

# **Deepwater Port License Application Blue Marlin Offshore Port (BMOP) Project**

*Volume IIa – Appendix A*

*Submitted to:*



Maritime Administration  
Office of Deepwater Ports and Offshore  
Activities  
1200 New Jersey Avenue SE, W21-309  
Washington, DC 20590



United States Coast Guard  
Commandant (CG-OES-2)  
Stop 7509  
2703 Martin Luther King Jr. Ave. SE  
Washington, DC 20593-7509

*Submitted by:*

***Blue Marlin Offshore Port LLC  
8111 Westchester Drive  
Suite 600  
Dallas, Texas 75225***

*September 2020*



## Deepwater Port License Application Blue Marlin Offshore Port (BMOP) Project

- Volume I: General (Public), including Deepwater Port License Application and Appendices  
*(under separate cover)*
- Volume IIa: Offshore Project Components Environmental Evaluation (Public)**  
*(under separate cover)*
- Volume IIb: Onshore Project Components, Environmental Evaluation (Public)  
*(herein)*
- Volume III: Technical Information  
[*Confidential*]  
*(under separate cover)*
- Volume IV: Company and Financial Information  
[*Confidential*]  
*(under separate cover)*

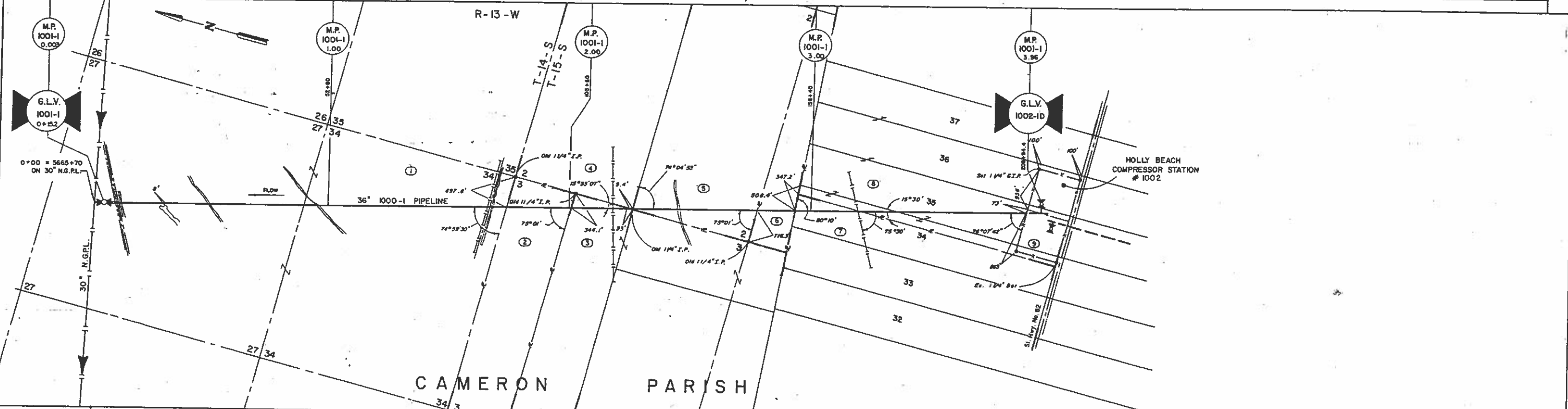
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**APPENDIX A**

**OFFSHORE PROJECT MAPPING**

**Existing Stingray as-built drawings**

OWNERSHIP & LINE LIST NO.	1 CAMERON MEADOWS LAND CO. 1001-1-1	2 PATRICK WELLS 1001-1-2	3 WEST PARS 1001-1-3	4 CAMERON MEADOWS LAND CO. 1001-1-4	5 WYTTI FAVELL DONATI 1001-1-5	6 BAY B. PEKED BEE 1001-1-6	7 WVA. W. PINK, ET AL 1001-1-7	8 WEST PARS LAND CO. 1001-1-8	9 STURDAY PROP. 1001-1-9
PROPERTY LINES & RODDAGE	0+00	81+88.8	82.9	100+88.4	78.4	100+88.4	100+88.4	100+88.4	100+88.4
CLASS LOCATION									



TAX DISTRICT DATA	
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**FIELD NOTES**

0+00 C.L. Top Lt. 0 Sta. 5665+70 30" N.G.P.L. C.L. 30" Ball 0+15.2 Valve, Jus. 54" Dia. 100' Bsp. 465" N.I. Conc. Ctd. Pipe 0+63 03'13"45" Lt. 1+95.5 C.L. Dirt Road 2+37 C.L. Canal

47+48.6 Section Line (Scaled)

86+71 C.L. 3" P.L. (Exposed) Hobble Oil 86+81.5 C.L. Shell Road 87+64 C.L. Canal 91+98.8 S.L., P.L., & Top. Un.

105+65.8 P.L. Hitch-Hike 113+76.5 C.L. & Test Lead 118+77.3 P.L. 119+11.6 S.L. & P.L.

128+22 C.L. Old E. Bayou

146+44.7 P.L. & S.L. 155+03.8 P.L. & S.L. Fe 168+90.5 C.L. Columbia Gulf P.L. & Test Lead 169+28.5 P.L. Fe. 188+06.8 Sec. Line (Scaled) 189+85 12" P.L. & Test Lead

204+3 End .459" Conc. Ctd. Pipe & Bsp. .562" WT. Pipe

204+3 End .552" Pipe, Bsp. .625" WT. Pipe

204+3 End .625" Pipe, Bsp. .750" WT. Conc. Ctd. Pipe

204+55.4 P.L. Fe. & Bsp. Valve Setting End 750" WC Conc. Ctd. Pipe

206+94.4 C.L. Valve 1002-1D 208+84.4

For Piping Inside Station No. 1002 See Compressor Station Completion Draw.

REVISIONS	
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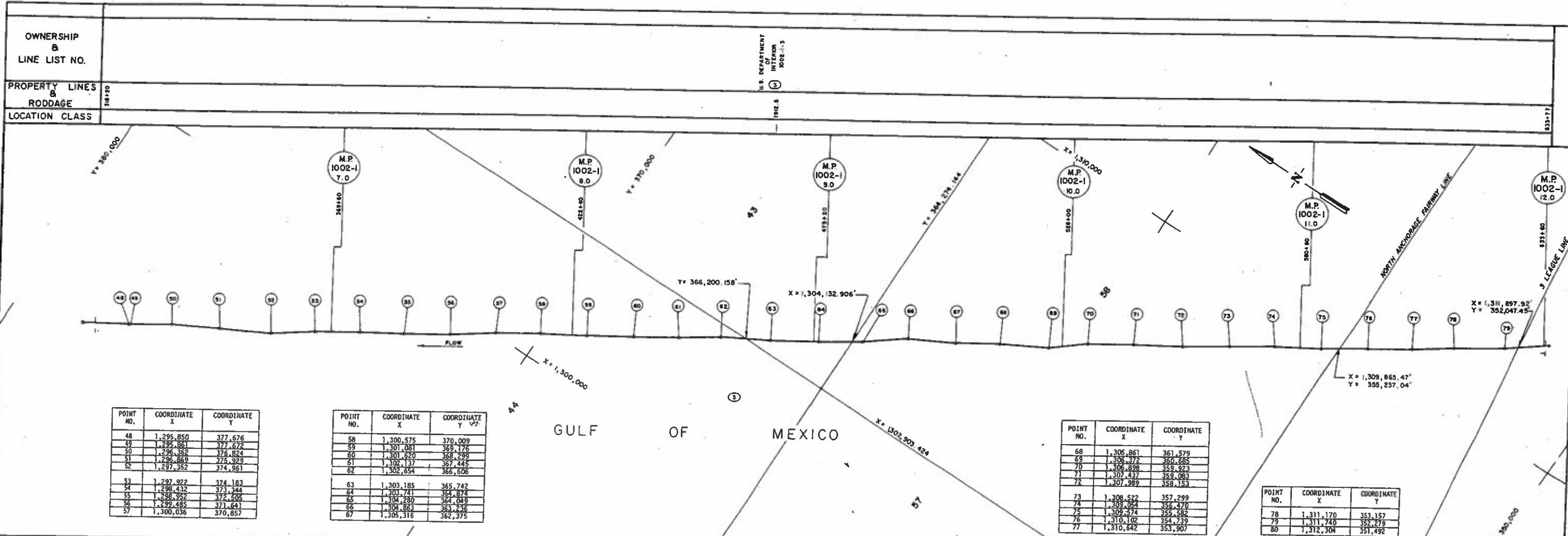
THE CONSTRUCTION OF THIS PIPELINE WAS DONE BY H.G.P.L. IN 1972. THIS REVISED VERSION WAS TAKEN FROM H.G.P.L. DNG. - SHEET 1, G.C.

DRWG. NO.	REFERENCE DRWG.	REV	DATE	DESCRIPTION	DATE	APPROVALS	DATE

DWG. OL-1000-1-1001A <b>LINE 1000-1</b> LOC. CAMERON PARISH, LOUISIANA. YEAR: 1982 W. O.	ISSUE DATE: ORIGINAL 2-5-84 LAST <b>Stingray Pipeline Company</b> <small>POST OFFICE BOX 1340 LAFAYETTE CITY, LOUISIANA 70501</small>
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SQUAD LEADER: ELEC. ENGINEER: PROJECT ENGINEER: PROJECT LEADER DESIGN: PROJECT DESIGN SUPV.: TRANSMISSION:	DRAWN BY: STEVENS DRAFTING CHECK BY: TDD MATERIAL CHECK BY:	10/19/82 1-25-84
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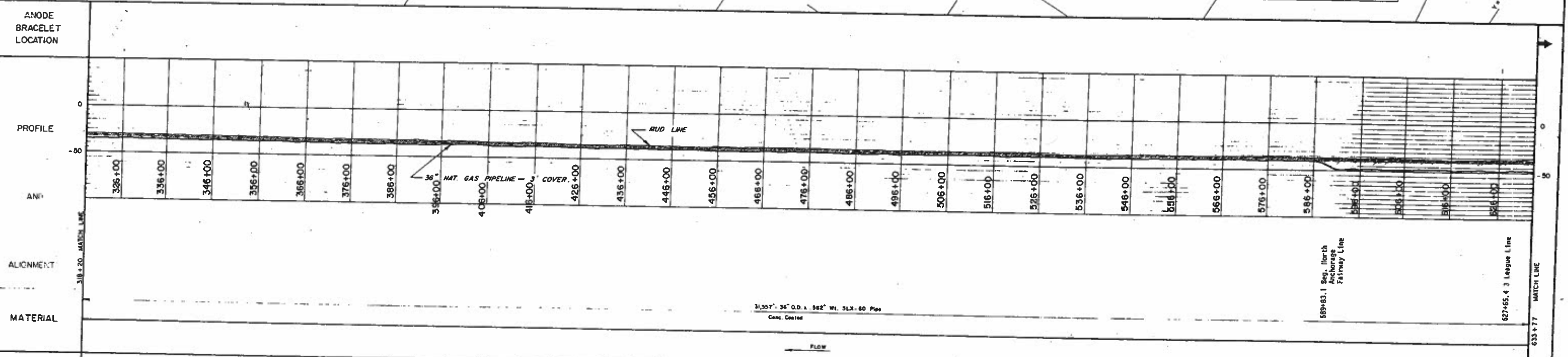


POINT NO.	COORDINATE X	COORDINATE Y
48	1,295,850	377,676
49	1,295,881	377,672
50	1,296,352	375,924
51	1,296,869	375,929
52	1,297,352	374,961
53	1,297,922	374,183
54	1,298,432	373,344
55	1,298,922	372,505
56	1,299,485	371,681
57	1,300,036	370,857

POINT NO.	COORDINATE X	COORDINATE Y
58	1,300,575	370,009
59	1,301,081	369,176
60	1,301,620	368,299
61	1,302,137	367,445
62	1,302,654	366,506
63	1,303,185	365,742
64	1,303,741	364,874
65	1,304,280	364,049
66	1,304,863	363,236
67	1,305,316	362,375

POINT NO.	COORDINATE X	COORDINATE Y
68	1,305,861	361,579
69	1,306,372	360,685
70	1,306,898	359,823
71	1,307,437	358,983
72	1,307,989	358,153
73	1,308,522	357,299
74	1,309,054	356,470
75	1,309,574	355,582
76	1,310,102	354,739
77	1,310,642	353,907

POINT NO.	COORDINATE X	COORDINATE Y
78	1,311,170	353,157
79	1,311,740	352,279
80	1,312,304	351,492



**LEGEND**

- Gas We
- Dr. We
- Platform
- Cluster Head
- Cathodic Coupon
- Land Trac. Number
- Restriction
- R/W Agreement
- Bour/Son's type

**MATERIAL SUMMARY**

31,557' 36" O.D. x 562" WT. 5LX-80, w/D.O.T. CERT. CONC. COATED TD

**DRAWING NUMBER**

31,557'

**REFERENCE DRAWING**

DESIGN PRESSURE 13.69 PSIG  
DESIGN TEMPERATURE 72°F

**STINGRAY PIPELINE COMPANY**  
ENGINEERING DEPARTMENT

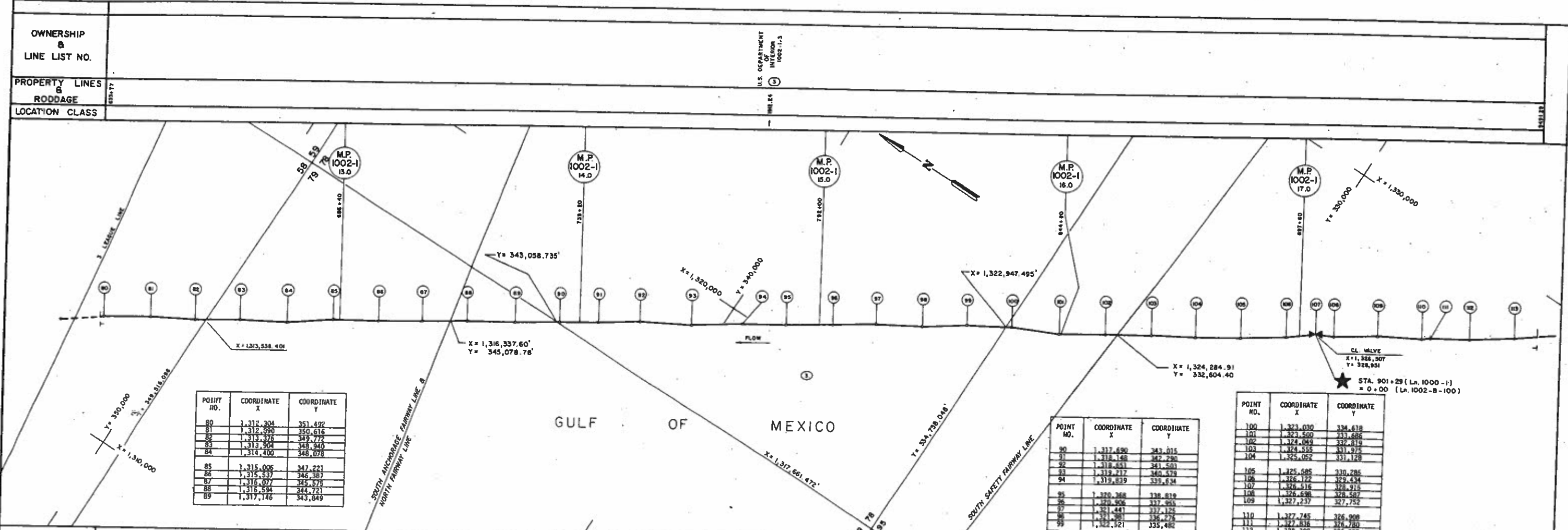
**LINE 1000-1**  
OFFSHORE GULF OF MEXICO  
WEST CAMERON AREA.

W.O. NO. DWG. OL-1000-1-1002B

COMPLETION DRAWING

THE CONSTRUCTION OF THIS PIPELINE WAS DONE BY H.G.P.L. IN 1972. THIS REVISED VERSION WAS TAKEN FROM H.G.P.L. ENG. - SHEET 3 B 4, G.C.

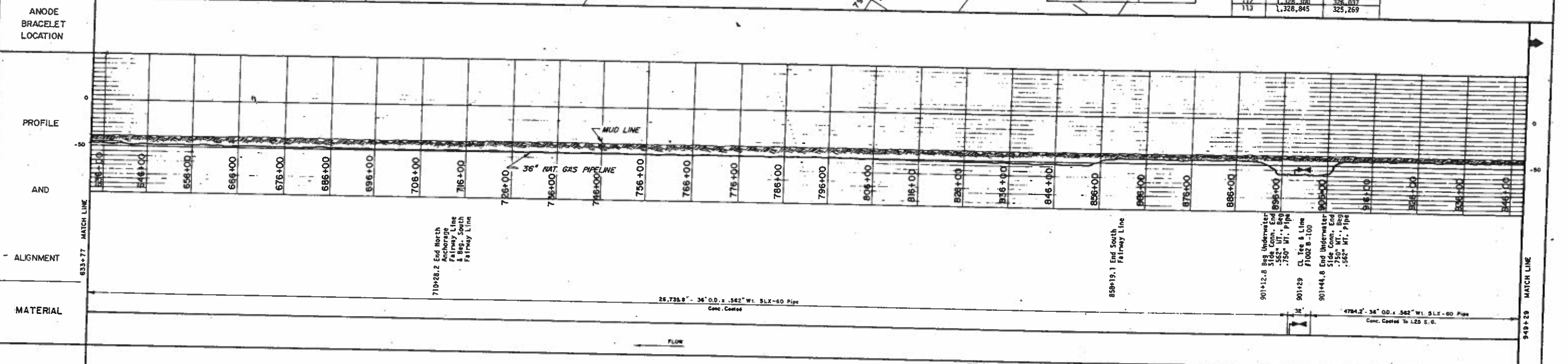




POINT NO.	COORDINATE X	COORDINATE Y
80	1,312,304	351,492
81	1,312,090	350,616
82	1,313,376	349,772
83	1,313,904	348,940
84	1,314,400	348,078
85	1,315,006	347,221
86	1,315,537	346,387
87	1,316,077	345,575
88	1,316,594	344,721
89	1,317,146	343,849

POINT NO.	COORDINATE X	COORDINATE Y
90	1,317,690	343,015
91	1,318,148	342,290
92	1,318,651	341,501
93	1,319,217	340,579
94	1,319,839	339,634
95	1,320,368	338,819
96	1,320,906	337,955
97	1,321,441	337,125
98	1,321,981	336,275
99	1,322,521	335,482

POINT NO.	COORDINATE X	COORDINATE Y
100	1,323,030	334,618
101	1,323,550	333,819
102	1,324,049	333,019
103	1,324,555	332,219
104	1,325,052	331,428
105	1,325,585	330,785
106	1,326,122	329,434
107	1,326,616	328,219
108	1,326,598	327,587
109	1,327,237	327,752
110	1,327,745	326,908
111	1,327,836	326,780
112	1,328,360	326,637
113	1,328,845	325,269



**LEGEND**

- Gas Well
- Dry Well
- Platform
- Crater Area
- Cathodic Test Coupon
- Land Tract Number
- Restriction R/W
- R/W Agreement
- Boys (Specify Type)
- Equation
- Block Line
- Foreign Pipeline
- X, Y Coordinate Mark
- Offshore Area Outline
- Oyster Lease
- Reef
- Sunken Wreck
- M.P. 11-1 3.0
- U.S. B.G.S. Transportation Station
- Anode Bracelet
- Underwater Side Connection

**CONTRACTOR'S DATA**

NO.	DATE	DESCRIPTION

**MATERIAL SUMMARY**

QUANTITY	DESCRIPTION
31,520	36" O.D. x .562" Wt. 5LX-60 w/D.O.T. Cert. Conc. Coated
32'	UNDERWATER SIDE CONNECTION

**DRAWING NUMBER**

**REFERENCE DRAWING**

**DESIGN PRESSURE** 1349 PSIG

**DESIGN TEMPERATURE** PSIG

1781 (WATER) 8 HRS., 1972

**STINGRAY PIPELINE COMPANY**  
HOUSTON, TEXAS

**ENGINEERING DEPARTMENT**

**LINE 1000-1**

OFFSHORE WEST CAMERON AREA

W.O. NO.

1000 HORIZONTAL - 1" 50 VERTICAL

DATE 11/31/82

DATE 1-28-83

DATE 1-28-83

DATE

DWG. OL-1000-1-1002C

COMPLETION DRAWING

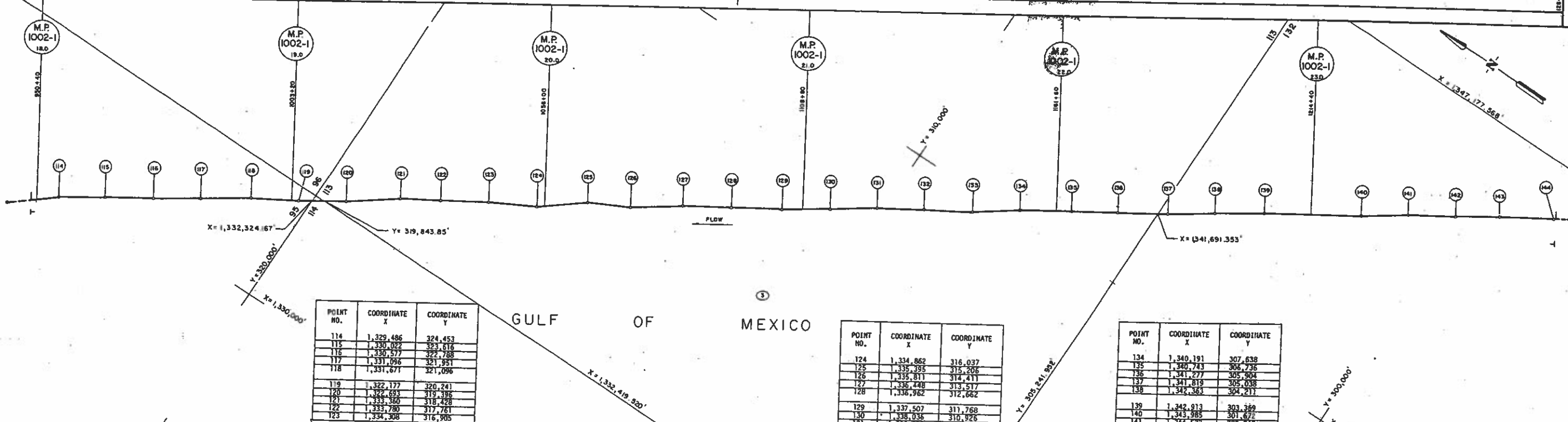
THE CONSTRUCTION OF THIS PIPELINE WAS DONE BY H.G.P.L. IN 1972. THIS REVISED VERSION WAS TAKEN FROM H.G.P.L. DMS. - SHEET 4 & 5, G.C.

OWNERSHIP & LINE LIST NO.

