

*Atlantic Sunrise Project – PA DEP Chapter 105 Joint Permit Application
Transcontinental Gas Pipe Line Company, LLC
Luzerne County*

ATTACHMENT H -3
HDD AND CONVENTIONAL BORE CONTINGENCIES
105 IMPACT DRAWINGS
(UNDER SEPARATE COVER)

Revised April 2017
Note: This Attachment has been replaced in its entirety

ATTACHMENT H-3
CONTINGENCY PLAN SET
LUZERNE COUNTY



Transcontinental Gas Pipe Line Company LLC
ATLANTIC SUNRISE PROJECT
PROPOSED 30" CENTRAL PENN LINE NORTH
CONTINGENCY PLAN IMPACT MAPS

M.P. 4.97 TO M.P. 27.20

LUZERNE COUNTY, PENNSYLVANIA

DRAWING NUMBER	DESCRIPTION	SHEET	REVISION
24-1601-70-20A-A/7.17-01	W-T02-15023A / W-T02-15023A-1 & W-T02-15023C	1 OF 2	0
24-1601-70-20A-A/7.17-01	W-T02-15023A / W-T02-15023A-1 & W-T02-15023C	2 OF 2	0
24-1601-70-09A-A/7.34-01	WW-T02-15018	1 OF 1	0
24-1601-70-09A-A/7.46-01	WW-T24-15001	1 OF 1	0
24-1601-70-09A-A/14.45-01	WW-T65-16001, WW-T03-16003B & WW-T03-16003	1 OF 2	0
24-1601-70-09A-A/14.45-01	WW-T65-16001, WW-T03-16003B & WW-T03-16003	2 OF 2	0

24-1601-70-09A-A-01_Luzerne-PKG
Issued for PADEP Submittal #3
Rev. 0
04-12-2017

ISSUED DATE: APRIL 12, 2017



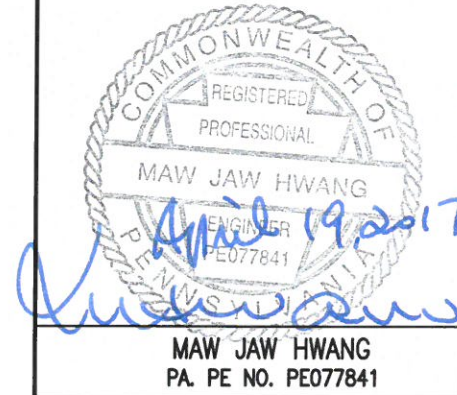
Transcontinental Gas Pipe Line Company LLC
ATLANTIC SUNRISE PROJECT
PROPOSED 30" CENTRAL PENN LINE NORTH
CONTINGENCY PLAN IMPACT MAPS

M.P. 4.97 TO M.P. 27.20

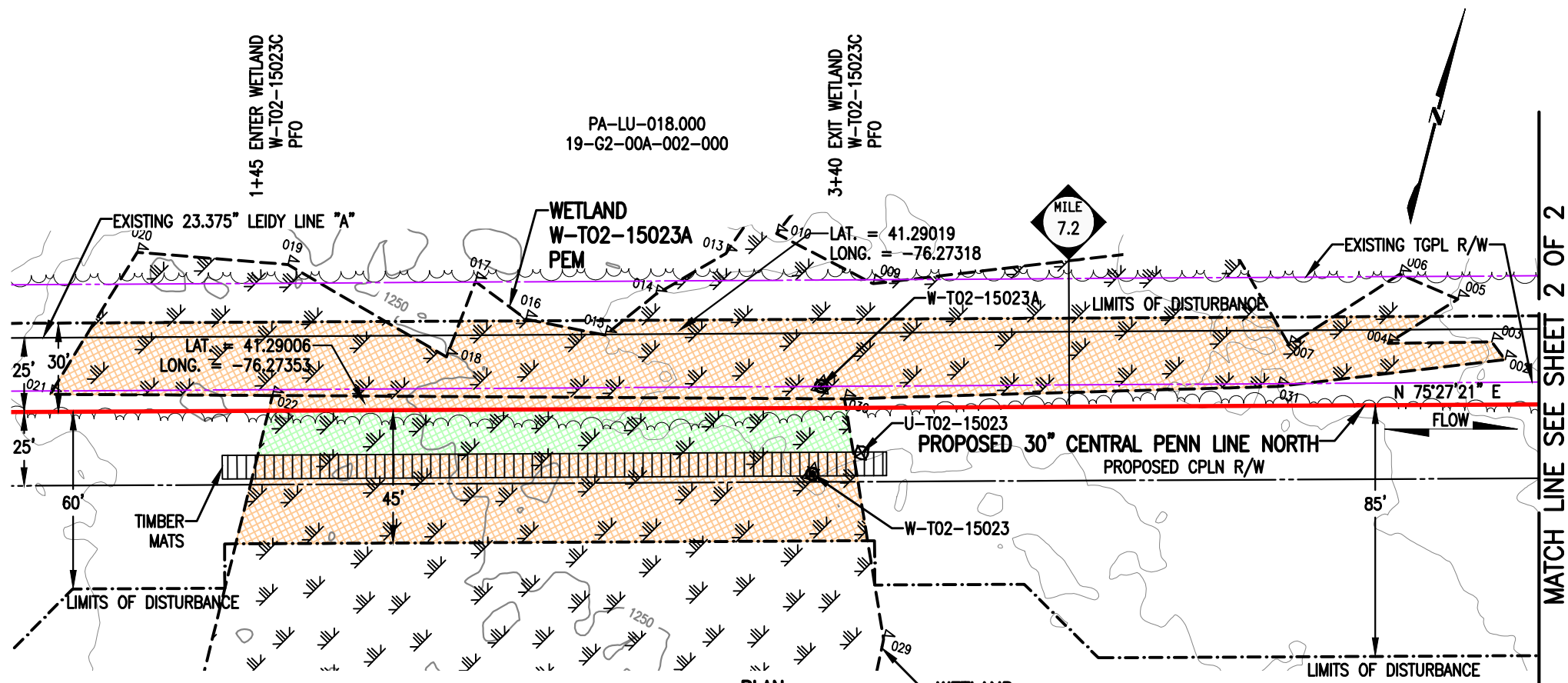
LUZERNE COUNTY, PENNSYLVANIA

DRAWING NUMBER	DESCRIPTION	SHEET	REVISION
24-1601-70-20A-A/7.17-01	W-T02-15023A / W-T02-15023A-1 & W-T02-15023C	1 OF 2	0
24-1601-70-20A-A/7.17-01	W-T02-15023A / W-T02-15023A-1 & W-T02-15023C	2 OF 2	0
24-1601-70-09A-A/7.34-01	WW-T02-15018	1 OF 1	0
24-1601-70-09A-A/7.46-01	WW-T24-15001	1 OF 1	0
24-1601-70-09A-A/14.45-01	WW-T65-16001, WW-T03-16003B & WW-T03-16003	1 OF 2	0
24-1601-70-09A-A/14.45-01	WW-T65-16001, WW-T03-16003B & WW-T03-16003	2 OF 2	0

