

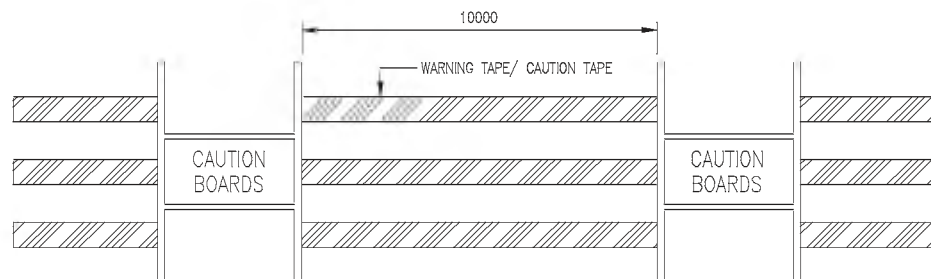


TECHNICAL SCOPE FOR PE LAYING & DOMESTIC / COMMERCIAL/INDUSTRIAL PNG INSTALLATIONS

GGL STANDARD DRAWINGS

S. No.	DRAWING DESCRIPTION	DRAWING NO.
6.01	Barricading	GGL-TS/PE-TYP/BARRICADING-001
6.02	Caution Board	GGL-TS/PE-TYP/CAUTION BOARD-002
6.03	Standard Sketch For Trench Cross Section With Pipeline	GGL-TS/PE-TYP/SKE FOR TREN-003
6.04	Typical Trench Dimension For Parallel PE Pipeline	GGL-TS/PE-TYP/TREN DIM-004
6.05	PE RCC Route Marker	GGL-TS/PE-TYP/ROUTE MARKER -025
6.06	Pole Marker With Foundation	GGL-TS/PE-TYP/POLE MARKER-006
6.07	Valve Chamber Pole Marker	GGL-TS/PE-TYP/V/C POLE MARKER-007
6.08	Village Marker	GGL-TS/PE-TYP/VILLAGE MARKER-008
6.09	Typical U/G Cable Crossing Details	GGL-TS/PE-TYP/CABLE CROSSING-009
6.10	Road/Highway Cased Crossing For PE Pipe	GGL-TS/PE-TYP/CASED CROSSING-010
6.11	Specification For Wood Screws For Clamping	GGL-TS/PE-TYP/WOOD SCREWS-011
6.12	Typical Details For GI-PE Transition Fitting	GGL-TS/PE-TYP/GI PE TF-012
6.13	Typical details for 3mm thk PTFE coating brass tool	GGL-TS/PE-TYP/PTFE COATING -013
6.14	Typical Details For GI Clamp	GGL-TS/PE-TYP/GI CLAMP-014
6.15	Typical Details For Meter Adaptor G 1.6	GGL-TS/PE-TYP/ADAPTOR(1.6)-015
6.16	Typical Details For RCC Guard	GGL-TS/PE-TYP/RCC GAURD-016
6.17	Typical Valve Chamber With FRP Cover for PE Network	GGL-TS/PE-TYP/FRP V/C-026
6.18	Typical Service Regulator Foundation Details	GGL-TS/PE-TYP/SERVICE REGULATOR-018
6.19	Schematic Of Ground Connection For Domestic Consumer Connection	GGL-TS/PE-TYP/NG DISTRIBUTION-019
6.20	Typical Domestic Connection Layout of NG Distribution	GGL-TS/PE-TYP/NG DISTRIBUTION-020
6.21	Typical Domestic Connection Layout of NG Distribution	GGL-TS/PE-TYP/NG DISTRIBUTION-021
6.22	Scheme Of Gas Supply To Commercial Consumer	GGL-TS/PE-TYP/COMM CONSUMER-023
6.23	Typical Natural Gas Installation For Commercial Consumers	GGL-TS/PE-TYP/COMM CUSTOMER-024
6.24	Typical Valve Chamber With Sleeper for PE Network	GGL-TS/PE-TYP/SLEEPER V/C-027
6.25	Rubber Hose Clip	GGL-TS/DOMESTIC INSTALLATION-TYP-001
6.26	Safety Bollard for SRM	GGL-TS/PE-TYP/CONC. BOLLARDS-028


6.27	Typical drawing for Adaptor G6, G10 & G16(OLD & NEW)	GGL-TS/ADAP, G6 G10 G16/TYP-001
6.28	Typical drawing for Adaptor G25 (OLD & NEW)	GGL-TS/ADAPTOR G25/TYP-001
6.29	Typical details of RCC Pre-cast Valve Chamber with Frame & Cover	GGL-PE/PNG-DWG-017
6.30	Typical arrangement of Anaconda in Riser With Lateral system	-

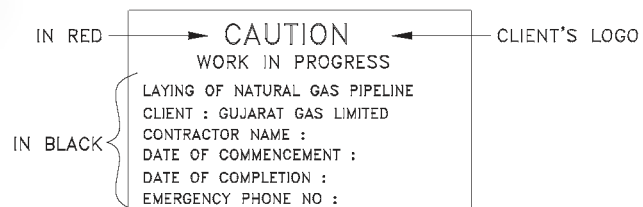


SCHEMATIC LAYOUT OF CAUTION BOARDS AND BARRICADING


NOTE :-

- 1) ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE STATED.
- 2) FOR DETAILS OF CAUTION BOARDS REFER DRAWING NO. GGL-TS/PE-TYP/CAUTION BOARD-002

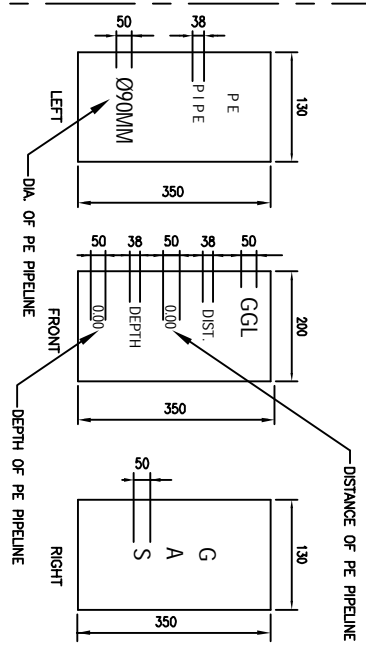
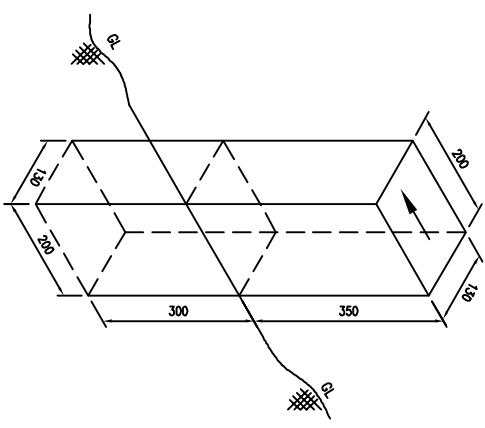
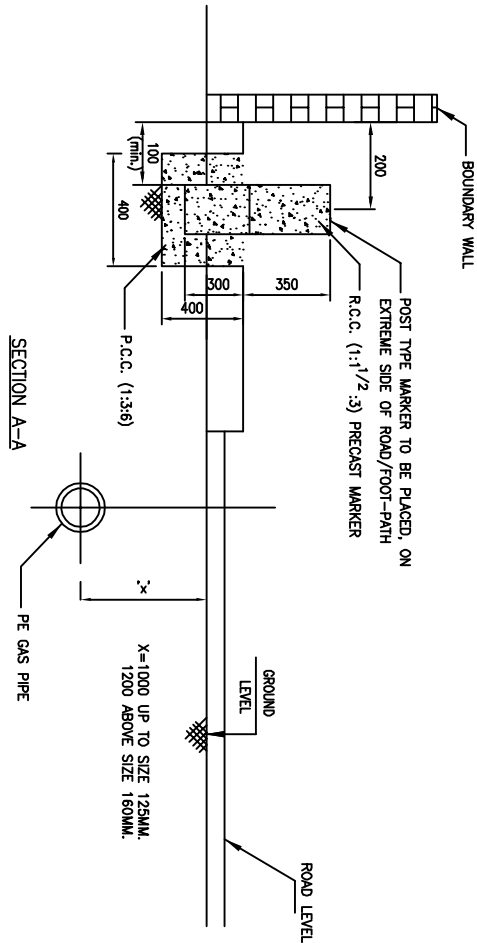
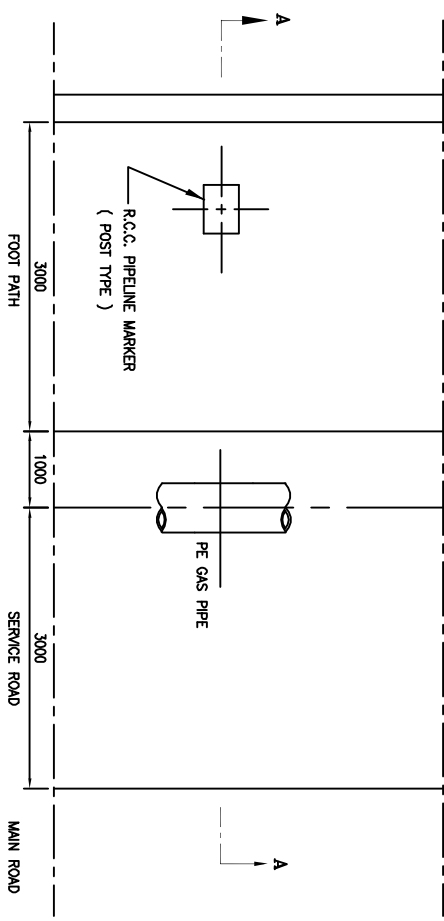
NO.	DATE	REVISION	REV.BY.	SIGN.
SIGN.	PREPARED BY	CHECKED BY	APPROVED BY	
NAME:	AJP	NJA	DL	
DATE	11.08.2017			
FOR	GGL	GGL	GGL	
 GUJARAT GAS LIMITED GUJARAT GAS TECHNICAL SERVICES				
TYPICAL DRAWING FOR PIPELINE CONSTRUCTION				
PROJECT NAME: TYPICAL DRAWING				
TITLE: BARRICADING				
SCALE	SHEET	DRAWING NO.		REV.
NTS	1 OF 1	GGL-TS/PE-TYP/BARRICADING-001		0



1) ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE STATED.