PROPERTY LINES & RODDAGE

LOCATION CLASS

U.S. DEPARTMENT OF INTERIOR 1002-1-3

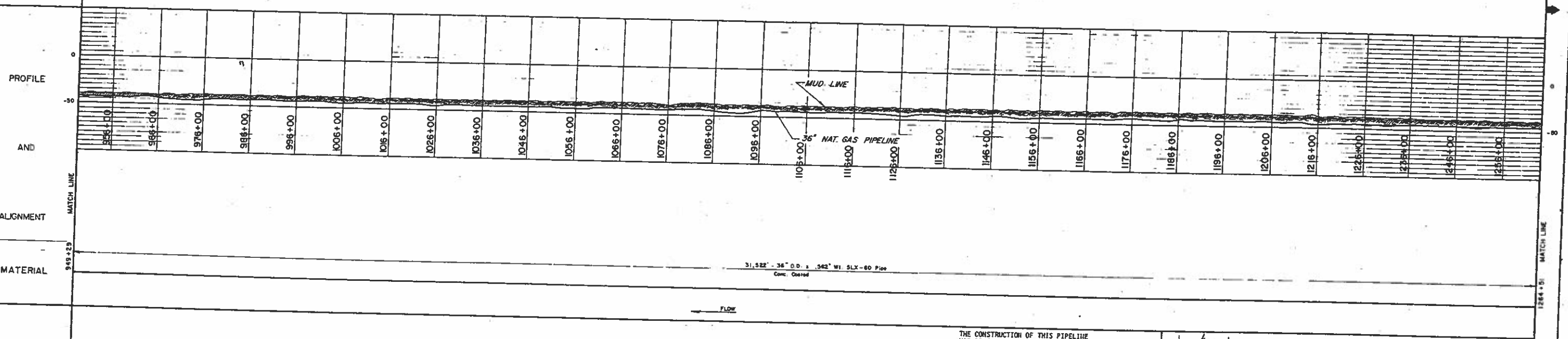


POINT NO.	COORDINATE X	COORDINATE Y
114	1,329,486	324,453
115	1,330,022	323,616
116	1,330,577	322,788
117	1,331,056	321,951
118	1,331,671	321,096
119	1,332,177	320,241
120	1,332,693	319,386
121	1,333,320	318,438
122	1,333,780	317,761
123	1,334,308	316,905

POINT NO.	COORDINATE X	COORDINATE Y
124	1,334,862	316,037
125	1,335,395	315,206
126	1,335,811	314,411
127	1,336,248	313,517
128	1,336,962	312,662
129	1,337,507	311,768
130	1,338,036	310,926
131	1,338,600	310,108
132	1,339,108	309,286
133	1,339,635	308,478

POINT NO.	COORDINATE X	COORDINATE Y
134	1,340,191	307,638
135	1,340,743	306,736
136	1,341,277	305,904
137	1,341,815	305,038
138	1,342,363	304,211
139	1,342,913	303,369
140	1,343,985	301,672
141	1,344,532	300,840
142	1,345,054	300,007
143	1,345,535	299,272
144	1,346,105	298,532

ANODE BRACELET LOCATION



THE CONSTRUCTION OF THIS PIPELINE WAS DONE BY H.G.P.L. IN 1972. THIS REVISED VERSION WAS TAKEN FROM H.G.P.L. DWG. - SHEET. 5 & 6, G.C.



- LEGEND**
- Gas Well
  - Dry Well
  - Platform
  - Crater Area
  - Comodic Test Coupon
  - Land Tract Number
  - Restriction R/W
  - R/W Agreement
  - Boys (Specify Type)
  - Equation
  - Black Line
  - Foreign Pipeline
  - X & Y Coordinate
  - Offshore Area Outline
  - Oyster Lease
  - Reef
  - Sunscreen
  - M.P. 11-1 30 Mile Post
  - U.S. & G.S. Triangulation Station
  - Anode Bracket
  - Underwater Side Connection
  - Reef
  - Sunscreen

**CONTRACTOR**

**CONTRACT NO.**

**CONTRACT DATE**

**CONTRACT VALUE**

**CONTRACT TYPE**

**CONTRACT DESCRIPTION**

**CONTRACT LOCATION**

**CONTRACT STATUS**

**CONTRACT COMMENTS**

**MATERIAL SUMMARY**

31,522'	36" O.D. x .562" Wt. 5LX-60 w/D.O.T. Cert. Conc. Coated
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**DRAWING NUMBER**

**REFERENCE DRAWING**

DESIGN PRESSURE 1350 PSIG  
DESIGN TEMPERATURE 75°F  
178" H<sub>2</sub>O (WATER) @ HRS., 1972

**STINGRAY PIPELINE COMPANY**  
ENGINEERING DEPARTMENT HOUSTON, TEXAS

**LINE 1000-1**

OFFSHORE WEST CAMERON AREA

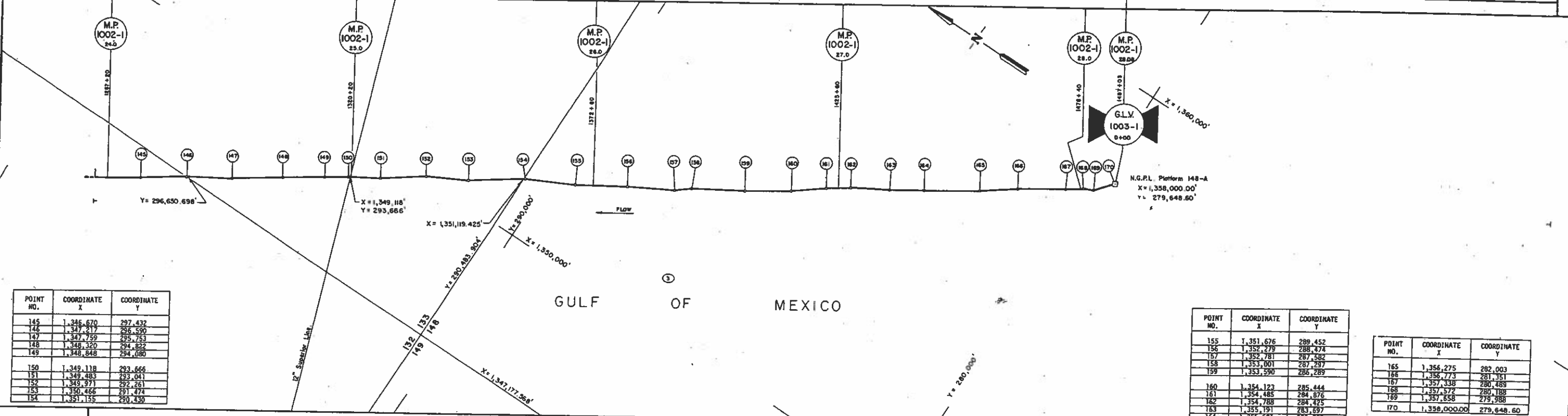
W.O. NO.

DATE: 11/22/82  
BY: S.A.  
DATE: 1-28-84

DWG. OL-1000-1-1002D

COMPLETION DRAWING

OWNERSHIP & LINE LIST NO.	
PROPERTY LINES & RODDAGE	
LOCATION CLASS	

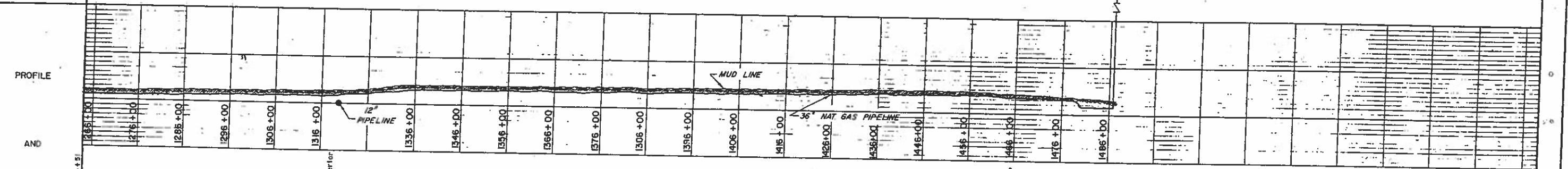


POINT NO.	COORDINATE X	COORDINATE Y
145	1,346,670	297,432
146	1,347,217	296,590
147	1,347,759	295,753
148	1,348,320	294,822
149	1,348,848	293,890
150	1,349,118	293,666
151	1,349,483	293,041
152	1,349,371	292,261
153	1,350,466	291,474
154	1,351,155	290,430

POINT NO.	COORDINATE X	COORDINATE Y
155	1,351,676	289,452
156	1,352,279	288,474
157	1,352,781	287,522
158	1,353,001	287,297
159	1,353,390	286,289
160	1,354,123	285,444
161	1,354,485	284,876
162	1,354,788	284,425
163	1,355,191	283,697
164	1,355,601	283,052

POINT NO.	COORDINATE X	COORDINATE Y
165	1,356,275	282,003
166	1,356,773	281,351
167	1,357,338	280,489
168	1,357,572	280,188
169	1,357,858	279,988
170	1,358,000.00	279,648.60

ANODE BRACELET LOCATION	
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ALIGNMENT	MATCH LINE 1265+51	1265+00	1276+00	1288+00	1296+00	1306+00	1316+00	1336+00	1346+00	1356+00	1366+00	1376+00	1386+00	1406+00	1416+00	1426+00	1436+00	1446+00	1456+00	1466+00	1476+00	1486+00
MATERIAL																						

THE CONSTRUCTION OF THIS PIPELINE WAS DONE BY H.G.P.L. IN 1972. THIS REVISED VERSION WAS TAKEN FROM H.G.P.L. Dwg. - SHEET. Y & 8, G.C.

REVERSE CURVE DATA FOR PIPELINE

LEGEND	
Gas Well	Equator
Dry Well	Block Line
Platform	Foreign Pipeline
Crater Area	S.B.Y. Coordinate
Cathodic Test Station	Offshore Area Outline
Land Tract Number	Oyster Lease
Restriction R/W	Rest
R/W Agreement	Summer Wreck
Bayou (Specify Type)	

CONTRACTOR	
PROJECT NO.	11-1
CONTRACT NO.	30
CONTRACT DATE	
CONTRACT VALUE	
CONTRACT TYPE	
CONTRACT DESCRIPTION	
CONTRACT LOCATION	
CONTRACT STATUS	
CONTRACT COMMENTS	

MATERIAL SUMMARY	
21,663.9'	36" O.D. x .562" Wt. 5LX-60 w/D.O.T. Cert. Conc. Cooled
453.3'	36" O.D. x .625" Wt. 5LX-60
3'	36" O.D. x .750" Wt. 5LX-60
23.5'	36" O.D. x .812" Wt. 5LX-60

DRAWING NUMBER	
REFERENCE DRAWING	

DESIGN PRESSURE	1249 PSIG
DESIGN TEMPERATURE	PSIG
1781 @ (WATER) @ 898.872	

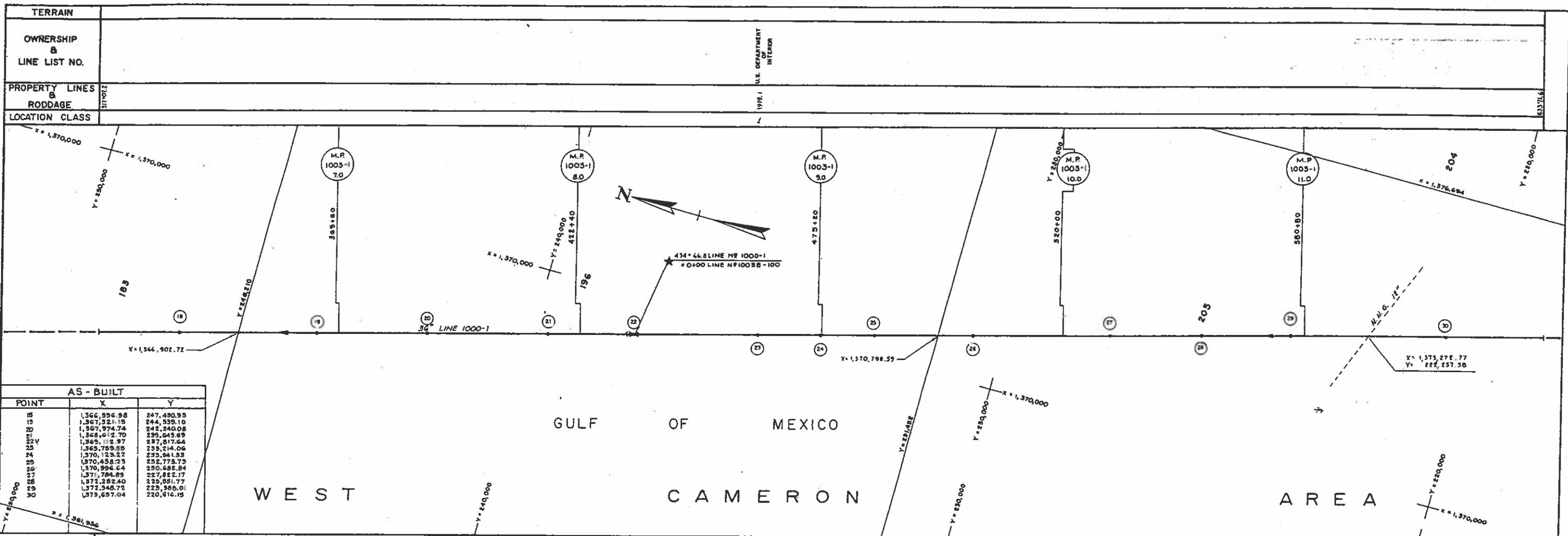
**STINGRAY PIPELINE COMPANY**  
ENGINEERING DEPARTMENT HOUSTON TEXAS

**LINE 1000-1**  
WEST CAMERON AREA.

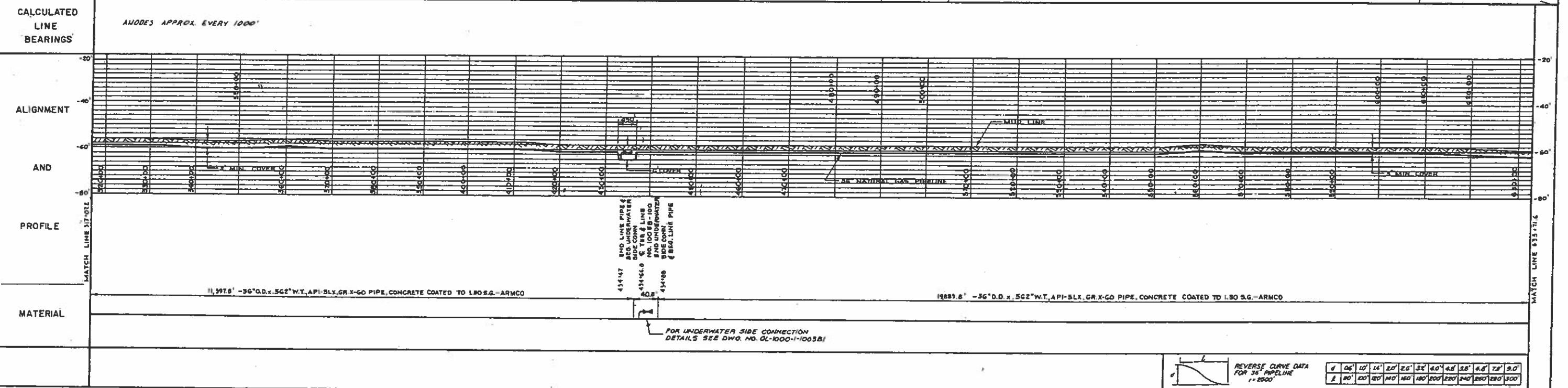
OFFSHORE  
W.O. NO. \_\_\_\_\_  
DATE 11/30/82  
DWG. OL-1000-1-1002E

COMPLETION DRAWING



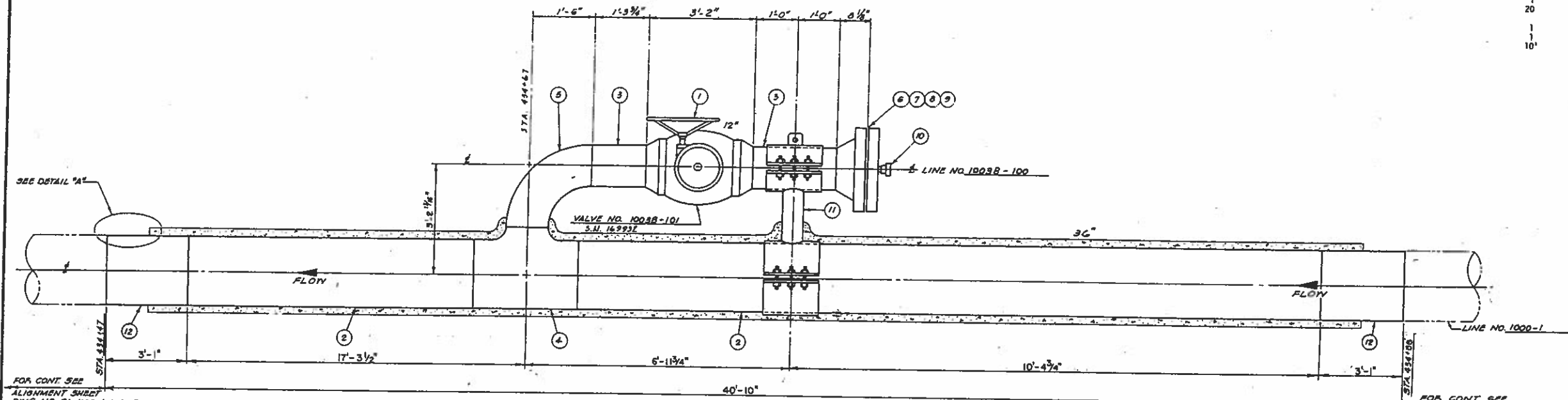


AS - BUILT		
POINT	X	Y
18	1,366,596.98	247,490.93
19	1,367,321.15	244,359.10
20	1,367,974.74	242,240.08
21	1,368,612.70	239,649.69
22V	1,369,112.97	237,617.64
23	1,369,759.85	235,214.06
24	1,370,123.22	233,041.83
25	1,370,458.23	232,773.73
26	1,370,994.64	230,682.84
27	1,371,784.85	227,822.17
28	1,372,282.40	229,951.77
29	1,372,348.72	229,966.01
30	1,373,657.04	220,616.15

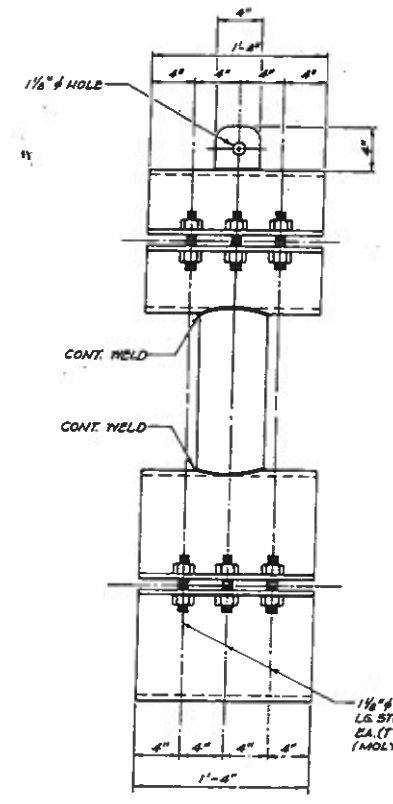


<b>LEGEND</b> Gas Well, Dry Well, Platform, Crater Area, Comodic Test Coupon, Land Tract Number, Restriction R/W, R/W Agreement, Equation, Block Line, Foreign Pipeline, X & Y Coordinate Mark, Offshore Area Outline, Oyster Lease, Underwater Side Connection, Sunken Wreck, M.P. 11-1 3.0, U.S.G.S. Triangulation Station, Anode Bracket, Reef		<b>HISTORICAL DATA</b> CONTRACTOR: SURECO DATE: 11-1-82 TYPE: UNDERWATER SIDE CONNECTION ASSEMBLY MATERIAL SUMMARY: 36" O.D. x .562" W.T. API-5LX GR X-60 PIPE W/DOT CERTIFICATION, CONCRETE COATED TO 1.50 S.G. UNDERWATER SIDE CONNECTION ASSEMBLY 36" ANODE BRACELETS		<b>DRAWING NUMBER</b> OL-1000-1-1003B1		<b>REFERENCE DRAWING</b> UNDERWATER SIDE CONNECTION ASSEMBLY		<b>DESIGN PRESSURE</b> 1348 PSIG																											
<b>FIELD BOOKS</b> 2736 - Pg. 3-30 2737 - Pg. 2-10		<b>STINGRAY PIPELINE COMPANY</b> HOUSTON, TEXAS <b>LINE 1000-1</b> GULF OF MEXICO OFFSHORE WEST CAMERON AREA W.O. NO. 1013, 1014, 1015 DWG. OL-1000-1-1003B COMPLETION DRAWING		<b>SCALE</b> 1"=100' HORIZONTAL, 1"=20' VERTICAL DATE: 7-26-82 DATE: 2-26-83		<b>REVISIONS</b> DATE: 7-26-82 DATE: 2-26-83		<b>REVERSE CURVE DATA FOR 36" PIPELINE 1"=2500'</b> <table border="1"> <tr><td>1</td><td>06'</td><td>10'</td><td>14'</td><td>20'</td><td>26'</td><td>32'</td><td>40'</td><td>48'</td><td>58'</td><td>68'</td><td>78'</td><td>90'</td></tr> <tr><td>2</td><td>100'</td><td>120'</td><td>140'</td><td>160'</td><td>180'</td><td>200'</td><td>220'</td><td>240'</td><td>260'</td><td>280'</td><td>300'</td><td>320'</td></tr> </table>		1	06'	10'	14'	20'	26'	32'	40'	48'	58'	68'	78'	90'	2	100'	120'	140'	160'	180'	200'	220'	240'	260'	280'	300'	320'
1	06'	10'	14'	20'	26'	32'	40'	48'	58'	68'	78'	90'																							
2	100'	120'	140'	160'	180'	200'	220'	240'	260'	280'	300'	320'																							

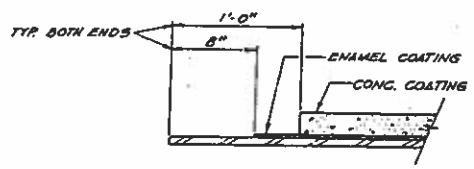
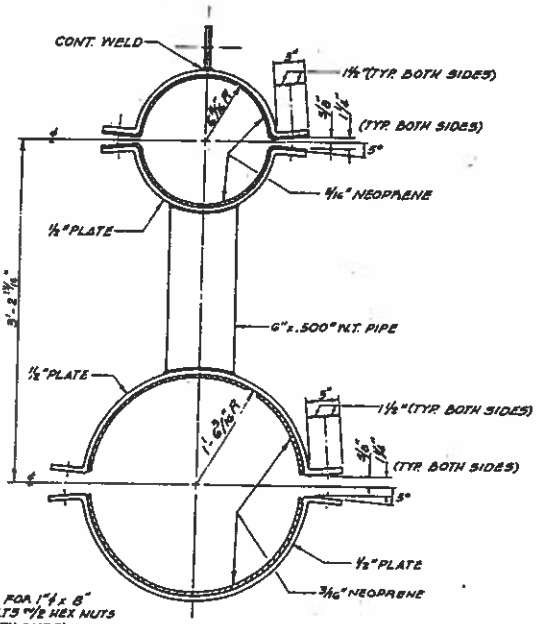
STOCK NO.	QUANTITY	SIZE	DESCRIPTION	MARK NO.
	1	12"	ANSI 900 WE Cameron Ball Valve Manual Gear Operated Protected for Salt Water Immersion, Prepare Ends for Welding to 12.75" O.D. x 500" M.T. Pipe API-60, 1968	1
	32'-0"	36"	O.D. x 500" M.T. Pipe API-SLX, GR. X-60 w/DOT Cert.	2
	4'-0"	12-3/4"	O.D. x 500" M.T. Pipe, API-60, GR. "B" Smls w/DOT Cert	3
	1	36"	x36"x12" Spec. Red Tee, 750" M.T. x 500" M.T. Per Std Dwg No 64 CESA WPHY-60 MSS-SP-75-1970, P=1348, T=250°F, F=50	4
	1	12"	x.500" M.T. L.R. 90° Weld Ell, GR. "B" WPB-ASTM, A-234 1971	5
	1	12"	ANSI 900 F.S. (R.T.J.) W.N. Flange, Bore 11.75" A 105-1968 GR. II ANSI B16.5-1968	6
	1	12"	ANSI 900 F.S. (R.T.J.) Blind Flange, Center Drill & Tap 1" N.P.T. A105-1968 GR. II, ANSI B16.5-1968	7
	1	R57	Ring Joint Gasket (Pitch Dia. 15") ANSI B16.20 1963	8
	20	1-3/8" Ø	Stud Bolts, 13" Thd Lgth B-7 ASTM A-193, 1971 w/2 ASTM A-194, 1969 Hex Nuts Ea Moly Coated	9
	1	1"	Pleeco Bleeder Plug, 3000# W.P. w/DOT Cert.	10
	1		Pipe Clamp Per Detail on this Dwg (By Contr.)	11
	10'	36"	O.D. x 562" M.T. Pipe, API-SLX, GR X-60 w/DOT Cert	12