WOOD GROUP MUSTANG INC.
17325 PARK ROW
HOUSTON TX, 77084
(832) 809-8000



ISSUED FOR PADEP SUBMITTAL #3
ISSUED DATE: APRIL 12, 2017



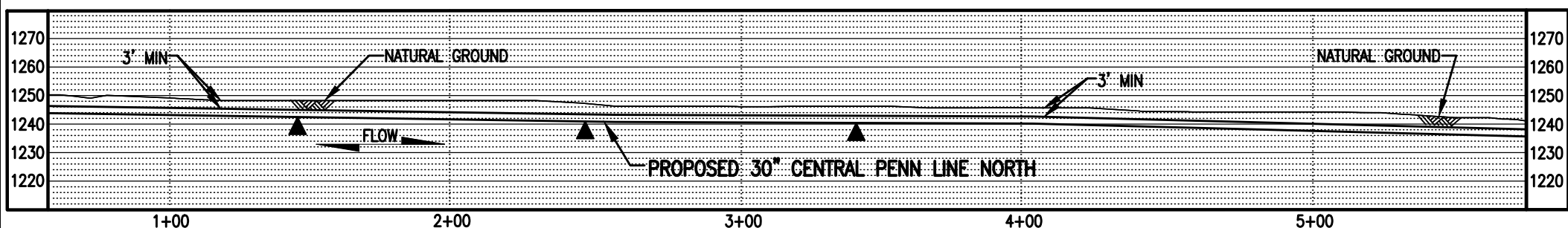
PLAN
SCALE: 1" = 50'

MATCH LINE SEE SHEET 2 OF 2

WETLAND DISTURBANCE:

WETLAND W-T02-15023A / W-T02-15023A-1	ACRE
TEMPORARY DISTURBANCE	0.2795
PERMANENT DISTURBANCE	0.0000
TOTAL DISTURBANCE	0.2795

WETLAND W-T02-15023C	ACRE
TEMPORARY DISTURBANCE	0.1615
PERMANENT DISTURBANCE	0.0684
TOTAL DISTURBANCE	0.2299



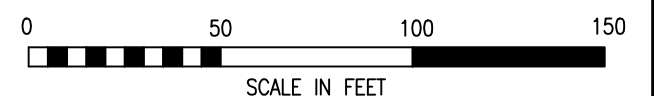
PROFILE
SCALE: 1" = 50' HORIZONTAL
1" = 50' VERTICAL

NOTES:

- UTILIZE A WETLAND EQUIPMENT CROSSING (WEC) AND WCC.3.
- STATION 2+00 SHOWN IS EQUAL TO STATION 377+98 ON THE EROSION AND SEDIMENT CONTROL PLAN.

SURVEY NOTES:

- T.B.M. SURVEY CONTROL POINT - 24' LT. OF M.P. 7.23, ELEV. = 1242.27' (NAVD88).



LEGEND

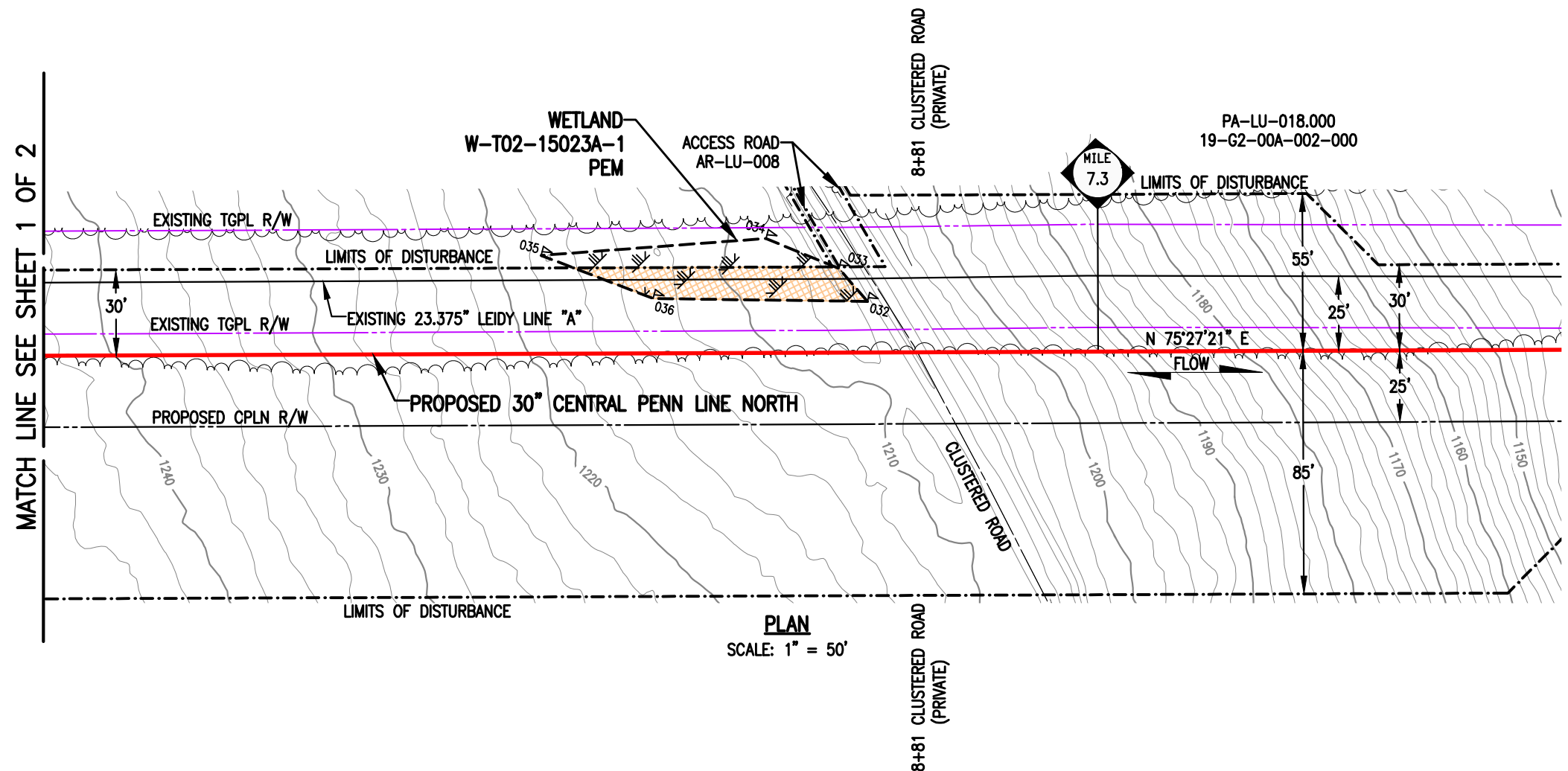
PROPOSED 30" CENTRAL PENN LINE NORTH	WETLAND FLAGS	WOOD GROUP MUSTANG, INC.
EXISTING PIPELINES	PHOTO DATA POINT	12" SEDIMENT BARRIER
EXISTING TGPL R/W	WETLAND DATA POINT	18" SEDIMENT BARRIER
LIMITS OF DISTURBANCE	UPLAND DATA POINT	24" SEDIMENT BARRIER
PROPOSED CPLN R/W	WELL POINT	32" SEDIMENT BARRIER
PROPERTY LINE	TRENCH PLUG	TOP OF BANK
FOREIGN PIPELINE	WATERBODY	PERMANENT WETLAND IMPACT
WETLAND AREA	TREE LINE	TEMPORARY WETLAND IMPACT
EXISTING POWER LINE	FLOODWAY BOUNDARY	
EXISTING FENCE	FEMA FLOODWAY BOUNDARY	

