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COUNTY: GALVESTON COUNTY, TEXAS

TERRAIN

OWNERSHIP	TX-GV-MSR-211.00	TX-CH-MRS-UNK. 43	TX-GV-MSR-213.00	TX-GV-MSR-214.00	TX-GV-MSR.215.01	TX-GV-MSR-215.00	TX-GV-MSR-216.00	TX-GV-MSR-217.00	TX-GV-MSR-218.00	TX-GV-MSR-219.00
2438+00	ANADARKO E&P ONSHORE LLC (2439+85)	UNK. OWNER 43 (2440+15)	CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC (2449+26)	CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC (2468+04)	THEODORE H STRAUSS (2472+10)	CENTERPOINT ENERGY INC. (2476+17)	CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC (2480+24)	CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC (2483+80)	HOUSTON LIGHTING AND POWER COMPANY (AKA CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC) (2487+11)	WEEMS & KELSEY MANAGEMENT COMPANY NO. 2, LTD.
RODS	11.23	1.81	55.21	113.80	24.60	24.67	24.68	21.56	20.06	17.53

2490+00

STATIONING

MATCHLINE 2438+00

2439+45 FENCE (BARBED WIRE), 49' LT.
2439+52 TOE CORNER, 21' LT.
2439+56 TOP BANK, 53' LT.
2439+84 DOW P/L (6" COV.), 14" RT.
2439+82 DOW MILE POST, 11' RT.
2439+85 PROPERTY LINE
2439+85 BUSINESS PARK LIMIT LINE
2439+89 TOP BANK
2439+97 30" COR PLASTIC PIPE CULVERT
2440+04 ℄ DITCH
2440+12 TOE BANK
2440+15 PROPERTY LINE
2440+20 TOP BANK
2441+06 12" DOW P/L (5' COV.)
2442+19 12" DOW P/L (6.3' COV.), 4' LT.
2445+29 12" DOW P/L (5.3' COV.), 4' LT.
2447+44 12" DOW P/L (4.3' COV.), 4' LT.
2449+26 PROPERTY LINE
2449+59 12" DOW P/L (4.1' COV.), 3' LT.
2449+94 KOCH MARKER/TESTLEAD, 11' RT.
2450+58 12" DOW P/L (5.3' COV.), 3' LT.
2452+75 12" DOW P/L (5' COV.), 3' LT.
2453+81 12" DOW P/L (4.7' COV.), 3' LT.
2454+98 12" DOW P/L (5.1' COV.), 4' LT.
2456+09 12" DOW P/L (4.3' COV.), 4' LT.
2457+24 12" DOW P/L (5' COV.), 3' LT.
2458+36 12" DOW P/L (5.2' COV.), 3' LT.
2460+67 12" DOW P/L (4.3' COV.), 4' LT.
2464+01 12" DOW P/L (4.6' COV.), 2' LT.
2465+17 12" DOW P/L (5.9' COV.), 3' LT.
2465+52 ENTER WETLAND
2465+53 KOCH AERIAL MARKER, 16' RT.
2465+55 KOCH MARKER/TESTLEAD, 17' RT.
2465+93 DOW P/L MARKER, 1' LT.
2466+15 EXIT WETLAND (UNK. COV.)
2466+62 DOW P/L MARKER, 16' RT.
2466+74 12" DOW P/L (6.2' COV.), 15' RT.
2467+69 12" DOW P/L (4.9' COV.), 15' RT.
2468+04 PROPERTY LINE
2470+92 12" DOW P/L (4.5' COV.), 16' RT.
2471+98 FENCE (BARBED WIRE)
2472+03 DOW P/L MARKER, 17' RT.
2472+10 PROPERTY LINE
2472+91 12" DOW P/L (6.8' COV.), 16' RT.
2473+67 TOE BANK
2473+71 EDGE ROAD
2473+76 ℄ ACCESS ROAD (GRAVEL)
2473+86 EDGE ROAD
2473+90 ℄ DITCH & CULVERT
2473+91 EXIT WETLAND (UNK. COV.)
2473+94 TOP BANK
2474+04 12" DOW P/L (7' COV.), 16' RT.
2474+37 FENCE CORNER CISTERN, 20' LT.
2474+41 FENCE CORNER CISTERN, 20' LT.
2476+16 DOW P/L MARKER (5.5' COV.), 16' RT.
2476+16 FENCE (BARBED WIRE)
2476+17 PROPERTY LINE
2476+19 DOW P/L MARKER, 17' RT.
2480+24 PROPERTY LINE
2480+34 12" DOW P/L (4.7' COV.), 16' RT.
2481+41 12" DOW P/L (5.9' COV.), 16' RT.
2483+80 PROPERTY LINE
2484+09 FENCE LINE, 54' LT.
2484+61 12" DOW P/L (5.6' COV.), 16' RT.
2485+47 PORTABLE BLDG., 13' LT.
2485+69 12" DOW P/L (9.1' COV.), 16' RT.
2485+75 FENCE LINE
2485+76 DOW MARKER/TESTLEAD, 15' RT.
2485+84 10" FOREIGN P/L (3.1' COV.), 16' RT.
2485+87 10" BAYVIEW WATERLINE (4.9' COV.)
2485+90 EDGE ROAD, 4' LT.
2486+02 ℄ ACCESS ROAD (GRAVEL)
2486+11 EDGE ROAD
2486+21 8" FOREIGN P/L (2.9' COV.)
2486+29 O/H POWERLINE
2486+91 4" HPL P/L (2.5' COV.)
2486+99 EDGE ROAD
2487+10 FENCE LINE
2487+12 PROPERTY LINE
2487+13 ℄ ROAD
2487+15 DOW P/L MARKER, 15' RT.
2487+25 EDGE ROAD
2487+65 PORTABLE BLDG., 51' LT.
2487+72 PORTABLE BLDG., 51' LT.
2488+10 DOW P/L MARKER (5.5' COV.), 15' RT.
2488+81 12" DOW P/L (5.5' COV.), 16' RT.