**ELEVATION**  
**UNDERWATER SIDE CONN. ASSEMBLY**  
NO SCALE



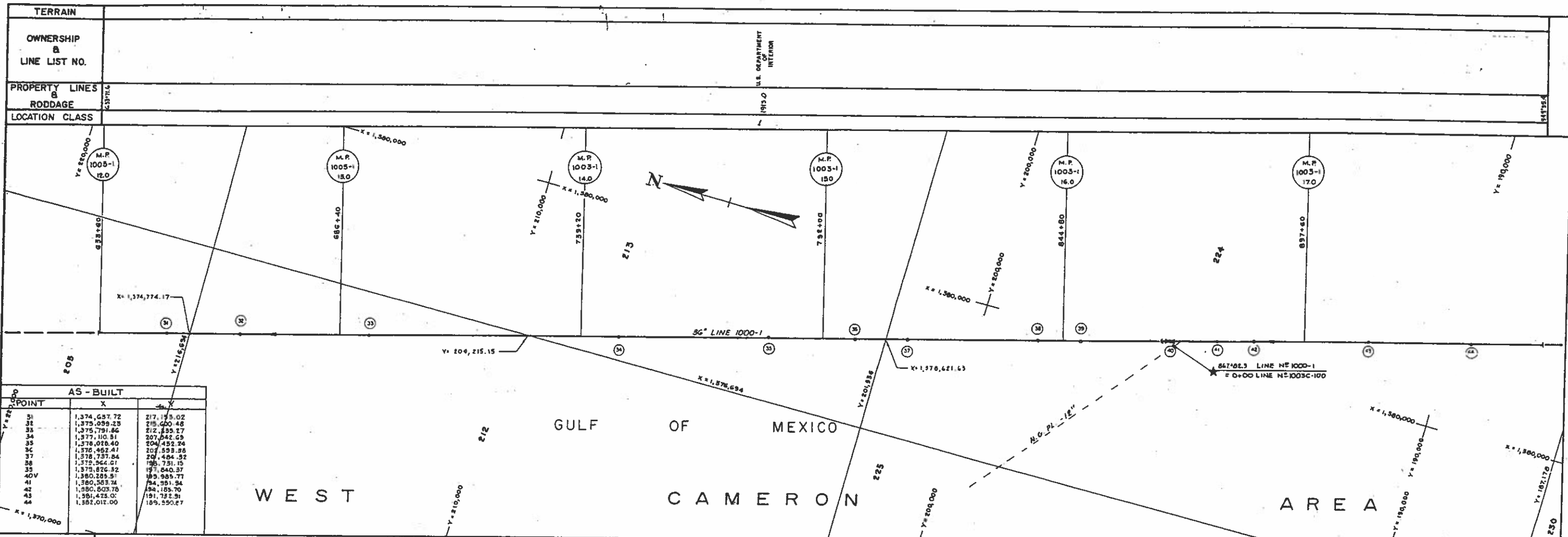
**DETAIL OF PIPE CLAMP (11)**  
(1 REQD.)  
NO SCALE



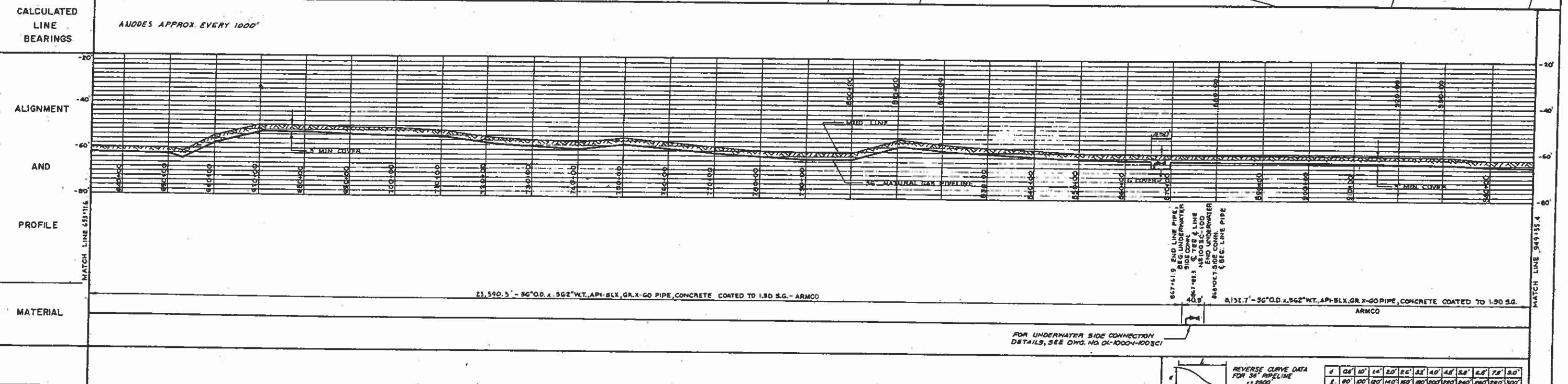
**DETAIL "A"**  
NO SCALE

FIELD BOOK  
2736 - Pg. 25  
2735 - Pg. 29

OL-1000-1-1003B ALIGNMENT SHEET, LINE NO. 1000-1	
DRAWING NUMBER	REFERENCE DRAWING
<b>STINGRAY PIPELINE COMPANY</b>	
ENGINEERING DEPARTMENT HOUSTON, TEXAS	
<b>UNDERWATER SIDE CONNECTION ASSEMBLY FOR LINE NO. 1003B-100</b>	
W.O. NO. 1013, 1014, 1015	
SCALE None	GM-CTBA
DRAWN D.J.J.	DATE 7-28-82
CHECKED C.S.	DATE 7-28-82
APPRO. CH. DR.	DATE
APPRO. ENGR.	DATE
DWG. OL-1000-1-1003B2 COMPLETION DRAWING	



AS-BUILT		
POINT	X	Y
31	1,374,637.72	217,173.02
32	1,375,059.23	215,600.48
33	1,375,791.86	212,835.27
34	1,377,110.51	207,842.69
35	1,378,018.40	204,452.24
36	1,378,452.41	202,533.98
37	1,378,737.84	201,484.52
38	1,378,864.01	198,731.15
39	1,378,826.32	197,840.37
40V	1,380,285.51	189,989.77
41	1,380,583.74	184,951.34
42	1,380,603.76	184,185.70
43	1,381,473.01	181,732.31
44	1,382,012.00	189,550.27

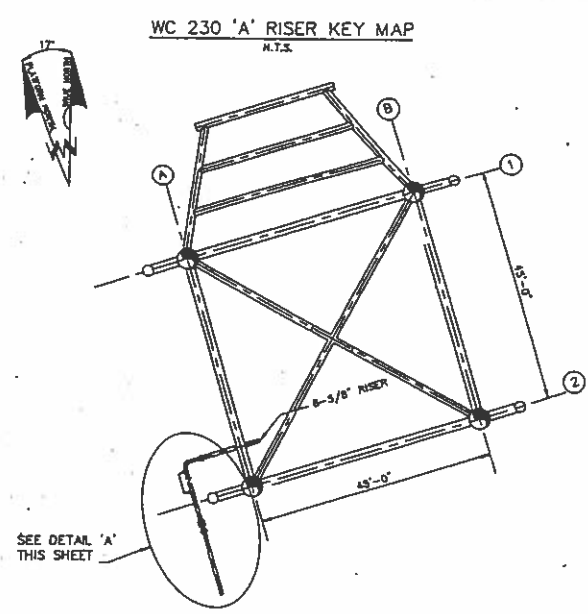


<b>LEGEND</b> Gas Well, Dry Well, Platform, Crown Ropes, Cathodic Test Coupon, Land Tract Number, Restriction R/W, R/W Agreement, Equation, Block Line, Foreign Pipeline, X & Y Coordinate, Offshore Area Outline, Oyster Lease, Reef, Sunken Wreck, M.P. 11-1 Mule Post, U.S.B.G.S. Triangulation Station, Anode Bracket, Underwater Side Connection	<b>HISTORICAL DATA</b> <table border="1"> <tr><th>CONTRACTOR</th><th>PIPE SIZE</th></tr> <tr><td>TRIED SOFT</td><td>36"</td></tr> <tr><td>CHIEF</td><td>TYPE</td></tr> <tr><td>CURRY CONST SURV</td><td>INSPECTION</td></tr> <tr><td>CONRY FUEL SURV</td><td>REP P O NO</td></tr> <tr><td>REPORT DATE</td><td>REPORT DATE</td></tr> <tr><td>CONTR DIS. JOINTING</td><td>PIPE P O NO</td></tr> <tr><td>JOINT LENGTH</td><td>JOINT LENGTH</td></tr> <tr><td>CONTR TESTING</td><td>INS YIELD</td></tr> <tr><td>TEST PRESSURE</td><td>MIN. TEST PRESS.</td></tr> <tr><td>TEST MEDIA</td><td>DESTINATION</td></tr> <tr><td>LINE VOLUME</td><td></td></tr> <tr><td>PIPE TONNAGE</td><td>REPAIR DATE</td></tr> <tr><td>CONRY TYPE</td><td>TYPE OF REPAIR</td></tr> <tr><td>DATE AT SERVICE</td><td>CAUSE OF REPAIR</td></tr> <tr><td>DIRECTION OF LAYING</td><td>LOCATION</td></tr> </table>	CONTRACTOR	PIPE SIZE	TRIED SOFT	36"	CHIEF	TYPE	CURRY CONST SURV	INSPECTION	CONRY FUEL SURV	REP P O NO	REPORT DATE	REPORT DATE	CONTR DIS. JOINTING	PIPE P O NO	JOINT LENGTH	JOINT LENGTH	CONTR TESTING	INS YIELD	TEST PRESSURE	MIN. TEST PRESS.	TEST MEDIA	DESTINATION	LINE VOLUME		PIPE TONNAGE	REPAIR DATE	CONRY TYPE	TYPE OF REPAIR	DATE AT SERVICE	CAUSE OF REPAIR	DIRECTION OF LAYING	LOCATION	<b>MATERIAL SUMMARY</b> 31,523' 36" O.D. x 562" WT. API-5LX, GR. X-60 PIPE W/DOT CERTIFICATION, CONCRETE COATED TO 1.30 S.G. UNDERWATER SIDE CONNECTION ASSEMBLY 36" ANODE BRACELETS	<b>DRAWING NUMBER</b> OL-1000-1-1003C1	<b>REFERENCE DRAWING</b> UNDERWATER, SIDE CONNECTION ASSEMBLY	<b>DESIGN PRESSURE</b> 1348 PSIG	<b>FIELD BOOKS</b> 2734-Pg. 24-30 2735-Pg. 2-29 2736-Pg. 2-3	<b>STINGRAY PIPELINE COMPANY</b> ENGINEERING DEPARTMENT HOUSTON, TEXAS <b>LINE 1000-1</b> GULF OF MEXICO OFFSHORE - WEST CAMERON AREA W.O. NO. 1013, 1014, 1015 DWG. OL-1000-1-1003C COMPLETION DRAWING
		CONTRACTOR	PIPE SIZE																																				
TRIED SOFT	36"																																						
CHIEF	TYPE																																						
CURRY CONST SURV	INSPECTION																																						
CONRY FUEL SURV	REP P O NO																																						
REPORT DATE	REPORT DATE																																						
CONTR DIS. JOINTING	PIPE P O NO																																						
JOINT LENGTH	JOINT LENGTH																																						
CONTR TESTING	INS YIELD																																						
TEST PRESSURE	MIN. TEST PRESS.																																						
TEST MEDIA	DESTINATION																																						
LINE VOLUME																																							
PIPE TONNAGE	REPAIR DATE																																						
CONRY TYPE	TYPE OF REPAIR																																						
DATE AT SERVICE	CAUSE OF REPAIR																																						
DIRECTION OF LAYING	LOCATION																																						
<b>REVISION</b> 1. 00' 10" 14" 20" 25" 31" 40" 45" 50" 55" 60" 65" 70" 75" 80" 85" 90" 95" 100" 105" 110" 115" 120" 125" 130" 135" 140" 145" 150" 155" 160" 165" 170" 175" 180" 185" 190" 195" 200" 205" 210" 215" 220" 225" 230" 235" 240" 245" 250" 255" 260" 265" 270" 275" 280" 285" 290" 295" 300"																																							



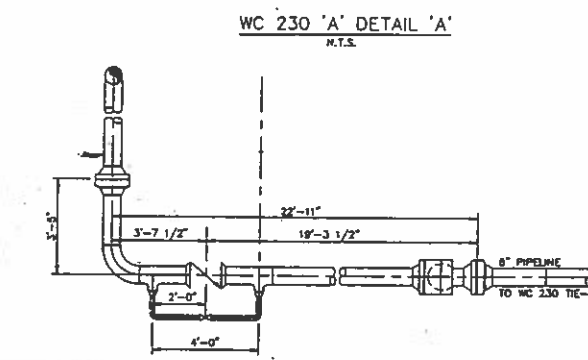
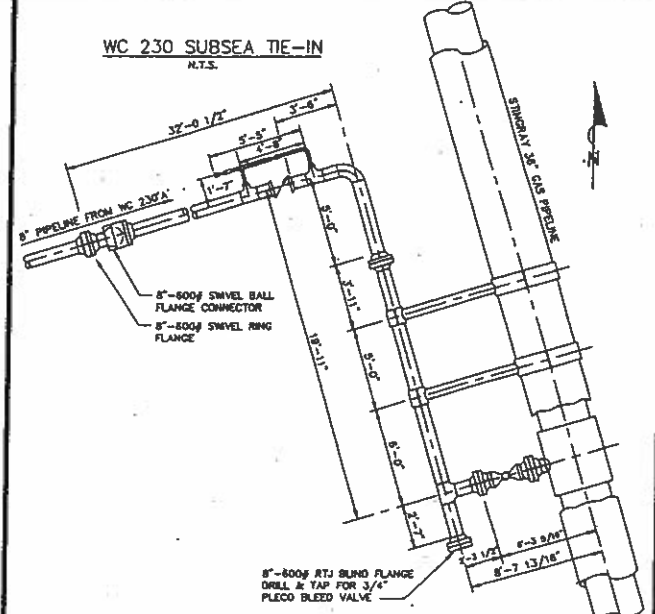
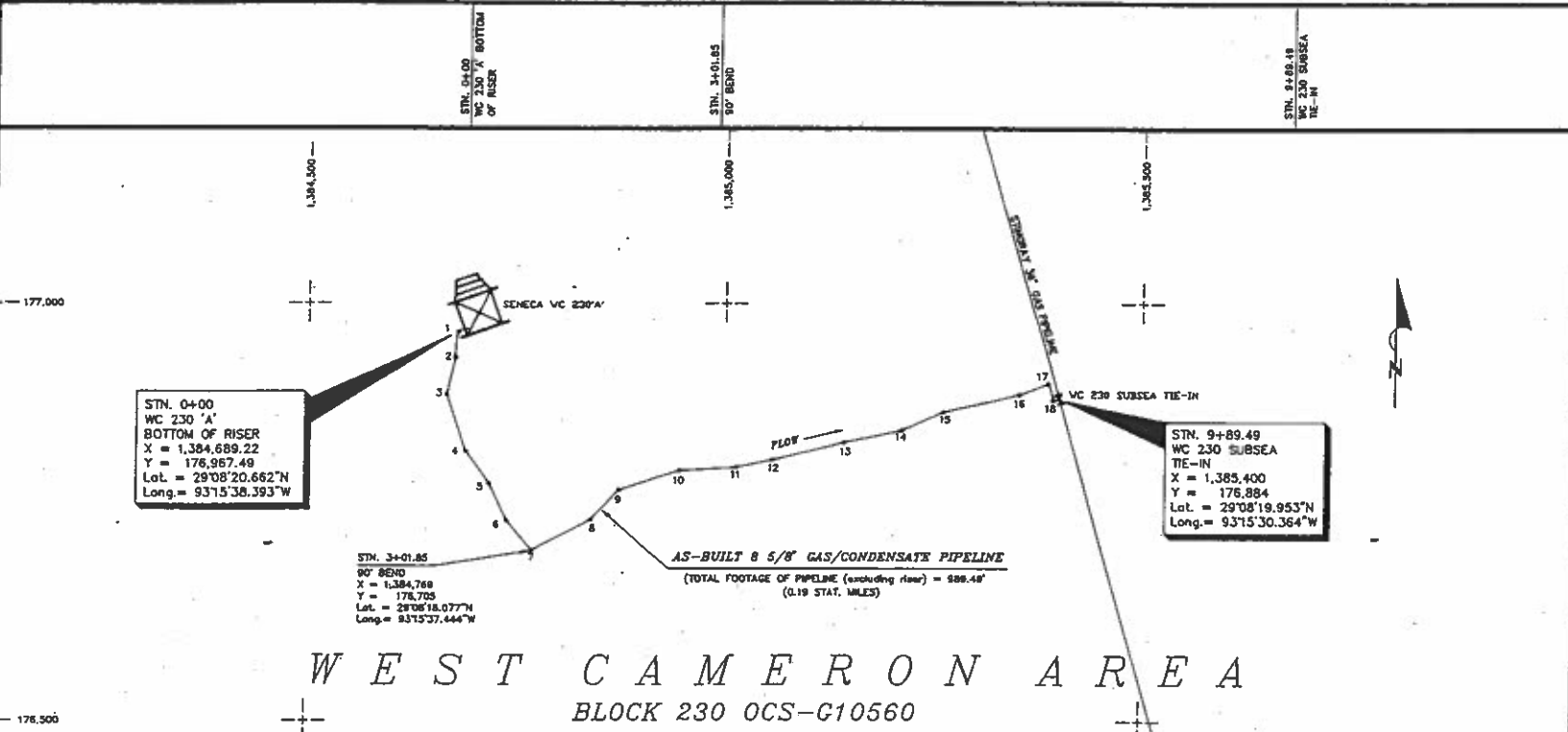




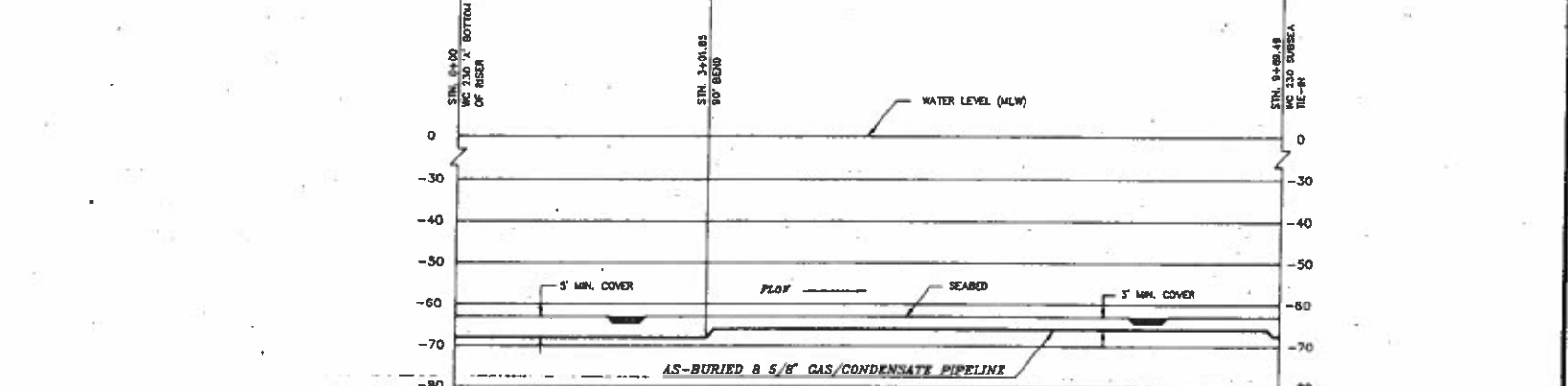


BEARINGS & POINTS OF INTERSECTION

PLAN  
SCALE: 1" = 100'



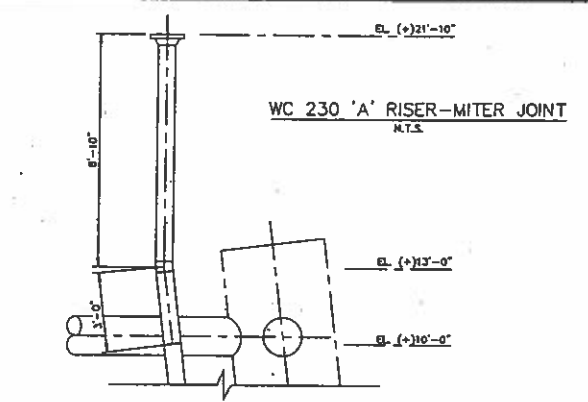
PROFILE  
SCALE: HORIZ. 1" = 100', VERT. 1" = 20'



AS-BUILT 8 5/8" GAS/CONDENSATE PIPELINE FROM SENECA WC 230'A' PLATFORM TO WC 230 SUBSEA TIE-IN

POINT	X COORD.	Y COORD.	POINT	X COORD.	Y COORD.
WC 230 'A' BOTTOM OF RISER	1,384,889.22	178,967.49	10	1,384,946	178,799
1	1,384,878	178,964	11	1,385,014	178,803
2	1,384,875	178,933	12	1,385,057	178,812
3	1,384,665	178,889	13	1,385,144	178,833
4	1,384,688	178,822	14	1,385,213	178,847
5	1,384,717	178,783	15	1,385,252	178,869
6	1,384,730	178,740	16	1,385,352	178,889
7	1,384,789	178,705	17	1,385,386	178,902
8	1,384,840	178,741	18	1,385,392	178,882
9	1,384,873	178,778	WC 230 SUBSEA TIE-IN	1,385,400	178,884

TOTAL FOOTAGE (excluding riser) = 989.48'



PIPE CODE	RISER/TIE-IN SPOOLS: 8.625" O.D. x .500" W.T. API 5L GRADE B SMLS. PIPE (A-106) / LINE PIPE: 8.625" O.D. x .375" W.T. API 5L GRADE B SMLS. PIPE (A-106)
LOCATION CLASSIFICATION	CLASS I
CORROSION COATING	EXTERNAL: FUSION BOND EPOXY, 16 MILS.; INTERNALLY COATED WITH ZEBRON AT EACH FLOW DIRECTION CHANGE FOR 5' ON EITHER SIDE
WEIGHT COATING	NONE
ANODES	3-112# ZINC BRACELET ANODE, ONE ON EACH END AND ONE CENTERED ON THE LATERAL
FIELD JOINTS	HEAT SHRINK SLEEVES
TRENCH DEPTH	5' BURY FROM RISER TO THE 90° BEND - 3' FROM THE 90° BEND TO THE TIE-IN
HYDROSTATIC TEST PRESSURE	2225 PSIG (MAX) - 2160 PSIG (MIN) FOR 8 HOURS
MAOP	1348 PSIG

**GENERAL NOTES**

- COORDINATES FOR WC 230'A' BOTTOM OF RISER TAKEN FROM CONSTRUCTION DRAWINGS, SURVEYED BY OTHERS AND VERIFIED THIS SURVEY.
- DEPTH OF BURIAL INFORMATION FURNISHED BY MARTECH, INC. DIVE CONTRACTORS TO STRINGRAY PIPELINE COMPANY.