DRAWING NO.		REFERENCE TITLE				
24-1601-70-20-A/7.17-01		WATER OBSTRUCTION AND ENCROACHMENT PERMIT IMPACT MAPS				
NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.
0	04/12/17	THL	ISSUED FOR PADEP SUBMITTAL #3	1161481	CLR	MJH

TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC
CONTINGENCY PLAN IMPACT MAPS
ATLANTIC SUNRISE PROJECT
PROPOSED 30" CENTRAL PENN LINE NORTH
WETLAND CROSSINGS W-T02-15023A/W-T02-15023A-1
● M.P. 7.18 & W-T02-15023C ● M.P. 7.17
FAIRMOUNT TOWNSHIP, LUZERNE COUNTY, PENNSYLVANIA

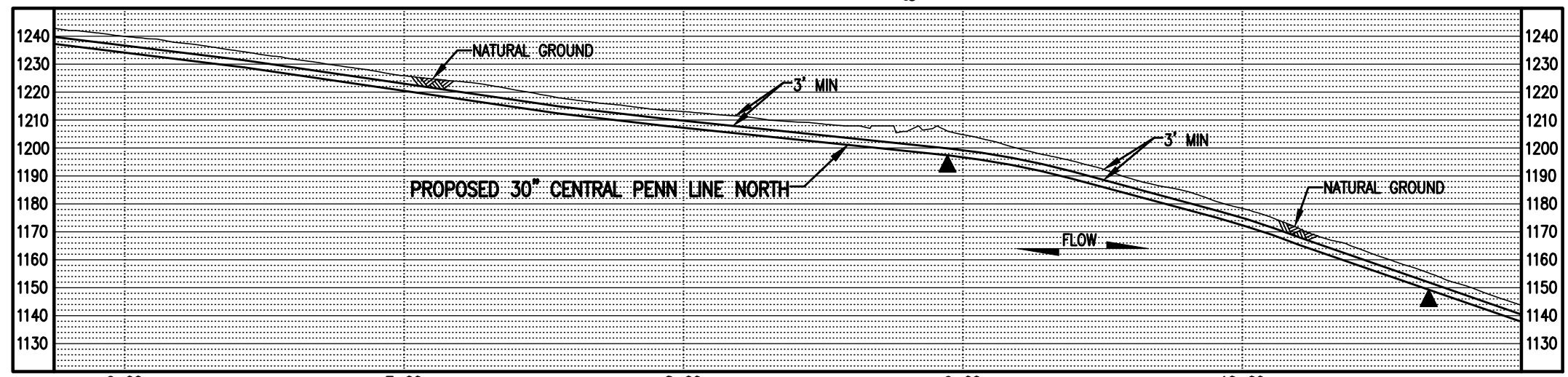
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CHECKED BY: AT	DATE: 03/30/17	ISSUED FOR CONSTRUCTION:	REVISION: 0
APPROVED BY: MJH	DATE: 03/30/17	DRAWING NUMBER: 24-1601-70-20A-A/7.17-01	SHEET 1
WC: 1161481		4/27/2017	OF 2

MATCH LINE SEE SHEET 1 OF 2



WETLAND DISTURBANCE:
SEE TABLE ON SHEET 1 OF 2

PLAN
SCALE: 1" = 50'