MATCHLINE 2490+00

PLAN

LEGEND
- EQUATION
- FOREIGN PIPELINE
- SEDIMENT BARRIER
- POWER LINE
- BURIED CABLE (UG)
- FENCE LINE
- WATER LINE
- RAILROAD
- ROAD CENTERLINE
- DITCH CENTERLINE
- PIPE CHANGE
- MAIN LINE VALVE
- PP POWER POLE
- BORE ENTRY / EXIT
- MATERIAL ITEM
- RECTIFIER
- BOND BOX
- ANODE BED
- TEST STATION
- T.S. W/PERM. COUPON & REFERENCE CELL
- P.I.
- PROPOSED PIPELINE
- TEMPORARY WORK SPACE
- ADDITIONAL TEMPORARY WORK SPACE
- WETLAND
- WATER

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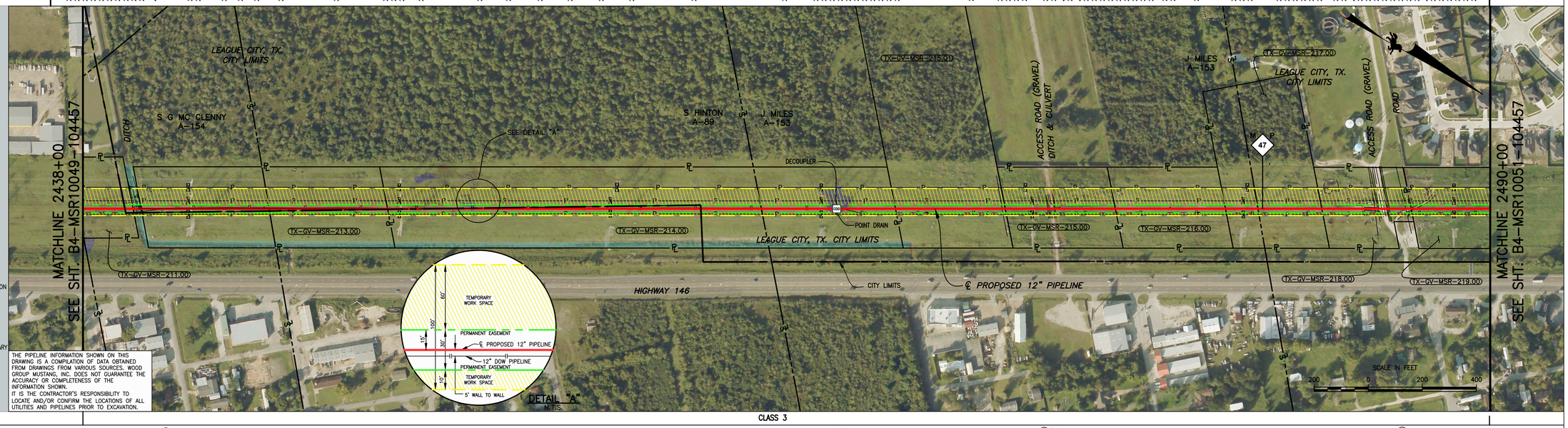
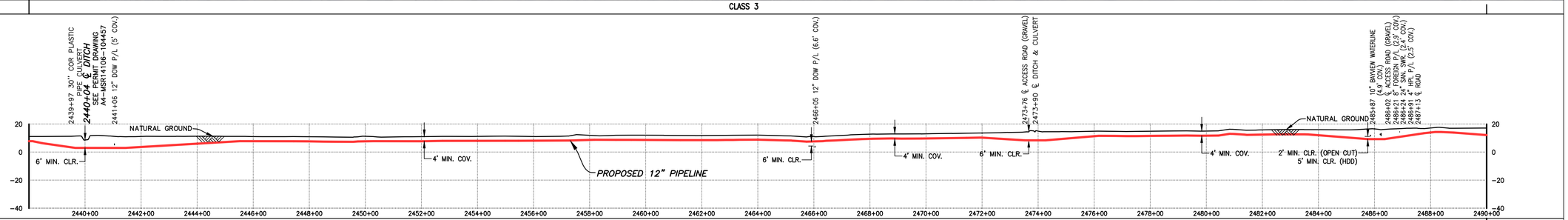