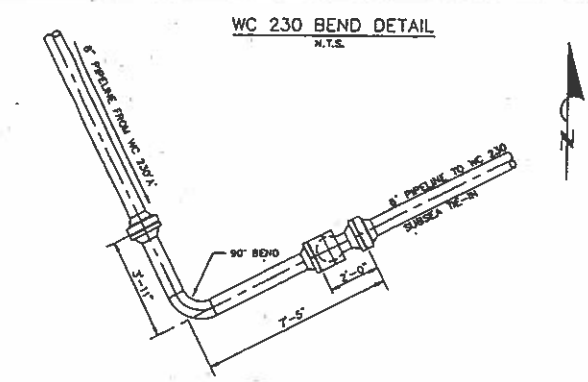
**LEGEND**

- AS-BUILT PIPELINE
- EXISTING PIPELINE
- WELL LOCATION
- PLATFORM
- BLOCKLINES & NUMBERS
- SUBSEA TIE-IN

**REFERENCE DRAWINGS**

NCPD DRAWING: 05-LE-EM-02

PIPELINES & UTILITY CROSSINGS				
STATION	SIZE	COVER	CLR.	OWNER



**APPROVAL**

DRWN BY: S.A.R.  
DATE: 12/7/92

CHECKED: [Signature]  
DATE: [Blank]

REVISION: [Blank]  
DATE: [Blank]

CHECKED: [Signature]  
DATE: [Blank]

UNITS: U.S.C. & C.S. FEET	FALSE EASTING: 2,000,000.00
PROJECTION: LAMBERT	FALSE NORTHING: 0.0
ZONE: LOUISIANA SOUTH	POSITIONING SYSTEM: STEDS/DGPS
DATE: MAR 1927	LAY BARGE: PIPELAYER 5
SPHEROID: CLARKE 1866	SURVEY DATES: NOVEMBER 1992
CENTRAL MERIDIAN: 91°20'00.0"W	D.P. REF.: 0982
UPPER PARALLEL: 30°42'00.0"N	JOB NO.: 1345-LE
LOWER PARALLEL: 28°18'00.0"N	DRAWING NO.: 05P1092
ORIGIN LATITUDE: 28°40'00.0"N	

**NCS INTERNATIONAL**

3000 HAYES RD.  
HOUSTON, TX 77082  
TEL (713)584-9000  
FAX (713)584-9090

I hereby certify that this plan has been prepared following generally accepted professional standards for offshore surveys and represents the horizontal position of the pipeline.

Edna A. Cold, Inc. Reg. No. 4869  
Date: [Blank]

**GPI**

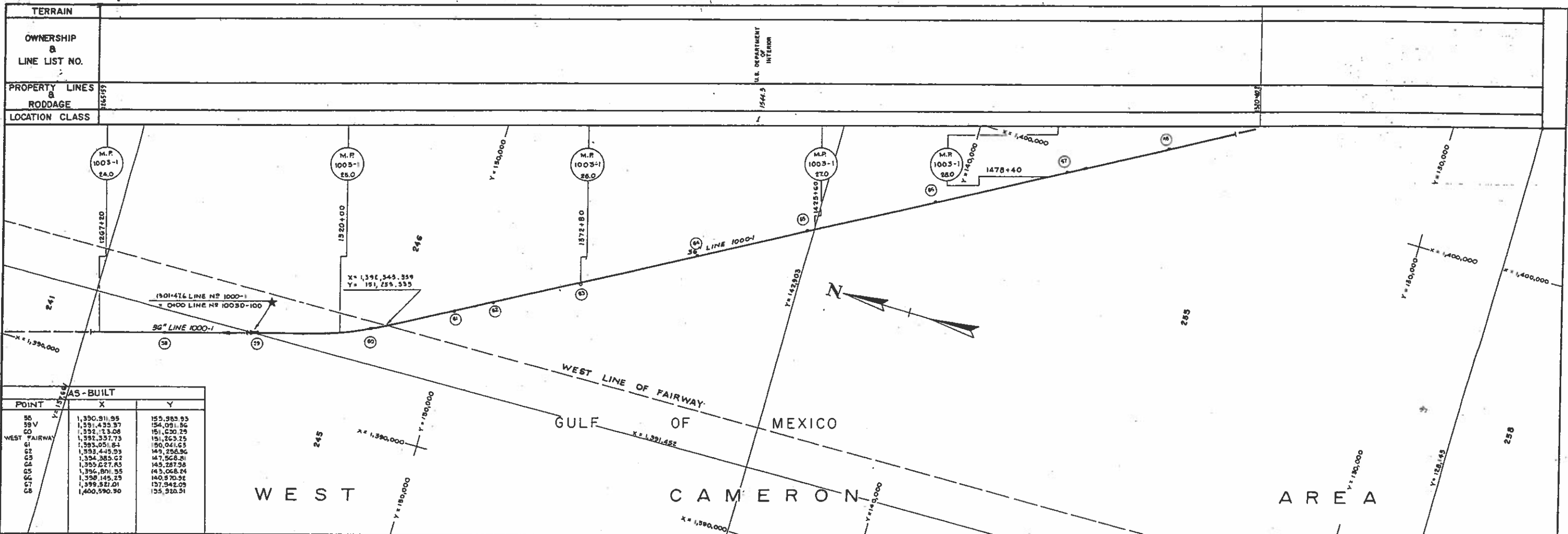
**STRINGRAY PIPELINE COMPANY**  
(OPERATED BY: NATURAL GAS PIPELINE COMPANY OF AMERICA)

AS-BUILT 8 5/8" GAS/CONDENSATE PIPELINE

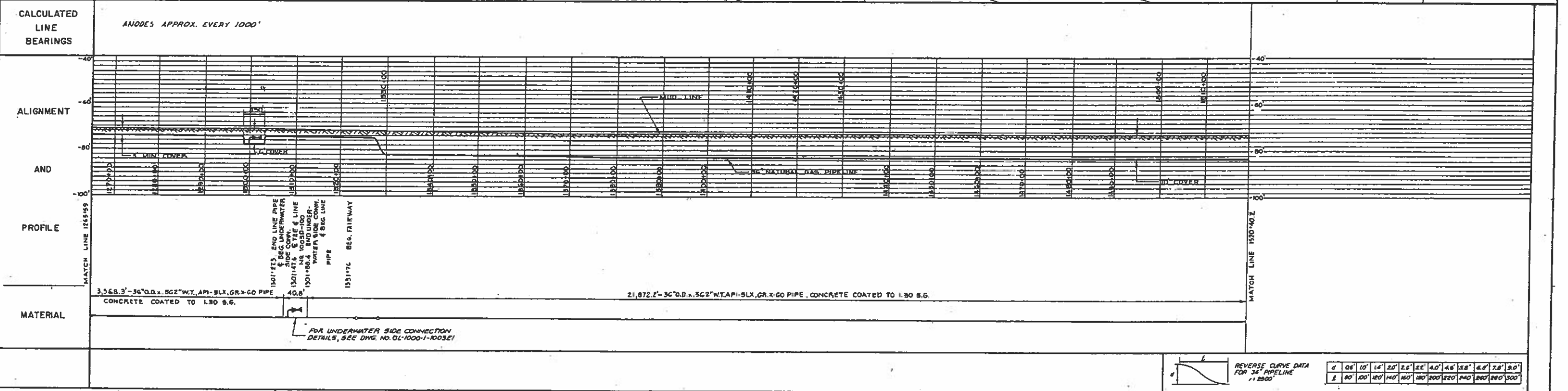
WEST CAMERON AREA

BLOCK 230

DWG. OL-1000-1-1003D1

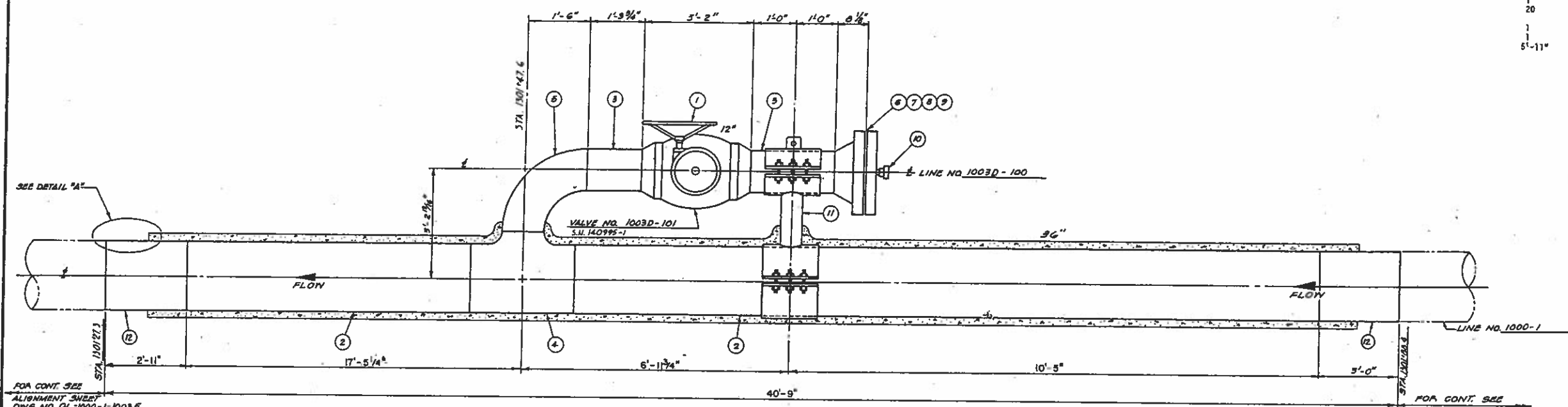


POINT	X	Y
55	1,350,811.95	155,983.93
59V	1,351,435.37	154,091.86
60	1,352,733.08	151,030.75
WEST FAIRWAY	1,352,357.73	151,263.25
61	1,353,051.64	150,041.65
62	1,353,445.53	149,256.96
63	1,354,385.52	147,568.21
64	1,355,227.83	145,287.98
65	1,356,801.55	143,068.24
66	1,358,145.25	140,570.92
67	1,359,821.01	137,942.09
68	1,400,590.90	135,320.91

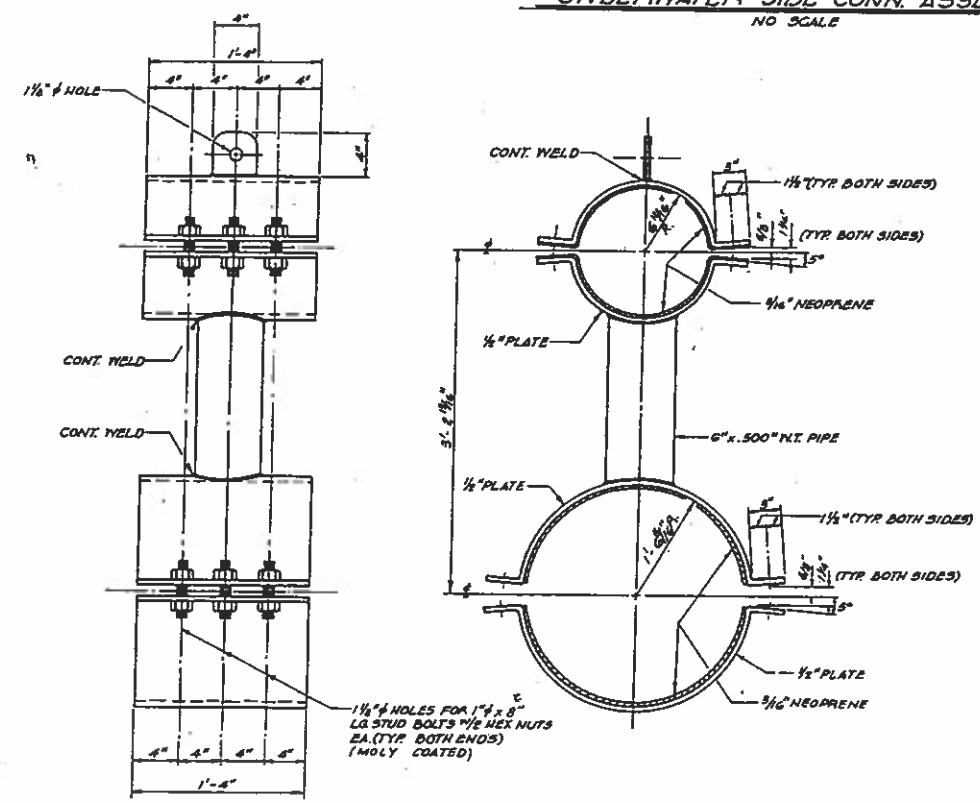


LEGEND		HISTORICAL DATA		MATERIAL SUMMARY		DRAWING NUMBER		REFERENCE DRAWING		DESIGN PRESSURE 1348 PSIG	
Gas Well	Equation	CONTRACTOR	PIPE SIZE	25,440'	36" O.D. x 562" WT, API-5LX, GR. X-60 PIPE W/DOT CERTIFICATION, CONCRETE COATED TO 1.30 S.G.	OL-1000-1-1003E1	UNDERWATER SIDE CONNECTION ASSEMBLY	2732 - Pg. 17-30	2733 - Pg. 2-17	STINGRAY PIPELINE COMPANY ENGINEERING DEPARTMENT HOUSTON, TEXAS	
Dry Well	Block Line	SPREAD SUB	TYPE	40.8'	36" O.D. x 562" WT, API-5LX, GR. X-60 PIPE W/DOT CERTIFICATION, CONCRETE COATED TO 1.30 S.G.					LINE 1000-1 GULF OF MEXICO OFFSHORE - WEST CAMERON AREA	
Platform	Foreign Pipeline	CONTR. CONST. SURV.	INSPECTION		36" ANODE BRACELETS					W.O. NO. 1013, 1014, 1015	
Creter Area	X & Y Coordinate	CONTR. FINAL SURV.	REPORT NO.							DWG. OL-1000-1-1003E	
Cathodic Test Coupon	Offshore Area	CONTR. TEST LOG	REPORT DATE							DATE 7-26-82	
Land Tract Number	Oyster Lease	CONTR. TEST LOG	TEST MEDIA							DATE 2-28-83	
Restriction R/W	Reef	CONTR. TEST LOG	TEST MEDIA PRESS.							COMPLETION DRAWING	
R/W Agreement	Sunken Wreck	CONTR. TEST LOG	TEST MEDIA DESTINATION							DATE OF AERIAL	

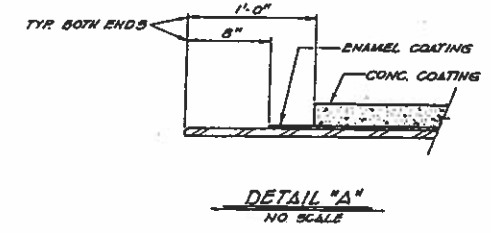
STOCK NO.	QUANTITY	SIZE	DESCRIPTION	MARK NO.
	1	12"	ANSI 900 W.E. Groove Ball Valve Manual Gear Operated Protected for Salt Water Immersion. Prepare Ends for Welding to 12.75" O.D. x 500 W.T. Pipe API-6D, 1968	1
30'-0"	36"		O.D. x 750 W.T. Pipe API-SLX, GR. X-60 w/DOT Cert.	2
4'-0"	12-3/4"		O.D. x 500 W.T. Pipe, API-SL GR. #8 Seals w/DOT Cert.	3
	1	36"	x38"x12" Spec. Red Tee, .750 W.T. x 500 W.T. Per Std Dwg No 6-CESA, WPHY-60 HSS-SP-75-1970 P-1348, T=250°F, P=50	4
	1	12"	x.500 W.T. L.R. 90° Weld ELL, GR. #8 WPB-ASTM, A-234, 1971	5
	1	12"	ANSI 900 F.S. (R.T.J.) M.N. Flange, Bore 11.75" A 105-1968 GR. II, ANSI B16.5-1968	6
	1	12"	ANSI 900 F.S. (R.T.J.) Blind Flange, Center Drill & Tap for 1" H.P.T. A105-1968 GR. II, ANSI B16.5-1968	7
	1	RS7	Ring Joint Gasket (Pitch Dia. 15") ANSI B16.20-1963	8
	20	1-3/8" B	Stud Bolts, 13" Thd. Lgth 8-7 ASTM A-193, 1971 w/2	9
	1	1"	ASTM A-194, 1969 Hex Nuts Ea Moly Coated	10
	1	1"	Pleeco Bleeder Plug, 3000F W.P. w/DOT Cert.	11
5'-11"	36"		Pipe Clamp Per Detail on this Dwg (By Contr.)	12
			O.D. x .562 W.T. Pipe, API-SLX, GR. X-60 w/DOT Cert.	



**ELEVATION**  
**UNDERWATER SIDE CONN. ASSEMBLY**  
 NO SCALE



**DETAIL OF PIPE CLAMP (1)**  
 (1 REQD)  
 NO SCALE

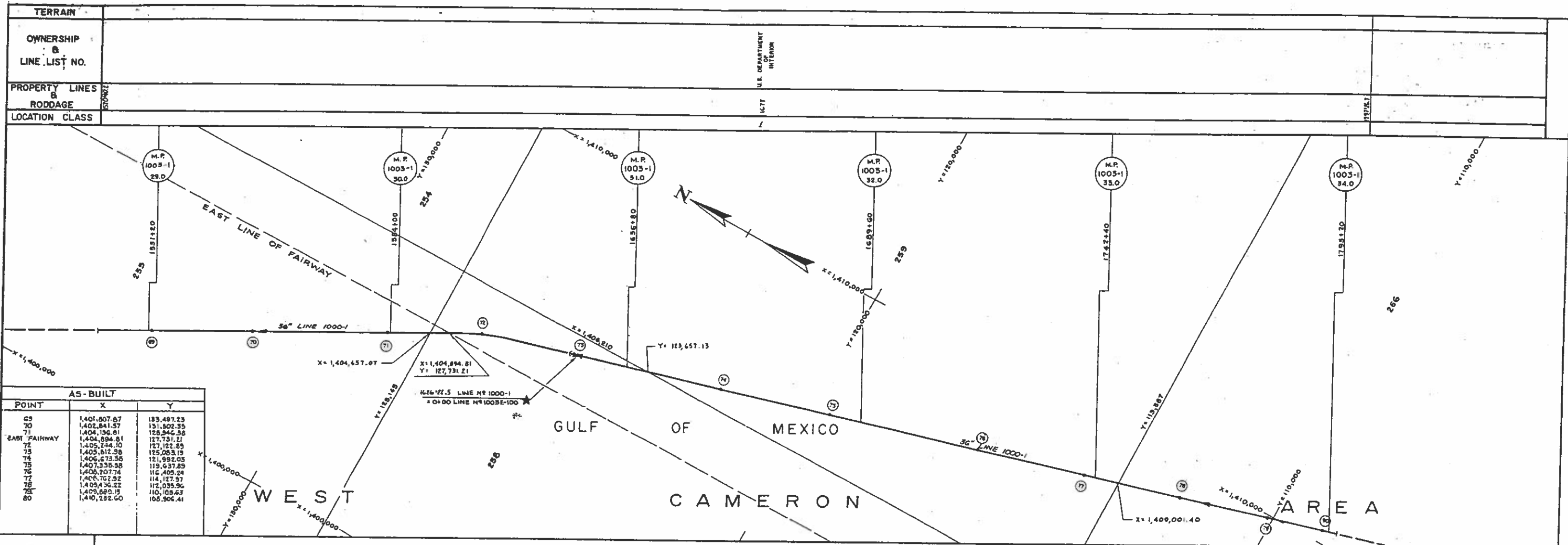


**DETAIL "A"**  
 NO SCALE

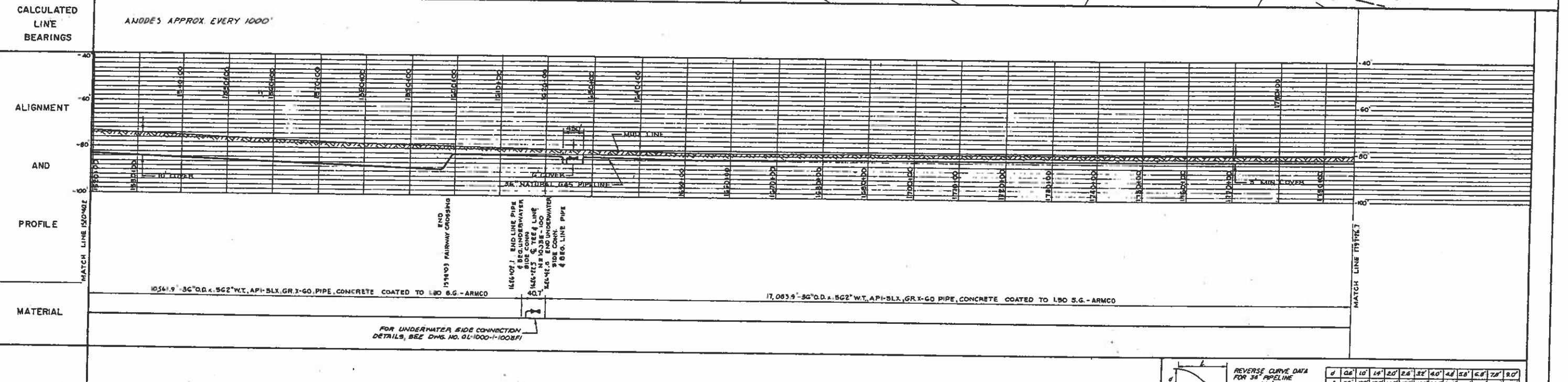
FIELD BOOK  
 2733-Pg. 13

OL-1000-1-1003E ALIGNMENT SHEET, LINE NO. 1000-1		REFERENCE DRAWING
DRAWING NUMBER		
<b>STINGRAY PIPELINE COMPANY</b>		
ENGINEERING DEPARTMENT		HOUSTON, TEXAS
<b>UNDERWATER SIDE CONNECTION</b>		
<b>ASSEMBLY FOR</b>		
<b>LINE NO. 1003D-100</b>		
W.O. NO. 1013, 1014, 1015		
SCALE	AS SHOWN	G34-C78A
DRAWN	D.J.W.	DATE 7-29-82
CHECKED	C.S.	DATE 2-28-83
APPR. CH. ENR.		DATE
APPR. ENGR.		DATE
		COMPLETION DRAWING
DATE OF REVISION		

DWG. OL-1000-1-1003E1



AS-BUILT		
POINT	X	Y
69	1,401,807.67	153,497.23
70	1,402,841.57	151,502.55
71	1,404,156.81	128,546.38
72	1,404,894.81	127,731.21
73	1,405,744.10	127,192.85
74	1,406,612.38	125,083.13
75	1,406,673.56	121,992.05
76	1,407,338.58	119,637.85
77	1,408,207.74	116,409.24
78	1,408,702.52	114,127.97
79	1,409,436.22	112,035.96
80	1,409,683.13	110,103.63
81	1,410,232.60	108,906.41



LEGEND	
⊙	Gas Well
◇	Dry Well
□	Platform
⊕	Crater Area
⊗	Cathodic Test Coupon
Ⓢ	Land Tract Number
Ⓜ	Restriction R/W
L-X	R/W Agreement
●	Buy/Sell/Type
★	Equation
—	Block Line
—	Foreign Pipeline
+	X, Y Coordinate Mark
Ⓢ	Distress Area Outline
Ⓢ	Dyster Lease
Ⓢ	Rest
Ⓢ	Sunken Wreck
M.P. 11-1	Mile Post
Ⓢ	U.S. & G.S. Triangulation Station
Ⓢ	Anode Bracket
Ⓢ	Underwater Side Connection

HISTORICAL DATA	
CONTRACTOR:	PIPE SIZE
DATE OF SURVY:	TYPE
CORRECT SURVY:	INSPECTION:
CORRECT SURVY:	REP. P.U. NO.
2 MAY 1987	REPORT DATE
CORRECT SURVY:	JOINT LENGTH
TEST PRESSURE:	JOINT TYPE
TEST MEDIA:	MAT. TEST PRESS.
TEST OPER. PRESS:	DESTINATION
LINE VOLUME:	REPAIR DATE
PIPE TORQUE:	REPAIR DATE
CORRECT TYPE:	TYPE OF REPAIR
DATE IN SERVICE:	CAUSE OF REPAIR
DIRECTION OF LAYING:	LOCATION

MATERIAL SUMMARY	
27,445.8	36" O.D. x 562" W.T. API-5LX GR.X-GO PIPE W/DOT CERTIFICATION, CONCRETE COATED TO 1.50 S.G. UNDERWATER SIDE CONNECTION ASSEMBLY 36" ANODE BRACELETS
40.7	
29	