NO.	DATE	REVISION				REV.BY.	SIGN.		
PREPARED BY		CHECKED BY		APPROVED BY					
SIGN.	AJP		NJA		DL				
DATE	11.08.2017								
FOR	GGL		GGL		GGL				
 GUJARAT GAS LIMITED GUJARAT GAS TECHNICAL SERVICES									
TYPICAL DRAWING FOR PIPELINE CONSTRUCTION									
PROJECT NAME: TYPICAL DRAWING									
TITLE: CAUTION BOARD									
SCALE	SHEET		DRAWING NO.				REV.		
NTS	1 OF 1		GGL-75/PE-TIP/CAUTION BOARD-002				0		

PE ROUTE MARKER



350	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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NOTE :-

1) ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE STATED

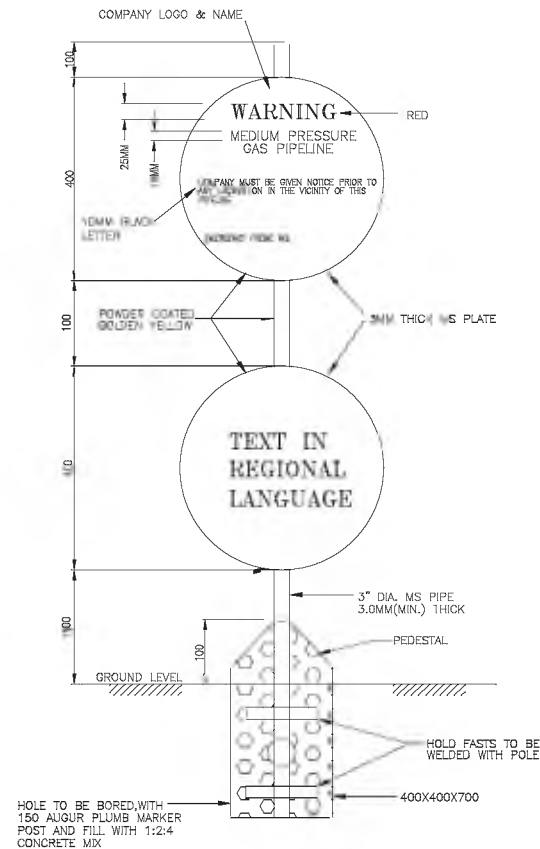
2) * R.C.C. 1:1¹/₂:3 PRECAST MARKER WITH 6 MM M.S. BAR INCL. EXCAVATION OF SIZE 400 L x 400 H PIT PLACING POST IN POSITION (IN PLUMB) AND REMAINING EXCAVATED PORTION TO BE FILLED WITH P.C.C. 1:3:6 CURING ETC. COMPLETE EXCESS EARTH SHALL BE SPADED OUT.

NO.	DATE	REVISION	REV. BY.	SIGN.
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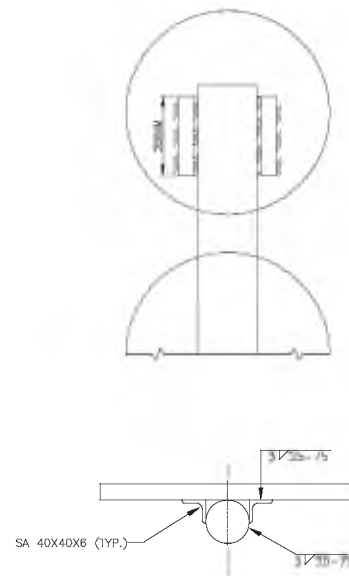
GUJARAT GAS LIMITED

GUJARAT GAS TECHNICAL SERVICES

TITLE: PE ROUTE MARKER	SHEET: 1 OF 1	DRAWING NO. GGL-TS/PE-TYP/ROUTE MARKER-025	REV. 01
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FIXING DETAILS



NOTE :-

- 1) ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE STATED.
- 2) MARKING AND SIZES ARE ONLY INDICATIVE AND ARE SUBJECT TO THE APPROVAL BY OWNER/OWNER'S REPRESENTATIVE BEFORE FABRICATION.
- 3) SCHEME FOR POWDER COATING AND COLOURING, ONE COAT OF PRIMER & TWO COATS OF SPECIFIED PAINTS. ALL LETTERS EXCEPT "WARNING" TO BE PAINTED BLACK.
- 4) APPROVAL OF WARNING MARKER DESIGN SHALL BE OBTAINED BEFORE THE COMMENCEMENT OF WORK.
- 5) UNDERGROUND STEEL STRUCTURE EXCEPT THAT EMBEDDED IN CONCRETE COAT TAR EPOXY MIN 300 MICRON THICK.
- 6) COLOUR SCHEME FOR GUJARAT GAS LTD. MONOGRAM SHALL BE AS DIRECTED BY COMPANY.
- 7) SIGN PLATE IN REGIONAL LANGUAGE SHALL BE PREPARED BY CONTRACTOR ON SIMILAR LINES AND APPROVED BY ENGG. IN CHARGE.

NO.	DATE	REVISION	REV.BY.	SIGN.

SIGN.	PREPARED BY	CHECKED BY	APPROVED BY
	AJP	NJA	DL
DATE	11.08.2017		
FOR	GGL	GGL	GGL



TYPICAL DRAWING FOR PIPELINE CONSTRUCTION			
PROJECT NAME: TYPICAL DRAWING			
TITLE: POLE MARKER WITH FOUNDATION FOR PE PIPELINE			
SCALE	SHEET	DRAWING NO.	REV.
NTS	1 OF 1	GGL-TS/PE-TYP/POLE MARKER-008	0



ISA 75X75X5 THK.

100MM STITCH FILLET WELDING

3MM THK.

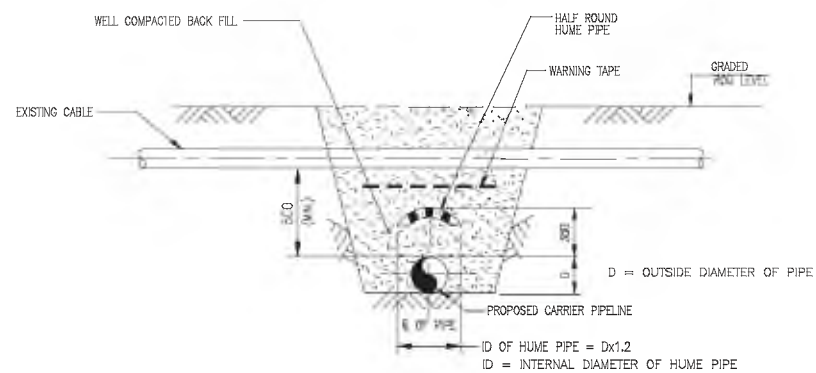
SECTION A-A

NO.	DATE	REVISION	REV.BY.	SIGN.

	PREPARED BY	CHECKED BY	APPROVED BY
SIGN.			
NAME	AJP	NJA	DI.
DATE	11.08.2017		
FOR	GGL	GGL	GGL




SCALE	SHEET	DRAWING NO.	REV.
NTS	1 OF 1	GGL-TS/PE-TYP/VILLAGE MARKER-008	0

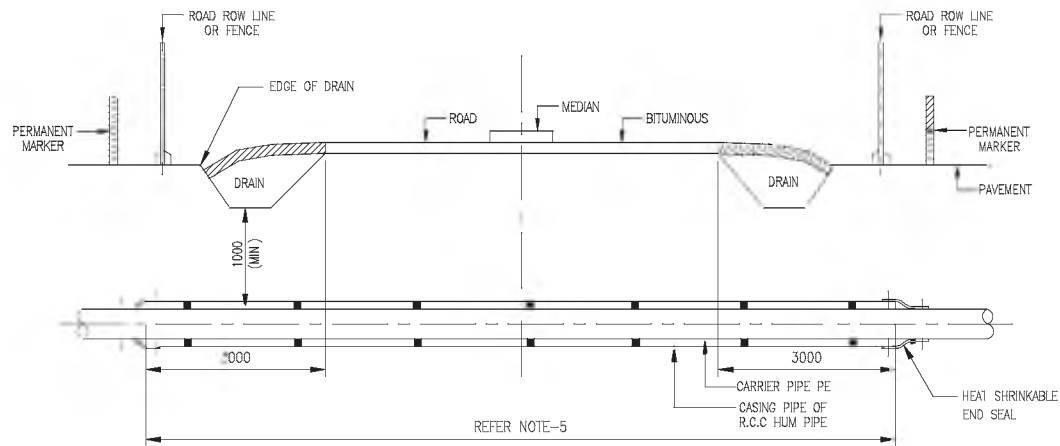


SECTION X-X

- 1) ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE STATED.
- 2) ALL MODIFIED PIPELINE WARNING SIGN SHALL BE INSTALLED CLOSE TO THE CROSSING.
- 3) CROSSING SHALL BE DONE AS PER GGL GUIDELINE AND TO THE SATISFACTION OF CONCERNED AUTHORITIES.

NO.	DATE	REVISION	REV.BY, SIGN.
SIGN.	PREPARED BY	CHECKED BY	APPROVED BY
NAME	AJP	NJA	DI.
DATE	16.11.2016		
FOR	GGL	GGL	GGL
 GUJARAT GAS LIMITED GUJARAT GAS TECHNICAL SERVICES			
TYPICAL DRAWING FOR PIPELINE CONSTRUCTION			
PROJECT NAME: TYPICAL DRAWING			
TITLE: TYPICAL UNDER GROUND CABLE CROSSING DETAILS			
SCALE	SHEET	DRAWING NO.	RE
NTS	1 OF 1	GGL-TS/PE-TYP/CABLE CROSSING-009	D


ROAD/HIGHWAY CROSSING PE PIPELINE (WITH CASING)

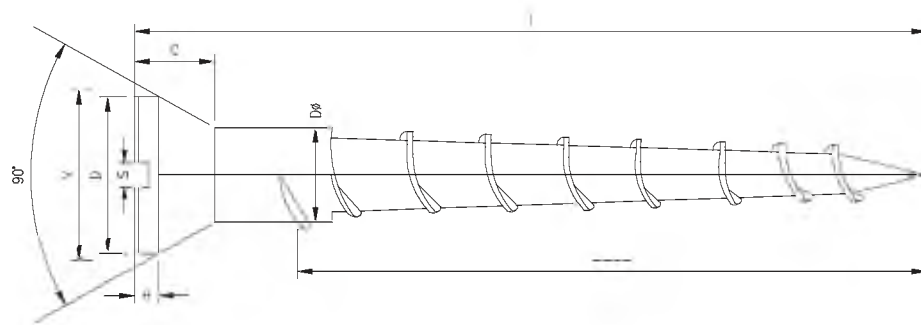


TYPICAL SECTION

NOTE :-


- 1) ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE STATED.
- 2) ROAD/HIGHWAY CROSSING SHALL BE RESTORED TO ORIGINAL CONDITION TO THE ENTIRE SATISFACTION OF OWNER AND CONCERNED AUTHORITIES HAVING JURISDICTION.
- 3) REFER API RP 1102 FOR OTHER DESIGN AND INSTALLATION REQUIREMENT.
- 4) ANGLE OF INTERSECTION BETWEEN PIPELINE AND THE ROAD/HIGHWAY SHALL BE CLOSE TO 90° AS POSSIBLE BUT IN NO CASE LESS THAN 30°
- 5) CONTRACTOR SHALL VERIFY THE ACTUAL DIMENSIONS WITH RESPECT TO SURVEY DETAILS FOR EACH ROAD/HIGHWAY CROSSING AND PREPARE DETAILED DRAWING FOR INDIVIDUAL CROSSING ENGINEER IN CHARGE APPROVAL BEFORE COMMENCEMENT OF CONSTRUCTION.
- 6) IN CASE OF OPEN CUT USE HUME PIPE AND INCASE OF TRENCHLESS METHOD USE STEEL PIPE OR AS PER AUTHORITY REQUIREMENT. CASING ENDS TO BE CLOSED.
- 7) CASING IS APPLICABLE AS PER AUTHORITY REQUIREMENT.

