK	236598
CART TRACK	237240

DESCRIPTION	ECIL	EIL	BORL
AS BUILT DRAWING			

AS BUILT DRAWING

इंजीनियर्स इंडिया लिमिटेड ENGINEERS INDIA LIMITED (A Govt. of India Undertaking)

BHARAT OMAN REFINERIES LIMITED

ESSAR ESSAR CONSTRUCTIONS (INDIA) LIMITED

बीना रिफायनरी परियोजना (वाडीनार बीना पाइपलाइन) — BINA REFINERY PROJECT (VADINAR-BINA PIPELINE)

एलाइनमेन्ट शीट वाडीनार से बीना चेनेज 232.853 से 237.853 कि.मी. — ALIGNMENT SHEET VADINAR TO BINA CHAINAGE 232.853 KM TO 237.853 KM

SCALE	JOB NO.	UNIT	DEPT.	SECT.	DWG. NO.	REV.
AS SHOWN	12055	04	16	71	1247	0