DRAWING NUMBER	REFERENCE DRAWING
01-1000-1-1003F	UNDERWATER SIDE CONNECTION ASSEMBLY

DESIGN PRESSURE 1548 PSIG

FIELD BOOKS  
2731- Pg. 14-30  
2732- Pg. 2-17

**STINGRAY PIPELINE COMPANY**  
ENGINEERING DEPARTMENT HOUSTON, TEXAS

**LINE 1000-1**  
GULF OF MEXICO  
WEST CAMERON AREA

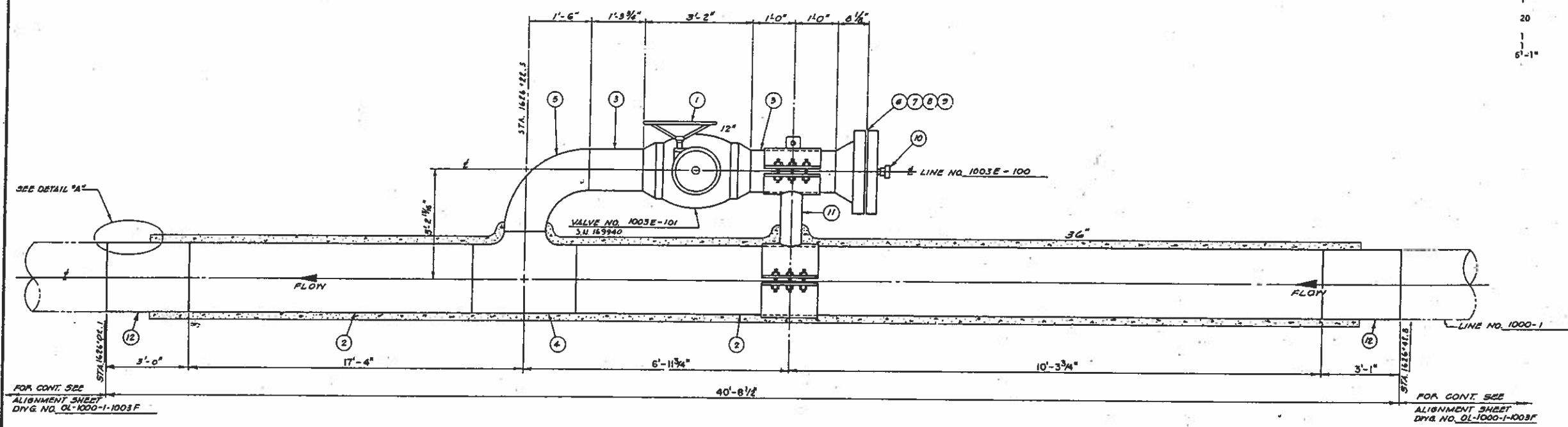
W.O. NO. 1013, 1014, 1015

SCALE: 1" = 100' HORIZONTAL, 1" = 20' VERTICAL

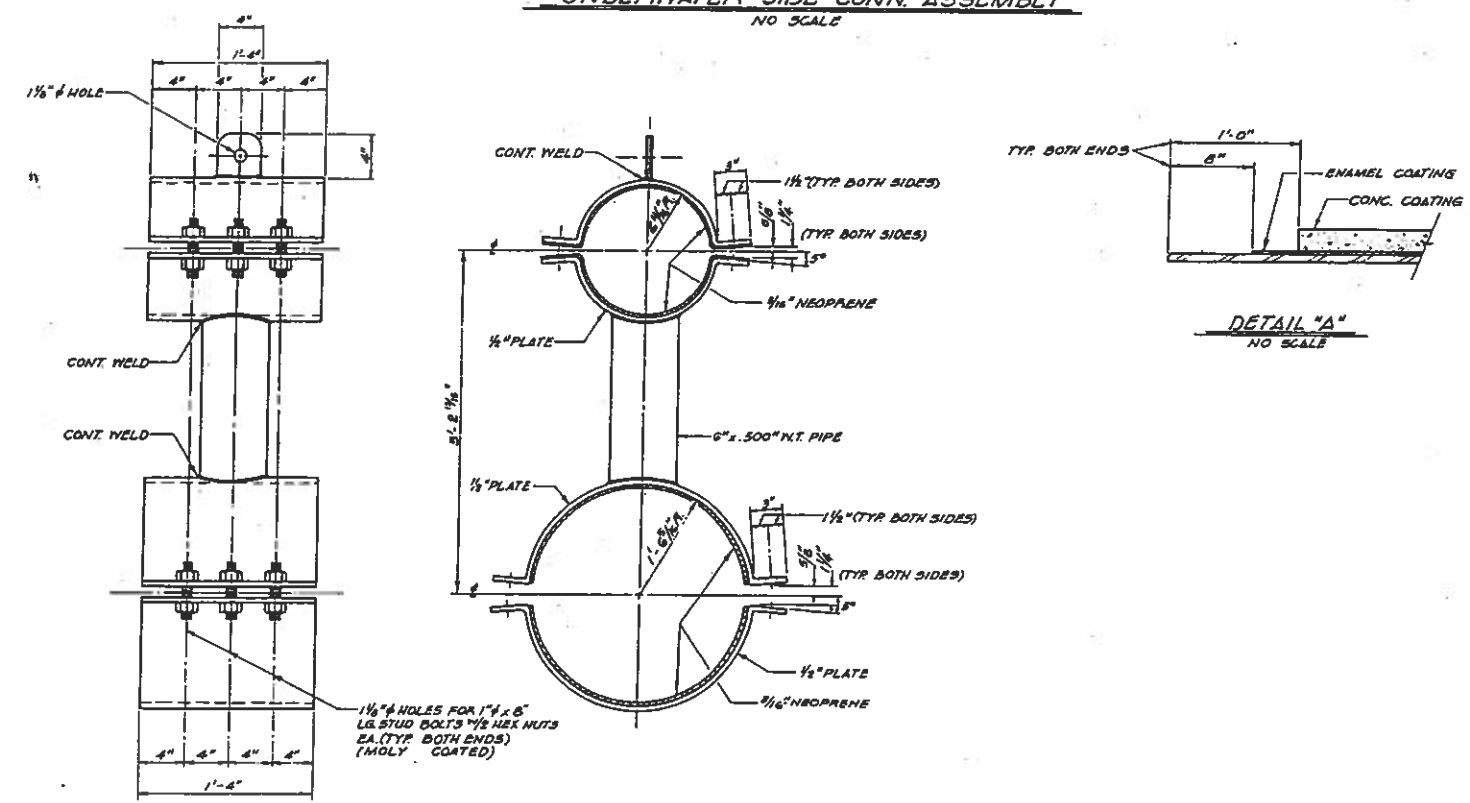
DATE: 7-27-82  
DWG. NO. 01-1000-1-1003F

DATE: 2-28-83  
COMPLETION DRAWING

STOCK NO.	QUANTITY	SIZE	DESCRIPTION	MARK NO.
	1	12"	ANSI 900 M.E. Cameron Ball Valve Manual Gear Operated for Salt Water Immersion, Prepare Ends for Welding to 12.75" O.D. x 500" M.T. Pipe API-6D 1968	1
30'-3"	36"	36"	O.D. x 750" M.T. Pipe API-SLX, GR. X-60 w/ DOT Cert.	2
4'-0"	12-3/4"	12-3/4"	O.D. x 500" M.T. Pipe, API-SL GR. "8" Smls w/ DOT Cert.	3
1	36"	36"	x36"x12" Spec. Red Tee, 750" M.T. x 500" M.T. Per Std. Des. No. 64-C65A MPKT-60 MSS-SP-75-1970, P=1348, T=250°F, Fw 50	4
1	12"	12"	x 500" M.T. L.R. 90° Weld Ell, GR. "8" WP8-ASTM, A-234 1971	5
1	12"	12"	ANSI 900 F.S. (R.T.J.) W.M. Flange, Bore 11.75" A105-1968 GR. II, ANSI B16.5-1968	6
1	12"	12"	ANSI 900 F.S. (R.T.J.) Blind Flange, Center Dr-111 8 Tap for 1" N.P.T. A105-1968 GR. II, ANSI B16.5-1968	7
1	R57		Ring Joint Gasket (Pitch Dia. 15") ANSI B16.20 1963	8
20	1-3/8" B		Stud Bolts, 13" Thd. Lgth 8-7 ASTM A-193, 1971 w/ 2 ASTM A-194, 1969 Hex Nuts Ea Moly Coated	9
1	1"		Piececo Bleeder Plug, 3000# W.P. w/ DOT Cert.	10
1	1"		Pipe Clamp Per Detail on this Day [By Contr.]	11
6'-1"	36"		O.D. x 562" M.T. Pipe, API-SLX GR. X-60 w/ DOT Cert.	12



**ELEVATION**  
**UNDERWATER SIDE CONN. ASSEMBLY**  
NO SCALE

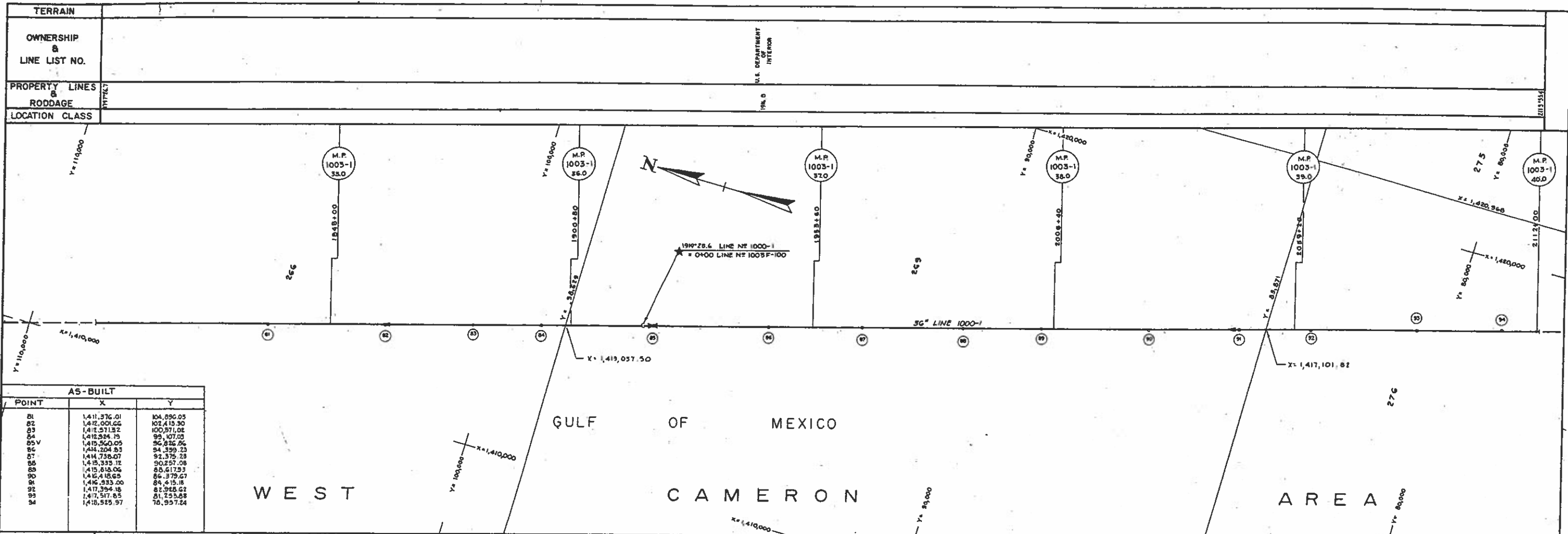


**DETAIL OF PIPE CLAMP (11)**  
(1: ASQB)  
NO SCALE

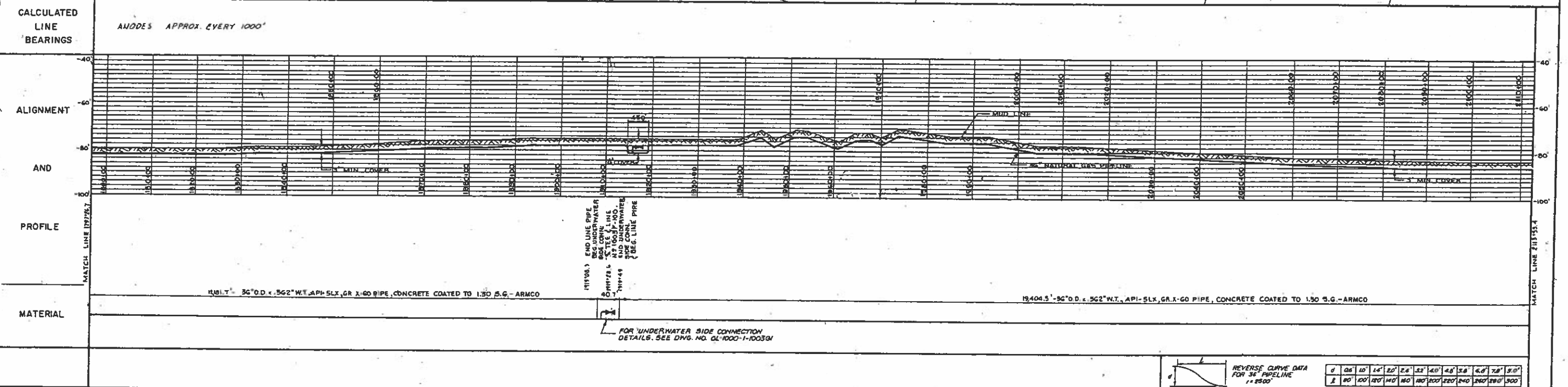
**DETAIL "A"**  
NO SCALE

FIELD BOOK  
2732 - Pg. 4 B.30

OL-1000-1-1003F		ALIGNMENT SHEET, LINE NO. 1000-1	
SCALE	None	REFERENCE DRAWING	
<b>STINGRAY PIPELINE COMPANY</b>			
ENGINEERING DEPARTMENT		HOUSTON, TEXAS	
<b>UNDERWATER SIDE CONNECTION ASSEMBLY FOR LINE NO. 1003E-100</b>			
W.O. NO. 1013, 1014, 1015			
SCALE	None	GM-C784	
DRAWN	D. J. J.	DATE	7-28-82
CHECKED	C. S.	DATE	2-28-83
APPRO. ENGR.		DATE	
DATE		DATE OF SERIAL	
FIELD BOOK NO.			
		DWG. OL-1000-1-1003F-1	
		COMPLETION DRAWING	
		OL-1000-1-1003F1	



AS-BUILT		
POINT	X	Y
B1	1,411,376.01	104,896.03
B2	1,412,001.64	102,415.90
B3	1,412,571.82	100,371.06
B4	1,412,834.75	95,327.03
B5V	1,415,560.05	56,826.06
B6	1,414,204.83	94,399.23
B7	1,414,738.07	92,375.23
B8	1,415,333.12	90,257.08
B9	1,415,818.06	88,617.93
B0	1,416,418.65	86,379.67
B1	1,416,933.00	84,415.18
B2	1,417,394.18	81,948.62
B3	1,417,517.85	81,233.88
B4	1,418,525.97	78,957.24



LEGEND	
☆ Gas Well	★ Equation
◇ Dry Well	— Block Line
□ Platform	— Foreign Pipeline
○ Crater Area	+ X & Y Coordinate Mark
⊙ Cathodic Test Coupon	⊕ Offshore Area Outline
⊙ Land Tract Number	⊖ Dyer Lease
⊙ Restriction R/W	— Reel
L-X R/W Agreement	— Sunken Wreck
● Bour/Survey Truss	

HISTORICAL DATA	
CONTRACTOR	PIPE SIZE
SPREAD SURV	MFR
TYPE WSP	TYPE
CONTR SURV	INSPECTION
CONTR FINAL SURV	INSPECTION NO.
INSPECTION DATE	INSPECTION DATE
CONTR SURV	CONTR SURV
TEST PRESSURE	TEST PRESSURE
TEST MEDIA	TEST MEDIA
MAX OPER PRESS	MAX OPER PRESS
LINE VOLUME	LINE VOLUME
PIPE JOINTS	PIPE JOINTS
CONST TYPE	CONST TYPE
DATE IN SERVICE	DATE IN SERVICE
DIRECTION OF LAYING	DIRECTION OF LAYING

MATERIAL SUMMARY	
31,504.1'	36" O.D. x .562" W.T. API-5LX, GR. X-60 PIPE W/DOT CERTIFICATION, CONCRETE COATED TO 1.50 S.G. UNDERWATER SIDE CONNECTION ASSEMBLY 36" ANODE BRACELETS
40.7'	
31'	

DRAWING NUMBER	REFERENCE DRAWING
OL-1000-1-1003G1	UNDERWATER SIDE CONNECTION ASSEMBLY

DESIGN PRESSURE 1348 PSIG

FIELD BOOKS  
2730-Pg. 7-30  
2731-Pg. 2-14

**STINGRAY PIPELINE COMPANY**  
ENGINEERING DEPARTMENT

**LINE 1000-1**  
GULF OF MEXICO

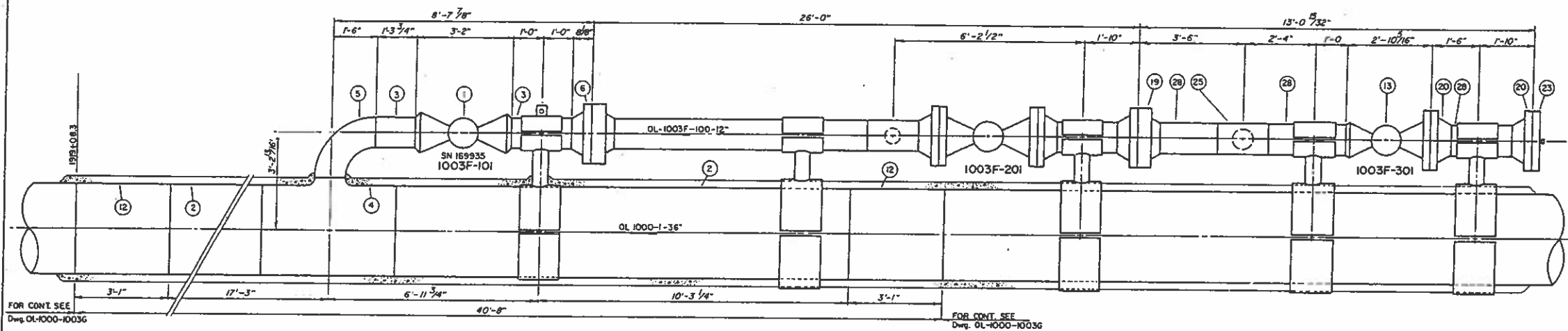
OFFSHORE - WEST CAMERON AREA

W.O. NO. 1013, 1014, 1015

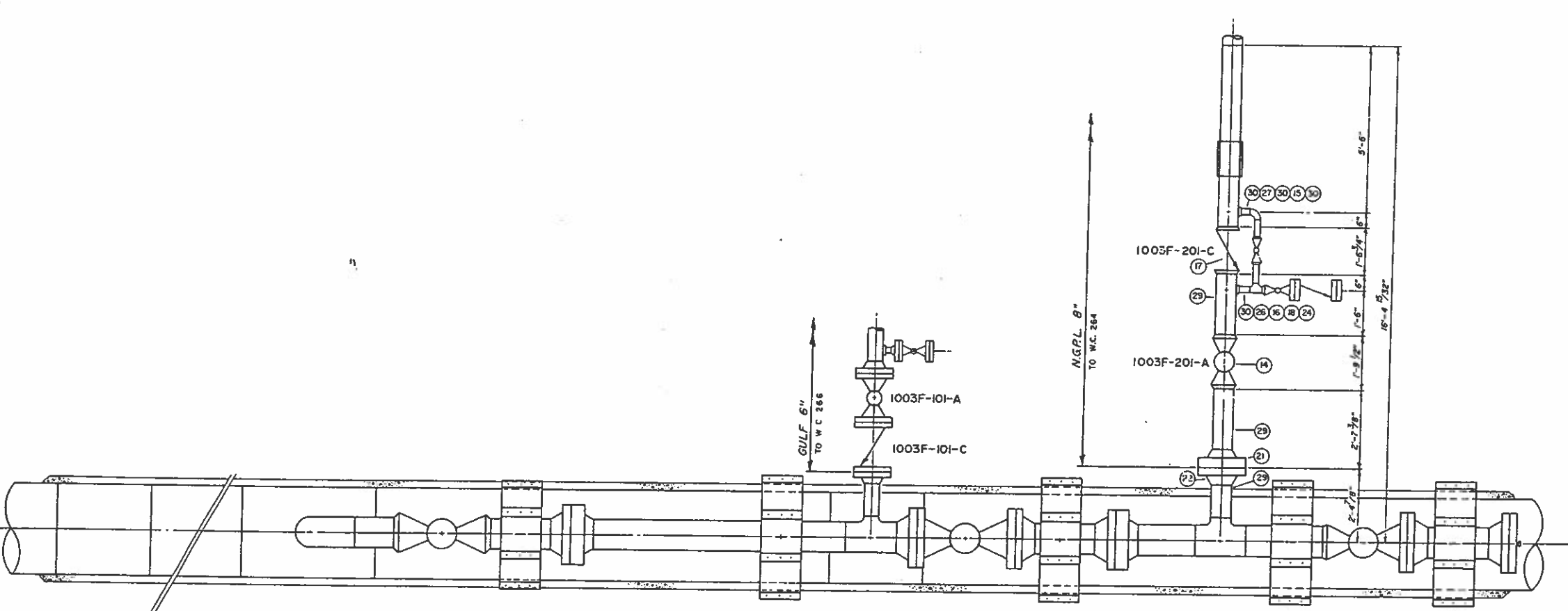
SCALE 1"=1000' HORIZONTAL - 1"=20' VERTICAL

Drawn	D. J. J.	DATE	7-27-82
Checked	C. S.	DATE	7-28-82
App'd. by	DR	DATE	
App'd. Engr.		DATE	
DATE	11-11-83	DATE OF AERIAL	