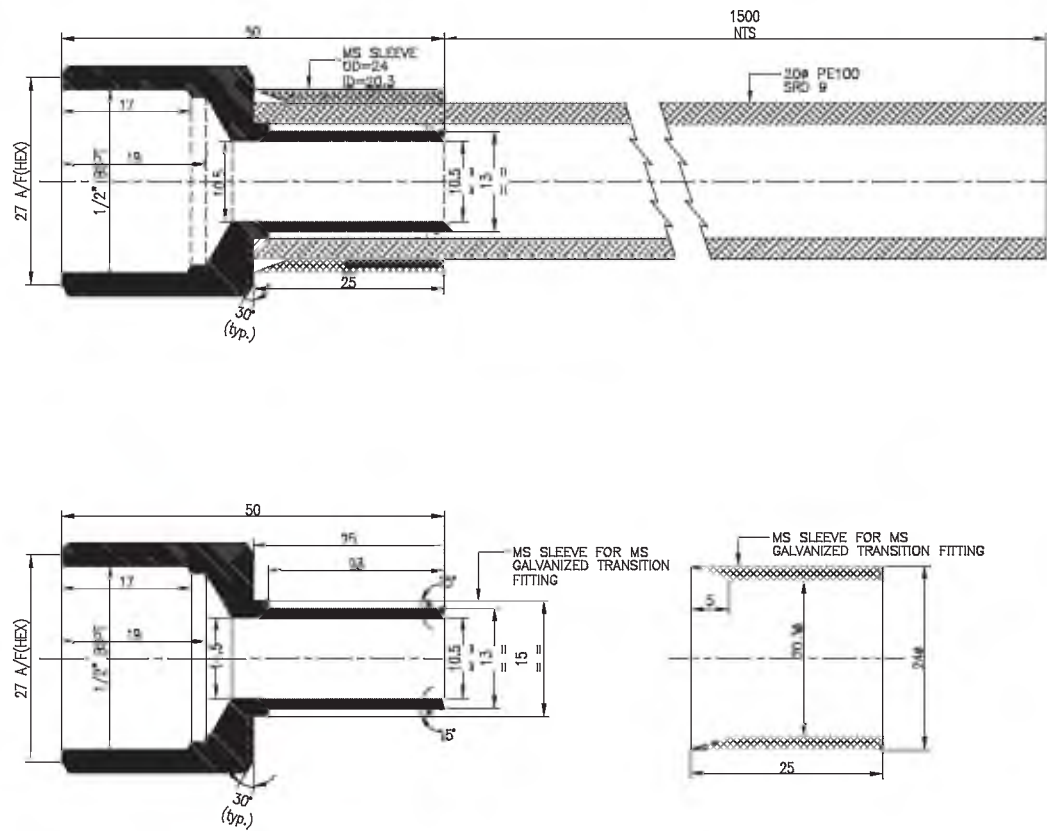
NO.	DATE	REVISION	REV.BY.	SIGN.
	PREPARED BY	CHECKED BY	APPROVED BY	
SIGN.				
NAME	AJP	NJA	DL	
DATE	16.11.2016			
FOR	GGL	GGL	GGL	
 GUJARAT GAS LIMITED GUJARAT GAS TECHNICAL SERVICES				
TYPICAL DRAWING FOR PIPELINE CONSTRUCTION				
PROJECT NAME: TYPICAL DRAWING				
TITLE: ROAD/HIGHWAY CASED CROSSING PE PIPELINE				
SCALE	SHEET	DRAWING NO.		REV.
NTS	1 OF 1	06L-TS/PE-TYP/CASED CROSSING-010		0



SCREW NO.	Dφ			PITCH	V	D		C	S		H		
	NOM.	MAX.	MIN.			MAX.	MIN.	MAX.	MAX.	MIN.	MAX.	MIN.	
7	3.81	3.94	3.68	1.59	8.2	7.62	7.34	2.16	1.27	1.11	1.14	0.84	35

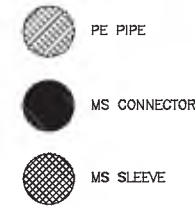
- NOTE :-
- 1) ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE STATED.
 - 2) THE DIMENSIONS FOR "V" ARE THEORETICAL DIAMETER OF HEAD TO SHARP CORNERS AND ARE GIVEN FOR DESIGN PURPOSE ONLY.
 - 3) DIMENSIONS TOLERANCE WILL BE AS SPECIFIED IN IS 6760-1972.

NO.	DATE	REVISION	REV.BY.	SIGN.	
	PREPARED BY	CHECKED BY	APPROVED BY		
SIGN.					
NAME:	AJP	NJA	DL		
DATE	18.11.2016				
FOR	GGL	GGL	GGL		
 GUJARAT GAS LIMITED GUJARAT GAS TECHNICAL SERVICES					
TYPICAL DRAWING FOR PIPELINE CONSTRUCTION					
PROJECT NAME: TYPICAL DRAWING					
TITLE: SPECIFICATION FOR WOOD SCREWS FOR CLAMPING					
SCALE	SHEET	DRAWING NO.	REV.		
NTS	1 OF 1	GGL-TS/PE-TYP/WOOD SCREWS-011	0		



NOTE :-
1) ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE STATED.

LEGEND:-



NO.	DATE	REVISION	REV.BY.	SIGN.

SIGN.	PREPARED BY	CHECKED BY	APPROVED BY
NAME	AJP	NJA	DL
DATE	16.11.2016		
FOR	GGL	GGL	GGL

GUJARAT GAS LIMITED
GUJARAT GAS TECHNICAL SERVICES

TYPICAL DRAWING FOR PIPELINE CONSTRUCTION


PROJECT NAME: TYPICAL DRAWING

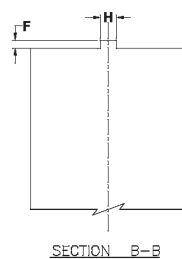
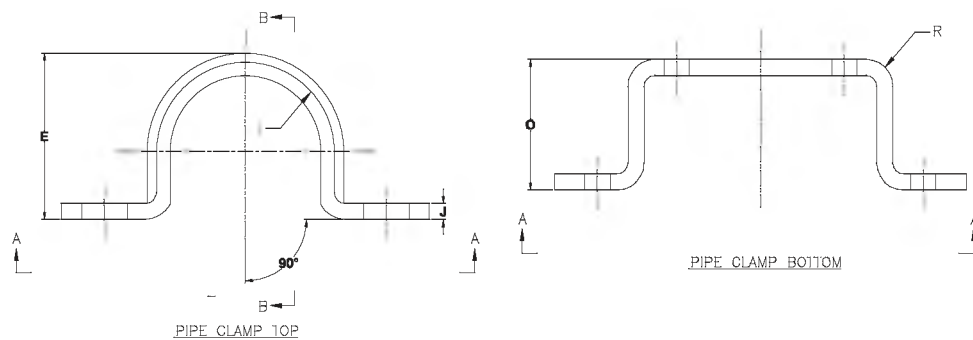
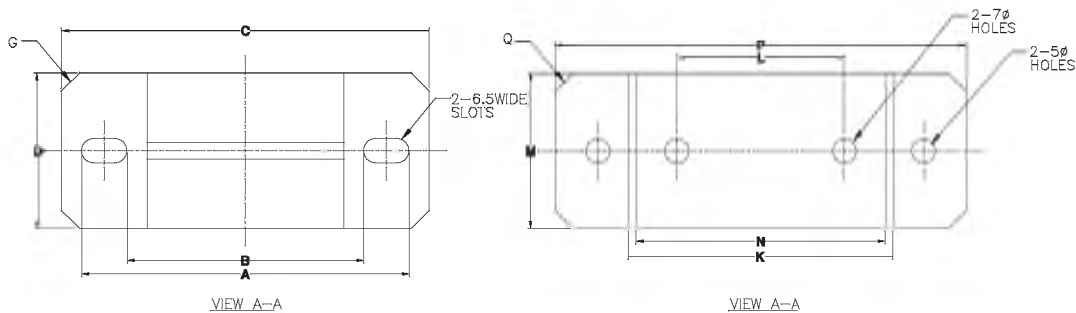
TITLE: TYPICAL DETAILS OF GL/PE TRANSITION FITTINGS

SCALE	SHEET	DRAWING NO.	REV.
NTS	1 OF 1	GGL-TS/PE-TYP/GI PE TF-012	0



1) ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE STATED.

NO.	DATE	REVISION	REV.BY.	SIGN.
	PREPARED BY	CHECKED BY	APPROVED BY	
SIGN.				
NAME:	AJP	NJA	DL	
DATE	11.08.2017			
FOR	GGL	GGL	GGL	
 GUJARAT GAS LIMITED				
GUJARAT GAS		TECHNICAL SERVICES		
TYPING DETAIL FOR PIPELINE CONSTRUCTION				
PROJECT NAME: TYPICAL DRAWING				
TITLE: TYPICAL DETAILS FOR 3mm THK PTFE COATING-013				
BORING TOOL				
SCALE	SHEET	DRAWING NO.		
NTS	1 OF 1	GGL-TS/PE-TYP/PTFE COATING-013		
				REV.



DIMENSION TABLE																		
CLAMP SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
1"	66	46	72	15	34	1.2	1.0	2.0	16	1.2	108	56	20	75	25	122	2.0	2.0
1/2"	54	34	60	15	22	1.2	1.0	2.0	11.5	1.2	96	44	20	60	25	110	2.0	2.0

NOTE :-
 1) ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE STATED.
 2) TPI - THREAD PER INCH
 3) ALL TOLERANCE ARE $\pm 0.2\text{MM}$, UNLESS SPECIFIED EXPLICITLY.