PROFILE
SCALE: 1" = 50' HORIZONTAL
1" = 50' VERTICAL

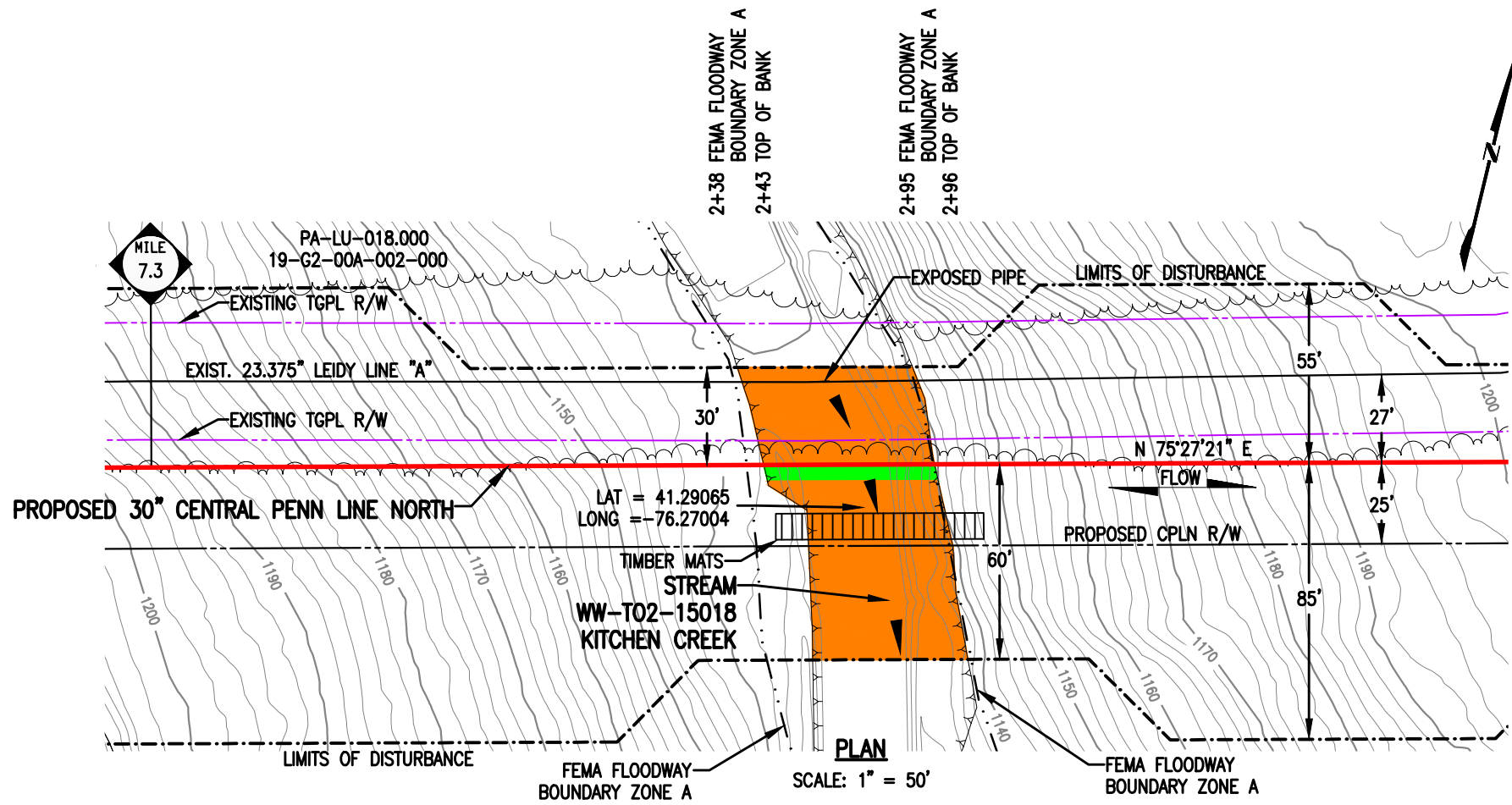


LEGEND		WOOD GROUP MUSTANG, INC.	
	PROPOSED 30" CENTRAL PENN LINE NORTH		WETLAND FLAGS
	EXISTING PIPELINES		PHOTO DATA POINT
	EXISTING TGPL R/W		WETLAND DATA POINT
	LIMITS OF DISTURBANCE		UPLAND DATA POINT
	PROPOSED CPLN R/W		WELL POINT
	PROPERTY LINE		TRENCH PLUG
	FOREIGN PIPELINE		WATERBODY
	WETLAND AREA		TREE LINE
	EXISTING POWER LINE		FLOODWAY BOUNDARY
	EXISTING FENCE		FEMA FLOODWAY BOUNDARY
	PERMANENT WETLAND IMPACT		TEMPORARY WETLAND IMPACT
	12" SEDIMENT BARRIER		24" SEDIMENT BARRIER
	18" SEDIMENT BARRIER		32" SEDIMENT BARRIER
	24" SEDIMENT BARRIER		TOP OF BANK
	32" SEDIMENT BARRIER		

DRAWING NO.		REFERENCE TITLE	
24-1601-70-20-A/7.17-01		WATER OBSTRUCTION AND ENCROACHMENT PERMIT IMPACT MAPS	
NO.	DATE	BY	REVISION DESCRIPTION
0	04/12/17	THL	ISSUED FOR PADEP SUBMITTAL #3

TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC
CONTINGENCY PLAN IMPACT MAPS
ATLANTIC SUNRISE PROJECT
PROPOSED 30" CENTRAL PENN LINE NORTH
WETLAND CROSSINGS W-T02-15023A/W-T02-15023A-1
© M.P. 7.18 & W-T02-15023C © M.P. 7.17
FAIRMOUNT TOWNSHIP, LUZERNE COUNTY, PENNSYLVANIA

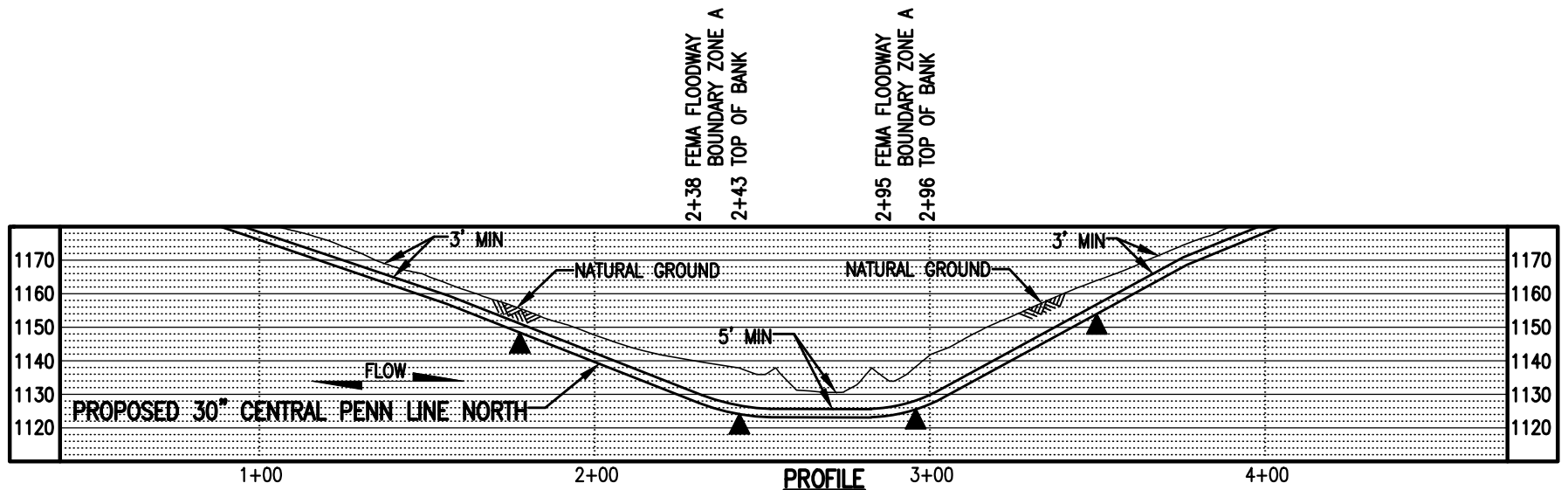
DRAWN BY: THL	DATE: 03/30/17	ISSUED FOR BID:	SCALE: 1" = 50'
CHECKED BY: AT	DATE: 03/30/17	ISSUED FOR CONSTRUCTION:	REVISION: 0
APPROVED BY: MJH	DATE: 03/30/17	DRAWING NUMBER: 24-1601-70-20A-A/7.17-01	SHEET 2
WC: 1161481			OF 2