DWG. OL-1000-1-1003G  
COMPLETION DRAWING



**ELEVATION**  
**UNDERWATER SIDE CONN. ASSEMBLY**



**PLAN**  
**UNDERWATER SIDE CONN ASSEMBLY**

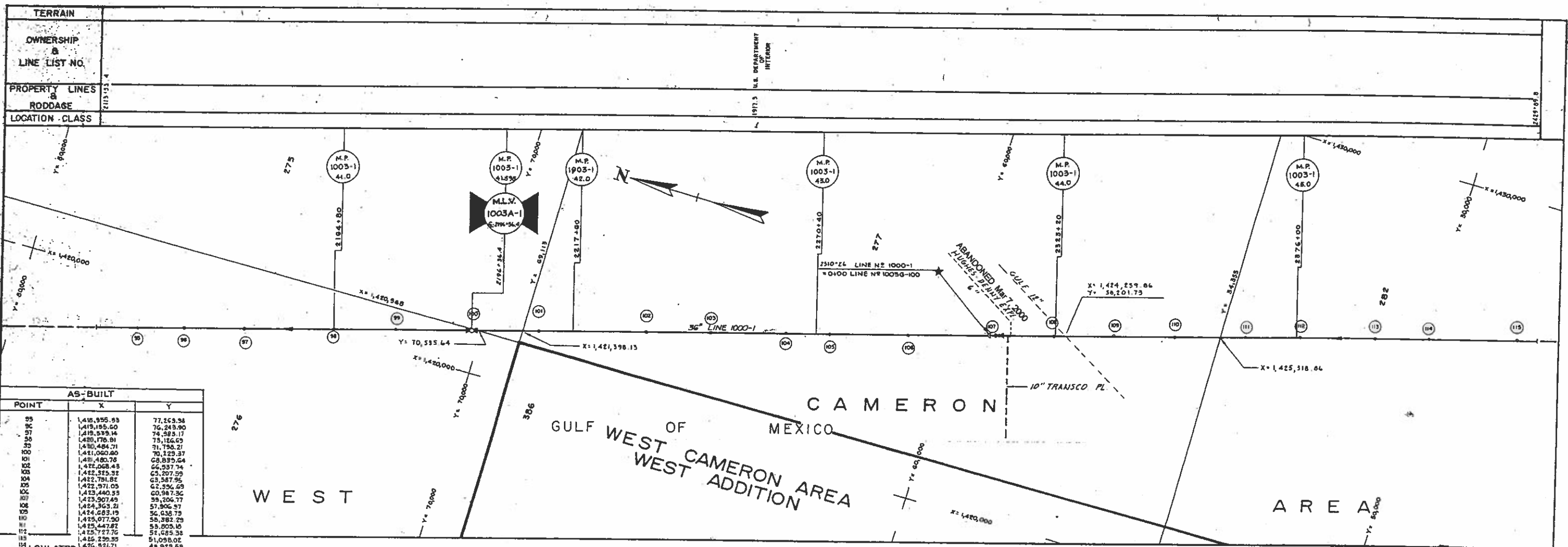
1	12"	ANSI 900 W.E. Cameron Ball Valve Manual Gear Operated Protected for Salt Water Immersion. Prepare Ends for Welding to 12.75" O.D. x 500" M.T. Pipe API-6D, 1968	1
30'-1"	36"	O.D. x 750" M.T. Pipe API-SLX, GR. X-60 w/ DOT Cert.	2
4'-0"	12-3/4"	O.D. x 500" M.T. Pipe, API-SL GR. "B" Sals w/ DOT Cert.	3
1	36"	x.36"x12" Spec Red Tee, .750" M.T. x .500" M.T. Per Std Dwg No 64-C65A WPHY-60 HSS-SP-75-1970, P=1348, T=250°F, F=.50	4
1	12"	x.500" M.T. L.R. 90° Weld ELL, GR. "B" WPB-ASTM, A-234 1971	5
1	12"	ANSI 900 F.S. (R.T.J.) V.N. Flange, Bore 11.75" A105 1968 GR. II ANSI B16.5-1968	6
6'-2"	36"	O.D. x .562" M.T. Pipe, API-SLX, GR. X-60 w/ DOT Cert.	12
<b>NGPL MATERIAL</b>			
1	12"	CAMERON BALL VA., ANSI 900, WE.R.T.J.	13
1	8"	CAMERON BALL VA., ANSI 900, WE	14
1	2"	CAMERON BALL VA., ANSI 900, WE, .218"	15
1	2"	CAMERON BALL VA., ANSI 900, WE.R.T.J., .218"	16
1	8"	WHEATLY CK. VA., ANSI 900, WE, W/THRU CONDUIT	17
1	2"	WHEATLY CK. VA., ANSI 900, R.T.J.	18
1	12"	SHIVEL RING FLG., ANSI 900, RTJ, .500"	19
2	12"	WELD NECK FLG., R.T.J., .500"	20
1	8"	SHIVEL RING FLG., ANSI 900, RTJ, .500"	21
1	8"	WELD NECK FLG., ANSI 900, RTJ, .500"	22
1	12"	BLIND FLG., ANSI 900, RTJ, TAPED 1/2" FOR PLECO BLEED PLUG	23
1	2"	BLIND FLG., ANSI 900, RTJ, TAPED 1/2" FOR PLECO BLEED PLUG	24
1	12"x8"	REDUCING WELD TEE, .500"	25
1	2"	WELD TEE, .218"	26
1	2"	WELD ELL, .218"	27
	12"x.500"	SMLS. STEEL LINE PIPE	28
	8"x.500"	SMLS. STEEL LINE PIPE	29
	2"x.218"	SMLS. STEEL LINE PIPE	30

PE0524 10/27/83

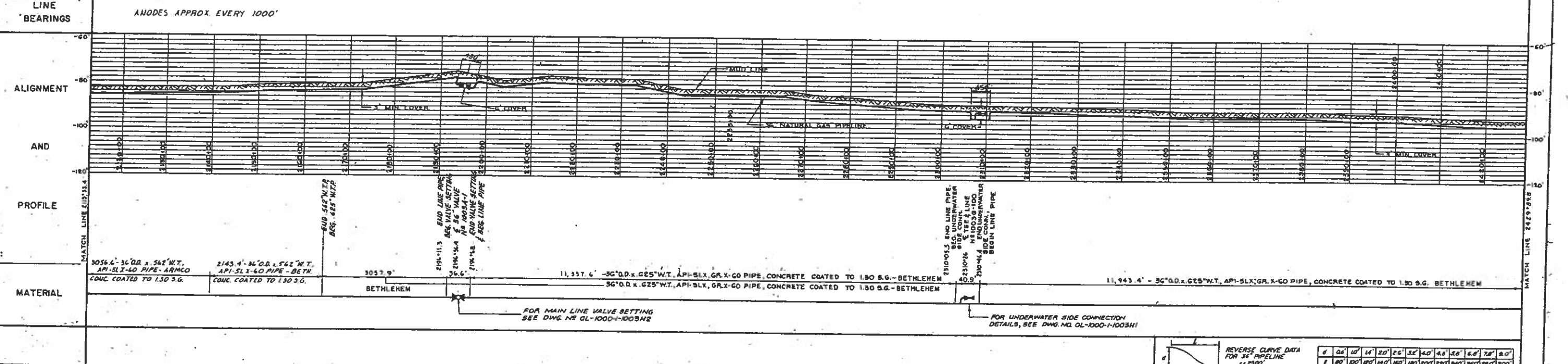
DRWG. NO.	REFERENCE DRWG.	REV	IDFM	CK	DESCRIPTION	DATE	SCALE: 1/2" = 1'-0"	DATE	GROUP LEADER	ELECTRICAL ENGR.	PROJECT ENGR.	PROJ. LDR. DESIGN	PROJ. DESIGN SUPV.	TRANSMISSION	APPROVALS	P2	P3	BID	CONST.

REV. 10-20-87	<b>1003F-100</b>	<b>Stingray Pipeline Company</b>
LOC. WEST CAMERON, BLK 269	YEAR: 1987	W. O. 1013, 1014, 1015
DWG. OL-1000-1-1003G1	REV.	





AS-BUILT		
POINT	X	Y
95	1,418,955.83	77,163.34
96	1,419,155.60	76,249.90
97	1,419,599.14	74,583.17
98	1,420,178.91	71,156.69
99	1,420,484.71	71,750.21
100	1,421,060.00	70,129.37
101	1,421,480.76	68,899.64
102	1,422,068.45	66,937.74
103	1,422,525.32	65,207.59
104	1,422,781.82	63,587.95
105	1,422,971.09	62,356.69
106	1,423,440.33	60,947.36
107	1,423,907.49	59,206.77
108	1,424,363.21	57,306.57
109	1,424,683.19	56,038.79
110	1,425,077.90	55,282.09
111	1,425,447.82	54,005.46
112	1,425,727.76	52,685.33
113	1,426,239.39	51,056.02
114	1,426,324.71	49,929.59
115	1,427,027.60	48,921.93



LEGEND	
⊙	Gas Well
◇	Dry Well
□	Platform
⊕	Crater Area
⊙	Cathodic Test Coupon
⊙	Land Tract Number
⊙	Restriction R/W
⊙	R/W Agreement
★	Equation
—	Block Line
—	Foreign Pipeline
+	X & Y Coordinate Mark
⊕	Offshore Area Outline
⊕	Oyster Lease
⊕	Reef
⊕	Sunken Wreck
M.P. 11-1	Mile Post
⊕	U.S. & G.S. Triangulation Station
⊕	Anode Bracket
⊕	Underwater Side Connection

HISTORICAL DATA	
CONTRACTOR	PIPE SIZE
SPREAD SHT	W.P.
PIPE R/W	TYPE
CONTR. COY. SURV.	INSPECTION
CONTR. FINAL SURV.	ESP. P.O. NO.
TRAV. REP.	REPAIR DATE
CONTR. JOINTING	CONTR. JOINTING
CONTR. TESTING	PIPE P.O. NO.
TEST PRESSURE	JOINT TEST PRESS.
TEST MEDIA	MLL. TEST PRESS.
TEST OPEN PRESS.	DESTINATION
LINE VOLUME	REPAIR DATE
PIPE TONNAGE	TYPE OF REPAIR
CONCT. T.Y.	CAUSE OF REPAIR
DATE IN SERVICE	LOCATION
DIRECTION OF LAYING	

MATERIAL SUMMARY	
5200'	36" O.D. x 5.62" W.T. API-5LX GR. X-60 PIPE W/DOT CERTIFICATION, CONCRETE COATED TO 1.30 S.G.
26,338.8'	36" O.D. x 6.25" W.T. API-5LX GR. X-60 PIPE W/DOT CERTIFICATION, CONCRETE COATED TO 1.30 S.G.
56.6'	36" O.D. x 6.25" W.T. API-5LX GR. X-60 PIPE W/DOT CERTIFICATION, CONCRETE COATED TO 1.30 S.G.
40.9'	36" O.D. x 6.25" W.T. API-5LX GR. X-60 PIPE W/DOT CERTIFICATION, CONCRETE COATED TO 1.30 S.G.
34'	36" O.D. x 6.25" W.T. API-5LX GR. X-60 PIPE W/DOT CERTIFICATION, CONCRETE COATED TO 1.30 S.G.

DRAWING NUMBER	REFERENCE DRAWING
OL-1000-1-1003 H1	UNDERWATER SIDE CONNECTION ASSEMBLY
OL-1000-1-1003 H2	UNDERWATER MAINLINE VALVE SETTING

DESIGN PRESSURE - 1348 PSIG

FIELD BOOKS  
2748 - Pg. 2-30  
2749 - Pg. 2-27  
2730 - Pg. 2-7

REV 3/7/00

**STINGRAY PIPELINE COMPANY**  
ENGINEERING DEPARTMENT  
HOUSTON, TEXAS

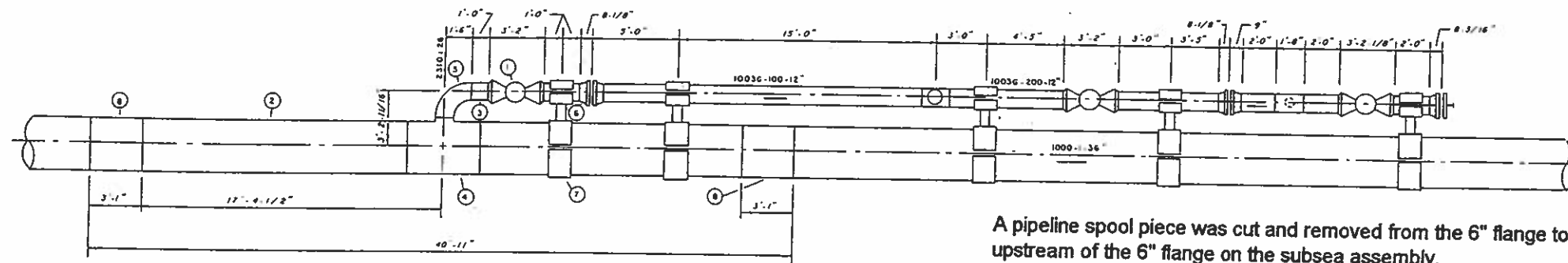
**LINE 1000-1**  
GULF OF MEXICO

OFFSHORE - WEST CAMERON AREA

W.O. NO. 1013, 1014, 1015

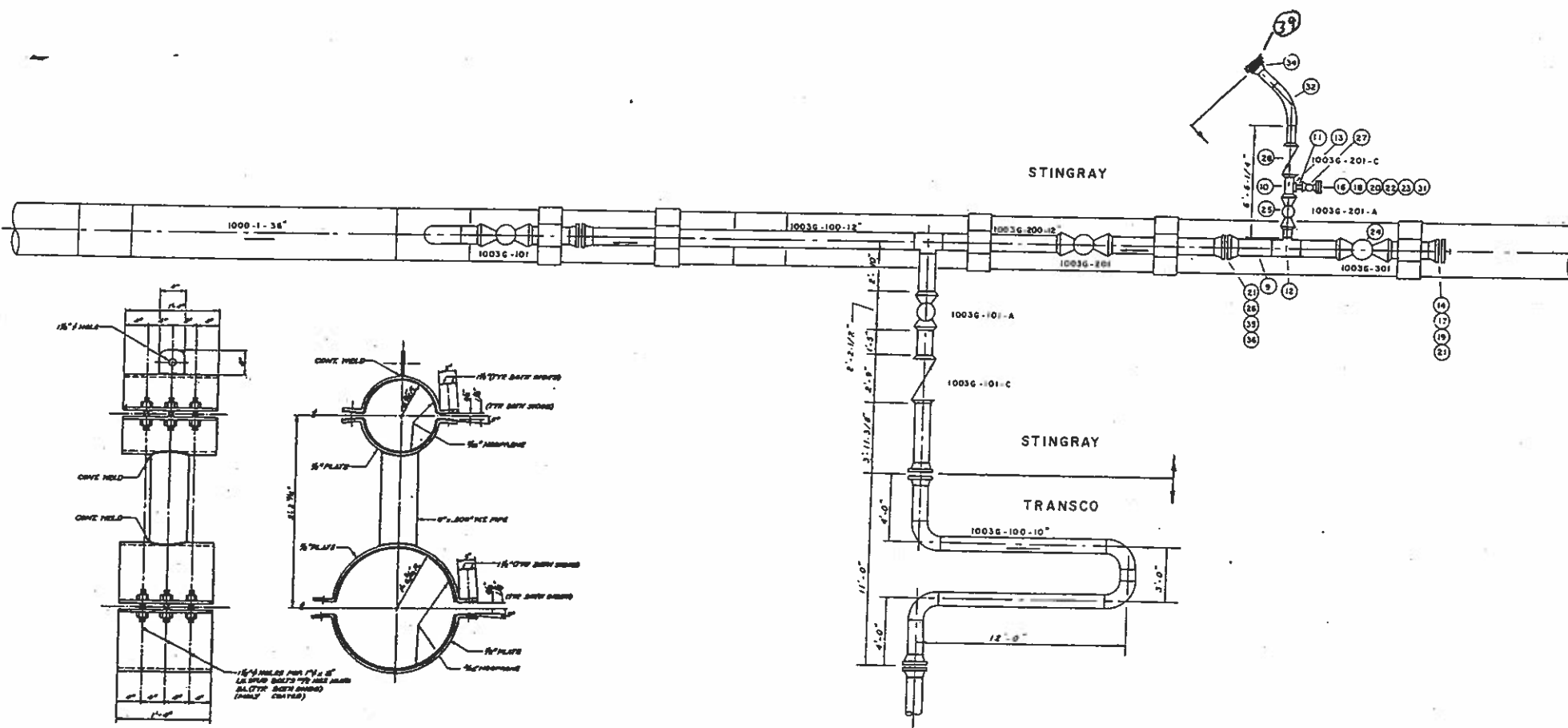
SCALE: 1" = 100' HORIZONTAL - 1" = 20' VERTICAL

DRWN: D.J.J.	DATE: 7-27-82	DWG. NO. OL-1000-1-1003H
CHEK: C.S.	DATE: 2-28-83	
APPR. EN. BR.	DATE:	
APPR. ENGR.	DATE:	COMPLETION DRAWING



ELEVATION  
Scale 1/4"=1'-0"

A pipeline spool piece was cut and removed from the 6" flange to a point 30' upstream of the 6" flange on the subsea assembly.  
 A 6" 900# ANSI RTJ blind flange was installed on the 6" 900# ANSI RTJ weldneck flange located upstream of the 6" check valve and spool piece.  
 Pipeline abandonment work was conducted between March 5 and 7, 2000.  
**NOTE:** The 6" and 2" ball valves were left in the closed position, however, the 12" ball valve located between the 12" X 12" X 10" tee (Transco tie-in) and the 12" X 12" X 6" tee could not be closed (the stem on the operator was turned clockwise approximately 40 complete turns until kickback was felt on the wrench. However, the valve indicator on the top of the operator did not indicate that the valve was closed). Consequently the 12" subsea assembly between the 12" ball valve and the 6" ball valve still has pressure in it. The 6" subsea assembly between the 6" ball valve and the 6" blind flange was left depressured.



PLAN  
Scale 1/4"=1'-0"

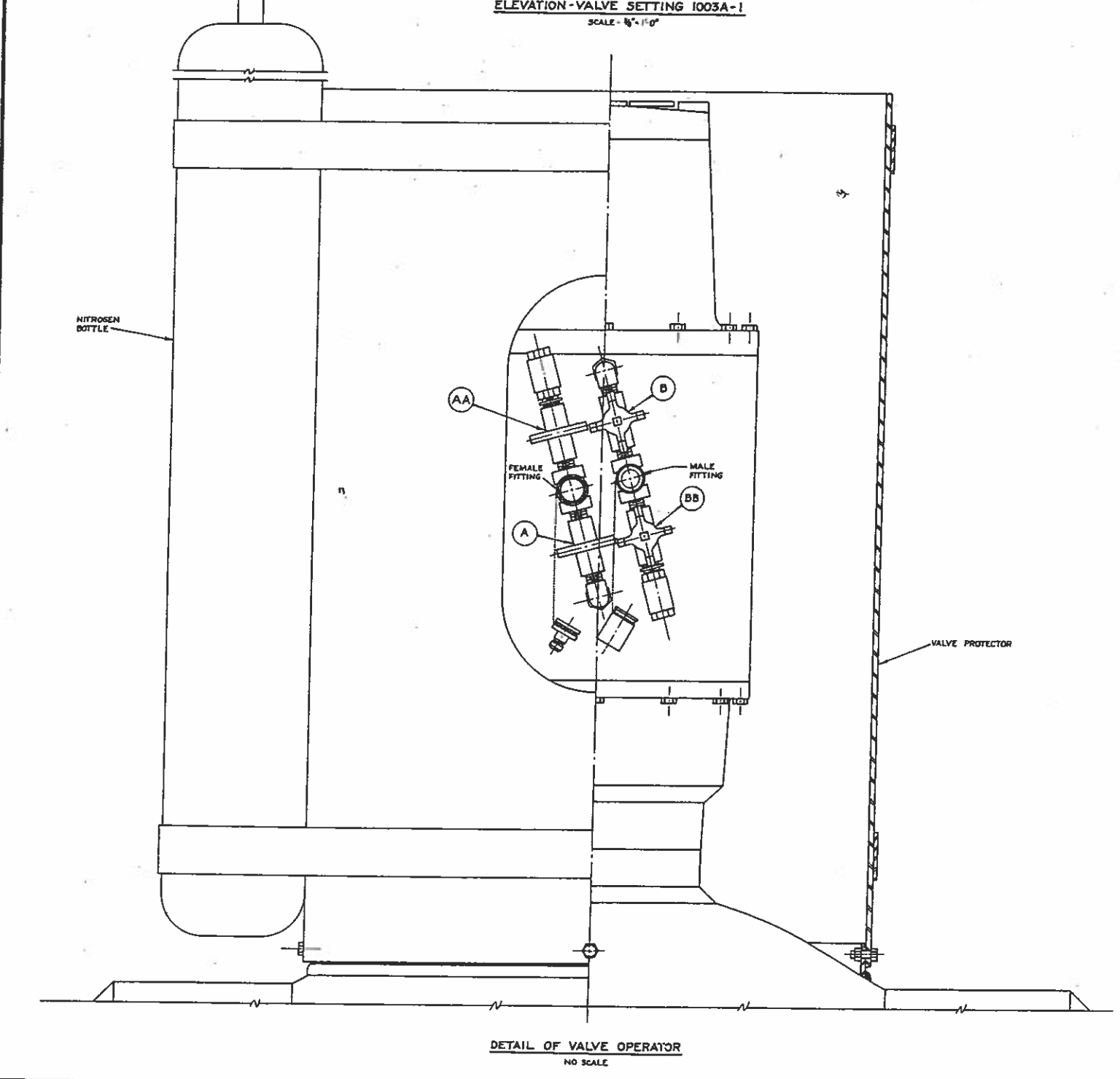
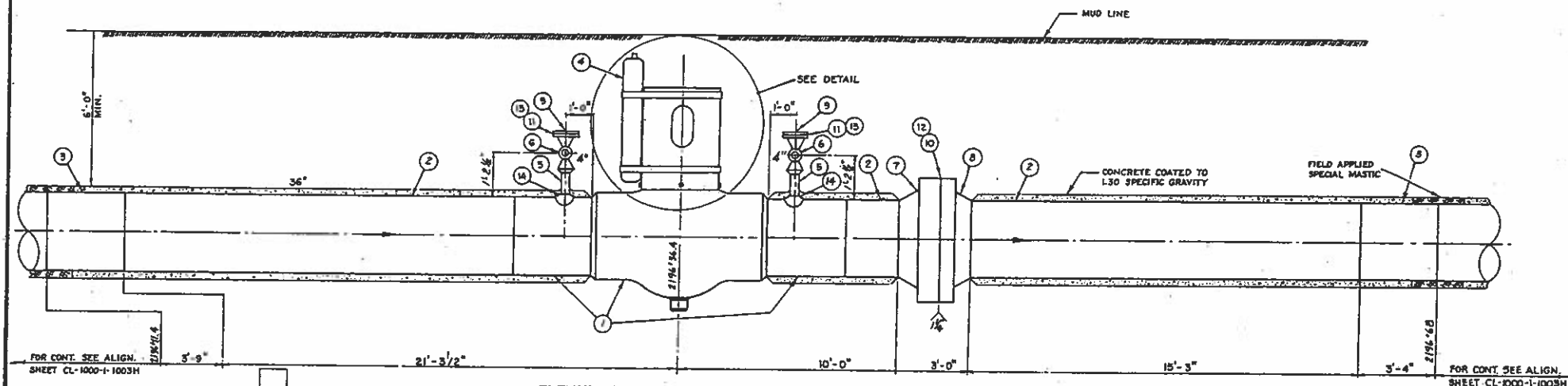
- 1 12" ANSI 900 W.E. GROVE BALL VALVE, S.N. 148995-3, PROTECTED FOR SALT WATER IMMERSION (1)
- 30'-4" 36" O.D. x .750" W.T. PIPE API-5LX, GR. X-60 (2)
- 4'-0" 12-3/4" O.D. x .500" W.T. PIPE, API-5L, GR "B" SMLS. (3)
- 1 36" x 36" x 12" SPEC. RED. TEE, .750" W.T. x .500" W.T. (4)
- 1 12" x .500" W.T. L.R. 90° WELD BLL., GR. "B" (5)
- 1 12" ANSI 900 F.S. (R.T.J.) W.M. FLANGE (6)
- 1 PIPE CLAMP PER DETAIL ON THIS DWG. (7)
- 6'-2" 36" O.D. x .625" W.T. PIPE API-5LX GR. X-60 (8)
- 9 8" 12.75" O.D. x .500" W.T. PIPE, API-5L, GRADE B, SMLS (9)
- 10 10" 6" O.D. x .432" W.T. PIPE, GRADE B, SMLS (10)
- 11 1" 2.375" O.D. x .218" W.T. PIPE, API-5L, GRADE B, SMLS (11)
- 12 1 12" x 12" x 6" x .500 W.T. x .432 BRANCH W.T. REDUCING WELD TEE (12)
- 13 1 WELDOLET 2" ON 6" SCH. 60 API-5L, GRADE B (13)
- 14 1 12" ANSI 900# RTJ WN FLANGE (14)
- 15 1 6" ANSI 900# R-45 GASKET 316 SS (15)
- 16 1 2" ANSI 900# RTJ BLIND FLANGE (16)
- 17 20 1-3/8" O.D. x 10-1/2" LG. B-7 ALLOY STEEL STUD WITH 2 HEX NUTS COATED IMF-3W OR EQUAL (17)
- 18 8 5/8" O.D. x 4-1/2" LG. B-7 ALLOY STEEL STUD WITH 2 HEX NUTS COATED IMF-32 OR EQUAL (18)
- 19 1 12" ANSI 900# R-57 GASKET, 316 S.S. (19)
- 20 1 2" ANSI 900# R-23 GASKET, 316 S.S. (20)
- 21 2 12" ANSI 900# S.S. FLANGE PROTECTOR WITH GREASE FITTINGS, 4" ROCKWELL OR HCRVOI (21)
- 22 1 2" ANSI 900# S.S. FLANGE PROTECTOR WITH GREASE FITTINGS, 4" ROCKWELL OR HCRVOI (22)
- 23 1 1" 6000# HEX PLUG S.S. (23)
- 24 1 12" ANSI 900# FULL OPEN TRUNION MOUNTED BALL VALVE, WE x WE, W/MANUAL GEAR OPER. PROTECTED FOR SALTWATER IMMERSION (24)
- 25 1 6" ANSI 900# FULL OPEN TRUNION MOUNTED BALL VALVE, WE x WE, W/MANUAL GEAR OPER. PROTECTED FOR SALTWATER IMMERSION (25)
- 26 1 12" ANSI 900# RTJ WN SWIVEL FLANGE (26)
- 27 1 2" ANSI 900# RTJ x WE FULL OPEN TRUNION BMTD. BALL VALVE, WITH LEVER OPER. PROTECTED FOR SALTWATER IMMERSION (27)
- 28 1 6" ANSI 900# SCH. 80 BORE WE x WE CHECK VALVE, WITH EXTERNAL SHAFT WITH LOCK OPEN LEVER FOR OFFSHORE UNDERWATER SERVICE (28)
- 29 1 6" ANSI 900# RTJ WN MISALIGNMENT FLANGE (29)
- 30 1 6" ANSI 900# RTJ WN SWIVEL FLANGE (30)
- 31 1 1" 5000# NEEDLE VALVE, M x P, S.S. (31)
- 32 1 6.625" O.D. x .432" W.T. PIPE, GRADE B, SMLS, WITH 1.0" TANGENT, EACH END (32)
- 33 12 1-1/8" O.D. x 8-3/4" LG. B-7 ALLOY STEEL STUD WITH 2 HEX NUTS COATED IMF-3W OR EQUAL (33)
- 34 1 6" ANSI 900# RTJ WN FLANGE WELD TO 6-5/8" x .432" W.T. GRADE B PIPE (34)
- 35 20 1-3/8" O.D. x 12-1/2" LG. B-7 ALLOY STEEL STUD WITH 2 HEX NUTS COATED IMF-3W OR EQUAL (35)
- 36 1 12" ANSI 900# R-57 GASKET, 316 S.S. (36)
- 37 2 6" ANSI 900# RTJ FLANGE PROTECTORS WITH GREASE FITTINGS (37)
- 38 1 INSULATION KIT FOR 6" ANSI 900# RTJ FLANGE, 6" R-45 GASKET AND 1-3/8" DIAMETER STUD BOLTS WITH INSERTS TO FIT SWIVEL FLANGE WN CONNECTION (38)
- 39 1 6" ANSI 900 RTJ Blind Flange (39)