CLASS LOCATION: CLASS 3

PROFILE
SCALE: 1" = 200'
1" = 40'



MATERIAL

ITEM	DESCRIPTION	QTY
1	12.750" O.D.X0.438" W.T. X65 WITH 14-16 MIL FBE	4302
2	12.750" O.D.X0.438" W.T. X65 WITH DUAL FBE WITH ARO FBE TOP COAT 35-40 MILS	898

ISSUED FOR CONSTRUCTION
07/21/15

2438+00 — 329' (1) — 2441+29 — 120' (2) — 2442+49 — 652' (1) — 2449+01 — 120' (2) — 2450+21 — 654' (1) — 2456+75 — 120' (2) — 2457+95 — 651' (1) — 2464+46 — 120' (2) — 2465+66 — 654' (1) — 2472+20 — 120' (2) — 2473+40 — 694' (1) — 2480+34 — 120' (2) — 2481+54 — 426' (1) — 2485+80 — 58' (2) — 2486+38 — 174' (1) — 2488+12 — 120' (2) — 2489+32 — 68' (1) — 2490+00

DECOUPLER SEE SITE SPECIFIC DWG.# E4-MSR18034-104457 — 2465+85 (DC)

2487+20 (TCR)

WOOD GROUP MUSTANG, INC.
TEXAS REGISTERED ENGINEERING FIRM F-444
PROJECT NO: 100502

REV. MARK	REVISION	BY	CHK	APP	DATE
0	ISSUED FOR CONSTRUCTION	DP	PAC	TG	07/21/15

DRAWING ISSUE RECORD

ISSUE NO.	REV	MATERIAL OR JOB SPEC	BID	FAB	CONST	REF
1	0	1330-0101-104457			07/21/15	

DATE ISSUED FOR

DESIGNED	WOOD GROUP MUSTANG	07/18/14
DRAWN	M. PHAM	08/18/14
CHECKED	P. CURLIN	06/22/15
APPROVED	T. GARNER	06/29/15
PROJ. ENGR.	R. ANG	06/29/15
MTG. REP.	D. HILL	06/29/15

STATUS | PLANT NO.

P.E. SEAL: STATE OF TEXAS — W. RAYMOND ANG — 80995 — LICENSED PROFESSIONAL ENGINEER

DOW HYDROCARBONS AND RESOURCES LLC

GULF COAST PIPELINE — ANGLETON, TEXAS

PROPOSED 12" MSR-P-10001 PIPELINE
ALIGNMENT SHEET
STA. 2438+00 TO STA. 2490+00

CHARGE NUMBER	SCALE		REV.
104457	1" = 200'	B4-MSR10050-104457	0

PRINTED | VER.

FILE: R:\Projects\211S3\DISPELINE\CAD\DRAWINGS\01-ALIGNMENT\SOW 1 NORTH\B4-MSR10050-104457.dwg PLOT DATE: 8/7/2015 BY: ARMENTA, VICTOR

$TIME $DATE $PERSON $FILENAME $INSTRUCTIONS

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COUNTY		GALVESTON COUNTY, TEXAS					
TERRAIN							
OWNERSHIP	2490+00	TX-GV-MSR-219.00 WEEMS & KELSEY MANAGEMENT COMPANY NO. 2, LTD.	2505+79	TX-GV-MSR-220.00 WEEMS & KELSEY MANAGEMENT COMPANY NO. 2, LTD.	2528+63	TX-GV-MSR-221.00 WEEMS & KELSEY MANAGEMENT COMPANY NO. 2, LTD.	2538+63	TX-CH-MRS-UNK. 42 STATE HWY 96	2540+67	TX-GV-MSR-223.00 AMERICAN INTERNATIONAL TEXAS PROPERTIES, INC.	2542+00
RODS		95.68		138.47		60.60		12.35		8.06	