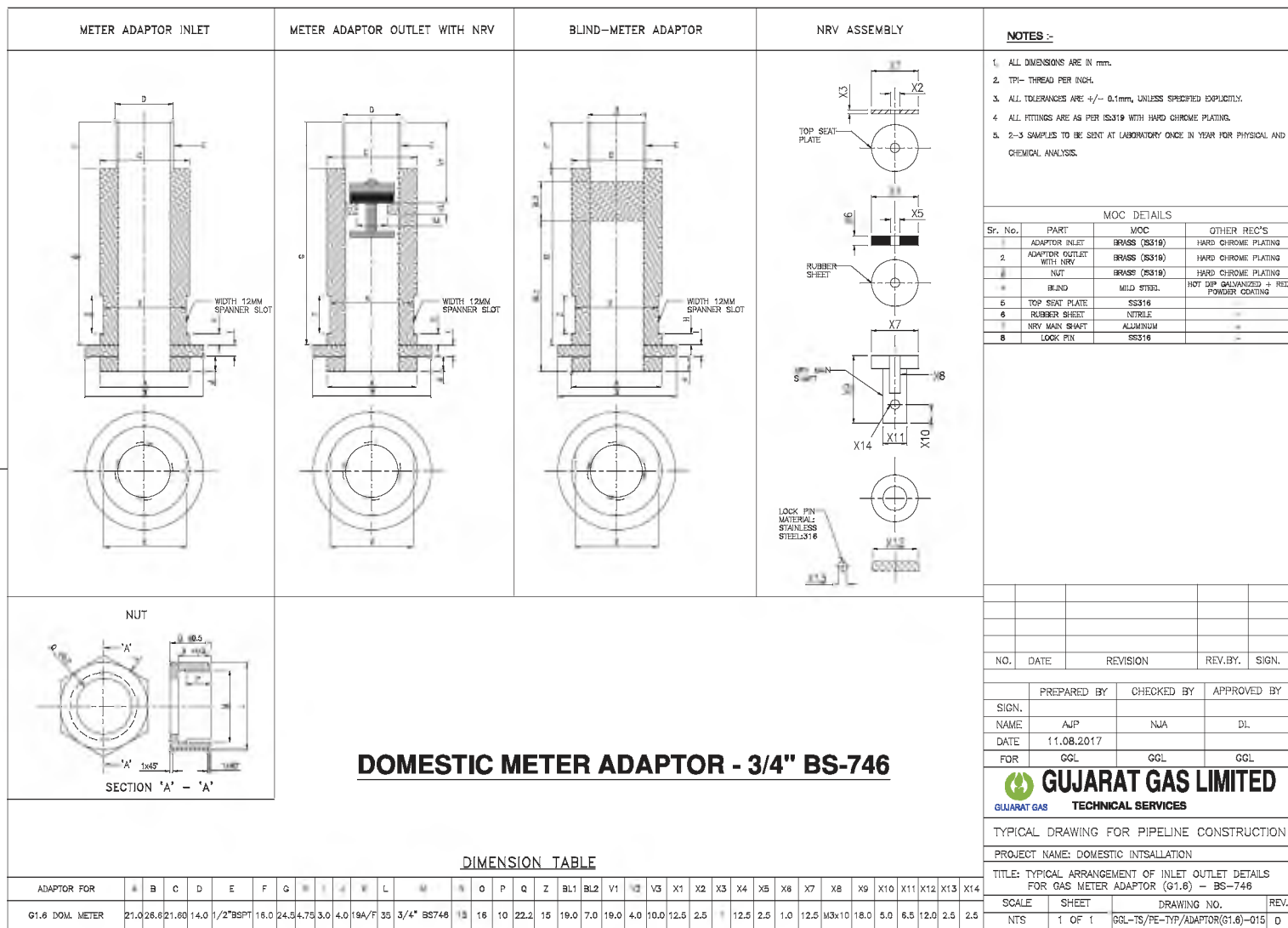
MATERIAL SPECIFICATION		
PART	MATERIAL	REQUIREMENT
PIPE CLAMP	MILD STEEL	HOT DIP GALVANIZED WITH YELLOW POWDER COATING

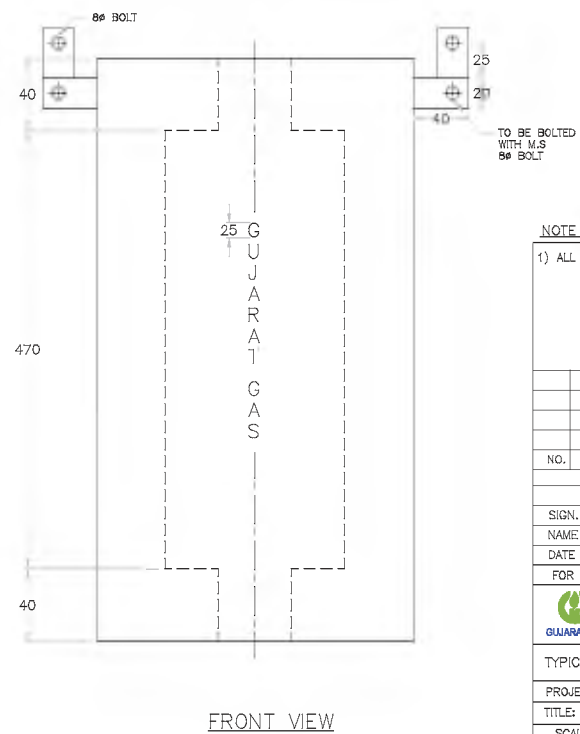
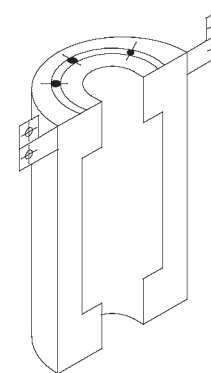
NO.	DATE	REVISION	REV.BY.	SIGN.

PREPARED BY	CHECKED BY	APPROVED BY
SIGN.		
NAME	AJP	NJA
DATE	11.08.2017	
FOR	GGL	GGL


GUJARAT GAS LIMITED
 GUJARAT GAS TECHNICAL SERVICES

TYPICAL DRAWING FOR PIPELINE CONSTRUCTION			
PROJECT NAME: TYPICAL DRAWING			
TITLE: TYPICAL DETAILS FOR GI CLAMP			
SCALE	SHEET	DRAWING NO.	REV.
NTS	1 OF 1	GGL-TS/PE-TYP/GI CLAMP-014	0



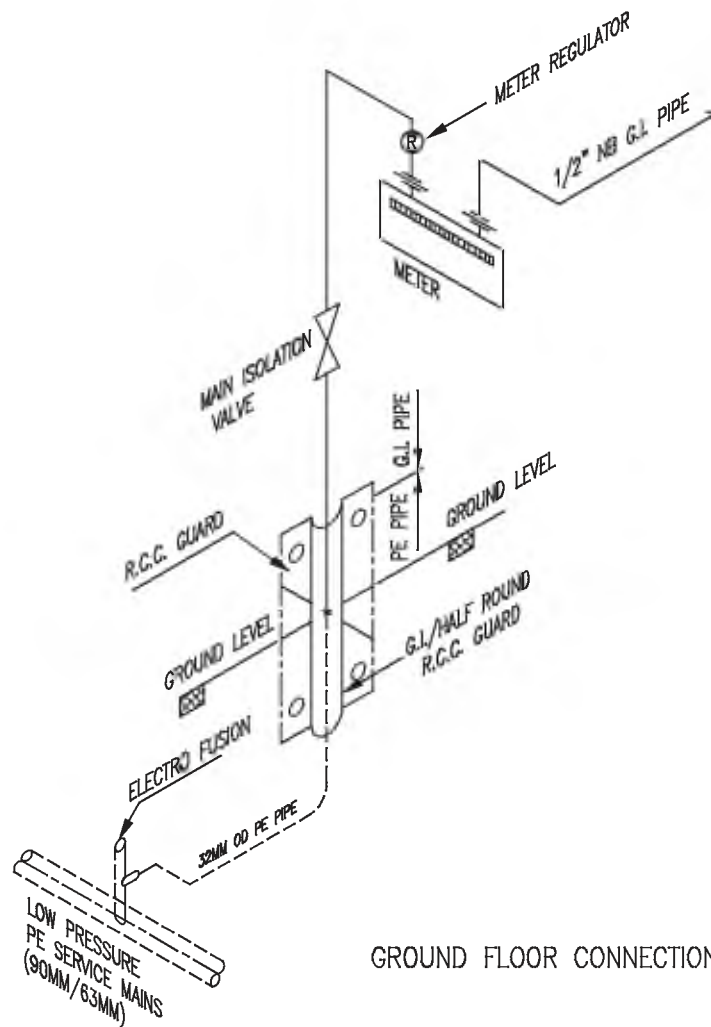


1) ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE STATED.

NO.	DATE	REVISION	REV.BY.	SIGN.	
	PREPARED BY	CHECKED BY	APPROVED BY		
SIGN.					
NAME	AJP	NJA	DL		
DATE	11.08.2017				
FOR	GGL	GGL	GGL		
 GUJARAT GAS LIMITED GUJARAT GAS TECHNICAL SERVICES					
TYPICAL DRAWING FOR PIPELINE CONSTRUCTION					
PROJECT NAME: TYPICAL DRAWING					
TITLE: TYPICAL DETAILS FOR RCC GUARD					
SCALE	SHEET	DRAWING NO.			REV.
NTS	1 OF 1	GGL-TS/FE-TYP/RCC GUARD-018			



SCALE	SHEET	DRAWING NO.	REV.
NTS	1 OF 1	GGL-TS/PE-TYP/FRP V/C -026	0



GROUND FLOOR CONNECTION

NOTE :-

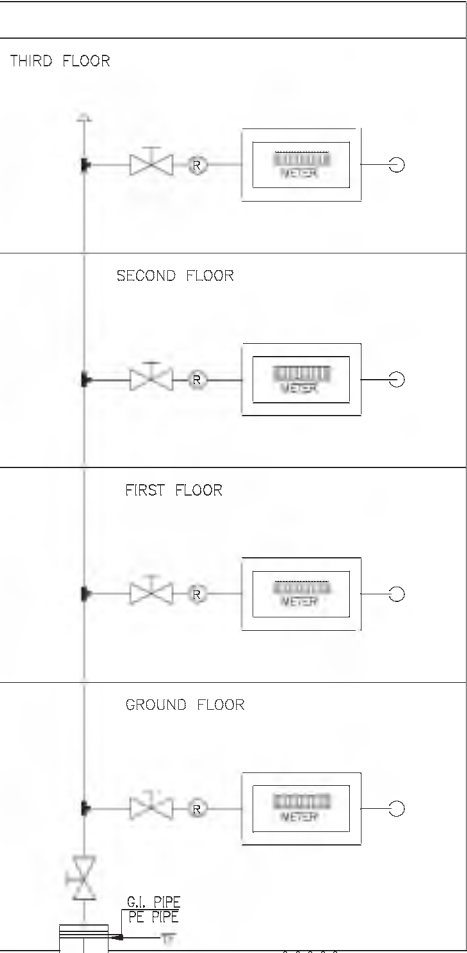
- 1) ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE STATED.
- 2) FOR DETAILS REFER PE PNG GUIDELINE

NO.	DATE	REVISION	REV.BY.	SIGN.