Removed during abandonment  
 Removed during abandonment

Removed during abandonment  
 Removed during abandonment

DWG. NO.	REVISIONS	DATE	BY	DESCRIPTION	SCALE: AS SHOWN	REV. 5-1-99	ISSUE DATE	ORIGINAL	LAST
OL-1000-1-1003 H				LIVE 1000-1					5-11-99
				Added 6" pipeline abandonment					
UNDERWATER SIDE CONNECTION FOR 10036-100, 10036-200						STINGRAY PIPE LINE COMPANY A Unit of Panhandle Eastern Corporation 5400 Westheimer Ct. Houston, TX 77056-5310 713-627-5400			
DWG. OL-1000-1-1003H1									

STOCK NO.	QUANTITY	SIZE	DESCRIPTION	MARK NO.
	1	36"	ANSI 6004, 14404 WOG Cameron Ball Valve, Full Opening W.E. w/Protective Cover, API-6D, 1968 w/Pups per Dwg 64-89L	1
	33'-9"	36"	O.D.x.750"W.T. API-SLX, GR. X-60 Pipe with DOT Cert.	2
	7'-1"	36"	O.D.x.625"W.T. API-SLX, GR. X-60 Pipe w/DOT Cert.	3
	1	9-1/8" #	x57" H. Nitrogen Bottle, DOT 3AA 2265 (Bandng Mat-erial to be Furnished by Contractor)	4
	3'	4-1/2"	O.D.x.874"W.T. GR. "B" Smls Pipe (Valve End Tapered to .237"W.T.) API-SL w/DOT Cert.	5
	2	4"	ANSI 600 WEXFE (R.F.) Groove Ball Valve, Protected for Salt Water Immersion, Prepare ME for Welding to 4"x .237"W.T. Pipe-API-6D, 1968, Groove Full Opening, 84-T ANSI 900 F.S. Svlve) Ring Flange (R.T.J.) Bore 34.50" F-60 w/Hub Designed for Welding to 36"x.750"W.T. GR. X-60 Pipe, MSS-SP44-1970 w/DOT Cert. (By Contr)	6
	1	36"	ANSI 900 F.S.W.N. Flange (R.T.J.) Bore 34.50", F-60 w/Hub Designed for Welding to 36"x.750"W.T. GR. X-60 Pipe, MSS-SP44-1970 w/DOT Cert. (By Contr)	7
	2	4"	ANSI 600 F.S. 811nd Flange (R.F.) ASTM A-105-1968 GR. 11, ANSI 016, 5-1968	8
	1	R105	Oval Ring Gasket (Pitch Dia. 40-1/4") ANSI B16.20 1963 (By Contractor)	9
	2	1/16"	Thk. x1-1/2" I.D.x7-5/8"O.D. Asbestos Ring GasKet B16, 5-1968	10
	20	3-1/2" #	Stud Bolts, 2'-5-3/4" Thd Lgth B-7 ASTM A-193-1971 w/2 Hex Nuts Each ASTM A-194-1969 Moly Coated (By Contractor)	11
	16	7/8" #	Stud Bolts, 5-1/2" Thd Lgth B-7 ASTM A-193-1971 w/2 Hex Nuts Each, ASTM A-194-1969 Moly Coated	12
	2	4"	x36"x.500" Hln H.T. GR. "B" Weld Saddle	13
				14



**PROCEDURE FOR OPENING VALVE**

- DIVER DESCENDS AND CHECKS VALVE "AA" TO ASCERTAIN THAT IT IS CLOSED.
- OPENS VALVE "A" AND CHECKS THAT THE VALVE INDICATOR IS MOVING.
- WHEN INDICATOR STOPS MOVING, DIVER OPENS VALVES "B" & "BB" TO RELEASE ANY "BUILT UP" PRESSURE.
- INDICATOR WILL START MOVING WHEN PRESSURE IS RELEASED.
- WHEN INDICATOR STOPS MOVING, DIVER CLOSSES VALVES "B" & "BB", CLOSSES VALVE "A", CLOSSES VALVE ON NITROGEN BOTTLE, OPENS VALVE "AA" TO RELEASE PRESSURE ON HOSE.
- DIVER DISCONNECTS FEMALE QUICK DISCONNECT CLOSSES VALVE "AA".
- DIVER INSTALLS PLUG IN FEMALE FITTING.
- DIVER CUTS BANDING AND ASCENDS WITH NITROGEN BOTTLE.

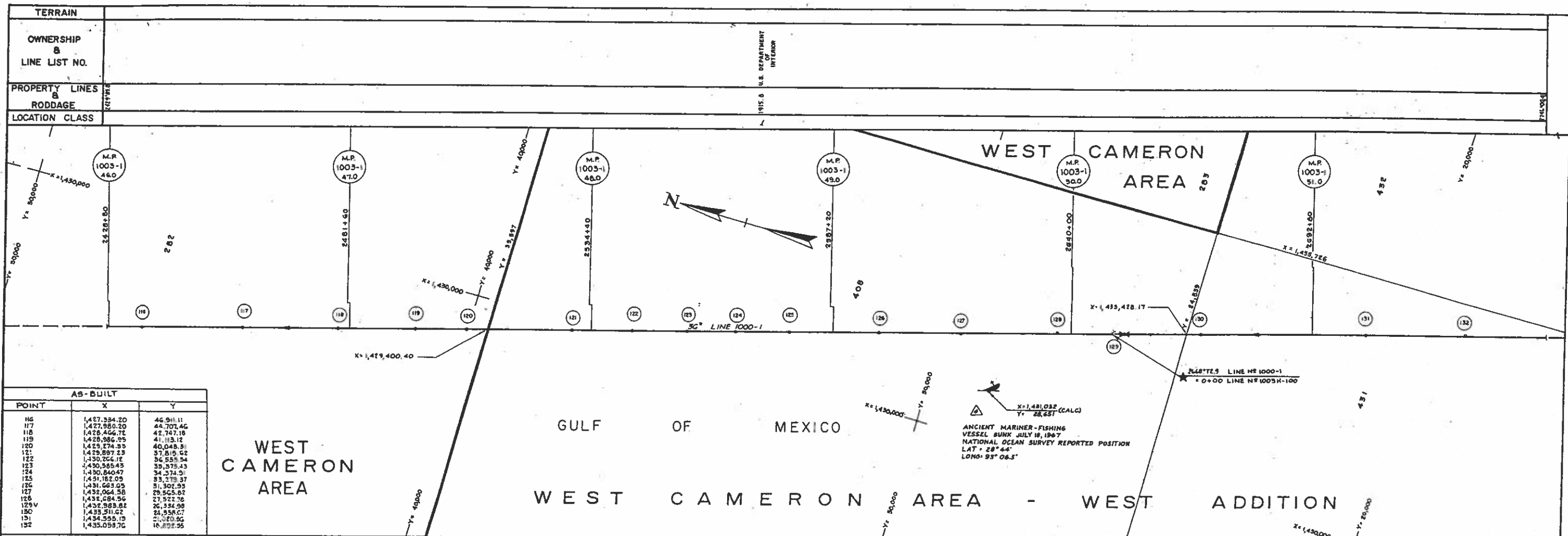
BOTTLE OF NITROGEN SHALL BE STRAPPED OR BANNDED SECURELY TO 36" PIPE VALVE PROTECTOR. NITROGEN BOTTLE WITH NECESSARY HOSE & MALE QUICK DISCONNECT SHALL BE ATTACHED TO FEMALE FITTING.

**NOTES**

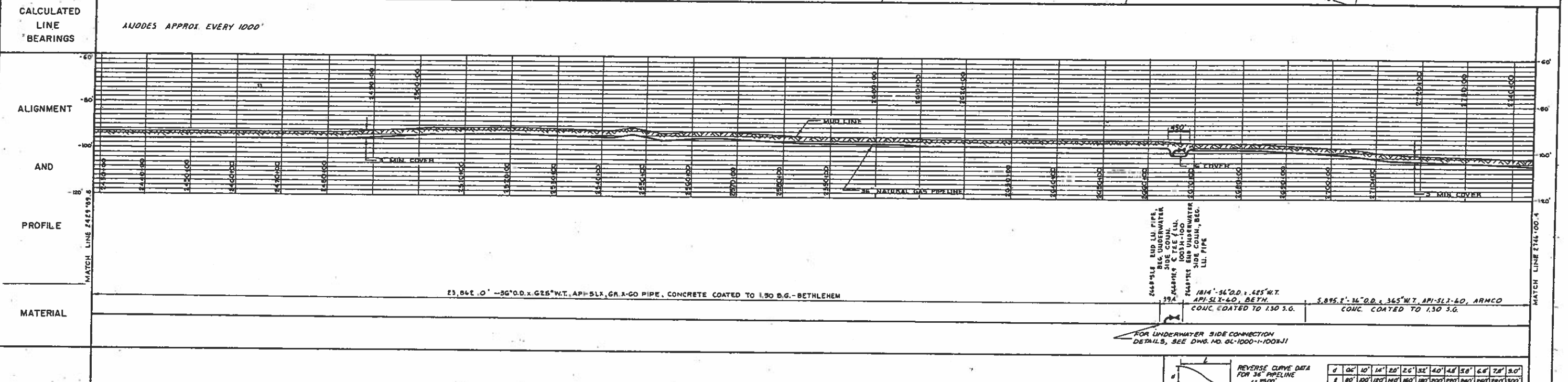
- COMPLETE ASSEMBLY SHALL BE HYDROSTATICALLY TESTED TO 2022 PSI MINIMUM FOR 4 HOURS IN FABRICATION YARD PRIOR TO COATING REPAIR. TEST SHALL BE PERFORMED IN PRESENCE OF COMPANY REPRESENTATIVE WITH VALVE IN OPEN POSITION AND CONTRACTOR SHALL FURNISH COMPANY WITH THE TEST CHART AND/OR DEAD WEIGHT RECORD.
- UPON COMPLETION OF TEST THE ASSEMBLY SHALL BE DRAINED OF ALL LIQUIDS, CAPS REMOVED, PIPE ENDS RESEYLED AND THE VALVE PLACED IN A CLOSED POSITION.
- VALVE, OPERATOR, HOUSING, SMALL VALVES & FITTINGS SUPPLIED COATED WITH COAL TAR EPOXY. LAYING CONTRACTOR TO REPAIR ANY COATING DAMAGE CAUSED BY HANDLING.

FIELD BOOK  
2748-Pg. 6

OL-1000-1-1003H		ALIGNMENT SHEET	
DRAWING NUMBER		REFERENCE DRAWING	
<b>STINGRAY PIPELINE COMPANY</b>			
ENGINEERING DEPARTMENT		HOUSTON, TEXAS	
<b>VALVE SETTING 1003A - I</b>			
W.O. NO. 1013, 1014, 1015			
SCALE AS SHOWN			
DRAWN BY D.J.J.	DATE 7-29-82	DWG. OL-1000-1-1003H2	
CHECKED BY C.S.	DATE 2-28-83		
APPRO. CH. ENR.	DATE		
APPRO. ENGR.	DATE	COMPLETION DRAWING	
OL-1000-1-1003H2			

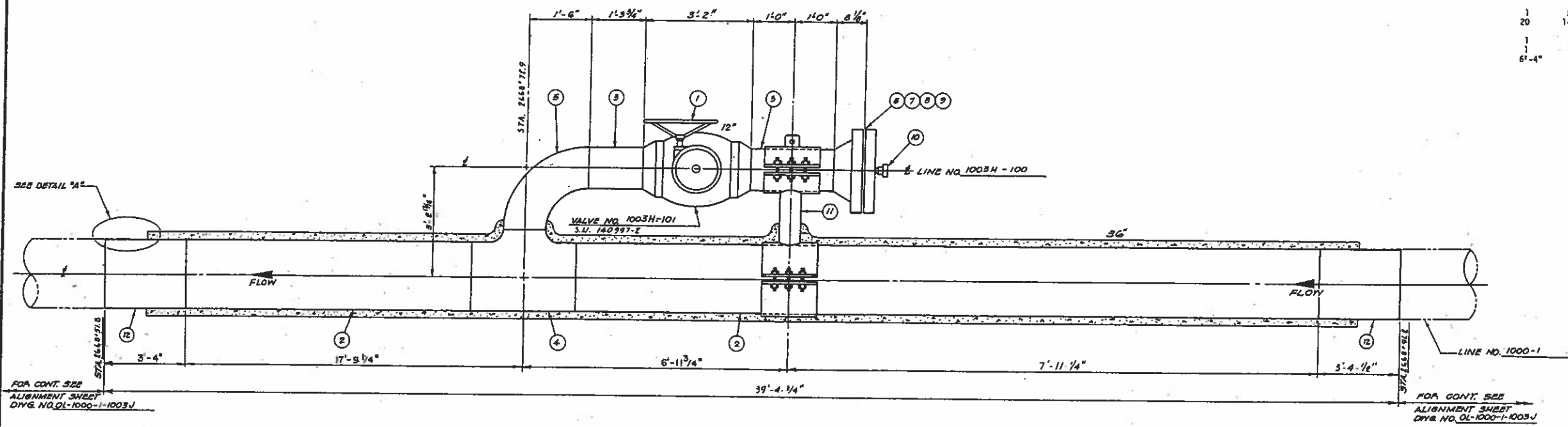


AS-BUILT		
POINT	X	Y
116	1,427,334.20	46,911.11
117	1,427,580.20	44,707.46
118	1,426,466.71	42,747.16
119	1,426,986.95	41,113.12
120	1,425,274.33	40,048.31
121	1,425,597.23	37,815.62
122	1,430,266.18	36,555.54
123	1,430,565.45	35,375.43
124	1,430,840.47	34,374.31
125	1,431,182.05	33,373.37
126	1,431,663.03	31,302.93
127	1,432,064.58	29,565.62
128	1,432,684.56	27,522.76
129V	1,432,983.62	26,384.98
130	1,433,311.62	24,558.67
131	1,434,555.13	21,370.96
132	1,435,058.76	18,102.55

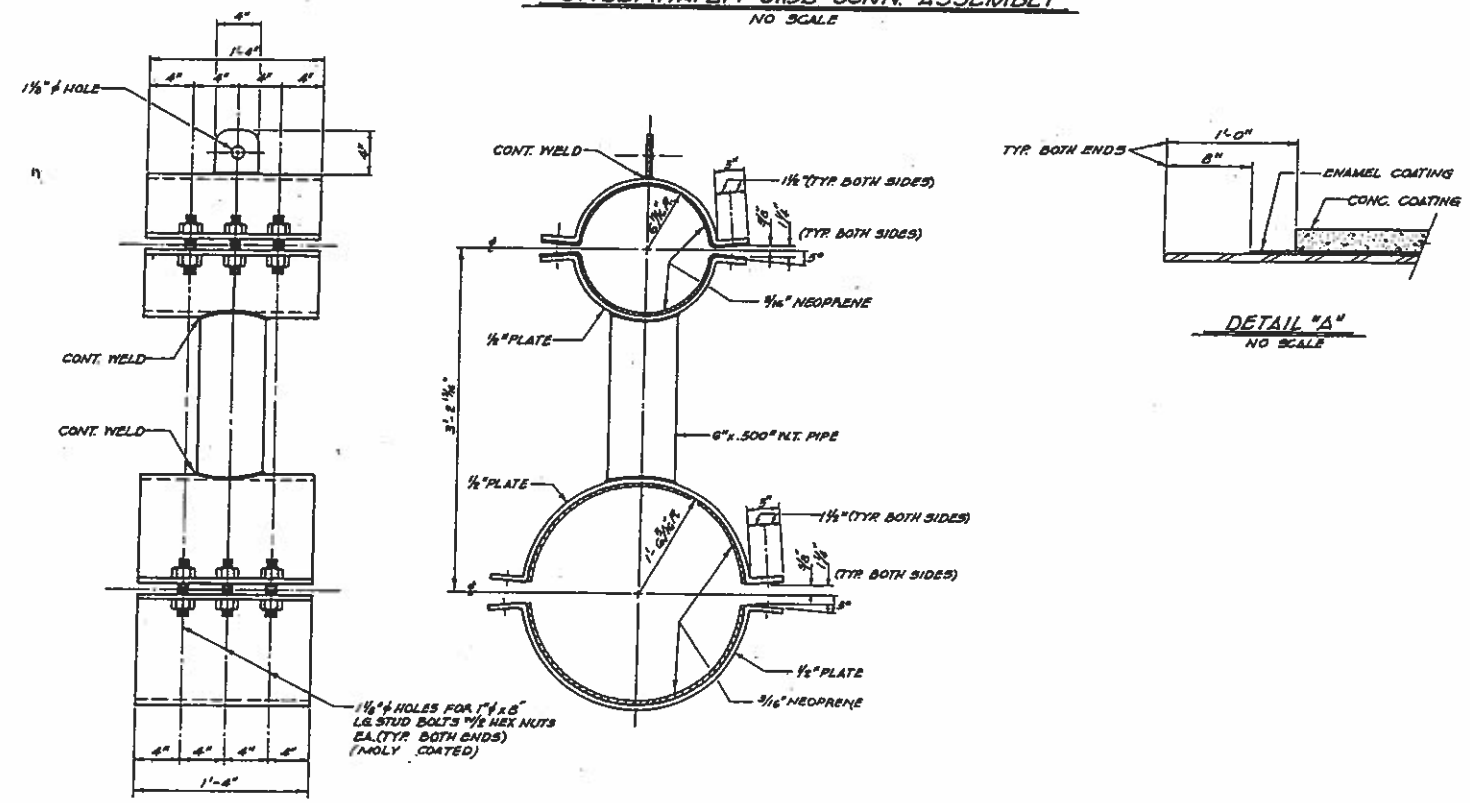


<b>LEGEND</b> Gas Well, Dry Well, Platform, Crater Area, Cathodic Test Coupon, Land Tract Number, Restriction R/W, R/W Agreement, Equation, Block Line, Foreign Pipeline, X & Y Coordinates, Offshore Area Outline, Oyster Lease, Rest, Sunkn Wreck, M.P. Mile Post, U.S. & G.S. Triangulation Station, Anode Bracket, Underwater Side Connection	<b>HISTORICAL DATA</b> CONTRACTOR, ERIGED DATE, CORR. POINT SURV., CORR. TRIANG. SURV., CORR. TEST DATE, TEST PRESSURE, TEST MEDIA, MILE OVER PRESS., LINE VOLUME, PIPE THICKNESS, CORRECT TYPE, DATE IN SERVICE, DIRECTION OF LAYING	<b>MATERIAL SUMMARY</b> 36" O.D. x 625" INT. API-5LX GR. X-60 PIPE W/DOT CERTIFICATION, CONCRETE COATED TO 1.30 S.G. UNDERWATER SIDE CONNECTION ASSEMBLY 36" ANODE BRACELETS!	<b>DRAWING NUMBER</b> OL-1000-1-1003J	<b>REFERENCE DRAWING</b> UNDERWATER SIDE CONNECTION ASSEMBLY	<b>DESIGN PRESSURE</b> 1250 PSIG  FIELD BOOKS 2749 - Pg. 7-30 2750 - Pg. 2-21	<b>STINGRAY PIPELINE COMPANY</b> ENGINEERING DEPARTMENT HOUSTON, TEXAS <b>LINE 1000-1</b> GULF OF MEXICO W. CAMERON AREA OFFSHORE - W. CAMERON AREA - W. ADDITION W.O. NO. 1013, 1014, 1015 SCALE 1" = 1000' HORIZONTAL - 1" = 20' VERTICAL DRAWN D.J.J. DATE 7-28-82 CHECKED C.G. DATE 2-28-83 APP'D C.H. BR. DATE APP'D ENGR. DATE <b>DWG. OL-1000-1-1003J</b> <b>COMPLETION DRAWING</b>

STOCK NO.	QUANTITY	SIZE	DESCRIPTION	MARK NO.
	1	12"	ANSI 900 WE Grove Ball Valve Manual Gear Operated Protected for Salt Water Immersion. Prepare Ends for Welding to 12.75" O.D. x .500" W.T. Pipe API-6D 1968	1
30'-2"		36"	O.D. x .750" W.T. Pipe API-SLX, GR. X-60 w/ DOT Cert.	2
4'-0"		12-3/4"	O.D. x .500" W.T. Pipe, API-SL, GR. "B" Sals w/ DOT Cert. x36"x12" Spec Red Tee, .750" W.T. x .500" W.T. Per Std Dwg No. 64-C65A NPHY-60 HSS-SP-75-1970, P=1348, T=250°F, Fv.50	3
1		36"	x.500" W.T. L.R. 90° Weld ELL, GR. "B" WPB-ASTH, A-234 1971	4
1		12"	ANSI 900 F.S. (R.T.J.) W.M. Flange, Bore 11.75"	5
1		12"	A105-1968 GR. II, ANSI B16.5-1968	6
1		12"	ANSI 900 F.S. (R.T.J.) Blind Flange, Center Drill & Tap for 1" W.P.T. A105-1968 GR. II, ANSI B16.5-1968	7
1	RS7		Ring Joint Gasket (Pitch Dia. 15") ANSI B16.20-1963	8
20		1-3/8" φ	Stud Bolts, 13" Tnd Lgh B-7 ASTH A-193, 1971 w/2	9
1		1"	ASTH A-194, 1969; Hex Nuts Ea. Holy Coated	10
1		1"	Pleeco Bleeder Plug, 3000F W.P. w/ DOT Cert.	11
1		1"	Pipe Clamp Per Detail on this Dwg (By Contr)	12
6'-4"		36"	O.D. x .625" W.T. Pipe API-SLX, GR X-60 w/ DOT Cert.	