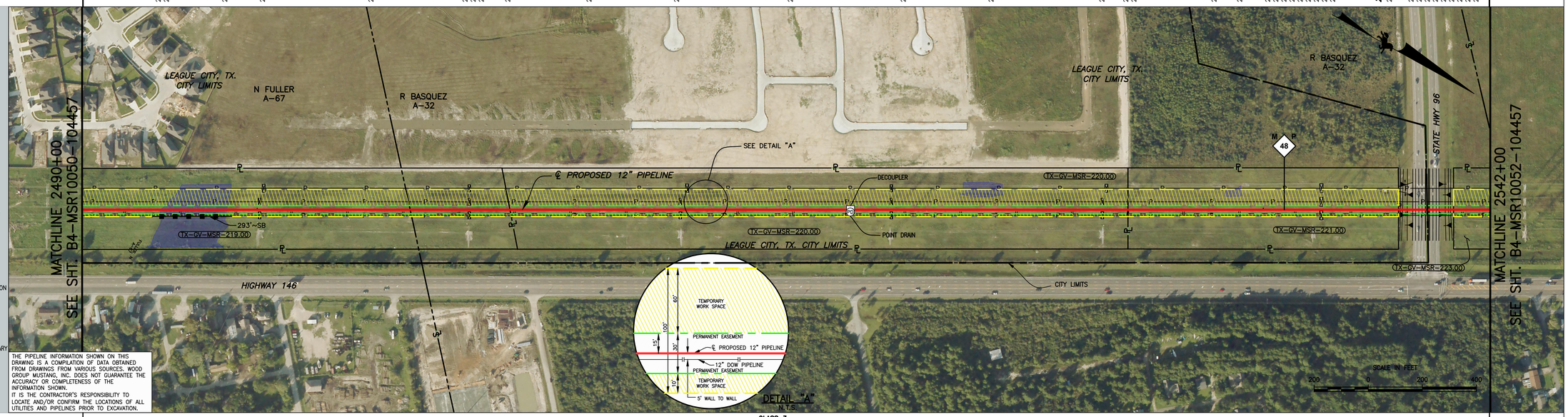
STATIONING

MATCHLINE 2490+00

2492+86 ENTER WETLAND
2492+93 12" DOW PIPELINE (4.7' COV.), 15' RT.
2495+32 EXIT WETLAND
2496+72 12" DOW PIPELINE (5.4' COV.), 15' RT.
2500+73 12" DOW PIPELINE (5' COV.), 15' RT.
2504+21 DOW MILE POST, 16' RT.
2504+65 DOW MARKER/TESTLEAD, 16' RT.
2504+76 12" DOW PIPELINE (5.6' COV.), 16' RT.
2505+79 PROPERTY LINE
2508+79 12" DOW PIPELINE (4.8' COV.), 15' RT.
2512+03 DOW PIPELINE MARKER, 16' RT.
2516+23 12" DOW PIPELINE (5.1' COV.), 15' RT.
2520+41 12" DOW PIPELINE (6' COV.), 15' RT.
2523+65 12" DOW PIPELINE (5' COV.), 15' RT.
2527+75 DOW PIPELINE MARKER, 15' RT.
2528+63 PROPERTY LINE
2528+99 12" DOW PIPELINE (4.4' COV.), 16' RT.
2531+90 12" DOW PIPELINE (5.4' COV.), 15' RT.
2536+89 12" DOW PIPELINE (5.2' COV.), 15' RT.
2538+18 12" DOW PIPELINE (8.8' COV.), 15' RT.
2538+45 12" DOW PIPELINE (8.8' COV.), 17' RT.
2538+63 FENCE (BARBED WIRE) & PROPERTY LINE
2538+65 O/H POWERLINE
2538+71 TOP BANK
2538+79 TOE BANK
2538+94 TOE BANK
2539+15 TOP BANK
2539+27 EDGE ROAD
2539+65 ℄ STATE HWY 96 (ASPHALT)
2539+74 END CITY LIMIT LINE
2540+03 EDGE ROAD
2540+13 TOP BANK
2540+36 TOE BANK
2540+46 TOE BANK
2540+56 TOP BANK
2540+57 CONTROL POINT, 62' LT.
2540+67 PROPERTY LINE
2540+71 DOW PIPELINE MARKER, 16' RT.
2541+63 12" DOW PIPELINE (8.4' COV.), 17' RT.