STREAM DISTURBANCE:

STREAM WW-T02-15018 (HQ)	ACRE
TEMPORARY STREAM DISTURBANCE	0.0943
PERMANENT STREAM DISTURBANCE	0.0060
TOTAL STREAM DISTURBANCE	0.1003
TEMPORARY FLOODWAY DISTURBANCE	0.0219
PERMANENT FLOODWAY DISTURBANCE	0.0006
TOTAL FLOODWAY DISTURBANCE	0.0225

STREAM DIMENSION	FT.
STREAM WIDTH (TOB TO TOB)	52.52
STREAM LENGTH	98.38



GENERAL NOTES:

1. STREAM CROSSING METHOD SHALL BE DAM AND PUMP (DPX). EQUIPMENT TO CROSS STREAM UTILIZING A BRIDGE EQUIPMENT CROSSING (BEC).
2. THIS SITE IS LOCATED WITHIN THE 100 YEAR FLOOD PLAIN PER FEMA FLOOD MAP DATA.
3. STATION 2+00 SHOWN IS EQUAL TO STATION 386+89 ON THE EROSION AND SEDIMENT CONTROL PLAN.

SURVEY NOTES:

1. T.B.M. SURVEY CONTROL POINT - 29' LT. OF M.P. 7.33, ELEV. = 1140' (NAVD88).



LEGEND

	PROPOSED 30" CENTRAL PENN LINE NORTH		WETLAND FLAGS
	EXISTING PIPELINES		PHOTO DATA POINT
	EXISTING TGPL R/W		WETLAND DATA POINT
	LIMITS OF DISTURBANCE		UPLAND DATA POINT
	PROPOSED CPLN R/W		WELL POINT
	PROPERTY LINE		TRENCH PLUG
	FOREIGN PIPELINE		WATERBODY
	WETLAND AREA		TREE LINE
	STREAM FLOW		FLOODWAY BOUNDARY
	EXISTING POWER LINE		FEMA FLOODWAY BOUNDARY
	EXISTING FENCE		PERMANENT STREAM IMPACT
			TEMPORARY STREAM IMPACT

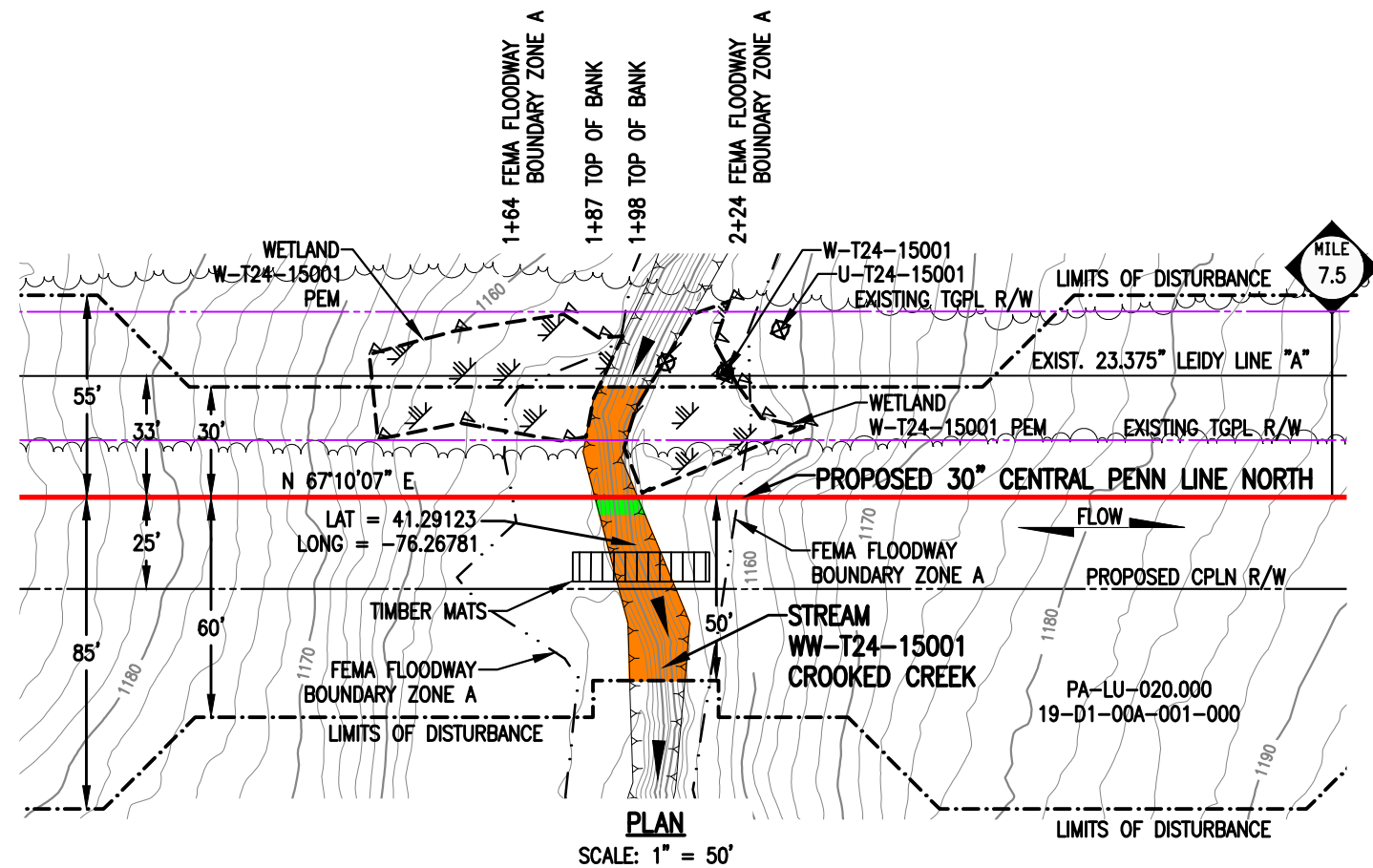
WOOD GROUP MUSTANG, INC.