	PREPARED BY	CHECKED BY	APPROVED BY
SIGN.			
NAME	AJP	NJA	DL
DATE	11.08.2017		
FOR	GGL	GGL	GGL

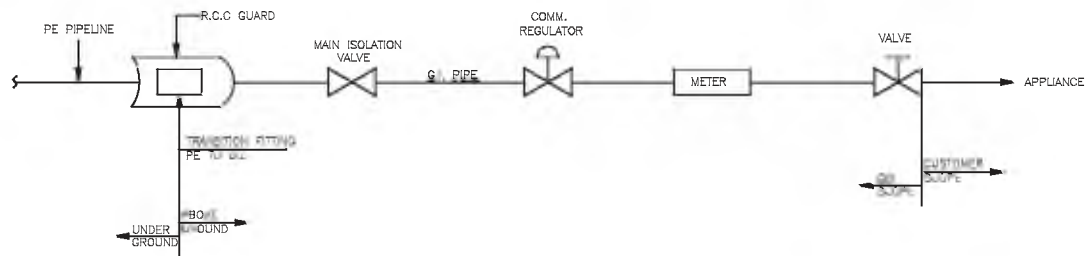


TYPICAL DRAWING FOR PIPELINE CONSTRUCTION			
PROJECT NAME: TYPICAL DRAWING			
TITLE: TYPICAL DOMESTIC CONNECTION LAYOUT OF NG DISTRIBUTION			
SCALE	SHEET	DRAWING NO.	REV.
NTS	1 OF 1	GG-15/PE-TYP/NG DISTRIBUTION -019	0



- 1) ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE STATED.
- 2) TAPPING SHALL BE PROVIDED AT EACH FLOOR AT THE TIME OF RISER INSTALLATION.

NO.	DATE	REVISION	REV.BY.	SIGN.	
	PREPARED BY	CHECKED BY	APPROVED BY		
SIGN.					
NAME	AJP	NJA	DL		
DATE	11.08.2017				
FOR	GGL	GGL	GGL		
GUJARAT GAS LIMITED					
GUJARAT GAS TECHNICAL SERVICES					
PROJECT DRAWING FOR PIPELINE CONSTRUCTION					
TITLE NAME: TYPICAL DRAWING					
TITLE: DOMESTIC CONNECTION LAYOUT OF NG DISTRIBUTION					
SCALE	SHEET	DRAWING NO.	REV.		
NTS	1 OF 1	GGL-TS/PE-TYP/NG DISTRIBUTION-020			



SCHEME OF NATURAL GAS SUPPLY TO COMMERCIAL CONSUMERS

NOTE :-

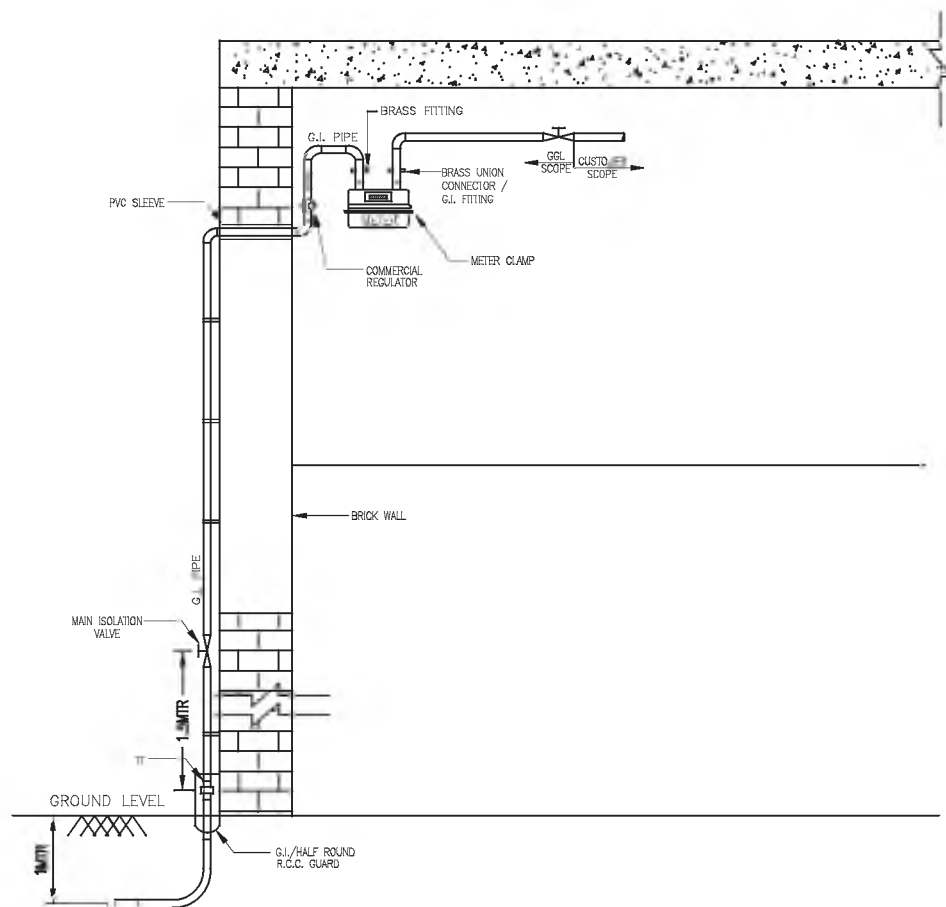
- 1) ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE STATED.
- 2) SIZE OF LINE, VALVE ETC. SHALL BE DECIDED AT THE OF EXECUTION AS PER THE INSTRUCTIONS OF OWNER/ OWNERS REPRESENTATIVE.

NO.	DATE	REVISION	REV.BY.	SIGN.

	PREPARED BY	CHECKED BY	APPROVED BY
SIGN.			
NAME	AJP	NJA	DL
DATE	11.08.2017		
FOR	GGL	GGL	GGL



TYPICAL DRAWING FOR PIPELINE CONSTRUCTION			
PROJECT NAME: TYPICAL DRAWING			
TITLE: SCHEME OF GAS SUPPLY TO COMMERCIAL CONSUMERS			
SCALE	SHEET	DRAWING NO.	REV.
NTS	1 OF 1	GG-15/PE-TYP/COMM CONSUMER-023	0



NOTE :-

- 1) ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE STATED.
- 2) THE SIZE SHOWN IN THE DRAWING ARE TENTATIVE.

NO.	DATE	REVISION	REV.BY.	SIGN.

	PREPARED BY	CHECKED BY	APPROVED BY
SIGN.			
NAME:	AJP	NJA	DL
DATE	11.08.2017		
FOR	GGL	GGL	GGL



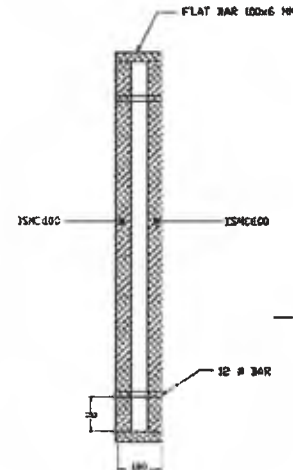
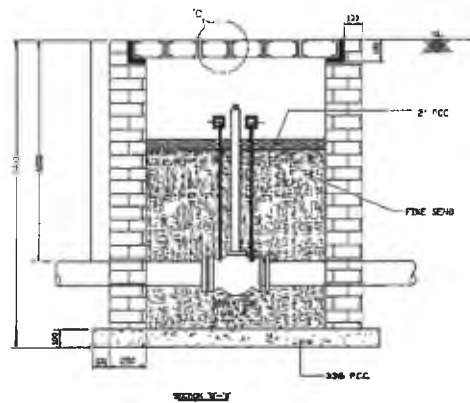
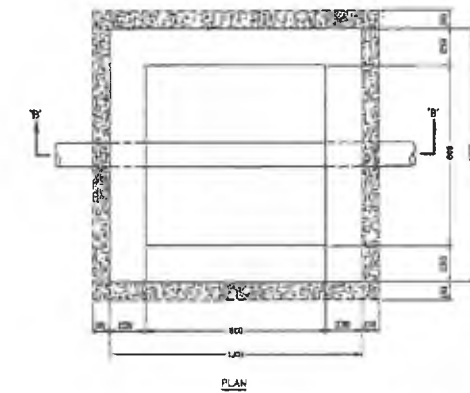
GUJARAT GAS TECHNICAL SERVICES

TYPICAL DRAWING FOR PIPELINE CONSTRUCTION

PROJECT NAME: TYPICAL DRAWING

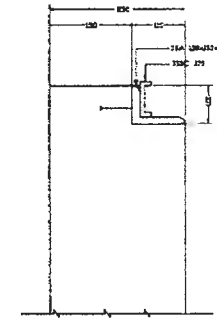
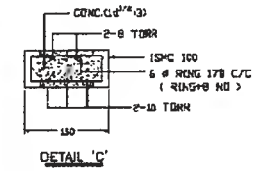
TITLE: NATURAL GAS INSTALLATION FOR COMMERCIAL CUSTOMER

SCALE	SHEET	DRAWING NO.	REV.
NTS	1 OF 1	GGL-TS/PE-TYP/DOWN CUSTOMER-024	0



SLEEPER SIZE
 LENGTH = 1200 mm
 WIDTH = 150 mm
 THICK = 120 mm
 FLAT BAR SIZE IS 100mm x 6mm x 5500 mm
 FRAME SIZE = 1400 x 1400 mm