MATCHLINE 2542+00

PLAN



LEGEND

- EQUATION
- FOREIGN PIPELINE
- SEDIMENT BARRIER
- POWER LINE
- BURIED CABLE (UG)
- FENCE LINE
- WATER LINE
- RAILROAD
- ROAD CENTERLINE
- DITCH CENTERLINE
- PIPE CHANGE
- MAIN LINE VALVE
- PP POWER POLE
- BORE ENTRY / EXIT
- 1 MATERIAL ITEM
- T/R RECTIFIER
- BB BOND BOX
- A ANODE BED
- TS TEST STATION
- TCR T.S. W/PERM. COUPON & REFERENCE CELL
- P.I.
- PROPOSED PIPELINE
- TEMPORARY WORK SPACE
- ADDITIONAL TEMPORARY WORK SPACE
- WETLAND
- WATER

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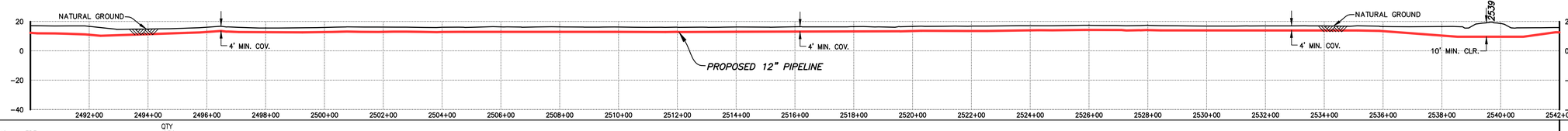
CLASS LOCATION: CLASS 3

PROFILE
SCALE: 1" = 200'
1" = 40'



MATERIAL

ITEM	DESCRIPTION	QTY
1	12.750" O.D.X0.438" W.T. X65 WITH 14-16 MIL FBE	4256
2	12.750" O.D.X0.438" W.T. X65 WITH DUAL FBE WITH ARO FBE TOP COAT 35-40 MILS	944
	SEDIMENT BARRIER	293'

ISSUED FOR CONSTRUCTION
07/21/15

2490+00 — 594' (1) — 2495+94 — 120' (2) — 2497+14 — 655' (1) — 2503+69 — 120' (2) — 2504+69 — 660' (1) — 2511+49 — 120' (2) — 2512+69 — 659' (1) — 2519+28 — 120' (2) — 2520+48 — 660' (1) — 2527+08 — 120' (2) — 2528+28 — 690' (1) — 2535+18 — 120' (2) — 2536+38 — 215' (1) — 2538+53 — 224' (2) — 2540+77 — 123' (1) — 2542+00

DECOUPLER
SEE SITE SPECIFIC DWG.#
E4-MSR18035-104457
2518+37 CDD

2538+50 TCR

WOOD GROUP MUSTANG, INC.
TEXAS REGISTERED ENGINEERING FIRM F-2999
PROJECT NO: 100502

REV. MARK	REVISION	BY	CHK	APP	DATE
0	ISSUED FOR CONSTRUCTION	DP	PAC	TG	07/21/15

REV. MARK	REVISION	BY	CHK	APP	DATE

DRAWING ISSUE RECORD

ISSUE NO.	REV	MATERIAL OR JOB SPEC	BID	FAB	CONST	REF
1	0	1330-0101-104457			07/21/15	

DATE ISSUED FOR

DESIGNED	WOOD GROUP MUSTANG	07/18/14
DRAWN	M. PHAM	08/18/14
CHECKED	P. CURLIN	06/22/15
APPROVED	T. GARNER	06/29/15
PROJ. ENGR.	R. ANG	06/29/15
MFG. REP.	D. HILL	06/29/15

STATUS | PLANT NO.

P.E. SEAL: STATE OF TEXAS — W. RAYMOND ANG — 80995 — LICENSED PROFESSIONAL ENGINEER

DOW HYDROCARBONS AND RESOURCES LLC

GULF COAST PIPELINE — ANGLETON, TEXAS

PROPOSED 12" MSR-P-10001 PIPELINE
ALIGNMENT SHEET
STA. 2490+00 TO STA. 2542+00

CHARGE NUMBER	SCALE		REV.
104457	1" = 200'	B4-MSR10051-104457	0

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FILE: R:\Projects\21113\DISCIPLINE\CAD\DRAWINGS\31-ALIGNMENT\SOW 1 NORTH\B4-MSR10051-104457.dwg PLOT DATE: 8/10/2015 BY: ARMENTA, VICTOR

$TIME $DATE $PERSON $FILENAME $INSTRUCTIONS