SS 12" SEDIMENT BARRIER
SS 18" SEDIMENT BARRIER
SS 24" SEDIMENT BARRIER
SS 32" SEDIMENT BARRIER
TOP OF BANK

DRAWING NO.		REFERENCE TITLE				
24-1601-70-09-A/7.34-01		WATER OBSTRUCTION AND ENCROACHMENT PERMIT IMPACT MAPS				
NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.
0	04/12/17	THL	ISSUED FOR PADEP SUBMITTAL #3	1161481	CLR	MJH

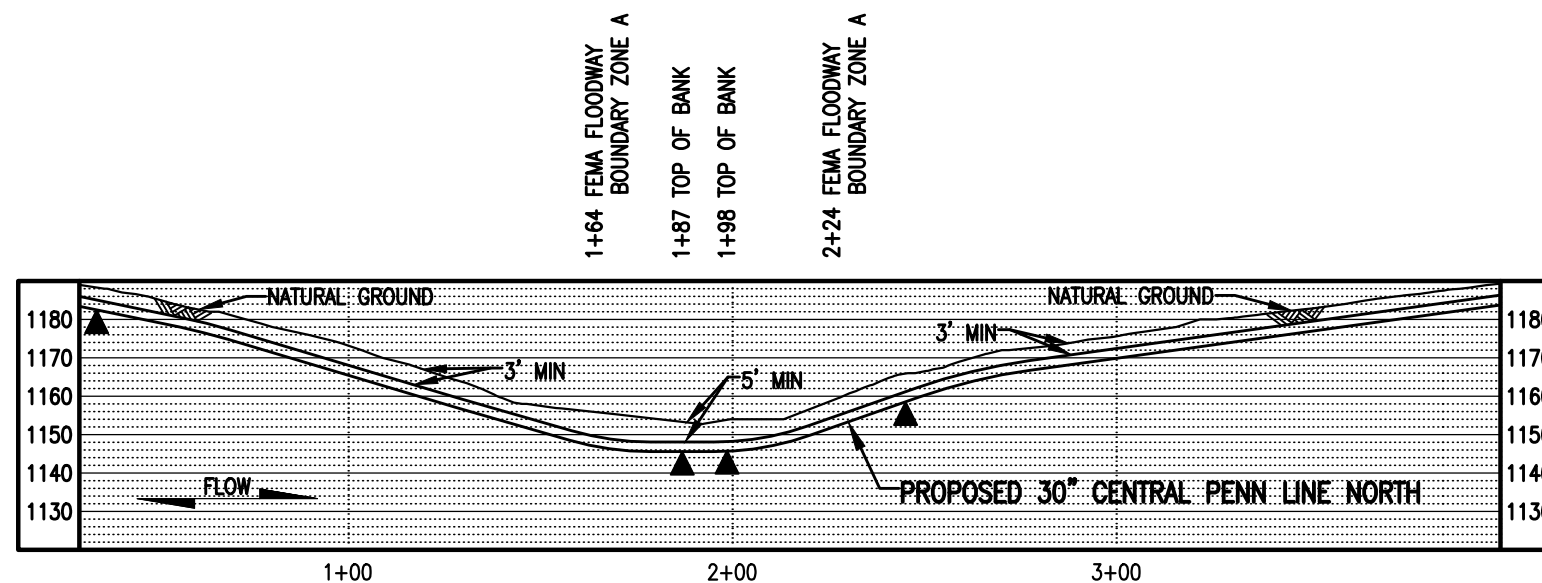
TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC
CONTINGENCY PLAN IMPACT MAPS
ATLANTIC SUNRISE PROJECT
PROPOSED 30" CENTRAL PENN LINE NORTH
STREAM CROSSING WW-T02-15018
M.P. 7.34
FAIRMOUNT TOWNSHIP, LUZERNE COUNTY, PENNSYLVANIA

DRAWN BY: THL	DATE: 03/30/17	ISSUED FOR BID:	SCALE: 1" = 50'
CHECKED BY: AT	DATE: 03/30/17	ISSUED FOR CONSTRUCTION:	REVISION: 0
APPROVED BY: MJH	DATE: 03/30/17	DRAWING NUMBER: 24-1601-70-09A-A/7.34-01	SHEET 1
W.O. NUMBER: 1161481	4/9/2017	t3le	OF 1



STREAM DISTURBANCE:

STREAM WW-T24-15001 (HQ)	ACRE
TEMPORARY STREAM DISTURBANCE	0.0235
PERMANENT STREAM DISTURBANCE	0.0014
TOTAL STREAM DISTURBANCE	0.0249
TEMPORARY FLOODWAY DISTURBANCE	0.0590
PERMANENT FLOODWAY DISTURBANCE	0.0056
TOTAL FLOODWAY DISTURBANCE	0.0646
STREAM DIMENSION	FT.
STREAM WIDTH (TOB TO TOB)	11.67
STREAM LENGTH	80.25



GENERAL NOTES:

1. STREAM CROSSING METHOD SHALL BE DAM AND PUMP (DPX). EQUIPMENT TO CROSS STREAM UTILIZING A BRIDGE EQUIPMENT CROSSING (BEC).
2. THIS SITE IS LOCATED WITHIN THE 100 YEAR FLOOD PLAIN PER FEMA FLOOD MAP DATA.
3. STATION 1+00 SHOWN IS EQUAL TO STATION 393+12 ON THE EROSION AND SEDIMENT CONTROL PLAN.

SURVEY NOTES:

1. T.B.M. SURVEY CONTROL POINT - 45' LT. OF M.P. 7.27, ELEV. = 1157.79' (NAVD88).



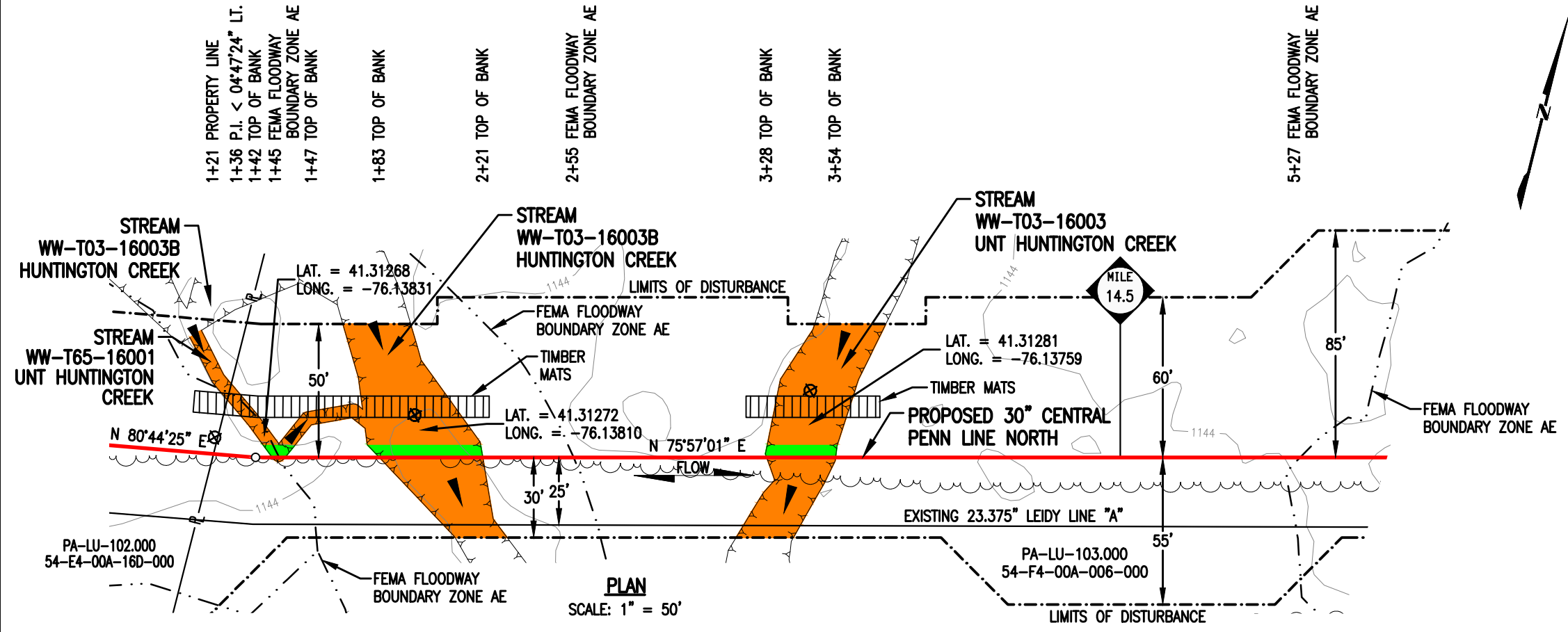
LEGEND

	PROPOSED 30" CENTRAL PENN LINE NORTH		WETLAND FLAGS		WOOD GROUP MUSTANG, INC.
	EXISTING PIPELINES		PHOTO DATA POINT		12" SEDIMENT BARRIER
	EXISTING TGPL R/W		WETLAND DATA POINT		18" SEDIMENT BARRIER
	LIMITS OF DISTURBANCE		UPLAND DATA POINT		24" SEDIMENT BARRIER
	PROPOSED CPLN R/W		WELL POINT		32" SEDIMENT BARRIER
	PROPERTY LINE		TRENCH PLUG		PERMANENT STREAM IMPACT
	FOREIGN PIPELINE		WATERBODY		TEMPORARY STREAM IMPACT
	WETLAND AREA		TREE LINE		FLOODWAY BOUNDARY
	STREAM FLOW		FEMA FLOODWAY BOUNDARY		
	EXISTING POWER LINE				
	EXISTING FENCE				

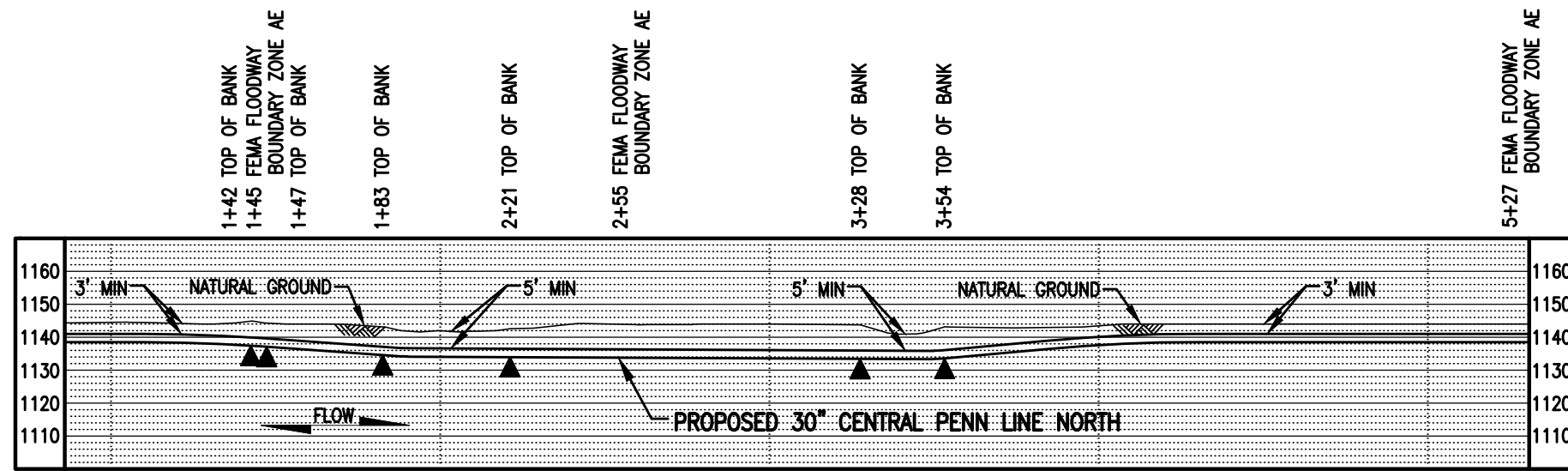
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24-1601-70-09-A/7.46-01		WATER OBSTRUCTION AND ENCROACHMENT PERMIT IMPACT MAPS				
NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.
0	04/12/17	THL	ISSUED FOR PADEP SUBMITTAL #3	1161481	CLR	MJH

TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC
CONTINGENCY PLAN IMPACT MAPS
ATLANTIC SUNRISE PROJECT
PROPOSED 30" CENTRAL PENN LINE NORTH
STREAM CROSSING WW-T24-15001
M.P. 7.46
FAIRMOUNT TOWNSHIP, LUZERNE COUNTY, PENNSYLVANIA

DRAWN BY: THL	DATE: 03/30/17	ISSUED FOR BID:	SCALE: 1" = 50'
CHECKED BY: AT	DATE: 03/30/17	ISSUED FOR CONSTRUCTION:	REVISION: 0
APPROVED BY: MJH	DATE: 03/30/17	DRAWING NUMBER: 24-1601-70-09A-A/7.46-01	SHEET 1
W.O. NUMBER: 1161481	4/10/2017	t3le	OF 1



STREAM DISTURBANCE:
SEE TABLE ON SHEET 2 OF 2



GENERAL NOTES:

1. STREAM CROSSING METHOD SHALL BE DAM AND PUMP (DPX). EQUIPMENT TO CROSS STREAMS UTILIZING A BRIDGE EQUIPMENT CROSSING (BEC).
2. THIS SITE IS LOCATED WITHIN THE 100 YEAR FLOOD PLAIN PER FEMA FLOOD MAP DATA.
3. STATION 1+00 SHOWN IS EQUAL TO STATION 762+00 ON THE EROSION AND SEDIMENT CONTROL PLAN.