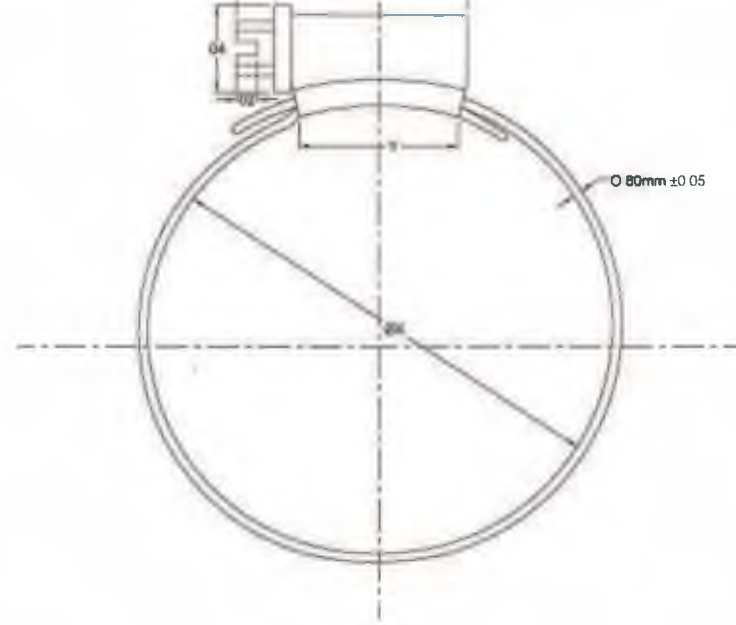
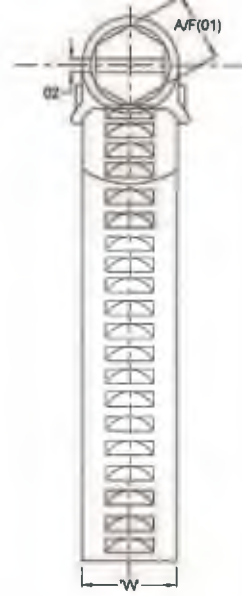
PE VALVE CHAMBER WITH SLEEPERS



GUJARAT GAS LIMITED
 GUJARAT GAS TECHNICAL SERVICES

TYPICAL DRAWING FOR PIPELINE CONSTRUCTION			
PROJECT NAME: TYPICAL DRAWING			
TITLE: VALVE CHAMBER WITH SLEEPER FOR PE NETWORK			
SCALE	SHEET	DRAWING NO.	REV.
NTS	1 OF 1	GGL-TS/PE-TYP/SLEEPER V/C -027	0

				PREPARED BY	CHECKED BY	APPROVED BY
SIGN.						
NAME				AJP	NJA	DL
DATE				11.08.2017		
FOR				GGL	GGL	GGL
NO.	DATE	REVISION	REV.BY.	SIGN.		



DIA.X		W ±0.5	Z MAX.	Y MAX.	Free Movement	Application Torque on solid mendril Nm	Failure Torque on solid mendril Nm
MIN.	MAX.						
11	16	9.0	25	14	Hands Free	3.40	4.50

MATERIAL :-

BOLT : M.S. Wire Grade-IS 7887-GR-3
 HOUSING : Sheet Grade-IS 1986/D
 BAND : C40 or Equivalent

BOLT DETAILS :-

01) BOLT HEAD A/F : 7.00 -0.15
 02) SLOT WIDTH & DEPTH : 2.00 & 2.50 MAX
 03) HEAD LENGTH : 4.50 - 5.50
 04) WASHER DIA. : 10.40 - 10.60
 05) WASHER THIK. : 1.80 - 2.10

FINISH :- ZINC ELECTRO PLATING YELLOW
 PASSIVATION WITH 8 MICRONS MINIMUM

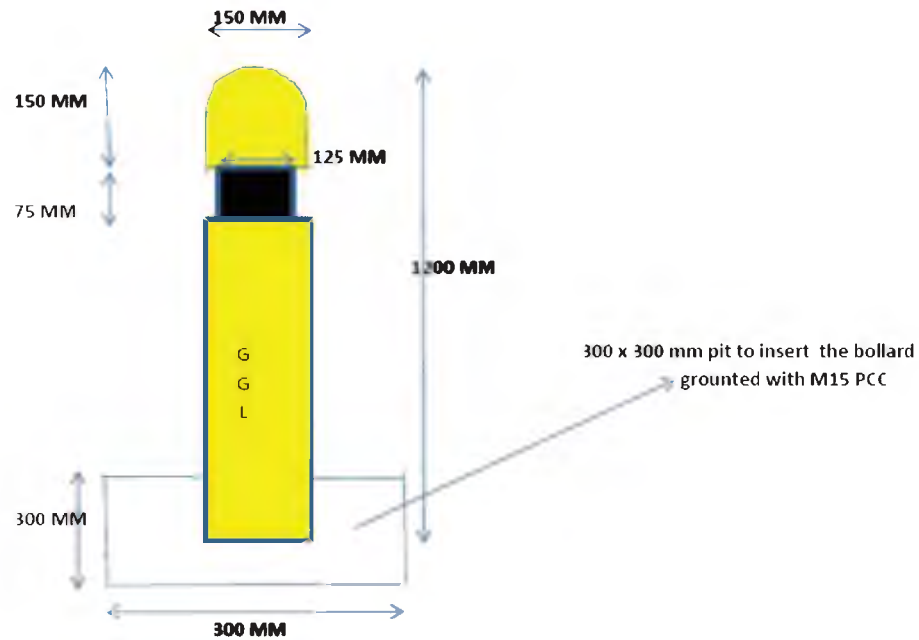
NOTES

- ALL DIMENSIONS ARE IN MM.
- REMOVE SHARP CORNERS



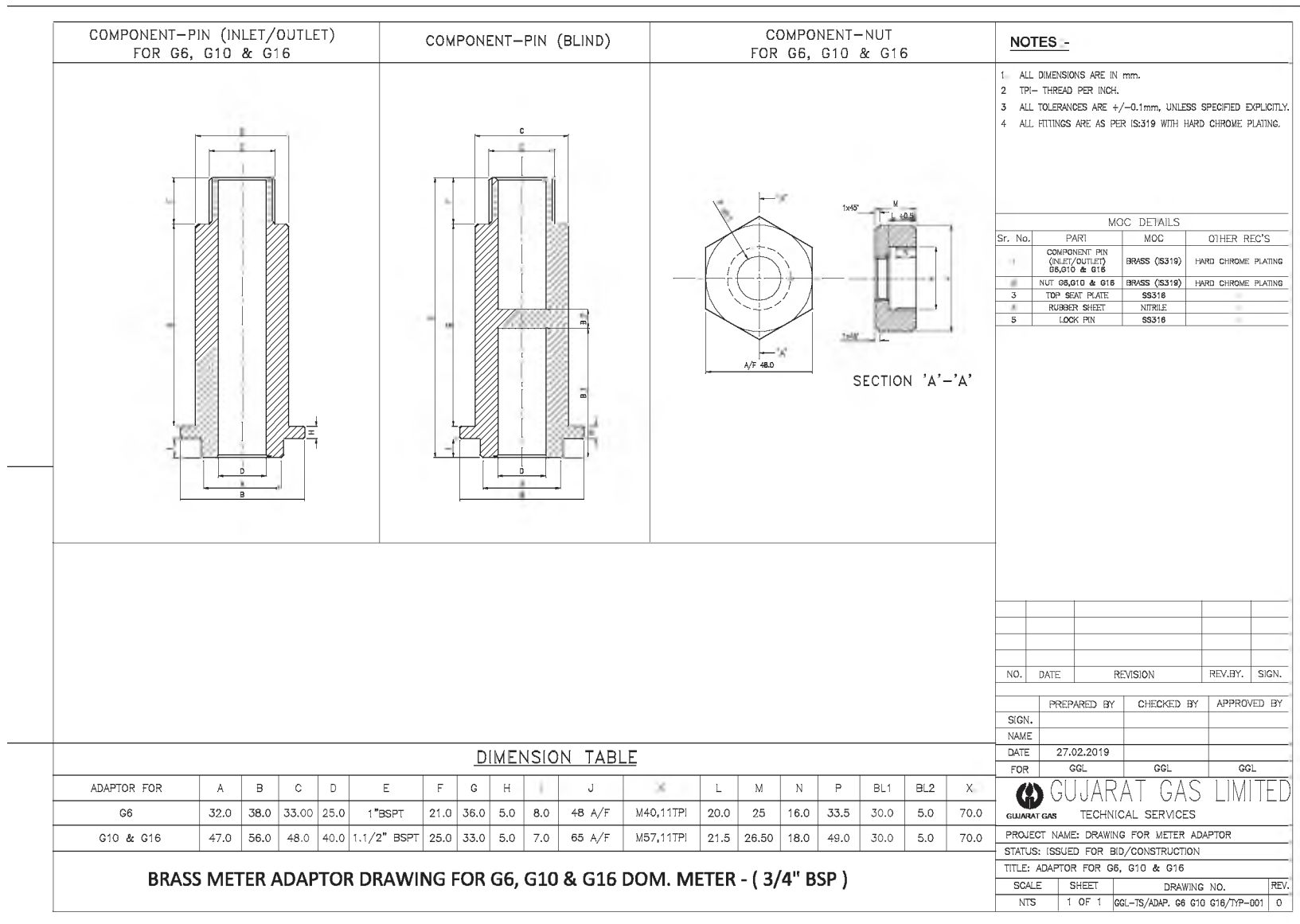
GUJARAT GAS LIMITED

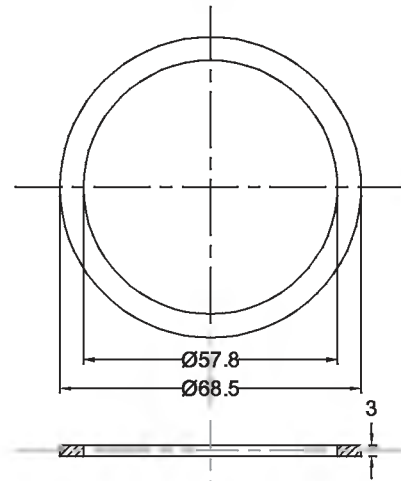
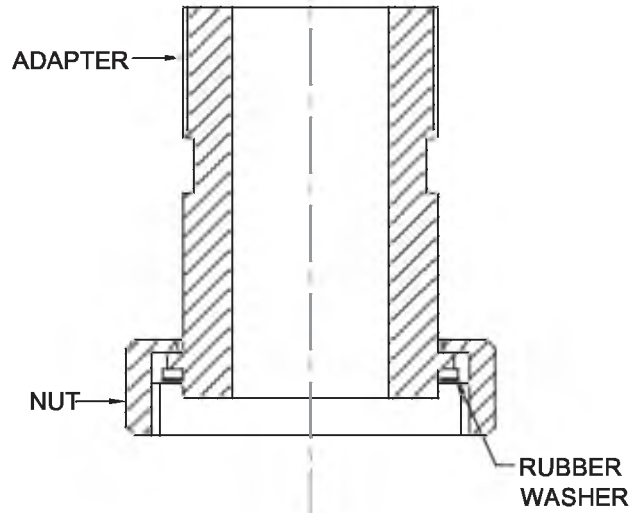
Design of Concret Bollards