**ELEVATION**  
**UNDERWATER SIDE CONN. ASSEMBLY**  
NO SCALE

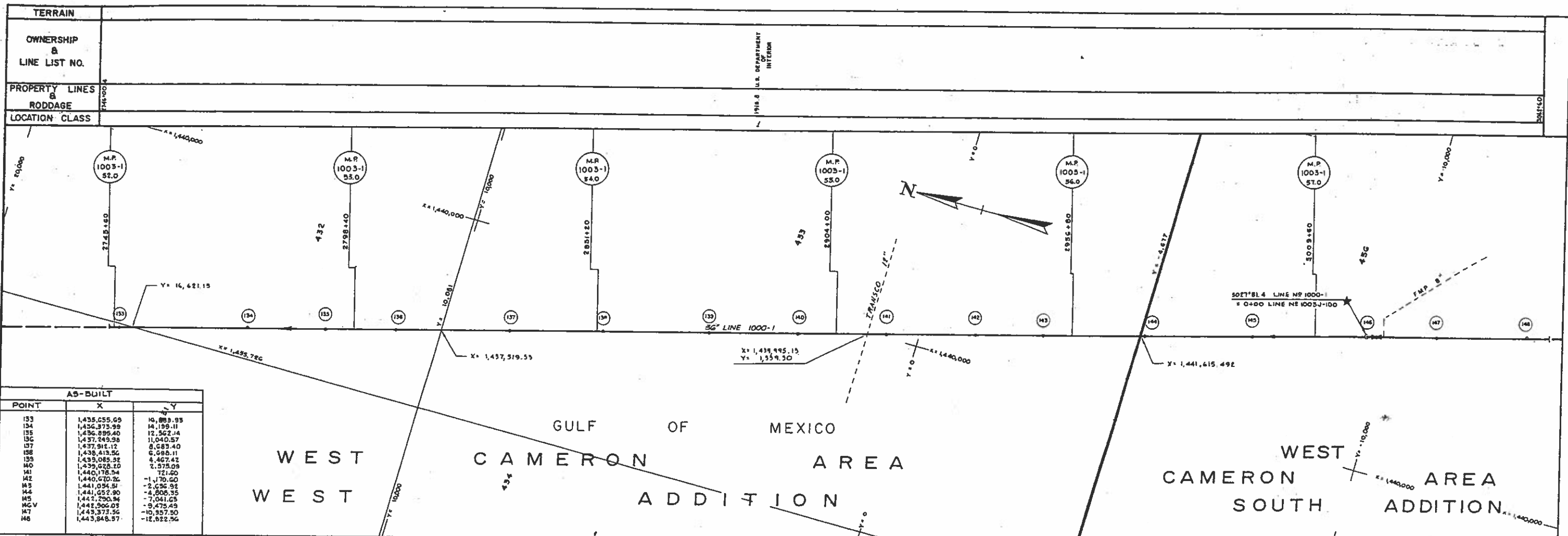


**DETAIL OF PIPE CLAMP (1)**  
(1 REQ'D)  
NO SCALE

**DETAIL "A"**  
NO SCALE

FIELD BOOK  
2750-Pg. B-9

OL-1000-1003J		ALIGNMENT SHEET, LINE NO. 1000-1	
SCALE	AS SHOWN	DATE	7-29-82
<b>STINGRAY PIPELINE COMPANY</b>			
ENGINEERING DEPARTMENT		HOUSTON, TEXAS	
<b>UNDERWATER SIDE CONNECTION</b>			
<b>ASSEMBLY FOR</b>			
<b>LINE NO. 1003H-100</b>			
W.O. NO. 1013, 1014, 1015			
SCALE	AS SHOWN	DATE	7-29-82
DRAWN	D.J.J.	DATE	7-29-82
CHECKED	C.S.	DATE	7-29-82
APPRO. CH. DR.		DATE	
APPRO. ENGR.		DATE	
DATE OF AERIAL		DATE	
FIELD BOOK NO.			
			DWG. OL-1000-1-1003J1
			COMPLETION DRAWING
			OL-1000-1-1003J1



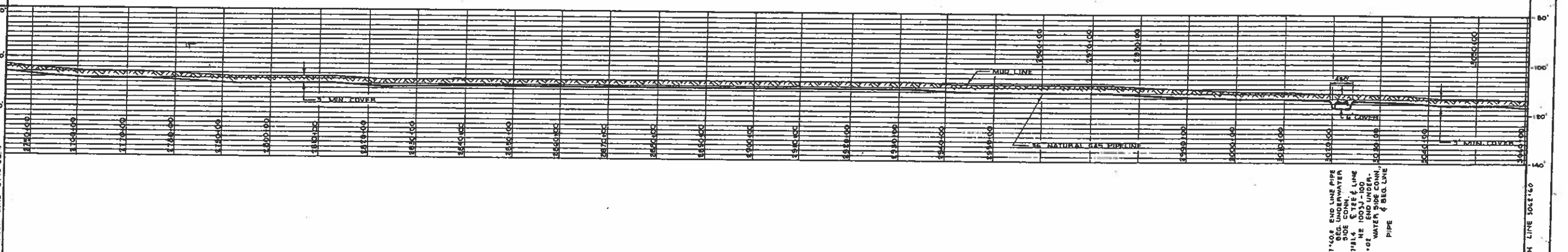
AS-BUILT		
POINT	X	Y
133	1,435,655.69	10,889.93
134	1,436,373.99	14,199.11
135	1,436,895.40	12,562.14
136	1,437,249.98	11,040.57
137	1,437,912.12	8,683.40
138	1,438,413.56	6,688.11
139	1,439,085.32	4,467.42
140	1,439,628.10	2,375.09
141	1,440,178.54	721.60
142	1,440,670.26	-1,170.60
143	1,441,034.97	-2,636.91
144	1,441,652.90	-4,805.35
145	1,442,290.94	-7,041.65
MCV	1,442,906.03	-9,475.49
147	1,443,373.56	-10,957.90
148	1,443,948.57	-12,822.56

CALCULATED LINE BEARINGS

ANODES APPROX. EVERY 1000'

133-134	134-135	135-136	136-137	137-138	138-139	139-140	140-141	141-142	142-143	143-144	144-145	145-MCV	MCV-146	146-147	147-148
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ALIGNMENT AND PROFILE



MATERIAL

28,160.4' - 36" O.D. x .625" W.T. API-5LX, GR. X-60 PIPE, CONCRETE COATED TO L30 S.G. - ARMCO	3457.9' - ARMCO
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LEGEND

Gas Well	Equation	MP 11-1 30 Mile Post
Dry Well	Block Line	U.S. B.G.S. Transp. Station
Platform	Foreign Pipeline	Anode Bracket
Crater Area	X, Y Coordinate Mark	Underwater Side Connection
Cathodic Test Coupon	Offshore Area Outline	Reel
Land Tract Number	Oyster Lease	Sunken Wreck
Restriction R/W	Reel	
R/W Agreement		

HISTORICAL DATA

CONTRACTOR	PIPE SIZE	31,618.3'
SPREAD SHT	TYPE	41.2'
CHIEF ENG.	INSPECTION	31
CONTR. COST SURV.	INSPECTION	
CONTR. FINAL SURV.	INSPECTION	
SPRAY REP.	REPAIR DATE	
CONTR. JOINTING	REPAIR DATE	
CONTR. TESTING	REPAIR DATE	
TEST PRESS.	REPAIR DATE	
MAX. OPER. PRESS.	REPAIR DATE	
LINE VOLUME	REPAIR DATE	
PIPE COATING	REPAIR DATE	
CONST. TYPE	REPAIR DATE	
DATE IN SERVICE	REPAIR DATE	
DIRECTION OF LAYING	REPAIR DATE	

MATERIAL SUMMARY

31,618.3'	36" O.D. x .625" W.T. API-5LX, GR. X-60 PIPE W/DOT CERTIFICATION, CONCRETE COATED TO L30 S.G. UNDERWATER SIDE CONNECTION ASSEMBLY 36" ANODE BRACELETS
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DRAWING NUMBER: OL-1000-1003K1

REFERENCE DRAWING: UNDERWATER SIDE CONNECTION ASSEMBLY

DESIGN PRESSURE: 1388 PSIG

FIELD BOOKS: 2750 - Pg. 21-30, 2751 - Pg. 2-30, 2752 - Pg. 2-3

STINGRAY PIPELINE COMPANY

HOUSTON, TEXAS

LINE 1000-1

GULF OF MEXICO

W. CAMERON AREA - WEST ADDITION

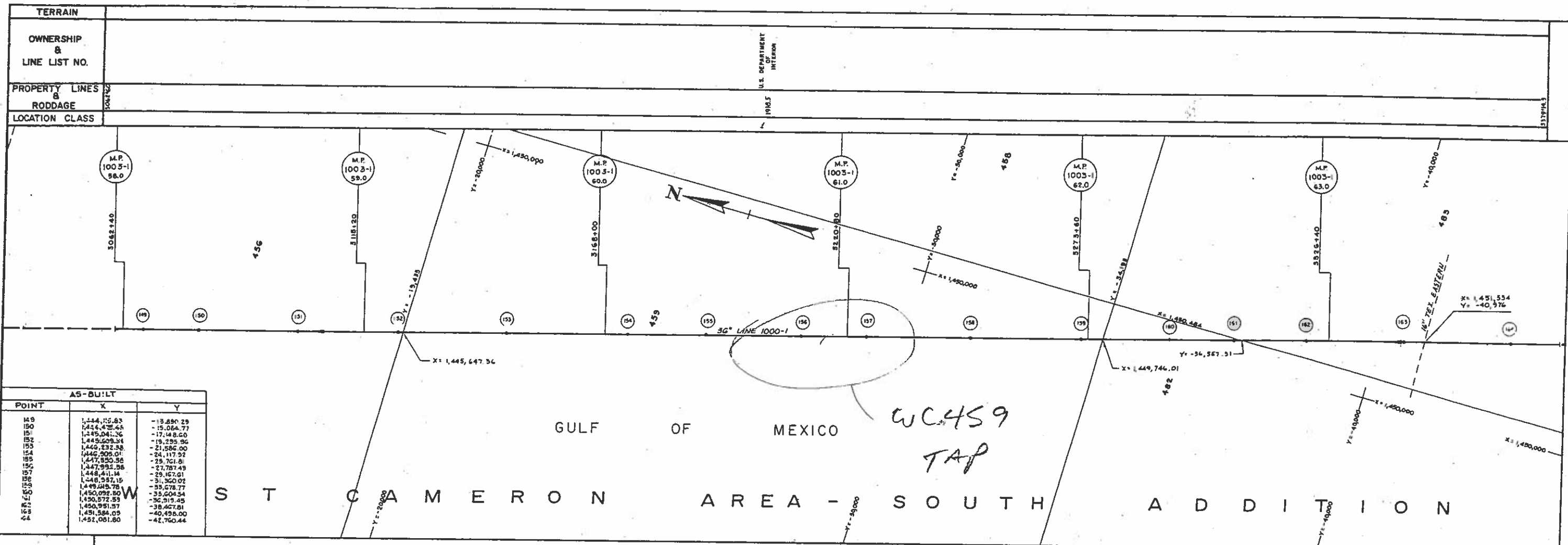
OFFSHORE - W. CAMERON AREA - SOUTH ADDITION

W.O. NO. 1013, 1014, 1015

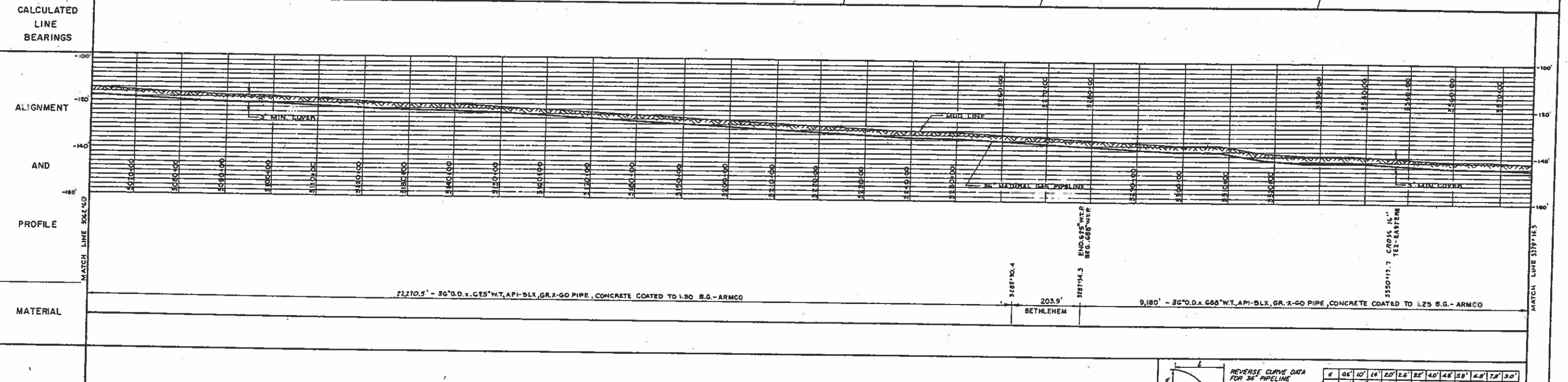
DWG. OL-1000-1-1003K

COMPLETION DRAWING





POINT	X	Y
149	1,444,155.63	-13,890.29
150	1,446,478.44	-15,064.77
151	1,449,041.26	-17,148.60
152	1,452,009.34	-19,235.96
153	1,455,232.38	-21,326.00
154	1,458,605.01	-23,417.92
155	1,462,130.58	-25,511.81
156	1,465,802.58	-27,607.49
157	1,469,515.14	-29,704.61
158	1,473,262.15	-31,802.02
159	1,477,038.78	-33,899.77
160	1,480,840.30	-35,997.84
161	1,484,661.59	-38,096.25
162	1,488,507.37	-40,195.00
163	1,492,372.09	-42,294.11
164	1,496,251.60	-44,393.56



LEGEND	
Gas Well	Equation
Dry Well	Black Line
Platform	Foreign Pipeline
Cryger Area	X & Y Coordinate
Cathodic Test Coupon	Offshore Area Outline
Lead Tract Number	Oyster Lease
Restriction R/W	Reel
R/W Agreement	Surken Wreck
Booy (Specify Type)	
M.P. 11-1	Mac Post
U.S. & G.S. Triangulation Station	
Anode Bracket	
Underwater Side Connection	

HISTORICAL DATA	
CONTRACTOR	PIPE SIZE
SPREAD SURV	W.P.C.
CHIEF SURV	TYPE
CONV. CONST. SURV	INSPECTION
CONV. PAUL. SURV	RESP. TO SURV
R-WAY SURV	REPORT DATE
CONV. ONE JOINTING	PIPE W.D. NO.
CONV. TESTING	JOINT LENGTH
TEST PRESSURE	MIN. YIELD
TEST MEDIA	MIN. TEST PRESS.
TEST DATE	DESTINATION
TEST TYPE	REPAIR DATA
DATE IN SERVICE	TYPE OF REPAIR
DIRECTION OF LAYING	LOCATION

MATERIAL SUMMARY	
22,474.4'	36" O.D. x .625" W.T. API-5LX GR. X-GO PIPE W/DOT CERTIFICATION, CONCRETE COATED TO 1.50 S.G.
9180'	36" O.D. x .686" W.T. API-5LX GR. X-GO PIPE W/DOT CERTIFICATION, CONCRETE COATED TO 1.25 S.G.
35'	36" ANODE BRACELETS

DRAWING NUMBER	REFERENCE DRAWING

DESIGN PRESSURE 1348 PSIG

FIELD BOOKS  
2752 - Pg. 3-30  
2753 - Pg. 2-16

**STINGRAY PIPELINE COMPANY**  
ENGINEERING DEPARTMENT HOUSTON, TEXAS

**LINE 1000-1**  
GULF OF MEXICO

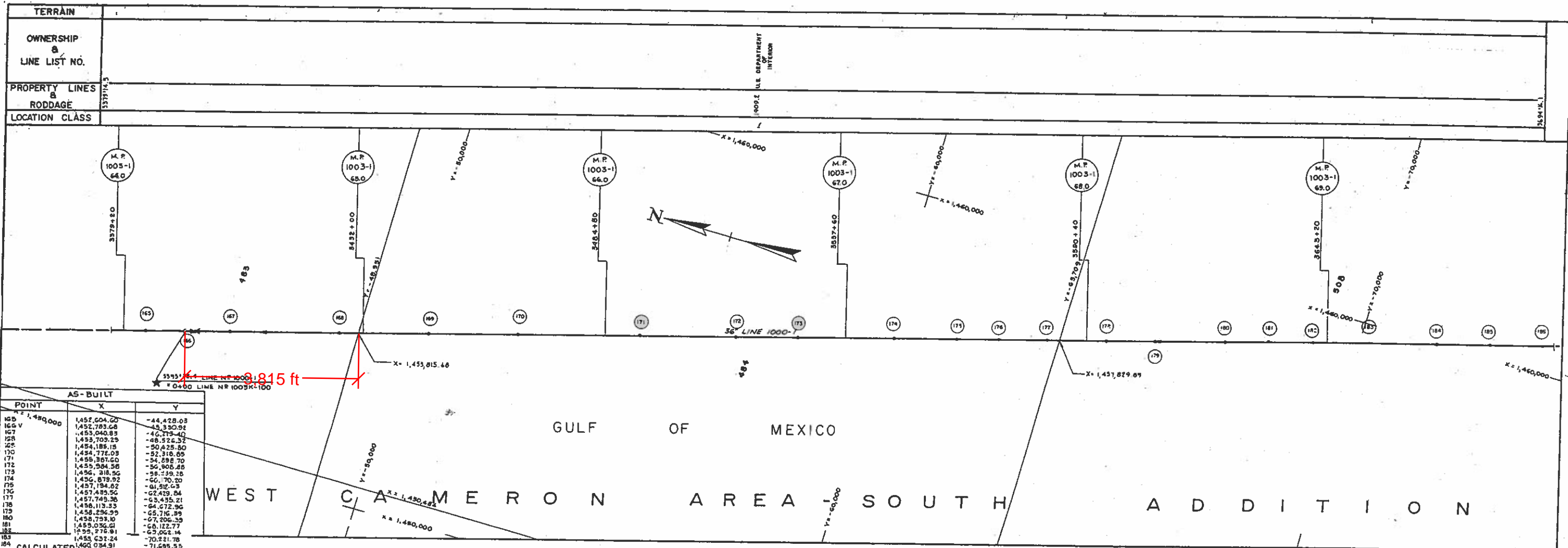
OFFSHORE W. CAMERON AREA-SOUTH ADDITION  
W.O. NO. 1013, 1014, 1015

SCALE: 1"=1000' HORIZONTAL - 1"=20' VERTICAL

DRAWN: D.J.J.	DATE: 7-28-82
CHECKED: G.S.	DATE: 2-28-83
APPROVED: [Signature]	DATE: [Blank]
DATE: 11-1-81	DATE OF REPAIR: [Blank]

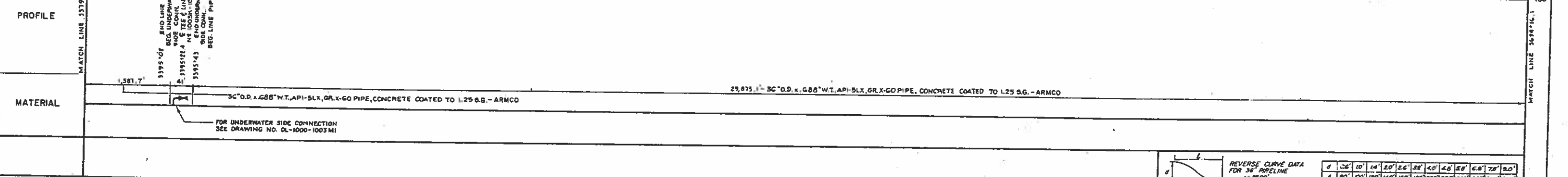
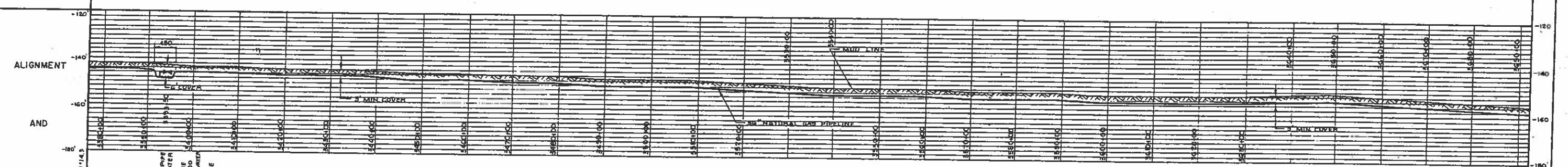
DWG. OL-1000-1-1003L  
COMPLETION DRAWING





AS-BUILT		
POINT	X	Y
165	1,452,604.60	-44,428.03
166	1,452,793.68	-45,350.92
167	1,453,040.88	-46,273.40
168	1,453,705.23	-48,572.37
169	1,454,185.15	-50,425.80
170	1,454,772.03	-52,318.05
171	1,455,381.60	-54,258.70
172	1,455,994.58	-56,905.85
173	1,456,318.56	-58,339.28
174	1,456,879.92	-60,707.20
175	1,457,194.62	-61,312.65
176	1,457,485.56	-62,429.84
177	1,457,749.36	-63,435.21
178	1,458,113.33	-64,772.96
179	1,458,236.39	-65,716.99
180	1,458,193.10	-67,206.38
181	1,459,036.61	-68,122.77
182	1,459,276.91	-69,062.14
183	1,459,631.24	-70,221.78
184	1,460,034.91	-71,695.55
185	1,460,314.85	-72,783.51
186	1,460,608.52	-73,908.77

CALCULATED LINE BEARINGS		
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LEGEND	
Gas Well	Equation
Dry Well	Block Line
Platform	Foreign Pipeline
Crater Area	X, Y Coordinate Mark
Commod. Test Caupon	Offshore Area Outline
Land Tract Number	Oyster Lease
Restriction R/W	Reef
R/W Agreement	Sunken Wreck
Boat (Security Tag)	
M.P. 11-1 3.0	Mile Post
U.S. & G.S. Triangulation Station	
Anode Bracket	
Underwater Side Connection	

HISTORICAL DATA	
CONTRACTOR	PIPE SIZE
SPREAD SUPT	SPUR
CONTR. CO'S SURV	TYPE
CONTR. PRIN. SURV	INSPECTION
2-RAY WSP	REPORT DATE
CONTR. JOINTING	PIPE #0 NO.
CONTR. TESTING	JOINT LENGTH
TEST PRESSURE	MIN. YIELD
TEST MEDIA	WALL TEST PRESS.
MAX. OPER. PRESS.	DESTINATION
LINE VOLUME	REPAIR DATE
PIPE TORSION	TYPE OF REPAIR
CONTR. TYPE	CAUSE OF REPAIR
DATE IN SERVICE	LOCATION
DIRECTION OF LAYING	

MATERIAL SUMMARY	
31,440.0	36" O.D. x .688" W.T. API-5LX, GR. X-60 PIPE W/ DOT CERTIFICATION, CONCRETE COATED TO 1.25 S.G. UNDERWATER SIDE CONNECTION ASSEMBLY 36" ANODE BRACELETS
41	
31	

DRAWING NUMBER	REFERENCE DRAWING
OL-1000-1003M1	UNDERWATER SIDE CONNECTION ASSEMBLY

DESIGN PRESSURE 1348 PSIG

FIELD BOOKS  
2753-Pg. 16-30  
2742-Pg. 2-25

**STINGRAY PIPELINE COMPANY**  
ENGINEERING DEPARTMENT HOUSTON, TEXAS

**LINE 1000-1**  
GULF OF MEXICO

OFFSHORE - W CAMERON AREA-SOUTH ADDITION  
W.O. NO. 1013, 1014, 1015

SCALE 1"=1000' HORIZONTAL, 1"=20' VERTICAL

DRAWN D.J.J. DATE 7-28-82 DWG. OL-1000-1-1003M  
CHECKED C.S. DATE 2-28-83  
APP'D E.H. DATE  
APP'D T.R.A. DATE

COMPLETION DRAWING





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