SURVEY NOTES:

1. T.B.M. SURVEY CONTROL POINT - 29.81' RT. OF M.P. 14.46, ELEV. = 1141.82' (NAVD88).



LEGEND

	PROPOSED 30" CENTRAL PENN LINE NORTH		WETLAND FLAGS
	EXISTING PIPELINES		PHOTO DATA POINT
	EXISTING TGPL R/W		WETLAND DATA POINT
	LIMITS OF DISTURBANCE		UPLAND DATA POINT
	PROPOSED CPLN R/W		WELL POINT
	PROPERTY LINE		TRENCH PLUG
	FOREIGN PIPELINE		WATERBODY
	WETLAND AREA		TREE LINE
	STREAM FLOW		FLOODWAY BOUNDARY
	EXISTING POWER LINE		FEMA FLOODWAY BOUNDARY
	EXISTING FENCE		PERMANENT STREAM IMPACT
			TEMPORARY STREAM IMPACT

WOOD GROUP MUSTANG, INC.

	12" SEDIMENT BARRIER
	18" SEDIMENT BARRIER
	24" SEDIMENT BARRIER
	32" SEDIMENT BARRIER
	TOP OF BANK

DRAWING NO. 24-1601-70-09-A/14.45-01		REFERENCE TITLE WATER OBSTRUCTION AND ENCROACHMENT PERMIT IMPACT MAPS				
NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.
0	04/12/17	THL	ISSUED FOR PADEP SUBMITTAL #3	1161481	CLR	MJH

TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC
CONTINGENCY PLAN IMPACT MAPS
ATLANTIC SUNRISE PROJECT
PROPOSED 30" CENTRAL PENN LINE NORTH
STREAM CROSSINGS WW-T65-16001 @ M.P. 14.44,
WW-T03-16003B @ M.P. 14.45 & WW-T03-16003 @ M.P. 14.48
ROSS TOWNSHIP, LUZERNE COUNTY, PENNSYLVANIA

DRAWN BY: THL	DATE: 03/30/17	ISSUED FOR BID:	SCALE: 1" = 50'
CHECKED BY: AT	DATE: 03/30/17	ISSUED FOR CONSTRUCTION:	REVISION: 0
APPROVED BY: MJH	DATE: 03/30/17	DRAWING NUMBER: 24-1601-70-09A-A/14.45-01	SHEET 1
WC: 1161481			OF 2

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STREAM DISTURBANCE:

STREAM WW-T03-16003 (HQ)	ACRE
TEMPORARY STREAM DISTURBANCE	0.0433
PERMANENT STREAM DISTURBANCE	0.0030
TOTAL STREAM DISTURBANCE	0.0463
TEMPORARY FLOODWAY DISTURBANCE	0.8062
PERMANENT FLOODWAY DISTURBANCE	0.0360
TOTAL FLOODWAY DISTURBANCE	0.8422

STREAM DIMENSION	FT.
STREAM WIDTH (TOB TO TOB)	25.70
STREAM LENGTH	86.14

STREAM WW-T03-16003B (HQ)	ACRE
TEMPORARY STREAM DISTURBANCE	0.0541
PERMANENT STREAM DISTURBANCE	0.0047
TOTAL STREAM DISTURBANCE	0.0588
TEMPORARY FLOODWAY DISTURBANCE	0.0000
PERMANENT FLOODWAY DISTURBANCE	0.0000
TOTAL FLOODWAY DISTURBANCE	0.0000

STREAM DIMENSION	FT.
STREAM WIDTH (TOB TO TOB)	38.64
STREAM LENGTH	92.08

STREAM WW-T65-16001 (HQ)	ACRE
TEMPORARY STREAM DISTURBANCE	0.0098
PERMANENT STREAM DISTURBANCE	0.0010
TOTAL STREAM DISTURBANCE	0.0108
TEMPORARY FLOODWAY DISTURBANCE	0.0000
PERMANENT FLOODWAY DISTURBANCE	0.0000
TOTAL FLOODWAY DISTURBANCE	0.0000

STREAM DIMENSION	FT.
STREAM WIDTH (TOB TO TOB)	4.67
STREAM LENGTH	111.17

LEGEND

- PROPOSED 30" CENTRAL PENN LINE NORTH
- EXISTING PIPELINES
- EXISTING TGPL R/W
- LIMITS OF DISTURBANCE
- PROPOSED CPLN R/W
- PROPERTY LINE
- FOREIGN PIPELINE
- WETLAND AREA
- STREAM FLOW
- EXISTING POWER LINE
- EXISTING FENCE

- WETLAND FLAGS
- PHOTO DATA POINT
- WETLAND DATA POINT
- UPLAND DATA POINT
- WELL POINT
- TRENCH PLUG
- WATERBODY
- TREE LINE
- FLOODWAY BOUNDARY
- FEMA FLOODWAY BOUNDARY

- 12" SEDIMENT BARRIER
- 18" SEDIMENT BARRIER
- 24" SEDIMENT BARRIER
- 32" SEDIMENT BARRIER
- TOP OF BANK
- PERMANENT STREAM IMPACT
- TEMPORARY STREAM IMPACT



DRAWING NO.		REFERENCE TITLE				
24-1601-70-09-A/14.45-01		WATER OBSTRUCTION AND ENCROACHMENT PERMIT IMPACT MAPS				
NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.
0	04/12/17	THL	ISSUED FOR PADEP SUBMITTAL #3	1161481	CLR	MJH

TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC
CONTINGENCY PLAN IMPACT MAPS
ATLANTIC SUNRISE PROJECT
PROPOSED 30" CENTRAL PENN LINE NORTH
STREAM CROSSINGS WW-T65-16001 @ M.P. 14.44,
WW-T03-16003B @ M.P. 14.45 & WW-T03-16003 @ M.P. 14.48
ROSS TOWNSHIP, LUZERNE COUNTY, PENNSYLVANIA

DRAWN BY: THL	DATE: 03/30/17	ISSUED FOR BID:	SCALE: N.T.S.
CHECKED BY: AT	DATE: 03/30/17	ISSUED FOR CONSTRUCTION:	REVISION: 0
APPROVED BY: MJH	DATE: 03/30/17	DRAWING NUMBER: 24-1601-70-09A-A/14.45-01	SHEET 2
WO: 1161481		7:05am 4/10/2017 t3le	OF 2