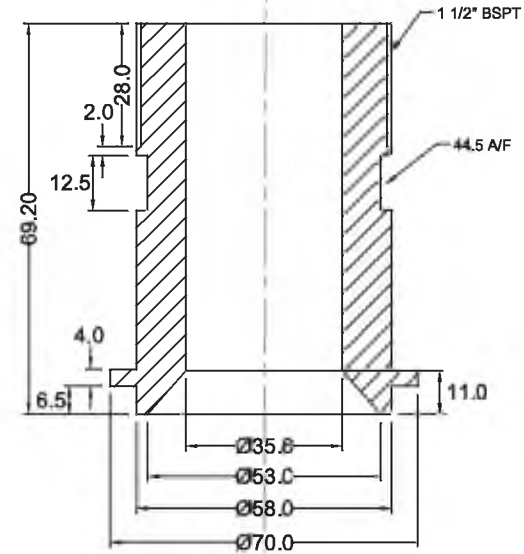
TYPICAL DRAWING FOR PIPELINE CONSTRUCTION			
PROJECT NAME: TYPICAL DRAWING			
TITLE: DESIGN OF CONCRET BOLLARDS			
SCALE	SHEET	DRAWING NO.	REV.
NTS	1 OF 1	GGL-TS/PE-TYP/CONC. BOLLARDS-028	0

					PREPARED BY	CHECKED BY	APPROVED BY
				SIGN.			
				NAME	AJP	NJA	DL
				DATE	02.08.2018		
NO.	DATE	REVISION	REV.BY.	SIGN.	FOR	GGL	GGL

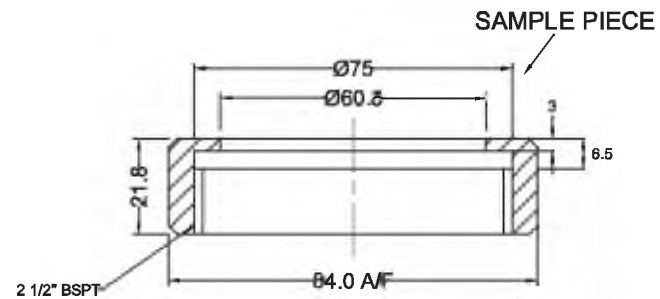




RUBBER 'O' RING



ADAPTOR PIN



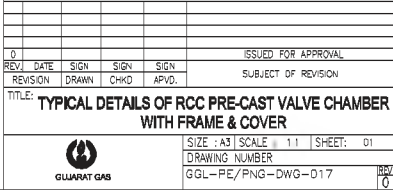
HEX. NUT

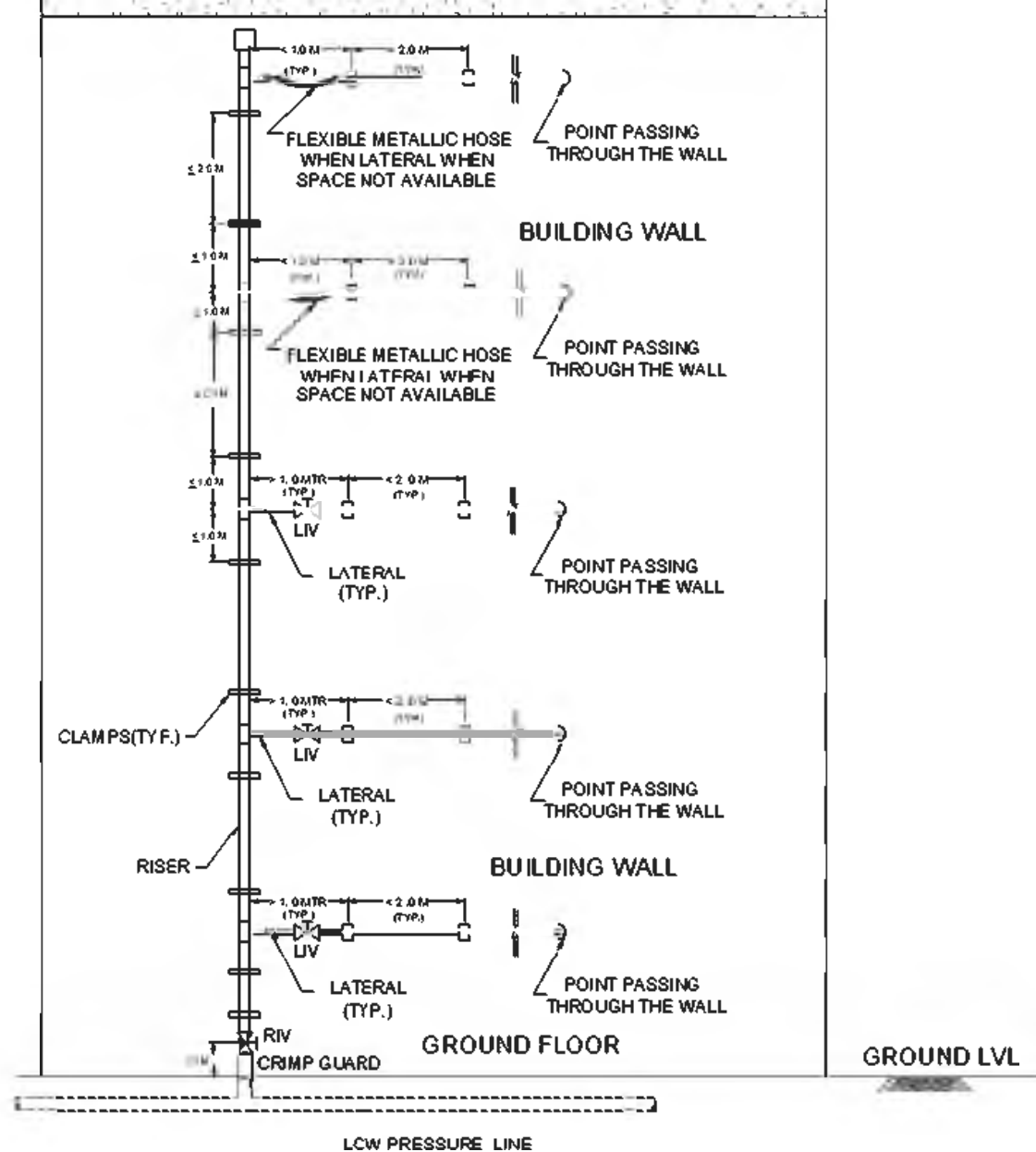
NOTES :-

1. MATERIAL SHALL CONFIRM TO IS 319, FREE CUTTING EXTRUDED BRASS ROD.
2. DIMENSIONS REFERENCES SHALL BE AS PER BS 86 AND BS 21.
3. RUBBER O RING MATERIAL WILL BE NITRAEL.
4. ALL DIMENSIONS ARE IN MM.

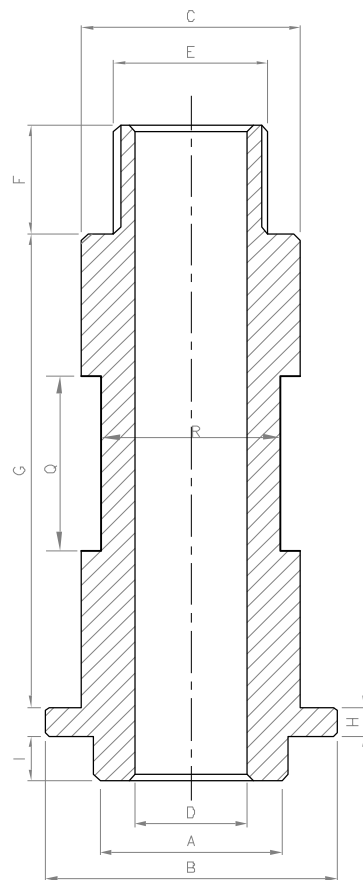


GUJARAT GAS LIMITED
TECHNICAL SERVICES

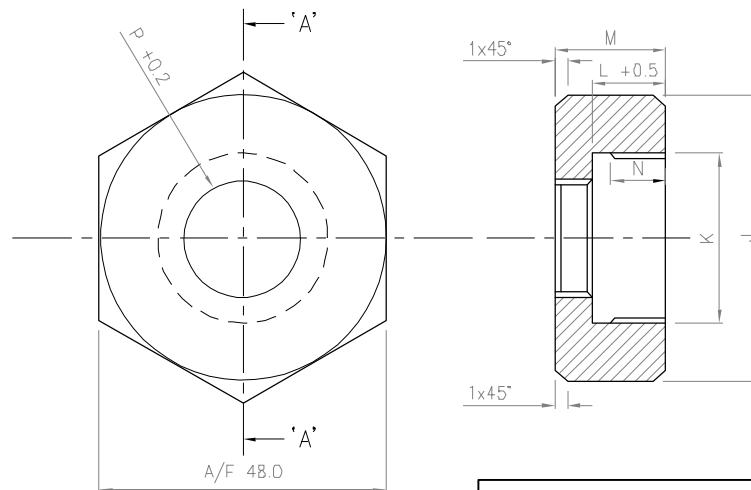




COMPONENT-PIN (INLET/OUTLET)
FOR G6



COMPONENT-NUT
FOR G6



SECTION 'A'-'A'

NOTES:-

1. ALL DIMENSIONS ARE IN MM.
2. TPI-THREAD PER INCH.
3. ALL TOLERANCES ARE ± 0.01 MM, UNLESS SPECIFIED EXPLICITLY.
4. ALL FITTINGS ARE AS PER IS:319 WITH HARD CHROME PLATING.

MOC DETAILS

Sr. No.	PART	MOC	OTHER REC'S
1	COMPONENT PIN (INLET/OUTLET) G6	BRASS (IS: 319 ROUND BAR)	HARD CHROME PLATING
2	NUT G6	BRASS (IS: 319) (IS: 319 HEXA BAR)	HARD CHROME PLATING
3	TOP SEAT PLATE	SS316	
4	RUBBER SHEET	NITRILE	-
5	LOCK PIN	SS316	-

NEW DESIGN

01.	03/04/24	NEW DESIGN INTRODUCE	AJ/SG/MT
NO.	DATE	REVISION	REV. BY SIGN.

	PREPARED BY	CHECKED BY	APPROVED BY
SIGN.			
NAME	AJ	SG	US
DATE	27.03.2024		
FOR	GGL	GGL	GGL



GUJARAT GAS LIMITED
TECHNICAL SERVICES

PROJECT NAME: DRAWING FOR METER ADAPTOR
STATUS: ISSUED FOR BID/CONSTRUCTION

TITLE: ADAPTOR FOR G6

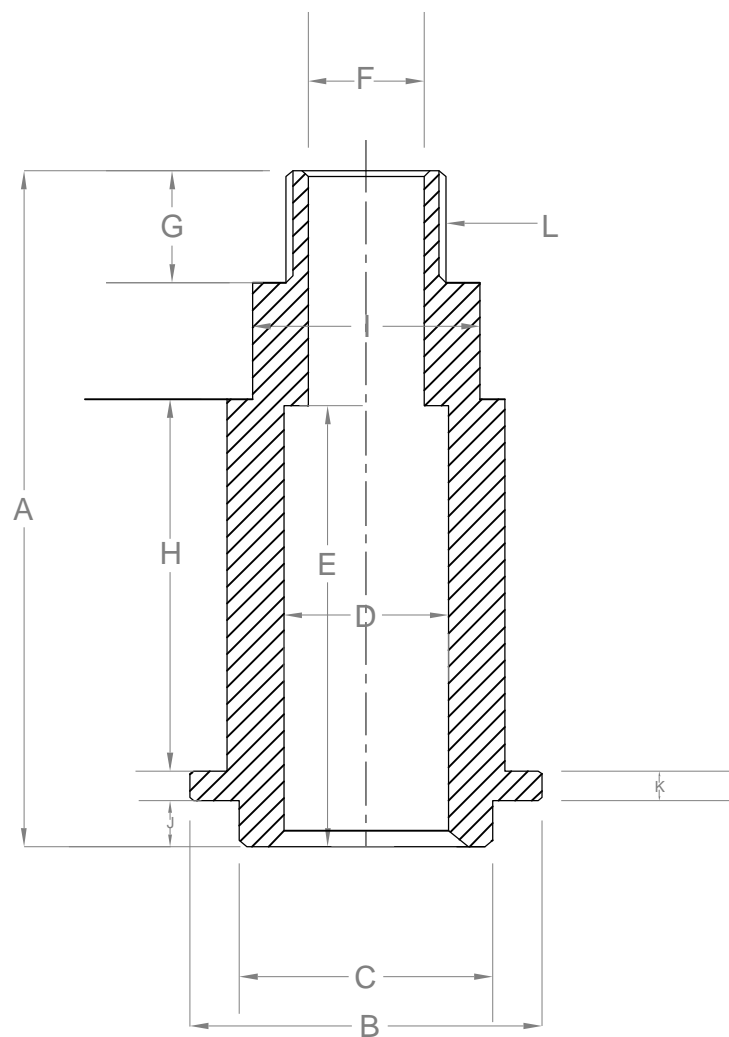
SCALE	SHEET	DRAWING NO.	REV.
NTS	1 OF 1	GGL-TS/ADAP. G6/TYP-001	01

DIMENTION TABLE

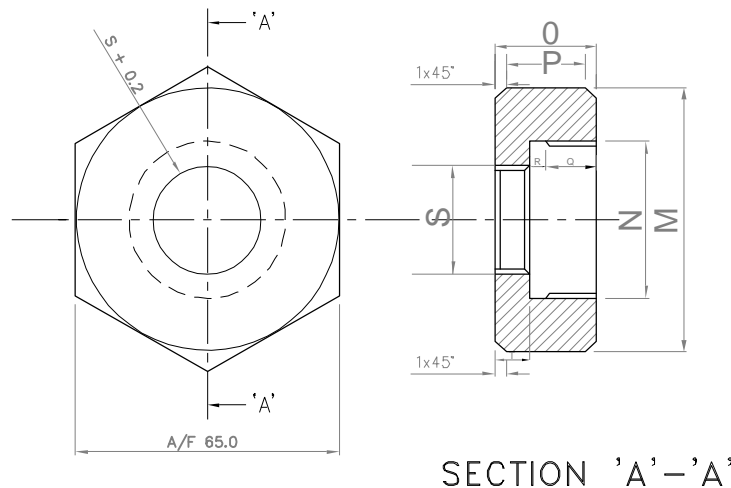
ADAPTOR FOR	A	B	C	D	E	F	G	H	I	J	K	L	M	N	P	Q	R	BL1	BL2	X.
G6	31.0	38.0	33.00	25.0	1" BSPT	21.0	36.0	5.0	8.0	48 A/F	1 1/2 (1.25") BSP THREAD (ISO 228-1)	20.0	25	16.0	33.5	12.5	30 A/F	30.0	5.0	70.0

BRASS METER ADAPTOR DRAWING FOR G6- COM METER

COMPONENT-PIN (INLET/OUTLET)
FOR G10 & G16



COMPONENT-NUT
FOR G10 & G16



NOTES:-

1. ALL DIMENSIONS ARE IN MM.
2. TPI-THREAD PER INCH.
3. ALL TOLERANCES ARE ± 0.01 MM, UNLESS SPECIFIED EXPLICITLY.
4. ALL FITTINGS ARE AS PER IS:319 WITH HARD CHROME PLATING.

MOC DETAILS

Sr. No.	PART	MOC	OTHER REC'S
1	COMPONENT PIN (INLET/OUTLET) G6	BRASS (IS: 319 ROUND BAR)	HARD CHROME PLATING
2	NUT G6	BRASS (IS: 319) (IS: 319 HEXA BAR)	HARD CHROME PLATING
3	TOP SEAT PLATE	SS316	
4	RUBBER SHEET	NITRILE	-
5	LOCK PIN	SS316	-

NEW DESIGN

DIMENSION TABLE

ADAPTOR FOR	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
G10 & G16	70.0	56.0	47.0	35.0	32.0	25.0	25.0	21.0	13.0/39AF	6.0	5.0	1" BSPT THREAD	65 AF	2" BSPT THREAD (ISO228-1)	27.0	25.0	18.0	4.0	48.0	5.0

BRASS METER ADAPTOR DRAWING FOR G10 & G16 DOM. METER-(2" BSP)

01.	03/04/24	NEW DESIGN INTRODUCE	AJ/SG/MT	
NO.	DATE	REVISION	REV. BY	SIGN.

SIGN.	PREPARED BY	CHECKED BY	APPROVED BY
NAME	AJ	SG	US
DATE	04.03.2023		
FOR	GGL	GGL	GGL



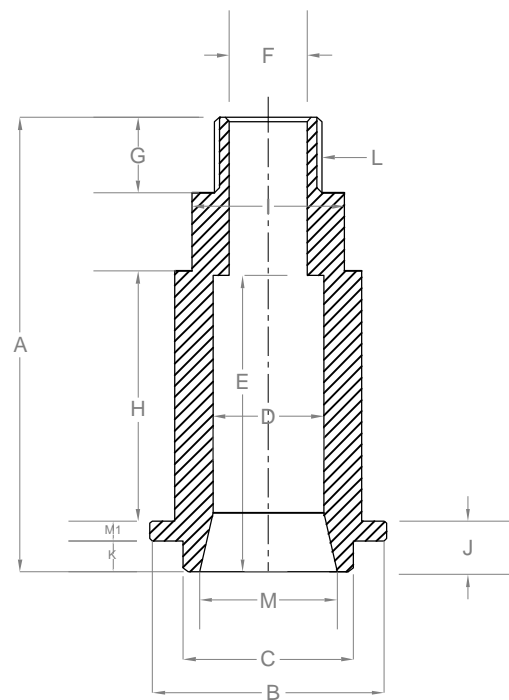
GUJARAT GAS LIMITED
TECHNICAL SERVICES

PROJECT NAME: DRAWING FOR METER ADAPTOR
STATUS: ISSUED FOR BID/CONSTRUCTION

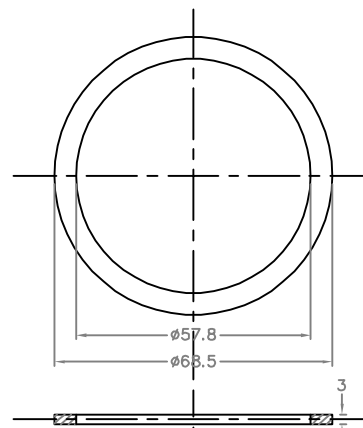
TITLE: ADAPTOR FOR G10 & G16

SCALE	SHEET	DRAWING NO.	REV.
NTS	1 OF 1	GGL-TS/ADAP. G10,G16/TYP-001	01

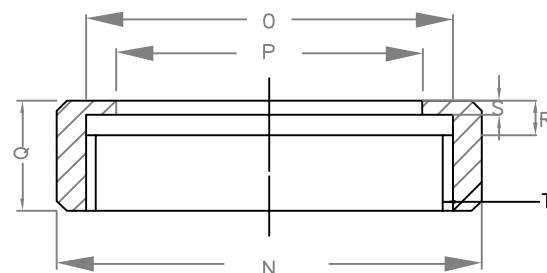
COMPONENT-PIN (INLET/OUTLET)
FOR G25



COMPONENT-NUT
FOR G25



RUBBER 'O' RING



HEX. NUT

NOTES:-

1. ALL DIMENSIONS ARE IN MM.
2. TPI-THREAD PER INCH.
3. ALL TOLERANCES ARE ± 0.01 MM, UNLESS SPECIFIED EXPLICITLY.
4. ALL FITTINGS ARE AS PER IS:319 WITH HARD CHROME PLATING.

MOC DETAILS

Sr. No.	PART	MOC	OTHER REC'S
1	COMPONENT PIN (INLET/OUTLET) G6	BRASS (IS: 319 ROUND BAR)	HARD CHROME PLATING
2	NUT G6	BRASS (IS: 319) (IS: 319 HEXA BAR)	HARD CHROME PLATING
3	TOP SEAT PLATE	SS316	
4	RUBBER SHEET	NITRILE	-
5	LOCK PIN	SS316	-

NEW DESIGN

01.	03/04/24	NEW DESIGN INTRODUCE	AJ/SG/MT	
NO.	DATE	REVISION	REV. BY	SIGN.

SIGN.	PREPARED BY	CHECKED BY	APPROVED BY
NAME	AJ	SG	US
DATE	04.03.2023		
FOR	GGL	GGL	GGL



GUJARAT GAS LIMITED
TECHNICAL SERVICES

PROJECT NAME: DRAWING FOR METER ADAPTOR
STATUS: ISSUED FOR BID/CONSTRUCTION

TITLE: ADAPTOR FOR G25

SCALE	SHEET	DRAWING NO.	REV.
NTS	1 OF 1	GGL-TS/ADAP.G25/TYP-001	01

DIMENTION TABLE

ADAPTOR FOR	A	B	C	D	E	F	G	H	I	J	K	L	M	M1	N	O	P	Q	R	S	T
G25	Ø70.0	Ø70.0	Ø58.0	Ø35.0	Ø28.0	Ø25.0	Ø28.0	Ø29.0	Ø13.0 / 44.5 AF	Ø7.0	Ø11.0	1" BSP THREAD	Ø53.0	Ø4.0	84 AF	Ø75.0	Ø59.0	Ø22.0	Ø6.0	Ø3.0	2 1/2" BSP THREAD (ISO-228-1)

BRASS METER ADAPTOR DRAWING FOR G25 DOM. METER-(2 1/2" BSP)